

## 10. Collar strategy.

Today we will be discussing a Collar strategy. It is an options trading strategy that is constructed by holding shares of the underlying stock while simultaneously buying protective puts and selling call options against that holding. The puts and calls are both out-of-the-money options having the same expiration month and must be equal in number of contracts.

Collar strategy construction is given as follows,

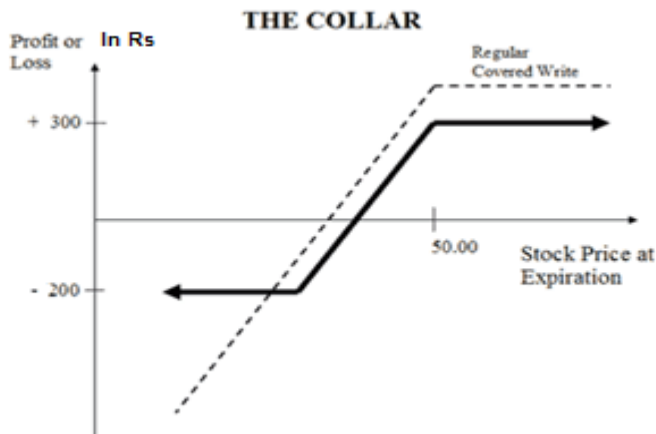
Long 100 Shares; Sell 1 OTM Call; Buy 1 OTM Put.

The collar is a good strategy to use if the options trader is writing covered calls to earn premiums but wish to protect him from an unexpected sharp drop in the price of the underlying security.

### Example:

Suppose an options trader is holding 100 shares of the stock xyz currently trading at Rs.48 in June. He decides to establish a collar by writing a XYZ 50 covered call for Rs.2 while simultaneously purchases a XYZ 45 put for Rs.1. Since he pays Rs.4800 for the 100 share of XYZ, another Rs.100 for the put but receives Rs.200 for selling the call option, his total investment is Rs.4700. On expiration date, the stock had rallied by 5 points to Rs.53. Since the striking price of Rs.50 for the call option is lower than the trading price of the stock, the call is assigned and the trader sells the shares for 5000, resulting in a Rs.300 profit (Rs.5000 minus Rs.4700 original investment). However, what happens should the stock price have gone down 5 points to Rs.43 instead? Let's take a look, At Rs.43 the call writer would have incurred a paper loss of Rs.500 for holding the 100 shares of XYZ but because of the XYZ protective put, he is able to sell his shares for Rs.4500 instead of Rs.4300. Thus, his net loss is limited to only Rs.200 (Rs.4500 minus Rs.4700 original investment) and the stock price remain stable at Rs.48 at expiration, he will still net a paper gain of Rs.100 since he only paid a total of Rs.4700 to acquire Rs.4800 worth of stock.

### Collar Strategy Payoff Diagram:



## Limited Profit Potential:

The formula for calculating maximum profit is given below:

- Max profit = Strike price of short call - Purchase price of underlying + Net premium received - Commissions paid
- Max profit achieved when price of underlying  $\geq$  Strike price of short call

## Limited Risk:

The formula for calculating maximum loss is given below:

- Max loss = Purchase price of underlying - Strike price of long put - Net premium received + Commissions paid
- Max loss occurs when price of underlying  $\leq$  Strike price of long put

## Breakeven Point:

The underlier price at which break-even is achieved for the collar strategy position can be calculated using the following formula.

- Breakeven point = Purchase price of underlying + Net premium paid.

In next session we will discuss further strategies which we have listed at start of the topic. For more details or any query kindly contact us on [knowledge@grovalue.in](mailto:knowledge@grovalue.in)