



ACCG329 Security Pricing and Hedging
Unit Outline[†]

Division of Economic and Financial Studies

Semester 1, 2008

[†]Version 1.0

1 Brief Description and Objectives

This unit explores the principles, theory and techniques of asset pricing. The first half of the unit focuses on portfolio analysis and multifactor models applicable to problems in investment analysis and asset allocation.

The second half of the unit focuses on pricing techniques driven by arbitrage arguments. Arbitrage or relative pricing arguments underpin powerful, robust methods for pricing derivative securities.

Upon successful completion of this unit you will:

1. understand the economic arguments underlying important asset pricing models;
2. be able to apply the models to practical problems;
3. have developed an awareness of the need to consider the limitations of models and techniques when applied to non-textbook examples.

That, at least, is the intention.

2 Pre-requisites

Entry to ACCG329 requires you to have completed the following pre-requisites:

1. ACCG253 (P) or ACST200;
2. ECON141 or STAT271

Some tutorial questions in the early weeks of the course revise important concepts from statistics and introductory finance. Make a special effort to complete the revision questions ASAP if you struggled to pass either of the pre-requisites to avoid falling behind.

3 Textbooks

There are two prescribed texts:

Modern Investment Theory by Robert A. Haugen, 5th Edition, Prentice Hall, 2001. ISBN 0-13-019170-1.

Options, Futures and Other Derivatives by John Hull, 6th Edition, Prentice Hall, 2006. ISBN 0-13-197705-9.

The following text was used in previous years and is helpful if you want an alternative (more mathematical) exposition of portfolio theory:

Modern Portfolio Theory and Investment Analysis by Elton, Gruber, Brown and Goetzmann. 6th Edition, John Wiley and Sons, Inc, 2003.

Refer to the unit web page for other useful references and resources.

4 Staff Contacts

Full Time Staff

Lecturer-in-Charge	Tutor	Unit Administrator
Dr Egon Kalotay	Mr David Siu	Ms Cissy Zhan
Office: E4A 513 Ph: 9850 8490 email: ekalotay@efs.mq.edu.au	Office: E4A 219 Ph: 9850 9193 email: dsiu@efs.mq.edu.au	Office: Desk 350D, Level 3, E4A Ph: 9850 4832 email: czhan@efs.mq.edu.au

In addition, several tutorial classes will be taken by casual tutors. Consultation times and contact details will be provided on the unit web page.

Questions about administrative matters should be directed to the Unit Adminis-

trator. Questions about lecture material or assessment should be directed to the lecturer in charge.

5 Assessment

Your final grade will be determined by your performance in tutorials, the mid-semester test and final exam as follows:

Assessment Weightings for Final Grading

Tutorial Assignments	15%
Mid Semester Test	25%
Final Exam	60%

TUTORIALS

1. Tutorial attendance is compulsory.
2. You are strongly advised to attempt all assigned tutorial questions before the weekly tutorial class, and before consulting the solutions. It is very easy to be lulled into a false sense of security by simply reading questions and looking at the solutions.
3. **Each week you are required to submit to your tutor your attempt at the questions marked with a star (*). Submit the starred questions only.** These mini-assignments must be **submitted on time, in your assigned tutorial class.** Your assignment submission record will serve as a record of your attendance. Five of the submitted assignments, randomly selected, will be assigned a mark by your tutor. Your final tutorial mark will be the sum of the assignment marks. Assignments will be marked out of 3 for both effort and outcome. Here is the grading scale:
 - (a) 3/3 is awarded for a complete, well-presented attempt. Answers should be substantially correct but need not be error free.
 - (b) 2/3 is awarded for a complete, satisfactory attempt. Less than full marks are awarded due to a shortfall in the substance or presentation of the submitted work.
 - (c) 1/3 is awarded for an incomplete or incoherent attempt. This mark may also be awarded if your answers are completely wrong or unsubstantiated.

- (d) 0/3 is awarded if you do not submit the questions on time in your assigned tutorial, or, if what you submit does not merit a mark

Solutions to starred questions will be made available in the week after they are due.

4. Questions with stars simply indicate that the questions are to be submitted to your tutor. In terms of content, they are no more or less important than the questions without stars. Stated differently, the presence or absence of stars should not be read as a signal of what will or won't be tested. Solutions to questions to all tutorial questions without stars will be provided at the beginning of the week in which they're due.

MID-SEMESTER TEST & FINAL EXAM

A 90-minute mid-semester test based on the topics covered in lectures 1-5 (inclusive) will be held during the lecture time in week 7.

The final exam will be a three hour paper.

You must achieve a satisfactory level of performance in *both* the mid-semester test and the final exam to pass the unit.

Non-programmable calculators may be used in both the mid-semester test and final exam. You are not permitted to use dictionaries in either the test or final exam.

6 Lecture Topics, Reading and Tutorial Assignments

IMPORTANT: If I become aware of any errors in the lecture notes, tutorial solutions or any other document I will correct the problem as soon as possible, post an update and flag the revision on the web page. I place a version number on all documents so you can easily ensure you have the latest version of all materials.

ALSO: In weeks where tutorial questions are not listed below you will find the assigned questions on the last lecture slide. You should always check the last lecture slide for additional questions or modifications to the questions assigned for the following week (starred or otherwise). I will also provide details of an additional readings on the final lecture slide.

Week 1: Optimal Portfolio Choice: Estimation Issues (*Week beginning February 25, 2008*)

Reading: Haugen: Chapters 1-5.

Tutorial Questions due Week 2: Ch 3, Question Set 1: Q 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15; Ch 4, Question Set 1: Q 8, 9*, 10*, 12*, 13* & 14*.

Week 2: Optimal Portfolio Choice: Pragmatic Approaches and the Static CAPM (*Week beginning March 3, 2008*)

Reading: Haugen Chapters: 5, 6 & 8.

Tutorial Questions due Week 3: Ch 5, Question Set 1: Q 3, 5, 7, 8*, 11*; Ch 6, Question Set 1: Q 1, 4, 5, 6, 7, 8*, 11, 12*, 13*, 14, 15, 16*, 26; Ch 8, Question Set 1: Q 4, 5, 6, 7, 8, 9, 10, 11, & 14*.

Week 3: Multifactor Pricing Models (*Week beginning March 10, 2008*)

Reading: Haugen Chapter 10, Lecture Notes & Additional Reading

Tutorial Questions due Week 4: Ch 10, Question Set 1: Q 1, 2, 4, 5, 7*, 8, 10*, 11, 12 + Additional Questions.

Week 4: Informational Efficiency (*Week beginning March 17, 2008*)

Reading: Haugen Chapters: 9, 24, & 25

Tutorial Questions due Week 5: Ch 9, Question Set 1: Q 5, 7*, 10, 11; Ch 24, Question Set 1: Q 1, 2, 3, 9, 12*; Ch 25, Question Set 1: Q 1*, 2*, 3*, & 4.

Week 5: Models and Reality; Introduction to Derivatives (*Week beginning March 24, 2008*)

Reading: Hull Chapters 1, 2, 5 & 10

Tutorial Questions due Week 6: Refer to the lecture slides

Week 6: Pricing Forwards & Futures; Swaps (*Week beginning March 31, 2008*)

Reading: Hull Chapters 3 & 7

Tutorial Questions due Week 8: Refer to the lecture slides

Week 7: Mid-Semester Test (*Week beginning April 7, 2008*)

No tutorials in week 7. The mid-semester test will be held this week. Most students will sit the test during the Tuesday 5-7pm lecture time on April 8. Some students may be required to sit the test at 7-9pm on the same night. We'll provide you with further information in lectures and on the web as the date approaches.

Mid-Semester Break (*April 14-April 25, 2007*)

Week 8: Properties of Stock Options (*Week beginning April 28, 2008*)

Reading: Hull Chapter 9

Tutorial Questions due Week 9: Refer to the lecture slides

Week 9: Binomial Option Pricing and Introduction to Continuous Time Processes (*Week beginning May 7, 2008*)

Reading: Hull, Chapters 11 & 12

Tutorial Questions due Week 10: Refer to the lecture slides

Week 10: Black-Scholes-Merton & Extensions (*Week beginning May 12, 2008*)

Reading: Hull, Chapters 13 & 14

Tutorial Questions due Week 11: Refer to the lecture slides

Week 11: “The Greeks” and Value at Risk (VaR) (*Week beginning May 19, 2008*)

Reading: Hull, Chapters 15 & 18 plus additional reading TBA

Tutorial Questions due Week 12: Refer to the lecture slides

Week 12: Modeling Extensions & Failures (*Week beginning May 26, 2008*)

Reading: Reading TBA.

Tutorial Questions due Week 13: Refer to the lecture slides

Week 13: Revision (*Week beginning June 2, 2008*)

ABOUT LECTURES: The weekly lecture is on Tuesday 5-7pm in Mason theatre, building E7B. Attendance at lectures is not compulsory, but highly recommended.

As a matter of basic courtesy mobiles should be turned off during all classes (lectures and tutorials); not simply set to “silent”.

LECTURE NOTES: will be available on the web, prior to the lecture - usually the week before the lecture. Log in to the unit web page on Blackboard from: <https://learn.mq.edu.au> and check the page regularly for updates.

The lecture notes define the unit content; the textbooks should be viewed as a supplement to the lecture notes. As a general rule, if the textbook covers material that is not mentioned in the lectures, it will only be examinable if it is covered in one of the assigned tutorial questions.

ABOUT READINGS AND HOMEWORK: Always check the lecture notes for additional reading or additional tutorial questions. The reading guide provided above is approximate: there may be material in some of the chapters that are not covered in the unit, or there may be material in lectures not covered in the book.

7 Regarding Special Consideration

Students requesting special consideration should acquaint themselves with Bachelor Degree Rule 8 by reading the 2008 Handbook of Undergraduate Studies or visiting the website at <http://www.cal.mq.edu.au/>

Note that applications for special consideration must be accompanied by the appropriate supporting documentation - including a Professional Authority form if you're ill.

Please refer to <http://www.reg.mq.edu.au/Forms/APScons.pdf> for details of

the requirements and the requisite forms.

8 Regarding Plagiarism

Please acquaint yourself with the University rules on plagiarism at <http://www.student.mq.edu.au/plagiarism/>

Please be aware that you can expect a zero tolerance approach to plagiarism or any other form of cheating in this unit. If you're caught, you will receive zero marks for your efforts and the matter will be pursued in accordance with University procedures.