

# ACCG806

Risk Management and Derivatives

Semester 1, 2010

Department of Accounting and Finance

Macquarie University
Faculty of Business and Economics
Unit Outline: ACCG806 Risk Management and Derivatives

Year and Semester: 2010, Semester 1

Unit convenor: Dr Geoffrey Loudon

**Prerequisites:** There are no formal prerequisites. However, this is an advanced unit of study and it is assumed that students have successfully completed at least one prior unit in finance. Students should have strong quantitative skills and reasoning ability.

Students in this unit should read this unit outline 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**

Unit description: 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.

Credit Points: 4

Unit rationale: 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. Important unit concepts are reinforced by practical applications. The unit takes the perspective of corporate risk managers.

# **Teaching staff**

Convenor: Associate Professor Geoffrey Loudon

Room: E4A 230 Tel: 9850 8536

Email: gloudon@efs.mq.edu.au

Consultation hours are on Friday 2-3pm during teaching weeks. Other times are available, but by prior arrangement only.

### Classes

Classes comprise a weekly, three-hour seminar. Students are expected to attend all classes, both for learning and assessment purposes.

The timetable for classes can be found on the University web site at <a href="http://www.timetables.mq.edu.au/">http://www.timetables.mq.edu.au/</a>

## Required and recommended texts and/or materials

The **recommended** textbook for this unit is **René M. Stulz, Risk management & derivatives**, Thomson South–Western. This book is available in the library.

Additional readings are selected from relevant academic books and journals. Compulsory readings can be downloaded from the unit web site.

### Unit web page

The web page for this unit can be found at <a href="http://learn.mg.edu.au">http://learn.mg.edu.au</a>

Students should consult the web page frequently. Learning, teaching and other reference materials will be posted to this site throughout the semester.

## Learning objectives and outcomes

The learning objectives of this unit are to equip students with some of the analytical knowledge and practical skills that are essential to the successful use of derivative financial products for managing the financial risks faced by both financial and non-financial corporates.

The learning outcomes of this unit are an increased ability of students to:

- 1. recognise the role of derivatives in financial risk management;
- 2. explain the methods and limitations of risk measurement techniques;
- 3. understand the value of effective risk management;
- 4. appreciate the dangers of poor risk management;
- 5. evaluate alternative risk management strategy and tactics;
- 6. implement appropriate risk management solutions for corporate risk scenarios;

7. critique the theory underlying risk management and review the empirical evidence.

In addition to the discipline-based learning objectives, all academic programs at Macquarie seek to develop students' generic skills in a range of areas. One of the aims of this unit is that students develop their skills in the following: Foundation skills of literacy, numeracy and information technology; Self-awareness and interpersonal skills; Communication skills; Critical analysis skills; Problem-solving skills.

### Teaching and learning strategy

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. Learning 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 risk management. Class activities include a short interactive lecture on topic material; small group discussion of key issues and student presentations of responses to class discussion questions.

Students are expected to carefully read the required references prior to each seminar and be prepared to discuss these in class. Small groups are formed to discuss key issues. Nominated students are required to lead the class discussion for their allocated question and all other students are expected to have thought about the important issues prior to the class. Class discussion questions are contained in the lecture notes for each topic.

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.

The list of topics to be covered is:

#### Week Topic

- 1. Introduction to risk management and derivatives
- 2. Adding value by risk management
- 3. Derivatives valuation: principles
- 4. Derivatives valuation: practice
- 5. Measuring risk exposures: principles
- 6. No class due to public holiday
- 7. Measuring risk exposures: practice
- 8. Risk management with derivatives: principles
- 9. Risk management with derivatives: practice

- 10. Credit risk and liquidity risk
- 11. Operational risk and model risk
- 12. Risk management failures and Unit review
- 13. Final examination

# Relationship between assessment and learning outcomes

### Assessment tasks and percentage weighting

Class quiz 10%
Class participation 10%
Group project 20%
Final examination 60%

To pass this unit, it is necessary to achieve a passing grade in both the final examination and the overall unit assessment.

Absence from the class quiz, or late submission of the group project, will not be accepted, except where adequate documentary evidence of illness or unavoidable disruption is provided. In such cases you need to advise the convenor as soon as possible.

### Class quiz

The class quiz is an early, low risk diagnostic task designed to provide feedback for students and the unit convenor to address likely learning challenges. It will test students engagement with the unit material and provide them with some useful guidance as to their capacity to achieve the learning outcomes for the unit.

The quiz will be a short, written exercise containing a mix of objective and open-ended questions. It will be **held during the class in week 4** and based on the topic covered in the previous class. Responses to the quiz will be discussed in class and individual scores notified to students during the following week.

#### Class participation

Participation marks will be awarded for attendance and participation in class discussion [5%] and the class presentation [5%].

Participation is assessed to stimulate its effectiveness. Effective participation is important as it encourages more active engagement in learning. Group discussions in class foster more cooperative and collaborative learning. Class presentations assist students to develop their communication skills in the context of the unit material. They also enable peer feedback and foster self-awareness.

### Group project

The group project will require students to critically review a research article on a current issue in financial risk management. Reviewing a research article provides students with the opportunity to enhance their interpretation and evaluation of cutting-edge thinking in the field by experts. It develops their critical analysis and problem-solving skills. Group work encourages collaboration, co-operation and communication among students. This facilitates authentic, contextual development of self-awareness and interpersonal skills; communication skills.

Groups will be required to submit a written report that addresses several important issues arising from a paper selected by the convenor.

- The chosen paper, the specific questions and solution guidance will be posted to the unit web site in week 4.
- This project is to be conducted by groups no larger than four. Students are to form their own groups. Group formation may be facilitated during the class discussion sessions or by using the Discussions tool on the Web site.
- The written report must not exceed ten typed, double-spaced pages. All source documents must be properly acknowledged together with a full bibliography. Use the referencing style of the paper being reviewed as a guide to proper academic referencing.
- Submissions that merely reproduce or paraphrase large sections of source documents will receive a failing grade. Plagiarism will result in a zero mark and potential disciplinary action by the University.
- Your written report must include a statement, signed by all members, that sets out
  the percentage contribution of each member. The same mark will apply to all group
  members as it is expected that groups will allocate tasks so that each member makes
  a similar level of contribution. However, marks may be adjusted where unequal contributions can be proved from individual log-books or other identifiable evidence.
- Submit your written report no later than the week 11 class. You should hand your project to the convenor during the week 11 class.

#### Final examination

The final examination for this unit will be **held in the last week of classes at the usual class time and location.** Further details on the style and coverage of the exam will be provided later in the semester.

The purpose of the final examination is to provide assurance that students have personally learned the necessary knowledge and skills taught in the unit. The style and content of the final examination is designed to fairly assess the extent to which the learning outcomes of the unit have been achieved by each student.

You are expected to present yourself for examination at the time and place designated. 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. Information about unavoidable disruption and the special consideration process is available at

http://www.reg.mq.edu.au/Forms/APSCon.pdf

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.

You are advised that it is Macquarie University policy not to set early examinations for individuals or groups of students. All students are expected to ensure that they are available until the end of the teaching semester, that is the final day of the official examination period.

### **Plagiarism**

The University defines plagiarism in its rules: "Plagiarism involves using the work of another person and presenting it as one's own." Plagiarism is a serious breach of the University's rules and carries significant penalties. You must read the University's practices and procedures on plagiarism. These can be found in the *Handbook of Postgraduate Studies* or on the web at

http://www.student.mq.edu.au/plagiarism/

The policies and procedures explain what plagiarism is, how to avoid it, the procedures that will be taken in cases of suspected plagiarism, and the penalties if you are found guilty. Penalties may include a deduction of marks, failure in the unit, and/or referral to the University Discipline Committee.

# Student support services

Macquarie University provides a range of Academic Student Support Services. Details of these services can be accessed at

http://www.student.mq.edu.au

For faculty specific support, contact BESS - (Faculty of) Business and Economics Student Services in Room 106, Building E4B, or,

http://www.businessandeconomics.mq.edu.au/current/undergraduate/bess