

## **Grovalue Classroom**

### 2. Call Options.

#### **Definition:**

A call option is an option contract in which the buyer of the option has the right but not obligation to buy an underlying security at a specified price i.e. strike price within a fixed period of time until its expiry.

In case of seller of a call option, it represents an obligation to sell the underlying security at the strike price if the option is exercised. The call option writer will receive a premium for taking on the risk associated with the obligation.

The long call option strategy is the most basic option trading strategy whereby the options trader buys call options with the belief that the price of the underlying security will rise significantly beyond the strike price before the option expiration date.

#### How to trade Call Option:

#### Buying a call option:

Buying a call is simplest way of trading a call. New traders can often start with trading options by buying calls, not only because of its simplicity but also due to the large ROI generated from successful trades.

Example:

Suppose the stock of XYZ Company is trading at Rs.40. A call option contract with a strike price of Rs.40 expiring in a month's time is being priced at Rs.2. You strongly believe that XYZ stock will rise sharply in the coming weeks after their earnings report. So you paid premium of Rs.200 to purchase a single Rs.40 XYZ call option covering 100 shares.



In above diagram, Y-axis represents the profit and loss and x axis represent the stock price. Say you were spot on and the price of XYZ stock rallies to Rs.50 after the company reported strong earnings and raised its earnings guidance for the next quarter. With this sharp rise in the underlying stock price, your call buying strategy will give you a net profit of Rs.800.

Let us take a look at how we obtain above figure. If you were to exercise your call option after the earnings report, you invoke your right to buy 100 shares of XYZ stock at Rs.40 each and can sell them immediately in the market for Rs.50 a share. This gives you a profit of Rs.10 per share. As each call option contract covers 100 shares, the total amount you will receive from the exercise is Rs.1000. Since you had paid Rs.200 to purchase the call option, your net profit for the entire trade is Rs.800. It is also interesting to note that in this scenario, the call buying strategy's ROI of 400% is very much higher than the 25% ROI achieved if you were to purchase the stock itself.



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This strategy of trading call options is known as the long call strategy. There are almost 35-40 options strategies in which trader can trade. Let's formulate calculation of leverage, maximum profit, maximum loss and breakeven points in long call options.

#### 1. Leverage:

Compared to buying the underlying shares outright, the call option buyer is able to gain leverage since the lower priced calls appreciate in value faster percentagewise for every point rise in the price of the underlying stock.

#### 2. Unlimited Profit Potential:

Since they can be no limit as to how high the stock price can be at expiration date, there is no limit to the maximum profit possible when implementing the long call option strategy.

The formula for calculating profit is given below:

- Maximum Profit = Unlimited
- Profit Achieved When Price of Underlying >= Strike Price of Long Call + Premium Paid
- Profit = Price of Underlying Strike Price of Long Call Premium Paid

#### 3. Limited Risk:

Risk for the long call options strategy is limited to the price paid for the call option no matter how low the stock price is trading on expiration date.

The formula for calculating maximum loss is given below:

- Max Loss = Premium Paid + Commissions Paid
- Max Loss Occurs When Price of Underlying <= Strike Price of Long Call</li>

#### 4. Breakeven Point(s):

The underlying price at which break-even is achieved for the long call position can be calculated using the following formula.

Breakeven Point = Strike Price of Long Call + Premium Paid

#### Selling a call option:

Instead of purchasing call options, one can also sell them for a profit. Call option writers, also known as sellers, sell call options with the hope that they expire worthless so that they can pocket the premiums. Selling calls, or short call, involves more risk but can also be very profitable when done properly.

Payoff for selling a call option:



In next chapter we will discuss about PUT Options. For any queries feel free to contact us on grovalue@research.in