

Ac.F214M: Michaelmas Term 2024

## **1 Module Objectives**

The aim of this course is to introduce the key theories and practices of corporate finance. The students will learn why companies and financial markets behave in certain ways. The course offers a set of integrated topics. Initially, we will begin with the thorough discussion of the project evaluation process. Next, we re-introduce the notion of risk to help the students to broaden their understanding of the links between expected returns on an investment, discount rates and firms' cost of capital. The second part of the course will offer important discussions on how firms raise funds to undertake their investments and how and why dividends are paid. Finally, we will introduce a set of major derivative contracts used by the firms for investment and/or risk management purposes.

This 15 credit course is compulsory for students majoring in accounting and/or finance and optional for those on other degrees, with Ac.F100 or Ac.F263 (or equivalent) being the prerequisite.

# **2 Learning Outcomes**

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

- be able to assess investment projects using capital budgeting techniques, and understand the problems associated with applying such techniques in practice;
- understand the relationship between risk and required return and interpret the capital asset pricing model;
- understand the concept and practical implications of market efficiency and be able to provide a number of rational and behavioral explanations of selected market anomalies;
- be able to discuss the key theories of how companies make a choice between debt and equity financing and interpret the determinants of a firm's capital structure choice and payout policy;
- have a good understanding of financial options, futures and forward contracts;
- be aware of the concept of the put-call parity, and be able to examine the arbitrage opportunities in derivative markets.



## 3 Reading and e-learning resources

The course does not have a single recommended textbook. The following books each have a very good coverage of the majority of the topics of this course:

- 1. Corporate Finance by J. Berk and P. DeMarzo (2017, 4th ed., ISBN: 9781259254802, Pearson Education)
- 2. Principles of Corporate Finance by R. Brealey, S. Myers, and F. Allen (2014, 11th ed., ISBN 978-0-07-803476-3, McGraw-Hill).
- 3. Corporate Finance by D. Hillier, S. Ross, R. Westerfield, J. Jaffe, and B. Jordan (2016, 3rd ed., ISBN: 978-0077173630, McGraw-Hill).

Students are advised to purchase a copy of one of the textbooks for the course. The current and older editions of each book above are available in the library. Older/newer editions and alternative titles are also suitable for this course. The lectures will be delivered on the assumption that students have read the recommended chapters listed in the lecture outline.

While any of the above contain a good coverage of the most areas of the module, derivatives are particularly well explained in:

1. Options, Futures and Other Derivatives by J. Hull (2012, 8th ed., ISBN: 9780273759072, London: Pearson).

Further reading related to the specific sections of the course is listed in Section 6 of this course syllabus.

Teaching notes and workshop solutions will be distributed in the relevant lecture or workshop and made available on the <u>course Moodle site</u>. Make sure you access this site and follow the link to Ac.F 214M during the first week of the course to confirm you are registered for it and to receive course notices and gain access to the web-based discussion group. You are responsible for accessing this at least twice a week during the course to check for announcements etc.

#### **4 Module Administration**

• Module Director: Dr. Hui (Frank) Xu

• Office: Charles Carter C13



• E-mail: <u>h.xu10@lancaster.ac.uk</u>

• Office hours: Tuesday, 17:00-18:00 (GMT), or by appointment.

The module consists of 20 1-hour lectures and 10 weekly workshops.

## Lectures:

Week 1-9: Tuesdays, 12:00-13:00, George Fox LT 1 Week 1-10: Thursdays, 14:00-15:00, George Fox LT 1

Week 10 Only: Wednesday, 9:00-10:00, George Fox LT 1

Workshops: Starting from week 2,

12:00-14:00 on Mondays, County South LT A70

15:00-17:00 on Tuesdays, FAR - Cavendish LT

13:00-15:00 on Fridays, Fylde LT 1 A15

It is your responsibility to ensure you register your attendance in compulsory sessions on this module by checking into the i-Lancaster system during live sessions. Please ask if you are unsure how to register your attendance in a session.

Your total study time for this module is expected to be at least 150 hours.

#### **5 Module Assessment**

The module is assessed as follows:

Test in week 6: 25%

• Exam: 75%

60-minute test in Week 6 will consist of multiple-choice questions covering the topics for the first 5 weeks of the module. The test will be based on the materials covered in lectures and workshops. It will be a good way to test your understanding of the key concepts/issues taught, and to assess your strengths and weaknesses regarding the materials covered up to that point.

Note: the Department reserves the right to adjust coursework marks after coursework has been returned to students to ensure that the coursework marks have an appropriate distribution.



Any visiting student who intends to leave Lancaster before the summer examination must inform the module director(s) immediately so that alternative assessment may be arranged. Please note that there is no opportunity for re-assessment for visiting students failing to achieve the necessary pass mark for their home University.

#### **6 Lecture Outline**

Lectures 1-2: Fundamentals of Capital Budgeting

Content: Capital investment process including application of NPV, consideration of relevant costs in capital budgeting, free cash flow estimation, break-even, sensitivity and scenario analysis.

Required reading: Berk & DeMarzo Chapters 7 and 8

Alternative texts: Brealey et al. Chapters 6 and 10, or Hillier et al. Chapters 7 and 8

#### Topic in the news:

Skott, A. (2015) Boeing looks at pricey titanium in bid to stem 787 losses. Available at here.

Lectures 3-4: Risk, Return and the Cost of Capital

Content: Portfolio expected returns and variance, relationship between securities in a portfolio, covariance, correlation, capital asset pricing model (CAPM), capital market line (CML), Security market line (SML), beta, its practicalities of estimation, project's beta and cost of capital.

Required reading: Berk & DeMarzo Chapters 10, 11 and 12.

Alternative texts: Brealey et al. Chapters 7, 8 and 9, or Hillier et al. Chapters 10, 11 and 12.

#### Additional reading:

Elton, E. & Gruber, M. (1997), Modern Portfolio Theory, 1950 to date, Journal of Banking & Finance, 21(11-12), pp.1743-1759.

Lecture 5: Efficient Market Hypothesis and Behavioral Finance

Content: Evolution of asset prices in an efficient market, theoretical foundations and forms of EMH, Behavioral and empirical challenges to EMH, Some explanations for the EHM violations, the lessons of market efficiency.

Required reading: Berk & DeMarzo Chapter 13.

Alternative texts: Brealey et al. Chapter 13, or Hillier et al. Chapter 13.

#### Additional reading:

 Schwert, G.W. (2003). Anomalies and market efficiency. Chapter 15 in Handbook of the Economics of Finance, pp.939-974.



• Shiller, R. J. (2003). From efficient markets theory to behavioural finance. *Journal of Economic Perspectives*, 17(1), pp.83-104.

#### Topic in the news:

Martin, T. (2016). What Does Nevada's \$35 Billion Fund Manager Do All Day? Nothing.
Available at here.

#### Lecture 6: Capital Structure

Content: Equity and debt financing, theory of capital structure irrelevance, debt and taxes, reasons why capital structure matters.

Required reading: Berk & DeMarzo Chapters 14 and 15.

Alternative texts: Brealey et al. Chapters 14 and 17, or Hillier et al. Chapters 14 and 15.

#### Additional reading:

- Modigliani, F. & Miller, M. (1953) The Cost of Capital, Corporation Finance and the Theory of Investments, *American Economic Review*, 48, pp.261-297.
- Miller, M. (1988) The Modigliani-Miller propositions after thirty years, *Journal of Economic Perspectives*, 2, pp.99-120.

# Lecture 7: Capital Structure (cont.)

Content: Financial distress, managerial incentives, information asymmetries, Pecking order theory, Trade-off theory.

Required reading: Berk & DeMarzo Chapter 16.

Alternative texts: Brealey et al. Chapter 18, or Hillier et al. Chapter 16.

## Additional reading:

- Pinegar, J. & Wilbricht, L. (1989) What Managers Think of Capital Structure Theory: A Survey, *Financial Management*, 18, pp.82-91.
- Graham, J. & Harvey, C. (2002) How do CFOs make capital budgeting and capital structure decisions? *Journal of Applied Corporate Finance*, 15(1), pp.8-12.
- Frank, M.Z. & Goyal, V.K., (2009) Capital structure decisions: which factors are reliably important? *Financial Management*, 38(1), pp.1-37.

## Lecture 8: Payout Policy

Content: Theory of dividend policy irrelevance, reasons why dividend policy matters. Required reading: Berk & DeMarzo Chapter 17.

Alternative texts: Brealey et al. Chapter 16, or Hillier et al. Chapter 18.



#### Additional reading:

• Brav, A., Graham, J. R., Harvey, C. R., & Michaely, R. (2005). Payout policy in the 21st century. *Journal of Financial Economics*, 77(3), 483-527.

#### Topic in the news:

• Arnold, M. (2016) Barclays shares tumble 8% after dividend cut. Available at <a href="here">here</a>.

Lecture 9: Options

Content: Options contracts, determinants of option pricing, put-call parity, arbitrage.

Required reading: Hull Chapters 9 and 10.

Additional reading: Berk & DeMarzo Chapter 20, Brealey et al. Chapter 20, or Hillier et al. Chapter 22.

Lecture 10: Futures and Forwards

Content: Futures and forward contracts, operation of futures markets, pricing of forwards. Required reading: Hull Chapters 1, 2, and 5.

You will be expected to read the lecture slides in addition to the chapters in the text book. The lecture outline is meant as guidance only and may be adjusted during the course.

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