

**EC4050 Economics of Securities Markets**  
**Module A: Theory**  
**Michaelmas Term 2007**

Dr Sébastien Wälti  
Office 3017, Arts Building  
Phone: 01 8961041  
Email: [waltis@tcd.ie](mailto:waltis@tcd.ie)  
Web: <http://sebwalti.googlepages.com>, <http://www.tcd.ie/Economics/staff/waltis>  
Office hours: Wednesday, 10:00 – 12:00

**Lectures:** Tuesday, 16:00, 5052; Wednesday, 15:00, 3071.

**Tutorials:** Thursday, 12:00, 3106.

**Course description**

This course presents economic methods to analyse decision-making under uncertainty, both at the level of the individual investor and at the level of the capital market. We review the key role of the interest rate in guiding decisions in the case of certainty. We introduce the mean-variance model to take risk into account and to understand individual decision-making in the case of uncertainty. The capital asset pricing model (CAPM) is derived fully and we discuss its main predictions. We will also focus on the consumption-based CAPM, discuss its implications (the risk premium puzzle) and relate it to the standard CAPM. We then turn to an alternative approach known as arbitrage pricing theory (APT). The second part of the module discusses options, outlining the different types of options, their characteristics and presents the basic pricing model. This module concludes with an introduction to behavioural finance.

**Literature**

The course will be based mainly on two textbooks:

K. Cuthbertson and D. Nitzsche (2004), *Quantitative Financial Economics*, 2<sup>nd</sup> edition, John Wiley (CN)

E. Elton, M. Gruber, S. Brown and W. Goetzmann (2007), *Modern Portfolio Theory and Investment Analysis*, 7<sup>th</sup> edition, John Wiley (EGBG)

References will be made to other textbooks as well as journal articles. Starred readings are compulsory; other readings are essential references, or contain further material, that should be of general interest to students.

## Assessment

There will be an applied project carried out during Hilary Term and Trinity Term. The project counts for 20% of the overall grade for the course. The end-of-year exam counts for the remaining 80%.

## Module Outline

### 1. Introduction

\* EGBG (2007), chp. 2.

Ross, S. (1987), The interrelations of finance and economics: theoretical perspectives, *American Economic Review* 77(2), 29-34.

Fischer, S. (2003), Globalization and its challenges, *American Economic Review* 93(2), 1-30.

Obstfeld, M. and A. Taylor (2002), Globalization and capital markets, NBER Working Paper 8846

Lane, P. and G. M. Milesi-Ferretti (2006), The External Wealth of Nations Mark II: revised and extended estimates of foreign assets and liabilities, 1970-2004, [IIS Discussion Paper 126](#).

### 2. Financial markets and the economy

\* Copeland, T., J. Weston and K. Shastri (2005), *Financial Theory and Corporate Policy*, 4<sup>th</sup> edition, chp. 1.

EGBG (2007), chp. 1.

Sharpe, W. (1970), *Portfolio Theory and Capital Markets*, chp. 1.

Poterba, J. (2000), Stock market wealth and consumption, *Journal of Economic Perspectives* 14, 99-118.

### 3. The mean-variance model

\* CN (2004), chp. 5, 115-132, chp. 6, 142-145, 148-151.

EGBG (2007), chp. 4, 44-61, chp. 5, 68-88.

Somerville, R.A. and P. O'Connell (2002), [On the endogeneity of the mean-variance efficient frontier](#), *Journal of Economic Education* 33, 357-366.

Sharpe, W. (1970), *Portfolio Theory and Capital Markets*, chp. 4.

#### **4. The standard CAPM**

\* EGBG (2007), chp. 13, 284-292, 296-298, chp. 15, 353-355.

\* CN (2004), chp. 148-151.

Sharpe, W. (1964), Capital asset prices: a theory of market equilibrium under conditions of risk, *Journal of Finance* 19, 425-442.

Lintner, J. (1965), The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets, *Review of Economics and Statistics* 47, 13-37.

Roll, R. (1977), A critique of the asset pricing theory's tests, *Journal of Financial Economics* 4, 129-176.

Fama, E. and K. French (2004), The capital asset pricing model: theory and evidence, *Journal of Economic Perspectives* 18, 25-46.

#### **5. The consumption-CAPM**

\* CN (2004), chp. 13, 303-311, chp. 14, 323-324.

\* Mehra, R. (2003), The equity premium: why is it a puzzle?, NBER Working Paper 9512.

#### **6. Arbitrage pricing theory**

\* EGBG (2007), chp. 16, 362-380.

\* Shanken, J. (1992), The current state of the arbitrage pricing theory, *Journal of Finance* 47(4), 1569-1574.

#### **7. Options**

\* EGBG (2007), chp. 23, 581-586.

\* Hull, J. (2008), *Fundamentals of Futures and Options Markets*, chp. 8, 185-190, chp. 11, 247-250, 252-255.

Black, F. (1989), How we came up with the option pricing formula, *Journal of Portfolio Management* 15(2), 4-8.

## **8. Behavioural finance**

\* Barberis, N. and R. Thaler (2003), A survey of behavioral finance, in Constantinides, G.M., M. Harris and R. Stulz (eds), *Handbook of the Economics of Finance*, Elsevier Science.

\* Thaler, R. (1999), The end of behavioral finance, available online at the following website: <http://introduction.behaviouralfinance.net/Thal99.pdf>.

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

Shleifer, A. (2000), *Inefficient Markets*, Oxford University Press