

FAQ Research and Education

1. What is commodity?

Ans. Commodity is a basic good which is either extracted from nature or produced through cultivation, industrial means. These commodities are fungible and interchangeable with other commodities of the same type. It is the basic raw material inputs in the production of other goods or services to satisfy the wants and needs of the consumer. The quality of a given commodity may differ slightly, but it is essentially uniform across producers.

2. What are the different types of commodities?

Ans. Classifications of commodities are done as per their origin or characteristic features. From trade and commerce point of view, these commodities can be broadly classified into the following:

Precious Metals: Gold, Silver, Platinum etc Base Metals: Nickel, Aluminum, Copper etc Agro-Based Commodities: Wheat, Corn, Cotton, Oils, Oilseeds, etc. Soft Commodities: Coffee, Cocoa, Sugar etc Live-Stock: Live Cattle, Pork Bellies etc Energy: Crude Oil, Natural Gas, Gasoline etc Exotic: Weather, Index etc.

3. What is commodity market?

Ans. A physical or virtual marketplace for buying, selling and trading raw or primary products When the transaction between a buyer and seller is organised, it is called organised market place. Earlier market place required to have a demarcated physical space where buyer and seller used to interact with each other e.g. Haat, Rural fair, seasonal market, wholesale market yard, commodity or group of commodity specific market place. Advancement of the technology has enabled to carry out the transaction through various means e.g. Phone, Fax, Mail, Chat etc and physical requirement of buyer and seller is not the necessary aspect. Examples of organised electronic platform are e-commerce, Electronic based commodity, currency, capital markets.

4. What are the types of commodity market?

Ans. Based on the types of transaction, commodity markets are of two types. One is Spot market/physical market/Over the counter market (OTC) where buyer and seller contact each other and negotiate the price, quality, and quantity and delivery location. Spot market also has forward transaction where price is fixed for delivery of the materials down the line. Other is an exchange, a central market place having common rules and regulation and having standard quality parameters for all the buyers and sellers on the platform. Examples of exchange based markets are Equity or capital market, currency derivatives and commodity derivatives. Before the introduction of electronic based trading, these exchanges used to have open outcry system of trade.

5. What is the derivative?

Ans: Derivatives are contracts which derive its value from another contract or asset. These are basically used for hedging the risk, but they are also used to earn higher yields. The types of derivatives depend on the types of risks. As per Securities Contract (Regulation) Act, 1956:

Section 2(ac) of the act defines "Derivative" as: "Derivatives includes- A) a security derived from a debt instrument, share, loan, whether secured or unsecured, risk instrument or contract for differences or any other form of security; (B) a contract which derives its value from the prices, or index of prices, of underlying securities"

As per Reserve bank of India:

Section 45U(a) of the Reserve Bank of India Act, 1934 defines "Derivatives" as: "an instrument, to be settled at a future date, whose value is derived from change in interest rate, foreign exchange rate, credit rating or credit index, price of securities (also called "underlying"), or a combination of more than one of them and includes interest rate swaps, forward rate agreements, foreign currency swaps, foreign currency-rupee swaps, foreign currency options, foreign currency rupee options or such other instruments as may be specified by the Bank from time to time"

6. What are Futures and Forwards?

Ans: Futures are exchange traded derivatives where the counterparty is the exchange. The future transactions are subject to margin requirements and are settled on the particular settlement day. The credit risk associated with futures is comparatively low. Forwards are traded over the counter where the counterparty is the contracting party. The forwards are settled at the end of the period mentioned in the contract. The credit risk associated with forwards are higher than that of the futures.

7. What is the need for the exchange-traded commodity derivatives market?

Ans. Now exchange based market place is synonymous with the electronic exchange market platform. The biggest advantage of having an exchange-based platform is accessibility. Such market places are based on the technology of modern communication which allows the users to access the market from anywhere in the world without the time lags. Accessibility enables the multiple participants to get linked with the market from any place. A wider reach ensures greater participation, which results into a more efficient price discovery mechanism.

8. What opportunities do the commodity derivatives provide for investors?

Ans. Futures contract in the commodities market can be used for various types of trading activities which includes speculation, hedging and arbitrage.

- **Speculation:** It is about taking informed decision on the price direction of the commodities and accordingly initiate buy or sell transaction. Speculation is always done with a definite view on the price movement as per gut feelings, or fundamental (Supply and Demand) or technical (Chart and other sophisticated indicator) analysis. Speculators are not interested in physical possession of the commodity rather they trade on the price view. They hold the position temporarily.
- **Hedging:** The people who have physical exposure of commodities uses the futures market for an effective hedging mechanism against price movements. For example a diamond merchant may go short in diamond futures by selling diamond futures contract, thus 'locking' his sale price and in the process hedging against any adverse price movements. On the other hand a diamond jewelry manufacturer may buy diamond futures and thus assure himself a supply of diamond at a pre-determined price.
- **Arbitrage:** Traders may exploit arbitrage opportunities that arise on account of difference in prices between the two market places or between different contracts of the same underlying.

9. What is Hedging, hedge and hedger?

Ans. Hedging is a risk management mechanism whereby downside risk is minimized by locking in the position. In trading and investing, hedging means fixing the price of underlying asset as per buying and selling exposure against the price uncertainty. Hedging is also about striking a balance between uncertainty and the risk of opportunity loss.

The word hedge means protection. A hedge is an investment to reduce the risk of adverse price movements in an asset. Assets may include foreign exchange rates, interest rates, commodity prices, and equity prices.Normally, a hedge consists of taking an offsetting position in a related security, such as a futures contract.

The person or institution that does hedging is called hedger. Example producers, manufacturers, exporters, importers, investors etc.

10. What is long hedge and short hedge?

Ans. When sell position is created at futures exchange it is called short position or short hedge and buy position is created at futures exchange it is called long position or long hedge.

11. How price hedging is carried out?

Ans. Hedging employs various techniques but, basically, involves taking equal and opposite positions in two different markets (such as cash and futures markets).

12. What is a future Contract?

Ans. A futures contract is a commitment to make or take delivery of a specific quantity and quality of a given underlying asset at a specific delivery location and time in the future.

13. What is Basis?

Ans. The difference in cash or physical or spot price and futures price is called basis. The basis is factors of storage, quality difference, freight, handling charges and the local demand supply factors in cash price.

14. What are futures & Options?

Ans.Futures: A future is a legally binding agreement to buy or sell any underlying security/commodity at a future date at a pre-determined price. The contract is standardized in terms of quantity, quality, delivery time and place for settlement at a future date. Both the buyer and seller entering into such an agreement are obliged to complete the contract at the end of the contract period with the delivery of cash/stock. A futures contract gives the buyer the *obligation* to purchase a specific asset, and the seller to sell and deliver that asset at a specific future date, unless the holder's position is closed prior to expiration. When selling is done at futures exchange it is called short position or short hedge and when buying is done at futures exchange it is a Futures market can profit from such contracts because they can enjoy benefits without actually having to hold on the stock until expiry. By hedging through futures the market participant assumes the basis risk which is market risk.

Options: An option gives the buyer the right, *but not the obligation* to buy (or sell) a certain asset at a specific price at any time during the life of the contract. A call option gives the buyer, the right to buy the asset at a given price. This 'given price' is called 'strike price'. It should be noted that while the holder of the call option has a right to demand sale of asset from the seller, the seller has only the obligation and not the right. For e.g.: if the buyer wants to buy the asset, the seller has to sell it. He does not have a right. Similarly a 'put' option gives the buyer a right to sell the asset at the 'strike price' to the buyer. Here the buyer has the right to sell and the seller has the obligation to buy. So in any options contract, the right to exercise the option is vested with the buyer of the contract. The seller of the contract has only the obligation and no right. As the seller of the contract bears the obligation, he is paid a price called as 'premium'. Therefore the price that is paid for buying an option contract is called as premium.

15. How Premium of option is determined?

Ans. Premium of option consists of two values intrinsic and time value. Intrinsic value is the amount of money that could be currently realized by exercising an option with a given strike price. An option's intrinsic value is determined by the relationship of the option strike price to the underlying futures price. An option has intrinsic value if it is currently profitable to exercise the option. Time value is the difference between the total premium and the intrinsic value. If an option doesn't have intrinsic value (either it's at-the-money or out-of-the-money), that option's premium would be all time value.

16. What is the in the money, out of the money and at the money in option.

Ans.

IN-THE-MONEY

Call option: Futures price > Strike price, Put option: Futures price < Strike price

OUT-OF-THE-MONEY

Call option: Futures price < Strike price, Put option: Futures price > Strike price

AT-THE-MONEY

Call option: Futures price = Strike price, Put option: Futures price = Strike price

17. How to employ hedging strategies using futures?

Ans. The basic premises of the futures market is that the future price of the underlying converges with the spot price at the time of contract expiry. We take two scenarios wherein the price of the underlying changes as per the market fundamentals. Now we will explain how hedging strategies work for buyer and seller.

A jewelry shop is in the business of manufacturing diamond jewelry. Suppose he requires 10 carats of diamond each month. The price of diamond changes every day following demand and supply scenario.

Long Hedge: Buyer is in need of the commodity and maintains the inventory. The change in the price is as per the market fundamentals.

| Date | Spot Market | Futures Price |
|---------------------------|--------------------|--------------------|
| 8 th Jan 2015 | Rs.4000/cents | Buy Rs. 4264/cents |
| 31 st May 2015 | Buy Rs. 4384/cents | Sell Rs.4384/cents |
| Loss/Gain | | +80 |

Prices Increase Scenario

He bought May 2015 futures at Rs.4264 and at the time of contract expiry the price of futures increased to 4384. So he earns Rs. 80 in the futures market. He sells his futures position and buy the diamond in the spot market effectively his buy price remained at Rs.4264/cents.

Prices Decrease Scenario

| Date | Spot Market | Futures Market |
|---------------------------|--------------------|----------------|
| 8 th Jan 2015 | Rs.4000/cents | Buy Rs. 4264 |
| 31 st May 2015 | Buy Rs. 3854/cents | Sell Rs.3854 |
| Loss/Gain | | -410 |

He bought May 2015 futures at Rs.4264 and at the time of contract expiry the price of futures decreased to 3854. So he loses Rs. 410 in the futures market. He sells his futures position and buy the diamond in the spot market effectively his buy price remained at Rs.4264/cents.

Short Hedge:

Prices Increase Scenario

| Date | Spot Market | Futures Price |
|---------------------------|---------------------|---------------------|
| 8 th Jan 2015 | Rs.4000/cents | Sell Rs. 4264/cents |
| 31 st May 2015 | Sell Rs. 4385/cents | Buy Rs.4384/cents |
| Loss/Gain | | -80 |

A diamond merchant sell in May 2016 futures at Rs.4264 and at the time of contract expiry the price of futures increased to 4384. So he loses Rs. 80 in the futures market. He buys his futures position and sell the diamond in the spot market effectively his sell price remained at Rs.4264/cents.

Prices Decrease Scenario

| Date | Spot Market | Futures Market |
|---------------------------|---------------------|----------------|
| 8 th Jan 2015 | Rs.4000/cents | Sell Rs. 4264 |
| 31 st May 2015 | Sell Rs. 3850/cents | Buy Rs.3845 |
| Loss/Gain | | +419 |

He sold May 2015 futures at Rs.4264 and at the time of contract expiry the price of futures decreased to 3854. So he gains Rs. 410 in the futures market. He square off his futures position and sell the diamond in the spot market effectively his sale price remained at Rs.4264/cents.