



Commodity Trading and Futures Markets: Clearing, Basis, Spreads and Hedging Programmes



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Introduction:

Commodity trading desks and procurement teams lose money when a metal, grain or softs exposure is hedged with the wrong futures month, when basis moves against the hedge or when a margin call arrives unfunded. This Core Concept course gives traders, risk, treasury and procurement staff a working method for commodity trading in exchange-traded futures: reading contract specifications, clearing and margin, pricing basis and spreads, interpreting forward curves, using options on futures and running producer and consumer hedging programmes. Participants build a Commodity Hedging Programme with a Margin Funding Forecast.

Course Objectives:

- Distinguish physical, forward and exchange-traded futures positions across base metals, precious metals, grains, oilseeds, softs and energy and map where each sits in a trading book
- Read futures contract specifications and calculate notional value, tick value, initial margin and daily variation margin for a clearing member account
- Measure basis, calendar spreads and inter-commodity spreads and explain forward curve shape using cost of carry and convenience yield
- Construct producer and consumer hedges with futures and options on futures, sizing hedge ratios and comparing premium cost against protection
- Track a commodity trade from execution through confirmation, give-up, delivery or cash settlement and reconcile positions against clearing statements
- Assemble a Commodity Hedging Programme with a Margin Funding Forecast, position limits and a Value at Risk summary for management review

Target Audience:

- Traders and trading assistants who execute and manage futures positions in metals, agricultural and energy contracts
 - Trading risk and middle office staff who monitor positions, limits, mark-to-market and daily profit and loss
 - Treasury staff who fund initial and variation margin and forecast cash calls from clearing brokers
 - Procurement and sales staff who fix prices for raw materials or crops and hedge the price exposure
 - Trade operations and settlement staff who confirm deals, manage delivery notices and reconcile clearing statements
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Course Outline:

Day 1: Commodity Markets, Participants and the Physical-to-Paper Link

- Hard and Soft Commodity Classes: Base Metals, Precious Metals, Grains, Oilseeds, Softs and Energy
- Spot, Forward and Futures Contracts Compared on Standardisation, Credit Exposure and Delivery
- Hedgers, Speculators, Merchants and Market Makers: Roles and Position Profiles
- Major Futures Venues and Warehouse Delivery Networks for Metals and Agricultural Contracts
- Current-State Price Exposure Map for a Producer, a Processor and a Manufacturer

Day 2: Futures Contract Mechanics, Clearing and Margin

- Contract Specification Reading: Grade, Lot Size, Tick Size, Delivery Months and Last Trading Day
- Clearing House Novation and the Clearing Member Account Structure
- Initial Margin, Variation Margin and Daily Mark-to-Market Calculation Worksheet
- Daily Price Limits, Notional Value and Leverage Arithmetic
- Physical Delivery Versus Cash Settlement and Closing Out Before Expiry

Day 3: Basis, Spreads, Forward Curves and Options on Futures

- Basis Calculation, Basis Risk and Local Cash Price Differentials for Grains and Metals
- Contango, Backwardation, Cost of Carry and Convenience Yield on the Forward Curve
- Calendar Spreads, Cash-and-Carry Trades and Inter-Commodity Spreads such as Crush and Metal Ratios
- Calls and Puts on Futures: Premium, Strike Selection, Delta and Time Decay
- Hedging Structures with Options: Protective Puts, Capped Calls and Zero-Cost Collars

Day 4: Hedging Programmes, Price Risk Measurement and Trade Controls

- Producer Short Hedge and Consumer Long Hedge Design with Hedge Ratio Sizing
- Rolling Hedges Across Delivery Months and the Roll Yield Effect
- Value at Risk Overview and Stress Scenarios for a Multi-Commodity Book
- Trade Lifecycle: Execution, Confirmation, Give-Up, Allocation and Clearing Statement Reconciliation
- Position Limits, Accountability Levels and Market Conduct Red Flags such as Spoofing and Squeezes

Day 5: Hedging Programme Modelling Build and Margin Funding Forecast

- Copper Fabricator Case: Fixing Metal Cost on Customer Orders with Futures
 - Grain Processor Case: Basis Contracts and Crush Margin Protection
 - Coffee and Sugar Case: Option Collars for a Softs Buyer
 - Commodity Hedging Programme and Margin Funding Forecast Spreadsheet Build
 - Peer Panel Challenge of the Hedging Programme and Limit Settings
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Skills You Will Gain:

- Contract Specification Analysis
- Margin and Mark-to-Market Calculation
- Basis and Spread Valuation
- Forward Curve Interpretation
- Options on Futures Structuring
- Hedge Ratio Sizing
- Clearing Statement Reconciliation
- Market Conduct Awareness

Why Attend This Course:

- Return with a Commodity Hedging Programme and Margin Funding Forecast built around your own metal, crop or energy exposures
- Forecast margin calls before they arrive so treasury can fund them without disrupting working capital
- Explain to management why a hedge gained or lost money by separating flat price, basis and roll effects
- Compare hedging practice with peers from mining, metals fabrication, agribusiness, food processing and trading houses

Conclusion:

A futures hedge protects a physical position only when the contract month, basis, margin funding and delivery route are managed together. The course moves from commodity classes and market participants, through contract mechanics, clearing and margin, to basis, spreads, forward curves and options on futures, then to hedging programmes, Value at Risk at overview, trade operations and position limits. The final day applies these methods to metals, grains and softs cases and produces a Commodity Hedging Programme with a Margin Funding Forecast.
