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Option Trading Strategies for Volatile Market Conditions: With Special Reference to ACC Company

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Abstract

Financial derivatives are good instrument for minimising the risk. It involves underlying assets and instruments such as forward, future, options, swaps and intrinsic value. Options give the traders an opportunity to make profit irrespective of the move of the market. Options can be used for hedging and speculative purposes. Many investors are trade in the option market. Options trading strategies are available for bullish, bearish and volatile market situations. Many option trading strategies have been suggested and practiced. In this paper we focus on option trading strategies for volatile markets.

Key words: Options, Hedging, Speculative, Bearish and Bullish.

Introduction

Financial options are strong financial instrument not only for hedging, but they can be also very useful in trading. Options give the traders an opportunity to make profit irrespective of the direction of the market. Options can be used for speculative and hedging purposes. Most of the individual investors use options for speculation. Usually Risk-seekers trade in the option market rather than average traders. But the fact is that derivatives are very good instruments in minimising the risk. Extensive range of option trading strategies enables the users to leverage the funds available for investment. Options trading strategies are available for bullish, bearish and volatile market situations. Many option trading strategies have been suggested and practiced. There are many option trading strategies. These strategies can be med to profit based on the investor's requirement and market conditions. One can choose the strategy based on this risk bearing capacity and prediction about the market. All the option trading strategies can be categories in three parts: Strategy for Bullish market, bearish market and volatile market.

Options are a type of derivative contract that offer holders the option to purchase or sell a security at a specified price at a future date but not the obligation to do so. The options sellers charge a sum known as a premium for such a privilege.

Option holders will let the option expire worthlessly and decline to exercise this right if market prices are adverse for them, limiting possible losses to the option premium. On the other hand, if the market shifts in a way that increases the value of this right, it uses it.

Call and put contracts are the two main types of options. When purchasing a call option, the contract's buyer has the right to purchase the underlying asset at a later time for a fixed sum known as the exercise price or strike price. A put option allows the buyer to sell the underlying asset at a future date and price.

Review of literature

Fischer Black and Myron Scholes (1973) in their paper the options prices spread in certain systematic ways from the values predicted by the formula. Option buyers pay prices that are consistently higher than those predicted by the formula. Option writers, however, receive prices that are at about the level of predicted by the formula. There are large transaction costs in the option market, all of which are effectively paid by option buyers. The difference between the price paid by option buyers and the value given by the formula is greater for options on low-risk stocks than the options on high risk stocks.

Dhondiba and Dr. Panduranga in their paper investigated empirically accuracy and relevance of Black – Scholes Model in Indian Derivative Market with specific reference to select Pharmaceuticals stock options. They found statistically significant difference between the expected option price i.e. calculated through Black – Scholes Model and market price of option at 5% level of significations. Their results also provide evidence that the model is irrelevant and inaccuracy for Pharmaceuticals stock options.

Statement of the Problem

Option trading strategy is the one of the instrument of derivative market. Many investors do not show interest in option market, as they feel that option market is more risky. Therefore, they prefer to invest in the cash market. Majority of the investors in option market are speculators and hedges. But one can make decent profits in option market by using the option trading strategy. Many individual investors are unaware of option trading strategy. An effort has been made in this paper to test the applicability of Option Trading Strategies meant for volatile market conditions.

Objectives of the study

The specific objective of the study as are as under;

- To know the profitability for Volatile market option Strategies.
- To provide the suitable suggestions for findings.

Research methodology

A brief description the research design is as under:

- **Types of research:** Applied research was used to find the appropriate option trading strategies during volatile market conditions.
- **Sources of Data:** The paper is based on the secondary data. Entire data has been collected from the old website of NSE.
- **Population:** All the stock options of NSE constitute as a study population.
- **Sampling Method:** The judgement sampling method has been applied for this paper.
- **Sample size:** Seven month ACC stocks are selected for the study.
- **Data taken:** 01/01/2022 to 28/07/2022.

Data analysis and interpretation

The study is based on secondary data. An effort has been made in this paper to test the applicability of Option Trading Strategies meant for volatile market conditions with reference to ACC. The following strategies have been tested, for the four months data.

- Long Straddle
- Short Straddle
- Long Strangle
- Short Strangle

Long straddle

A Straddle is a volatility strategy and is used when the stock price or index is expected to show large movements. Long straddle strategy involves buying a call as well as put on the same stock or index for the same maturity and strike price, to take advantage of a movement in either direction. If the price of the stock or index increases, the call is exercised while the put expires worthless and if the price of the stock or index decreases, the put is exercised, the call expires worthless. Either way if the stock or index shows volatility to cover the cost of the trade, profits are to be made.

When to Use: The investor thinks that the underlying stock or index will experience

Short straddle

A Short Straddle is the opposite of Long Straddle. It is a strategy to be adopted when the investor feels the market will not show much movement. He sells a Call and a Put on the same stock or index for the same maturity and strike price. It creates a net income for the investor. If the stock or index does not move much in either direction, the investor retains the Premium as neither the Call nor the Put will be exercised. However, in case the stock /index moves in either direction, up or down significantly, the investor's losses can be significant. So this is a risky strategy and should be carefully adopted and only when the expected volatility in the market is limited.

When to Use: The investor thinks that the underlying stock or index will experience

Long strangle

A Strangle is a slight modification to the Straddle to make it cheaper to execute. Long Strangle strategy involves the simultaneous buying of a slightly out-of-the-money (OTM) put and a slightly out-of-the-money (OTM) call of the same underlying stock or index and expiration date.

When to Use: The investor thinks that the underlying stock / index will experience

Short strangle

This strategy involves the simultaneous selling of as lightly out-of-the-money (OTM) put and a slightly out-of-the-money (OTM) call of the same underlying stock and expiration date. This typically means that since OTM call and put are sold, the net credit received by the seller is less as compared to a Short Straddle, but the break even points are also widened. The underlying stock has to move significantly for the Call and the Put to be worth exercising.

When to Use: This options trading strategy is taken when the options investor thinks that the underlying stock will experience

Table No.1
Long Straddle for ACC

(In Rupees)

Date of transaction (Spot price)	Date of expiration	Transaction	Strike price	Premium paid	Closing price of the stock on date of expiration	Pay off	Net Payoff
01-01-2022 (2284.6)	27-01-2022	Buy 1 CE	2100	1.78	2167.7	67.7	65.92
		Buy 1 PE	2100	6.67		Nil	-6.67
		Total		**8.45**		**67.7**	**59.25**
28-01-2022 (2306.55)	24-02-2022	Buy 1 CE	2200	4.45	2014.0	Nil	-4.45
		Buy 1 PE	2200	12.65		186	173.65
		Total		**17.1**		**186**	**169.20**
25-02-2022 (2067.75)	31-03-2022	Buy 1 CE	2080	4.6	2151.35	71.35	66.75
		Buy 1 PE	2080	0.21		Nil	-0.21
		Total		**4.81**		**71.35**	**66.54**
01-04-2022 (2145.5)	28-04-2022	Buy 1 CE	2000	7.74	2376.8	376.8	369.06
		Buy 1 PE	2000	21.18		Nil	-21.18
		Total		**29.54**		**376.8**	**347.88**
29-04-2022 (2300.1)	26-05-2022	Buy 1 CE	2200	16.44	2208.0	8.0	-8.4
		Buy 1 PE	2200	39.29		Nil	-39.29
		Total		**55.73**		**8**	**-47.69**

27-05-2022 (2195.85)	30-06-2022	Buy 1 CE	2220	32.01	2121.95	Nil	-32.01
		Buy 1 PE	2220	0.27		98.05	97.78
Total				**32.28**		**98.05**	**65.77**
01-07-2022 (2174.35)	28-07-2022	Buy 1 CE	2140	14.51	2180.8	40.8	26.29
		Buy 1 PE	2140	0.09		Nil	-0.09
Total				**14.60**		**40.8**	**26.20**

The total premium paid for transactions shown in the Table no.1 is Rs. 848.7 and the net payoff is Rs. 687.15

Table No.2
Short Straddle for ACC

(In Rupees)

Date of transaction (Spot price)	Date of expiration	Transaction	Strike price	Premium paid	Closing price of the stock on date of expiration	Pay off	Net Payoff
01-01-2022 (2284.6)	27-01-2022	Sell 1 CE	2100	1.78	2167.7	-67.7	-65.92
		Sell 1 PE	2100	6.67		Nil	6.67
Total				**8.45**		**-67.7**	**-59.25**
28-01-2022 (2306.55)	24-02-2022	Sell 1 CE	2200	4.45	2014.0	Nil	-4.45
		Sell 1 PE	2200	12.65		-186	-173.65
Total				**17.1**		**-186**	**-169.20**
25-02-2022 (2067.75)	31-03-2022	Sell 1 CE	2080	4.6	2151.35	-71.35	-66.75
		Sell 1 PE	2080	0.21		Nil	0.21
Total				**4.81**		**-71.35**	**-66.54**
01-04-2022 (2145.5)	28-04-2022	Sell 1 CE	2000	7.74	2376.8	-376.8	-369.06
		Sell 1 PE	2000	21.18		Nil	21.18
Total				**29.54**		**-376.8**	**-347.88**
29-04-2022 (2300.1)	26-05-2022	Sell 1 CE	2200	16.44	2208.0	-8.0	8.4
		Sell 1 PE	2200	39.29		Nil	39.29
Total				**55.73**		**-8**	**47.69**
27-05-2022 (2195.85)	30-06-2022	Sell 1 CE	2220	32.01	2121.95	Nil	32.01
		Sell 1 PE	2220	0.27		-98.05	-97.78
Total				**32.28**		**-98.05**	**-65.77**
01-07-2022 (2174.35)	28-07-2022	Sell 1 CE	2140	14.51	2180.8	-40.8	-26.29
		Sell 1 PE	2140	0.09		Nil	0.09
Total				**14.60**		**-40.8**	**-26.20**

The total premium received for transactions shown in the Table no.2 is Rs. -848.7 and the net payoff is Rs. -687.15

Table No.3
Long Strangle for ACC

(In Rupees)

Date of transaction (Spot price)	Date of expiration	Transaction	Strike price	Premium paid	Closing price of the stock on date of expiration	Pay off	Net Payoff
01-01-2022 (2284.6)	27-01-2022	Buy 1 OTMCE	2100	1.78	2167.7	67.7	65.92
		Buy 1OTM PE	2000	2.12		Nil	-2.12
Total						**67.7**	**63.65**
28-01-2022 (2306.55)	24-02-2022	Buy 1 OTMCE	2200	4.45	2014.0	Nil	-4.45
		Buy 1OTM PE	2100	19.17		186	166.83
Total						**186**	**162.38**
25-02-2022 (2067.75)	31-03-2022	Buy 1 OTMCE	2080	4.6	2151.35	71.35	66.75
		Buy 1OTM PE	2000	18.37		Nil	-18.37
Total						**71.35**	**48.38**
01-04-2022 (2145.5)	28-04-2022	Buy 1 OTMCE	2000	7.74	2376.8	376.8	369.06
		Buy 1OTM PE	1900	4.58		Nil	-4.58
Total						**376.8**	**364.48**
29-04-2022 (2300.1)	26-05-2022	Buy 1 OTMCE	2200	16.44	2208.0	Nil	-16.44
		Buy 1OTM PE	2100	10.29		108	97.71
Total						**108**	**81.27**
27-05-2022 (2195.85)	30-06-2022	Buy 1 OTMCE	2220	32.01	2121.95	Nil	-32.01
		Buy 1OTM PE	2200	66.37		78.05	11.68
Total						**78.05**	**20.33**
01-07-2022 (2174.35)	28-07-2022	Buy1 OTMCE	2140	14.51	2180.8	40.8	26.29
		Buy1OTM PE	2100	17.24		Nil	-17.24
Total						**40.8**	**9.05**

The total premium paid for transactions shown in the Table no.3 is Rs.928.7 and the net payoff is Rs. 749.54

Table No.4
Short Strangle for ACC

(In Rupees)

Date of transaction (Spot price)	Date of expiration	Transaction	Strike price	Premium paid	Closing price of the stock on date of expiration	Pay off	Net Payoff
01-01-2022 (2284.6)	27-01-2022	Sell 1 OTMCE	2100	1.78	2167.7	-67.7	-65.92
		Sell1OTM PE	2000	2.12		Nil	2.12
Total						**-67.7**	**-63.65**
28-01-2022 (2306.55)	24-02-2022	Sell 1 OTMCE	2200	4.45	2014.0	Nil	4.45
		Sell 1OTM PE	2100	19.17		-186	-166.83
Total						**-186**	**-162.38**
25-02-2022 (2067.75)	31-03-2022	Sell 1 OTMCE	2080	4.6	2151.35	-71.35	-66.75
		Sell 1OTM PE	2000	18.37		Nil	18.37
Total						**-71.35**	**-48.38**
01-04-2022 (2145.5)	28-04-2022	Sell 1 OTMCE	2000	7.74	2376.8	-376.8	-369.06
		Sell 1OTM PE	1900	4.58		Nil	4.58
Total						**-376.8**	**-364.48**
29-04-2022 (2300.1)	26-05-2022	Sell 1 OTMCE	2200	16.44	2208.0	Nil	16.44
		Sell 1OTM PE	2100	10.29		-108	-97.71
Total						**-108**	**-81.27**
27-05-2022 (2195.85)	30-06-2022		2220	32.01	2121.95	Nil	32.01
		Sell 1 OTMCE	2200	66.37		-78.05	-11.68
Sell 1OTM PE						**-78.05**	**-20.33**
01-07-2022 (2174.35)	28-07-2022	Total	2140	14.51	2180.8	-40.8	-26.29
		Sell 1 OTMCE	2100	17.24		Nil	17.24
Sell 1OTM PE						**-40.8**	**-9.05**

The total premium received for transactions shown in the Table no.4 is Rs. -928.7 and the net payoff is Rs. -749.54

Table 5 - Glimpse of Profitability of Options Trading Strategies of ACC

Strategy	Payoff (In Rs.)	Net Payoff (In Rs.)
Long Straddle	848.7	687.15
Short Straddle	-848.7	-687.15
Long Strangle	928.7	749.54
Short Strangle	-928.7	-749.54

It can be inferred from the above table that Long Strangle is the better strategies than Short Strangle. Two stocks have yielded profit under Long Straddle Strategies.

Findings

- The study findings shows that one can profit by trading based on option trading strategies.
- Long strangle strategies have yielded positive payoff
- Short strangle has shown losses
- Short straddle has shown losses.
- ACC has shown high profits in long strangle and less in short strangles.

Suggestions

- The study analysis indicates that options are not highly risky.
- It is advisable to trade based on option trading strategies to have decent return on investment.
- Based on the payoff of various strategies it can be said that one can make profit by using option trading strategies meant for volatile market condition.

Conclusion

Forward, Future, Options, Swaps are the products of financial derivatives. Many investors are familiar with the cash segment of stock market. But, the awareness about derivatives is relatively very less. Investment in options is option requires lot of knowledge of the market and ability to predict the market movement. Good number of options trading strategies is available for bullish, bearish and volatile market situations. Many investors do not trade in the options market by using the options trading strategies. They trade based on trading calls received from the broking firms. The study has proved that all strategies may not work all the times. Based on the analysis of the select strategies it is advised to use Long strategies during volatile market conditions.

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