



Advances in Asset Allocation Seminar

New York, 12-14 May 2009, Grand Hyatt



The Choice of Asset Allocation and Risk Management

✿ Having learned in recent years about the limited payoffs and significant risks of excessive reliance on asset selection models, investment managers and institutional investors are showing unprecedented interest in asset allocation approaches as sources of performance.

✿ Meanwhile, recent advances in academic research have paved the way for the development of a new generation of welfare-improving financial engineering techniques aimed at designing optimal investment solutions that take into account the specific constraints and objectives of the various types of investors.

✿ Following and paralleling these developments, a profound shift is currently affecting the whole financial industry, with asset allocation and risk management being increasingly recognized as the key ingredients on which to focus in order to design improved investment processes and solutions.

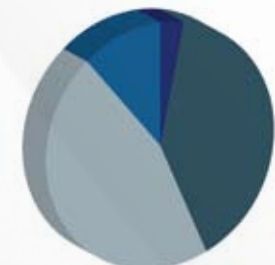
✿ It is against this backdrop that the EDHEC Risk and Asset Management Research Centre has structured its work on asset allocation and risk management. Now regarded as the premier European center for applied financial research, it plays a noted role in furthering asset allocation concepts and techniques and systematically highlighting their practical uses to the investment management industry.

✿ Together with CFA Institute, the EDHEC Risk and Asset Management Research Centre has introduced seminars that take stock of the latest industry trends and research advances and clarify the distinction between true innovation and mere marketing claims. CFA Institute is the world's leading association of investment professionals and has been an unwavering promoter of higher industry standards for more than sixty years.

Return variation between funds:

45.5% – Tactical Asset Allocation
3.5% – Fees
40% – Strategic Asset Allocation
11% – Stock Picking

Source: EDHEC (2002)
and Ibbotson, Kaplan (2000)



Advances in Asset Allocation Seminar

✿ The Advances in Asset Allocation seminar is an intensive three-day course that will provide participants with an in-depth appreciation of the concepts and techniques that will shape the future of investment management. The seminar will also equip them with practical tools to improve asset allocation processes, implement novel investment management approaches, and develop new products.

✿ The first half of the seminar focuses on bridging the gap between portfolio theory and portfolio construction. It discusses the limits of modern portfolio theory, and presents solutions to address estimation issues and incorporate active views in a Bayesian framework. It explores enhanced index construction, looking at new forms of indices and benchmarks and imparting research-based insights into the performance of fundamental index® strategies. It concludes with a presentation of portfolio optimization models that take non-normality risks and realistic preferences into account.

The second half of the seminar is devoted to the integration of liability and risk management constraints in portfolio construction. It presents the state of the art in asset-liability management (ALM) and liability-driven investment (LDI), studies the place of alternative investments in ALM as diversification, substitution, and inflation-hedging

vehicles, and introduces novel forms of inflation-hedging portfolios. It shows how to move from risk diversification to risk hedging by introducing risk management constraints in asset allocation and implementing time- and state-dependent strategies. It examines how to use dynamic core-satellite investing to achieve dissymmetric management of the risk budget and to blend active management and risk controls. It concludes with three integrative case studies of designs for long-only absolute return funds with maximum drawdown and trailing performance constraints, for dynamic strategies mixing traditional and alternative vehicles that pass the liquidity test, and for dynamic LDI strategies.

✿ Presented in a highly accessible manner by a team of instructors with established reputations for bringing together academic expertise and industry experience, the seminar balances exploration of new models and approaches with applications and case studies.





Key Learning Benefits

- ✿ Bridge the gap between modern portfolio theory and practical portfolio construction to build stable models: find out how to make parameter estimation manageable and reliable; discover how to account for non-normality, asymmetric risk preferences, parameter uncertainty, and views in portfolio construction.
- ✿ Understand enhanced index and optimal benchmark construction: review the limitations of traditional indices; find out about minimum-variance, equally-weighted, and other forms of benchmarks; discover statistical and fundamental weighting schemes; learn how to use idiosyncratic risk to design improved equity indices; and discover how to take account of liquidity constraints and transaction costs.
- ✿ Understand state-of-the-art ALM and LDI and examine the role of alternative assets in ALM: review the fundamentals of ALM and discover the latest developments; find out how to use derivatives for liability matching; uncover the potential of ALM in private banking; incorporate the sponsor perspective in ALM and incorporate funding ratio and inflation risk constraints in LDI; optimize the use of hedge funds in ALM; assess the inflation-hedging potential of alternative asset classes and strategies; find out how to select alternative investments to maximize diversification and implement optimal substitution strategies, and discover new cost-efficient forms of inflation-hedging portfolios.
- ✿ Use dynamic beta management, risk budgeting, and dynamic core-satellite allocation to refine investment management and risk management processes and design new investment solutions: learn to introduce risk management constraints into asset allocation and discover new risk management techniques; explore static and dynamic risk budgeting in a benchmark-relative and core-satellite framework; learn to blend active management and risk control; find out how to design long-only absolute return funds with maximum drawdown and trailing performance constraints; how to devise dynamic strategies mixing traditional and alternative investments that pass the liquidity test, and how to use new LDI approaches to optimize regulatory constraints.

Who Should Attend

✿ The programme is intended for investment management professionals who advise on or participate in the design and implementation of asset allocation policies and portfolio models, and for sell-side practitioners who develop new asset management and ALM solutions for investors.

✿ The 2008 editions of the seminar attracted a large cross-section of buy- and sell-side institutions from twenty-three countries worldwide. Global giants, national champions, and small boutiques were represented by their senior officers and investment specialists. Participants included practitioners with the following functions and from the following types of institutions:

Functions

- Chief executive officers/ Managing directors
- Chief investment officers/ Directors of investments
- Heads of asset allocation/ investment strategy/ALM
- Heads of investment solutions/ structuring/financial services
- Portfolio managers
- Risk managers
- Senior analysts and investment officers
- Senior investment advisers/ consultants
- Senior research officers

Institutions

- Asset management companies
- Consultancies
- Insurance and reinsurance companies
- Investment banks
- Non-financial companies
- Pension funds, endowments and foundations
- Private banks
- Research firms
- Sovereign wealth funds

|| *Probably the best learning experience I have had on the topic.*

Jose Vidrigo
Head of Research & Operations, IGFCSS, Portugal
Past participant

This seminar is state of the art, offering very deep insights into risk management and modelling techniques that reflect the pros and cons of each solution. Supplemented with most recent research studies, this seminar enables investors to achieve an edge.

Jochen Menssen, CFA
Portfolio Manager, E.ON, Düsseldorf, Germany
Past participant

Excellent seminar bringing together the latest in risk management with better asset management solutions.

Alwin Oerlemans, CFA
Deputy Director Institutional Clients, Cordares, The Netherlands
Past participant

The course is valuable in that it introduces an array of tools that can be used to formulate the asset allocation process. Its generic nature implies that the techniques are applicable across all markets.

Guy Fletcher, CFA
Chief Investment Officer, PeregrineQuant, Cape Town, South Africa
Past participant



Seminar Faculty

Noël Amenc, PhD



Noël Amenc is Professor of Finance and Dean of Research at EDHEC Business School and Director of the EDHEC Risk and Asset Management Research Centre.

Before joining EDHEC Business School full time, Noël was Head of Research with Misys Asset Management Systems. Before that, he was the president of SIP SA, a portfolio management software company he founded, developed, and sold.

Noël has conducted research in the fields of quantitative asset management, portfolio performance analysis, and asset allocation and published numerous articles in academic and practitioner journals such as *European Financial Management*, *Journal of Portfolio Management*, *Journal of Performance Measurement*, *Journal of Asset Management*, and *Financial Analysts Journal*. He has co-authored four books on quantitative equity management, portfolio management, performance analysis, and hedge funds, including the notable *Portfolio Theory and Performance Analysis* (Wiley Finance). Noël sits on the editorial board of the *Journal of Portfolio Management*, is an associate editor of the *Journal of Alternative Investments* and a member of the scientific advisory council of the AMF, the French financial markets authority. He holds graduate degrees in economics, finance, and management and a PhD in finance.

Lionel Martellini, PhD

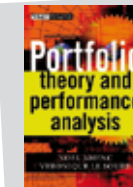


Lionel Martellini is Professor of Finance at EDHEC Business School and Scientific Director of the EDHEC Risk and Asset Management Research Centre.

Lionel has consulted on risk management, alternative investment strategies, and performance benchmarks for various institutional investors, investment banks, and asset management firms, both in Europe and in the United States. His research has been published in leading academic and practitioner journals, including *Management Science*, *Review of Financial Studies*, *European Financial Management*, *Financial Analysts Journal*, and *Risk*. He sits on the editorial board of the *Journal of Portfolio Management* and the *Journal of Alternative Investments*.

Lionel has co-authored and co-edited reference texts on fixed-income management and alternative investment such as the much-praised *Fixed-Income Securities: Valuation, Risk Management and Portfolio Strategies* (Wiley Finance) and is regularly invited to deliver presentations at leading academic and industry conferences. He holds graduate degrees in business administration, economics, statistics and mathematics, as well as a PhD in finance from the Haas School of Business at UC Berkeley.

Praise for Seminar Faculty's Latest Books



"A wonderful step forward in portfolio management texts! The material is well laid out and up-to-date; it strikes a welcome balance between presenting the academic background for topics and providing a good feel for current industry practice."

Terry Marsh, President and CEO, Quantal International, and Emeritus Professor of Finance, University of California, Berkeley



"The authors have produced a work of the very highest quality. As focused as it is comprehensive, this is a superb contribution to the literature."

Moorad Choudhry, Head of Treasury at KBC Financial Products, and Senior Fellow, Centre for Mathematical Trading and Finance, CASS Business School

Part one: Bridging the gap between portfolio theory and portfolio construction

Seminar contents: identifying paradigm shifts in the asset management industry, understanding when and why modern portfolio theory fails in the real world, making covariance matrix estimation manageable and improving parameter estimates, incorporating active views in a Bayesian framework, searching for the market portfolio, and identifying alternative forms of indices and benchmarks.

Introduction

Paradigm shifts in the asset management industry

- Alpha-beta separation and risk management: understanding the difference between asset allocation and risk allocation, absolute and relative-return risk, asset and liability relative risk budgeting; appreciating the relevance of beta and risk management—recognizing the inefficiency of tracking error constraints; understanding the limits of market cap-weighted indices and identifying alternative weighting schemes.
- The core-satellite approach and risk budgeting: measuring and decomposing risk; realizing the benefits of the core-satellite organization (clarifying the sources of value added, optimizing management fees and/or transaction costs, simplifying alpha selection and management); aligning factor exposures: manager optimization versus completeness portfolio; engineering portable alpha solutions.
- From asset management to risk and asset management: understanding the value of risk management in the asset management process; defining the three possible approaches to risk management: risk diversification, risk insurance and risk hedging; shifting from *ex-post* risk management to using risk budgets as key ingredients in the design of the asset allocation solution; introducing the new paradigm that makes it possible to design investment solutions that meet investors' needs.

Towards Efficient Risk Diversification—From Portfolio Theory to Portfolio Construction Limits of the Markowitz model

- Feasibility issues: Markowitz optimization as a formidable econometric problem yielding noisy and unstable results; portfolio optimization with parameter uncertainty.
- Relevance issues: how theoretical assumptions about investor behavior and return distributions compare to empirical facts; how differences affect portfolio construction; Markowitz portfolios in the asset management and ALM contexts and why they are sub-optimal; moving from mean variance to higher moments, from static to dynamic allocation decisions, and from asset management to ALM.

Implementing and improving covariance parameter estimation

- Addressing sample risk with covariance matrix estimation and state-of-the-art factor models: reducing dimensionality and estimating the covariance matrix with explicit, implicit, and explicit/implicit factor models; introducing Bayesian techniques and statistical shrinkage estimators.
- Addressing stationarity risk: de-smoothing the returns of illiquid sectors and asset classes; extending the analysis beyond rolling windows and exponentially-weighted moving averages; conditional estimation of parameters with autoregressive conditional heteroskedasticity and state-dependent models.





Day One

Implementing and improving estimation of expected return parameters

- Expected return estimation in the absence of active views: factor model and optimal statistical shrinkage towards the grand mean.
- Incorporating active views in a Bayesian framework: applying Bayesian analysis to combine historical estimates and non-sample views of varying reliability; the Black-Litterman model as a special case.

Enhanced index construction

- New forms of indices and benchmarks: beyond capitalization weighting; fundamental weighting schemes; equally-weighted benchmarks; minimum variance benchmarks; maximally diversified benchmarks; equal risk contribution benchmarks & stochastic portfolio theory.
- Rehabilitating the tangency portfolio: incorporating idiosyncratic risk in asset allocation; using total risk as a proxy for excess expected returns; meeting implementation challenges: liquidity constraints and transaction cost optimization.

Day Two

Dealing with non-normality risks and asymmetric risk preferences

- Measures, statistical significance, and persistence of non-normality risks: recognizing when non-normality matters; understanding higher moment and higher-order co-moment beta and how to use it for allocating to assets with non-normal returns; defining and measuring partial moments and using them as behaviour-motivated measures of risks for portfolio optimization.

- Portfolio optimization with higher moments: accounting for extreme risks in portfolio optimization with VaR and beyond VaR; scenario optimization as a tool to account for non-normality; utility- and risk-based scenario optimization.
- Case study: implementing the optimal diversification approach to the introduction of alternative investments in portfolios.

Seminar contents, morning: implementing alternative portfolio models that integrate non-normality risks and realistic preferences.

Day Two

Part two: Integrating liability and risk management constraints in portfolio construction

Seminar contents, afternoon: reviewing the latest advances in ALM and LDI; and optimizing the benefits of alternative investments in ALM: alternative assets as diversification, substitution, and inflation-hedging vehicles; reviewing the inflation-hedging properties of traditional and alternative investments; designing new cost-efficient forms of inflation-hedging portfolios; hedging extreme inflation risk.

Towards Efficient Risk Hedging—From Asset Management to Asset and Liability Management

Accounting for the presence of liability constraints in portfolio construction

- A brief history of asset-liability management: cash-flow matching, immunization, surplus optimization, and LDI strategies; performance-seeking portfolio vs. liability-matching portfolio; using derivatives to implement the liability-matching portfolio; incorporating the sponsor company perspective into ALM; applying ALM techniques to wealth management and private banking; underlining the specificities of ALM for sovereign wealth funds; implementing endowment hedging versus liability hedging.
- Improving the performance-seeking portfolio versus improving the liability-hedging portfolio: introducing alternative investments for optimal diversification and optimal substitution within the performance-seeking portfolio; incorporating alternative assets into the liability-hedging portfolio for inflation hedging.

State-of-the-art inflation hedging

- Inflation-hedging properties of traditional and alternative investment strategies: short-term inflation matching versus long-term inflation hedging: term structure of risk from an asset-management and an asset-liability management perspective; employing alternative assets for inflation hedging: inflation-hedging properties of real estate and commodities; using traditional asset classes for inflation hedging: inflation-linked securities and stocks as possible ingredients in the liability-hedging portfolio.
- New forms of inflation-hedging portfolios with alternative investments: inflation-hedging portfolios with enhanced performance—reducing the cost of inflation protection by introducing alternative investments; understanding the impact on risk budgeting—reducing the required allocation to the performance-seeking portfolio by enhancing the liability-hedging portfolio; hedging extreme inflation risk—focusing on the left tail of the inflation risk distribution to reduce the cost of inflation hedging.





Day Three

Seminar contents: moving from static to dynamic beta management; optimizing risk budgeting within the core-satellite architecture; using dynamic core-satellite investing to achieve dissymmetric management of the risk budget; blending active management and risk management in a unified framework; designing new asset management offerings and novel LDI solutions.

Towards Efficient Risk Insurance—From Asset-Liability Management to Risk and Asset-Liability Management

From static to dynamic beta management

- From risk diversification to risk hedging: introducing risk management constraints into asset allocation; defining margin for error as a function of risk-aversion; implementing time- and state-dependent asset allocation strategies for risk management; reviewing portfolio insurance strategies: constant proportion portfolio insurance vs. option-based portfolio insurance; understanding risk-management techniques based on replication and on derivatives; introducing exotic structures.
- Using risk-budgets as ingredients in the design of the optimal portfolio strategy; implementing martingale techniques in optimization.

Dynamic core-satellite management and new approaches for improved investment management offerings

- Dynamic core-satellite management: principles, derivation, and implementation of the dynamic core-satellite model; non-linear payoff management; asymmetric tracking error management; asymmetric de-correlation; optimal substitution.
- Convergence of investment banking and asset management: implementing enhanced models with time-varying parameters and transaction-cost optimization; blending active management and risk management in a unified framework; incorporating maximum drawdown constraints in product design; minimizing the costs of downside protection and maximizing access to the upside potential.

Case studies of new investment management offerings:

- Designing a long-only absolute return fund: including relative maximum drawdown and trailing performance constraints; introducing goal-oriented strategies; reducing the opportunity cost of downside risk hedging.
- Designing a dynamic strategy mixing traditional and alternative vehicles: towards an optimal replacement of traditional factor exposures with alternative factor exposures; dynamic core-satellite techniques with alternatives—passing the liquidity test.

Capstone Case Study

Designing dynamic LDI strategies to minimize the costs of regulatory constraints

- Understanding the impact of regulatory and accounting constraints in asset-management and asset-liability management; measuring the costs of regulatory short-termism.
- Defining risk budgets from an ALM perspective; implementing dynamic LDI strategies; optimizing regulatory constraints; designing optimal portfolio strategies with irreversible contributions.



CFA Institute is the global, not-for-profit professional association that administers the Chartered Financial Analyst® (CFA®) curriculum and examination program worldwide, publishes research, conducts professional-development programmes, and sets voluntary, ethics-based professional and performance-reporting standards for the investment industry.

As part of its commitment to professional excellence, it has developed the Advances in Asset Allocation Seminar jointly with EDHEC Business School specifically for senior-level investment professionals.

CFA Institute has more than 95,000 members in 134 countries and territories, including the world's 82,000 charterholders, as well as 135 affiliated professional societies in 56 countries and territories.

CFA Institute is headquartered in Charlottesville, VA, USA, with regional headquarters in London, Hong Kong, and New York. More information may be found at www.cfainstitute.org.

About the Organizers



CFA Institute provides the investment community with an ideal platform to grow both in skills and relationships among peers.

*Markus Stadlmann
Managing Director, Harald Quandt Holding, Bad Homburg, Germany*

EDHEC has demonstrated in a very short time a level of commitment to, and excellence in, the research of alternative assets. (...) EDHEC pushes me to maintain my professional skills at the highest level.

*Mark Anson, CFA
President and Executive Director, Investment Service, Nuveen Investments,
Chicago, Illinois, USA*

I have been following the research that EDHEC-Risk has been doing during the past few years with great interest. The research programme is of high academic quality but is nevertheless always relevant and applicable from a practitioner's point of view.

*Erik Valtonen
Chief Investment Officer, AP3, Stockholm, Sweden*

With 110 permanent professors and researchers and over 5,000 students, EDHEC is one of the leading business schools in Europe. Founded in 1906, it has earned the triple crown of international academic accreditations (AACSB, EQUIS, AMBA).

The EDHEC Risk and Asset Management Research Centre conducts world-class academic research and highlights its applications to the investment management industry. The Centre's team of forty-four researchers carries out six industry-sponsored programmes focusing on asset allocation and risk management in the traditional and alternative investment universes.

The Centre systematically seeks to validate the academic quality of its research through publications in leading scholarly journals and has a policy of optimizing exchanges with the industry. It maintains a website (www.edhec-risk.com) devoted to asset management research for professionals, circulates a monthly newsletter to over 260,000 practitioners, takes regular industry surveys and consultations, organizes research conferences for the industry, and delivers executive education programmes to hundreds of institutions yearly.

Continuing Education Credits

EDHEC Asset Management Education is registered with CFA Institute as an Approved Provider of the Continuing Education Program. This seminar qualifies for 20 CE credits under the guidelines of the CFA Institute Continuing Education Program. Please see www.cfainstitute.org/ceprogram for more information.



Schedule

A typical program day lasts from 8:30 a.m. to 5:30 p.m. and is usually divided into lectures and application cases. The two class sessions in each half-day period are separated by thirty-minute refreshment breaks scheduled at 10:30 a.m. and 3:30 p.m. Lunch is served at 12:30.

Venue

Located in the heart of New York, adjacent to Grand Central, the Grand Hyatt New York offers outstanding accommodations and state-of-the-art, newly renovated function areas. Grand Hyatt New York, 109 East 42nd Street, New York, NY 10017, United States
Tel: +1 212 883 1234, Fax: +1 212 697 3772

Registration and Fee Information

Fees

Seminar Fee: US \$8,000

CFA Institute Member Rate: US \$6,000

Payments are accepted in euros or US dollars.

VAT at a rate of 19.6% applies to sales to EU residents, to companies based in France, and to EU institutions without a VAT number. Non-EU residents/companies are not liable to VAT.

Fees include instruction, teaching materials, refreshments at breaks, and lunches. Accommodation is not included.

Billing and payment

The fee is billed following registration and must be settled before the seminar begins. Payment can be made by credit card or wire transfer.

Transfer or cancellation

Transfer of registration to a colleague, upon written notice, is allowed and free of charge. Transfer of registration fees to another EDHEC Asset Management Education program must be requested in writing and is subject to the following charges: 45 to 30 days' notice: 15% of the tuition fee; 29 to 11 days' notice: 30% of the tuition fee; 10 days' notice or less: 50% of the tuition fee.

Cancellations of confirmed seats must be received in writing and are subject to the following charges: 45 to 30 days' notice: 25% of the tuition fee; 29 to 11 days' notice: 50% of the tuition fee; 10 days' notice or less: 100% of the tuition fee.

Further Information and Registration

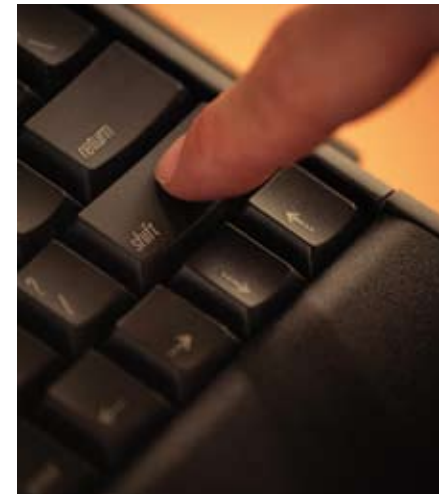
For further information, contact Mélanie Ruiz at: AMeducation@edhec-risk.com or on: +33 (0) 493 187 819

To register, visit: <http://store.edhec-risk.com>

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