



## Profit Making for Long Term Investors Using Derivatives

### KEYWORDS

writing options, long-term investor, derivatives market, and portfolio.

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**ABSTRACT** The derivatives market is another part of financial market specially for derivatives, financial instruments like futures contracts or options, which are derived from any underlying markets, individual stock markets, stock indices and currency markets. This paper brings out the idea on how long term investors hold a very good opportunity in the derivatives market by writing options. This paper aims at giving an idea to make good returns from the ideal shares in the portfolio or even when one does not have shares in his portfolio. The situations in which the idea can be well exploited are provided and explained supporting graphs and examples with mathematical calculations by a simple governing formula. Investors with shares in their portfolio are proven to have an upper hand. It also aims in bringing people to come and trade bravely in the derivatives market.

### INTRODUCTION

The term 'Derivative' stands for a contract whose price is derived from or is dependent upon underlying asset. The underlying asset could be a financial asset such as currency, stock and market index, an interest bearing security or a physical commodity [1]. Derivatives market has a large potential that is yet to be tapped. An option gives the buyer (holder) a right but not an obligation to buy or sell an asset in the future [2]. Due to the fact that there is no obligation, it is a method to safely play in the market. Options are of two types – calls and puts. Writing call option or put option using this technique without holding shares or without an intention to buy a share respectively is just an alternative way to enter the speculative market. Finally, the key is to play with calls a puts in a proper combination to bring out its true potential.

### METHODOLOGY

In option terminology, the predetermined, or fixed, price of a stock option is called the strike price. The strike price is a very important piece of information that you will discover when you first start trading. One way to define strike price is to think of it as a target price. It's the price of the underlying stock [3]. The premium of an option is also extremely important. If you are the buyer, it is the price you pay for an option. If you are the seller, it is the price you receive [4]. The long-term investors hold a very good chance in particular by using the method described in this paper. It is a hidden secret that might not be known to the long-term investors. It is a must that the investor must be able to make a concrete decision to perfectly use this tool. The moment a concrete decision is made, profit generation starts. This idea is developed from experience of an ardent trader. There are two scenarios:

#### A. An investor with shares in his portfolio

At the present moment it is assumed that the long-term investor has shares in his portfolio. To generate profits from these shares, the investor has to effectively write calls. The investor should also have a concrete idea as to when he wants to sell the shares.

Suppose the investor holds 1000 shares of a company ABC and the cost price of each share is Rs.100. The investor is ready to sell the shares only when the market price reaches Rs.120 (target price). So, the investor writes calls.

**TABLE I** Call price and its premium

CE (strike price in Rs.)	PREMIUM
100	Minimum above Rs.20
105	Minimum above Rs.15
110	Minimum above Rs.10
115	Minimum above Rs.5
120	Any amount

If the closing price of ABC share at expiration is anywhere less than Rs.120, the investor is going to make a profit. The amount of profit made by investor can be given by the formula, which is no big secret and is actual common sense. The formula is, Profit= (strike price+premium-closing price)\*number of shares

If the investor sold the 110 CE at a premium of Rs.10 and the market closed at Rs.111, the investor will make a profit of Rs.9000.

Strike price= Rs.110

Premium= Rs.10

Closing price= Rs.111

Profit= (110+10-111)\*1000= Rs.9000



**Fig. 1. Closing Price Vs. Profit**

From the graph, Fig.1, it is clearly seen that if the market closes above Rs.120 the investor gets a loss from the call option. But, the investor can now sell the shares that he bought for Rs.100 and hence can still end up making a profit of Rs.20000 if the market closes at Rs.125.

Profit from the shares= 1000\*(125-100) = Rs.25000

Loss from derivatives= Rs.5000

Net profit= Rs.20000

**TABLE 2 Call price and its premium**

CE (strike price in Rs.)	PREMIUM
840	Rs.34.95
860	Rs.22.30
880	Rs.13.55

(Source: NSE)

Table 2 is the details of call options of Reliance Industries as on 9<sup>th</sup> January, 2015 when the spot price was Rs.861.50. Let us assume that the investor holds 1000 shares which cost Rs.850 per share. The investor is ready to sell the shares at Rs.880. Following similar relationship from Table 1, the investor can sell the 860 CE at a premium of Rs.22.30 and this will enable the investor to make a profit for any closing price less than Rs.882.30. The 840 CE is available at a premium of Rs.34.95. The investor should sell the 840 CE for a premium greater than Rs.40 to realize benefits. So, the investor has to wait for the premium to go up. The investor can sell the 880 CE at any premium for whatever he gets is only a benefit as the investor is ready to sell the shares at Rs.880. The investor should sell the shares at expiration only if the expiration price is more than Rs.880 else he can apply the technique again for the next month on the same shares and take advantage of the market.

**B. An investor who has no shares in his portfolio**

It is never a problem not having shares also. This method holds a solution for that too. All that is required is the concrete decision again. The investor can realize profits in this situation by writing puts instead of writing call as we did in the previous case. The investor must be sure of when he wants buy the shares.

Suppose the investor wants to continue with ABC Company shares itself. Now, an ABC company share is trading at Rs.120 and the investor is willing to buy 1000 shares only when the market price falls to Rs.100 (target price). So, the investor writes puts.

**TABLE 3 Put price and its premium**

PE (strike price in Rs.)	PREMIUM
120	Minimum above Rs.20
115	Minimum above Rs.15
110	Minimum above Rs.10
105	Minimum above Rs.5
100	Any amount

If the closing price of ABC share at expiration is anywhere



**Fig. 2. Closing Price Vs. Profit**

From the graph, Fig.2, it is clearly seen that if the market closes below Rs.100 the investor gets a loss from the put

option. But, the investor had made a concrete decision to buy 1000 shares when expiration price of the ABC share came to Rs.100 or below. So, once he has bought those shares at Rs.100, he can very well go back to the case wherein he holds shares in his portfolio.

**TABLE 4 Put price and its premium**

PE (strike price in Rs.)	PREMIUM
840	Rs.10.00
860	Rs.17.60
880	Rs.28.25

(Source: NSE)

Table 4 is the details of put options of Reliance Industries which is going to expire on 29<sup>th</sup> January, 2015 as on 9<sup>th</sup> January, 2015 when the spot price was Rs.861.50. Let us assume that the investor is willing to buy 1000 shares at Rs.830 per share. According to our technique the investor is requested to wait in the above case. The 860 PE should be sold at a minimum premium of Rs.30. The 840 PE can be sold at a premium of Rs.10. If the closing price is Rs.830 or below, the long term investor has to buy the shares. If the closing price is below Rs.830, the investor makes a loss on the option but it is equivalent to buying the shares at Rs.830 itself (The loss from options is added to the expiration price of the share).

**ANALYSIS AND FINDING**

The formula used in the above cases is obtained from detailed observations. The risk factor does not even come into the picture since our subjects are long-term investors. A good study of all options of all shares in the portfolio will definitely lead to a better picture of using the technique. The potential of this method is more than what it seems like. Ideal shares in the portfolio can be used to generate a good profit. Investment can be multiplied to reap equivalent benefits. A person with a good money power holds a major stake in the market. The availability of a large number of derivative products when combined with a well spread portfolio will give excellent results. The margin required for trading can be paid off using the underlying shares itself. The biggest advantage of this technique is that the premium comes as a bonus to the investor each and every month till the month when the expiration price is above the target price.

**CONCLUSIONS**

An effective way to earn profits by writing option has been learnt by using a simple but yet an innovative logic for long-term investors. Investors with shares in the portfolio are at an upper hand. This method provides for new investors to bravely enter the derivatives market. Derivatives market is a tough field but with few logical techniques it can be brought to our favor to an extent and also motivate more investors to take interest in the derivatives market.

**REFERENCE**

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