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# Options Trading Strategies - A Guide for New Investors

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### ABSTRACT

This research paper reveals the various aspects of option trading strategies with clarity. Also explored the various possibilities we get in option trading. If option trading does not turn out in favor of the trader then he can know their downside risk which is the beauty of these options strategies. This paper shows the theoretical and practical framework of option trading strategies. These option strategies represent a combination of long and short positions for both calls and puts. The purpose of this study is to spread awareness among options traders. It is an important trading and investment tool in the derivatives market.

Keywords: Option Strategy, Derivatives, Long term & Short term position.

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### INTRODUCTION

he principle of financial management is adapting itself to meet the changing situation and challenges of the environment. Many new models and concepts have been developed in the field of financial management during the last few decades. New tools and techniques have been developed for better financial analysis and risk management. In recent times, derivatives have emerged as an effective tool of risk management by traders and corporate managers. Traders and investors in both capital markets and money markets are always exposed to the risk of fluctuations in securities prices, interest rates, or foreign exchange rates. Derivatives provide different traders with a risk hedging mechanism in different ways. [1].

Options are one of the most useful and robust tools in the derivatives market and It is used for trading, arbitrage, hedging and to introduce new financial instruments to traders. An option is an agreement between the two sides that gives a buyer the right to buy or sell an underlying asset or a certain asset at a certain price within a preset period [2]. An option is a financial gizmo that refers to an agreement sold by one party (the option seller) to another party (the option buyer). The agreement gives the right but does not provide buyers a commitment to buy or **Corresponding Author :** Hemraj Kawadkar, S.B. Jain Institute of Technology Management and Research, Nagpur, India; e-mail: hemrajkawadkar@sbjit.edu.in **How to cite this article :** Kawadkar, H., Kadu, T. (2022). Options Trading Strategies - A Guide for New Investors. *SAMRIDDHI : A Journal of Physical Sciences, Engineering and Technology*, Volume 14, Special Issue (1), 156-168. **Source of support :** Nil

Conflict of interest : None

sell but provides an obligation to sellers to sell or buy securities.

The purpose of this study is to provide traders with the possibility [3], how to improve the probability of closing a buy or sell position in the stock market with minimal profit or loss, and reduce the risk of investing in a pessimistic price progress scenario. For this motive, option strategies can be applied, the purpose of this study is to demonstrate in theory and practice how different options strategies can be created and used in situations that include long positions and short positions is open and the stock/index price is not moving in a positive manner.

### LITERATURE **R**EVIEW

Deepika Krishnan & Raju G, (2018) "Performance analysis of volatile strategy under Indian options

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market" describe Options trading strategies are practise to curtail our risk and increase the gain. options strategies consist of long and short position. The trader must thoroughly scrutiny the market to recognize a suitable strategy, which can help you in the high labile market. Option strategies are adopted to diminish risk during highly labile market. The high volatility in the markets results in high payouts on these strategies, due to which the National Stock Exchange in India attempts to normalize the notions of strangle strategy and straddle strategy. According to expert point of view, straddle and strangle is the most qualified volatility strategy in options market. Therefore, a complexity increases, which strategy gives more returns. Therefore, the evaluation is performed using the Sharperatio, Treynor ratio and Jensen's alpha ratio. The study shows that, when market unpredictability is high, it is superior to use a strangle strategy. Therefore, traders should examine the market and then determine which strategies are suitable. [4].

Atheetha S, Simran Mondal, Dhanusha N and Raghunandan H J (2019) "Options Trading Strategy: A quantitative study from an Investor's Pov". This research aims to analysis unrevealed trait in the trading of options and finding technique to increase profits. In this research, they study options pricing, simple averaging method, timing risk, stop loss strategies, speculation and monthly trends. The expansion and opportunities in the derivatives space have been unfounded. That is the only drawback of this study. This analysis helps to demostrate that by using a simple averaging method and timing risk, an informed trader can enhance profits in the options market. usually in the options market, the trader loses out on the profit by stopping for the expiry date of the option. This research paper is tackle to address such hitch of trading in options for a small-scale trader with little investment [5].

Shalini H S, R. Duraipandian (2014) "Analysis of option trading strategies as an effective financial engineering tool- This study examines the use of various options trading strategies as a powerful tool in financial engineering, used as a powerful machanism for risk management in optimistic and pessimistic markets. Financial engineering influences financial policy and reduces the potential for investment, product growth and unexpected negative outcomes. From the perspective of financial markets, the phrase "financial engineering" has been applied to explain the observation of empirically collected data from financial markets and to allow the use of financial engineering instruments and methods for financial engineers. In this study, they have discussed about Arbitraging, Hedging, Speculation, Option Spread, Butterfly Spread, time spread or calender Spread, Straddles, Straps/Strips strategies. Financial engineering means to design, development, execution, tools innovative financial mechanisms, and drafting for creative solutions. [6].

Pallavi and Raju (2013), "Operational strategies and performance of options trading in India". This study explains the foundations of the derivatives market and how traders can manage their portfolio risk with the help of the options they have mentioned here. Prior to the parley of options strategies for trading, they have explained what an option derivative is, its sorts and how it can be used in the options derivative market. Then they discussed various options strategies like long call, long put, short call, short put, straddle etc which are very effective for investors who have market awareness about price action. They have used data from derivatives trading, the development of index and stock options trading and agreements for the period 2001 to 2012 to analyze the performance of options in derivatives trading and how the strategies can be used by divergent traders, Which they have explained here. [7].

## OBJECTIVES

- 1. To study about different option strategies of option derivatives market.
- 2. To know the outcome of optimal option strategies.
- 3. To know how option strategies are helpful to the new beginners.

## **RESEARCH METHODOLOGY**

The study on the topic of Option Trading Strategies -A Guide for Newly Investors is based exclusively on secondary data taken from various articles, newspapers, books, magazines, bulletins and reports issued by NSE.

## **OPTION STRATEGIES**

An option is a agreement between two sides that allows a buyer the right to buy or sell an underlying asset or specific assets at a definite price within a predetermined period of time. "Option is a financial derivative that refers a agreement sold by one party (option seller) to another party (option buyer) [8]. The agreement gives the right, but does not provide obligation to buy (call) or sell (put) a security", This is the glossary of options derivative.

#### Strategy 1: Long Call (Buy Call Option)

Long Call options are financial derivatives agreement that give rights to a call option buyer, but not a commitment to procure an underlying asset (stocks or index) at a defined price within a defined time period. A stock or index is called an underlying asset. The defined price means exercise price and defined time means the time till expiry or maturity. This strategy involves a single position to purchase call options either At-The-Money, Out of-The-Money, In-The-Money in option chain.

When to use: when trader view is bullish about a particular stock or index and anticipates the market to grow in the near future, he uses a long call strategy.

Risk or loss: Finite to the premium paid.

Gain or profit: Infinite.

Breakeven: Exercise price + premium paid by call option buyer.

Let consider the following case for better understanding- Mr. Nelson's paid a premium of Rs. 5 per share for 6-month call option agreement of the Apollo Ltd. At the time of procure, Apollo Ltd. was trading at Rs.59 per share & the exercise price of the call option was 58.

Strategy : Long Call Option		
	Current Share Price	5 <b>9</b>
Call Option	Exercise Price (Rs.)	58
Nelson's Pays	Premium Paid (Rs.)	5
	BEP (Exercise Price + Premium)	63

Table-1: Long Call Option

#### Table-2: Long Call Option

The Payoff Catalogue:		
If The Share Price	Net Payoff Of Long	
Closes At	Call Option (Rs.)	
54	-5	
56	-5	
58	-5	
63	0	
65	2	
67	4	
68	5	



Figure 1: Long Call Option

#### Strategy 2: Short / Write Call (Sell Call Option)

Call option writer collect a premium in exchange for giving the buyer the right to buy and call option writer is obliged to sell the underlying asset (stock or index) at an agreed price within an agreed period of time. The luck of the call writer and option buyer moves in exactly the opposite direction. If the option buyer makes a profit, the call writer will suffer a loss and vice versa. This strategy involves a single position to short / sell call options either In-The-Money, At-The-Money or Out of-The-Money (ITM, ATM or OTM).

When to use: when trader view is very pessimistic about particular stock or index and anticipates the market to decline in the near future, he uses a short call strategy.

Risk or loss: Infinite.

Gain or Reward: Finite to the amount of premium gathered.

Breakeven: Exercise price + premium gathered.

Case: Mr. Nelson's is pessimistic about nifty and feels that it falls soon. He short a call option at an exercise price of Rs. 2640 at a premium of Rs. 160 and actually the nifty is at Rs. 2694. If the nifty remains at Rs. 2640 or beneath, the buyer of the call will not execute, the call option and Mr. Nelson will conserve whole premium of Rs. 160.

Strategy : Short Call Option			
	Current Share Price	2694	
Call Option Sell	Exercise Price (Rs.)	2640	
Nelson's received	Premium Received (Rs.)		
	BEP (Strike Price + Premium)	2800	

The Payoff Catalogue:		
Nifty closes on	Net payoff of short	
expiry at	call option (Rs.)	
2400	160	
2500	160	
2700	100	
2800	0	
2900	- 100	
3000	-200	

Table-4: Short Call Option



Figure 2: Short Call Option

## Strategy 3: Long Put (Buy Put Option)

Long put options are financial contracts that give rights to a put option buyer, but no commitment to vend an underlying asset (stock or index) at a predetermined price within a specific time period. In This strategy we can take position ITM, ATM or OTM

When to use: when trader view is pessimistic about particular stock or index and anticipates the market to fall in the near future, he uses a long put strategy.

Risk: Finite to the Premium debited.

Reward or profit: Infinite.

Breakeven: Exercise Price – Premium Paid by put option buyer.

Let consider the following case - Mr. Nelson's is pessimistic on Nifty on 29<sup>th</sup> November, when the Nifty is at 2694. He long a Put option with a exercise price Rs. 2640 at a premium of Rs. 30, expiring on 31st December. If the Nifty goes beneath 2610, Mr. Nelson's will make a profit on executing the option. In case the Nifty exceeding 2640, he can forgot the option (it will cessation in vain) with a utmost loss of the premium.

Strategy : Long Put Option		
	Current Share Price	2694
Put Option	Exercise Price (Rs.)	2640
Mr. Nelson's	Premium (Rs.)	30
	BEP (Strike Price - Premium)	2610

#### Table-6: Long Put Option

The Payoff Catalogue:		
On expiry Nifty	Net Amt. of Long	
closes at	Put	
2300	248	
2400	148	
2500	48	
2548	0	
2600	-52	
2700	-52	
2800	-52	



Figure 3: Long Put Option

### Strategy 4: Short Put (Sell Put Option)

The Put Option Writer collects a premium in exchange for giving the buyer the authority to sell and the Put Option Seller is obliged to procure the underlying asset (stock or index) at the agreed price within the agreed time. To sell a put option you will have to deposit margin. When you expect the market to remain flat or ahead the exercise price, you can sell the put option in that case. This strategy involves a single position to short / sell put options either At-The-Money, In-The-Money or Out of-The-Money.

When to use: when trader view is very bullish about a particular stock or index and anticipates the market to rise in the near future, he uses a short put strategy.

Risk or loss: Infinite.

# *Reward or profit: Finite to the Premium credited/Got. Breakeven: Exercise Price – Premium gathered from put buyer.*

Let consider the following case - Mr. Nelson's is positive on nifty, when it trades at 3900. He short a put option at an exercise price of Rs. 3800 at a premium of Rs. 171 expiring on 30<sup>th</sup> November. If the nifty index goes beyond 3800, he will get the amount of premium as the put purchaser won't exercise his option. Suppose, the nifty decrease under 3800 then put purchaser will execute the option and the Mr. Nelson's will commence squandering money. If the nifty close beneath 3629 which is the breakeven point, Mr. Nelson's will squander the premium which he received from the put buyer.

#### Table-7: Short Put Option

Strategy : Short Put Option		
	Current Share Price	3900
Put Option	Exercise Price (Rs.)	3800
Nelson's	Premium Received (Rs.)	171
	BEP (Strike Price - Premium)	3629

#### Table-8: Short Put Option

The Pay Off Catalogue:		
On Expiry If Nifty Closes At	Net Amount Of Short Put Option (Rs.)	
3300	-329	
3400	-229	
3500	-129	
3600	-29	
3629	0	
3800	171	
3900	171	
4000	171	



Figure 4: Short Put Option

#### Strategy 5: Long Straddle Strategy (Buy Straddle)

For a long straddle you will need to buy an ATM call and put option simultaneously. Options should be related to the alike underlying asset, alike exercise price and equal cessation period. Traders can use a long straddle before a press release, such as the issuance of earnings, fed action, the passage of legislation, or the outcome of an election. They believe that the market is looking for such an event, where the business is unsure. When an event occurs, all of that suppressed boom or recession is exposed, reasons to move the underlying asset faster. Therefore, a long straddle is a sensible strategy to make a profit from any outcome. Of course, since the outcome of the genuine affair is mysterious, the trader does not know whether there is a boom or a downturn. Therefore, a long straddle is a wise strategy to benefit from any outcome. But akin any investment strategy, a long straddle also has its own obstacles.

When to use: when trader estimates that the underlying asset (stock / index) will more volatile in the near term or wide fluctuation in price. Not clear about the direction.

Risk or loss: finite to the premium paid.

Gain or profit: Infinite.

Breakeven:

- 1) Higher BEP = exercise price + net premium paid by call buyer.
- 2) Lower BEP = exercise price net premium paid by put buyer.

Let consider the following case - Nifty is presently trading @ 5400. Long straddle created by Mr. Nelson's by purchasing call and put option at exercise price of 5400 and having premium of 69 and 31 respectively. Net premium paid is Rs. 100.

Strategy : Straddle (Long Call + Put)			
	Current Nifty Price	5400	
Call + Put	Exercise Price (Rs.)	5400	
Nelson's Pav	Premium paid (Rs.) (Call +	100	
	Put) (69+31)	100	
BEP (Exercise Price +		5500	
	Premium) For Call	5500	
	BEP (Exercise Price – Total		
	Premium) For Put	5500	

#### Table-9: Long Straddle Strategy

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The Pay Off Catalogue :			
On Expiry If Nifty Closes At	Net Amt. of long Call	Net Amt. of long Put	Net Payoff (Rs.)
5000	-69	369	300
5100	-69	269	200
5200	-69	169	100
5300	-69	69	0
5400	-69	-31	-100
5500	31	-31	0
5600	131	-31	100
5700	231	-31	200

Table-10: Long Straddle Strategy



Figure 5: Long Straddle Strategy

## Strategy 6: Short Straddle Strategy (Sell Straddle)

For short straddle you have to short ATM call and put option simultaneously. Options must be related to the alike underlying asset, alike exercise price and equal cessation period. This applies when the trader is confident that the underlying asset will not move strongly upward or downward.

When to use: when trader is neutral about the direction of the market and anticipates little volatility in the stock or index.

Risk or loss: Infinite

Gain or profit: Finite to the premium got.

Breakeven:

1) Higher BEP = exercise price + net premium received from call buyer.

*2)* Lower BEP = strike price - net premium received from put buyer.

Let consider the following case - Nifty is presently trading @ 5400. Mr. Nelson's formed straddle by vending call and put option at exercise price of 5400 and having premium of 69 and 31 respectively. Net premium received is Rs. 100.

 Table-11: Short Straddle Strategy

Strategy : Straddle (Sell Call + Put)			
	Current Nifty Price 5400		
Call + Put	Exercise Price (Rs.)	5400	
Nelson's Receive	Premium (Rs.) (Call + Put) Received	100	
	BEP (Strike Price + Total Premium) Of Short Call	5500	
	BEP (Strike Price - Total Premium) Of Short Put	5300	

Table-12: Short Straddle Strategies

The Pay Off Catalogue:			
On Expiry If Nifty Closes At	Net Amt. of Short Call	Net Amt. of Short Put	Net Payoff (Rs.)
5000	69	-369	-300
5100	69	-269	-200
5200	69	-169	-100
5300	69	-69	0
5400	69	35	100
5500	-31	31	0
5600	-131	31	-100
5700	-231	31	-200



Figure 6 : Short Straddle Strategy

### Strategy 7: Long Strangle Strategy (Buy Strangle)

Long strangle made of purchase call with high exercise price and purchase put with low exercise price. Both options must have the alike underlying asset and the equal cessation date, but at different exercise prices. Gain is confirmed when the underlying asset (like stock or index) rises beyond the upper break-even point or remains below the lower break-even point. In this strategy, traders buy 1 out-of-the-money (OTM) call option and buy 1 out of money (OTM) put option in the equal period at different exercise price on the same stock to minimize the cost of premium. But the exercise price of both options should not be too far from the spot price/ current price. When you are unaware of the direction of the underlying (stock / index), but expect high volatility in the near term. The objective of this strategy is to detract the cost of strategy.

When to use: more or wide fluctuation in the market. Not sure about direction. (May be down or upward side).

Risk or loss: Finite to the amount of premium paid.

Gain or profit: Infinite.

Breakeven:

*a)* Higher BEP = exercise price + net premium paid by call buyer.

# *b)* Lower BEP = exercise price - net premium paid by put buyer.

Let consider the following case - Suppose nifty is at 6000 in October. An trader, Mr. Nelson's takes a long position by procuring nifty put and nifty call options at an exercise price of 5800 and 6200, the premium for nifty put and call option is Rs. 23 and Rs. 43 respectively. The net debit from this trade is Rs. 66.

Table-13: Long Strangle Strategy

Strategy: Strangle (Buy Call + Put )			
	Current nifty price	6000	
Buy call	Strike price (Rs.)	6200	
Nelson's Pay	Premium (Rs.)	43	
	BEP f or call option (43 + 23) = 66	6266	
Buy put	Strike price (Rs.)	5800	
Nelson's pay	Premium (Rs.)	23	
	BEP for put option (43 + 23) = 66	5734	

Table-14 : Long Strangle Strategy

The Pay Off Catalogue :			
On Expiry If Nifty Closes At	Net Amt. Of Long Put	Net Amt. Of Long Call	Net Payoff (Rs.)
5600	177	-43	134
5700	77	-43	34
5734	43	-43	0
5800	-23	-43	-66
5900	-23	-43	-66
6000	-23	-43	-66
6100	-23	-43	-66
6200	-23	-43	-66
6266	-23	23	0
6300	-23	57	34
6400	-23	157	134



Figure 7: Long Strangle Strategy

#### Strategy 8: Short Strangle Strategy (Sell Strangle)

A short strangle consists of a short call with a high strike price and a short put with a low strike. Both options have equal underlying asset (like stock or index) and equal cessation date, but have dissimilar exercise prices. Short strangle (or sell strangle) is a neutral strategy in which sell 1 out-of-the-money (OTM) put options and sell 1 out-of-the-money (OTM) call options that relate to the alike underlying asset (like stock or index) and have the equal cessation period But have dissimilar exercise prices.

When to use: when trader ancipates that the stock / index will be less volatile or range bound in future, then trader can use this strategy.

Risk or loss: Infinite.

Reward or profit: Finite to the premium received.

Breakeven: a) higher BEP for call = exercise price + premium credited from the call buyer.

*b)* Lower BEP for put = exercise price - premium credited from put buyer.

Let consider the following case - Suppose nifty is at 6000 in October. An trader, Mr. Nelson's takes a short strangle position by shorting nifty put and nifty call options at an exercise price of Rs. 5800 and Rs. 6200, the premium received from nifty put and call options are Rs. 23 and Rs. 41 respectively. The net credit from this trade is Rs.64.

	5 55		
Strategy : Strangle (Sell Call + Put)			
	Current Nifty Price	6000	
Sell Call	Exercise Price (Rs.)	6200	
Nelson's Receive	Premium Received	41	
	BEP For Call Option	6264	
Sell Put	Exercise Price (Rs.)	5800	
Nelson's Receive	Premium Received	23	
	BEP For Put Option	5736	

Table-15: Short Strangle Strategy

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Tuble To: Short strangle strategy				
	The Pay Off Catalogue:			
On Expiry If Nifty Closes At	Net Amount Of Short Put	Net Amount Of Short Call	Net Payoff (Rs.)	
5600	-177	41	-136	
5700	-77	41	-36	
5736	-41	41	0	
5800	23	41	64	
5900	23	41	64	
6000	23	41	64	
6100	23	41	64	
6200	23	41	64	
6264	23	-23	0	
6300	23	-59	-36	
6400	23	-159	-136	

#### Table-16: Short Strangle Strategy



Figure 8: Short Strangle Strategy

### Strategy 9: Bull Call Spread Strategy

A bull call spread is composed of a buy call with a lower exercise price and a sell call with a higher exercise price, but both calls have the alike underlying asset (like stock or index) and the equal cessation period. This strategy is created by purchasing an "inthe-money call option" (lower exercise price) and selling an "out-of- the-money call option" (higher exercise price).

When to use: when the investor is moderately bullish about the underlying asset (stock or index).

Risk or loss: Finite to the premium debited.

*Gain or profit: Finite. (Gap or value between two exercise prices – net premium debited).* 

Breakeven: strike price of call purchaser + net premium paid.

Let consider the following case - Mr. Nelson's long a nifty call with an exercise price of 6100 at a premium

of Rs. 162 and he shorts a nifty call option with a exercise price of 6400 at a premium of Rs. 31. The net payment here is Rs. 131 which is also his utmost loss. Current nifty traded at Rs. 6191.

Strategy : Bull Call Spread Strategy			
	Current Nifty Price	6191	
Buy 1 Call	Exercise Price (Rs.)	6100	
Mr. Nelson's	Premium Paid (Rs.)	162	
Рау			
Sell 1 Call	Exercise Price (Rs.)	6400	
Mr. Nelson's	Premium Received (Rs.)	31	
Receive			
	Total Premium Paid (162 – 31)	131	

Table-18: Bull Call Spread Strategy

The Pay Off Catalogue:			
On Expiry If Nifty Closes At	Net Amount Of Long Call	Net Amount Of Short Call	Net Payoff (Rs.)
6000	-162	31	-131
6100	-162	31	-131
6200	-62	31	-31
6231	-31	31	0
6300	38	31	69
6400	138	31	169
6500	238	-69	169
6600	338	-169	169
6700	438	-269	169



Figure 9: Bull Call Spread Strategy

## Strategy 10: Bull Put Spread Strategy

A bull put spread has a short put with a high exercise price and a long put with a low strike price, but both options have the same underlying asset (stock or index) and the same cessation date. Bull put spread is used to obtain the net amount. You should long 1 OTM (out of the money) put option and short / write 1 ITM (in the money) put option.

When to use: when investor is optimistic about the underlying asset. This strategy is useful when you forecast that the price of a particular underlying will rise, move sideways or fall marginally.

Risk or loss: Finite. When the underlying drops below the low strike level, the investor begins to lose his maximum money. It means (5800) or below. (Gap or value between two exercise prices – net premium credited).

Reward or profit: Finite to the net premium credited / received. When the underlying rises above the level of higher exercise price, that time investor begin to earn money.

# Breakeven: Exercise price of sell put - Net premium credited.

Let consider the following case - Mr. Nelson's short a nifty put option with a Exercise price of 6200 at a premium of Rs. 23 and long further OTM nifty put option with a strike price of 5800 at a premium of Rs.5 when the presently nifty is at 6191, with both options cessation on 30<sup>th</sup> April.

Strategy : Bull Put Spread Strategy			
	Current Nifty Price 6191		
Buy 1 Put	Strike Price	5800	
Mr.Nelson's pay	Premium Paid	5	
Sell 1 put	Strike price	6200	
Mr.Nelson's Receive	Premium Received	23	
	Total Pre. Received	18	

Table-19 : Bull Put Spread Strategy

Table-20: Bull Put Spread Strategy

The Net Pay Off			
On Expiry If	Net Amt.	Net Amount	Net Payoff
Nifty Closes At	Of Long Put	Of Put Sell	(Rs.)
5600	195	-577	-382
5700	95	-477	-382
5800	-5	-377	-382
5900	-5	-277	-282
6000	-5	-177	-182
6100	-5	-77	-82
6182	-5	5	0
6200	-5	23	18
6300	-5	23	18
6400	-5	23	18



Figure 10: Bull Put Spread Strategy

### Strategy 11: Bear Call Spread Strategy

A bear call spread consists of a short call with a low exercise price and a long call with a high exercise price but both calls have the same underlying asset (like stock or index) and the same cessation date. Bear call spread is a strategy that receives an option premium and simultaneously finite risk. A bear call spread is created by purchasing an OTM call option" (at higher exercise price) and shorting / selling an ITM call options (at lower exercise price).

When to use: Adopt a bear call spread when investor is moderately pessimistic or neutral about the market or underlying asset.

*Risk or loss: finite. (Gap or Value between the exercise price of long call and short call – net premium credited).* 

Gain or profit: finite to the net premium credited.

Breakeven: exercise price of short call + net premium credited.

Let consider the following case - Mr. Nelson's is pessimistic on nifty. Mr. Nelson's short ITM call option at an exercise price of 5300 at a premium of Rs.152 and purchase an OTM call option at an exercise price of 5500 with premium of Rs. 51 and presently nifty at 5388.

Strategy : Bear Call Spread Strategy			
	Current Nifty Price	5388	
Buy 1 Call	Exercise Price (Rs.)	5500	
Nelson's Pay	Premium Paid (Rs.)	51	
Sell 1 Call	Exercise Price (Rs.)	5300	
Nelson's Receive	Premium Received	152	
	Total Premium Received (152 – 51)	101	

# Table-21: Bear Call Spread Strategy

		•	05		
The Pay Off Catalogue:					
On Expiry If	On Expiry If Net Amt. Net Net Payoff				
Nifty Closes	Off Of	Amount Of	(Rs.)		
At	Long Call	Short Call			
5200	-51	152	101		
5300	-51	152	101		
5400	-51	52	1		
5401	-51	51	0		
5500	-51	-48	-99		
5600	49	-148	-99		
5700	149	-248	-99		
3100	249	-348	-99		

Table-22: Bear Call Spread Strategy



Figure 11: Bear Call Spread Strategy

## Strategy 12: Bear Put Spread Strategy

A bear put spread formed by a long put with a higher exercise value and a short put with a lower exercise value, but both have the alike underlying asset (stock or index) and the alike cessation date. Bear Put Spread is designed for net payment. A bear put spread is created by purchasing an ITM put option (at higher exercise price) and shorting OTM put option (at lower strike price) with the alike underlying asset and the alike expiration period.

When to use: when investor is reasonably pessimistic about the markets or underlying asset and anticipate price drop in the near term.

Risk or loss: finite to the net premium debited.

Gain: finite. (Gap/Value between the exercise price of long and short put – net premium debited.)

Breakeven: exercise price of put buy - net premium debited.

Let consider the following case - Nifty is currently at 5388. Mr. Nelson's anticipates nifty will fall. He long one nifty ITM put at an exercise price of 5500 at a

premium of Rs.129 and short one nifty OTM put at an exercise price of 5300 at a premium Rs. 57.

Table-23:	Bear	Put	Spread	Strategy
				55

Strategy : Bear Put Spread Strategy					
	Current Nifty Price 5388				
Buy 1 Put	Buy 1 Put Strike Price (Rs.)				
Nelson's Pay Premium Paid (Rs.) 12					
Sell 1 Put Exercise Price (Rs.)		5300			
Nelson's Rece.	Premium Received	57			
	Total Premium Paid	70			
	(129 – 57 )	12			

Table-24: Bear Put Spread Strategy

The Pay Off Catalogue:				
On Expiry If Nifty Closes At	Net Amount Of Long Put	Net Amount Of Short Put	Net Payoff (Rs.)	
5000	371	-243	128	
5100	271	-143	128	
5200	171	-43	128	
5300	71	57	128	
5400	-29	57	28	
5428	-57	57	0	
5500	-129	57	-72	
5600	-129	57	-72	
5700	-129	57	-72	



Figure 12: Bear Put Spread Strategy

## Strategy 13: Long Call Butterfly

It is a three-split strategy formed by purchasing call with a lower exercise price, shorting two calls at a higher price, and purchasing a call an even more upper level exercise price. All options have the equal cessation period, and exercise prices are the same distance. In this strategy investor sells/ writes 2 ATM calls, buy 1 ITM call, and buy 1 OTM call option (there must be analogy between exercise prices). If the underlying asset (stock or index) value rises or decreases too much, the loss will occur.

When to use: long call butterfly is abide when the investor is anticipating little volatile or immobility in the underlying assets.

Risk or loss: finite to the net premium debited.

*Reward or Gain: Gap between the lowest and center exercise prices – net premium paid/ debited.* 

Breakeven: a) upper breakeven point = high exercise price of call buy - net premium debited.

*b)* Lower breakeven point = low exercise price of call buy + net premium debited.

Let consider the following case - Nifty is currently at 6200. Mr. Nelson's anticipates minor movement in nifty. Mr. Nelson's short /sell 2 ATM nifty call options at an exercise price of 6200 at a premium of Rs. 98 each. Long 1 ITM nifty call option at an exercise price of 6100 at a premium of Rs. 142 and long 1 OTM nifty call option with an exercise price of 6300 at a premium of Rs. 61.

Table-25: Long Call Butterfly Strategy

Strategy : Long Call Butterfly				
	Current Nifty Price	6200		
Short 2 ATM Call	Exercise Price (Rs.)	6200		
Mr. Nelson's	Premium Received	196		
Receive	( 98 ×2)			
Long ITM Call	Exercise Price (Rs.)	6100		
Mr. Nelson's Pay	Premium Paid (Rs.)	142		
Long 1 OTM Call	Exercise Price (Rs.)	6300		
Mr. Nelson's Pay	Premium Paid (Rs.)	61		
	Total Premium Paid	7		
	( 196 - 142 – 61 )			
	BEP (Upper)	6293		
	BEP (Lower)	6107		

Tab	le-26:	Long	Call	Butterfly	Strategy

The Pay Off Catalogue:					
On Expiry Net Amount Of 2 Net Net Net					
If Nifty	ATM Short Call	Amount	Amount	Payoff	
Closes		Of 1 ITM	Of 1 OTM	(Rs.)	
At		Long Call	Long Call		
5700	196	-142	-61	-7	
5800	196	-142	-61	-7	
5900	196	-142	-61	-7	
6000	196	-142	-61	-7	
6100	196	-142	-61	-7	
6107	196	-135	-61	0	
6200	196	-42	-61	93	

6293	( 93*2 =186) (196 – 186) = 10	51	-61	0
3300	(100 *2 = 200) ( 196 – 200) =-4	58	-61	-7
3400	( 200 *2 = 400) ( 196 - 400) = - 204	158	39	-7
3500	( 300 *2 = 600) ( 196 - 600) = -404	258	139	-7
3600	(400 *2 = 800) ( 196 - 800) = -604	358	239	-7
3700	(500 * 2 =1000) (196 - 1000) = -804	458	339	-7



Figure 13: Long Call Butterfly Strategy

#### Strategy 14: Short Call Butterfly

It is a three-split strategy constructed by shorting/ writing calls at a low exercise price, purchasing two calls with a high exercise price, and shorting call an even more upper level exercise price. All options have the identical cessation period, and exercise prices are the same distance. The short call butterfly can be formed by shorting 1(lower strike) in-the-money call option, purchasing 2 ATM calls options and shorting 1 (higher strike) OTM call, allow the investor's to net receive, hence it is called credit strategy.

When to use: when investor unaware of the direction (bullish or bearish) of the market but expect high volatility in the underlying asset in the near term.

*Risk or loss: Gap/Value between the two exercise prices – net premium credited.* 

Gain or profit: Finite to the net premium got / credited.

Breakeven: a) upper breakeven = higher exercise price of short call - net premium credited. b) Lower breakeven = lower exercise price of short call + net premium credited.

Let consider the following case - Nifty is presently at 6200. Mr. Nelson anticipates great volatility in Nifty whatever of the direction in which the movement is, up or down. Mr. Nelson's long 2 ATM nifty call options

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at an exercise price of 6200 with a premium of Rs. 98 each, sells/writes 1 ITM nifty call option at an exercise price of 6100 with a premium of Rs. 142 and sells/ writes 1 OTM nifty call option at an exercise price of 6300 with a premium of Rs. 61. The net gain from this example is Rs. 7.

Strategy : Short Call Butterfly				
	Current Nifty Price	6200		
Long 2 ATM call	Exercise Price (Rs.)	6200		
Mr Nelson's Pay	Premium Paid (Rs.)	196		
Sell 1 ITM Call	Exercise Price (Rs.)	6100		
Mr. Nelson's Premium Received (Rs.)		1/2		
Receive		142		
Sell 1 OTM Call	Exercise Price (Rs.)	6300		
Nelson's Receive	Premium Received	61		
	Total Premium Received	7		
	(142 + 64 – 196 )	1		
	BEP (Upper)	6293		
	BEP (Lower)	6107		

#### Table-27: Short Call Butterfly Strategy

#### Table-28: Short Call Butterfly Strategy

The Pay Off Catalogue:					
On Expiry If Nifty Closes At	Net Amount Of ATM Long Call (2)	Net Amount Of ITM Short Call	Net Amount Of OTM Short Call	Net Payoff (Rs.)	
5700	-196	142	61	7	
5800	-196	142	61	7	
5900	-196	142	61	7	
6000	-196	142	61	7	
6100	-196	142	61	7	
6107	-196	135	61	0	
6200	-196	42	61	-93	
6293	(93 *2 = 186) (186 -196) =-10	-51	61	0	
6300	(100 *2 = 200) (200 - 196) = 4	-58	61	7	
6400	(200 *2 = 400) (400 - 196) = 204	-158	-39	7	
6500	(300 * 2 = 600) (600 - 196) = 404	-258	-139	7	



Figure 14: Short Call Butterfly Strategy

## FINDINGS

The wide range of strike prices and expiration dates can make it challenging for an inexperienced investor. Assess risk/reward ratio, view volatility, and consider events. Those steps can help traders to choose the right options strategy. Assess risk/reward ratio-the first step is to determine your risk-reward payoff, which must depend on your risk tolerance or risk appetite.

View volatility: implied volatility refers to how much the particular Index or Stock will fluctuate, either up or down, but does not show direction. Higher implied volatility increases the Premium and makes an option more attractive. The trader writes/shorts the option which he Thinks the volatility will not move forward and can receive that premium. Low implied Volatility refers to the cheaper option premium, which is a good option to buy if the holder seems that the particular stock will move sufficiently to swell the value of the option.

Consider events: Verify the events that could affect the underlying asset can help you determine the relevant time frame and expiration date for your options trade. You should be aware of these parameters while implementing any of the above option Strategies.

## CONCLUSION

The market is a rational person (expert), so you cannot predict the market accurately every time because the market is too broad for analysis, but options are a tool that helps traders convert their huge losses into lesser losses or profits. Trading options have advantages such as downside protection and leveraged returns, but also disadvantages, such as the need for upfront premium payments. Options can offer many possibilities for traders in the financial markets, but in order to grab them, one must know the specific ways to use this tool.

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