A Study on How "Options" Work in Investment – A Guide to the Investors

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INTRODUCTION:

Nowadays, many investors' portfolios include investments such as mutual funds, stocks and bonds. But the variety of securities you have at your disposal does not end there. Another type of security, called an option, presents a world of opportunity to sophisticated investors.

The power of options lies in their versatility. They enable you to adapt or adjust your position according to any situation that arises. Options can be as speculative or as conservative as you want. This means you can do everything from protecting a position from a decline to outright betting on the movement of a market or index.

What is an Option?

Options are derivative instrument. An option is a contract that gives the buyer the right, but not the obligation, to buy or sell an underlying asset at a specific price (strike price) on or before a certain date.

An option, just like a stock or bond, is a security. It is also a binding contract with strictly defined terms and properties. Writer / seller of an option receives the option premium and thereby has an obligation to sell/buy the underlying if the buyer decides to exercise the option.

Options are standardized, exchange traded contract with specific expiry period, underlying, lot size and market driven price (premium).

Options can be In-the-money (ITM), At-the-money(ATM) and Out-of-Money(OTM).

ITM Call options mean that the market / spot price of the underlying stock is higher than that of strike price.

ATM Call options mean that the market/ spotprice of the underlying asset is near to the strike price.

OTM Call options means that the market/spot price of the underlying asset is lower than that of the strike price.

CALLS AND PUTS

The two types of options are calls and puts:

A call gives the holder the right to buy an asset at a certain price within a specific period of time. Calls are similar to having a long position on a stock. Buyers of calls hope that the stock will increase substantially before the option expires.

A put gives the holder the right to sell an asset at a certain price within a specific period of time. Puts are very similar to having a short position on a stock. Buyers of puts hope that the price of the stock will fall before the option expires.

CALL OPTION:

It gives the holder the right to buy the underlying asset by a certain date for a certain price.

Example: Shyam, a stock market investor, purchases a call option on ACC at a strike price of Rs.450 exercisable on 26th December, 2005 by paying a premium to the seller. Suppose he holds it till maturity. On 26th December, 2005, Shyam views that the price of ACC in the market is Rs.455. The option is then obviously, worth exercising therefore, Shyam exercises the option and demands for delivery of ACC shares. The pay off from the option excluding the premium paid for Shyam is :

Sport Price of ACC	=	Rs.455.00
Exercise price of ACC	=	Rs.450.00
Pay off		Rs. 5.00

The net gain under this call option is arrived by subtracting the premium paid upfront from the pay-off. If the premium paid is Re.1 per share as premium under the option, the net payoff would be:-

Pay	=	Rs.5.00
Less Premium	=	Rs.1.00
Net gain	=	Rs.4.00

On the other hand, if the price of ACC on the maturity date of the option is Rs.445, the option has finished out of

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the money and thus it becomes worthless. The pay off. Is Zero. Therefore Shyam will not exercise the option (as he is under no obligation to take delivery under the contract)i.e., he will not demand for delivery of ACC share. Instead, he goes to the cash market and purchases ACC shares @ Rs.445, as it works out to be cheaper.

PUT OPTION:

It gives the holder the right to sell the underlying asset by a certain date for a certain price.

When a put option is exercised, the holder/buyer of the option sells the underlying asset and the writer/seller of the option has to accept it at the pre-specified strike price.

Example: Shyam, buys a put option from NSE for Selling Maruti Shares at the strike price of Rs.530, expiry date, being 26th December, 2005. Shyam holds the option till expiry. If Maruti trades at Rs.525 on 26th December, Shyam would jump to exercise the option. He will simply deliver the shares and demand for Rs.530/-. The pay-off under the put option is:

Strike Price	=	Rs.530.00
Current Price	=	Rs.525.00
In the money	=	Rs. 5.00

Exercising the put option, Shyam got a gain of Rs.5 per share.

But if the price of Maruti shares at maturity is Rs.540, Shyam will not exercise the option since, he can sell the same in the cash market at a price higher than the strike price of the option. Thus, the put option becomes worthless.

There are two main types of options:

American options can be exercised at any time between the date of purchase and the expiration date. Most exchange-traded options are of this type.

European options are different from American options in that they can only be exercised at the end of their lives.

INDEX OPTIONS:

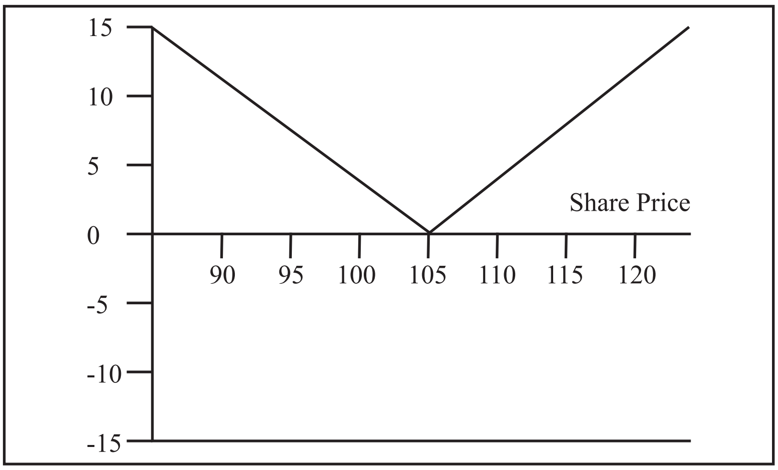
Index Options are call or put options on the stock market indices. In India, there are options on the Bombay Stock Exchange (BSE) Sensex and the National Stock Exchange (NSE) Nifty. The Sensex options are European-type options and expire on last Thursday of the contract month. The put and call index option contracts with 1-month, 2-month and 3-month maturity are available. The settlement is done in cash on a T+1 basis and the prices are based on expiration price as may be decided by the Exchange. Option contracts will have a multiplier of 100.

NAKED OPTION:

A naked option is a position where the option writer does not hold a share in her portfolio that has a counterbalancing effect. The investor can protect herself by taking a covered position. A covered call position is an investment in a share plus the sale of a call on that share. The position is covered because the investor holds a share against a possible obligation to deliver the share.

STRADDLE:

A straddle is a combined position created by the simultaneous purchase (or sale) of a put and a call with the same expiration date and the same exercise price.



Strips: It is a combination of two puts and one call with the same exercise price and the expiration date.
Strap: It is a combination of two calls and one put.
Strangle: A strangle is a portfolio of a put and call with the same expiration date but with different exercise prices. The investor will combine an out-of-the-money call with an out-of-the money put.
Spread: A spread is a combination of a put and a call with different exercise prices. A spread also involves simultaneous buying and selling call or put options. There are two types of spread: Price Spread or the Vertical spread, Calendar spread or the horizontal spread.

Participants in the Options Market :

There are four types of participants in options markets depending on the position they take:
1. Buyers of calls
2. Sellers of calls
3. Buyers of puts
4. Sellers of puts

People who buy options are called holders and those who sell options are called writers; furthermore, buyers are said to have long positions, and sellers are said to have short positions.
Here is the important distinction between buyers and sellers:
-Call holders and put holders (buyers) are not obligated to buy or sell. They have the choice to exercise their rights if they choose.
-Call writers and put writers (sellers), however, are obligated to buy or sell. This means that a seller may be required to make good on a promise to buy or sell.

Why Use Options?

The reasons why an investor use options are :
1. to speculate and
2. to hedge.

SPECULATION:

Speculation is the territory in which the big money is made - and lost. The use of options in this manner is the reason options have the reputation of being risky. This is because when you buy an option, you have to be correct in determining not only the direction of the stock's movement, but also the magnitude and the timing of this movement. To succeed, you must correctly predict whether a stock will go up or down, and you have to be right about how much the price will change as well as the time frame it will take for all this to happen.

HEDGING :

The other function of options is hedging. Think of this as an insurance policy. Just as you insure your house or car, options can be used to insure your investments against a downturn. Critics of options say that if you are so unsure of your stock pick that you need a hedge, you shouldn't make the investment. On the other hand, there is no doubt that hedging strategies can be useful, especially for large institutions. Even the individual investor can benefit. Imagine that you wanted to take advantage of technology stocks and their upside, but say you also wanted to limit any losses. By using options, you would be able to restrict your downside while enjoying the full upside in a cost-effective way.

OPTIONS TRADING IN INDIA:

In the USA, the trading in options was introduced in 1973. The Chicago Board of Trade created the Chicago Board Options Exchange (CBOE) as centralized market for trading standardized options contracts. The exchange-traded options are a recent phenomenon in India. The Security Exchange Board of India (SEBI) has announced a list of 31 shares for the stock based option trading from July 2002. SEBI selected these shares for option trading on the basis of the following criteria.
1. Shares must be among the top 200 in terms of market capitalization and trading volume.
2. Shares must be traded in atleast 90 percent of the trading days.
3. The non-promoter holding should be atleast 30% and the market capitalization of free-float shares should be Rs.750 crore.
4. The six month average trading volume in the share in the underlying cash market should be a minimum of Rs.5 crore.
5. The ratio of daily volatility of the share vis-à-vis the daily volatility of the index should not be more than

four times at any time during the previous six months.
The minimum size of the contract is Rs.2 lakh. For the first six months, there would be cash settlement in options contracts and afterwards, there would be physical settlement. The option sellers will have to pay the margin, but the buyers will have to only pay the premium in advance. The stock exchanges can set limits on exercise price.

CONCLUSION:

Options Trading is truly the favorite financial instrument of small retail investors over the past few decades all over the world. Options Trading allows investors with very small funds to gain disproportionately big profits and to control stocks that would otherwise be too expensive to own. Options Trading is so powerful, its also extremely complex and dangerous if it is not handled carefully. Options traders need a very firm knowledge of the basics of Options Trading before even thinking of ways to make money out of it. So, this article would give a broad outlook for the new investors to learn about the options.

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