



AFIN828

International Investment and Risk

S1 Day 2014

Applied Finance and Actuarial Studies

Contents

<u>General Information</u>	2
<u>Learning Outcomes</u>	2
<u>Assessment Tasks</u>	3
<u>Delivery and Resources</u>	6
<u>Unit Schedule</u>	8
<u>Policies and Procedures</u>	9
<u>Graduate Capabilities</u>	10
<u>Research and Practice</u>	12

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General Information

Unit convenor and teaching staff

Unit Convenor

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E4A 432

Refer to iLearn

Other Staff

Joel Fabre

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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

Acquire an extensive knowledge on the major approaches to managing market, credit and operational risks and banking regulations as they are suggested in the new Basel Capital Accord

Assessment Tasks

Name	Weighting	Due
<u>Assessed Coursework</u>	10%	Start of class from Week 2
<u>In Class Test</u>	20%	April 30, 2014
<u>Assignment</u>	25%	May 21, 2014
<u>Final Examination</u>	45%	Examination Period

Assessed Coursework

Due: **Start of class from Week 2**

Weighting: **10%**

You will prepare and **submit answers to the assigned tutorial questions at the start of each class from Week 2**. Tutorial questions are to be answered in the Assignment groups. See the section on the Assignment for further information on groups and group formation. Each group will have their tutorial submission marked on two randomly selected weeks during semester.

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:

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- Evaluate econometric models for financial variables, for example with respect to their volatility, risk, dependence structure and time series properties
- Acquire an extensive knowledge on the major approaches to managing market, credit and operational risks and banking regulations as they are suggested in the new Basel Capital Accord

In Class Test

Due: **April 30, 2014**

Weighting: **20%**

The **In Class Test** will be multiple choice questions. These questions may include calculations as well as “verbal” answers. The test is a mid-semester test and is scheduled for **April 30, 2014 (Lecture 7)**. It will be held during normal lecture hours.

On successful completion you will be able to:

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Assignment

Due: **May 21, 2014**

Weighting: **25%**

The **assignment** will provide the opportunity for students to work on specified topics covering important concepts of investment and risk management. The assignment will be completed in

groups of 2 or 3. You will need to form your group in Lecture 1. The topic and reading material will be provided in week 6, the due date will be **May 21, 2014 (Lecture 10)**. Please submit the assignment during class. The assignment provides further opportunity for students to develop their critical analysis skills, problem-solving skills and creative thinking skills.

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
- 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
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Final Examination

Due: **Examination Period**

Weighting: **45%**

The **final examination** will comprise long-answer questions, and it will cover the entire semester. Please watch this space for your examination information.

http://students.mq.edu.au/student_admin/exams/

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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- 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
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Delivery and Resources

Classes

Classes in AFIN828 are three hours in length. Usually two hours will be spent on a lecture and one hour will be spent on reviewing tutorial questions. Unit materials are learnt by attending classes and through independent learning. The lectures provide a general overview of the topics highlighting a number of concepts and techniques. Further additional reading material will be provided. Students are strongly advised to study the additional reading material provided by the unit convenor and further explore all relevant concepts and techniques.

Students should attend the three-hour class every week. Lecture slides will be available prior to the lectures at the unit's Web site.

Required and Recommended Texts and/or Materials

Required Text

Hull, J. (2012) *Risk Management and Financial Institutions*, 3rd 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. (2012) *Investments*, 9th 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

Technologies Used and Required

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

Unit Web Page

The web page for this unit can be found at: <http://ilearn.mq.edu.au>

You are strongly encouraged to regularly visit the website and use it as a resource centre to assist with your learning.

If you are unable to access the website because you are not aware of or have forgotten your username and password, please contact the IT helpdesk either via logging a ticket at [OneHelp \(http://help.mq.edu.au\)](http://help.mq.edu.au); calling them on 9850 4357; or visiting them in C5C 244.

The IT helpdesk will also be able to assist you with using ILearn. Please note that there is also a help feature in ILearn and you may refer to this instead for assistance in using ILearn. If you have contacted the helpdesk in regard to your username and password and you are still unable to login to ILearn you should then contact the Unit Convenor.

Please remember to log out when you have finished using ILearn. Failure to do so could result in unauthorised access to your ILearn account.

Teaching and Learning Activities

The teaching strategy in AFIN828 recognises that students learn independently and assume responsibility for the learning process and with academic integrity. Students are expected to participate in the unit by attending lectures, reading the provided material, thoroughly revising the lecture notes and preparing answers to the provided exercise questions and reading additional material about important issues in investment and risk.

What we aim to achieve in AFIN828 is deep (as opposed to surface) learning. Thus, learning is interpreted as making sense or abstracting meaning. Learning involves relating parts of the subject matter to each other and to the real world. Further learning is understood as

comprehending the world by understanding and re-interpreting knowledge.

The teaching philosophy is articulated as follows:

Lectures – large group learning (3 hour each teaching week)

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 exercise questions.

Independent learning – learning by doing (about 6 hours each teaching week and 9 hours each week during the 2-week mid-semester recess)

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.

Timetables

Your timetable is available via the Timetables portal at <http://timetables.mq.edu.au>

What Has Changed?

The Presentation assessment task was replaced by the Tutorial Submissions assessment task.

Unit Schedule

Lecture 1 (March 5th) Hull Chapter 1&2: Introduction, Risk and Return (Joel and Stefan)

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

Lecture 3 (March 19th) Hull Chapter 5&6: Trading in Financial Markets, the credit crisis of 2007 (Joel)

Lecture 4 (March 26th) Hull Chapter 7: How traders manage their risk (Joel)

Lecture 5 (April 2nd) Additional Material: International Money Markets, Exchange Rates & Currency Risks (Stefan)

Lecture 6 (April 9th) Hull Chapter 8: Interest Rate Risk (Stefan)

Mid-Semester Break: Monday, April 13 to Friday, April 25

Lecture 7 (April 30th) **Mid-Semester Test** / Hull Chapter 9: Value-at-Risk (Stefan)

Lecture 8 (May 7th) Hull Chapter 10: Volatility (Joel)

Lecture 9 (May 14th) Hull Chapter 11&12&13: Correlations and Copulas, Bank Regulation

& Basel II, Basel 2.5, Basel III and Dodd-Frank (Joel)

Lecture 10 (May 21st) Hull Chapter 14&15: Market Risk VaR: historical simulation and model building approach (Joel) **Assignment Due Date**

Lecture 11 (May 28th) Hull Chapter 16: Credit Risk - Probabilities of Default (PD) (Stefan)

Lecture 12 (June 4th) Hull Chapter 17, 18, 19: Counterparty Credit Risk in Derivatives, Credit VaR and Stress Testing (Stefan)

Lecture 13 (June 11th) Assignment Feedback and Revision (Joel)

Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central](#). Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic_honesty/policy.html

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_management/policy.html

Disruption to Studies Policy http://www.mq.edu.au/policy/docs/disruption_studies/policy.html *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 [Learning and Teaching Category](#) 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/

Supplementary Exams

Further information regarding supplementary exams, including dates, is available here: http://www.businessandconomics.mq.edu.au/current_students/undergraduate/how_do_i/special_consideration

Student Support

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

Learning Skills

Learning Skills (mq.edu.au/learningskills) 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 <http://informatics.mq.edu.au/help/>.

When using the University's IT, you must adhere to the [Acceptable Use Policy](#). 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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volatility, risk, dependence structure and time series properties

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Assessment tasks

- Assessed Coursework
- In Class Test
- Assignment
- Final Examination

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
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Assessment tasks

- Assessed Coursework
- In Class Test
- Assignment
- Final Examination

PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

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
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Assessment tasks

- Assessed Coursework
- 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
- This unit gives you opportunities to conduct your own research