Course information 2023-24
FN3204 Investment and portfolio management

General information

MODULE LEVEL: 6

CREDIT: 30

NOTIONAL STUDY TIME: 300 hours

Summary

The goal of the course is to broaden, and selectively deepen, students' understanding of finance, building on their existing knowledge of financial economics. This course will examine the empirical evidence on the behaviour of stock prices, the extent to which financial markets are informationally efficient, portfolio management and performance evaluation, and elements of international finance. Students will study the empirical evidence of the CAPM and other asset pricing models, learn arbitrage pricing theory, and analyse different tests of market efficiency focusing on event studies and investment anomalies. The course also studies the main empirical findings in behavioural finance and behavioural explanations for various market anomalies. Furthermore, students will learn how to measure the performance of a portfolio manager and to attribute it to different types of skill. Finally, the course introduces the foundations of international finance and explores issues related to international portfolio management.

Conditions

Prerequisite: If taken as part of a BSc degree, the following course(s) must be passed before this course may be attempted:

- FN2190 Asset pricing and financial markets **OR**
- FN2203 Principles of asset pricing **OR**
- AC3059 Financial management

Aims and objectives

- First objective of the course is to equip students with the empirical methods and theories for the analysis of asset pricing models and the efficiency of financial markets. Further objective is to provide methods for portfolio management, performance evaluation, and international asset allocation.

Please consult the current EMFSS Programme Regulations for further information on the availability of a course, where it can be placed on your programme's structure, and other important details.

Learning outcomes

By the end of the course, successful students will be able to:

- Evaluate investment decisions by examining the empirical behaviour of security prices.
- Outline and critically assess the empirical evidence of the Capital Asset Pricing Model and Multifactor Models.
- Master asset valuation by factor models and the arbitrage pricing theory.
- Produce and analyse event studies to test market efficiency.
- Identify investment anomalies and their link to return predictability.
- Critically evaluate the main empirical findings in behavioural finance.
- Measure asset management performance and attribute it to different types of skill.
- Apply asset management theories/models within an international context

Essential reading

Detailed course programmes and reading lists are distributed at the start of the course. Illustrative texts include:

- Zvi Bodie, Alex Kane, and Alan Marcus, Investments, McGraw-Hill, 12th International Student Edition ed. (note: earlier or later editions can be used but chapter numbers might be different.)
- Inefficient Markets: An Introduction to Behavioral Finance by Andrei Shleifer, Oxford University Press.

Assessment

This course is assessed by a three-hour and fifteen-minute closed-book written examination.

Syllabus

1. **The Capital Asset Pricing Model: overview**

    - Basic rules of statistics

    - Review of portfolio theory

    - Review of portfolio fronitiers

    - Frontier with a riskless asset

    - CAPM

    - Predictions and Applications of CAPM

2. **The Capital Asset Pricing Model: empirical tests**

    - Review of regression analysis

    - Regression and asset returns

    - Estimating expected returns

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- Testing CAPM: Two-Pass approach

- Testing CAPM: Fama-MacBeth approach and summary

- Roll's critique

3. **Empirical evidence of the CAPM and multifactor models**

- More tests of CAPM

- Betas, size, and book-to-market

- Multifactor models

- Arbitrage pricing theory: introduction

- Arbitrage pricing theory: main results

- Three-factor model

4. **Market efficiency**

- Efficient markets hypothesis

- Three forms of market efficiency

- Tests of weal-form efficiency

- Event studies methodology

- Tests of semi-strong form efficiency

- Strong form efficiency and summary

5. **Investment anomalies and return predictability**

- What is an anomaly?

- Reversal and momentum

- Earnings announcement puzzle

- Other anomalies

- Twin stock puzzle and bubbles

- Size and value effects

- Introduction to behavioral finance

6. **Behavioral Finance and limits to arbitrage**

- Underreaction and overreaction to news

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- Theories of Momentum

- Empirical tests and summary

- Limits to arbitrage

- Twin stock puzzle and noise traders

- Performance based arbitrage

- Riding the sentiment wave

7. **Fixed-income portfolio management**

- Interest rate risk and the term structure of interest rates

- Inference from the term structure

- Duration

- Immunization

- Duration and convexity

- Interest rate swaps

8. **Active portfolio management and performance evaluation**

- Active portfolio management

- Traynor-Black model

- Measuring performance

- Sharoe ratio and M^2 measure

- Jensen's alpha, Traynor's ratio and appraisal ratio

- Market timing

- Style analysis

9. **Elements of International Finance**

- FX markets and forward exchange rates

- Covered interest parity

- Unbiased expectations hypothesis

- Purchasing Power Parity

- Real exchange and interest rates

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10. **International asset allocation**

- Investing in foreign markets

- Risk in international markets

- Hedging FX risks

- International CAPM

- Tests of ICAPM and Diversification

- International investment choices and home bias

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