

# TRADING IN FUTURE AND OPTION(F&O)

## How to invest in F&O

Trading in derivatives like futures, and options were introduced in the Indian stock exchanges in the year 2000. Initially, the only futures, and options were for indices. A couple of years later, futures, and options in individual stocks followed suit. Since then, futures, and options have become very popular, and account for most of the [trading](#) on the stock exchanges.

These instruments are handy for investors, and traders, and learning how to trade in futures and options is very important if you want to make the most of the ups, and downs of the stock market. , and it's a pretty good idea to invest in the stock market since returns from [equity](#) have outperformed most other assets in the past few years. Of course, investing in equity, and its [derivatives](#) carry market risk, so it's always better to proceed with a degree of caution.

## F&O trading basics

Before learning how to invest in F&O, it's essential to get your basics right. Let's look at some of the concepts.

Futures, and options are derivatives, whose value derives from the underlying asset. There are many different kinds of assets on which derivatives are available. These include stocks, indices, and commodities like wheat, petroleum, gold, silver, cotton, and many more such items. We will be focusing on how to trade in [futures and options](#) on the stock market.

These futures, and options are used for two main purposes. One is to hedge against price risks; another is to profit from changes in prices or speculation. Most of the activity is speculative.

What you must remember while learning how to invest in F&O is that every future, and options contract needs to have a counterparty. Every buyer of a future or options contract needs to have a seller, or 'writer'. It's a zero-sum game. If you win, someone else loses, and vice versa.

## What are futures?

Futures contracts enable a buyer or the seller to buy or sell stock at a certain predetermined price on a certain date in the future. This can be best illustrated with the help of an example of an expected increase in the share price of company BZ, which is currently at Rs 80. You then buy 1,000 BZ futures at Rs 80. So if the share price of BZ goes up to Rs 100, you will make  $100-80 \times 1000$ , or Rs 20,000. If the prices fall Rs 60, you make a loss of Rs 20,000.

## What are the options?

Options give a buyer or seller the right, but not the obligation, to buy or sell stock at a certain price on a predetermined date in the future. The difference between a future and an option is that in the latter, you have the choice of not exercising the contract. Taking the above example of BZ, if prices fall to Rs 60, you have the choice of not exercising the contract. So your losses will be restricted to the premium that you have paid.

There are two types of options – [call option](#), and [put option](#). A call option gives you the right to buy a certain stock, while a put option gives you the right to sell the stock. Call options work best when you expect stock prices move up. Put options are a better choice when stock prices are expected to fall.

## What is margin/ premium?

When you learn [how to trade in futures](#), it's important to understand, and the concept of margin. Margin is what you have to pay the broker to trade futures. It is a percentage of the transactions you can make, and is fixed at the maximum possible loss that you could incur. Margins will be higher in volatile times. In options, you pay a premium to the seller of the option, or the 'writer'.

## What is the leverage?

Another thing that's very important while learning how to invest in F&O is the concept of leverage. Remember that the margin is a percentage of the underlying asset. If the margin is 10 per cent, , and you invest Rs 10 crore in a futures contract, you need to pay only Rs 1 crore to the broker. So you will be able to trade in a multiple of the margin. This is called leverage. The high leverage makes it possible to make large amounts of transactions, , and thus increase your chances of making profits. Of course, the downside is that you st, and to lose a lot more if you get your timing wrong.

## What is the expiry date?

Another one of F&O trading basics is that futures, and options contracts are not for an unlimited period. They are for certain fixed period, like one, two or three months. At the end of the expiry period, the contracts have to be settled, either in cash or by delivery of

shares. However, you don't have to hold them till the end of the expiry period. You can square off the transaction

before that if you feel prices are not moving in your favour.

## Which is better — stocks or futures?

Is there any advantage in investing in futures instead of directly in stocks? Certainly, there are advantages in futures trading. The biggest is that you don't have to expend capital on acquiring the entire asset, or stock. You only have to pay a margin to the broker, which is a percentage of the futures transactions you make. Plus you get the benefit of leverage, which means you will be able to get larger exposure, and increase your chances of making money from your transactions.

## Which is better – stocks or futures?

It would seem that options are a better choice since your losses will be restricted to the premium you have paid. This may compare poorly with futures, in which the contract has to be exercised at the strike price, and the potential for losses could hence be unlimited. However, the chances of making a profit are much higher in futures than in options. The world over, an overwhelming number of options contracts expire worthlessly. Thus the main gainers from options contracts would be the writers who sell them.

There are some disadvantages of futures trading vis-à-vis stocks. One of them is that you don't have ownership of the underlying shares. So you have to forgo the benefit of ownership like dividends from the company, or voting rights. The sole purpose of futures trading is to benefit from the movement of prices.

## What are index futures?

There are two types of futures available in the stock market. One is [index futures](#), and another is individual stock futures. An index future is a contract whose underlying is the stocks that make up an index. What you are doing is betting on the general movement of the index. You can get index futures for the Nifty, the Sensex, bank index, IT index, and so on. Since you are betting on several stocks instead of just one, the risks are lower than investing in individual stocks. Index futures are cash settled, and there is no delivery of shares.

## Are futures available for all stocks?

No, only some stocks are eligible for futures trading. Futures contracts are available on 175 securities stipulated by the Securities & Exchange Board of India (SEBI). They are selected according to several criteria that include liquidity, and volume.

# What is a mark to market in futures trading?

Open < ahref="https://www.angelbroking.com/futures-and-options/what-are-futures">futures contracts are marked to market automatically at the end of each trading day. That is, the day's base price is compared with the previous day's closing price, , and the difference cash settled. It is used to calculate margin requirements. If the current value of the stocks in the futures contract falls, the holder will get a margin call from the broker to maintain margin at the required level. If the margin call is not met, the broker can sell the futures, and the holder could incur huge losses.

## Pros and cons of F&O trading

When you are learning about how to trade in futures and options, you should also be aware of what you are getting into. Certainly, there are many advantages to investing in F&O, like leverage. But F&O can be risky too. The high leverage enables you to take large positions, and if the market does not go in your favour, the losses could be huge. F&O is all about betting on future price movements, and no one can say for certain in which way they will move.

## Different types of future options

### 1. Options on index futures

Option contract on index futures is the right to buy or sell a particular index future, say S&P CNX NIFTY at a mutually agreed-upon price on a fixed date, which is the date on which the option contract expires.

### 2. Options on currency futures

Options on [currency futures](#) are the rights to trade currency futures at prefixed prices on the contract's expiration day. Indian bourses like NSE allow futures trading in 4 currencies US Dollars (USD), Euro (EUR), Great Britain Pound (GBP) and Japanese Yen (JPY).

For example, a buyer could purchase an option to buy a one month USD futures contract at Rs. 65/\$.

### 3. Future Options in share market

Similarly, future options in share market or options on stock futures are a buyer's or seller's right to purchase (also called a < ahref="https://www.angelbroking.com/futures-and-options/call-options"> call option) or sell off (also called a [put option](#)) a stock futures contract at mutually determined prices on the date the tenor of contract ends.

A stock future is a binding contract between the buyer and seller to execute the buy or sell trade of the stock shares at pre-determined prices on a specific date.

#### 4. Options on interest rate futures

Options on interest rate futures are a contract that provides the buyer and seller right that they can claim to trade off interest rate futures at prices mutually agreed upon between the two parties on a specific date.

Interest Rate Futures are obligations to buy or sell debt products at a mutually fixed price, also called the strike price, on a specific future date. For interest-rate futures, the underlying assets are government bonds or T-bills.

## What is the call future option?

This is a future option [trading](#) contract where buyers have a right to buy either a currency, [commodity](#) or stock futures, at a mutually agreed-upon price or strike price on the date of options expiry. With call options, the buyer is said to be in a long position, that is, he will look to exercise his right to buy the underlying asset if the strike price is lower than the prevailing price in the futures market. In purchasing a call option, he buys this right that he may or may not exercise on the expiration date by paying a premium.

## How does a call future option work?

Let us see how a call future option works with the index future as an underlying asset.

In a hypothetical example, suppose trader C is bullish and expects the price of NIFTY index futures to rise to Rs. 13,000 or higher in the nearing months. He buys a one-month index future option contract at a strike price of Rs. 12,200, where the spot price of the index future is Rs. 11,950. The difference of Rs. 250 is the premium charged for the contract.

Now one month later on the day the contract expires, if the NIFTY index future trades at anywhere above Rs. 12,200, (probably Rs. 13,300), then trader C will be said to be In The Money. Trader C can exercise his right to buy the NIFTY index future contract at Rs. 12,200, making an apparent gain of Rs. 1100 due to the difference between the strike price and spot price of the index future.

Hedging bets can sometimes go wrong. Now, in another scenario, if the index future trades anywhere less than Rs. 12,200 or lower than the strike price, at say Rs. 11,000, then trader C stands to make a notional loss of Rs. 1200. He is said to be out of money in the call option if the strike price is higher than the prevailing prices of the index future

on the day the option contract expires. In that case, trader C can buy future contracts from the spot market instead of exercising his buying right.

## What is a put option on the futures?

A put future option trading contract is the right to sell a futures contract as an underlying asset at a pre-determined price on the date of options expiration. With put options, the owner of the option would be in a short position, that is, he will look to sell the underlying future contract at a strike price higher than current prices of the futures contract.

## How does a put future option work?

Let us see how a put future option works with index futures as an underlying asset.

What makes the derivative market interestingly volatile is that there are bullish and bearish investors. Where people are expecting the prices of an underlying asset to fall, there will be others who would expect the prices to go up.

Suppose trader D, unlike trader C, is bearish and expects the price of NIFTY index futures to fall to Rs. 9,000 from the spot price of Rs.11,950. He enters a one month put future option contract giving him the right to sell the index futures at a strike price of say Rs. 11,000 one month later when the contract expires.

Going by the principle of buy low and sell high, now one month later on the day the contract expires, if the NIFTY index future trades at anywhere above the strike price of Rs.11,000, at say Rs.12,000, then trader D will not want to exercise his right to sell the index futures because the spot price is higher than the strike price. Trader D will be said to be Out of The Money in that case.

In another scenario, if the NIFTY index futures is currently at say Rs.10,000 or anywhere lower than the strike price of Rs.11,000, trader D will exercise his right to sell the index futures at the strike price, pocketing a gain of Rs. 1000. In that case, trader D's put option will be said to be In the Money when the strike price is higher than the spot price of the underlying asset.