ASSET PRICING PRACTICE

Lieven Baele

Lieven Baele is Associate Professor of Finance at Tilburg University. His research is mostly in the field of Empirical Asset pricing and International Finance. He has published in journals such as the Review of Financial Studies or the Journal of Financial and Quantitative Analysis. In recent papers, he searches for the fundamental determinants of asset return comovements, and to what extent return correlations change in times of market stress. He has taught Risk Management, International Finance, and Global Asset Allocation both in (under)graduate and executive programmes (Tias-Nimbas, Vlerick, and Solvay Brussels School of Economics and Management). He has been a consultant to both the public sector (European Central Bank, European Commission) and to private financial institutions.

Wim Van Hyfte

Wim Van Hyfte is Senior Manager – Quantitative Equity Analyst at Dexia Asset Management. He obtained his Master's degree in Applied Economics from Ghent University in 1998 and subsequently an MBA in finance at the Vlerick Leuven Gent Management School. From September 1998 until September 1999, he was also part-time research assistant at the department of Corporate Finance, Ghent University, engaged in studying venture capital. He joined the department of Financial Economics, Ghent University, in October 1999 as a PhD research and teaching assistant carrying out doctoral research within the field of asset pricing. He obtained his PhD in Economics from Ghent University in 2005. After obtaining his PhD he became Postdoctoral Researcher at the Department of Financial Economics (Ghent University) and professor in Finance at the University of Antwerp Management School. From 2007 to 2012, he was also Professor at the Vlerick Business School teaching the Investment course. His research interests include asset pricing, portfolio management and risk management. His work has been presented at several national and international conferences. Some of his studies have already been published in international scientific journals.

Course Outline

The aim of the first part of this course is to make students familiar with state-of-the-art models of (strategic) asset allocation. We will investigate the properties of alternative asset classes, such as commodities, private equity, hedge funds, or inflation-link bonds, and discuss their value for different types of investors. We will learn how quantitative techniques, such as (extensions of) mean-variance optimization, can help in taking optimal asset allocation decisions. The second part of the course will firstly introduce the many aspects of the discount factor from the perspective of a portfolio manager, by concentrating on the typical risk corrections when valuing an asset. What drives systematic risk in the different asset classes, how do we estimate these risks and how can we integrate risk into the construction of an optimal portfolio will be among the questions explored. Secondly, we will examine what the concept of alpha-beta separation entails for portfolio management in terms of predictability of asset returns. Building on the risk framework developed earlier in the course, we will distinguish beta allocation from pure alpha generation and relate the latter to the efficient-market hypothesis and alternatively behavioural finance.

At the end of the course, Participants will be able to:

- understand principles for portfolio management
- use the Black-Litterman model
- understand the practical limitations of the theoretical asset pricing models
- use techniques to analyse data and search for alpha

Course Structure

I. **Portfolio management principles**
   a. Common sense in investing
   b. Investment case-studies

II. **Black-Litterman model**
   a. Portfolio management using the Black-Litterman model

III. **Limitations of theoretical models**
   a. How much data do I need?
   b. Estimating the covariance matrix
   c. Practical use of the CAPM / Fama-French models
   d. Extending factor models

IV. **Practical portfolio management**
   a. Generating alpha
   b. “Smart”-beta models
   c. Factor investing