

Investments and Portfolio Management INVP11 Spring 2015


PLEASE NOTE: In addition to the detail contained within this hand out, it is your responsibility to read and understand the information provided within the programme's Succeed site. In particular, please pay close attention to the plagiarism documents.

SCQF Level 11 – 15 credits


Pre-requisites: None

TEACHING STAFF

Module Co-ordinator

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Teaching Staff

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MODULE INTRODUCTION, AIMS AND OBJECTIVES

The module aims to provide an understanding of investments and portfolio management. The first part of the course will be concerned principally with the valuation of equities and the management of equity portfolios. This part will build on the basic principles (examined previously in Corporate Finance) which underpin modern portfolio theory and models of asset pricing. These principles are then applied to issues of performance measurement and active portfolio management. The second part primarily focuses on fixed-income securities. It explains the principles of bond valuation, introduces the concepts underlying the term structure of interest rates, and discusses the management of bond portfolios.

LEARNING OUTCOMES AND SKILLS DEVELOPED

By the end of the module students should be able to:

1. Explain and apply concepts related to risk such as risk aversion, fair games and indifference curves.
2. Explain and apply utility theory and its relevance to investment theory.
3. Explain and apply alternative risk measures, i.e. probability of loss, expected value of loss, and semi-variance.
4. Explain and calculate expected return, variance (standard deviation), covariance and correlation coefficient both for individual stocks and for portfolios of stocks.

5. Describe the Capital Asset Pricing Model and Arbitrage Pricing Models and apply each model to the measurement of equity returns.
6. Explain the three different ways of estimating factors in factor models (factor analysis, macro economic factors, firm characteristics) and specify the advantages and disadvantages of these approaches.
7. Explain the different types of market efficiency.
8. Explain the strengths and weaknesses of behavioural finance as well as its most important characteristics.
9. Explain the different ways to value shares of common stock.
10. Describe and apply price/earnings ratio models.
11. Explain the advantages and disadvantages of price/earnings ratio models.
12. Describe hedge funds and other alternative investments including their potential contribution to portfolio management.
13. Describe the basic principles underlying the conventional theory of performance evaluation.
14. Apply performance attribution procedures in order to partition portfolio performance according to asset allocation, sector selection and security selection decisions.
15. Appreciate the value of market timing and how it may be measured.
16. Explain the advantages and disadvantages of both active and passive portfolio management.
17. Understand the merits and disadvantages of international diversification.
18. Understand various characteristics of bonds and different measures of bond returns.
19. Appreciate the principles of bond pricing.
20. Calculate the price of bonds.
21. Understand spot, zero coupon, forward and par interest rates.
22. Understand the term-structure of interest rates.
23. Understand duration, modified duration and convexity and to appreciate their impact on the variability of bond prices.
24. Comprehend the different terminologies and types of financial instruments which are traded on international bond markets.
25. Understand different strategies related to bond portfolio management.

In addition it is expected that the module will provide an opportunity to develop, inter-alia, the following personal transferable skills; analytical thinking and problem-solving; interpreting statistical information; condensing information; methodical work through planning and prioritisation and listening skills.

Students will be required to actively participate in the module by means of contributions to seminar discussions.

LECTURES AND CLASS WORK

Lectures: Fridays, 9.00-11.00 in C.LTA4 (Lecture Theatre A4)

The first lecture is scheduled to take place on **Friday, 16 January 2015, Lecture Theatre A4.**

Note: On Friday 20 and 27 March, the lecture will be from 9.00 – 12.00 hours in C.LTA4 in order to make up for the Good Friday holiday; see lecture schedule below).

PREPARATION FOR THE FIRST LECTURE

Students should revise the material covered in Chapters 2 (only Sections 2.3 and 2.4) and 5 prior to the first lectures. These materials were mostly dealt with in the Corporate Finance course (INVP01). The materials of Chapters 2 and 5 will *not* be part of the course test and the final exam (except for Section 5.5 that will be part of the final exam, but not of the course test). However, these materials are essential for understanding the course materials. The first lecture will cover Chapters 6, 7, and 9. Since a large part of these materials were dealt with before, the treatment of these chapters in class will be concise. However, since the first part of the course will build on the basic concepts from these earlier chapters, it is very important that students read these chapters themselves. Moreover, they will both be part of the course test and the final exam. **As a**

general rule, students are strongly recommended to study the readings from BKM *before* the relevant lectures.

Seminars:

Seminars are held on Mondays at the times and venues listed below, starting on Monday the 19th January 2015.

Monday	11.00-12.00	Room C.2A19
Monday	14.00-15.00	Room C.4B128
Monday	15.00-16.00	Room C.4B128
Monday	17.00-18.00	Room C.4B128

The seminar schedule might be adapted depending on the final number of students in the module. For news and details about the seminars and sign-up, check the announcements on Succeed.

Students have to sign up themselves to one of the seminar slots via Succeed. As the seminar involves group work, students sign up to seminars by signing up into groups within a seminar slot. Students not signed up at the end of week 1 will be signed up randomly by the module co-ordinator. If you wish to choose who you work with, please agree this with your colleagues before signing into a group because it is difficult to change groups once you have entered the group in Succeed. Difficulties with group formation should be reported first to Allison Butler (allison.butler@stir.ac.uk). They will then only be forwarded to the module co-ordinator if they cannot easily be resolved.

Attendance at lectures and seminars is regarded as important. Please note that if you miss two consecutive seminars or fail to submit a coursework assignment you will receive an email from the module coordinator (cc. to personal tutor and programme director) to ascertain that all is well and that you have not run into difficulties. This should result in any problems you may be experiencing being discovered sooner rather than later and for you to be directed to any relevant student support services.

RECOMMENDED READING LIST

The core text book for this module is:

Bodie, Z., Kane, A. & Marcus, A.J.: *Investments*, 10th global edition, McGraw Hill, 2014 (BKM)

The module text (BKM) is widely regarded as providing the most comprehensive coverage of the securities and investments literature. It is, however, a challenging text and students should be prepared to allocate sufficient time to cover the designated chapters.

STRONGLY RECOMMENDED READING

Reilly, F.K. and Brown, K.C.: *Analysis of Investments and Management of Portfolios*, 9th edition, South-Western Cengage Learning, 2009.

For Lecture 1 (on Building an Efficient Portfolio), the lecture notes closely follow: Haugen, Robert A. *Modern investment theory*. The 4th edition is available in the library (a 5th edition is now out). See especially the chapter on 'Finding the Efficient Set' but other chapters will aid your understanding of the material.

READINGS FOR SEMINAR 3.

Estrada, J., (2013), 'Are stocks riskier than bonds? Not if you assess risk like Warren Buffett', *Journal of Asset Management*, 14, 73-78

Dimson, E., Marsh, P. and Staunton, M., (2011), 'Equity Premia Around the World', LBS Working Paper.

Arnott, R., (2009), 'Bonds: Why Bother?' *Journal of Indexes*, 10-17.

FURTHER READINGS

Bodie, Z., Kane, A. & Marcus, A.J.: *Essentials of Investments*, 7th edition, Irwin-McGraw-Hill, 2008.

Hillier, D., Grinblatt, M. & Titman, S.: *Financial Markets and Corporate Strategy* (European edition), McGraw-Hill, 2008.

Ackert, L. & Deaves, R.: *Behavioral Finance: Psychology, Decision-Making and Markets*, South-Western Cengage Learning, 2010.

Strong, R.A.: *Portfolio Construction, Management, & Protection*, 5th edition, South-western, 2009.

Lecture Timetable

Week	Topic	Reading (BKM)	
1. Friday 16 January	Review (self-study) your understanding of: Risk, risk aversion and alternative risk measures Modern Portfolio Theory and CAPM – Building an Efficient Portfolio	Chapter 2 and 5 Section 6.1 Chapters 6, 7, and 9 (for additional readings, see above)	D McMillan
2. Friday 23 January	Index models Arbitrage Pricing Theory and Multifactor Models	Chapter 8 Chapter 10	D McMillan
3. Friday 30 January	Alternative Portfolio Methods – Fama/French 3-Factor and Others	Section 10.5 References to Journal Articles to be given in class	D McMillan
4. Friday 6 February	Market Efficiency, Predicting Returns and Behavioural finance Valuation of equity securities	Chapters 11 and 12 Chapter 22	D McMillan
5. Friday 13 February	MIDTERM EXAM (first hour) Portfolio Performance Evaluation	Section 5.5 and Chapter 24	D McMillan
Friday 20 and 27 February	MID-SEMESTER BREAK	NO LECTURE	
6. Friday 6 March	International Diversification	Chapter 23, Section 23.1 Chapter 25	P Herbst
7. Friday 13 March	Hedge funds and other alternative investments	Chapter 26	P Herbst
8. Friday 20 March 9.00 – 12.00, C.LTA4	Introduction to fixed income securities Bond prices and yields Term-structure of interest rates (1)	Chapter 2, Sections 2.1 and 2.2 Chapter 14 Chapter 15	P Herbst
9. Friday 27 March 9.00 – 12.00, C.LTA4	Term-structure of interest rates (2) Managing bond portfolios	Chapter 15 Chapter 16	P Herbst
Friday 3 April	Good Friday Holiday	NO LECTURE	
10. Friday 10 April	Theory and process of Active Portfolio Management	Chapters 27 and 28	P Herbst

Please check Succeed regularly for details of any alterations.

Note 1: Lecture contents and required readings are subject to change. Updates will be communicated via Succeed and/or in the lectures.

Note 2: Unless explicitly stated otherwise, appendixes are *not* part of the compulsory course materials.

Note 3: The midterm exam on Friday February 13 will take place in different computer labs from 09.00-10.00. After the midterm exam there is a regular lecture in LTA4 from 10.00-11.00. Students are allocated to midterm exam venues – this information will be provided via Succeed during the first weeks of the semester.
Students sitting midterm exams in the wrong venue will have their exam marked with a fail grade

Seminar Timetable

Week	Topic	Reading	
1. Monday 19 January	Review (self-study) Risk, risk aversion, and alternative risk measures Modern Portfolio Theory and CAPM	Question distributed in class. For revisions purposes you should attempt Ch. 6: 5 and CFA: 1, 2, 3 Ch. 9: 3 and CFA 3, 4, 5, 6, 7	C Gavriilidis
2. Monday 26 January	Index models Arbitrage Pricing Theory and Multifactor Models	Ch. 8: 1, 7, CFA 1 Ch. 10: 2, 10, 11 and CFA 4, 5, 7	C Gavriilidis
3. Monday 2 February	Alternative Portfolio Methods – Fama/French 3-Factor and Others	Read 3 articles and be prepared to present one (as allocated to your group) and to discuss all of them in the debate between bonds and equity.	C Gavriilidis
4. Monday 9 February	Behavioural finance and market efficiency Valuation of equity securities	Ch. 12: CFA 1, 2, 3 Ch. 22: CFA 4	C Gavriilidis
Monday 16 and 23 February	MID-SEMESTER BREAK	NO SEMINARS	
5. Monday 2 March	Portfolio Performance Evaluation	Ch. 24: 4, 8, 9, 12 and CFA 2, 14	C Gavriilidis
6. Monday 9 March	International Diversification	Ch. 25: 3, 4, 6, 7, 8, 9	C Gavriilidis
7. Monday 16 March	Hedge funds and other alternative investments	Ch. 26: 2, 3, 4, 8, 9, 17	P Herbst
8. Monday 23 March	Introduction Bond prices and yields	Ch. 2: 4, 8 Ch.14: 4, 8, 9, 10, 16, 29	P Herbst
9. Monday 30 March	Term-structure of interest rates	Ch. 14: 13 Ch. 15: 7, 11, 12, 13, 17	P Herbst
Monday 6 April	EASTER HOLIDAY	NO SEMINARS	
10. Monday 13 April	Managing bond portfolios	Ch 14: 22 Ch. 16: 4, 9, 12, 16	P Herbst
11. Self study	Theory and process of Active Portfolio Management	Ch. 28: 2, 3 and CFA 1	

Please check Succeed regularly for details of any alterations.

REQUIREMENTS

It is essential that you:

- Attend lectures and seminars;
- Actively participate in lectures / seminars, taking notes as appropriate;
- Read prior to lectures the main textbook and suggested literature. These readings are not exhaustive of the topics but serve to provide you with a background to facilitate understanding and discussion during lectures;
- Engage actively in all sessions of the class, especially group work;

ASSESSMENT

This module is assessed by: 20 % coursework (midterm exam) and 80% examination (end of semester).

The midterm exam will examine the **material covered in weeks 1-3 (inclusive)** of the course. This exam, which takes the form of an electronic multiple choice test, will take place during the first hour of lecture 5 on:

Friday, 13 February, from 09.00 to 10.00 hours

The exam will be held in different computer labs and students will be allocated to venues. Details will be made available on Succeed and communicated during the lectures. Students should carefully check this information before the midterm exam.

Students are required to bring their student ID card to the exam. Students sitting exams in the wrong venue will have their exams marked with a fail grade. Students who are found in the wrong venue will be asked to move to the correct venue without being allowed extra-time.

In accordance with University recommendations, a medical certificate is required to cover absence from examinations and non-completion of coursework. Students are responsible for obtaining these, and for informing the Module Co-ordinator of the reason for their absence before the date of an assessment. The decision as to whether or not a deferred examination is granted rests with the Head of the Accounting and Finance Division.

SUCCEED INFORMATION

Refer to the Succeed website for complementary information about:

- How to submit your essay via Turn-It-In;
- What is meant by plagiarism at Stirling (also check your student Handbook for comprehensive explanations on how to reference work properly);
- Your responsibilities as a student;
- Workload;
- Marking and retention of assessed work;
- Grading scheme.

MARKING SCHEME

Details of the Common Marking Scheme can be found at

<http://www.stir.ac.uk/academicpolicy/handbook/assessmentincludingacademicmisconduct/#q-5>

ACADEMIC MISCONDUCT

The University has an agreed policy setting out procedures for dealing with academic misconduct.

Details can be found at

<http://www.stir.ac.uk/academicpolicy/handbook/assessmentincludingacademicmisconduct/#q-8>

Students' should familiarise themselves with "The Little Book of Plagiarism" and "The Little Book of Academic Misconduct", which can be found in the Succeed site for this module.