AFIN806
Risk Management and Derivatives
Semester 1, 2012

Department of Applied Finance and Actuarial Studies
Year and Semester: 2012, Semester 1

Unit convenor: Associate Professor Geoffrey Loudon

[Prerequisites / Corequisites:]

Completion of any Faculty of Business and Economics unit at 600 level or admission to MCom or MIB or MEd or MActPrac prior to 2011

Credit points: 4

Students in this unit should read this unit guide carefully at the start of semester. It contains important information about the unit. If anything in it is unclear, please consult one of the teaching staff in the unit.

ABOUT THIS UNIT

- This unit examines current techniques for measuring and managing the financial risk faced by corporates and financial institutions, with an emphasis on the practical use of derivative financial products such as forwards, futures, swaps and options to manage risk.

- The rationale of this unit is to provide a research-based, conceptual framework designed to enable the more effective use of derivatives in managing financial risk in a corporate setting. Practical applications reinforce important unit concepts. The unit takes the perspective of corporate risk managers.

TEACHING STAFF

- Convenor: Associate Professor Geoffrey Loudon
  Room: E4A 230
  Tel: 9850 8536
  Email: geoff.loudon@mq.edu.au

CONTACTING STAFF

The convenor is available for student consultation on Monday 2-3pm during teaching weeks. Other times are available, but by prior arrangement only.

You are encouraged to seek help at a time that is convenient to you from a staff member teaching on this unit during their regular consultation hours. In special circumstances, an appointment may be made outside regular consultation hours.
Staff will not conduct consultations by email. You may, however, phone staff during their consultation hours.

In order to gain access to staff located at levels 1, 2 and 3 of building E4A during their consultation hours please ring the staff member from the phones available in the lobby (phone numbers of relevant staff members will be provided on iLearn and are available next to the phones).

- Other ways of contacting staff

Contact the convenor during class time, consultation hours or by email to arrange an appointment.

Students experiencing significant difficulties with any topic in the unit must seek assistance immediately.

**CLASSES**

- Classes comprise a weekly, three-hour seminar. Students should attend all classes, both for learning and assessment purposes.
- The timetable for classes can be found on the University web site at: [http://www.timetables.mq.edu.au/](http://www.timetables.mq.edu.au/)

**REQUIRED AND RECOMMENDED TEXTS AND/OR MATERIALS**

- Additional references may be added during the semester. Details of these will be provided at the unit web page.

**TECHNOLOGY USED AND REQUIRED**

- Access to the unit Web Site.
- Word processing software for report writing.
- Students are encouraged to use spreadsheets for learning about quantitative models studied in the unit.

**UNIT WEB PAGE**

- Course material is available on the learning management system (iLearn)
- The web page for this unit can be found at: [http://ilearn.mq.edu.au/course/view.php?id=3740](http://ilearn.mq.edu.au/course/view.php?id=3740)
- Students should consult the web page frequently. Learning, teaching and other reference materials are posted to this site throughout the semester.
LEARNING OUTCOMES

The learning outcomes of this unit are to increase the ability of students to:

1. recognise the role of derivatives in financial risk management
2. know the fundamental principles of derivatives valuation
3. understand the value of effective risk management and the dangers of poor risk management
4. evaluate alternative risk management strategy and tactics
5. implement appropriate risk management solutions for corporate risk scenarios.

GRADUATE CAPABILITIES

In addition to the discipline-based learning objectives, all academic programs at Macquarie seek to develop the capabilities the University’s graduates will need to develop to address the challenges, and to be effective, engaged participants in their world.

This unit contributes to this by developing the following graduate capabilities:

1. Discipline Specific Knowledge and Skills
   a. Familiarity with the major issues in risk management and derivatives.
   b. Cognisance of the key theories and research in risk management and derivatives.
   c. Awareness of implementation problems when theory meets practice.
2. Critical, Analytical and Integrative Thinking
3. Problem Solving and Research Capability
4. Effective Communication
5. Capable of Professional and Personal Judgement and Initiative

LEARNING AND TEACHING ACTIVITIES

- Learning and teaching activities are designed to both equip students with necessary technical skills for effective risk management with derivatives, as well as to develop their generic skills, especially within the context of corporate risk management.
- This unit is taught in a seminar style. Each session runs for three hours including breaks and consists of a variety of interactive learning activities.
- Class activities include a short interactive lecture on topic material and small group discussion of key issues.
- Substantial use is made of case studies and group work.
- With regard to preparing for the final examination, students should develop their ability to understand unit concepts and how to apply them in practical situations, rather than merely being able to memorise and use formulas.
- Week-by-week list of the topics to be covered:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overview</td>
</tr>
<tr>
<td>2</td>
<td>Corporate risk management and firm valuation</td>
</tr>
<tr>
<td>3</td>
<td>Pricing and hedging derivatives</td>
</tr>
<tr>
<td>4</td>
<td>Risk measurement techniques</td>
</tr>
<tr>
<td>5</td>
<td>Risk management with derivatives</td>
</tr>
<tr>
<td>6</td>
<td>Limitations of risk management</td>
</tr>
<tr>
<td></td>
<td>Mid semester break</td>
</tr>
<tr>
<td>7</td>
<td>Class Test</td>
</tr>
<tr>
<td>8</td>
<td>Case 1: Roche</td>
</tr>
<tr>
<td>9</td>
<td>Case 2: Metallgesellschaft</td>
</tr>
<tr>
<td>10</td>
<td>Case 3: Proctor &amp; Gamble versus BT</td>
</tr>
<tr>
<td>11</td>
<td>Case 4: Orange County</td>
</tr>
<tr>
<td>12</td>
<td>Case 5: Barings Bank</td>
</tr>
<tr>
<td>13</td>
<td>Case 6: Long Term Capital Management</td>
</tr>
</tbody>
</table>

**Research and Practice**

- This unit gives you practice in applying research findings in your assignments and gives you opportunities to conduct your own research into case studies in risk management.
## Relationship between Assessment and Learning Outcomes

<table>
<thead>
<tr>
<th>Assessment Task 1</th>
<th>Assessment Task 2</th>
<th>Assessment Task 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title/Name</strong></td>
<td>Class test</td>
<td>Group case study</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>60 minute written test containing a mix of objective and open-ended questions.</td>
<td>Students prepare a written report and an oral presentation on a case study in risk management.</td>
</tr>
<tr>
<td><strong>Due date</strong></td>
<td>Week 7 class</td>
<td>Classes during weeks 8-13</td>
</tr>
<tr>
<td><strong>% Weighting</strong></td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Grading method</strong></td>
<td>Assessed and graded on extent to which student demonstrates achievement of learning outcomes.</td>
<td>Marking criteria provided with assessment task.</td>
</tr>
<tr>
<td><strong>Submission method</strong></td>
<td>Hand in test paper to instructor.</td>
<td>Hand in project report to instructor and present findings in class.</td>
</tr>
<tr>
<td><strong>Feedback</strong></td>
<td>Responses to the test discussed in class. Individual scores posted to unit web page in week 6.</td>
<td>Grades and performance report posted to unit web page by end of exam period.</td>
</tr>
<tr>
<td><strong>Estimated student workload (hours)</strong></td>
<td>24</td>
<td>45</td>
</tr>
<tr>
<td><strong>Learning outcomes assessed (max 6)</strong></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Graduate capabilities assessed (max 4)</strong></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

These hours are estimates only and may vary across students.
• Extension requests for assessment tasks will not be granted, except where adequate documentary evidence of illness or unavoidable disruption is provided. Absence from the class test and/or from the group case study presentations class will not be accepted, except where adequate documentary evidence of illness or unavoidable disruption is provided.

In these circumstances, you may wish to consider applying for Special Consideration. The University’s policy on special consideration process is available at http://www.mq.edu.au/policy/docs/special_consideration/policy.html In any case, you must advise the convenor as soon as possible.

There will be no make-up class tests. If you fail to attend the class test, your assessment will be determined from your performance in the group case study [30% weight] and the final exam [70% weight].

• Attendance: Students are required to attend the class test and group case study presentations for their group. Students are strongly recommended to attend all other classes.

• Examinations

A final examination is included as an assessment task for this unit to provide assurance that:

i) the product belongs to the student and

ii) the student has attained the knowledge and skills tested in the exam.

A 2 hour final examination for this unit will be held during the University Examination period.

The University Examination period in First Half Year 2012 is from 12 June to 29 June 2012.

You are expected to present yourself for examination at the time and place designated in the University Examination Timetable. The timetable will be available in Draft form approximately eight weeks before the commencement of the examinations and in Final form approximately four weeks before the commencement of the examinations.
http://exams.mq.edu.au/

The only exception to not sitting an examination at the designated time is because of documented illness or unavoidable disruption. In these circumstances you may wish to consider applying for Special Consideration. The University’s policy on special consideration process is available at http://www.mq.edu.au/policy/docs/special_consideration/policy.html

If a Supplementary Examination is granted as a result of the Special Consideration process the examination will be scheduled after the conclusion of the official examination period. (Individual Faculties may wish to signal when the Faculties’ Supplementary Exams are normally scheduled.)
The Macquarie university examination policy details the principles and conduct of examinations at the University. The policy is available at: http://www.mq.edu.au/policy/docs/examination/policy.htm

**ACADEMIC HONESTY**

The nature of scholarly endeavour, dependent as it is on the work of others, binds all members of the University community to abide by the principles of academic honesty. Its fundamental principle is that all staff and students act with integrity in the creation, development, application and use of ideas and information. This means that:

- all academic work claimed as original is the work of the author making the claim
- all academic collaborations are acknowledged
- academic work is not falsified in any way
- when the ideas of others are used, these ideas are acknowledged appropriately.

Further information on the academic honesty can be found in the Macquarie University Academic Honesty Policy at http://www.mq.edu.au/policy/docs/academic_honesty/policy.html

**GRADES**

Macquarie University uses the following grades in coursework units of study:

HD - High Distinction  
D - Distinction  
CR - Credit  
P - Pass  
F - Fail

Grade descriptors and other information concerning grading are contained in the Macquarie University Grading Policy which is available at: http://www.mq.edu.au/policy/docs/grading/policy.html

All final grades in the Department of Applied Finance and Actuarial Studies are determined by a grading committee and are not the sole responsibility of the Unit Coordinator.

Macquarie University’s Academic Senate has a set of guidelines on the distribution of grades across the range from fail to high distinction. Your final result will include one of these grades plus a Standardised Numerical Grade (SNG).

The Standardised Numerical Grade (SNG) is not a summation of the individual assessment components.

To be awarded a specific grade, students are required to perform at an equivalent standard in the final examination and the overall assessment mark in the unit.
GRADING APPEALS AND FINAL EXAMINATION SCRIPT VIEWING

If, at the conclusion of the unit, you have performed below expectations, and are considering lodging an appeal of grade and/or viewing your final exam script please refer to the following website which provides information about these processes and the cut off dates in the first instance. Please read the instructions provided concerning what constitutes a valid grounds for appeal before appealing your grade.

http://www.businessandeconomics.mq.edu.au/new_and_current_students/undergraduate_current_students/how_do_i/grade_appeals

SPECIAL CONSIDERATION

The University is committed to equity and fairness in all aspects of its learning and teaching. In stating this commitment, the University recognises that there may be circumstances where a student is prevented by unavoidable disruption from performing in accordance with their ability. A special consideration policy exists to support students who experience serious and unavoidable disruption such that they do not reach their usual demonstrated performance level. The policy is available at:
http://www.mq.edu.au/policy/docs/special_consideration/policy.html

STUDENT SUPPORT SERVICES

Macquarie University provides a range of Academic Support Services. Details of these and other services for students can be accessed at http://www.student.mq.edu.au.

IT CONDITIONS OF USE

Access to all student computing facilities within the Faculty of Business and Economics is restricted to authorised coursework for approved units. Student ID cards must be displayed in the locations provided at all times.

Students are expected to act responsibly when using University IT facilities. The following regulations apply to the use of computing facilities and online services:
● Accessing inappropriate web sites or downloading inappropriate material is not permitted. Material that is not related to coursework for approved units is deemed inappropriate.
● Downloading copyright material without permission from the copyright owner is illegal, and strictly prohibited. Students detected undertaking such activities will face disciplinary action, which may result in criminal proceedings.

Non-compliance with these conditions may result in disciplinary action without further notice.

Students must use their Macquarie University email addresses to communicate with staff as it is University policy that the University issued email account is used for official University communication.