



19BAE710-FINANCIAL DERIVATIVES

Commodity Futures

Commodity futures are financial contracts that obligate the buyer to purchase or the seller to sell a specific quantity of a commodity at a predetermined price on a future date. These contracts are traded on commodity futures exchanges and serve various purposes, including hedging against price fluctuations and providing a platform for speculation.

Key Components:

1. Underlying Commodities:

- Commodity futures are linked to physical commodities such as agricultural products (wheat, corn, soybeans), energy resources (crude oil, natural gas), precious metals (gold, silver), and industrial metals (copper, aluminum).

2. Standardized Contracts:

- Futures contracts are standardized with specific terms, including the quantity of the commodity, quality specifications, delivery location, and expiration date.

3. Buyer and Seller:

- The buyer (long position) agrees to purchase the commodity, while the seller (short position) agrees to sell it. Both parties have obligations to fulfill under the contract.

Purpose and Participants:

1. Risk Management:

- Hedgers, such as farmers, manufacturers, and commodity producers, use futures contracts to manage price risk. By locking in future prices, they can protect themselves against adverse price movements.

2. Speculation:

- Traders and investors engage in speculation, aiming to profit from anticipated price movements. They take either long (expecting prices to rise) or short (anticipating price declines) positions.

3. Price Discovery:

- Futures markets contribute to price discovery by reflecting market participants' collective expectations about future commodity prices.

4. Arbitrage:

- Arbitrageurs exploit price differentials between the spot (current market) and futures markets to profit from market inefficiencies.

Exchange-Traded vs. Over-the-Counter (OTC):

1. Exchange-Traded Futures:

- Traded on organized exchanges such as the Chicago Mercantile Exchange (CME), NYMEX, and others.
- Standardized contracts with clear terms and specifications.
- Centralized clearinghouse facilitates risk management and ensures contract performance.

2. Over-the-Counter (OTC) Futures:

- Traded directly between two parties, customized to meet their specific needs.
- Lack standardization, making them more flexible but also less liquid.
- Counterparty risk management becomes crucial, and clearing is not done through a centralized clearinghouse.

Trading Process:

1. Contract Specification:

- Exchanges specify contract details, including the commodity, contract size, tick size, and delivery terms.

2. Order Placement:

- Traders place orders to buy or sell futures contracts through brokers or electronic trading platforms.

3. Clearing and Settlement:

- The clearinghouse ensures the financial integrity of the market by acting as a counterparty to both the buyer and seller. It facilitates the clearing and settlement of contracts.

4. Margin Requirements:

- Traders are required to deposit initial and maintenance margins to cover potential losses. Margin calls may be issued if the market moves against a trader.

5. Expiration and Delivery:

- Most traders close out their positions before expiration by offsetting their contracts. For physical delivery contracts, a small percentage may choose to fulfill the contract by taking or making delivery of the physical commodity.

Regulatory Oversight:

1. Commodity Exchanges:

- Regulated by relevant authorities in each country, such as the Commodity Futures Trading Commission (CFTC) in the United States.

2. Market Surveillance:

- Exchanges actively monitor trading activities to detect and prevent market manipulation and abusive practices.

Challenges and Considerations:

1. Volatility:

- Commodity prices can be highly volatile, leading to potential gains or losses for market participants.

2. Supply and Demand Factors:

- Commodity futures prices are influenced by factors such as weather conditions, geopolitical events, and global supply and demand dynamics.

3. Rolling Contracts:

- Traders may need to roll their positions from one futures contract to another before expiration, which can involve transaction costs.

Commodity futures play a vital role in the global financial system by providing a mechanism for price discovery, risk management, and market participation for a wide range of commodities. They serve as essential tools for producers, consumers, and investors in managing and speculating on price movements in commodity markets.