

AFIN828

International Investment and Risk

S2 Evening 2014

Applied Finance and Actuarial Studies

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General Information

Unit convenor and teaching staff Unit Convenor Chi Truong chi.truong@mq.edu.au Contact via chi.truong@mq.edu.au E4A 452 Tuesday 3-5 pm, Thursday 3-5pm / Room: E4A 452

Credit points

4

Prerequisites ACST603 or AFIN858 or admission to MActPrac or MCom or MEc or MIntBus prior to 2011

Corequisites

Co-badged status

Unit description

This is an advanced-level unit concentrating on various techniques in investment and financial risk management. Topics include the analysis of risk and return, financial derivatives, international bond markets, dependence modelling, banking regulations, managing market, credit, operational risk and economic capital. A strong emphasis is placed upon developing a rigorous analytical skill-base which can then be applied to real-world issues in the financial industry.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

Examine and find optimal investments strategies with respect to expected returns and

risks involved and dependencies between financial instruments

Attain an excellent knowledge of the role and characteristics of international financial

markets and the institutions and intermediaries

Understand the pricing of various financial products like equity, fixed income instruments or derivatives and know how these products can be used for hedging and risk management

Evaluate econometric models for financial variables, for example with respect to their volatility, risk, dependence structure and time series properties

General Assessment Information

A Standardised Numerical Grade (SNG) gives you an indication of how you have performed within the band for your descriptive grade. The SNG is not a mark, and you may not be able to work it out based on your raw examination and other assessment marks. Nor are you able to determine you are "one mark away" from a different grade.

Assessment Tasks

Name	Weighting	Due
Group presentation	15%	Assigned tutorial section
Class Test	15%	September 16
Assignment	25%	October 21
Final exam	45%	ТВА

Group presentation

Due: **Assigned tutorial section** Weighting: **15%**

The **group presentation** will be on tutorial questions posted after each lecture. A weight of 12% is given to correct answers, and 3% is given to presentation delivery (e.g. using graphs, tables, ...) that facilitates the understanding of the presentation. Groups will be formed and presentation topics will be selected in the first lecture. Presentation slides must be submitted before the section starts.

Late assessment:

No extensions will be granted. Students who have not submitted the task prior to the deadline will be awarded a mark of 0 for the task, except for cases in which an application for special consideration is made and approved.

On successful completion you will be able to:

- Examine and find optimal investments strategies with respect to expected returns and risks involved and dependencies between financial instruments
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Class Test

Due: September 16 Weighting: 15%

The **class test** will be multiple choice questions. These questions may include calculations as well as "verbal" answers. The test is scheduled for September 16 and will be held during normal lecture hours.

Late assessment

No extensions will be granted. Students who have not submitted the task prior to the deadline will be awarded a mark of 0 for the task, except for cases in which an application for special consideration is made and approved.

On successful completion you will be able to:

- Examine and find optimal investments strategies with respect to expected returns and risks involved and dependencies between financial instruments
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Assignment

Due: October 21 Weighting: 25%

The **assignment** will provide the opportunity for students to work on specified topics covering important concepts of investment and risk management. The topic and reading material will be provided in week 6, the due date will be **October 21**. Late submission of assignment will be penalized 5% of total mark per day. The assignment provides further opportunity for students to develop their critical analysis skills, problem-solving skills and creative thinking skills.

Late assessment

No extensions will be granted. Late tasks will be accepted up to 72 hours after the submission deadline. There will be a deduction of 20% of the total available marks made from the total awarded mark for each 24 hour period or part thereof that the submission is late (for example, 25 hours late in submission – 40% penalty). This penalty does not apply for cases in which an application for special consideration is made and approved.

On successful completion you will be able to:

- Examine and find optimal investments strategies with respect to expected returns and risks involved and dependencies between financial instruments
- Understand the pricing of various financial products like equity, fixed income instruments or derivatives and know how these products can be used for hedging and risk management
- Evaluate econometric models for financial variables, for example with respect to their volatility, risk, dependence structure and time series properties

Final exam

Due: **TBA** Weighting: **45%**

The **final examination** will comprise long-answer questions, and will cover the entire semester. The date for the final examination will be announced within the first three weeks of the semester. All assessment tasks further develop problem solving, knowledge on applied finance and communication skills. Students absent from final exam without special consideration will be given zero mark for final exam. For special consideration policy, see Policies and Procedures.

Late assessment

No extensions will be granted. Students who have not submitted the task prior to the deadline will be awarded a mark of 0 for the task, except for cases in which an application for special consideration is made and approved.

Reference material

You are permitted ONE A4 page of paper containing reference material printed on both sides. The material may be handwritten or typed. The page will not be returned at the end of the final examination.

On successful completion you will be able to:

- Examine and find optimal investments strategies with respect to expected returns and risks involved and dependencies between financial instruments
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Delivery and Resources

Technology used and required

iLearn is an online program available at <u>http://learn.mq.edu.au/</u> through which students will be able to access resources to assist them throughout the semester.

Changes since the last offering

Assessment tasks have been re-designed to encourage students to work together to comprehend the course materials and to engage students from the beginning of the course. We have introduced Presentation as a new assessment task where students are rewarded for preparing tutorial questions, raising critical questions, comments and for good response to questions raised. The weight on final exam is now lowered to provide reward for hard work on Presentation assessment task.

Required Text

Hull, J. (2012) Risk Management and Financial Institutions, 3nd Edition, WILEY.

Additional to the recommended text, sometimes chapters from other books (see below) will be used in conjunction with journal articles and lecture notes.

Other Recommended References:

Allen, L., Boudoukh, J., Saunders, A. (2009) Understanding Market, Credit and Operational Risk: The Value-at-Risk Approach, John Wiley & Sons.

Bodie, Z., Kane, A., Marcus, A. (2006) Investments, 7th Edition, Mc-Graw-Hill.

Crouhy, M., Galai, D., Mark, R. (2006), The Essentials of Risk Management, McGraw-Hill.

Elton, E., Gruber, M., Brown, S., Goetzmann, W. (2009) Modern Portfolio Theory and Investment Analysis, 8th Edition, John Wiley & Sons.

Hull, J. (2011) Options, Futures & other Derivatives, 8th Edition, Prentice Hall.

Jorion, P. (2006), Value-at-Risk, 3rd Edition, McGraw-Hill.

Madura, J. (2009), International Financial Management, 10th Edition, South-Western College Pub.

Saunders, A., Millon Cornett, M. (2007), Financial Institutions Management – A Risk Management Approach, 6th Edition, McGraw Hill.

Shapiro, A., Sarin, A. (2008), Foundations of Multinational Financial Management, 6th Edition, Wiley.

Solnik, B., McLeavey, D. (2008) Global Investments, 6th Edition, Addison Wesley.

Trueck, S., Rachev, S., (2009) Rating Based Modeling of Credit Risk, Elsevier.

Students needing assistance with mathematics should first consult:

Dowling, E.T. (1992) Introduction to Mathematical Economics, (2nd Ed) New York: McGraw-Hill

Gujarati, D. (2003) Basic Econometrics, (4th Ed), McGraw-Hill

Unit Schedule

Lecture 1 (August 5) Hull Chapter 1&2: Introduction, Risk and Return

Lecture 2 (August 12) Additional Material / Hull Chapter 4: Portfolio Construction, Mutual Funds and Hedge Funds

Lecture 3 (August 19) Hull Chapter 5: Financial Instruments

Lecture 4 (August 26)

Hull Chapter 7: How traders manage their exposure

Lecture 5 (September 2)

Additional Material: International Money Markets, Exchange Rates & Currency Risks

Lecture 6 (September 9) Hull Chapter 8: Bond Markets, Interest rate risk, Duration, Convexity

Lecture 7 (September 16)

Mid-Semester Test / Hull Chapter 9: Value-at-Risk

Mid-Semester Break: Sunday, September 20 to Monday, October 06

Lecture 8 (October 7) Hull Chapter 10: Volatility, EWMA and GARCH models

Lecture 9 (October 14)

Hull Chapter 11&12: Correlations and Copulas, Bank Regulation & Basel II

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Lecture 10 (October 21)

Hull Chapter 14&15: Market Risk VaR: historical simulation and model building approach

Lecture 11 (October 28)

Hull Chapter 16&17: Credit Risk - Probabilities of Default (PD), Counterparty Credit risk in Derivatives

Lecture 12 (November 4)

Hull Chapter 18&6: Credit VaR and the Credit Crunch of 2007

Lecture 13 (November 11)

Hull Chapter 19&20: Stress Testing and Operational Risk / Revision

Learning and Teaching Activities

Lectures

Lectures are intended to provide an overview of conceptual frameworks and issues in applied finance that are critical to the core themes of the unit. Usually one hour of the lecture time will be spent on group presentations that address exercise questions.

Independent learning

AFIN828 relies heavily on independent learning where students read the textbook and other relevant material, revise the lecture notes, prepare answers to the provided exercise questions, participate in the discussion board and extend themselves by doing additional reading, questions, exercises and problems. Students should spend at least 6 hours each teaching week and 9 hours each week during the 2-week mid-semester recess on independent learning.

Policies and Procedures

Macquarie University policies and procedures are accessible from <u>Policy Central</u>. Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy <u>http://mq.edu.au/policy/docs/academic_honesty/policy.ht</u> ml

Assessment Policy http://mq.edu.au/policy/docs/assessment/policy.html

Grading Policy http://mq.edu.au/policy/docs/grading/policy.html

Grade Appeal Policy http://mq.edu.au/policy/docs/gradeappeal/policy.html

Grievance Management Policy http://mq.edu.au/policy/docs/grievance_managemen

t/policy.html

Disruption to Studies Policy <u>http://www.mq.edu.au/policy/docs/disruption_studies/policy.html</u> The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.

In addition, a number of other policies can be found in the <u>Learning and Teaching Category</u> of Policy Central.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/support/student_conduct/

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

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

SUPPLEMENTARY EXAM

Further information regarding supplementary exams, including dates, is available here

http://www.businessandeconomics.mq.edu.au/current_students/undergraduate/how_do_i/special_consid eration

Student Support

Macquarie University provides a range of support services for students. For details, visit <u>http://stu</u> dents.mq.edu.au/support/

Learning Skills

Learning Skills (<u>mq.edu.au/learningskills</u>) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students
- Ask a Learning Adviser

Student Services and Support

Students with a disability are encouraged to contact the **Disability Service** who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

IT Help

For help with University computer systems and technology, visit <u>http://informatics.mq.edu.au/hel</u>p/.

When using the University's IT, you must adhere to the <u>Acceptable Use Policy</u>. The policy applies to all who connect to the MQ network including students.

Graduate Capabilities

PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

Learning outcomes

- Examine and find optimal investments strategies with respect to expected returns and risks involved and dependencies between financial instruments
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Assessment tasks

- Group presentation
- Class Test
- Assignment
- Final exam

PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

Learning outcomes

- Examine and find optimal investments strategies with respect to expected returns and risks involved and dependencies between financial instruments
- Attain an excellent knowledge of the role and characteristics of international financial markets and the institutions and intermediaries

- Understand the pricing of various financial products like equity, fixed income instruments or derivatives and know how these products can be used for hedging and risk management
- Evaluate econometric models for financial variables, for example with respect to their volatility, risk, dependence structure and time series properties

Assessment tasks

- Group presentation
- Class Test
- Assignment
- Final exam

PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

Learning outcomes

- Examine and find optimal investments strategies with respect to expected returns and risks involved and dependencies between financial instruments
- Attain an excellent knowledge of the role and characteristics of international financial markets and the institutions and intermediaries
- Understand the pricing of various financial products like equity, fixed income instruments or derivatives and know how these products can be used for hedging and risk management
- Evaluate econometric models for financial variables, for example with respect to their volatility, risk, dependence structure and time series properties

Assessment tasks

- Group presentation
- Assignment

Research and Practice

- This unit uses research by Macquarie University researchers
- · This unit uses research from external sources
- · This unit gives you practice in applying research findings in your assignments

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• This unit gives you opportunities to conduct your own research