Commodities & Commodity Derivatives

A practical two-day programme on the latest techniques for pricing and managing the risk in a portfolio of commodities and commodity derivatives used for investment and trading.

Presented by Professor Hélyette Geman

All delegates will receive a copy of Professor Geman’s book, "Commodities and Commodity Derivatives: Modelling and Pricing for Agriculturals, Metals and Energy".

THE COURSE
The current explosion of activity in commodity makes this course essential for all those needing a thorough and detailed understanding of all types of commodity transaction. This programme provides an in-depth coverage of complex issues such as volume risk, mean-reversion, the forward curve, and the theory of storage. Plain-vanilla and exotic options on commodities will be analysed in the context of trading and risk management, as well as a real options approach to energy physical assets. Lastly, different ways of investing in commodities will be presented and discussed, as well as ways of holding commodity baskets to diversify a portfolio and hedge against inflation.

PRIOR KNOWLEDGE
A background in finance and a basic knowledge of commodity markets is assumed.

WHO SHOULD ATTEND?

- Commodity Traders
- Hedge Fund Managers
- Investment Bankers
- Energy Company Risk Managers
- Insurance companies
DAY I

Spot and Forward Commodity Markets in Detail
- Price formation in commodities: the massive arrival and rapid withdrawal of new players
- Theory of storage and forward curves in detail
- Understanding the impact of inventory and commodity price volatility
The role of shipping markets: the remarkable spikes in freight indices and their recent collapse

Metal markets
- Zinc, copper, nickel, lead
- The impact of the London Metal Exchange rules
- Precious metals: is Gold returning to its role as a shelter currency?

Energy Markets
- Coal and its large reserves
- Natural gas markets; modelling and understanding the role of seasonality
- Crude oil prices and its new developments

Case Study: Modelling the dynamics of commodity forward curves: seasonality and stochasticity. The Borovkova-Geman model applied to crude oil and natural gas.

The Teacher

Hélyette Geman is Professor of Finance at the University of Paris Dauphine and ESSEC Graduate Business School. Professor Geman has been a scientific advisor to a number of major energy companies for the last decade, covering the spectrum of oil, natural gas and electricity as well as agricultural commodities origination and trading. She was previously Head of Research and Development at Caisse des Dépots. She has published more than 80 papers in major finance journals and has written a book entitled ‘Insurance and Weather Derivatives’. Professor Geman is also a Member of Honour of the French Society of Actuaries. Her research includes asset price modelling using jump diffusions and Lévy processes, commodity forward curve modelling and exotic option pricing, for which she won the Merrill Lynch Awards first prize. She was named in 2004 in the Hall of Fame of Energy Risk. Wiley Finance published her latest book, ‘Commodities and Commodity Derivatives’ in January 2005. Hélyette is also a hugely popular and inspiring teacher.
DAY II

Financial and Physical Options in Commodities - Investing in Commodities

- Electricity and its unique features
- Agricultural commodities: the old and the new
- Ethanol and biofuels revisited
- Water as the next commodity
- Commodity cross correlation and the implications for risk management
- The unique features of commodity volatilities in spot and option prices
- Managing the specific risks from electricity derivatives
- Spread options in commodities: differences from other asset classes and how to model them (crush spreads, sparkspreads, darkspreads)
- Valuation of physical assets in the energy industry
- Investing in commodities:
  - The major commodity indexes
  - The choice of weights, rebalancing rule and time-to-maturity of the futures
  - The importance of the shape of the forward curve in the roll yield
- Commodity Structured Notes and ETFs

Case Study: Investing in shares of oil and mining companies: how good is the performance? Mid cap versus large caps.
The course fee is £1195 per day plus VAT and includes lunch, refreshments, full documentation, all relevant Excel macros and spreadsheets and access to our on-line Library.

An early booking discount of 10% is available for bookings made more than 20 working days before the start of the course. Multiple booking discounts are also available.

Invoices will be sent out with payment instructions and are payable by the earlier of 14 days from receipt or the first day of the course.

**Commodities & Commodity Derivatives** (Please fill in 1 form for each booking)

**PLEASE WRITE CLEARLY IN BLOCK CAPITALS**

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Registration

To confirm your place, please return this booking form by fax to: +44 (0)20 7378 1062