

The Miffre and Till Seminar

State-of-the-Art Commodities Investing

New York, 21-22 October 2008

Drivers and risks of commodity markets

Integrating commodities into global portfolios –
optimal strategic allocation and tactical trading

Maximising the diversification potential
of commodities

Commodities for inflation protection
and hedging of extreme risks

Evaluating active and passive commodity
investment opportunities

Generating alpha and capturing beta
with commodity programmes

Implementing institutional commodities
investment programmes

Meeting the challenges of commodity
risk management

Amaranth, Bank of Montreal, and others –
Lessons from recent commodity-trading debacles

seminar

The State-of-the-Art in Commodities Investing

A five-year rally in prices and several multi-billion dollar commitments by leading pension funds have drawn the attention of institutional investors to commodities. Still in its infancy, commodity investment has enormous growth potential and offers considerable rewards to money managers who understand its unique characteristics, benefits and challenges.

More than \$250bn has flowed into commodity markets over the past five years, fuelling the rapid growth of investable indices and leading to a proliferation of new investment opportunities. Among the options for investors seeking exposure to commodities are: buying into natural resource companies, implementing a commodity futures programme, investing in long-only futures indices and their derivatives or via managed accounts, commodity pools, mutual funds, hedge funds and funds of funds.

Financial investment in consumable and transformable assets is a very recent phenomenon and one of modest magnitude relative to the size of the underlying commodity markets or in comparison with other alternative classes and strategies.

However, this emerging asset class should not be overlooked: the long-term economic fundamentals point towards higher commodity prices and the historical record makes a clear case for including natural resources in portfolios. Over nearly half a century, commodity futures have returned over 10% annually while providing a solid hedge against inflation and performing strongly in bear equity and bond markets.

Commodities are not capital assets; therefore, they cannot be priced with traditional financial models or evaluated through discounting approaches. Investment managers need to recognise the specificities of natural resources and understand their short and long term performance drivers to adapt their asset and risk management processes to commodities. Advisers have a key role to play in helping investors define their optimal commodity allocation, choose a suitable benchmark, select appropriate vehicles from an expanding set of products, and conduct due diligence.

Designed and delivered by two leading experts in the theory and practice of commodities trading and alternative investment, this intensive seminar equips participants with a comprehensive overview of natural resources markets, a thorough understanding of the importance of commodities as an asset class, and the state-of-the-art techniques for designing futures programmes and implementing institutional commodity investments.

Presented in a highly accessible manner and drawing from the latest results of alternative investment research, the Miffre and Till seminar appeals to fund managers, investment officers and administrators working for institutional investors and family offices, and to consultants and key account representatives advising high net worth individuals and institutions on commodity investments.



Day 1 Content

The first day of the seminar addresses such questions as:

- ▶▶ What are the unique characteristics of natural resources?
- ▶▶ What are the sources of returns in commodity investment?
- ▶▶ What is the case for commodities as an asset class?
- ▶▶ How to integrate commodities in strategic and tactical asset allocation
- ▶▶ How to optimise the diversification properties of commodity programmes
- ▶▶ How to use commodities as a hedge against inflation
- ▶▶ Is there a case for investing through CTAs?
- ▶▶ How to decide between active and passive commodity investing
- ▶▶ What are the advantages and disadvantages of the main commodity vehicles?
- ▶▶ How to choose between competing commodity indices

Outline

I. COMMODITY FUNDAMENTALS

A. Commodity Types and Markets

B. Fundamentals of Commodity Futures

- Commodity pricing theory
- Normal backwardation, contango and the unbiased expectations hypothesis
- The theory of storage and the pricing of commodity futures

II. COMMODITIES AS A STRATEGIC ASSET CLASS

A. Statistical Properties of Commodity Futures Returns

B. Is There a Risk Premium in Commodity Futures Markets?

C. Commodities as a Source of Diversification

- Commodities as a diversifier of traditional portfolios
- Optimal diversification within commodity portfolios
- Conditional correlations with traditional asset classes

D. Commodities as a Hedge against Inflation

III. COMMODITIES AS A TACTICAL ASSET CLASS

A. Hedging Pressure-Based Strategies

B. Momentum-Based Strategies

C. Term Structure-Based Strategies

D. Double-Sort Strategies Combining Term Structure and Momentum Signals

E. Economic-Based Strategies

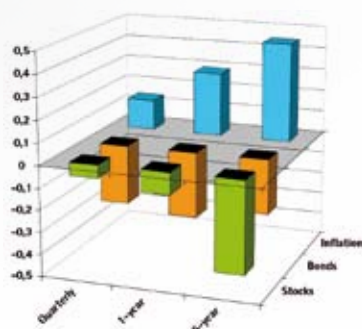
IV. INVESTMENT OPPORTUNITIES

A. Investment Vehicles

- Equities, mutual funds, ETFs
- Derivatives
- Medium-term notes
- Commodity Trading Advisers (CTAs)

B. Commodity Indices

- Performance attribution
- Comparative review of major indices and new developments



Correlation of Commodity Futures with Stocks, Bonds and Inflation (1957-2004)
Gorton and Rouwenhorst (2005)

Day 2 Content

The second day of the seminar addresses such questions as:

- ▶▶ How to create state-of-the-art commodities futures programmes
- ▶▶ What are the risk-management techniques specific to commodity investing?
- ▶▶ What are the opportunities and the pitfalls in commodity market-microstructure strategies?
- ▶▶ How to manage the mismatch between strategy and reporting horizons
- ▶▶ How to implement an institutional commodity programme
- ▶▶ How to carry out due diligence when selecting natural-resources managers
- ▶▶ What are the key lessons from recent commodity-trading debacles?
- ▶▶ What are the latest regulatory initiatives concerning commodity futures trading and investing?

Outline

V. DESIGNING A STATE-OF-THE-ART COMMODITIES FUTURES PROGRAMME

A. Investment Process

- Trade discovery, sizing, entry and exit, portfolio construction, risk management
- Strategy bucketing, balancing of long- and short-options-like trades

B. Risk Management

- Strategy and portfolio level VaR, incremental risk measures
- Monitoring beta risks
- Structural breaks
- Scenario testing
- Inadvertent concentration risk
- Event risks
- Seasonally-varying correlations and emerging correlations
- The monitoring of risk-asset deleveraging
- Case Studies: May/June 2006; February 27, 2007; August 16, 2007; and March 2008.

C. Commodity Market Microstructure

- Floor, side-by-side, and electronic trading
- The challenges of nodal liquidity
- Case Study: Natural gas calendar spreads

D. Risk Tolerance and Implementation Discipline

- The issue with tick-by-tick evaluation of long-term strategies
- Case Study: Heating oil calendar spreads

VI. IMPLEMENTING AN INSTITUTIONAL COMMODITY PROGRAMME

A. Optimal Allocation to Commodities

B. Choice of Benchmark

C. Selection of Investment Vehicles

D. Due Diligence

- Mitigation of business risk via background checks and verification of track records
- Investing through a managed account
- Fraud and weak infrastructure considerations

VII. CASE STUDIES: LESSONS FROM RECENT COMMODITY TRADING DEBACLES

VIII. CURRENT POLICY INITIATIVES

A. Commodity Regulatory Initiatives in the U.S. and in the U.K.

B. Monitoring Futures Commissions Merchants

Seminar Leaders



Joëlle Miffre is Professor of Finance at EDHEC Business School and a member of the EDHEC Risk and Asset Management Research Centre. Her work focuses on asset management, with special emphasis on alternative investments, active strategies, and asset pricing. Before joining EDHEC Business School, she was with the Cass Business School. Her previous appointments also include research and teaching positions at the University of Technology, Sydney, the ICMA Centre at the University of Reading, and Brunel University.

At EDHEC Business School, Professor Miffre teaches postgraduate and executive education courses on fixed-income analysis, derivative securities, and alternative investments and contributes to the work of the EDHEC Risk and Asset Management Research Centre.

Her research on tactical asset allocation, derivatives, commodity futures, and hedge funds has appeared in refereed academic and practitioner journals such as *Economics Letters*, *European Financial Management*, *Journal of Alternative Investments*, *Journal of Banking and Finance*, *Journal of Business Finance and Accounting*, and *Journal of Futures Markets*.

Professor Miffre received support from Inquire-UK for her work on higher moments and the conditional performance of alternative investments. She is a seasoned presenter at international academic conferences and industry events. Professor Miffre holds graduate degrees in management and finance and a PhD in Finance from Brunel University.



Hilary Till is the co-founder of Premia Capital Management, LLC, a principal of Premia Risk Consultancy, Inc., and a research associate with the EDHEC Risk and Asset Management Research Centre.

She also sits on the advisory board of the Tellus Natural Resources Fund, a fund of hedge funds. Ms. Till has over 15 years of experience in the commodity derivatives markets. Established in 1998, Chicago-based Premia Capital Management is a proprietary trading firm with a natural resources focus which specialises in using statistical techniques to detect pockets

of predictability in derivatives markets. Premia Risk Consultancy advises investment firms on derivatives strategies and risk management policy.

Before co-founding Premia Capital, Ms. Till headed derivatives strategies at Putnam Investments and also served as the company's commodity portfolio manager for institutional clients. Prior to joining Putnam, Ms. Till was with Harvard Management Company where she set up the commodity investment programme of the university's endowment.

Ms. Till has written articles on commodities, risk management, and hedge funds in refereed academic and practitioner journals. She serves on the examination committees of professional designations in alternative investment and risk management.

Ms. Till has authored many articles on commodities, derivatives and risk management in industry publications and contributed to ten books in the last four years including *The Handbook of Inflation Hedging Investments* (McGraw Hill), *Fund of Hedge Funds: Performance, Assessment, Diversification and Statistical Properties* (Elsevier), and *Energy and Environmental Markets* (PRMIA).

She is the co-editor of *Intelligent Commodity Investing* (Risk Books). Ms. Till has a BA in statistics from the University of Chicago and an MSc in statistics from the London School of Economics.

State-of-the-Art Commodities Investing 21-22 October, 2008 - New York

October 21: Commodities as an Asset Class and Fundamentals of Commodities Investing with Joëlle Miffre

October 22: Designing and Implementing Commodity Programmes with Hilary Till

Two day course: \$3,500

One day course: \$2,500

Fees include documentation, refreshments, lunch, and drinks.



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With over 110 permanent professors and researchers and some 5,000 students spread over three campuses in Lille, Nice and Paris, the EDHEC Group is the largest provider of business education in France and one of the leading business schools in Europe.

EDHEC Business School has been offering management training and development programmes since 1906 and is a member of the select group of academic institutions worldwide to have earned the triple crown of international accreditations (AACSB, EQUIS, AMBA).



EDHEC Business School set up the Risk and Asset Management Research Centre to conduct world-class academic research and highlight its applications to the industry. The centre's team of 40 researchers carries out six industry sponsored programmes focusing on asset allocation and risk management in the traditional and alternative investment universes.

In keeping with its mission, the centre systematically seeks to validate the academic quality of its research through publications in leading scholarly journals, implements a multifaceted communications policy to inform investors and asset managers on state-of-the-art concepts and techniques, and develops business partnerships to launch innovative products.

To optimise exchanges between the academic and business worlds, the Risk and Asset Management Research Centre maintains a website devoted to asset management research for the industry: www.edhec-risk.com, circulates a monthly newsletter to over 200,000 practitioners, conducts regular industry surveys and consultations, and organises annual conferences for the benefit of institutional investors and asset managers.

EDHEC has also created a consultancy, EDHEC Investment Research, and a continuing-education arm, EDHEC Asset Management Education. EDHEC Asset Management Education helps investment professionals to upgrade their skills with advanced risk and asset management training across traditional and alternative classes.



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