



# **Certified European Financial Analyst (CEFA) by EFFAS**

Examination Syllabus



CERTIFIED EUROPEAN FINANCIAL  
ANALYST (CEFA)  
EFFAS

Page

1

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# CEFA by EFFAS

Certified European Financial Analyst

## Examination Syllabus

	Page
<b>List of Contents</b>	
<b>Index</b>	
<u>1. Economics</u>	3
<u>2. Corporate Finance</u>	5
<u>3. Financial Accounting and Financial Statement Analysis</u>	8
<u>4. Equity Valuation and Analysis</u>	13
<u>5. Derivatives Valuation and Analysis</u>	14
<u>6. Fixed Income Valuation and Analysis</u>	17
<u>7. Portfolio Management</u>	21
<u>8. European Regulation</u>	27
<u>9. Ethics</u>	29
<u>10. ESG – Environmental Social and Governance</u>	30

# 1. Economics

## 1. Macroeconomics

### 1.1. Measuring National Income and Price

- 1.1.1. National income accounting
- 1.1.1. Concept of national income

- 1.1.2. Consumption
- 1.1.2. Consumption function
- 1.1.2. Investment
- 1.1.2. Investment function

### 1.2. Government expenditure

- 1.2.3. Government revenue and expenditure
- 1.2.3. Effect of government expenditure and tax on national income
- 1.2.3. Government expenditure and crowding-out effect
- 1.2.4. Equilibrium relationship in the good/service market: IS curve

### 1.3. Equilibrium in the Money Market

- 1.3.1. Demand for money
- 1.3.2. Equilibrium relationship in the monetary market: LM curve

### 1.4. Equilibrium in Economy and Aggregate Demand

- 1.4.1. Aggregate demand

### 1.5. Aggregate Supply and Determination of Price of Goods/Services

- 1.5.1. Aggregate supply

## 2. Macro Dynamics

### 2.1. Inflation

- 2.1.1. Unemployment and inflation rate
- 2.1.1. Tradeoff between unemployment and inflation
- 2.1.1. Natural rate of unemployment hypothesis and expected inflation

### 2.2. Economic Growth

- 2.2.1. Main factor of economic growth
- 2.2.1. Saving rate/capital
- 2.2.1. Population growth
- 2.2.2. Theory of economic growth
- 2.2.2. Capital accumulation and economic growth
- 2.2.2. Technological innovation and economic growth
- 2.2.2. Human resources and economic growth
- 2.2.2. Financial market and economic growth

### 2.3. Business Cycles

- 2.3.1. Theory of exogenous business cycle
- 2.3.2. Theory of endogenous business cycle
- 2.3.3. Fiscal/monetary policy and business cycle

# 1. Economics

## 3. International Economy and Foreign Exchange Market

### 3.1. Open Macroeconomics

- 3.1.1. International balance of payments and capital flows
- Balance of payment statement
- Balance of payment and capital flows
- Factor affecting international capital movement
- Government's intervention and money supply
- 3.1.2. Determination of equilibrium national income in the open economy
- Foreign trade multiplier under floating system
- Open macro economics model: preliminary
- Equilibrium model of open economy
- Effect of fiscal policy
- Effect of monetary policy

### 3.2. Foreign exchange rate

- 3.2.1. Determinants of exchange rate in the long-run
- Concept of foreign exchange rate
- Price and foreign exchange rate
- Interest rate and foreign exchange rate
- 3.2.2. Determination of foreign exchange rates
- Monetary approach
- Asset approach
- Overshooting model
- Portfolio balance approach
- 3.2.3. Government intervention and foreign exchange policy
- Government intervention
- Foreign exchange rate and foreign exchange policy in local market
- 3.2.4. Foreign exchange risk and risk management
- Risk hedging with currency derivatives
- Growth of currency derivatives markets
- 3.2.5. Historical movement and forecasting of foreign exchange rate
- Historical analysis of foreign exchange rate
- Forecasting of foreign exchange rate
- Impact of foreign exchange rate change on security prices

### 3.3. Central bank and monetary policy

- 3.3.1. Monetary policy
- Target of monetary policy
- Instruments of monetary policy
- 3.3.2. Transmission effect of monetary policy on real economy
- 3.3.3. Central bank operations in major countries
- 3.3.4. Effect of monetary policy on security markets

## 2. Corporate Finance

### 1. Fundamentals of Corporate Finance

#### 1.1. Goals of Corporate Finance

- 1.1.1. Value maximisation of shareholders
- 1.1.2. Corporate Governance issue
- 1.1.3. Agency relationship
- 1.1.4. Control of the firm

#### 1.2. The Finance Function and the Firm's Objectives

#### 1.3. Role of Financial Managers

#### 1.4. Principles of Valuation

- 1.4.1. What is value?
- 1.4.2. The valuation process
- 1.4.3. Value creation for shareholders

#### 1.5. Discounted Cash Flows

- 1.5.1. What is cash flow?
- 1.5.2. Basics of cash flow analysis
- 1.5.3. Terminal values

#### 1.6. Capital Budgeting

- 1.6.1. Investment decision criteria
  - Payback rules
  - Discounting payback period method
  - IRR
  - NPV
- 1.6.2. Cost of capital
  - Cost of equity capital
  - Cost of debt capital
  - WACC
  - Corporate taxes, interest subsidy and cost of capital
- 1.6.3. CAPM
  - Measuring beta
  - Certainty equivalents
  - Risk free rate
  - Risk adjusted discount rates
  - CML
  - SML

### 2. Long-Term Finance Decision

#### 2.1. Investment Decision

- 2.1.1. Periodic budgeting
- 2.1.2. Project evaluation

## 2. Corporate Finance

### 2.2. Project Evaluation

- 2.2.1. Method for ranking investment proposals
- 2.2.2. Capital resource rationing
- 2.2.3. Common pitfalls (e.g., Sunk costs, depreciation)

### 2.3. Liquidation and Reorganisation

## 3. Short-Term Finance Decision

### 3.1. Short-Term Financing

- 3.1.1. Current asset financing
- Needs for working capital
- Components of working capital
- 3.1.2. Short term financing
- Short-term financing resources
- Short-term financial planning models

### 3.2. Cash Management

- 3.2.1. Credit management
- Commercial credit instruments
- Credit decision
- 3.2.2. Cash management
- Target cash balance model
- Cash conversion cycle
- Investing idle cash balance

### 3.3. Short-Term Lending and Borrowing

- 3.3.1. Short-term lending
- Money markets
- Alternatives to money markets
- 3.3.2. Short-term borrowing
- Credit rationing
- Secured and unsecured loans

## 4. Capital Structure and Dividend Policy

### 4.1. Leverage and the Value of the Firm

- 4.1.1. Modigliani-Miller Theory
  - 1) Irrelevance Theorem
  - 2) Corporate taxes and capital structure
- 4.1.2. Bankruptcy cost model
- 4.1.3. Agency cost model

## 2. Corporate Finance

### 4.2. Dividend Policy

- 4.2.1. Types of dividend (cash dividend, stock dividend, and splits)
- 4.2.2. Repurchase of stock
- 4.2.3. Irrelevance Theorem
- 4.2.4. Clientele effect
- 4.2.5. Signalling model
- 4.2.6. Dividend policy in local market

## 5. Mergers and Acquisitions

### 5.1. Valuation Issues

- 5.1.1. Valuation of the target

### 5.2. Forms of Acquisitions

- 5.2.1. Take-overs
- 5.2.2. Approved acquisitions
- 5.2.3. Creeping take-overs
- 5.2.4. Eliminating minority interests

### 5.3. Strategies for the Acquirer

- 5.3.1. Aggressive or agreed
- 5.3.2. Conditional or unconditional
- 5.3.3. Timing
- 5.3.4. Board considerations

### 5.4. Defensive Strategies

- 5.4.1. Pre-emptive versus reactive
- 5.4.2. Pre-emptive (long-term) strategies
- 5.4.3. Pre-emptive (short-term) strategies

## 6. International Corporate Finance

### 6.1. International Capital Budgeting for Multinational Firm

- 6.1.1. Foreign project appraisal
- 6.1.2. Political risk analysis
- 6.1.3. Managing foreign exchange exposure

### 6.2. Asset and Project Finance

- 6.2.1. Asset-backed securities
- 6.2.2. Leasing
- 6.2.3. Project evaluation
- 6.2.4. Lender's evaluation of the project
- 6.2.5. Syndication

### 3. Financial Accounting and Financial Statement Analysis

#### 1. Financial Reporting Environment

##### 1.1. Financial Statements

- 1.1.1. Balance sheet
- 1.1.2. Income statement
- 1.1.3. Presentation formats
- 1.1.4. Classification of expenses (by nature or by function)
- 1.1.5. Statement of cash flows
- 1.1.6. Statement of changes in equity
- 1.1.7. The comprehensive income
- 1.1.8. Notes to financial Statements
- 1.1.9. Relation between business activities and financial statements

##### 1.2. Financial Reporting Issues

- 1.2.1. 1.2.1.1. Uses of financial statements
- 1.2.1.1.1. Equity investment
- 1.2.1.1.2. Credit extension
- 1.2.1.1.3. Competition
- 1.2.1.1.4. Merger & Acquisition
- 1.2.2. 1.2.2.1. International differences in accounting
- 1.2.2.2. International differences in accounting
- 1.2.2.3. Market – oriented accounting systems
- 1.2.2.4. Bank – oriented accounting systems
- 1.2.2.5. The IASB and the IFRSs

#### 2. Framework for the Preparation and Presentation of Financial Statements

- 2.1. Objective of financial statements
- 2.2. Accounting conventions (going concern, accrual Basis, etc)
- 2.3. Criteria for accounting recognition
- 2.4. Fundamental definitions (asset, liability, equity, revenue, expense)

#### 3. The cash flow statement

- 3.1. Rationale for the Statement of Cash Flows
- 3.2. Relation between Income Flows and Cash Flows
- 3.3. Presentation of the cash flow statement
  - 3.3.1. The direct method
  - 3.3.2. The indirect method

#### 4. The income statement: Revenue recognition

- 4.1. Criteria for revenues recognition
  - 4.1.1. Sales of goods
  - 4.1.2. Rendering of services
- 4.2. Measurement of revenues

### 3. Financial Accounting and Financial Statement Analysis

**4.3. Construction contracts**

- 4.3.1. Percentage of completion method
- 4.3.2. Completed contract method

**4.4. Accounting for stock – options and similar benefits**

- 4.4.1. Classification of share-based payments
- 4.4.2. Equity – settled share-based payments
- 4.4.3. Cash-settled share-based payments

### 5. Assets, Liabilities and Shareholders Equity

**5.1. Assets**

- 5.1.1. Property, plant and equipment
  - Measurement at cost
  - Measurement at fair value
- 5.1.2. Investment property
  - Measurement at cost
  - Measurement at fair value
- 5.1.3. Intangible assets
  - Criteria for recognition
  - Accounting for research and development costs
- 5.1.4. Inventories
  - Measurement
  - Cost formulas(FIFO, LIFO, weighted average Cost)
- 5.1.5. Financial instruments
  - Classification
  - Measurement at fair value
  - Measurement at amortized cost
  - Hedge accounting
- 5.1.6. Impairment of assets
  - Measuring the recoverable amount
  - Impairment tests

**5.2. Liabilities**

- 5.2.1. Bonds
  - Accounting for bond discounts/premiums
- 5.2.2. Hybrid securities
  - Convertible debt securities
  - Debt issues with detachable warrants
- 5.2.3. Leases
  - Operating leases
  - Finance leases
- 5.2.4. Borrowing costs
  - Conditions for capitalization
  - Costs that may be capitalized
- 5.2.5. Retirement benefits
  - Pensions
  - Post-retirement benefits other than pensions

### 3. Financial Accounting and Financial Statement Analysis

- 5.2.6. Income Taxes  
Temporary differences  
Deferred taxes
- 5.2.7. Provisions  
Conditions for the recognition of provisions  
Contingent liabilities

**5.3. Shareholders' Equities**

- 5.3.1. Issuance of capital stock
- 5.3.2. Acquisition and reissue of treasury stocks
- 5.3.3. Cash, property and stock dividends
- 5.3.4. Accounting
- 5.4.5. Other changes in retained earnings

## 6. Business Combination

**6.1. Mergers and Acquisitions**

- 6.1.1. Acquisitions  
Asset valuation in acquisitions  
Accounting for goodwill
- 6.1.2. Mergers  
Pooling of interest method  
Purchase method

**6.2. Consolidated Financial Statements**

- 6.2.1. The scope of consolidation
- 6.2.2. Consolidation methods
- 6.2.3. The difference arising from consolidation
- 6.2.4. Uses of each method
- 6.2.5. The consolidation procedure
- 6.2.6. Analysis of the difference arising from initial consolidation
- 6.2.7. Impairment of goodwill

## 7. Foreign Currency Transactions

**7.1. Foreign Currency Transaction**

- 7.1.1. Initial recognition
- 7.1.2. Reporting at subsequent B/S daily
- 7.1.3. Recognition of exchange differences

**7.2. Financial Statements of Foreign Operations**

- 7.2.1. Classification of foreign operations
- 7.2.2. Translation to the presentation currency

### 3. Financial Accounting and Financial Statement Analysis

## 8. Financial Reporting and Financial Statement Analysis

### 8.1. Income Flow vs Cash Flow

- 8.1.1. Relation between net income and cash flows from operating activities
- 8.1.2. Net income and cash flows in various stages of life cycle

### 8.2. Quality of Earning, Earnings Management

- 8.2.1. Data issues in analyzing financial statements
- 8.2.1. Non-recurring income items
- 8.2.1. Income, gains and losses from discontinued operations
- 8.2.2. Accounting changes
- 8.2.2. Changes in accounting estimates
- 8.2.2. Changes in accounting policies
- 8.2.2. Adjustments to prior financial statements

### 8.3. Earnings per Share

- 8.3.1. Basic earnings per share
- 8.3.2. Diluted earnings per share
- 8.3.3. Using EPS to value firms
- 8.3.4. Criticisms of EPS

### 8.4. Segment Reporting

- 8.4.1. Definition
- 8.4.1. Industry segments
- 8.4.1. Geographical segments
- 8.4.2. Disclosure requirements
- 8.4.3. Using segment information

### 8.5. Interim Financial Statements

## 9. Analytical Tools for Gaining Financial Statement Insights

### 9.1. Balance Sheet

- 9.1.1. Common size analysis
- 9.1.2. Time series analysis

### 9.2. Income Statement

- 9.2.1. Common size analysis
- 9.2.2. Time series analysis

### 3. Financial Accounting and Financial Statement Analysis

#### 10. Analytical Tools for Assessing Profitability and Risk

##### 10.1. Profitability Analysis

- 10.1.1. ROA
  - Breakdown of ROA
  - Interpreting ROA
- 10.1.2. ROCE
  - Relating ROA to ROCE
  - Breakdown of ROCE

##### 10.2. Risk Analysis

- 10.2.1. Short term liquidity risk
  - Current ratio
  - Quick ratio
  - Operating cash flow to current liabilities
  - Working capital activity ratio
  - Operating cash flow to cash interest cost
- 10.2.2. Long term solvency risk
  - Debt ratio
  - Interest coverage ratio
  - Operating cash flow to total liabilities
  - Operating cash flow to capital expenditure
- 10.2.3. Financial distress risk
  - Univariate analysis
  - Multiple discriminant analysis

##### 10.3. Break-even Analysis

##### 10.4. Pro Forma Financial Statements

- 10.4.1. Steps in preparing pro forma financial statements
- 10.4.2. Conditions when common size percentage, growth rates, and turnover provide the best projections of financial statements amounts

## 4. Equity Valuation and Analysis

### 1. Equity Markets and Structures

#### 1.1. Types of equity securities

- Common stock
- Preferred stock
- Equity mutual fund shares

#### 1.2. Indices

### 2. Understanding the Industry Life Cycle

### 3. Analysing the Industry Sector and its Constituent Companies

- 3.1. The industry sector
- 3.2. Characteristic of the industry
- 3.3. Macro factor
- 3.4. Forecasting for companies in the sector
- 3.5. Balance sheet factors
- 3.6. Corporate strategy
- 3.7. Valuations

### 4. Understanding the Company

- 4.1. Historical financial performance
- 4.2. Segmental information
- 4.3. Inventory, debtors and creditors
- 4.4. Depreciation and amortisation
- 4.5. Completing the forecasts

### 5. Valuation Model of Common Stock

#### 5.1. Dividend discount model

- 5.1.1. Zero-growth model
- 5.1.2. Constant growth model
- 5.1.3. Multiple growth model

#### 5.2. Free cash flow model

#### 5.3. EVA, MVA, CFROI, Abnormal earnings discount model

#### 5.4. Measures of relative value

- 5.4.1. Price/earning ratio
- 5.4.2. Price/book value ratio
- 5.4.3. Price/cash flow ratio
- 5.4.4. Price/sales ratio

## 5. Derivative Valuation and Analysis

### 1. Financial Markets and Instruments

#### 1.1. Derivatives Markets

- 1.1.1. Fixed income derivatives
- Interest rate options
- Interest rate futures
- Delivery options
- Conversion factors
- Cheapest-to-deliver bonds
- Custom interest rate agreements (interest swap, IRA, cap, floor and swaptions)
- 1.1.2. Equity derivatives
- Options on individual stocks
- Stock index futures and options

#### 1.2. Futures Markets

- Basic characteristics of futures contract
- Mechanics of trading in futures markets

#### 1.3. Related Markets

- 1.3.1. Swaps
- Characteristics of swaps
- Related products (IRA, cap, floor, swaptions)

#### 1.4. Credit derivatives: Market, instruments and general characteristics

- 1.4.1. Market of credit derivatives
- 1.4.2. Definition of credit default swaps (CDS)
- 1.4.3. Structural diagram of credit default swaps
- 1.4.4. Credit events
- Physical settlement
- Cash settlement
- Trigger events
- 1.4.5. CDS products
- Credit default swaps and credit linked notes
- Index products
- Other credit default swap products
- 1.4.6. The role of credit derivatives
- Isolating credit risk
- Efficient mechanism to short a credit
- Market for pure credit risks
- Liquidity provision in times of turbulence
- Tailor credit investments and hedges
- Confidential transactions
- 1.4.7. Market participants
- Bank and loan portfolio managers
- Market makers
- Hedge funds
- Asset managers
- Insurance companies
- Corporations

## 2. Analysis of derivatives and other products

## 2.1. Futures

- 2.1.1. Factors determining contract price
- 2.1.2. Theoretical price of futures
- 2.1.3. Basis and factors causing change
- 2.1.4. Arbitrage problems
- 2.1.5. Hedging strategies
  - The hedge ratio
  - The perfect hedge
  - Minimum variance hedge ratio
  - Hedging with several futures contracts

## 2.2. Options

- 2.2.1. Determinants of option price
- 2.2.2. Options pricing models
  - B&S option pricing formula and variants
  - European options on stocks paying known dividends
  - European options on stocks paying unknown dividends
  - American options on stocks paying known dividends
  - Options on stock indices
  - Options on futures
  - Options on currencies
  - Warrants
  - Binomial option pricing model
  - Sensitivity analysis of options
  - Premiums
  - The strike price
  - Price of underlying assets, and delta and gamma
  - The time to maturity and theta
  - Interest rate and rho
  - Volatility of the stock returns and vega
  - Volatility and related topics
  - Estimating volatility from historical data
  - Implied volatility and volatility smile
  - Exotic options
- 2.2.3.
- 2.2.4.
- 2.2.5.

## 5. Derivative Valuation and Analysis

2.2.6. Options strategies  
Protective put  
Spreads  
Straddles  
Strangles

### 2.3. Asset-backed Securities

2.3.1. Types of underlying assets  
Instalment contract  
Revolving lines of credit  
Other assets

2.3.2. Cash flow characteristics

2.3.3. Credit enhancement

2.3.4. Valuation methodologies

## 6. Fixed Income Valuation and Analysis

### 1. Financial Markets and Instruments

#### 1.2. Fixed Income: Corporate and Government

- 1.2.1. Types of fixed income securities
- Money market instruments
- Government bonds
- Corporate securities

- 1.2.2. Indices

### 2. Time Value of Money

#### 2.1. Time value of money

- 2.1.1. Simple versus compound interest
- 2.1.2. Present and future value
- 2.1.3. Annuities
- 2.1.4. Continuous discounting and compounding

#### 2.2. Bond Yield Measures

- 2.2.1. Yield vs discount
- 2.2.2. Current yield
- 2.2.3. Yield to maturity
- 2.2.4. Yield to call
- 2.2.5. Other basic concepts
- Spot rates
- Discount function
- Forward rates
- Relations between spot rate, forward rate and the slope of the term structure
- 2.2.6. Yield curves
- Market Curves (Observed)
- Yield
- Swaps
- Credit
- Theoretical Curves (Imputed)
- Term Structures
- Parametric modelling

#### 2.3. Term Structure of Interest Rates

- 2.3.1. Yield curves and shapes
- 2.3.2. Theories of term structure
  - Expectations hypothesis
  - Liquidity preferences
  - Market segmentation and preferred habitat theories
- 2.3.3. Term structures
  - Risk Management
  - Asset Management/Liability Management/ALM
  - Financial Engineering
  - Structured Products
  - Regulatory
  - Portfolio Valuation

## 6. Fixed Income Valuation and Analysis

### 2.4. Bond Price Analysis

- 2.4.1. Basic price/yield relationship
- 2.4.2. Yield spread analysis
  - Types of spreads
  - Determinants of yield spreads
- 2.4.3. Valuation of coupon bonds using zero-coupon prices
  - Static arbitrage and valuation of coupon bonds
  - Strips markets

### 2.5. Risk Measurement

- 2.5.1. Risk measurement tools
- 2.5.2. Duration and modified duration
- 2.5.3. Convexity
- 2.5.4. Hedging

### 2.6. Usage Bond Yield Curves

- 2.6.1. Zero (Spot), Coupon and Par curves
- 2.6.2. Bond Curves in Market Usage
  - Structure and Smoothness
  - Trade Horizon: Yield, Duration & Convexity
  - Reversion to Mean
- 2.6.3. Curve Shapes and Future Rates
  - Constraints: Absolute & Relative (Slope)
  - Negative Discount Function
- 2.6.4. Curves and Economic Activity
- 2.6.5. Curves and Monetary Policy
- 2.6.6. Other Curves
  - Swap Curves
  - Credit Curves
  - Spread Curves

### 2.7. Credit Risk

- 2.7.1. Industry consideration
- 2.7.2. Ratio analysis
- 2.7.3. Credit rating and rating agencies
- 2.7.4. Curves and credit
  - The Additional Dimensions of Credit
  - Default risk
  - Recovery Rates
  - Annualised Expected Loss Rates
  - Bankruptcy processes
  - Term Structure of Credit
  - Credit Default Swaps (CDS)
  - Curve Shapes and Credit Quality
  - Historical Behaviour: Curves Under Shock

## 6. Fixed Income Valuation and Analysis

### 3. Bonds with Warrants

- 3.1. Investment Characteristics
- 3.2. Value of Warrants

### 4. Convertible Bonds

- 4.1. Investment Characteristics
- 4.2. Value of Conversion Benefits

### 5. Callable Bonds

- 5.1. Investment Characteristics**
  - 5.1.1. Price-yield relationship for a callable bond
  - 5.1.2. Negative convexity
- 5.2. Valuation and Duration**
  - 5.2.1. Determining the call option value
  - 5.2.2. Option-adjusted spread
  - 5.2.3. Effective duration and convexity

### 6. Floating Rate Notes

- 6.1. Investment Characteristics and Types
- 6.2. Valuation Method

### 7. Mortgage-Backed Securities

- 7.1. Types of Mortgages**
  - 7.1.1. Level-payment fixed-rate
  - 7.1.2. Adjustable-rate (ARM)
- 7.2. Types of Securities**
  - 7.2.1. Pass-through securities
  - 7.2.2. Collateralised mortgage obligations
- 7.3. Factors Affecting Market Price**
  - 7.3.1. Underlying collateral
  - 7.3.2. Structure and seasoning
  - 7.3.3. Prepayment rate
  - 7.3.4. Level of interest rate
  - 7.3.5. Liquidity
  - 7.3.6. Credit risk
- 7.4. Valuation Methodologies**
  - 7.4.1. Static cash flow yield methodology
  - 7.4.2. Prepayment model

### 8. Fixed Income Portfolio Management Strategies

#### 8.1. Active Management

- 8.1.1. Interest rate anticipation strategies
- 8.1.2. Yield spread analysis
- 8.1.3. Maturity spacing strategies

#### 8.2. Passive Management

- 8.2.1. Buy and hold
- 8.2.2. Indexation
- 8.2.3. Immunisation
- 8.2.4. Cash flow matching

#### 8.3. Portfolio Construction based on a Factor Model

- 8.3.1. Model specification
- 8.3.2. Suitable factors such as interest rates, spreads
- 8.3.3. Managing factor sensitivities

#### 8.4. Computing the Hedge Ratio: the Modified Duration Method

### 1. Modern Portfolio Theory

#### 1.1. The Risk/Return Framework

- 1.1.1. Return
- 1.1.1. Measures of return
- 1.1.2. Risk
- 1.1.2. Components of total risk
- 1.1.3. Measures of risk
- 1.1.3. Measures
- 1.1.3. Value at risk

#### 1.2. Efficient Market Hypothesis

- 1.2.1. Definition & assumptions
- 1.2.2. Alternative hypothesis
- 1.2.3. Types of market efficiency
- 1.2.4. Market anomalies

#### 1.3. Portfolio Theory

- 1.3.1. Diversification and portfolio risk
- 1.3.2. Markowitz model and efficient frontier

#### 1.4. Capital Asset Pricing Model (CAPM) - building on fundamentals in Part 2 module 1.6.3

- 1.4.1. Major assumptions
- 1.4.2. Capital market line (CML)
- 1.4.3. Security market line (SML)
- 1.4.4. International CAPM

#### 1.5. Arbitrage Pricing Theory

- 1.5.1. Assumptions
- 1.5.2. One factor models
- 1.5.3. Multi-factor models
- 1.5.4. Arbitrage pricing theory

### 2. Investment Policy

#### 2.1. Investment Objectives

- 2.1.1. Setting investment objectives for individuals
- 2.1.2. Deciding portfolio structure
- 2.1.3. Setting objectives for institutions

### 3. Asset Allocation

#### 3.1. Asset Allocation Overview

- 3.1.1. What is asset allocation?
- 3.1.2. Who does asset allocation?
- 3.1.3. Implementing and managing the asset allocation process
- 3.1.4. Evolution of asset allocation
- 3.1.5. Capital Market Expectations

## 7. Portfolio Management

- 3.2. Type of Asset Allocation**
  - 3.2.1. Integrated asset allocation
  - 3.2.2. Strategic asset allocation
  - 3.2.3. Tactical asset allocation
  - 3.2.4. Dynamic asset allocation

## 4. Asset Liability-Analysis and Management

- 4.1. Introduction**
  - 4.1.1. Background of ALM
  - 4.1.2. ALM with pension funds
  - 4.1.3. Types of ALM models
- 4.2. Modelling Liabilities**
  - 4.2.1. Types of liabilities
  - 4.2.2. Valuation of pension liabilities
  - 4.2.3. Annuity factors and discount rates
- 4.3. Modelling Assets**
  - 4.3.1. Types of asset classes
  - 4.3.2. Risk and return characteristics
- 4.4. Funding Ratios**
  - 4.4.1. Definitions
  - 4.4.2. Surplus risk management
- 4.5. Integrated Optimisation**
  - 4.5.1. Stochastic simulation
  - 4.5.2. Target functions and trade offs
  - 4.5.3. Scenario analysis and stress testing
- 4.6. Implementation of strategies**
  - 4.6.1. Active versus passive ALM strategies
  - 4.6.2. Dynamics adjustment of assets and liabilities
- 4.7. Dynamics and Implementation**
  - 4.7.1. Dynamic adjustment of liabilities
  - 4.7.2. Dynamic asset allocation and rebalancing
  - 4.7.3. Liability driven investing

## 5. Practical Portfolio Management

- 5.1. Managing an Equity Portfolio**
  - 5.1.1. Active management
  - Technical analysis/market timing
  - Stock selection/industry selection
  - Growth/value style
  - Specialisation/themes
  - Anomalies
  - Top-down/bottom-up
  - Adjusting the beta of an equity portfolio

## 7. Portfolio Management

- 5.1.2.
  - Passive management
  - Buy and hold
  - Stock index funds
  - Customised funds
  - Completeness funds
  - Factor/style funds
  - Indexing technology
  - Benchmark choice
  - Choice of the tracking error
- 5.1.3.
  - Combined strategies
  - Active/passive combinations
- 5.1.4.
  - Portfolio construction based on a factor model
- 5.2. Derivatives in Portfolio Management**
  - 5.2.1. Combining options and traditional assets
  - 5.2.2.
    - Portfolio insurance
    - Static portfolio insurance
    - Dynamic portfolio insurance
    - Constant Proportion Portfolio Insurance
  - 5.2.3. Hedging with stock index futures
  - 5.2.4. Hedging with foreign exchange futures
  - 5.2.5. Hedging with interest rate futures
  - 5.2.6. Use of swaps in portfolio management
  - 5.2.7. Asset allocation with futures
- 5.3. Managing a Property Portfolio**
  - 5.3.1. The role of property in a diversified portfolio
  - 5.3.2. The property investment decision
  - 5.3.3. Micro economic influences on property returns
  - 5.3.4. Macro economic influences on property returns
  - 5.3.5. Difference property investments
- 5.4. Alternative Assets/Private Capital**
  - 5.4.1. Unlisted (non-property) securities
  - 5.4.2. Terms, conditions and characteristics
  - 5.4.3. Role in a traditional portfolio
  - 5.4.4. Managing unlisted security vehicles
  - 5.4.5. Monitoring and reporting
- 5.5. International Investments**
  - 5.5.1.
    - International diversification
    - Cross-correlations
    - Country risk
    - Emerging markets

## 7. Portfolio Management

- 5.5.2.
  - Hedging foreign exchange risk
  - Effective management of currency risk
  - Behaviour of currency returns
  - Is it a separate asset class / zero sum game?
  - Treatment of currency within a portfolio
  - Black's paper on universal currency hedge
  - Use of overlay strategies
  - Key sensitivities
  - Currency-related example of performance attribution
- 5.5.3.
  - International equities
  - Reasons for holding international equity assets
- 5.5.4.
  - Performance objectives
  - International fixed income
  - Reasons for holding international fixed interest assets
- 5.5.5.
  - Performance objectives
  - Managing a portfolio of international assets
  - International investing
  - Global asset allocation
  - Portfolio management styles
  - Portfolio construction
  - Portfolio management strategy
  - Appraisal ratio

## 6. Performance Measurement

- 6.1. **Performance Measurement and Evaluations**
  - 6.1.1.
    - Risk-return measurement
    - Market and book value evaluation
    - Time horizon and performance measurement
    - Inflow/outflow of cash and performance measurement
    - Time-weighted and dollarweighted rate of return
    - Risk-adjusted performance measures
    - Sharpe's measure
    - Treynor's measure
    - Jensen's alpha
    - Appraisal ratio
  - 6.1.2.
    - Relative investment performance
    - Manager-universe comparison
    - Indices and benchmarks
    - Index definition and calculation
    - Choosing and constructing a benchmark
    - Domestic vs. International benchmarks
    - Cash benchmark and currencies
    - Multi-currency investments and interest rate differentials
    - Currency overlay and performance measurement
    - Balanced benchmarks
    - Random and normal portfolios
    - Index vs. universe median
    - Style-bogey comparisons
  - 6.1.3.
    - Relative investment performance
    - Manager-universe comparison
    - Indices and benchmarks
    - Index definition and calculation
    - Choosing and constructing a benchmark
    - Domestic vs. International benchmarks
    - Cash benchmark and currencies
    - Multi-currency investments and interest rate differentials
    - Currency overlay and performance measurement
    - Balanced benchmarks
    - Random and normal portfolios
    - Index vs. universe median
    - Style-bogey comparisons

## 7. Portfolio Management

- 6.1.4.
  - Performance attribution analysis
  - Asset allocation effect
  - Industry selection effect
  - Security selection effect
  - Investment timing effect
  - Attribution analysis of fixed income portfolio
- 6.1.5.
  - Special issues
  - Performance evaluation of international investments
  - A single currency attribution model by Brinson & al.
  - Multi-currency attribution and interest rate differentials
  - Performance evaluation of international investments/derivative investments
  - Effects of costs

## 7. Management of Investment Institutions

## 7.1. Assessing and Choosing Managers

- 7.1.1.
  - Style analysis
  - Means of style analysis
  - Style analysis
  - Risks, controls and prudential issues: organisational issues
  - Risks, controls and prudential issues: fee structures

## 8. Behavioural Finance

## 8.1. Definition and scope of Behavioural Finance

## 8.2. Rationality (homo oeconomicus) versus Bounded Rationality (according to Herbert Simon)

### 8.3. Anomalies in human behaviour

- 8.3.1. Anomalies regarding perception of information
- 8.3.2. Anomalies regarding information processing
- 8.3.3. Anomalies regarding decision making

## 8.4. Heuristics

- 8.4.1. Simplification heuristic
- 8.4.2. Mental accounting
- 8.4.3. Availability heuristic
- 8.4.4. Anchoring
- 8.4.5. Representativeness

## 8.5. Prospect Theory

- 8.5.1. Value function
- 8.5.2. Asymmetry effect
- 8.5.3. Disposition effect
- 8.5.4. Reference points

- 8.5.4.
- 8.6. Loss aversion
- 8.7. Regret aversion
- 8.8. Framing
- 8.9. Overconfidence
- 8.10. Home bias

## 8. European Regulation

### 0. Why regulation?

#### 1. European Legislation

##### 1.1. A brief history of European Union

##### 1.2. Enlargement

##### 1.3. Decision-Making Bodies

- 1.3.1. The European Parliament
- 1.3.2. The Council of the European Union
- 1.3.3. The EU Commission

##### 1.4. Legislative Acts

- 1.4.1. Directives
- 1.4.2. Regulations
- 1.4.3. Decisions
- 1.4.4. National Implementing Measures

##### 1.5. Legislative Procedure

- 1.5.1. Co-Decision Procedure
- 1.5.2. Comitology Procedure (Lamfalussy Process)

### 2. The Single Market for financial services

#### 2.1. The four principles of General Freedom in the EU

- 2.1.1. Free Movement of People
- 2.1.2. Free Movement of Goods
- 2.1.3. Free Movement of Services
- 2.1.4. Free Movement of Capital

#### 2.2. Harmonisation of Legislation

- 2.2.1. Minimum harmonisation
- 2.2.2. Maximum harmonisation
- 2.2.3. Harmonisation via regulations

#### 2.3. FSAP Financial Services Action Plan

#### 2.4. Single Market Act

### 3. Regulation of Capital Markets

#### 3.1. Market in Financial Instruments Directive (MiFID II / MiFIR)

- 3.1.1. Guiding Principles
- 3.1.2. Rules of Conduct

## 8. European Regulation

- 3.2. Market Abuse Directive (MAD II / MAR)**
  - 3.2.1. Insider Transactions
  - 3.2.2. Market Manipulation
    - 3.2.2.1. Manipulative deals and orders
    - 3.2.2.2. Deals and orders with accompanying manipulative actions
    - 3.2.2.3. Manipulative information
- 3.3. Directive on Takeover Bids**
- 3.4. Prospectus Directive**
- 3.5. Transparency Directive**
- 3.6. EMIR European Market Infrastructure Regulation**
- 3.7. Regulation on Investment Funds (UCITS)**
- 3.8. Alternative Investment Fund Managers Directive (AIFMD)**
- 3.9. Regulation on Credit Rating Agencies**
- 3.10. Investor compensation schemes**
- 3.11. Anti Money Laundering Directive**
- 3.12. Regulation on PRIIPS**
- 3.13. New Investment vehicles**

### Chapter II: European Supervision of Capital Markets

#### 4. European Regulatory Bodies

- 4.1. Old Supervisory Architecture**
  - 4.1.1. National Supervisory Authorities
  - 4.1.2. EU Committees
    - 4.1.2.1. Committee of Banking Supervisors (CEBS)
    - 4.1.2.2. Committee of Insurance and Occupational Pension Supervisors (CEIOPS)
    - 4.1.2.3. Committee of Securities Regulators (CESR)
    - 4.1.2.4. Colleges of Supervisors
- 4.2. New Supervisory Architecture**
  - 4.2.1. European Systemic Risk Board (ESRB)
  - 4.2.2. European System of Financial Supervisors
    - 4.2.2.1. European Banking Authority (EBA)
    - 4.2.2.2. European Insurance and Occupational Pensions Authority (EIOPA)
    - 4.2.2.3. European Securities and Markets Authority (ESMA)
- 4.3. Banking Union**
- 4.4. Capital Markets Union**

### 1. Ethical Conduct

- 1.1 Why ethical behaviour in financial markets?
- 1.2 The 'client first' principle
- 1.3 Conflicts of interest
- 1.4 Market Abuse (insider trading, market manipulation)

### 2. Self Regulation and Ethical Conduct

- 2.1 IOSCO
- 2.2 Basel Committee for Banking Supervision
- 2.3 Corporate Governance & Compliance
  - 2.3.1 Corporate Governance Codes
  - 2.3.2 Standard Compliance Codes
- 2.4 Code of Ethics for Financial Analysts
  - 2.4.1 EFFAS Principles of Ethical Conduct
  - 2.4.2 Practical case studies on 1.2 to 1.4.
  - 2.4.3 ACIIA Principles of Ethical Conduct (overview)

Annex [EFFAS Principles of Ethical Conduct in full text](#)

## 10. ESG – Environmental Social and Governance

### 1. ESG - an introduction

- 1.1. ESG Investment - where do we stand?
- 1.2. Definitions and developments
- 1.3. ESG strategies
- 1.4. Empirical evidence about ESG and financial performance
- 1.5. Barriers to ESG

### 2. Recent Developments of ESG integration

- 2.1. Market drivers
- 2.2. Regulatory Framework (Investor demands and initiatives)
- 2.3. ESG Reporting Frameworks for companies and investors

### 3. Investment Process Chain

- 3.1. Introduction
- 3.2. Macro research and asset allocation
- 3.3. Company analysis
- 3.4. Portfolio construction
- 3.5. Trading
- 3.6. Portfolio and risk analytics
- 3.7. Compliance and reporting
- 3.8. Engagement and voting

### 4. Responsible investing across asset classes

- 4.1. Introduction
- 4.2. Brief reflections on individual asset classes

### 5. ESG Integration in Valuation

- 5.1. Disclosure and Data Source
- 5.2. Identification of ESG value drivers
- 5.3. Analysis of governance, controversies
- 5.4. Analysis of Environmental and Social: sector specific
- 5.5. ESG integration in valuation models

## 11. National Component (complimentary)

### 1. National Regulation of Financial Services

- 1.1. National Competent Authorities
- 1.2. Licence Regime for Financial Services Providers
- 1.3. Organisational Requirements for Financial Services Providers
- 1.4. National Implementation of EU Law on Financial Services

### 2. Liability for Advice

- 2.1. Contractual obligations
- 2.2. Obligations imposed by capital markets law
- 2.3. Court rulings
- 2.4. Self regulation (if applicable)

### 3. Regulation of Financial Research

- 3.1. National regulations of Financial Research  
National Code of Conduct for Financial Research (if applicable)

### 4. Micro-market Structure

- 4.1. Structure of Capital Markets
  - 4.1.1. Stock Exchange
  - 4.1.2. Derivatives Exchange
  - 4.1.3. Commodities Exchange (if applicable)
- 4.2. Size of Markets
  - 4.2.1. Listed Companies
  - OTC Market
  - Private Equity (if applicable)
- 4.3. Trading Rules for Securities
- 4.4. Settlement of Securities Trades

### 5. Taxation of Investments / Investors

- 5.1. Taxation of private / institutional investors
  - 5.1.1. Taxable Income
  - 5.1.2. Types of Income
  - 5.1.3. Investment Income
- 5.2. Taxation of investments with private/institutional investors
- 5.3. Double Tax Treaties
- 5.4. Automated Information Exchange
- 5.5. FATCA