



FACULTY OF  
BUSINESS AND ECONOMICS

**ACCG 352**  
**Applied Portfolio Management**

**Semester 2, 2010**

*Department of Accounting and Finance*

**UNIT OUTLINE ACCG 352 Applied Portfolio Management**

**Year and Semester: 2010, Semester 2**

**Unit convenor: Dr Ryle Perera**

**[Prerequisites / Co requisites:] ACCG 252 (P) or ACCG 329 (P) or ACST 305**

**Credit points: 03**

Students in this unit should read this unit outline carefully at the start of the 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 provides students with the analytical skills and techniques required to effectively manage diversified portfolios of securities. The first section of the unit prepares students for asset allocation management and performance assessment of diversified portfolios. Section two reviews theoretical and practical issues relating to the management of portfolios containing options, futures and other derivatives. Material presented has relevance for students interested in careers as security analysts, portfolio managers, and corporate treasurers.
- This unit complements the material covered in ACCG 252 or ACCG329 or ACST305. It emphasizes the practical implementation of portfolio and option pricing theory within the context of portfolio management.

**TEACHING STAFF**

- Convenor (contact details)
  - Name: Dr. Ryle Perera
  - Room: E4A 229
  - Tel: 9850 8578
  - Email: [ryle.perera@mq.edu.au](mailto:ryle.perera@mq.edu.au)

## CONSULTATION TIMES

Staff-student consultation timetable will be advised in lectures & posted on the ACCG 352 Blackboard website at the beginning of the semester.

You are encouraged to seek help from a staff member teaching this unit during their regular consultation hours. In special circumstances, an appointment may be made outside regular consultation hours. Staff will not conduct any 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 Blackboard and are available next to the phones).

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

## CLASSES

- The weekly three hour class time for this unit consists of a two hour lecture and a one hour tutorial. There are no tutorials in weeks 1 and 8. Weekly tutorials cover material based on the lecture of the previous week.
- The timetable for classes can be found on the University web site at: <http://www.timetables.mq.edu.au/>
- Students cannot change from one tutorial group/class to another without permission from the unit convener. Please note that changes to tutorial classes must be done online and no later than Friday of the second week of the semester (13 August 2010).

## PRIZES

- Prizes for this unit (see).  
[http://www.businessandconomics.mq.edu.au/undergraduate\\_degrees/prizes\\_scholarships](http://www.businessandconomics.mq.edu.au/undergraduate_degrees/prizes_scholarships)

## REQUIRED AND RECOMMENDED TEXTS AND/OR MATERIALS

- For the first section of the unit, the required textbook is E.J. Elton, M.J. Gruber, S.J. Brown and W.N. Goetzmann, Modern Portfolio Theory and Investment Analysis, J. Wiley & Sons (8<sup>th</sup> Edition) 2009.
- For the second section of the unit, the required textbook is J.C. Hull, Options, futures and other derivatives, Prentice Hall (7<sup>th</sup> Edition) 2009. Students may also find the accompanying text helpful: J.C. Hull, Options, futures and other derivatives: solutions manual, Prentice Hall.
- Additional references may be prescribed for individual topics as appropriate.

- These are available for purchase from the Macquarie University Co-op Bookshop, and a copy will be available in the closed reserve section of the Macquarie Library.

### **TECHNOLOGY USED AND REQUIRED**

- E.J. Elton, M.J. Gruber, S.J. Brown and W.N. Goetzmann, Modern Portfolio Theory and Investment Analysis text book comes with a self-contained, windows-based software program. Students are encouraged to use this software program. To order this software package please visit <http://www.wiley.com>
- J.C. Hull, Options, futures and other derivatives: Prentice Hall (7<sup>th</sup> Edition) 2009 text book has an accompanying software package in a CD-ROM. Students are encouraged to use this software program.

### **UNIT WEB PAGE**

- The web page for this unit can be found at: <http://online.mq.edu.au>
- It is the responsibility of students to visit the unit site regularly. Course material is available on the learning management system (Blackboard).
- Lecture notes, tutorial solutions, unit announcements, and other reference materials will be posted to this site throughout the semester.

### **LEARNING OUTCOMES**

The learning outcomes of this unit are:

1. Understand and be able to apply concepts in portfolio theory and option pricing theory to practical settings faced by portfolio managers.
2. Be able to describe and draw comparisons between different Capital Asset Pricing Models (i.e., CAPM, APT & ICAPM).
3. Develop skills to apply the ideas of modern portfolio theory into investment practice.
4. Understand the fundamental differences between passive portfolio management and active portfolio management.
5. Be able to apply different techniques to evaluate active portfolio management performance.
6. Know how to use different financial derivatives when managing portfolios.
7. Read and interpret current research in portfolio management and apply to project work

## GRADUATE CAPABILITIES

All academic programs at Macquarie University seek to develop a range of capabilities that graduates will need to be effective and engaged participants in the challenges of the world. This unit aims to develop the following graduate capabilities:

<b>Graduate Capabilities</b>	<b>Indicators of development in being able to:</b>
1) Discipline specific knowledge and skills	a) Explain the key terms in the various topics b) Discuss the key theories and hypothesis in the various topics c) Apply theoretical knowledge in practical solutions d) Connect theory and practice
2) Critical analytical and integrative thinking	a) Identify and analyse quantitative as well as qualitative questions in portfolio management
3) Problem solving and research capability	a) Apply theoretical and quantitative knowledge when drawing conclusions and making recommendations
4) Effective communication	a) Effectively communicate views and information in writing and orally b) Modify communication skills for an appropriate audience, such as peers and teacher

## TEACHING AND LEARNING STRATEGY

- Lectures and tutorials
- Students are encouraged to read the prescribed reading and lecture materials prior to attending the lectures. Students are also expected to finish the weekly assigned home work before tutorials and participate in class discussion.
- A student consultation timetable will be provided at the beginning of the semester to enable students to obtain further assistance from the staff teaching this unit. This timetable will be posted on the blackboard at the beginning of the semester.

- Lecture Schedule

Lecture Week	Lecture Topic
1 - (2 Aug)	Introduction and Asset Allocation
2 - (9 Aug)	Bond Portfolio Management
3 - (16 Aug)	Passive Management of Equity Portfolio
4 - (23 Aug)	Active Management of Equity Portfolio
5 - (30 Aug)	International Diversification
6 - (6 Sep)	Portfolio Performance Assessment
7 - (13 Sep)	Structured Products
	<b>Mid-semester recess</b>
8 - (4 Oct)	<b>Mid-semester test</b>
9 - (11 Oct)	Modeling Portfolio returns: practical issues
10 - (18 Oct)	Portfolio Management with forward/futures
11- (25 Oct)	Portfolio Management with options
12- (1 Nov)	Managing portfolios of derivatives
13- (8 Nov)	Review

- Weekly curriculum and homework (see details in the last section)

## RESEARCH AND PRACTICE

This unit uses research from external sources for a major Project. The research references are as follows;

1. Malkiel, B.G., 2003, Passive Investment Strategies and Efficient Markets, *European Financial Management*, Vol. 9, No. 1, 1-10
2. Martijn Cremers, K.J. and Petajisto A., 2009, How Active Is Your Manager? A New Measure That Predicts Performance, *Review of Financial Studies*. Advance Access published August 6.

Students are expected to read the following references and lecture material and answer the following question.

**Project question:** Critically discuss and evaluate “*whether passive investing has the possibility of outperforming active investing*” using the above articles as principle references.

**Project Rules:**

1. Groups of four or five members **MUST** conduct this project. Form your groups as quickly as possible.
2. The written report **MUST NOT** exceed ten typed (10 A4 pages), double-spaced pages (i.e. about 3000 words). Submissions that merely reproduce or paraphrase large sections of the article will receive a failing grade. A full bibliography must be included and all source documents properly acknowledged. Plagiarism will result in a zero mark and potential disciplinary action by the University.
3. Your written report **MUST** include a statement, signed by all members, that sets out the percentage contribution of each member. It is expected that groups will allocate tasks so that each member makes a similar level of contribution. Marks may be adjusted where unequal contributions can be proved from individual log-books or other identifiable evidence.
4. The project is due in week 10-(**19 October 2010 by 5 PM**).

- This unit gives you practice in applying research findings in your assignments
- This unit gives you opportunities to conduct your own research

#### RELATIONSHIP BETWEEN ASSESSMENT AND LEARNING OUTCOMES

	<b>Assessment Task 1</b>	<b>Assessment Task 2</b>	<b>Assessment Task 3</b>	<b>Assessment Task 4</b>
Title/Name	<u>Week 4 Quiz</u>	<u>Mid-semester examination</u>	<u>Major project</u>	<u>Final examination</u>
	Completion of quiz given during week 4 tutorial	90 minutes plus 5 minutes reading time		2 hours plus 10 minutes reading time
Due date	Week beginning 23 <sup>rd</sup> August	Tuesday 5/10/10 During normal lecture hours	19/10/10 by 5PM Beginning of the lecture	End-of-semester examination period
<b>% Weighting</b>	<b>5%</b>	<b>40%</b>	<b>15%</b>	<b>40%</b>
Grading method	Zero for non-submission & non attendance  2.5 marks for attempting but suboptimal performance  5 marks for completion and satisfactory performance	Assessed on short written theory questions and calculations	Zero for non-submission  5 marks for attempting but incomplete submission  5 -15marks for completion and submission	Assessed on short written theory questions and calculations
Submission method	In lecture week 4 tutorial	Hand in examination script	Hand in assignment	Hand in examination script
Feedback method	Solutions posted on Blackboard on week 5	Review and discussion in tutorials	Review and discussion in tutorials	
Estimated student workload (hours)	2 hours	This is cumulative over the prior weeks in the semester plus your own time-management for revision	Approximately 10-15 hours	This is cumulative over the prior weeks in the semester plus your own time-management for revision
Learning outcomes assessed	1 to 6	1 to 6	7	1 to 6
Graduate capabilities assessed	1 to 4	1 to 4	1 to 4	1 to 4

### Other important information regarding the above assessment tasks:

1. Mid-semester test will be held during normal lecture hours in week 8 (October 5). Total time available for the mid-semester test is 90 minutes plus 5 minutes reading time. The mid-semester test is based on topics covered during lectures 1 to 6, inclusive. No dictionaries of any kind are allowed in the mid-semester test. Non-programmable calculators are allowed, provided that they are not capable of storing text. If you are unable to attend the midterm exam due to medical reasons, you have to complete a supplementary exam before week 10, with a valid medical certificate.
2. Students must complete a major project which is due for submission in week 10-(**19 October 2010 by 5 PM**).
3. The **final** exam is based on topics covered during lectures 7, 9 to 13, inclusive. Total time available for the final examination is 2 hours plus 10 minutes reading time. No dictionaries of any kind are allowed in the final examination. Non-programmable calculators are allowed, provided that they are not capable of storing text.
4. Students must obtain a pass mark for the final examination and an overall pass mark in order to attain a Pass grade or higher for the unit.
5. During Week 4 (the week beginning 23<sup>rd</sup> August), your tutor will give you a quiz to complete during the tutorial. This will be done at the beginning of the tutorial. Your tutor will award you a mark from 0 to 5 based on effort (have you made a good attempt), rather than if you got the problems correct or not. This quiz in Week 4 is to give you some **diagnostic feedback** on your performance and risks/deficiencies in the unit so far. Your tutor will give individual feedback. Students who are deemed to be at risk will be counselled and encouraged to seek academic assistance at staff consultation times regularly. The University Examination period is from 18 November – 4 December 2010. 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://www.timetables.mq.edu.au/exam>
6. 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](http://www.mq.edu.au/policy/docs/special_consideration/policy.html)
7. 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.html>



## 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](http://www.mq.edu.au/policy/docs/academic_honesty/policy.html)

## GRADES

Please refer to relevant Bachelor Degree rule in the Handbook of Undergraduate Studies.

All final grades in the Department of Accounting and Finance 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 their overall assessment marks 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.businessandconomics.mq.edu.au/for/new\\_and\\_current\\_students/undergraduate/admin\\_central/grade\\_appeals](http://www.businessandconomics.mq.edu.au/for/new_and_current_students/undergraduate/admin_central/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/procedure.html](http://www.mq.edu.au/policy/docs/special_consideration/procedure.html)

## **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>.

## **IT CONDITIONS OF USE**

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

Students are expected to act responsibly when utilizing 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 unit 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.

## **WEEKLY CURRICULUM AND HOMEWORK SCHEDULE**

## **Introduction and Asset allocation**

Readings: Lecture for week 1

- Elton, Gruber, Brown & Goetzmann, Chapter 16

Assignment Questions: Tutorial in week 2

- Elton, Gruber, Brown & Goetzmann, Chapter 16, Question 1 & 2

## **Bond Portfolio Management**

Readings: Lecture for week 2

- Elton, Gruber, Brown & Goetzmann, Chapters 21 & 22

Assignment Questions: Tutorial in week 3

- Elton, Gruber, Brown & Goetzmann, Chapter 21, Questions 1, 2,3 & 4; Chapter 22, Questions 1,2 &3

## **Passive Management of Equity Portfolios**

Readings: Lecture for week 3

- Elton, Gruber, Brown & Goetzmann, Chapters 16 & 27

Assignment Questions: Tutorial in week 4

- Elton, Gruber, Brown & Goetzmann, Chapter 16, Questions 3 & 4.
- See lecture notes for additional questions.

## **Active Management of Equity Portfolios**

Readings: Lecture for week 4

- Elton, Gruber, Brown & Goetzmann, Chapters 16 & 27

Assignment Questions: Tutorial in week 5

- Elton, Gruber, Brown & Goetzmann, Chapter 16, Questions 5 & 6.
- See lecture notes for additional questions.

## **International Diversification**

Readings: Lecture for week 5

- Elton, Gruber, Brown & Goetzmann, Chapter 12

Assignment Questions: Tutorial in week 6

- Elton, Gruber, Brown & Goetzmann, Chapter 12, Questions 1, 2, 3& 4.
- See lecture notes for additional questions.

## **Portfolio Performance Assessment**

Readings: Lecture for week 6

- Elton, Gruber, Brown & Goetzmann, Chapters 25& 26

Assignment Questions: Tutorial in week 7

- Elton, Gruber, Brown & Goetzmann, Chapter 25, Questions 1,2& 3; Chapter 26, Question 1

## **Structured products**

Readings: Lecture for week 7

- Hull, Chapters 24, 28 & 32
- R.G. Cooper, S.J. Edgett and E.J. Kleinschmidt, 1999. New Product Portfolio Management: Practices and Performance

Assignment Questions

- Hull, Chapter 24, Questions & Problems 24.1, 24.2, 24.5, 24.7, 24.14
- Hull, Chapter 28, Questions & Problems 28.10, 28.15
- Hull, Chapter 32, Questions & Problems 32.8

## **Modeling portfolio returns: practical issues**

Readings: Lecture for week 9

- Hull, Chapter 12
- Hull, Chapter 13, Sections 13.1-13.4
- Hull, Chapter 19

## Assignment Questions

- Hull, Chapter 12, Questions 12.1, 12.2, 12.4,12.8; Assignment Questions 12.14, 12.15, 12.16
- Hull, Chapter13, Questions & Problems 13.3, 13.6
- Hull, Chapter 19, Questions & Problems 19.1, 19.6

## **Portfolio management with forwards/futures**

Readings: Lecture for week 10

- Hull, Chapter 3

## Assignment Questions

- Hull, Chapter 3, Questions & Problems 3.5, 3.13, 3.15; Assignment Questions 3.25
- See lecture notes for additional questions.

## **Portfolio management with options**

Readings: Lecture for week 11

- Hull, Chapter 3

## Assignment Questions

- Hull, Chapter 10, Assignment Questions 10.19, 10.20, 10.21
- See lecture notes for additional questions.

## **Managing portfolio of derivatives**

Readings: Lecture for week 12

- Hull, Chapter 15

## Assignment Questions

- Hull, Chapter 15, Questions & problems, 15.12, 15.13, 15.14; Assignment Questions 15.26, 15.27

## **Review Lecture for week 13**

- No new reading materials, revise lecture materials from week 7, 9-12.