

Capital Markets & Portfolio Management
MSc in Finance and Banking
Athens University of Economics & Business
Instructor: Prof. Elias Tzavalis

Aims and objectives:

The aim of this course is to introduce students to capital markets, and the modern tools of investment analysis and portfolio management. It covers topics on investment techniques and capital budgeting, money and capital markets, optimal portfolio management and risk management, asset pricing, security analysis and bond pricing, as well as bond portfolio management. The course also includes a computational demonstration of most of the above tools and techniques with excel, which is very popular in the finance industry.

At the end of the course, the students will have a full understanding of concepts and tools of the modern portfolio management techniques and investment decisions. They will be acquire knowledge and skills on institutional issues of financial markets, trading mechanisms, asset evaluation procedures, investment strategies and risk management. They will be also able to implement the above tools and methods in practice to evaluate empirically their performance.

Course outline and reading list

1. **Investment decisions under certainty**
(Present value models-NPV, NCF, IRR, WACC)
2. **Security markets and valuation of common stocks**
(Common stocks, type of markets, trading mechanism, share valuation based on dividend and earnings under certainty)
3. **Investment decisions under uncertainty**
(Expected utility, risk aversion, certainty equivalence and risk, stochastic dominance)
4. **Portfolio analysis**
(Risky assets and returns, assets' portfolios, asset allocation and diversification, mean-variance analysis, market portfolio, security analysis and portfolio construction, mutual funds)
5. **Capital asset pricing**
(CAPM, security market line, applications of the CAPM, Empirical tests of CAPM)
6. **Factor models & arbitrage pricing theory (APT)**
(Wealth portfolio, one factor & multifactor models, Fama-French firm-specific risk factors, macroeconomic factors, APT)
7. **Fixed income securities**
(Money market instruments, government securities, corporate bonds, preferred stock, callable bonds)

8. **Fixed-income evaluation**
(intrinsic value, yield-to-maturity, zero-coupon bonds, default risk)
9. **Term structure and yield curves**
(The expectations theory, the liquidity preference theory, interest rate risk)
10. **Bond portfolio Management**
(holding returns, duration, convexity, immunization, bond swaps, active and passive bond portfolio management)

Text Books:

Bodie Z., Kane A., and Marcus A., “Essentials of Investments”, McGraw Hill

Copeland T., Weston J. and Shastri K, “Financial Theory and Corporate Policy”, Addison-Wesley.

Fabozzi F., “Bond Markets, Analysis and Strategies”, Prentice Hall.

Elton E, Gruber M. and Brown S., “Modern Portfolio Theory and Investment Analysis”, Wiley.

Luenberger D., Investment Science, Oxford University Press.

Danthine J-P. and Donaldson J, “Intermediate Financial Theory”, Academic Press.

Sundaresan S., “ Fixed Income Markets and their Derivatives”, Academic Press.

Tzavalis E., Lecture Notes in Finance (unpublished)

Text Books for the Computational Part of the course:

Benninga, S. “Principles of Finance with Excel”, Oxford University Press.

Jackson, M. and Staunton M., “Advanced modelling in finance using Excel and VBA”, Wiley.