

Corporate Finance

MBA (Executive) Program

AGSM MBA Programs

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Corporate Finance

Course overview

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Session 3, 2008 Calendar

Corporate Finance

Graduate Diploma in Management (GDM)

| Week no. | Week begins | Unit | Assessment due (% weighting) |
|---|--------------|------|------------------------------|
| 1 (Intro) | 15 September | 1 | |
| 2 | 22 September | 2 | |
| Optional Workshop 1 (Saturday 27 September) | | | |
| 3 | 29 September | 3 | |
| 4 | 6 October | 4 | |
| 5 | 13 October | 5 | |
| Mid Session Exam (Saturday 18 October) (25%) | | | |
| 6 | 20 October | 6 | |
| 7 | 27 October | 7 | |
| 8 | 3 November | 8 | |
| Workshop 2 (Saturday 8 November) | | | |
| 9 | 10 November | 9 | |
| 10 | 17 November | 10 | CF Assignment 1 due (25%) |
| 11 | 24 November | 11 | |
| 12 | 1 December | 12 | |
| Final Examination (50%) (Saturday 13 December) | | | |

Course outline

Corporate Finance addresses the important questions of:

- What is value and how is it measured?
- How does a well-run firm create or add value?

This course introduces the three basic ideas in finance:

- the time value of money;
- diversification;
- arbitrage.

Special focus is placed on the firm's primary functions:

- investment policy (which projects to undertake);
- financing policy (how to finance projects);
- risk management (how to cope with financial risks);
- strategic management (what is the best direction for the firm).

The major purpose of the course is to determine if and how these functions add value to the firm.

Student Learning Outcomes

When you have completed this course you will be able to:

- explain and use the key technical terms and concepts employed in the financial press.
- use the principal methods for determining the value of operations and investments by firms in the market place.
- develop a reasoned position on key questions of Corporate Finance related to value, source and structure of finance (such as 'What is the value of this proposed investment?' or 'How much should I borrow to finance this investment?').

Corporate Finance is presented in twelve units covering these issues.

In each of the units we have included a range of elements that we feel will assist you in understanding the concepts and exercising the skills of corporate finance.

Within each unit, as we introduce a new concept we have included some examples of the applications and issues – this will assist you in understanding the connection between the theory and practice of corporate finance. In each section we also provide some exercises for you to try. After each exercise we have provided the answer, so you can check your calculations and thinking for yourself.

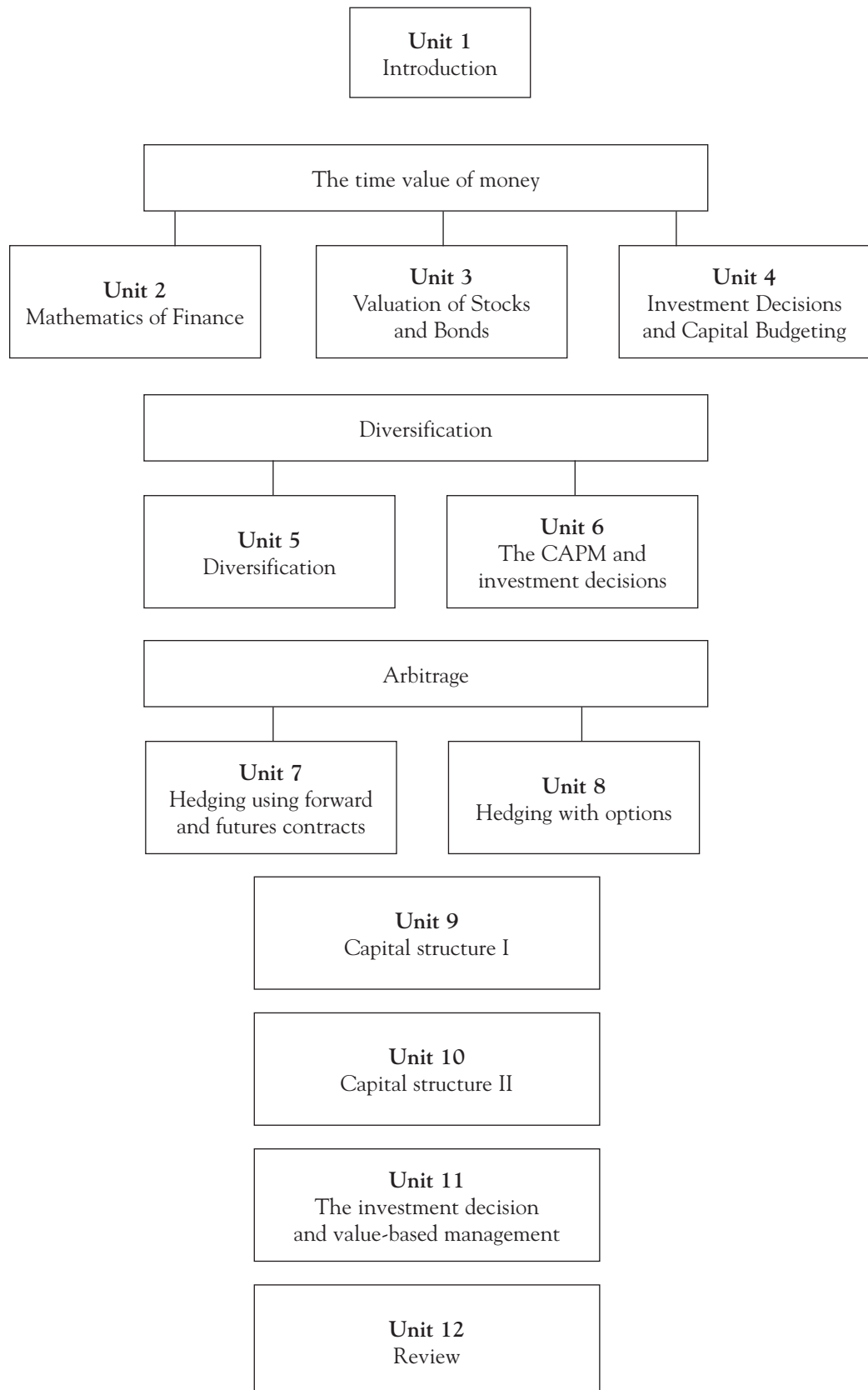
At the end of each unit we have provided three sections that you will need to prepare before class:

1. **Discussion:** This is a list of important issues developed in the unit and will form the basis of the summary discussion at the beginning of each class. Your instructor will assume that you have read the material for the unit and can discuss the points in this section.
2. **Class Discussion Questions:** We have also included some questions for class discussion, which you should attempt during the week and be prepared to discuss at the class session.
3. **Issues in Action:** Feedback from previous years highlighted the need for more practical applications. To this end we have included excerpts from current news articles to reinforce the issues introduced in each unit. In most cases the excerpt will provide all the necessary information, however the complete article may be sourced through Factiva (available via the UNSW library).

Self-assessment exercises and solutions are also provided in the appendixes of a number of the units, to enable you to practise the concepts introduced in *Corporate Finance*.

We have also included a continuous case, the *Fat Daddy's Case*, which begins in Unit 2 and continues to Unit 10. This case is an important element of this course as it illustrates the connections between the theory and practice of corporate finance and asks you to make decisions and recommendations, based on your reading of the units. This case study shows the integration of many units and is excellent revision on key ideas of the course.

Course structure



Assessment

It is important to understand that assessments are not simply devices to test fact learning or the blind application of formulas. They are designed to determine how well you are coming to grips with the concepts and how well you are able to apply the mathematical tools we introduce to a range of situations. In addition, the assessment will be testing your understanding of the rationale for such application.

Summary of requirements

In order to pass this course, you must:

- Achieve an aggregate (overall) mark of at least 50, and
- Achieve a minimum pass grade in the final piece of assessment.

Mid-Session Exam

Date: Week 5, Saturday 18 October 2008
Weight: 25%
Duration: Two (2) hours (plus 15 minutes reading time)

Assessment 1 – Applied analysis assignment

Due: Week 10
Weight: 25%

Final exam

Date: Saturday, 13 December 2008
Weight: 50%
Duration: Three (3) hours (plus 15 minutes reading time)

Assessment criteria and grading

| | Criterion | HD | Distinction | Credit | Pass | Fail |
|-----|--|---|---|---|---|--|
| 20% | Attention to purpose | Has addressed the purpose of the assignment comprehensively and imaginatively. Demonstrated the capacity to structure an assignment logically, showing clarity of thought | Has addressed the purpose of the assignment coherently and with some attempt to demonstrate imagination. Has demonstrated the capacity to structure an assignment logically, showing clarity of thought | Has addressed the main purpose of the assignment. | Some of the work is focused on the aims and themes of the assignment | Fails to address the task set |
| 20% | Content and range | Assignment demonstrates integration and innovation in the selection and handling of several topics. | Reasonable knowledge of several topics and an awareness of a variety of contexts | Most key topics are included in the work in an appropriate straight forward manner | Selection of topic is appropriate but some aspects have been missed or misconstrued | Lacks evidence of knowledge relevant to the topic and/or significantly misuses terminology |
| 30% | Data and analysis | Selects, processes and analyses data with confidence and imagination. Is correct in all calculations | Selects appropriate data and processes using relevant tools. Can apply major theories and compare alternative methods/ techniques for obtaining data. Is correct in all calculations | Makes a selection from data and applies processing tools. Analysis is clear and applies key principles. Is correct in most calculations | Collects some information and makes some use of processing tools. Is correct in some calculations | Random information gathering. Inappropriate use of processing tools. Many calculations are incorrect. |
| 20% | Conclusions | Analytical and clear conclusions well grounded in theory and literature showing development of new concepts | Good development shown in summary of arguments based in theory/literature | Evidence of findings and conclusions grounded in theory/ literature | Limited evidence of findings and conclusions supported by theory/literature | Unsubstantiated/ invalid conclusions based on anecdote and generalisation only, or no conclusions at all |
| 5% | Presentation and structure of assignment | Shows a polished and imaginative approach to the topic | Carefully and logically organised | Shows organisation and coherence | Shows some attempt to organise in a logical manner | Disorganised/ incoherent |
| 5% | Referencing (including data referencing) | Referencing is polished and consistently accurate | Referencing is consistently accurate with few minor errors | Referencing is mainly accurate | Some attempt at referencing | Disorganised/ Incoherent, no referencing |

A completed assessment cover sheet must be attached to the front of each submitted assessment. Blank assessment cover sheets for your use are included at the end of this Course Overview.

Assessment 1 – Mid-Session Exam

| | |
|------------------|--|
| Due: | Week 5, Saturday 18 October 2008 |
| Duration: | Two (2) hours (plus 15 minutes reading time) |
| Weight: | 25% |

This is a two hour open book exam, covering Units 1 to 4. Fifteen minutes additional reading time is allowed. Only writing of notes is allowed during the reading time. The type of questions asked will be similar to the exercises found in the units as well as the issues that you will cover in the case analyses, class discussion questions and issues in action. A sample exam will be provided on the course website.

Some hints for preparing for the examination include:

- ensure you can fulfil the objectives for each unit;
- review checkpoints;
- work through examples, exercises, self assessment questions, class discussion questions, cases analyses and issues in action;
- in the examination session, monitor your time carefully and spend some time planning your answers.

The exam will be discussed in more detail in class.

Assessment 2 – Applied analysis assignment

Due: Week 10

Weight: 25%

Maximum length: A maximum of 10 pages – this limit *includes* any text, figures, tables, equations and references. Appendices will not be marked.

Submission: Hard copies of your assignment must be submitted to your instructor during your class session in week 10.

Group Work: Assignments may be completed individually or in groups of up to 5 members. Students are responsible for the self-selection of groups. Previous students found that a group of 3 members was optimal and groups are limited to 5 students. Although group work is encouraged, the assignment may be completed individually, however it is important to note that marking of the assignment does NOT depend on group size.

For details of this assessment see Appendix 1.

Assessment 3 – Final Exam

Date: Saturday, 13 December 2008

Duration: Three (3) hours (plus 15 minutes reading time)

Weight: 50%

This is a three hour open book exam, covering Units 1 to 12. Fifteen minutes additional reading time is allowed. Only writing of notes is allowed during the reading time. The type of questions asked will be similar to the exercises found in the units as well as the issues that you will cover in the case analyses, class discussion questions and issues in action. A sample exam will be provided on the course website.

Some hints for preparing for the examination include:

- ensure you can fulfil the objectives for each unit;
- review checkpoints;
- work through examples, exercises, self assessment questions, class discussion questions, cases analyses and issues in action;
- in the examination session, monitor your time carefully and spend some time planning your answers.

The exam will be discussed in more detail in class.

Learning technology

The learning technology you have to assist you in your study of Corporate Finance consists of a number of elements:

- the twelve units of printed materials contained in two binders
- the weekly class sessions
- the half-day Saturday workshops
- your fellow class members
- sources of financial information, including newspapers, television and radio
- your own network
- the AGSM website and Internet references for background information
- CD-ROM *Interactive Finance*

Students looking for some extra background in a fun way may wish to see the following films:

- *Wall Street*
- *Trading Places*
- *Other People's Money*
- *Barbarians at the Gate*
- *Boiler Room*

Additionally, you may enjoy reading *Liar's Poker: Rising through the wreckage on Wall Street* (Norton, 1989) by Michael Lewis; *Barbarians at the Gate* (Arrow Books, 1991) by Bryan Burrough and John Helyar; or *Infectious Greed How Deceit and Risk Corrupted the Financial Markets* (Profile Books, 2003) by Frank Partnoy.

More academic books that are recommended, but not required, reading include:

- Brealey, R., Myers, S., and Allen, F., *Principles of Corporate Finance* (McGraw-Hill Irwin, 2005, 8th edition).
- Bernstein, P., *Capital Ideas The Improbable Origins of Modern Wall Street* (Free Press, 1992).
- Baker, G.P., and Smith, G.D., *The New Financial Capitalists Kohlberg Kravis Roberts and the Creation of Corporate Value* (Cambridge University Press, 1999).

Equipment you will need

A regular calculator with power and log functions is required for this course. A specialist, financial calculator is not necessary.

It is advisable for you to have some skills in using Excel. If you are unfamiliar with operating Excel, you should find a group member who can show you the basics.

To run the full capabilities of the CD-Rom mentioned on pages 12 and 14, you will need access to an IBM-compatible PC running Microsoft Excel 97 or 2000 with a sound card.

Group work

During your study of *Corporate Finance* you will have the opportunity to work in groups. We encourage this form of collaborative work as we feel that you will gain much from discussion and reflection on the issues and problems presented in these units.

You might like to consider a few issues before identifying your fellow group members.

- The group will benefit from a mix of skills. There will be some calculations to complete, but there will also be a range of activities. An ideal group would be one of consisting of someone who has a quantitative background, someone who knows about computers and Excel, and someone with no quantitative or finance background at all.
- Your group will function at its best if you address the issues of contact early on. How will you contact each other? What methods could you use to keep in touch and discuss issues?
- You should also give some thought to your individual and collective contribution. How will you divide up the work to be done? How will you determine the issues of collaboration and cooperation?

CD-Rom



Interactive Finance

To supplement these notes we are providing you with a CD-Rom package called Interactive Finance, developed by Professor Stephen Gray at the University of Queensland. The CD-Rom package is an additional resource and is not core to the course requirements – students will not be disadvantaged if they do not have access. You will not be directly assessed on the contents of the CD-Rom however for many students the CDs facilitate the understanding of the material in the folders. The two CDs are divided into units, covering the same material as your notes.

If you read through the notes and find the material difficult to grasp then listening to the powerpoint presentation on the CD may be beneficial. Also, you may find yourself in a situation with limited time to prepare for class. The powerpoint presentation can give you a timely way of understanding the key issues and therefore enabling you to participate in some of the class discussion.

Requirements

Essential features

- A PC running Windows 95, 98, 2000, Windows XP or Windows NT or a Power PC Macintosh running a windows emulator such as Virtual PC.
- A CD-Rom drive.

Recommended features

A sound card (to hear the verbal descriptions that accompany the slideshow presentations). Microsoft Excel 97 or 2000 (to use the spreadsheet templates that are included for a number of topics).

Installation

1. Insert CD (Units 0–6) into your CD drive.
2. On most machines, the installation procedure will begin automatically. If it does not, then proceed as follows:
 - Click the START button (usually in the bottom left corner of your-screen).
 - Select RUN from the pop-up menu.
 - Type D:\setup.exe in the dialogue box (where D: represents the name of your computer's CD-Rom drive).
 - Press ENTER.
3. Follow the prompts that appear on your screen.

Operating instructions

1. Once installed, click the START button (usually in the bottom left corner of your screen).
2. Click INTERACTIVE FINANCE on the pop-up menu. On the left-hand side you will see a list of the units. Click on the + sign next to the unit to display the sections in each unit.

Key features

Unit 0 is a Mathematical Review. This covers similar material to the optional first workshop. If you are unsure whether you should attend this workshop, work through Unit 0. If you can easily complete unit 0, then you do not need to attend this optional workshop.

Each unit has:

- an Overview (text summary of the unit)
- Sections:
 - Powerpoint screenshow
 - Example
 - Exercise
- Review:
 - web links
 - Multichoice quiz
 - Practice questions.

The Powerpoint screenshows are mini lectures.

If you have a sound card, then you will hear the voiceovers for each presentation, otherwise you can simply read the slides. These lectures are designed to cover the material in the notes, and add additional insights.

The example and exercise in each section give you more practice on each-topic.

The multichoice quiz is a 10 question quiz that you can do over and over – each time you attempt the quiz the numbers will change, giving you a good opportunity to hone your mathematical skills. Solutions are provided.

The practice problems are longer than the multichoice quiz questions and are designed to test all aspects of the unit.

The web links provide additional sources of information, from the major stock exchanges to several companies.

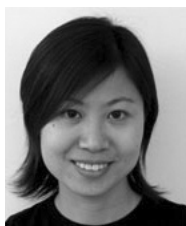
Saturday workshops

There are two Saturday workshops in *Corporate Finance*.

The first workshop is optional. It will focus on a review of equations and the mathematical constructs and skills which form the basis for *Corporate Finance*. As an optional workshop, those of you with a good understanding and skill in manipulating equations, need not attend. As a rule of thumb, if you can easily complete the self-assessment exercises at the end of Unit 2, or Unit 0 on the CD-Rom, you do not need to attend this optional workshop. A list of questions are included in the workshop section. Your instructor will spend the workshop explaining the solutions to these questions.

The second Saturday workshop will focus on facilitating group discussions for your applied analysis assessments, plus revising the material to date.

Acknowledgements



Course leader

Gloria Tian PhD, BEd
**Senior Lecturer, School of Banking and Finance,
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Dr. Gloria Tian is a senior lecturer of finance at the School of Banking and Finance Australian School of Business UNSW. She holds a PhD in Finance from University of Alberta Canada, and a BEd. from Nankai University China. Dr. Tian joined the AGSM in November 2005 and has since been teaching Corporate Finance (EMBA) and Finance (MBA) subjects. Previously, she taught undergraduate Corporate Finance, Investments, and Capital Investment subjects at University of Alberta. Dr. Tian's research interests include corporate governance, corporate finance, executive compensation, capital markets and financial regulations.

Course writers

The following writers have contributed to the course materials within the past six years. However, we also thank those who had made tremendous contributions before that, though we cannot acknowledge everybody due to space limitation.

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Appendices

Appendix 1 Assessment 2 – Applied analysis Assignment

Appendix 2 *Corporate Finance* Formulas

Appendix 3 Glossary of *Corporate Finance* terms

Appendix 4 Useful websites

Appendix 5 Assessment cover sheet

Appendix 1

Assessment 2
Applied analysis Assignment

AGSM MBA Programs

Corporate Finance

Assessment 2 – Applied Analysis Assignment Session 3 2008

(hand in at the Week 10 class session)

This assignment comprises 25% of your total assessment grade.

(Total marks = 100)

Assessment 2

Group Assignment Applied Analysis

In the group assignment you are required to write a set of reports to demonstrate that you can apply your knowledge from Corporate Finance to analyze the performance of the Australian share market, and of company shares. You should use the data in the accompanying spreadsheet (downloadable from CF website) for your analysis in conjunction with any additional research.

Each group should submit one set of written reports in class on the due date. In addition, each group may submit a soft copy as a MS Word or PDF file, and one, neatly formatted spreadsheet containing your calculations. You should place the calculations for each part under different tabs in your spreadsheet. These documents should be emailed to your course facilitator. The supporting documents will not be marked by your facilitator. However, your facilitator may choose to use them to assist his/her marking your written reports.

Background information

It is July 2007. When you graduated from the AGSM with your MBA in 2006 you decided to set up your own company to provide financial analyses to corporate clients, including Pinnacle Financial Consulting. Pinnacle itself sells financial analyses, but sometimes contracts out research work to other firms including yours.

Bozo, the principle at Pinnacle supplied you with a spreadsheet of weekly data on the share prices for BHP and 19 other leading Australian stocks, the ASX200 price index and the ASX200 accumulation index, all for the period of 07 January 2002 to 25 June 2007. Bozo asked you to do the following contract work. He will pay you 30% of your fee for Report 1, 40% for Report 2, and 30% for Report 3 (this is also the allocation of marks for the academic assignment):

Report 1 – Market Analysis (30 marks)

Bozo has received a number of enquiries about indices (specifically the ASX200 index and the All Ordinaries). He wants you to put together a brief on these. The brief should explore the following items:

- a) What is the ASX200 index and how is it constructed? How is a price index different from an accumulation or total returns index? Compare the ASX200 Share Price Index with the All Ordinaries Index, and the Dow Jones Index.
- b) What does the share price index value (i.e. the number reported in the press) mean, and how can you interpret or use this number?

- c) How do you 'buy' a share price index, and why do you want to 'buy' such an index?

Report 2 – Share Analysis (40 marks)

- a) Calculate and explain to Bozo's investors the returns they would have made on BHP between 07 January 2002 and 25 June 2007, using the price data provided. Compare the return on this share investment and its risk, with those on the ASX200 price index.
- b) Estimate BHP's Beta using these price data. Comment on this estimated Beta (i.e. does it make sense to you?). Then apply CAPM to estimate the required return on BHP shares as at 26 June 2007.

Clearly explain your methodology and any assumptions.

- c) Suppose, on 25 June 2007, the consensus of stockbrokers was that full year earnings per share (EPS) and dividends per share (DPS) for BHP were as follows:

| | Dec 2007 | Dec 2008 |
|-----|----------|----------|
| EPS | \$2.40 | \$3.40 |
| DPS | \$0.60 | \$0.85 |

Using the dividend growth model, what is the market expecting the perpetual growth rate in dividends to be after 2008? Do you believe that BHP is fairly priced?

Clearly explain your methodology and any assumptions.

Report 3 – Diversification Analysis (30 marks)

- a) Pinnacle has many corporate clients invested in the “20 Leaders Fund”, which consists of equal investments in each of the 20 companies provided in the spreadsheet. This fund diversifies your investment across the 20 largest Australian companies by market capitalization listed on the ASX market. Together, these companies make up around 50% of the value of the ASX market by full market capitalization.

Analyze the performance of an A\$200,000 portfolio invested in the “20 Leaders Fund” between 07 January 2002 and 25 June 2007. Consider the correlations of returns among the 20 companies, to show the impact of diversification. Assume that the portfolio is rebalanced each week so that each company retains an equal weight in the portfolio. Ignore the payments of dividends that may have occurred with the companies.

Clearly explain your methodology and any assumptions.

Where do I get the data for this assignment?

- You will be provided with the data in a spreadsheet. The data is downloadable from the Corporate Finance website.

What does “analyse the performance” mean?

- You should consider both returns and the standard deviation of returns (i.e. risk) as you analyse the performance of a share or index.
- Any discussion of either returns or the standard deviation of returns should be discussed in terms of annualised (“per year”) figures.
- Performance should always be discussed in comparison to other data (such as the most appropriate index).

What returns should I consider?

- Holding period return is the return from investing one dollar in the share at the start and holding it until the end of the period (including re-investments of any dividends received). You can annualise this figure using appropriate formulas from Unit 2.
- Annualised average weekly return calculates the mean average weekly return and then annualises this using appropriate formulas from Unit 2.
- You should expect that these two returns will yield different answers. For example, with an investment of \$1, a 10% return (\$1.10) followed by a –10% return (\$0.99) will yield a holding period return of –1% while it will provide an average return of 0%.

How do I annualised a standard deviation based on weekly data?

- Calculate the standard deviation based on weekly returns using the =STDEVP() function in Excel.
- Multiply this figure by $\sqrt{52}$ to turn it into an annualised standard deviation.

How do I find the beta of a share?

- There are two ways to find the beta of a stock. You can use Regression models in Excel to estimate a particular share's beta coefficient, based on its historical prices, and the historical values of ASX index over the same period.
- Alternatively, See Unit 6 for the formula for calculating the beta of a stock. Use the =COVAR() function in Excel to calculate covariance. Use the =VAR() function in Excel to calculate variance. The beta of a stock changes over time as you use different periods of data. To get a confidence interval for this "point estimate" then you can run a regression of stock returns against the returns on the market.

How do I calculate the return on a portfolio of twenty stocks?

- Calculate the weekly returns for each stock based on the prices provided.
- Since the portfolio contains equal investments in each stock and it is rebalanced each week, the return on the portfolio each week is the average of the stock returns for that week.
- Use the =AVERAGE() function in Excel to calculate the average return.
- See the note above for how to calculate the annualised standard deviation of these weekly returns.

Appendix 2

Corporate Finance Formulas

Unit 2 formulas

Equation 1 The future value of a single cash flow invested now

$$F_n = P(1 + r)^n.$$

Equation 2 The present value of a single cash flow to be received in period n

$$P = \frac{F_n}{(1 + r)^n}.$$

Equation 3 The future value (at the time of the last cash flow) of an annuity of R per period

$$S_n = \frac{(1+r)^n - 1}{r} R.$$

Equation 4 The present value of an annuity of R per period, where the first payment in the stream starts one period from now

$$A_n = \frac{1 - (1+r)^{-n}}{r} R.$$

Equation 5 The present value of a perpetuity of R per period

$$A_\infty = \frac{R}{r}.$$

Equation 6 The present value of a perpetuity of R growing at g% per period

$$A_{\infty,g} = \frac{R}{r - g}.$$

Equation 7 The nominal and periodic interest rate

$$r = \frac{j}{m}.$$

Equation 8 The annual equivalent rate where r is the periodic rate and m is the number of periods each year

$$AER = (1+r)^m - 1.$$

Equation 9 The basic equation for the valuation of any asset

$$P = \frac{X_1}{(1+r)} + \frac{X_2}{(1+r)^2} + \dots + \frac{X_n}{(1+r)^n}.$$

Unit 3 formulas

Price of stocks: constant dividend

In the case of stocks with constant dividends the price of the stock is given by:

$$p_0 = \frac{d}{r_e}$$

Stocks with dividends growing at a constant rate

In the case of stocks with dividends growing at a constant rate g the price of the stock is given by:

$$p_0 = \frac{d_1}{(r_e - g)}$$

Coupon bonds

For coupon bonds which pay both coupons each period and face value at maturity, the price is given by:

$$B = C \left[\frac{1 - (1 + r_d)^{-n}}{r_d} \right] + \frac{F}{(1 + r_d)^n}$$

Zero coupon bonds

For zero coupon bonds which pay no coupons and repay the face value at maturity, the price is given by:

$$B_d = \frac{F}{(1 + r_d)^n}$$

Unit 4 formulas

Equation 1 NPV rule

NPV = Present value of future cash flows – Initial investment cost

$$= \frac{X_1}{1 + r_p} + \frac{X_2}{(1 + r_p)^2} + \dots + \frac{X_n}{(1 + r_p)^n} - I.$$

Using Σ , the summation sign, the shorthand version looks like

$$NPV = \sum_{t=1}^n \frac{X_t}{(1 + r_p)^t} - I$$

where

n is the number of cash flows generated by the investment

r_p is the required return on the particular investment project

I is the investment cost.

Equation 2 Annual equivalent cash flow

The rule is that for mutually exclusive projects with different lives it is not appropriate to compare the NPV's directly. We should, instead, convert these NPV's to annual equivalent cash flows (AE) where

$$AE = \left[\frac{NPV}{\frac{1 - (1 + r_p)^{-n}}{r_p}} \right].$$

Unit 5 formulas

The expected return of a two-asset portfolio

$$E[r_p] = \alpha E[r_1] + (1 - \alpha) E[r_2].$$

The variance of a two-asset portfolio

$$\sigma_p^2 = \alpha^2 \sigma_1^2 + (1 - \alpha)^2 \sigma_2^2 + 2\alpha(1 - \alpha)\sigma_{1,2}$$

which can also be expressed as

$$\sigma_p^2 = \alpha^2 \sigma_1^2 + (1 - \alpha)^2 \sigma_2^2 + 2\alpha(1 - \alpha)\rho_{1,2}\sigma_1\sigma_2.$$

The definition of the correlation coefficient

$$\rho_{X,Y} = \frac{\sigma_{X,Y}}{\sigma_X\sigma_Y}.$$

The weight α^* on the first asset in the minimum variance portfolio

$$E(r_{mp}) = \alpha^* E(r_1) + (1 - \alpha^*) E(r_2)$$

where

$$\alpha^* = \frac{\sigma_2^2 - \rho_{1,2}\sigma_1\sigma_2}{\sigma_1^2 + \sigma_2^2 - 2\rho_{1,2}\sigma_1\sigma_2}.$$

Unit 6 formulas

Capital Asset Pricing Model

$$E[r_p] = r_f + \beta_p (E[r_m] - r_f)$$

Beta of an asset or portfolio

$$\beta_p = \frac{\text{COV}(r_p, r_m)}{\text{Var}(r_m)}$$

Unit 7 formulas

The price of a forward contract when there is a cost of carry q

$$F = S_0(1 + r_f + q)^T.$$

When interest rates are constant, the same relationship holds for a futures contract.

The price of a forward contract when there is a dividend benefit d

$$F = S_0(1 + r_f - d)^T.$$

When interest rates are constant, the same relationship holds for a futures contract.

Unit 8 formulas

Put-call parity

$$C_E = P_E + S - X(1 + r_f)^{-T}.$$

The lower bound on a European call option

$$C_E \geq \max[0, S - X(1 + r_f)^{-T}].$$

The lower bound on a European put option

$$P_E \geq \max[0, X(1 + r_f)^{-T} - S].$$

Unit 10 formulas

Capital structure: no taxes

$$V^U = V^L \text{ and } r_*^U = r_*^L$$

$$r_e^L = r_e^U + (r_e^U - r_d) \frac{D^L}{E^L}.$$

Capital structure: corporate taxes

$$V^L = V^U + \tau D^L$$

$$r_e^L = r_e^U + (r_e^U - r_d)(1 - \tau) \frac{D^L}{E^L}$$

$$r_*^L = r_*^U \frac{1 - \tau \frac{D^L}{V^L}}{1 - \tau \frac{D^L}{V^L}}.$$

Capital structure: corporate and personal taxes

$$V^L = V^U + \frac{1 - \frac{(1 - \tau)(1 - \tau_{pe})}{(1 - \tau_{pd})}}{1} D^L$$

$$r_*^L = r_*^U \text{ when } (1 - \tau_{pd}) = (1 - \tau)(1 - \tau_{pe}).$$

That is, full dividend imputation.

Appendix 3

Glossary of *Corporate Finance* terms

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| Abnormal return | The difference between an asset's realised return and the return one would expect on an asset of the same risk. |
| Accounting rate of return | A profitability measure calculated by dividing accounting income (from a project) by a measure of the investment (in the project). |
| Accumulation factor | Value at some future date of \$1 now. |
| Alpha | A measure of the abnormal performance of a share—the return the share provided above that predicted by its beta. |
| American option | An option that can be exercised at any time up until its expiry date. |
| Annual effective interest rate | The rate of return to an investment where interest is compounded once a year. |
| Annuity | A series of cash flows of a fixed amount each period for a specified number of periods. |
| Arbitrage | A series of transactions involving no outlay of funds that allows you to make a risk-free profit by exploiting differences in asset prices. |
| Articles of Association | The document that defines the constitution of the company. The Articles define the rules for the internal conduct of the company including procedures for issuing new shares and procedures for the payment of dividends. |
| Asymmetric information | A difference between the information available to various groups. For example, a manager and market participants may have different perceptions of a firm's value. |
| Authorised capital | The total amount of capital a company is authorised (by virtue of its articles of association and memorandum) to issue. |
| Bank accepted bill | A commercial bill accepted by a bank. The bank, by accepting (signing) the bill, assumes the obligation to pay at the due date. |
| Benchmark interest | An agreed standard interest rate for a particular term. The interest rate for some transaction can then be set as the benchmark, plus an agreed margin. |
| Best effort issues | A security issue where the intermediary promises to sell as much of the new issue of securities as possible, but does not guarantee the sale of the entire issue. |
| Beta | Beta measures the contribution of an asset to the risk of the market portfolio of all assets. |
| Book value | The asset's cost less the depreciation that has been expensed to date. |
| Business or operating risk | The risk inherent in the net operating income stream generated by the assets of the firm. This is the risk of the firm when financed only by equity. |
| Call option | An option to buy an asset for the exercise price. |

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| Capital Asset Pricing Model (CAPM) | The CAPM states that an asset's expected return is the risk-free rate plus a risk premium equal to the expected return on-the market portfolio in excess of the risk-free rate, multiplied by the asset's beta. |
| Capital budgeting | Another name for an investment decision. The determination of what a firm should invest in, and how much it should invest. |
| Capital Market Line (CML) | The relation between risk and expected return for an efficient portfolio. Efficient portfolios are combinations of the risk-free asset and the market portfolio. |
| Capital market | The market in which financial assets are issued and exchanged. |
| Capital market imperfection | Capital market imperfections include taxes, bankruptcy and transaction costs. |
| Capital structure | The mix of debt and equity issued by the firm. |
| Classical tax system | A tax system in which equity income is taxed twice. It is first taxed at the company level and again at the personal level. |
| Clientele effect | When a firm adopts a certain dividend policy, it attracts a clientele of investors who prefer that policy. |
| Commercial bills | Unsecured short-term discount debt securities issued by firms. |
| Compound interest | Interest received each period is reinvested. Interest in succeeding periods is earned not only on the initial investment but also on the accumulated interest of prior periods. |
| Consistency principle | Concerns the way the numerator and denominator in the NPV equation are measured. The cash flows estimated in the numerator should be measured in a way that is consistent with the measurement of the required rate of return in the denominator. This applies to variables such as tax, inflation, risk and the way cash flows are computed. |
| Constant payout policy | A policy of paying out a constant percentage of net income in dividends. |
| Continuous compounding | Interest compounded at every instant of time rather than at discrete intervals. |
| Convenience yield | The convenience yield is a measure of the value of immediate access to the commodity. |
| Convertibles | Securities that are convertible to ordinary shares at the holder's option some time in the future. |
| Correlation | Correlation is a statistical measure of the relation between two variables. If two assets' returns move in the same direction, there is said to be a positive correlation between them. When one asset's return goes down as the other rises, the two assets are said to be negatively correlated. |
| Correlation coefficient | The correlation coefficient measures the strength of a relation. It is a number between +1 and -1. The closer the correlation coefficient is to +1 or -1, the stronger is the relation. If the correlation coefficient is zero, the variables are unrelated. |
| Coupon or coupon payment | The regular interest payment received during the term of a debt security. |

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| Covariance | A measure used to describe how two asset returns covary. It equals the product of the correlation coefficient and the standard deviations of each variable. |
| Covenants | Provisions contained in loan agreements. Covenants are designed to protect the lender and include such items as limits on total indebtedness, restrictions on dividends and similar provisions. |
| Cum-rights | A share that is sold together with the entitlement to participate in a rights issue of new shares. |
| Cumulative rights | A feature of some preference shares that gives holders the right to any past unpaid dividends. |
| Debenture | A corporate debt security secured by a fixed or floating charge over the issuer's assets. |
| Debt covenants | Legal structures to protect debt holders from default on their investment. It is a restriction placed upon management in regard to the firm's debt levels and payments to equity holders. |
| Debt securities | Debt represents a contractual claim on the firm's cash flows. The investor has a claim to a fixed sequence of cash flows, comprising regular interest payments (or coupon payments), until the security matures and to a fixed cash amount (the face value of the security) at maturity. Examples are debentures, promissory notes and bank loans. |
| Depreciation tax shield | Tax benefit accruing from depreciation. |
| Derivative Security | Any security whose value depends on the value of an underlying asset. |
| Diminishing marginal return | An investor faced with a series of investment opportunities finds that for each extra dollar invested the additional dollar return is less than for the previous dollar. |
| Diminishing-value depreciation | A depreciation method that allocates depreciation expense to each year in an accelerated pattern, by applying a constant percentage to the declining book value of the asset. |
| Discount | If the coupon rate (on the face value) is below the required rate of return (on the price), the investor will want to buy the security at a discount – that is, the price will be below the face value. |
| Discount factor | Present value of one dollar received at some future date. |
| Discount rate | The interest rate used to calculate the present value of future cash flows. |
| Discounted cash flow | Future cash flows multiplied by discount factors to obtain their present value. |
| Discounting | Calculating a present value by multiplying a future cash flow by a discount factor. |
| Diversifiable risk | Risk that arises from events that affect a single asset or investment. Also called unique, specific or non-systematic risk. |
| Diversification | Spreading on investment over many different assets. |

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| Dividend imputation system | A tax system that allows shareholders to offset tax already paid on dividends at the corporate level against personal tax. |
| Dividend policy | A trade-off between retaining earnings for reinvestment and paying them out as dividends. |
| Dividend reinvestment scheme | A scheme that allows shareholders to reinvest their dividend receipts in shares in the company. |
| Dividend yield | The dividend on a share expressed as a percentage of the share price. |
| Dominance principle | The principle that states that an investor who likes expected return but who dislikes risk only chooses portfolios with the highest expected return for a given level of risk. Similarly, the investor will invest in the portfolio with the least risk at any chosen level of expected return. |
| Efficient frontier | A curve on which all efficient portfolios lie. |
| Efficient Market Hypothesis | A hypothesis which suggests that information is fully reflected in prices. |
| Efficient market | A market in which security prices fully reflect information. In an efficient market, the price of a security equals its value. |
| Efficient portfolio | A portfolio that offers the lowest risk for a particular expected return or the highest expected return for a particular level of risk. |
| Equity securities | Securities that represent a share of the ownership of the firm. The security represents a residual claim on the cash flows of the firm. The cash flows take the form of dividends and capital gains |
| Equivalent annual value (EAV) | Equivalent value per year for the life of a project. |
| European option | An option that can only be exercised at its expiry date. |
| Ex-dividend | The price of a share immediately after a dividend payment. |
| Ex-rights | A share sold without the entitlement to participate in a rights issue of new shares. |
| Excess return | The difference between an asset's realised return and the return one would expect on an asset of the same risk. |
| Exchange rate | The rate at which one currency can be exchanged for another. |
| Exercise price | The price, in an option contract, at which an asset may be bought or sold. |
| Expectations hypothesis | The hypothesis that long-term interest rates are equal to expected short-term rates compounded over the same period. |
| Expected value | The expected outcome. The mean value of the probability distribution of possible outcomes. |
| Expiration date | The date on which an option expires. |
| Face value | The fixed cash amount received on the maturity of a debt security. |
| Financial asset | A claim against future cash flows. Includes both loans, ordinary shares and debentures. |
| Financial decision | The investment and financing decisions undertaken by a firm. |

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| Financial distress | Occurs when a firm is unable to meet its debt payments. This can be short term, a cash flow problem, or long term when the firm moves to default or bankruptcy. |
| Financial leverage | The debt/equity mix employed by a firm. |
| Financial risk | Any increase in risk resulting from financial leverage. This risk is due solely to the capital structure decision. |
| Financial slack | Firms that are profitable have internal reserves, or financial slack, that they can use to fund new projects. |
| Financing decision | The determination of how funds should be raised to finance an asset or project. |
| Firm | Any organisation that coordinates resources to produce goods or services. Examples include partnerships, corporations and government departments. |
| Fixed rate debt | Debt where the interest rate is fixed at the outset for the term of the borrowing. |
| Floating rate debt | Debt where the interest rate changes at set intervals in response to movements in market rates, usually set at a margin above a market benchmark. |
| Foreign exchange risk | Uncertainty about the future value of a firm that arises from uncertainty about future foreign exchange rates. |
| Forward contract | An agreement to buy or sell an asset at a future date for a predetermined price. These can be tailor-made and are not traded on organised exchanges. |
| Forward exchange rate | The price at which you can contract today to exchange currency at some future date. |
| Forward rate | An interest rate at some future date, implied by current spot rates. |
| Franking account | A franking account tracks income earned by the company upon which corporate tax has been paid. This is only used under an imputation system. |
| Free cash flow | The cash flow generated by the firm for its owner(s) in excess of its needs to fund non-negative net present value projects. |
| Fully drawn advance | A fixed term loan where the amount of the loan is fully drawn at the time of approval. Unlike overdrafts where regular repayment of the loan is not required and interest is charged to the account, fully drawn advances require the borrower to make regular payments that represent a repayment of principal plus interest. |
| Future value | The value of cash flows in the future. |
| Futures contract | An agreement to buy or sell an asset at a future date for a predetermined price. Traded on a futures exchange as a commodity. Requires daily margin calls. |

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| Hedge ratio | The amount of one asset needed to hedge another asset, expressed as a proportion of the value of the asset exposed to risk. |
| Hedging | A term to describe actions that minimise exposure to fluctuations in interest rates, exchange rates or other changes in asset values. |
| Interest rate parity | The ratio of one plus the domestic interest rate to one plus the foreign rate equals the ratio of the forward exchange rate to the spot exchange rate when the exchange rate is quoted as domestic currency per unit foreign currency. |
| Interest rate risk | Uncertainty about the future value of a firm that arises from uncertainty about future interest rates. |
| Interest rate risk exposure | The risk a firm incurs when its cash flows are exposed to changes in interest rates. |
| Internal rate of return (IRR) | A rate of return that gives a zero net present value (NPV) to an investment. |
| Internal rate of return (IRR) rule | This rule states that you should invest in production until the rate of return from the last dollar invested is equal to the opportunity cost of capital, i.e. until net present value, (NPV) is-zero. |
| Investment decision | The determination of what a firm should invest in, and how much it should invest. |
| Issue price | The price at which a new security is issued to the primary investors. |
| Levered firm | A firm that employs both debt and equity. |
| Limited liability | Indicates that the liability of equity holders is limited in total to the par value of the shares. |
| Margin calls | Daily payments made in a futures contract to maintain a set balance in the futures account. The adjustments are made to reflect the changes in the underlying asset's price. |
| Market portfolio | A portfolio containing all assets in the whole economy. |
| Market risk | Risk that arises from events affecting all risky assets. Also called systematic or non-diversifiable risk. |
| Market risk premium | The premium that the market portfolio is expected to earn above the risk-free rate. |
| 'Me-first' protection | A protective clause in a debt contract that gives existing debt holders priority of access to cash flows over new debt holders. |
| Mean reversion adjustment | A statistical adjustment used to account for thin trading in estimating betas. Beta is expressed as a function of a constant term plus a proportion of the estimated beta that reflects the effects of thin trading. |
| Memorandum of Association | The formal document by which a firm is first registered. It contains certain essential details about the company such as its authorised capital and its objectives. |
| Minimum variance portfolio | A portfolio with the lowest possible variance of any combination of risky assets. |

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| Mortgage | A pledge of designated property as security for a loan. |
| Mutual fund | A managed investment fund whose shares are sold to investors. |
| Mutually exclusive projects | Two projects are mutually exclusive when a firm can invest in one or the other, but not both. |
| Net present value (NPV) | A project or an investment's net contribution to your wealth. The amount you earn in today's dollars after discounting future cash flows and deducting all initial costs associated with the investment. |
| Net present value (NPV) rule | The NPV rule states that you should accept all investments with a non-negative NPV. |
| Net working capital | Current assets less current liabilities. Net working capital can apply to individual projects as well as entire organisations. |
| No liability | A form of incorporation, sometimes used by mining or oil companies, that allows shareholders legally not to pay a call on unpaid shares but then to forfeit these shares. The shareholder is liable only for cash contributed. |
| Normal probability distribution | A symmetrical bell-shaped probability distribution. |
| OLS betas | Betas calculated using ordinary least squares (OLS) regressions. |
| Operating leverage | Operations are leveraged when a small change in sales revenue induces a relatively large change in net operating income. |
| Opportunity cost of capital | The return foregone by investing in a security rather than the next best alternative. |
| Optimal capital structure | The mix of debt and equity that maximises firm value. |
| Optimal dividend policy | A dividend policy that maximises firm value. |
| Option | The right but not the obligation to buy or sell an asset at, or sometimes before some future date. |
| Ordinary least squares (OLS) regression | A statistical technique for analysing the relationships between sets of data. |
| Ordinary shares | An equity security issued by the firm. The holder has a residual claim on the firm's cash flows and voting rights. |
| Overdraft | A limit placed on a customer's account by a bank. The bank will advance funds up to this limit. Overdraft lending is usually granted to finance a customer's short-term financing requirements, with the bank retaining the right to recall the loan at any time. |
| Par | When the coupon rate is the same as the investor's required rate of return, the security sells at par, that is, the price will be the same as the face value. |
| Par value | The nominal or legal value placed on each share by the company in its Memorandum and Articles of Association when establishing its authorised capital. |

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| Participating preference share | A preference share that entitles the holder to share in any surplus profits of the company in addition to the fixed dividend. |
| Partly paid shares | Shares on which the holder has not paid the full subscription price. The shareholder has a liability to pay the remaining amount when called on by the company. |
| Pay back | The number of years required to return the original investment from the net cash flows of the investment. |
| Payout ratio | The proportion of earnings paid out as dividends. |
| Pecking Order Hypothesis | This hypothesis states that there is a hierarchy or pecking order in the preferences for capital raisings between internally generated funds such as debt and equity issues. |
| Perfect capital market | A capital market in which there are no transaction costs and information is freely available to market participants. |
| Perpetuity | A stream of cash flows of a fixed amount for each period forever, that is, in perpetuity. |
| Plowback ratio | The proportion of earnings plowed back or reinvested in the firm. |
| Portfolio | A combination of assets. |
| Preference share | An equity security issued by a firm that has a claim to cash flows before that of ordinary shares. Although a fixed dividend is attached to the security there are normally no voting rights. Also known as preferred stock. |
| Premium | If the coupon rate is above the investor's required rate of return, the investor will be prepared to pay more than the face value; the security will be sold at a premium. |
| Present value | The value now of a stream of future cash flows. |
| Price–earnings (PE) ratio | $\frac{\text{share price}}{\text{earnings per share}}$ |
| Prime-cost depreciation | Depreciation that is calculated by applying a constant percentage to the asset's initial cost. |
| Private placement | An issue of securities made solely to an investor group that does not include all existing security holders. |
| Probability | The likelihood of a particular event occurring. |
| Promissory note | A note issued by a debtor agreeing to pay a certain amount at some time in the future. They are short term in nature. |
| Prospectus | An offer document required to be given to new investors interested in purchasing a new public issue of securities. |
| Public issue | An issue of securities made to investors at large. |
| Put option | An option to sell an asset for the exercise price. |

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| Rate of return | The with-dividend change in the value of an asset divided by the asset's initial value. |
| Real asset | A productive resource. A real asset has value because it can generate cash flows. It may be tangible (e.g., factories, machinery and equipment) or intangible (e.g., copyrights, brand names, skills and knowledge). |
| Real values (or constant dollar values) | These are expressed in terms of today's prices and today's purchasing power of the dollar. |
| Redeemable preference share | A class of preference shares that are redeemable either automatically or at the firm's option. In other words, the firm has the option to buy them back at an agreed price. |
| Renounceable right | A rights issue that allows existing shareholders to transfer (renounce) all or part of their entitlement to the new shares. |
| Required rate of return | The return required to compensate for the risk of the investment. |
| Residual claim | Claim to be paid only after the firm has met its other obligations, such as debt obligations and creditors. Residual claim typically refers to equity claims. |
| Return on equity (ROE) | The return the firm earns on book equity. |
| Rights issue | An issue of ordinary shares to existing shareholders, where each shareholder receives the right to an additional number of ordinary shares in a fixed proportion to their current holding. |
| Risk | The degree of uncertainty about an event. This depends on two things: the range of possible outcomes, and the likelihood of those outcomes. Risk is measured by variance or by standard deviation. |
| Risk averse | Disliking of risk, other things being equal; risk-averse individuals will only accept investments when they are compensated for choosing an uncertain outcome over a certain one. |
| Risk premium | The difference between the expected return as a risky investment and the return on a risk-free investment. A compensation for the risk of the investment. |
| Risk profile | The risk exposure of a firm. This may be business risk, financial risk or both. |
| Risk-free asset | An asset that offers an expected return that is considered certain. |
| Risk-free rate | A rate of return that can be earned with certainty. |
| Salvage value | The amount that can be recovered by disposing of equipment at the end of a project. It may represent the scrap value or the second-hand sale price. |
| Scholes–Williams adjustment | A method to adjust betas for thin trading that uses betas observed over adjacent periods. |
| Scholes–Williams betas | Betas calculated using the Scholes–Williams adjustment. |

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| Secondary market | The buying and selling of securities between investors. This does not involve any new capital being raised for the company. |
| Security | A tradable right for an investor to receive cash flows in the future. It can be freely sold from one investor to another. Examples include shares, commercial bills, promissory notes and debentures. |
| Security Market Line (SML) | The relation between the expected return on an asset and its risk as measured by beta. |
| Sensitivity analysis | An analysis of the effect on project profitability of changes in inputs to the project, such as sales, costs and market size. Each variable is set, in turn, at its most pessimistic or optimistic and the NPV of the project recalculated each time. |
| Separation principle | This principle states that investment decisions made according to the net present value (NPV) rule to maximise wealth are not affected by the personal consumption preferences of investors. |
| Spot exchange rate | The price at which you can exchange one Australian dollar today for other currency for immediate delivery. |
| Spot interest rate | Interest rate fixed today on a loan that is created today. |
| Spot price | The current price of an asset for immediate delivery. |
| Stable dividend policy | A policy of paying a stable dollar amount of dividends per share with adjustments only when the level of expected net income exhibits a 'permanent' change. |
| Subordinate debt | Debt that is repaid after all other creditors but before equity holders. |
| Term loan | A loan generally obtained from a bank or an insurance company with a maturity greater than 1 year. Term loans are generally amortised: periodic payments are made to reduce the outstanding amount of the loan over its life. |
| Separation principle | This principle states that investment decisions made according to the net present value (NPV) rule to maximise wealth are not affected by the personal consumption preferences of investors. |
| Spot exchange rate | The price at which you can exchange one Australian dollar today for other currency for immediate delivery. |
| Spot interest rate | Interest rate fixed today on a loan that is created today. |
| Spot price | The current price of an asset for immediate delivery. |
| Stable dividend policy | A policy of paying a stable dollar amount of dividends per share with adjustments only when the level of expected net income exhibits a 'permanent' change. |
| Subordinate debt | Debt that is repaid after all other creditors but before equity holders. |
| Term loan | A loan generally obtained from a bank or an insurance company with a maturity greater than 1 year. Term loans are generally amortised: periodic payments are made to reduce the outstanding amount of the loan over its life. |

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| Term structure of interest rates | The relationship between interest rates and maturity. |
| Thinly traded shares | Shares not traded frequently. |
| Time value of money | The concept that \$1 now is worth more than \$1 in the future because it can be immediately invested at a positive interest rate. |
| Trust deed | The contract between a company and a trustee, as the representative of the debenture holders, relating to the public issue of debentures. The trust deed sets out the terms and conditions of the issue and contains certain undertakings (covenants) by the firm, restricting the firm's actions. |
| Underwriter | An institution that guarantees the success of a new issue or sale of securities. If the issue is not fully subscribed, the underwriter will purchase any shortfall. |
| Unlevered firm | A firm that has no debt. |
| Unseasoned issue | An unseasoned issue or float refers to a firm's initial issue of new securities. |
| Variance and standard deviation | Measures of the degree of variability around expected value. |
| Venture capital | The provision of start-up or development capital together with business advice in return for large equity-linked returns. |
| Weight | The fraction of a portfolio invested in one particular asset. |
| Yield curve | A curve that depicts the relation between interest rates and the maturity dates of investments with the same default risk. |
| Yield to maturity (YTM) | The discount rate at which a debt security's net present value equals its current price. |

Appendix 4

Useful websites

Weblinks

Australian Securities and Investments Commission (ASIC)

<http://www.asic.gov.au>

<http://www.fido.asic.gov.au>

Securities information for companies, small businesses, investors and consumers as well as information on ASIC policy and changes to corporate law.

International Organization of Securities Commissions (IOSCO)

<http://www.iosco.org>

Contains IOSCO public documents and reports and annual conference information.

Australian Securities Exchange

<http://www.asx.com.au>

Information on ASX listed companies, ASX listed shareprices, investor relations and derivatives as well as information about the ASX.

Australian Financial Review Net Services

<http://www.afr.com.au/index.html>

Access to Australian Financial Review (newspaper) articles.

Financial Times

<http://www.ft.com>

Securities Exchange Commission

<http://www.sec.gov>

Includes SEC digest and statements, current rules, information on small business and recent enforcement action as well as general information about the SEC.

The Wall Street Journal – Interactive Edition

<http://www.wsj.com>

Appendix 5

Assessment cover sheet

Assessment Cover Sheet

AGSM MBA



- GCCM GDM Executive Year MBA
 Hong Kong GDM/MBA

Fill in all details on this form and submit with your assessment

Details

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|----------------------|---------------------------|--|--|
| Personal ID | Family name | Given name(s) | |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | |
| Course name | Lecturer/ Instructor name | Due date | |
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| Assessment name | Assessment number | Page length | |
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Student declaration

I declare that:

- This assessment item has not been submitted for academic credit elsewhere.
 I have read and understood the University Rules in respect of Student Academic Misconduct.
 Appropriate citation methodology has been used throughout the assignment in accordance with the UNSW Policy on Academic Misconduct and Student Misconduct. <https://my.unsw.edu.au/student/academiclife/assessment/AcademicMisconductStudentMisconduct.html>

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Individual assessment items:

- This assessment item is my own work, except where acknowledged, and is not the result of collaboration with others.

Signature

Date

 / /

Group assessment items:

- This work is the result of collaboration amongst all members of the group listed below and no others. All members of the group have contributed to the assessment.

| Family name | Given name | Signature |
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NB: If the assessment is submitted electronically please type name/s into the signature field.

Lecturer/Instructor use only

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| Date received | Grade | Date returned to student | Signature |
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Acknowledgement of receipt of assessment

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| Assessment name | Assessment number | |
| <input type="text"/> | <input type="text"/> | |
| Lecturer/Instructor name | Signature | |
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