#### ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS

# MSc in International Shipping, Finance and Management

#### FINANCIAL MANAGEMENT

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**Sessions**:  $8 \times 3$  hours each  $+ 3 \times 3$  hours each of tutorials

**Course assessment**: 3 hours final examination (70%) and two compulsory group projects (30%). The projects grades are applicable given that you have obtained a pass mark (50%) in the final examination.

#### **EDUCATIONAL AIM**

The goal of this course is to analyze corporate decisions from a financial perspective. To this end, the course focuses on investment and financing decisions, valuation, and the treatment of risk. Topics to be studied are the net present value rule, capital budgeting techniques and the estimation of the cost of capital. It also studies the valuation of stocks and bonds, the risk-return trade-off, the capital structure and its relationship with the value of the firm as well as the dividend policy of corporations. Finally, it analyzes the management of short-term assets and liabilities.

## **EDUCATIONAL OBJECTIVES**

- Introduce students to investment and financing decisions made by corporations.
- Explain to them how to reach such decisions using the theory of financial management.

The course will make it possible for participants:

- To acquire a clear understanding of investment and financing decision making, valuation of investment projects through various capital budgeting techniques, estimation of the cost of capital and its relation to risk, the role of capital structure and dividend policy and the management of short-term assets and liabilities.
- To be able to seek positions in the treasury department of corporations.

# LEARNING OUTCOMES

On completing the course participants will:

- Have an understanding of how projects are valued, and will be able to use the key capital budgeting techniques (NPV and IRR)
- Understand how firms raise capital from the market, and how stocks and bonds are priced
- Understand how risk affects the value of the asset in equilibrium, and how this affects, in turn, the company cost of capital

- Understand the trade-off firms face between tax advantages of debt and various costs of debt
- Be able to explain and use the capital structure theory in order to determine the optimal capital structure
- Understand and explain the relevance, facts and role of the dividend policy
- Be able to explain how firms manage their short-term assets and liabilities

#### THEMATIC AREAS

# • Thematic area 1: Introduction to Financial Management

A snapshot of the firm

The financial objectives

Investment, financing and payout decisions

Reading: Notes, Brealey (ch. 1), Damodaran (ch.1, 2)

# • Thematic area 2: The Present Value Rule

Introduction to present value

Risk and present value

Present value rule and shareholders' preferences

Valuing long-lived assets

Reading: Notes, Brealey (ch. 2), Damodaran (ch. 3)

# • Thematic area 3: Valuing Common Stocks and Bonds

The dividend discount model

The efficient market hypothesis

Valuing bonds using present value

The term structure of interest rates

The risk of default

Reading: Notes, Brealey (ch. 3, 4), Damodaran (ch. 5)

# • Thematic area 4: Cash flows for investment analysis

Accounting earnings vs cash flows

Cash flows for the firm and the equity investors

Reading: Notes, Brealey (ch. 6), Damodaran (ch. 9)

# • Thematic area 5: Investment decision rules

Accounting-income based decision rules

Payback period

Internal rate of return (IRR)

Reading: Notes, Brealey (ch. 5), Damodaran (ch. 10)

# • Thematic area 6: Financial Statement Analysis and Working Capital Management

Financial statement analysis

Accounts receivable and accounts payable management

Cash management

Reading: Notes, Brealey (ch. 28-30), Damodaran (ch. 4, 13-14)

#### • Thematic area 7: Risk – Return

Portfolio risk and diversification

The capital asset pricing model (CAPM)

Company and project cost of capital

Reading: Notes, Brealey (ch. 7-9), Damodaran (ch. 6-8)

# • Thematic area 8: Capital Structure

The different sources of finance and their costs

The trade-off theory

The cost of financial distress

Agency costs

Pecking order theory

Optimal financial mix

The after-tax weighted average cost of capital (after-tax WACC)

Reading: Notes, Brealey (ch. 17-19), Damodaran (ch. 18-20)

## • Thematic area 9: Payout Policy

Dividend payments and stock repurchases

Empirical evidence on dividend policy

The payout controversy

Reading: Notes, Brealey (ch. 16), Damodaran (ch. 21)

## BRIEF DESCRIPTION OF THEMATIC AREAS

## • Introduction to Financial Management

Investment decisions, financing decisions, limited liability, real assets vs financial assets, the economic environment, financial markets, financial goal of a corporation, maximization of shareholders' value.

## • The present value rule

The arithmetic of present value, the time value of money, opportunity cost of capital, net present value (NPV), risk and present value, project rate of return, shareholders' preferences and the present value rule, discounted cash flow (DCF) formula for valuing long-lived assets, perpetuities and annuities, loan payments calculation.

## • Valuing common stocks and bonds

Dividend discount model, cost of equity, Gordon growth model, dividend-price ratio, growth and income stocks, market efficiency, bonds characteristics, yield to maturity, duration, zero-coupon bonds, term structure of interest rates, expectations theory, risk of default, bond ratings, yield spread, credit score systems.

#### • Cash flows for investment analysis

Operating expenses and capital expenses, depreciation, working capital, sunk costs, opportunity costs, calculate cash flows to the firm and equity investor, free cash flow to equity discount model.

#### • Investment decision rules

Return on capital (ROC), return on equity (ROE), payback period, internal rate of return (IRR), the relation between IRR and NPV, advantages and disadvantages of these rules.

## • Financial Statement Analysis and Working Capital Management

Income statement, balance sheet, book value of equity, earnings per share, valuation ratio, financial statement analysis, short-term assets that firms invest, inventories, account receivables and their credit management, accounts payable management, cash management, money market investments, raising short-term capital using a revolving line of credit or commercial papers.

#### • Risk - Return

The variability of capital markets investments, calculating portfolio risk, the benefits of diversification, systematic and unsystematic risk, the beta of an individual security, the capital asset pricing model (CAPM) and the security

market line (SML), estimate the cost of equity using the CAPM, estimate the company cost of capital (weighted average cost of capital), estimate the project cost of capital, cyclicality and operating leverage.

# • Capital Structure

Sources of finance and their costs, definition of the capital structure, the optimal capital structure in perfect capital markets, financial leverage and the debt-to-equity ratio, the optimal capital structure given corporate and personal taxes, the role of financial distress effects, agency costs, the pecking order of financial choices, the optimal financing mix, the after-tax WACC.

## • Payout Policy

Dividend payment procedure and stock repurchases, empirical evidence of dividend policy, the information content of dividends and stock repurchases the three schools of dividend policy, payout policy is irrelevant in perfect capital markets, the role of corporate taxes in dividend policy.

# **READING MATERIAL**

- Class notes uploaded in the Eclass.
- Brealey, Myers and Allen, "Principles of Corporate Finance", McGraw-Hill 11<sup>th</sup> ed. 2014.
- Damodaran, "Corporate Finance: Theory and Practice", Wiley 2<sup>nd</sup> ed. 2001.
- Copeland, Weston and Shastri, "Financial Theory and Corporate Policy", Addison-Wesley 4<sup>th</sup> ed. 2005.
- Bodie, Merton and Cleeton, "Financial Economics", Pearson 2<sup>nd</sup> ed. 2011.

# In addition to the above, it is recommended to read:

- The finance related journals, such as: Journal of Finance, Review of Financial Studies, Journal of Financial and Quantitative Analysis, Journal of Financial Economics, Review of Finance, Financial Analysts Journal, Journal of Corporate Finance, Journal of Applied Corporate Finance, Financial Management, etc.
- Web pages with international market and corporate news including: <u>www.ft.com</u>, <u>www.investing.com</u>, <u>www.reuters.com</u>, <u>www.bloomberg.com</u>, <u>www.economist.com</u>, <u>www.ot.gr</u>, <u>www.m.naftemporiki.gr</u>

#### Useful Databases for data collection:

Reuters, Bloomberg, Datastream, Web pages of Companies and Stock Exchanges.

# Other references - publications in the area which may be used during lectures

- Black F., "Beta and Return," *Journal of Portfolio Management* 20 (Fall 1993), pp. 8–18.
- Brav A., J. R. Graham, C. R. Harvey, and R. Michaely, "Payout Policy in the 21st Century," *Journal of Financial Economics* 77 (September 2005), pp. 483–527.
- Brennan M. J., "Corporate Investment Policy," Handbook of the Economics of Finance, Volume 1A, Corporate Finance, eds. G. M. Constantinides, M. Harris, and R. M. Stulz (Amsterdam: Elsevier BV, 2003).

- Campbell J. Y., "Asset Pricing at the Millennium," *Journal of Finance* 55 (August 2000), pp. 1515–1567.
- Dittmar A., "Corporate Cash Policy and How to Manage It with Stock Repurchases," *Journal of Applied Corporate Finance* 20 (Summer 2008), pp. 22–34.
- Graham J. and C. Harvey, "How CFOs Make Capital Budgeting and Capital Structure Decisions," *Journal of Applied Corporate Finance* 15 (spring 2002), pp. 8–23.
- Harris M. and A. Raviv, "The Theory of Capital Structure," *Journal of Finance* 46 (March 1991), pp. 297–355.
- Karow K. A., G. R. Erwin, and J. J. McConnell, "Survey of U.S. Corporate Financing Innovations: 1970–1997," *Journal of Applied Corporate Finance* 12 (Spring 1999), pp. 55–69.
- Luehrman T. A., "Using APV: A Better Tool for Valuing Operations," *Harvard Business Review* 75 (May–June 1997), pp. 145–154.
- Mehra R. and E. C. Prescott, "The Equity Risk Premium in Prospect," in *Handbook of the Economics of Finance*, eds. G. M. Constantinides, M. Harris, and R. M. Stulz (Amsterdam, North-Holland, 2003).
- Miles J. and R. Ezzell, "The Weighted Average Cost of Capital, Perfect Capital Markets, and Project Life: A Clarification," *Journal of Financial and Quantitative Analysis* 15 (September 1980), pp. 719–730.
- Miller M. H., "The Modigliani-Miller Propositions after Thirty Years," *Journal of Applied Corporate Finance* 2 (Spring 1989), pp. 6–18.
- Petersen M. A. and R. G. Rajan, "Trade Credit: Theories and Evidence," *Review of Financial Studies* 10 (Fall 1997), pp. 661–692.
- Rajan R. G. and L. Zingales, "What Do We Know about Capital Structure? Some Evidence from International Data," *Journal of Finance* 50 (December 1995), pp. 1421–1460.