

EC371 Economic Analysis of Asset prices

Course Outline and Reading List

Details of assessment and submission deadlines are contained in the *Undergraduate Economics Handbook*, available from room 5B.211 in the Department of Economics. It is very important for you to collect your copy. Further Information about the module is available via University's module directory, see: <http://www2.essex.ac.uk/courses/>.

Textbook

Bailey, R. E. *The Economics of Financial Markets*, Cambridge University Press, 2005 (This book was first written as set of lecture notes for EC371 and EC372, combined.)

Other readings

Various other readings are recommended, though not essential, for each topic in the course. From among the many textbooks on finance, you may wish to read recommended sections from:

Elton, E. J., M. J. Gruber, S. J. Brown & W. Goetzmann: *Modern Portfolio Theory and Investment Analysis*, Wiley, 8th edition 2010. Cited as 'Elton and Gruber' in the readings below.)

Module resources: other course materials (e.g. exercises) will be made available in the *Course Materials Repository*.

Classes: All students should attend the weekly class, designed to review the previous week's lectures in the context of exercises.

Formative assessment: Multiple choice test in week beginning 21st November 2011. The purpose is to provide feedback about your understanding of course material up to that point.

Recommended study strategy:

1. **Most important:** study the assigned chapters in *Economics of Financial Markets* very carefully. Your level of understanding of the assigned chapters will determine your mark in the final examination: if you understand the assigned readings you should obtain a first class mark – the better your understanding, the higher will be your mark.
2. *Attempt the exercises* provided online for each topic. Answer guidelines are provided for all exercises but you are strongly advised to avoid consulting the answers until you have attempted the exercises. Do not simply memorise the answers to questions, because you will never see exactly the same question again – learn *how* to answer the questions.
3. Check your understanding of basic concepts by attempting the multiple choice test.
4. **Write a term paper:** consult the suggested readings and pursue references they contain. In preparing a term paper you definitely should go beyond the assigned reading. It is very important for you to make a start on the term paper as soon as possible after the start of term. Submission of a term paper is crucial – only students who fail to do so are likely to fail the module.
5. Apart from the research needed for term papers, it is not essential to read anything other than the assigned chapters of *Economics of Financial Markets*. You are welcome to explore other readings (listed for each topic). Use these to improve your understanding of the material covered in the assigned chapters.

Topics and Readings:

* = essential reading

Required and recommended readings are subject to amendment during the term.

University week 1 (beginning 03 October 2011) is Freshers' Week.

University week 2 (beginning 10 October 2011) Asset Markets and Asset Prices

Topics: The main types of capital markets; fundamental principles of asset price determination; arbitrage; implications of the credit crisis from 2007 for asset prices.

Required reading:

Economics of Financial Markets, chapter 1.

Suggestions for further reading:

Keynes, J. M. *The General Theory of Employment, Interest and Money*, chapter 12.

Shiller, Robert J. *Irrational Exuberance*, Princeton U. Press, 2nd ed., 2005, chapters 1, 3.

Brunnermeier, M. K. "Deciphering the Liquidity and Credit Crunch 2007–2008", *Journal of Economic Perspectives*, vol. 23(1), Winter 2009, pp. 77–100

Acharya, V.V. and M. Richardson: *Restoring Financial Stability: How to Repair a Failed System*, Wiley, 2009, "Prologue: A Bird's-Eye View", pp. 1–56

University Week 3 (beginning 17 October 2011) Predictability of Prices & Market Efficiency

Topics: Random walks of asset prices and martingales; asset market efficiency and anomalies in asset prices; event studies.

Required reading:

Economics of Financial Markets, chapter 3

Suggestions for further reading:

Elton and Gruber: chapter 17

Malkiel, B. G. (2007) *A Random Walk Down Wall Street*, W.W. Norton, chapters 5, 6, 7, 11.

Edmans, A., D. García, & Ø. Norli, (2007) "Sports Sentiment and Stock Returns", *Journal of Finance*, August 2007, vol 62(4)

Nofsinger, J. R. *The Psychology of Investing*, Prentice-Hall, third edition, 2008, chapters 4, 5.

Barberis, N. & R. H. Thaler (2005) "A Survey of Behavioral Finance", esp. pp. 3–12, ch 1 of *Advances in Behavioral Finance, vol II*", edited by R. H. Thaler, Princeton Univ. Press

University Week 4 (beginning 24 October 2011) Decision making under uncertainty

Topics: Risk and uncertainty; state preference analysis; the Expected Utility Hypothesis (EUH); the Fundamental Valuation Relationship; behavioural alternatives to the EUH; mean-variance analysis.

Required reading:

Economics of Financial Markets, chapter 4.

Suggestions for further reading:

Nofsinger, J. R. *The Psychology of Investing*, Prentice-Hall, third edition, 2008, chapters 6–9.

Eeckhoudt, L., C. Gollier & H. Schlesinger: *Economic & Financial Decisions under Risk*, Princeton University Press, 2005, chapters 4, 5.

Elton and Gruber: chapter 18 (pp. 438–445).

University Week 5 (beginning 31 October 2011) Portfolio selection: the mean-variance model

Topics: construction of the portfolio frontier without, and with, a risk free asset; portfolio separation theorems; optimal portfolio selection.

Required reading:

Economics of Financial Markets, chapter 5

Suggestions for further reading:

Elton and Gruber: chapter 4 (pp. 44–61); chapter 5 (pp. 68–88. (While excellent, this reference provides more detail than is required for EC371 – hence, the readings are strictly optional, if you want to learn more about the derivations.)

University Week 6 (beginning 07 November 2011) Capital Asset Pricing Model, CAPM

Topics: Assumptions of the Sharpe-Lintner CAPM; predictions – Capital Market Line, Characteristic Lines, Security Market Line; portfolio diversification; extension to the Black CAPM.

Required reading:

Economics of Financial Markets, chapter 6

Suggestions for further reading:

Perold, A. F. “The Capital Asset Pricing Model”, *Journal of Economic Perspectives*, vol. 18 (3), 2004, pp.3–24.

Elton and Gruber: chapters 13 (pp. 280–294), 14 (pp. 301–312)

Malkiel, B. (2007) *A Random Walk Down Wall Street*, chapter 9

University Week 7 (beginning 14 November 2011) Arbitrage, Factor Models and APT

Topics: Equivalent forms of the arbitrage principle; implications for asset prices; factor models; assumptions and predictions of APT; comparison and contrasts with CAPM.

Required reading:

Economics of Financial Markets, chapters 7, 8.

Suggestions for further reading:

Elton and Gruber: chapter 16 (pp. 358–385).

Varian, H. R. “The Arbitrage Principle in Financial Economics” *Journal of Economic Perspectives* vol. 1, Fall 1987, pp. 55–72

University Week 8 (beginning 21 November 2011) Empirical Appraisal of CAPM and APT

Topics: Time-series estimation of beta-coefficients in CAPM; cross-section analysis of the Security Market Line; time-series and cross-section estimation in the APT.

Required reading:

Economics of Financial Markets, chapter 9.

Suggestions for further reading:

Fama, E. F. & K. R. French, “The Capital Asset Pricing Model: Theory and Evidence”, *Journal of Economic Perspectives*, vol. 18(3), 2004, pp. 25–46.

Jagannathan, R. and E.R. McGratten “The CAPM Debate”, *Quarterly Review of the Federal Reserve Bank of Minneapolis* Fall 1995, pp. 2–17. A copy of this paper is available at: <http://woodrow.mpls.frb.fed.us/research/qr/qr1941.html>

University Week 9 (beginning 28 November 2011) Net Present Values and Intertemporal Choice

Topics: Net Present Value (NPV) as an implication of the arbitrage principle; limitations of NPV in explaining volatility; intertemporal portfolio allocation and its application to asset price volatility; the Equity Premium Puzzle, and the Intertemporal CAPM.

Required reading:

Economics of Financial Markets, chapters 10, pp. 222–237; 11

Suggestions for further reading:

Varian, H. R. *Intermediate Microeconomics: A Modern Approach*, (Fifth edition) chapters 11, 12 (Background reading).

- Jagannathan, R., E. R. McGrattan & A. Scherbina “The Declining U. S. Equity Premium”, *Federal Reserve Bank of Minneapolis Quarterly Review* vol. 24, No. 4, Fall 2000, pp. 3–19. Available at: <http://www.minneapolisfed.org/research/QR/QR2441.pdf>
- Mehra, R. “The Equity Premium: why is it still a puzzle?”, *Financial Analysts Journal*, 59(1), 2003, pp. 54–69.
- Elton and Gruber: chapter 14 (pp. 317–319).

University Week 10 (beginning 05 December 2011) Asset price bubbles

Topics: examples of extreme asset price fluctuations; theories of bubbles; behavioural finance explanations; Ponzi (pyramid, Madoff) schemes; effects of bubbles and their policy implications.

Required reading:

Economics of Financial Markets, chapter 10, pp. 237–243

Suggestions for further reading:

- Shiller, Robert J. *Irrational Exuberance*, Princeton U. Press, 2nd ed., 2005, chapters 10, 11, 12.
- Garber, P. “Famous First Bubbles”, *Journal of Economic Perspectives*, 1990, vol. 4, No. 2, pp. 35–54.
- Malkiel, B. G. (2007) *A Random Walk Down Wall Street*, W.W. Norton, chapters 2, 4, 10
- Kindleberger, C. P. & R. Z. Aliber *Manias, Panics and Crashes*, 6th ed, Palgrave Macmillan, 2011, chapters 1–5, 7, 13, 14, 15
- Allen, F. & D. Gale “Bubbles, Crises and Policy”, *Oxford Review of Economic Policy*, 1999, vol. 15, No. 3, pp. 9–18

University Week 11 (beginning 12 December 2011) Asset Market Microstructure

Topics: the flow approach to asset price determination; order-driven and dealer-driven price mechanisms; industrial organisation and regulation of capital markets; models of asset price determination and the role of information asymmetries.

Required reading:

Economics of Financial Markets, chapter 2

Suggestions for further reading:

- de Jong, F. and B. Rindi: *The Microstructure of Financial Markets*, Cambridge University Press, 2009, Introduction and chapter 1.
- Spencer, P. D. *The Structure and Regulation of Financial Markets*, Oxford University Press, 2000, chapter 4
- O’Hara, M. *Market Microstructure Theory*, Blackwell, 1995, chapter 1
