

Portfolio Optimization

- Risk premia, factor-modelling, private vs public

Day 1

09.00 **Welcome and introduction**

09.15 **1. Asset Allocation**

- Investment Policy
- Strategic and Tactical Allocation
- Asset Selection
- Performance Measurement

10.00 **2. The Public Asset Classes - Forecasting Risk, Return and Diversification Benefit**

- Empirical Findings
- Forecasting Returns
- Estimating Volatility
- Volatility vs Tracking Error
- Sharpe Ratio vs. Information Ratio
- Problems with SR and IR
- Sortino Ratio
- Workshop

12.00-13.00 **Lunch**

13.00 **3. Private Markets' Investments**

- Types of Private Markets and their Characteristics (Private Equity, Real Estate, Infrastructure, Private Debt, Hedge Funds)
- Why Private Markets?
 - Illiquidity Risk Premia
 - Diversification Benefit
 - Increased Returns
 - Lower Risk?
- Assessing the Returns (Multiples, IRR, MIRR)
- Problems with Return Measures
- Smoothing of Returns and its Impact
- Adjusting for Smoothing
- Alternative Risk Premia

16.00 **End of day 1**

Day 2

09.00 **Recap**

09.30 **4. Benchmark**

- Types of Benchmarks
- Benchmark Construction
- Choice of Benchmark

10.30 **5. Optimizing Portfolios**

- The Classical Markowitz Approach
- Problems with Markowitz
- Alternative Approaches
- Value at Risk and Expected Shortfall
 - Delta Normal, Historical and Monte Carlo Simulation
 - Marginal Contribution to Risk, Component Risk, Incremental Risk
- Implied Returns
- Long Term Optimization
- Derivatives in Portfolios
- Factor Modelling
 - Equity, Inflation, Interest and ARP
 - Sub Factors (Value, Size, Momentum,)
 - Empirical Findings
- Workshop

12.00-13.00 **Lunch**

10.30 **5. Optimizing Portfolios, continued**

14.00 **6. Tactical Asset Allocation**

- Short term forecasting
- Absolute or Relative Optimization

15.15 **7. Currency Overlay Management**

- Types of Currency Overlay Programs
- Setting up a Currency Overlay Program

16.00 **End of course and evaluation**

Price

The Price for the course is DKK 13,500 ex VAT. The price includes course material, lunch and refreshments.

