



AFIN828

International Investment and Risk

S1 Day 2015

Dept of 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

452 E4A

Thursday 3-5pm

Veronica Chen

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Credit points

4

Prerequisites

ACST603 or AFIN858

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

General Assessment Information

It is the responsibility of students to view their marks for each within session assessment on iLearn within 20 days of posting. If there are any discrepancies, students must contact the unit convenor immediately. Failure to do so will mean that queries received after the release of final results regarding assessment tasks (not including the final exam mark) will not be addressed.

Assessment Tasks

| Name | Weighting | Due |
|---|-----------|-----------------------------|
| <u>Group presentation</u> | 15% | Start of class, from Week 2 |
| <u>In Class Test</u> | 15% | April 21, 2015 |
| <u>Assignment</u> | 25% | May 12, 2015 |
| <u>Final Examination</u> | 45% | Examination Period |

Group presentation

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

Weighting: **15%**

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

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

- 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

In Class Test

Due: **April 21, 2015**

Weighting: **15%**

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 21, 2015 (Week 7)**. It will be held during normal lecture hours.

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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Assignment

Due: **May 12, 2015**

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 **May 12, 2015 (Week 10)**. Please submit the assignment during class. Students have to state their individual contribution to the assignment. 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
- Evaluate econometric models for financial variables, for example with respect to their volatility, risk, dependence structure and time series properties
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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 timetable.

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
- 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

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>); 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 Tutorial Submissions assessment task was replaced by the Presentation assessment task.

Unit Schedule

Lecture 1 (February 24) Hull Chapter 1&2: Introduction, Risk and Return

Lecture 2 (March 3) Additional Material / Hull Chapter 4: Portfolio Construction, Mutual Funds and Hedge Funds

Lecture 3 (March 10) Hull Chapter 5&6: Trading in Financial Markets, the credit crisis of 2007

Lecture 4 (March 17) Hull Chapter 7: How traders manage their risk

Lecture 5 (March 24) Additional Material: International Money Markets, Exchange Rates & Currency Risks

Lecture 6 (March 31) Hull Chapter 8: Interest Rate Risk

Mid-Semester Break: Friday, April 3 to Monday April 20

Lecture 7 (April 21) **Mid-Semester Test** / Hull Chapter 9: Value-at-Risk

Lecture 8 (April 28) Hull Chapter 10: Volatility

Lecture 9 (May 5) Hull Chapter 11&12&13: Correlations and Copulas, Bank Regulation & Basel

II, Basel 2.5, Basel III and Dodd-Frank

Lecture 10 (May 12) Hull Chapter 14&15: Market Risk VaR: historical simulation and model building approach **Assignment Due Date**

Lecture 11 (May 19) Hull Chapter 16: Credit Risk - Probabilities of Default (PD)

Lecture 12 (May 26) Hull Chapter 18, 19: Credit VaR and Stress Testing

Lecture 13 (June 2) Assignment Feedback and Revision

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/

Results

Results shown in *iLearn*, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in [eStudent](#). For more information visit ask.mq.edu.au.

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
- 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

- Group presentation
- 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
- 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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Assessment tasks

- Group presentation
- 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
- 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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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
- This unit gives you opportunities to conduct your own research

Changes since First Published

| Date | Description |
|------------|--------------------|
| 09/02/2015 | Change of contacts |