MNGT6321
Corporate Finance

Session 3, 2015
The UNSW Business School is actively monitoring student learning and quality of the student experience in all its programs. A random selection of completed assessment tasks may be used for quality assurance, such as to determine the extent to which program learning goals are being achieved. The information is required for accreditation purposes, and only aggregated findings will be used to inform changes aimed at improving the quality of UNSW Business School programs. All material used for such processes will be treated as confidential and will not be related to course grades.
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# Course calendar

## Session 3, 2015

### MNGT6321 Corporate Finance

**MBA (Executive)**

### Venue:

AGSM MBA Kensington Campus  
The University of New South Wales  
Gate 11, Botany Street  
Randwick NSW 2031

### Parking:

On Friday evenings, casual ticket parking is available on the top floors of the Botany Street (Gate 11) car park. Parking is free at this carpark on Saturdays and Sundays. (for non-restricted parking bays).

### Week, Unit, Assignment due (% weighting)

<table>
<thead>
<tr>
<th>Week no.</th>
<th>Week begins</th>
<th>Unit</th>
<th>Assignment due (% weighting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7 September</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>14 September</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>21 September</td>
<td>3</td>
<td>Quiz 1 starts (9:30am Friday 25 September)</td>
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<tr>
<td>4</td>
<td>28 September</td>
<td>4</td>
<td>Quiz 1 due (5%) (9:30am Monday 28 September)</td>
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<tr>
<td>5</td>
<td>5 October</td>
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<tr>
<td>6</td>
<td>12 October</td>
<td>6</td>
<td>Quiz 2 starts (9:30am Friday 16 October)</td>
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<tr>
<td>7</td>
<td>19 October</td>
<td>7</td>
<td>Quiz 2 due (5%) (9:30am Monday 19 October)</td>
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<tr>
<td>8</td>
<td>26 October</td>
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<td></td>
<td>Workshop (Saturday 31 October)</td>
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<td>9</td>
<td>2 November</td>
<td>9</td>
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<tr>
<td>10</td>
<td>9 November</td>
<td>10</td>
<td>Group Assignment (40%) due 9:30am (Sydney) Tuesday 10 November 2015</td>
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<tr>
<td>11</td>
<td>16 November</td>
<td>11</td>
<td></td>
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<tr>
<td>12</td>
<td>23 November</td>
<td>12</td>
<td></td>
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</tbody>
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**Final Exam (50%) (Saturday 5 December 2015)**
Course overview

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; and
- 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); and
- 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.

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.

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 each unit of Corporate Finance.

At the end of each unit we have provided some Class Discussion Questions that you will need to prepare before class. These questions are designed to be quite challenging and draw upon the major concepts developed in the unit. The solutions to these Class Discussion Questions are uploaded onto the Course Website after they are covered in class.
When you have completed this course you are expected to be able to:

1. perform financial modelling to value a series of cash flows;

2. identify and explain the key variables that influence the value of debt, equity and assets;

3. identify and explain the risks that are relevant for assessing value and how to calculate appropriate required rates of return based on relevant risks;

4. identify and explain how debt can change value, risk and required rates of return under a variety of international tax regimes;

5. construct and explain a hedge for future cash flows using forwards, futures and option contracts; and

6. explain and apply the principles of value based management.

MBA Program Learning Goals

The Course Learning Outcomes are what you should be able to DO by the end of this course if you participate fully in learning activities and successfully complete the assessment items.

The Learning Outcomes in this course also help you to achieve some of the overall Program Learning Goals and Outcomes for all postgraduate coursework students in the UNSW Business School. Program Learning Goals are what we want you to BE or HAVE by the time you successfully complete your degree (e.g. ‘be an effective team player’). You demonstrate this by achieving specific Program Learning Outcomes – what you are able to DO by the end of your degree (e.g. ‘participate collaboratively and responsibly in teams’).
MBA Program Learning Goals and Outcomes

Learning Goal 1: Business Management Knowledge
Students should be able to identify and apply current knowledge of disciplinary and interdisciplinary theory and professional practice to general management and business within diverse situations.

Learning Goal 2: Critical Thinking
Students should understand and be able to identify, research and analyse complex issues and problems in business and develop appropriate solutions.

Learning Goal 3: Communication
Students should be able to produce written documents and oral presentations that communicate effectively complex disciplinary ideas and information for the intended audience and purpose.

Learning Goal 4: Teamwork
Students should be able to participate collaboratively and responsibly in teams and to reflect upon their own contribution to the team and on the necessary processes and knowledge within the team to achieve specified outcomes.

Learning Goal 5: Responsible Business
Students should be able to appraise ethical, environmental and sustainability considerations in decision making and in practice in business.
Students should be able to consider the social and cultural implications of management practices and of business activities.

Learning Goal 6: Leadership
Students should be able to reflect upon their own personal leadership style and the leadership needs of business and of teams.

Learning Goal 7: International Perspective
Students should understand the needs of undertaking business within a global context.
Students should be able to apply business management knowledge to business situations within global markets with due recognition for differences in cultural, legal, commercial and other issues.

Learning Goal 8: Risk Management
Students should be able to demonstrate an understanding of the limits in precision and the risks associated with business models.
Students should be able to appraise risk and to develop risk mitigation strategies applicable to business undertaken within uncertain and volatile environments.
Course structure

Unit 1
Financial Intelligence

Unit 2
Financial Mathematics

Unit 3
Valuing Debt and Equity

Unit 4
Valuing Assets

Unit 5
Risk and Return I

Unit 6
Risk and Return II

Unit 7
Financial Leverage I

Unit 8
Financial Leverage II

Unit 9
Risk Management I

Unit 10
Risk Management II

Unit 11
Value-based Management

Unit 12
Review
Course communication

Course website

The Corporate Finance course website uses an online environment called eLearning which operates on a software platform called ‘Moodle’. It provides you with access to the following resources:

- the course notes in PDF format;
- solutions to the Class Discussion Questions for each unit after they have been covered in class;
- videos to assist you with your learning;
- the standard PowerPoint slides for this course;
- online assessments such as the quizzes and peer assessment; and
- sample final exams and solutions.

To access the course website:

1. go to http://telt.unsw.edu.au
2. select ‘Login to UNSW Moodle’
3. Login to the web Single Sign On (wSSO) using these details
   - Username: zNumber
   - Password: zPass
4. Select ‘MGNT6321-Corporate Finance’ from the ‘My Courses’ panel.

zNumber and zPass

Your zNumber is your 7-digit UNSW student number with a ‘z’ in front. If your student number is 1234567 then your zNumber is z1234567.

Your zPass is the password that you use to access UNSW online services. If you are a new student then you can obtain a password by visiting the UNSW Identity Manager website: https://idm.unsw.edu.au and then selecting the ‘New User – Click HERE’ link. If you have forgotten your password then enter your zNumber and then click ‘Forgot Password?’.

Troubleshooting access to the Course Website

If you have difficulties accessing the Course Website then this may be due to either a problem at your end (with your computer or connection) or a problem with the eLearning system itself. If you do experience problems accessing the website then we suggest that you try the following:
1. Check your email for any messages from the course coordinator or UNSW IT about the course website experiencing technical difficulties.

2. Determine if the problem is with your computer. Access the website from a different device at your location (such as a phone or a different computer). If the problem is with your computer, then try rebooting it. If that fails, then try clearing your browser's cache and clear cookies (if you don’t know how to do this then type the name of your browser into a search engine with the phrase “how to clear cache and cookies”). If that fails, then try using a different browser such as Mozilla Firefox.

3. If there is no problem with your computer, determine if the problem is with a firewall or your broadband connection. Try accessing the website from a device that uses a different internet connection, such as a smartphone that accesses the internet via 3G or from a home computer (if you are attempting to access the website from work).

4. If the problem is not with your connection, determine if the problem is with the web Single-Sign-On (wSSO) process that logs you onto the course website. Try the following:
   a) clear all your browser cache and cookies
   b) login to Moodle via myUNSW: https://my.unsw.edu.au
   c) click on Sign On which will take you to the Web Single Sign On
   d) login using your zNumber and zPass
   e) click on the Moodle logo on the right hand side of the page.

5. If the problem appears to be with the eLearning system, try waiting one hour to see if the problem is just a short-term issue that UNSW IT are able to resolve quickly.

6. If you have done all of the above (and also waited one hour), and have not received any email notifications of a technical difficulty with the course website, then please notify the course coordinator by email: andrew.hingston@agsm.edu.au and then contact IT Support at one of the contacts listed below.
Course email

The course coordinator and your facilitator may send announcements, reminders and materials to your student email address. You are responsible for making sure that you have set up your student email address to forward messages to an active personal or work email address. You can do this as follows:

1. go to https://idm.unsw.edu.au
2. Enter your zNumber and zPass and press 'Login'
3. Under the ‘UNSW Email’ section, add your personal or work email to the ‘Emails to this account are currently being delivered to’.

Some students prefer to set up a Gmail account at www.gmail.com to use as a repository for all of their student emails since they are free and also have generous storage limits (more than one gigabyte). Emails in Gmail accounts can also be downloaded into an email client (such as Microsoft Outlook), can be viewed using a standard internet browser and can also be easily viewed on smartphones.

eLearning support

Should you have any difficulties accessing your course online, please contact the eLearning support below:

For login issues:

UNSW IT Service Centre

Hours: Monday to Friday: 8.00am – 8.00pm  
       Saturday and Sunday: 11.00am – 2.00pm

Email: ITServiceCentre@unsw.edu.au
Phone: Internal: x51333  
       External: 02 9385 1333  
       International: +61 2 9385 1333

For assistance in using Moodle, including how to upload assessments:

The AGSM eLearning Coordinator

Hours: Monday to Friday: 9.00am – 5.00pm

Email: elearning@agsm.edu.au
Phone: Internal: x19541
External: 02 9931 9541  
International: +61 2 9931 9541

For help with technical issues and problems:

External TELT Support

Hours: Monday to Friday: 7.30am – 9.30pm  
       Saturdays and Sundays: 8.30am – 4.30pm

Email: externalteltsupport@unsw.edu.au  
Phone: Internal: x53331  
       External: 02 9385 3331  
       International: +61 2 9385 3331

AGSM MBA Programs contact details

Student Experience

If you have any administrative queries, they should be addressed to Student Experience.

Student Experience  
AGSM MBA Programs  
UNSW Business School  
UNSW SYDNEY NSW 2052

Tel: +61 2 9931 9400  
Fax: +61 2 9931 9205  
email: studentexperience@agsm.edu.au

Courier address:  
AGSM Building, Gate 11, Botany Street,  
UNSW Campus, Randwick NSW 2031

Mailing address:  
Student Experience  
AGSM MBA Programs  
UNSW Business School  
UNSW SYDNEY NSW 2052
Learning resources

The learning resources that you have to assist you in your study of Corporate Finance include:

- the twelve units of course materials on the Course Website;
- videos on the Course Website;
- the class sessions in your two weekend workshops;
- your fellow class members and your personal network;
- sources of financial information in the media; and
- the AGSM website and Internet references for background information.

Equipment you will need

A scientific calculator is required for this course. The standard blue scientific Casio calculators that are available in most newsagents and bookshops are more than adequate for this course. They have model numbers such as ‘Casio fx-82AU Plus’ and ‘Casio fx-100AU’ although you don’t need to purchase those exact models. Please consider purchasing a new calculator for this course rather than relying on your old calculator from high school since these new calculators have larger screens and other features that are beneficial for this course.

A financial calculator is not necessary for this course and may actually be a disadvantage since many calculations must be performed manually.

Excel revision

It is advisable for you to have some skills in using Microsoft Excel. If you are unfamiliar with operating Excel, you should familiarise yourself with how it works. There are many videos on Youtube that can help you with this.

Algebra revision

This course assumes familiarity with high-school level algebra. If you have rarely used algebra since high school, then you may need to review some mathematical concepts. In order to facilitate your learning, we have included some algebra refresher documents and videos on the Corporate Finance Course Website.
The main skills that you will need are to simplify an equation and to solve it. In particular to:

- create an equation: expressing a finance situation;
- re-arrange an equation: adding to both sides of the equation;
- re-arrange an equation: multiplying both sides of the equation; and
- re-arrange an equation: raising both sides of an equation to a power.

Another useful free resource is McDonalds Maths (http://www.mathsonline.com.au). Please note that this is a rather comprehensive resource that follows the year 7 to 12 curriculum but you only need to focus on contents (such as year 8–9 algebra) that are directly relevant to Corporate Finance.

As a rule of thumb, if you can easily complete the self-assessment exercises at the end of Unit 2, you do not need such a review.

**Additional reading**

The course notes are the only required academic reading for this course. However, it is important to supplement the course notes with your own regular reading of the *Australian Financial Review* or the *Financial Times*.

If you have already studied some finance before, then you might like to supplement the course notes with the following:


If this course inspires you to further your knowledge in Corporate Finance, then you may like to consider reading the following:

At the movies

If you are looking for some entertainment that picks up on some of the concepts from this course, then you may wish to see some of the following films:

- **Margin Call** (2011) – the 2007-08 Financial Crisis (not very good though!)
- **Wall Street: Money Never Sleeps** (2010) – asset bubbles
- **Enron: The Smartest Guys in the Room** (2005) – the Enron collapse
- **The Corporation** (2004) – documentary on history of corporations
- **Startup.Com** (2001) – documentary following the financing a start-up
- **Boiler Room** (2000) – a broker makes money from a scam (true story)
- **Rogue Trader** (1999) – the collapse of Barings investment bank
- **Barbarians at the Gate** (1993) – a leveraged buyout of RJR Nabisco

Additional student resources and support

The University and the UNSW Business School provide a wide range of support services for students, including:

- **UNSW Business School - Education Development Unit (EDU)** ([https://www.business.unsw.edu.au/students/resources/learning-support/consultations](https://www.business.unsw.edu.au/students/resources/learning-support/consultations))
  Academic writing, study skills and maths support specifically for UNSW Business School, AGSM and MBT students.
  Services include workshops, online and printed resources, and individual consultations.
  EDU Office: Level 1, Quadrangle Building; Ph: + 61 2 9385 5584; Email: edu@unsw.edu.au

- **UNSW Learning Centre** ([www.lc.unsw.edu.au](http://www.lc.unsw.edu.au))
  Academic skills support services, including workshops and resources, for all UNSW students. See website for details.

- **Library training and search support services** ([http://info.library.unsw.edu.au](http://info.library.unsw.edu.au))

- **UNSW IT Service Desk** Technical support for problems logging in to websites, downloading documents etc. Library, Level 2; Ph: + 61 2 9385 1333.
  Website: [www.its.unsw.edu.au/support/support_home.html](http://www.its.unsw.edu.au/support/support_home.html)
• **UNSW Counselling Service**  
  ([www.counselling.unsw.edu.au](http://www.counselling.unsw.edu.au))  
  Free, confidential service for problems of a personal or academic nature; and workshops on study issues such as ‘Coping With Stress’ and ‘Procrastination’.  
  Office: Level 2, Quadrangle East Wing; Ph: +61 2 9385 5418

• **Student Equity & Disabilities Unit**  
  ([http://www.studentequity.unsw.edu.au](http://www.studentequity.unsw.edu.au))  
  Advice regarding equity and diversity issues, and support for students who have a disability or disadvantage that interferes with their learning. Office: Ground Floor, John Goodsell Building; Ph: +61 2 9385 4734
### Assessment

**Summary of requirements**

In order to pass this course, you must:

- achieve an aggregate (overall) mark of at least 50; and
- pass the final exam.

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<thead>
<tr>
<th>Assignment</th>
<th>Due</th>
<th>Weight</th>
<th>Units assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Online Quiz 1</strong></td>
<td>9:30am (Sydney), Monday, 28 September 2015 (Week 4)</td>
<td>5%</td>
<td>Units 1 to 3</td>
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<tr>
<td><strong>Online Quiz 2</strong></td>
<td>9:30am (Sydney), Monday, 19 October 2015 (Week 7)</td>
<td>5%</td>
<td>Units 4 to 6</td>
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<td><strong>Group Assignment</strong></td>
<td>9:30am (Sydney), Tuesday, 10 November 2015 (Week 10)</td>
<td>40%</td>
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<tr>
<td><strong>Final exam</strong></td>
<td>Saturday, 5 December 2015</td>
<td>50%</td>
<td>Units 1 to 12</td>
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<tr>
<td></td>
<td>Duration: Two (2) hours (plus 10 minutes reading time)</td>
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Online Quizzes 1 and 2

Due: See details under each quiz below.
Weight: 5% each (marks on Course Website after due date)
Submission: Course Website
Duration: Unlimited time until due date

The objective of each online quiz is to assess whether you have adequately prepared for each workshop by pre-reading the course materials, viewing the videos and attempting the in-unit exercises in your Course Materials.

You must complete each online quiz on the course website. The links to these quizzes will only be available between the start and due dates listed below.

It is strongly recommended that you listen to the videos provided on the course website before you attempt these quizzes as part of your preparation for the workshops. You can download these videos and watch them on public transport on the way to work each day.

Make sure that you allocate sufficient time to perform each quiz and plan to submit each quiz well before the due date and time. The university undertakes administration of the eLearning website from time to time (especially on weekends). The website may also be unreliable or inaccessible from some workplaces due to firewall restrictions. Computer unavailability or difficulties are not an acceptable excuse for not submitting the quiz assessments.

If the university does schedule maintenance of the course website during the final 24 hours of the assessment, then the course coordinator may grant an extension to all students. The details of the extension will be provided by email to your student email address (see the earlier section on Course emails to make sure your student email is setup correctly to forward email to your personal or work email address). If the course website is unavailable for less than 24 hours then it is unlikely that an extension will be granted.

If you experience technical difficulties accessing the course website then please read the ‘Troubleshooting access to the Course Website’ section earlier in this course overview.

The questions in the quiz are randomly selected and ordered for you as an individual from a large set. Each quiz will consist of 15 questions which might be either in a multiple-choice format, or require you to type in a numerical value after making the necessary calculations. Each multiple choice question will have either four or five possible solutions. While more than one answer may be partly correct, you are required to select the most
correct answer. For questions requiring you to type in a numerical value, such values will be allowed to vary from the precise answer by a small percentage to account for rounding errors but you are urged to be as accurate as possible with your calculations to avoid penalties. Negative marks are not allocated for incorrect answers.

For questions requiring a numerical value, you must be careful regarding the format of your answer. Do not include a dollar sign ‘$’ as part of your answer. If the answer is $500.23 then just enter 500.23. Some answers may have a negative value. If the answer is -$500.23 then just enter -500.23. Percentages should be entered as a percentage without the percent symbol. If the answer is 10.23% then you should enter 10.23 as your answer. For rounding, refer to the question itself for how many decimal places to include. If answers are to be rounded to the nearest dollar then $500.23 would be rounded down to 500. An answer of $500.76 would be rounded up to 501.

Since the quiz responses are saved automatically provided that the online quiz is still available and not yet submitted, you can return to correct previous attempts till due date. After you have read the final question, you can click on ‘Next’ button found on the bottom left hand corner. On the following page you will see the summary of your attempt. You can click on either of the buttons ‘Return to attempt’ or ‘Submit all and finish’.

Do NOT click ‘Submit all and finish’ button unless you have completed the entire quiz and would like to get it graded. You can submit each online quiz only once, so quizzes that have been submitted cannot be un-submitted. If you mistakenly submit your online quiz too early or you do not then it will be marked based on the questions that you have completed. If you do not submit answers by the deadline then you will not receive marks for the questions that have not been answered.

You should complete each quiz individually. You should not discuss the questions or collaborate in any way with anyone else or allow any other person to see your answers since this constitutes academic misconduct. If another student asks you for assistance then you should immediately notify the course coordinator by email.

Posting questions and/or answers to the quiz questions in forums or other publicly available locations constitutes a breach of copyright and also represents academic misconduct. This will not be tolerated and disciplinary action may be taken against you.

If you are travelling during a particular quiz then you are responsible for arranging access to the Internet so that you can complete the assessment by the due date and time.
The quizzes are open book. You are permitted to refer to your course notes, lecture slides and other materials to answer the questions in the quizzes.

If what your facilitator teaches is different from the course notes, then the course notes will be deemed as “most correct” for the purpose of assessment.

The online quizzes will be computer marked. After each quiz due date and time, you will be able to see your score and the questions that you answered incorrectly on the course website. Instructions for accessing this feedback will be provided to you after the quiz has finished.

**Quiz 1**

Available: 9:30am (Sydney), Friday, 25 September 2015 (Week 3)
Due: 9:30am (Sydney), Monday, 28 September 2015 (Week 4)
Weight: 5%
Assessed: Units 1 to 3
Questions: 15 randomly selected

**Quiz 2**

Available: 9:30am (Sydney), Friday, 16 October 2015 (Week 6)
Due: 9:30am (Sydney), Monday, 19 October 2015 (Week 7)
Weight: 5%
Assessed: Units 4 to 6
Questions: 15 randomly selected
Group Assignment

Due: 9:30am (Sydney), Tuesday, 10 November 2015 (Week 10)
Weight: 40%
Assessed: Units 2 to 6

Group Work: Assignments should be completed in groups of 5 students or less. A group may only be formed between students who have the same facilitator. You are responsible for the selection of groups. While group work is encouraged, the assignment may be completed individually.

Length: Details on this word limit will be provided with the assignment question (on the course website by week 1 of session).

Formatting: You should use the Microsoft Word template provided on the course website for your assignment answer. You should only use the Arial font (or Helvetica) to maximise compatibility. You are not required to follow the standard AGSM assignment formatting requirements. More details on formatting are provided with the assignment question.

Submission: Your assignment will be submitted electronically as a Microsoft Word document on the course website. Detailed instructions on submission will be provided with the assignment question.

Assignment Qn: Available in week 1 on the course website under ‘Assessments … Group Assignment’
Group work

We encourage group work as we believe that you will gain by discussing the topics covered in this course with a diverse group of people. Group work is also important for developing your personal network. You might like to consider the following issues with group work:

- Your group will benefit from a high level of diversity. You are encouraged to form groups with a broad range of skills covering quantitative analysis and Excel skills, writing and editing skills and project management and leadership skills. You should also try to form groups that cover diverse industry groups and cultural backgrounds.

- You should consider appointing a project leader for the group who will adopt a 'consultative' leadership style. Avoid appointing a leader who is only able to exercise an 'autocratic' leadership style. In the past, students have found that groups who attempt to make every decision 'democratically' without a clear leader incur undue influence costs.

- Avoid splitting up the individual assignment questions to each group member to work on individually without collaboration. A better approach is for each member to individually prepare a 'rough draft' answer for all questions. You can then compare the different approaches to reduce 'Group Think' and draw from the diversity of experience and knowledge in your group. One or two group members can then work to develop the draft answers into a more comprehensive final version.

- You should consider developing a clear plan for the assignment that includes tasks, responsibilities and milestones. Aim to complete the assignment well in advance of the due date to avoid a last-minute rush. You are studying an MBA and so it is expected that you can manage your time effectively.

- If you commit to your group members to a deadline for a particular task, then it is expected that you deliver quality work on schedule. Everyone is busy with work and family commitments.

- Avoid long meetings on weekends. If you circulate drafts before meetings by email, then meetings can be used to discuss these drafts and decide on appropriate courses of action. Meetings should generally be less than one hour in duration.

- Consider using modern means of communication for your group meetings. A Skype Premium account costs less than $10 per month. Only one user needs to have a Skype Premium account in order to arrange a group video conference of up to 10 people. You can also share screens and documents easily using the Skype platform.
Assessment criteria and grading

You should make sure that you have reasonable expectations for your group assignment mark. Most good assignments receive a Credit while very good assignments receive a Distinction. High Distinction grades are normally reserved for assignments of an exceptional quality.

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

20 Corporate Finance
Final Exam

Date: Saturday, 5 December 2015
Duration: Two (2) hours (plus 10 minutes reading time)
Weight: 50%
Assessed: Units 1 to 12

The objective of the final exam is to test whether you have achieved the learning objectives of units 1 to 12 of the course.

The exam will be 2 hours with 10 minutes additional reading time. You will be allowed to write on your question paper during reading time but will not be permitted to write in your answer booklets.

A sample final exam (with answers) will be provided on the course website by week 10 of session under the ‘Assessments … Final Exam’ link. In addition, there are also some practise exam style questions in unit 12 of the course materials. The class discussion questions at the end of each unit can also be used for exam preparation (except those that involve developing spreadsheets). No additional sample exam questions will be provided by your facilitator or the course coordinator. The final examination is open book. In the exam you will be allowed to use electronic devices for the purpose of referring to digital course materials and notes only. These devices must not be connected to the internet, Wi-Fi must be disabled and tablets must be in flight mode. They must not be used to type your exam responses. You may also bring in printed materials and handwritten notes. However, it is unlikely that you will have time to make extensive use of your course notes during the examination. It is recommended that you only refer to one-page summaries for each unit. Computers and mobile phones must be switched off and placed in your bag. You should also use an ordinary scientific or financial calculator in the exam (not your phone).

The final exam will consist of 10 questions worth 10 marks each. 8 questions will be quantitative problems involving calculations. 2 questions will be qualitative questions involving short-answers (up to 1 page). The quantitative problems are broken up into several parts (a, b, c and so on). The correct answer for part b may depend on your answer from part a. Your answers will be ‘conditionally marked’ which means that if you answer part a) incorrectly, then you may still receive full marks for the rest of the question if your answers for the remaining parts are correct based on the answer that you provided in an earlier part. This means that you are only penalised for a mistake once. For written questions, you should answer the question in the lined space provided on the question paper (one page).
Some hints for preparing for the final examination include:

- make a one page summary for each unit focusing on the most important concepts and formulas;
- work through the examples and exercises in the body of each unit to test your understanding of these important concepts (without the answers in front of you!);
- make sure that you can comfortably and accurately complete the class discussion questions at the end of each unit;
- use the additional self-assessment questions at the end of each unit for further practice once you have mastered the exercises in the body of the unit and the class discussion question; and
- complete the sample final exams provided under exam conditions once you have mastered all 12 units to practice applying your knowledge under exam conditions.

Some hints on the content of the final examination include:

- the majority of questions will focus on assessing important concepts from the relevant units rather than trivial details;
- the questions will follow an audit style that involves testing a few concepts in depth rather than trying to assess everything covered in the course (no hints will be provided by your facilitator);
- the questions will focus on practical application of the concepts and models covered in the course and the meaning of those applications. The derivations of the various models will not be assessed (especially for CAPM in unit 6 and the M&M model in units 7 and 8);
- there will be no questions based on unit 2 that involve unreasonably tricky algebra (like some of the most difficult self-assessment questions);
- there will be no arbitrage questions in the final examination for units 7 to 10 (M&M model for financial leverage, forwards, futures and options);
- there will be no calculation questions on the operation of margin accounts in unit 9 or the Black Scholes Option Pricing model in unit 10;
- the important concepts from the case studies covered in workshops are assessable in the final examination; and
- please note that your facilitators are unable to provide any additional past exam papers or hints about the final exam since it is important that all classes receive exactly the same information about the final examination.
Acknowledgements

Course coordinator

Andrew Hingston
Master of Business Administration [AGSM]
Master of Economics (Financial Economics, Econometrics) [USyd]
Graduate Diploma in Financial Planning [Deakin]
Bachelor of Commerce (Finance (Hons) and Marketing) [UNSW]

Andrew has been teaching with AGSM since 2001. He instructs a range of courses including Corporate Finance, Economics in Management Practice and Data Analysis.

Andrew operates a management training and consulting business. He is a serial entrepreneur who is currently working on start-ups in both financial education and virtual reality entertainment, education and business solutions. He is married with two children (aged 6 and 8) and enjoys investing in the stockmarket, playing backyard soccer with his kids and cooking great food.

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Thanks also to the following for their numerous contributions: Andrew Hingston, Chris Adam, Gloria Tian, Scott Muller, Leigh Wiggins, Kevin Clarke, Cynthia Wilson and John Shannon.
Appendices

Appendix 1  Corporate Finance Formulas.
Appendix 2  Glossary of Corporate Finance terms.
Appendix 3  Useful websites.
Appendix 1

Corporate Finance Formulas.
Unit 2 formulas

Equation 1  Future value of a single cash flow invested now
\[ F_n = P(1 + r)^n. \]

Equation 2  Present value of a single cash flow to be received in period \( n \)
\[ P = \frac{F_n}{(1 + r)^n}. \]

Equation 3  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  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  Present value of a perpetuity of \( R \) per period
\[ A_p = \frac{R}{r}. \]

Equation 6  Present value of a perpetuity of \( R \) growing at \( g\% \) per period
\[ A_{p,g} = \frac{R}{r - g}. \]

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
\[ P = \frac{X_1}{(1+r)} + \frac{X_2}{(1+r)^2} + ... + \frac{X_n}{(1+r)^n}. \]
Unit 3 formulas

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

\[ p_0 = \frac{d}{r_c}. \]

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:

\[ p_0 = \frac{d_1}{(r_c - g)}. \]

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

\[ NPV = \frac{X_1}{1 + r_p} + \frac{X_2}{(1 + r_p)^2} + \ldots + \frac{X_n}{(1 + r_p)^n} - I. \]

Using \( \Sigma \), 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

\[ AE = \frac{NPV}{1 - \left(1 + r_p\right)^{-a}}. \]
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 \( \alpha^* \) 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 and 8 formulas

Capital structure: no taxes

\[ V^U = V^L \text{ and } r^U_c = r^L_c \]
\[ r^L_c = r^U_c + \left( r^U_c - r_d \right) \frac{D^L}{E^L}. \]

Capital structure: corporate taxes

\[ V^L = V^U + \tau D^L \]
\[ r^L_c = r^U_c + \left( r^U_c - r_d \right) (1 - \tau) \frac{D^L}{E^L} \]
\[ r^L_c = r^U_c \left( 1 - \tau \frac{D^L}{V^L} \right). \]

Capital structure: corporate and personal taxes

\[ V^L = V^U + \left( 1 - \frac{(1 - \tau)(1 - \tau_{pd})}{(1 - \tau_{pd})} \right) D^L \]
\[ r^L_c = r^U_c \text{ when } (1 - \tau_{pd}) = (1 - \tau)(1 - \tau_{pe}) \]

That is, full dividend imputation.
Unit 9 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 10 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

$$ P_E \geq \max [0, X (1 + r_f)^{-T} - S]. $$
Appendix 2

Glossary of Corporate Finance terms.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal return</td>
<td>The difference between an asset’s realised return and the return one would expect on an asset of the same risk.</td>
</tr>
<tr>
<td>Accounting rate of return</td>
<td>A profitability measure calculated by dividing accounting income (from a project) by a measure of the investment (in the project).</td>
</tr>
<tr>
<td>Accumulation factor</td>
<td>Value at some future date of $1 now.</td>
</tr>
<tr>
<td>Alpha</td>
<td>A measure of the abnormal performance of a share—the return the share provided above that predicted by its beta.</td>
</tr>
<tr>
<td>American option</td>
<td>An option that can be exercised at any time up until its expiry date.</td>
</tr>
<tr>
<td>Annual effective interest rate</td>
<td>The rate of return to an investment where interest is compounded once a year.</td>
</tr>
<tr>
<td>Annuity</td>
<td>A series of cash flows of a fixed amount each period for a specified number of periods.</td>
</tr>
<tr>
<td>Arbitrage</td>
<td>A series of transactions involving no outlay of funds that allows you to make a risk-free profit by exploiting differences in asset prices.</td>
</tr>
<tr>
<td>Articles of Association</td>
<td>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.</td>
</tr>
<tr>
<td>Asymmetric information</td>
<td>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.</td>
</tr>
<tr>
<td>Authorised capital</td>
<td>The total amount of capital a company is authorised (by virtue of its articles of association and memorandum) to issue.</td>
</tr>
<tr>
<td>Bank accepted bill</td>
<td>A commercial bill accepted by a bank. The bank, by accepting (signing) the bill, assumes the obligation to pay at the due date.</td>
</tr>
<tr>
<td>Benchmark interest</td>
<td>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.</td>
</tr>
<tr>
<td>Best effort issues</td>
<td>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.</td>
</tr>
<tr>
<td>Beta</td>
<td>Beta measures the contribution of an asset to the risk of the market portfolio of all assets.</td>
</tr>
<tr>
<td>Book value</td>
<td>The asset’s cost less the depreciation that has been expensed to date.</td>
</tr>
<tr>
<td>Business or operating risk</td>
<td>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.</td>
</tr>
<tr>
<td>Call option</td>
<td>An option to buy an asset for the exercise price.</td>
</tr>
<tr>
<td>Capital Asset Pricing Model (CAPM)</td>
<td>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.</td>
</tr>
<tr>
<td>Capital budgeting</td>
<td>Another name for an investment decision. The determination of what a firm should invest in, and how much it should invest.</td>
</tr>
<tr>
<td>Capital Market Line (CML)</td>
<td>The relation between risk and expected return for an efficient portfolio. Efficient portfolios are combinations of the risk-free asset and the market portfolio.</td>
</tr>
<tr>
<td>Capital market</td>
<td>The market in which financial assets are issued and exchanged.</td>
</tr>
<tr>
<td>Capital market imperfection</td>
<td>Capital market imperfections include taxes, bankruptcy and transaction costs.</td>
</tr>
<tr>
<td>Capital structure</td>
<td>The mix of debt and equity issued by the firm.</td>
</tr>
</tbody>
</table>
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.

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.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation tax shield</td>
<td>Tax benefit accruing from depreciation.</td>
</tr>
<tr>
<td>Derivative Security</td>
<td>Any security whose value depends on the value of an underlying asset.</td>
</tr>
<tr>
<td>Diminishing marginal return</td>
<td>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.</td>
</tr>
<tr>
<td>Diminishing-value depreciation</td>
<td>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.</td>
</tr>
<tr>
<td>Discount</td>
<td>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.</td>
</tr>
<tr>
<td>Discount factor</td>
<td>Present value of one dollar received at some future date.</td>
</tr>
<tr>
<td>Discount rate</td>
<td>The interest rate used to calculate the present value of future cash flows.</td>
</tr>
<tr>
<td>Discounted cash flow</td>
<td>Future cash flows multiplied by discount factors to obtain their present value.</td>
</tr>
<tr>
<td>Discounting</td>
<td>Calculating a present value by multiplying a future cash flow by a discount factor.</td>
</tr>
<tr>
<td>Diversifiable risk</td>
<td>Risk that arises from events that affect a single asset or investment. Also called unique, specific or non-systematic risk.</td>
</tr>
<tr>
<td>Diversification</td>
<td>Spreading on investment over many different assets.</td>
</tr>
<tr>
<td>Dividend imputation system</td>
<td>A tax system that allows shareholders to offset tax already paid on dividends at the corporate level against personal tax.</td>
</tr>
<tr>
<td>Dividend policy</td>
<td>A trade-off between retaining earnings for reinvestment and paying them out as dividends.</td>
</tr>
<tr>
<td>Dividend reinvestment scheme</td>
<td>A scheme that allows shareholders to reinvest their dividend receipts in shares in the company.</td>
</tr>
<tr>
<td>Dividend yield</td>
<td>The dividend on a share expressed as a percentage of the share price.</td>
</tr>
<tr>
<td>Dominance principle</td>
<td>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.</td>
</tr>
<tr>
<td>Efficient frontier</td>
<td>A curve on which all efficient portfolios lie.</td>
</tr>
<tr>
<td>Efficient Market Hypothesis</td>
<td>A hypothesis which suggests that information is fully reflected in prices.</td>
</tr>
<tr>
<td>Efficient market</td>
<td>A market in which security prices fully reflect information. In an efficient market, the price of a security equals its value.</td>
</tr>
<tr>
<td>Efficient portfolio</td>
<td>A portfolio that offers the lowest risk for a particular expected return or the highest expected return for a particular level of risk.</td>
</tr>
<tr>
<td>Equity securities</td>
<td>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</td>
</tr>
<tr>
<td>Equivalent annual value (EAV)</td>
<td>Equivalent value per year for the life of a project.</td>
</tr>
<tr>
<td>European option</td>
<td>An option that can only be exercised at its expiry date.</td>
</tr>
<tr>
<td>Ex-dividend</td>
<td>The price of a share immediately after a dividend payment.</td>
</tr>
<tr>
<td>Ex-rights</td>
<td>A share sold without the entitlement to participate in a rights issue of new shares.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Excess return</td>
<td>The difference between an asset’s realised return and the return one would expect on an asset of the same risk.</td>
</tr>
<tr>
<td>Exchange rate</td>
<td>The rate at which one currency can be exchanged for another.</td>
</tr>
<tr>
<td>Exercise price</td>
<td>The price, in an option contract, at which an asset may be bought or sold.</td>
</tr>
<tr>
<td>Expectations hypothesis</td>
<td>The hypothesis that long-term interest rates are equal to expected short-term rates compounded over the same period.</td>
</tr>
<tr>
<td>Expected value</td>
<td>The expected outcome. The mean value of the probability distribution of possible outcomes.</td>
</tr>
<tr>
<td>Expiration date</td>
<td>The date on which an option expires.</td>
</tr>
<tr>
<td>Face value</td>
<td>The fixed cash amount received on the maturity of a debt security.</td>
</tr>
<tr>
<td>Financial asset</td>
<td>A claim against future cash flows. Includes both loans, ordinary shares and debentures.</td>
</tr>
<tr>
<td>Financial decision</td>
<td>The investment and financing decisions undertaken by a firm.</td>
</tr>
<tr>
<td>Financial distress</td>
<td>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.</td>
</tr>
<tr>
<td>Financial leverage</td>
<td>The debt/equity mix employed by a firm.</td>
</tr>
<tr>
<td>Financial risk</td>
<td>Any increase in risk resulting from financial leverage. This risk is due solely to the capital structure decision.</td>
</tr>
<tr>
<td>Financial slack</td>
<td>Firms that are profitable have internal reserves, or financial slack, that they can use to fund new projects.</td>
</tr>
<tr>
<td>Financing decision</td>
<td>The determination of how funds should be raised to finance an asset or project.</td>
</tr>
<tr>
<td>Firm</td>
<td>Any organisation that coordinates resources to produce goods or services. Examples include partnerships, corporations and government departments.</td>
</tr>
<tr>
<td>Fixed rate debt</td>
<td>Debt where the interest rate is fixed at the outset for the term of the borrowing.</td>
</tr>
<tr>
<td>Floating rate debt</td>
<td>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.</td>
</tr>
<tr>
<td>Foreign exchange risk</td>
<td>Uncertainty about the future value of a firm that arises from uncertainty about future foreign exchange rates.</td>
</tr>
<tr>
<td>Forward contract</td>
<td>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.</td>
</tr>
<tr>
<td>Forward exchange rate</td>
<td>The price at which you can contract today to exchange currency at some future date.</td>
</tr>
<tr>
<td>Forward rate</td>
<td>An interest rate at some future date, implied by current spot rates.</td>
</tr>
<tr>
<td>Franking account</td>
<td>A franking account tracks income earned by the company upon which corporate tax has been paid. This is only used under an imputation system.</td>
</tr>
<tr>
<td>Free cash flow</td>
<td>The cash flow generated by the firm for its owner(s) in excess of its needs to fund non-negative net present value projects.</td>
</tr>
<tr>
<td>Fully drawn advance</td>
<td>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.</td>
</tr>
<tr>
<td>Future value</td>
<td>The value of cash flows in the future.</td>
</tr>
</tbody>
</table>
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.

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.

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) is 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.

The NPV rule states that you should accept all investments with a non-negative NPV.

Net working capital is Current assets less current liabilities. Net working capital can apply to individual projects as well as entire organisations.

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.

Net working capital is a symmetrical bell-shaped probability distribution.

Betas calculated using ordinary least squares (OLS) regressions.

Operations are leveraged when a small change in sales revenue induces a relatively large change in net operating income.

The return foregone by investing in a security rather than the next best alternative.

The mix of debt and equity that maximises firm value.

A dividend policy that maximises firm value.

The right but not the obligation to buy or sell an asset at, or sometimes before some future date.

A statistical technique for analysing the relationships between sets of data.

An equity security issued by the firm. The holder has a residual claim on the firm’s cash flows and voting rights.

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.

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.

The nominal or legal value placed on each share by the company in its Memorandum and Articles of Association when establishing its authorised capital.

A preference share that entitles the holder to share in any surplus profits of the company in addition to the fixed dividend.

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.

The number of years required to return the original investment from the net cash flows of the investment.

The proportion of earnings paid out as dividends.

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.

A capital market in which there are no transaction costs and information is freely available to market participants.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perpetuity</td>
<td>A stream of cash flows of a fixed amount for each period forever, that is, in perpetuity.</td>
</tr>
<tr>
<td>Plowback ratio</td>
<td>The proportion of earnings plowed back or reinvested in the firm.</td>
</tr>
<tr>
<td>Portfolio</td>
<td>A combination of assets.</td>
</tr>
<tr>
<td>Preference share</td>
<td>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.</td>
</tr>
<tr>
<td>Premium</td>
<td>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.</td>
</tr>
<tr>
<td>Present value</td>
<td>The value now of a stream of future cash flows.</td>
</tr>
<tr>
<td>Price–earnings (PE) ratio</td>
<td></td>
</tr>
<tr>
<td>Prime-cost depreciation</td>
<td>Depreciation that is calculated by applying a constant percentage to the asset’s initial cost.</td>
</tr>
<tr>
<td>Private placement</td>
<td>An issue of securities made solely to an investor group that does not include all existing security holders.</td>
</tr>
<tr>
<td>Probability</td>
<td>The likelihood of a particular event occurring.</td>
</tr>
<tr>
<td>Promissory note</td>
<td>A note issued by a debtor agreeing to pay a certain amount at some time in the future. They are short term in nature.</td>
</tr>
<tr>
<td>Prospectus</td>
<td>An offer document required to be given to new investors interested in purchasing a new public issue of securities.</td>
</tr>
<tr>
<td>Public issue</td>
<td>An issue of securities made to investors at large.</td>
</tr>
<tr>
<td>Put option</td>
<td>An option to sell an asset for the exercise price.</td>
</tr>
<tr>
<td>Rate of return</td>
<td>The with dividend change in the value of an asset divided by the asset’s initial value.</td>
</tr>
<tr>
<td>Real asset</td>
<td>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).</td>
</tr>
<tr>
<td>Real values (or constant dollar values)</td>
<td>These are expressed in terms of today’s prices and today’s purchasing power of the dollar.</td>
</tr>
<tr>
<td>Redeemable preference share</td>
<td>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.</td>
</tr>
<tr>
<td>Renounceable right</td>
<td>A rights issue that allows existing shareholders to transfer (renounce) all or part of their entitlement to the new shares.</td>
</tr>
<tr>
<td>Required rate of return</td>
<td>The return required to compensate for the risk of the investment.</td>
</tr>
<tr>
<td>Residual claim</td>
<td>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.</td>
</tr>
<tr>
<td>Return on equity (ROE)</td>
<td>The return the firm earns on book equity.</td>
</tr>
<tr>
<td>Rights issue</td>
<td>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.</td>
</tr>
<tr>
<td>Risk</td>
<td>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.</td>
</tr>
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<tr>
<td>Risk averse</td>
<td>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.</td>
</tr>
<tr>
<td>Risk premium</td>
<td>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.</td>
</tr>
<tr>
<td>Risk profile</td>
<td>The risk exposure of a firm. This may be business risk, financial risk or both.</td>
</tr>
<tr>
<td>Risk-free asset</td>
<td>An asset that offers an expected return that is considered certain.</td>
</tr>
<tr>
<td>Risk-free rate</td>
<td>A rate of return that can be earned with certainty.</td>
</tr>
<tr>
<td>Salvage value</td>
<td>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.</td>
</tr>
<tr>
<td>Scholes–Williams adjustment</td>
<td>A method to adjust betas for thin trading that uses betas observed over adjacent periods.</td>
</tr>
<tr>
<td>Scholes–Williams betas</td>
<td>Betas calculated using the Scholes–Williams adjustment.</td>
</tr>
<tr>
<td>Secondary market</td>
<td>The buying and selling of securities between investors. This does not involve any new capital being raised for the company.</td>
</tr>
<tr>
<td>Security</td>
<td>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.</td>
</tr>
<tr>
<td>Security Market Line (SML)</td>
<td>The relation between the expected return on an asset and its risk as measured by beta.</td>
</tr>
<tr>
<td>Sensitivity analysis</td>
<td>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.</td>
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<td>Separation principle</td>
<td>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.</td>
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<td>Spot exchange rate</td>
<td>The price at which you can exchange one Australian dollar today for other currency for immediate delivery.</td>
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<td>Spot interest rate</td>
<td>Interest rate fixed today on a loan that is created today.</td>
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<td>Spot price</td>
<td>The current price of an asset for immediate delivery.</td>
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<td>Stable dividend policy</td>
<td>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.</td>
</tr>
<tr>
<td>Subordinate debt</td>
<td>Debt that is repaid after all other creditors but before equity holders.</td>
</tr>
<tr>
<td>Term loan</td>
<td>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.</td>
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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 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 3

Useful websites.
Useful websites

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
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