Option Trading Strategies For Different Market Conditions For Hedging The Portfolio And Trading For Profits

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INTRODUCTION

Derivatives are among the most complex financial instruments and also one of the most controversial. While they are as old as commerce itself, they have become prominent only in the last few decades. Their supporters say that derivatives improve risk management and increase liquidity. Their critics claim that they make markets less transparent and more prone to instability and speculation. Both sides would agree that derivatives are extremely important and have a big impact on other financial markets and the economy. So even if the average investor doesn't invest directly in derivatives, its important that he or she knows what they are.

STATEMENT OF THE PROBLEM

For most of the investors who trade in the secondary markets, the word OPTION is still a financial jargon, which they feel is beyond their reach. On the contrary, options in reality are in the reach of investors who can benefit from trading in OPTION. It's just that they need to be educated. Trading in OPTION should be well-organized approach for the purpose of which they are being used, be it for hedging or trading for profits. The study analyzes the various strategies that can be used by traders and investors to get maximum returns in the derivatives market.

OBJECTIVES OF THE STUDY

1. To analyze various types of derivatives strategies used by the investors with special reference to 'options'.
2. To identify and formulate option trading strategies for different market conditions for hedging the portfolios and trading for profits.

SCOPE OF THE STUDY

1. The study covers exchange traded derivatives with regard to speculation and trading.
2. The study covers the various option strategies built over a period of one month.

METHODOLOGY

DESIGN OF THE STUDY

- **Research Design**: Experimental Design.
- **Sampling Method**: Convenient Random Sampling.
- **Sample Size**: 10 institutional,30 retail customers and 10 dealers.
- **Strategies Considered**: 14

TOOLS OF DATA COLLECTION

1. Primary Data: Primary data is collected by interviewing the clients and staff of a selected broking firm and Live Capital Market Data.
2. Secondary Data: Secondary data is collected from Text Books, Websites, Company Brochure and financial press.

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LIMITATIONS OF THE STUDY

1. The study is limited to investors at a selected broking firm.
2. The strategies built are subject to market uncertainties and risk.
3. The suggestions made are only recommendatory in nature and are subject to market imperfections.

DERIVATIVES MARKET IN INDIA

The first step towards introduction of derivatives trading in India was the promulgation of the Securities Laws (Amendment) Ordinance, 1995, which withdrew the prohibition on options in securities. The market for derivatives, however, did not take off, as there was no regulatory framework to govern trading of derivatives. SEBI set up a 24 member committee under the Chairmanship of Dr. L. C. Gupta on November 18, 1996 to develop appropriate regulatory framework for derivatives trading in India. The committee submitted its report on March 17, 1998 prescribing necessary preconditions for introduction of derivatives trading in India. The committee recommended that derivatives should be declared as 'securities' so that regulatory framework applicable to trading of 'securities' could also govern trading of securities. The Securities Contract Regulation Act (SCRA) was amended in December 1999 to include derivatives within the ambit of 'securities' and the regulatory framework were developed for governing derivatives trading. The act also made it clear that derivatives shall be legal and valid only if such contracts are traded on a recognized stock exchange, thus precluding OTC derivatives. Derivatives trading commenced in India in June 2000 after SEBI granted the final approval to this effect in May 2001. SEBI permitted the derivative segments of two stock exchanges, NSE and BSE, and their clearing house/corporation to commence trading and settlement in approved derivatives contracts. To begin with, SEBI approved trading in index futures contracts based on S&P CNX Nifty and BSE 30(Sensex) index. This was followed by approval for trading in options based on these two indexes and options on individual securities. The trading in BSE Sensex options commenced on June 4, 2001 and the trading in options on individual securities commenced in July 2001. Futures contracts on individual stocks were launched in November 2001. The derivatives trading on NSE commenced with S&P CNX Nifty Index futures on June 12, 2000. The trading in index options commenced on June 4, 2001 and trading in options on individual securities commenced on July 2, 2001. Single stock futures were launched on November 9, 2001.The index futures and options contract on NSE are based on S&P CNX trading and settlement in derivative contracts is done in accordance with the rules, byelaws, and regulations of the respective exchanges and their clearing house/corporation duly approved by SEBI and notified in the official gazette. Foreign Institutional Investors (FIIs) are permitted to trade in all exchange traded derivative products.

OPTION TRADING STRATEGIES

Exchange traded options first began trading in the United States in 1973. Since this time, option markets worldwide have grown exponentially in size. This growth is largely due to the great flexibility options provided to the investor, flexibility not available through share investment alone. Some of the key uses for options are leverage, earning extra income, protection the value of equity positions, limiting risk and as an alternative to a direct investment in the share market. So, how can we get the most out of options? The answer is by adopting the appropriate trading strategy which suits the personal circumstances and market view. Strategies can involve combining a share investment with bought and sold calls and/or puts within the same class. There are strategies that can be used by the investor with bullish, bearish or neutral views of the market and these strategies can be designed to reflect how bullish or bearish the investor is. Option trade should not be just in dimension of price, but also in dimension of time and volatility. Option strategies can be tailored to suit the investors view on moments in all of these dimensions. The key word is 'Flexibility'.

ANALYSIS & INTERPRETATION

The exercise involved: **(i)** selection of actions to be taken **(ii)** identification of market expectation **(iii)** Profit and loss characteristics at expiry **(iv)** Simulation **(v)** Computation of effective profit/loss and **(vi)** review of the actions in the light of varying market conditions for each of the 14 trading strategies, generally adopted by the investors and dealers. The detailed exercise is enumerated below:

1) LONG CALL SPREAD

Construction: Buy a call (A). Sell call at higher strike (B). Enter when the stock price is in between the two strike prices.

Market Expectation: Market expected to be bullish. The spread has the advantage of being cheaper to establish than the purchase of a single call, as the premium received from the sold call reduces the overall cost. The spread offers a limited profit potential if the underlying rises and a limited loss if the underlying falls.

Profit And Loss Characteristics At Expiry:

Profit: Limited to the difference between the two strikes minus net premium cost. Maximum profit occurs where the underlying rises to the level of the higher strike B or above.

Loss: Limited to any initial premium paid in establishing the position. Maximum loss occurs where the underlying falls to the level of the lower strike A or below.

Break-even: Reached when the underlying is above strike A by the same amount as the net cost of establishing the position.

Simulation :Reliance Natural Resources Limited [RNRL]; Lot size: 7150; Style: American

Construction

Entry: 03rd January 2008 - Stock Price at ₹194.85;
Buy 190.00 Jan Call option @ ₹11.00; Sell 200.00 Jan Call option @ ₹ 14.00
Exit: 09th January 2008 - Stock Price at ₹ 228.70;
Sell : 190.00 Jan Call option @ ₹ 58.00; Buy 200.00 Jan Call option @ ₹ 39.00

Effective Profit/Loss

190.00 Jan Call option: Profit ₹ 47 [58.00-11.00]
200.00 Jan Call option: Loss ₹ 25 [14.00-39.00]

Net Profit: ₹ 22/share.

Profit made on using Strategy [Profit/share x Lot size]: ₹ 1,57,300.00 [22.00 x 7150]

This strategy is adopted when the market is expected to be Bullish. The call option is bought at lower strike and sold at higher strike . The spread offers a limited profit potential if the underlying rises, and a limited loss if the underlying falls.

2) SHORT CALL SPREAD

Construction: Sell a call (A); buy call at higher strike (B).

Market Expectation: Market expected to be bearish. The Short Call at A aims to take advantage of a bearish market and the premium gained affords some upside protection with a Long Call at B. The spread offers a limited profit if the underlying falls and a limited loss exposure if the underlying rises.

Profit & Loss Characteristics At Expiry:

Profit: Limited to the net premium credited. Maximum profit occurs where underlying falls to the level of the lower strike A or below.

Loss: Limited to the difference between the two strikes minus the net credit received in establishing the position. Maximum loss occurs where the underlying rises to the level of the higher strike B or above.

Break-even: Reached when the underlying is above strike price A by the same amount as the net credit of establishing the position.

Simulation : *Reliance Energy Limited [REL]*; Lot size: 550; Style: American

Construction

Entry: 11th January 2008 - Stock Price at ₹ 2485.70
Buy : 2700.00 Jan Call option @ ₹ 50.00; Sell 2500.00 Jan Call option @ ₹ 116.00
Exit: 21st January 2008 - Stock Price at ₹1764.35
Sell : 2700.00 Jan Call option @ ₹ 9.00; Buy 2500.00 Jan Call option @ ₹ 7.50

Effective Profit/Loss

2700.00 Jan Call option: Loss ₹ 41.00 [9.00-50.00]
2500.00 Jan Call option: Profit ₹ 108.50 [116.00-7.50]

❁**Net Profit:** ₹ 67.50/share

❁**Profit made on using Strategy (Profit/share x Lot size):** ₹ 37,125.00 [67.50 x 550]

This strategy is adopted when the market is expected to be Bearish. The call option is Short at higher strike and Bought at lower strike price.The spread offers a limited profit potential if the underlying falls and a limited loss if the underlying rises.

3) LONG PUT SPREAD

❁**Construction:** Buy a put (B), sell put at lower strike (A).

❁**Market Expectation:** Market expected to be bearish. The spread has the advantage of being cheaper to establish than the purchase of a single put, as the premium received from the sold put reduces the overall cost. The spread offers a limited loss exposure if the underlying rises and a limited profit if the underlying falls.

❁**Profit & Loss Characteristics At Expiry:**

❁**Profit:** Limited to the difference between the two strikes minus net premium cost. Maximum profit occurs where underlying falls to the level of the lower strike A or below.

❁**Loss:** Limited to the initial premium paid in establishing the position. Maximum loss occurs where the underlying rises to the level of the higher strike B or above.

❁**Break-even:** Reached when the underlying is below strike price B by the same amount as the net cost of establishing the position.

❁**Simulation** : Mahanagar Telephone Nigam Limited [MTNL]: Lot size: 1600; Style: American

❁**Construction**

Entry: 03rd January 2008 - Stock Price at ₹ 211.00;

Buy 190.00 Jan Put option @ ₹ 2.20; Sell 180.00 Jan Put option @ ₹ 1.10

Exit: 21st January 2008 - Stock Price at ₹ 141.00; Sell 190.00 Jan Put option @ ₹ 37.80; Buy 180.00 Jan Put option @ ₹ 20.00

❁**Effective Profit/Loss**

190.00 Jan Put option: Profit ₹ 35.00 [37.80-2.20]

180.00 Jan Put option: Loss ₹ 18.90 [1.10-20.00]

❁**Net Profit:** ₹ 16.10/share.

❁**Profit made on using Strategy (Profit/share x Lot size):** ₹ 25,760.00 [16.10 x 1600]

This strategy is adopted when the market is expected to be Bearish. The Put option is bought at lower strike and sold at higher strike as shown in the graph. The spread offers a limited loss exposure if the underlying rises and a limited profit if the underlying falls.

4) SHORT STRADDLE

❁**Construction:** Sell a put (A), sell call at same strike.

❁**Market Expectation:** Market neutral/volatility bearish. With the underlying at A and a period of low or decreasing volatility is anticipated, and the underlying is not expected to move dramatically.

❁**Profit & Loss Characteristics At Expiry:**

❁**Profit**: Limited to the credit received from establishing the position. Highest if the market settles at A.

❁**Loss:** Unlimited for both- an increase and decrease in the underlying.

❁**Break-even:** Reached if the underlying rises or falls from strike A by the same amount as the premium received from establishing the position.

❁**Simulation :** Reliance Communications [RCOMM]; Lot size: 700; Style: American

❁**Construction**

Entry: 14th January 2008 - Stock Price at ₹ 804.80;

Sell 740.00 Jan Put option @ ₹ 5.10; Sell 740.00 Jan Call option @ ₹ 73.85

Exit: 18th January 2008 - Stock Price at ₹ 702.35; Buy 740.00 Jan Put option @ ₹ 41.00; Buy 740.00 Jan Call option @ ₹ 17.00

❁**Effective Profit/Loss**
740.00 Jan Put option: Loss ₹ 35.90 [5.10-41.00]
740.00 Jan Call option: Profit ₹ 56.85 [73.85-17.00]
❁**Net Profit:** ₹ 20.95/share
❁**Profit Made On Using Strategy (profit/share X Lot Size):** ₹14,665.00 [20.95 x 700]
This strategy is adopted when the market is expected to be Neutral/ volatile Bearish. The call option and put option is short at same strike price. Profit is limited to credit received from establishing the positions and Loss is unlimited for both an increase and decrease in the underlying.

5) LONG STRANGLE

❁**Construction:** Buy a put (A), buy a call at higher strike (B).
❁**Market Expectation:** Market neutral. The holder expects a major movement in the market but is unsure as to its direction. A larger directional move is needed than a straddle in order to yield a profit but if the market stagnates, losses will be less.
❁**Profit & Loss Characteristics At Expiry:**
❁**Profit:** The profit potential is unlimited although a substantial directional movement is necessary to yield a profit for both a rise and fall in the underlying.
❁**Loss:** Occurs if the market is static; limited to the premium paid in establishing the position.
❁**Break-even:** Occurs if the market rises above the higher strike price at B by an amount equal to the cost of establishing the position, or if the market falls below the lower strike price at A by the amount equal to the cost of establishing the position.
❁**Simulation :** Industrial Developmental Bank of India [IDBI]; Lot size: 2400; Style: American
❁**Construction**
Entry: 9th January 2008 - Stock Price at ₹ 167.65;
Buy 170.00 Jan Put option @ ₹ 8.00; Buy 165.00 Jan Call option @ ₹ 9.25
Exit: 16t h January 2008 - Stock Price at ₹ 165.50;
Sell 170.00 Jan Put option @ ₹ 9.50; Sell 165.00 Jan Call option @ ₹ 13.50
❁**Effective Profit/Loss**
170.00 Jan Put option: Profit ₹ 1.50 [9.50-8.00]
165.00 Jan Call option: Profit ₹ 4.25 [13.50-09.25]
❁**Net Profit:** ₹ 5.75/share.
❁**Profit made on using Strategy (Profit/share x Lot size):** ₹13,800.00 [5.75 x 2400]
This strategy is adopted when the market is expected to be Neutral/ volatile. The put option is bought at higher strike as well as the call option is bought at higher strike price .Profit is unlimited in case of large directional move and loss is limited to the premium paid in establishing the position.

6) SHORT STRANGLE

❁**Construction:** Sell a put (A), sell call at higher strike (B).
❁**Market expectation:** Direction neutral/volatility bearish. The holder expects low volatility and no major directional move. More cautious than a straddle as profit potential spans a larger range although maximum potential profits will be lower.
❁**Profit & Loss Characteristics At Expiry:**
❁**Profit:** Limited to the premium received and would be highest if the underlying remains within the market level A-B.
❁**Loss:** Unlimited for a sharp move in the underlying in either direction.
❁**Break-even:** Reached if the underlying falls below strike A or rises above strike B by the same amount as the premium received in establishing the position.
❁**Simulation :** Industrial Finance Corporation of India [IFCI]; Lot size: 7875; Style: American

❁Construction
Entry: 10th January 2008 - Stock Price at ₹ 82.90;
Sell 65.00 Jan Put option @ ₹ 0.20; Sell 80.00 Jan Call option @ ₹ 9.50
Exit: 17th January 2008 - Stock Price at ₹ 85.00;
Buy 65.00 Jan Put option @ ₹ 0.25; Buy 80.00 Jan Call option @ ₹ 6.40
❁Effective Profit/Loss
65.00 Jan Put option: Loss ₹ 0.05 [0.20-0.25]
80.00 Jan Call option: Profit ₹ 3.10 [9.50-6.40]
❁Net Profit: ₹ 3.05/share
❁Profit made on using Strategy (Profit/share x Lot size): ₹ 24,018.00 [3.05 x 7875]
This strategy is adopted when the market is expected to be Neutral/ volatile Bearish. The put option is sold at higher strike as well as the call option is sold at higher strike price . Profit is limited to the premium received in establishing the position and loss is unlimited for the sharp move in the underlying in any direction.

7) LONG GUTS

❁Construction: Buy a call (A), buy put at higher strike (B).
❁Market Expectation: Market neutral. The market is at, or about the A-B range and a large directional move in the underlying is anticipated. Position has characteristics comparable to an in-the-money strangle.
❁Profit & Loss Characteristics At Expiry:
❁Profit: Unlimited in a rising or falling market. A substantial directional movement is required however.
❁Loss: Limited to the initial premium paid less the difference between A and B; occurs if the underlying remains within the range A-B.
❁Break-even: Reached if the underlying rises above the higher strike price B by the amount equal to the cost of establishing the position less A-B, or if the underlying falls below the lower strike price A by the amount equal to the cost of establishing the position less A-B.
❁Simulation : Reliance Industries Limited [RIL]; Lot size: 150; Style: American
❁Construction
Entry: 1st January 2008 - Stock Price at ₹ 2848.25;
Buy 2800.00 Jan Call option @ ₹ 159.15; Buy 2850.00 Jan Put option @ ₹ 89.00
Exit: 7th January 2008 - Stock Price at ₹ 3020.45;
Sell 2800.00 Jan Call option @ ₹ 230.00; Sell 2850.00 Jan Put option @ ₹ 50.00
❁Effective Profit/Loss
2800.00 Jan Call option: Profit ₹ 70.85 [230.00-159.15]
2850.00 Jan Put option: Loss ₹ 39.00 [50.00-89.00]
❁Net Profit: ₹ 31.85/share
❁Profit made on using Strategy (Profit/share x Lot size): ₹ 4,777.50 [31.85 x 150]
This strategy is adopted when the market is expected to be Neutral/ volatile. The call option is bought at lower strike and the put option is bought at higher strike price. Profit is unlimited in case of large directional move and loss is limited to the premium paid less the difference between call strike price and put strike price.

8) SHORT GUTS

❁Construction: Sell a call (A), sell a put at higher strike (B).
❁Market Expectation: Direction neutral. In this case the underlying is at, or about the A-B range and is expected to remain within this band.
❁Profit & Loss Characteristics At Expiry:
❁Profit: Limited to the net premium received less the difference between A and B; occurs if the underlying remains within the range A-B.
❁Loss: Unlimited in a rising or falling market. A substantial directional movement is required however.
❁Break-even: Reached if the underlying falls below the lower strike price A by the amount equal to the premium

received from establishing the position less A-B, or if the underlying rises above strike price B by the amount equal to the premium received from establishing the position less A-B.

❁**Simulation :** *Reliance Natural Resources Limited [RNRL]*; Lot size: 7150; Style: American

❁**Construction**

Entry: 3rd January 2008 - Stock Price at ₹ 194.85;

Sell 180.00 Jan Call option @ ₹ 29.10; Sell 190.00 Jan Put option @ ₹ 10.20

Exit: 9th January 2008 - Stock Price at ₹ 228.70;

Buy 180.00 Jan Put option @ ₹ 35.00; Buy 190.00 Jan Put option @ ₹ 2.45

❁**Effective Profit/Loss**

180.00 Jan Call option: Loss ₹ 5.90 [29.10-35.00]

190.00 Jan Put option: Profit ₹ 7.75 [10.20-2.45]

❁**Net Profit:** ₹ 1.85/share

❁**Profit made on using Strategy (Profit/share x Lot size):** ₹13,227.50 [1.85 x 7150]

This strategy is adopted when the market is expected to be Neutral/ volatile. The call option is sold at higher strike as well as the put option is sold at higher strike price. Profit is limited to the net premium received and loss is unlimited in rising and falling market.

9) LONG BUTTERFLY

❁**Construction:** Buy put (or call) A, sell two puts (or calls) at higher strike B, buy put (or call) at an even higher strike C.

❁**Market Expectation:** Direction neutral. In this case, the holder expects the underlying to remain around strike B, or it is felt that there will be a fall in implied volatility. Position is less risky than selling straddles or strangles as there is a limited downside exposure.

❁**Profit & Loss Characteristics At Expiry:**

❁**Profit:** Maximum profit limited to the difference in strikes between A and B minus the net cost of establishing the position. Maximized at mid strike B (assuming A-B and B-C are equal).

❁**Loss:** Maximum loss limited to the net cost of the position for either a rise or a fall in the underlying.

❁**Break-even:** Reached when the underlying is higher than A or lower than C by the cost of establishing the position.

❁**Simulation :** Tata Motors Limited [TATAMOTORS}; Lot size: 412; Style: American

❁**Construction**

Entry: 1st January 2008 - Stock Price at ₹ 763.05

Buy 740.00 May Call Option @ ₹ 45.00; Sell 760.00 May Call Option 2 Lots @ ₹ 40.75; Buy 780.00 May Call Option @ ₹ 24.25

Exit: 10th January 2008 - Stock Price at ₹ 770.00

Sell 740.00 Jan Call Option @ ₹ 68.00; Buy 760.00 Jan Call Option 2 Lots @ ₹ 35.90; Sell 780.00 Jan Call option @ ₹ 23.05

❁**Effective Profit/Loss**

740.00 Jan Call Option: Profit ₹ 23.00 [68.00-45.00]

760.00 Jan Call option: Profit ₹ 9.70 [(40.75-35.90) x 2)]

780.00 Jan call option: Loss ₹ 1.20 [23.05-24.25]

❁**Net Profit:** ₹ 31.50/share

❁**Profit made on using Strategy (Profit/share x Lot size):** ₹ 12,978.00 [31.50 x 412]

This strategy is adopted when the market is expected to be Neutral/ volatile. The call (or put) option is bought at lower strike (A) and another call (or put) option is bought at higher strike price (C) and two call (or put) options are sold at the same price (B) between A and C .

10) SHORT BUTTERFLY

❁**Construction:** Sell put (or call) A, buy two puts (or calls) B, sell put (or call) C.

❁**Market Expectation:** Market neutral. In this case, the holder expects a directional move in the underlying, or a rise in implied volatility.

❁**Profit & Loss Characteristics At Expiry:**

❁**Profit:** Maximum profit is the net credit received in establishing the position and will occur if there is a sufficient directional move of the underlying, in either direction.

❁**Loss:** It is limited to the difference in strikes between A and B, minus the net credited in establishing the position.

❁**Break-even:** Reached when the underlying is higher than A or lower than C by the credit received from establishing the position.

❁**Simulation :** National Thermal Power Corporation [NTPC}; Lot size: 1625; Style: American

❁**Construction**

Entry: 9th January 2008 - Stock Price at ₹ 277.15

Sell 250.00 Jan Put Option @ ₹ 3.45; Buy 260.00 Jan Put Option 2 Lots @ ₹ 5.70

Sell 270.00 Jan Put Option @ ₹13.80

Exit: 14th January 2008 - Stock Price at ₹ 284.65

Buy 250.00 Jan Put Option @ ₹1.90; Sell 260.00 Jan Put Option 2 Lots @ ₹6.90

Buy 270.00 Jan Put Option @ ₹ 9.50

❁**Effective Profit/Loss**

250.00 Jan Put option: Profit ₹1.55 [3.45-1.90]

260.00 Jan Put option: Profit ₹ 2.40 [(6.90-5.70) x 2]

270.00 Jan Put option: Profit ₹ 4.30 [13.80-9.50]

❁**Net Profit:** ₹ 8.25/share.

❁**Profit made on using Strategy (Profit/share x Lot size):** ₹ 13,406.25 [8.25 x 1625]

This strategy is adopted when the market is expected to be Neutral/ volatile. The call (or put) option is sold at lower strike (A) and another call (or put) option is sold at higher strike price (C) and two call (or put) options are bought at the same price (B) between A and C .

11) LONG CONDOR

❁**Construction:** Buy put (call) at A; sell put (call) at two higher strikes B, C; buy put (call) at yet higher strike D.

❁**Market Expectation:** Direction neutral. A Long Condor allows for a greater degree of volatility and hence a wider band of profit potential than a Long Butterfly.

❁**Profit And Loss Characteristics At Expiry:**

❁**Profit:** Maximized where the underlying settles between the two strike prices B and C, but will decline as the market rises, or falls beyond these strikes.

❁**Loss:** Occurs if the underlying rises towards strike D or falls towards strike A and would be limited to the cost of establishing the position for either a rise or a fall in the underlying.

❁**Break-even:** Lower break-even point reached when underlying reaches the lower strike price A plus the cost of establishing the spread, and the higher break-even when the underlying reaches the level of the higher strike D minus the cost of establishing the spread.

❁**Simulation** : *Tata Motors Limited [TATAMOTORS}*; Lot size: 412; Style: American

❁**Construction**

Entry: 10th January 2008 - Stock Price at ₹ 770.00

Buy 740.00 Jan Call Option @ ₹ 39.35; Sell 760.00 Jan Call Option @ ₹ 60.00

Sell 780.00 Jan Call Option @ ₹ 47.00; Buy 800.00 Jan Call Option @ ₹ 16.65

Exit: 16th January 2008 - Stock Price at ₹ 749.95

Sell 740.00 May Call Option @ ₹ 30.25; Buy 760.00 May Call Option @ ₹ 21.25

Buy 780.00 May Call Option @ ₹ 12.00; Sell 800.00 May Call option @ ₹ 9.90

❁**Effective Profit/Loss**

740.00 Jan Call option: Loss ₹ 9.10 [30.25-39.35]

760.00 Jan Call option: Profit ₹ 38.75 [60.00-21.25]

780.00 Jan call option: Profit ₹ 35.00 [47.00-12.00]
800.00 Jan call option: Loss ₹ 6.75 [9.90-16.65]
❁ **Net Profit:** ₹ 57.90/share
❁ **Profit made on using Strategy (Profit/share x Lot size)** = ₹ 23,854.80 [57.90 x 412]
This strategy is adopted when the market is expected to be Neutral/ volatile. The call (or put) option is bought at lower strike (A) and another call (or put) option is bought at higher strike price (D) and two call (or put) options are sold at the strikes (B) and (C) between (A) and (D).

12) SHORT CONDOR

❁ **Construction:** Sell put (call) at A; buy put (call) at two higher strikes B, C; sell put (call) at yet higher strike D.
❁ **Market Expectation:** Direction neutral. Holder expects the market to move significantly, or volatility to rise, but the direction is uncertain. A Short Condor will require a larger directional move than a butterfly in order to yield a profit.
❁ **Profit & Loss Characteristics At Expiry:**
❁ **Profit:** Limited and will occur if the market moves above the highest strike (D) or below the lower strike at A.
❁ **Loss:** Maximum losses are limited and will occur if the market remains between the exercise prices B and C.
❁ **Break-even:** Lower break even reached when underlying reaches the lower strike price A plus the net credit received from establishing the position, and the higher breakeven when the underlying reaches the level of the higher strike price D minus the credit received from establishing the position.
❁ **Simulation :** Industrial Finance Corporation of India [IFCI]; Lot size: 7875; Style: American
❁ **Construction**
Entry: 11th January 2008 - Stock Price at ₹ 82.90
Sell 80.00 Jan Call Option @ ₹ 7.00; Buy 85.00 Jan Call Option @ ₹ 4.85
Buy 90.00 Jan Call Option @ ₹ 3.10; Sell 100.00 Jan Call Option @ ₹ 2.50
Exit: 16th January 2008 - Stock Price at ₹ 85.70
Buy 80.00 Jan Call Option @ ₹ 7.30; Sell 85.00 Jan Call Option @ ₹ 6.40
Sell 90.00 Jan Call Option @ ₹ 3.35; Buy 100.00 Jan Call Option @ ₹ 2.15
❁ **Effective Profit/Loss**
80.00 Jan Call option: Loss ₹ 0.30 [7.00-7.30]
85.00 Jan Call option: Profit ₹ 1.55 [6.40-4.85]
90.00 Jan Call option: Profit ₹ 0.25 [3.35-3.10]
100.00 Jan Call option: Profit ₹ 0.35 [2.50-2.15]
❁ **Net Profit:** ₹ 1.85/share
❁ **Profit made on using Strategy (Profit/share x Lot size)** = ₹ 14,568.75 [1.85 x 7875]
This strategy is adopted when the market is expected to be Neutral/ volatile. The call (or put) option is sold at lower strike (A) and another call (or put) option is sold at higher strike price (D) and two call (or put) options are bought at the strikes (B) and (C) between (A) and (D).

13) LONG CALL STRIP

❁ **Construction:** Buy call at strike A, buy calls at higher strike prices. Between 3 and 8 strikes may be used in total, with one call option purchased at each.. All call options must be for the same expiry month.
❁ **Market Expectation:** Direction bullish. A long call strip gives the holder an increased exposure to a positive movement in the underlying price.
❁ **Profit & Loss Characteristics At Expiry:**
❁ **Profit:** Unlimited in a rising market.
❁ **Loss:** Limited to the initial premium.
❁ **Break-even:** There will be a single break-even position, but the position in relation to the strikes will depend on the strike prices involved and the premium paid.
❁ **Simulation** : Bharti Airtel; Lot size: 500; Style: American

❁Construction
Entry: 21st January 2008 - Stock Price at ₹ 870.00
Buy: 860 Jan Call Option @ ₹ 22.00; Buy 880 Jan Call Option @ ₹ 16.00
Buy 900 Jan Call Option @ ₹ 10.30
Exit: 25th January 2008 - Stock Price at ₹ 915.10
Sell: 860 Jan Call Option @ ₹ 60.00; Sell 880 Jan Call Option @ ₹ 24.95
Sell 900 Jan Call Option @ ₹ 13.00
❁Effective Profit/Loss
860 Jan Call option: Profit ₹ 38.00 [60.00-22.00]
880 Jan Call option: Profit ₹ 8.95 [24.95-16.00]
900 Jan Call option: Profit ₹ 2.70 [13.00-10.30]
❁Net Profit: ₹ 49.65/share
❁Profit made on using Strategy (Profit/share x Lot size): ₹ 12,412.50 [49.65 x 250]
This strategy is adopted when the market is expected to be Bullish. The call option is bought at lower strike (A),other call options are bought at higher strike prices, in total 3-8 strikes may be used with 1 call option purchased at each strike price. All the call options must be of the same expiry.

14) SHORT CALL STRIP

❁Construction: Sell call at strike A, sell calls at higher strike prices. Between 3 and 8 strikes may be used in total, with one call option sold at each.All call options must be for the same expiry month.
❁Market Expectation: Direction neutral or bearish.
❁Profit & Loss Characteristics At Expiry:
❁Profit: Limited to the initial premium received.
❁Loss: Unlimited in a rising market.
❁Break-even: There will be a single break-even position, but the position in relation to the strikes will depend on the strike prices involved and the premium paid.
❁Simulation: Steel Authority of India limited [SAIL]; Lot size: 1350; Style: American
❁Construction
Entry: 1st January 2008 - Stock price at 284.55
Sell 280.00 Jan Call Option @ ₹16.90; Sell 290.00 Jan Call Option @ ₹ 15.00
Sell 300.00 Jan Call Option @ ₹ 10.75
Exit: 10th January 2008 - Stock price at 248.85
Buy 280.00 Jan Call Option @ ₹ 4.70; Buy 290.00 Jan Call Option @ ₹ 5.75
Buy 300.00 Jan Call Option @ ₹ 4.75
❁Effective Profit/Loss
280.00 Jan Call option: Profit ₹ 12.22 [16.90-4.70]
290.00 Jan Call option: Profit ₹ 9.25 [15.00-5.75]
300.00 Jan Call option: Profit ₹ 6.00 [10.75-4.75]
❁Net Profit: ₹ 27.45/share
❁Profit made on using Strategy (Profit/share x Lot size): ₹ 37,057.50 [27.45 x 1350]
This strategy is adopted when the market is expected to be Neutral/Bearish. The call option is sold at higher strike (A), another call options are sold at higher strike prices, in total 3-8 strikes may be used with 1 call option sold at each strike price. All the call options must be for the same expiry.

FINDINGS OF THE STUDY

The following findings are based on the information gathered by means of interview schedule from the advisory team at the selected broking firm:

1. The respondents are of the age group 25 - 40 years and are salaried, having a monthly income between ₹15000- ₹ 35000.

2. It is observed that most of the investors and traders at the selected broking firm go for daily and short term trading in options as well as in futures.
3. The Traders expect high profits with minimum investments, high risk appetite and greater leverage from their investment in derivatives specifically in options.
4. Around 55% investors invest 40%-60% of their total investments in option market, 20% investors invest more than 60% of their total investments and the rest 25% investors invest 20%-40% of their total investments in options.
5. The intention that the investors as well as the advisors at the selected broking firm have while investing in Options is 'Speculation'.
6. Majority of the investors as well as the advisors trade in all Derivatives including Options by using market information and to some extent technical analysis.
7. Majority of the investors and advisors trade in Futures and Options derivatives.
8. The awareness about the various Option Strategies among the investors is not remarkable but few advisors adopt the strategies if they feel the market conditions are favoring the strategies.
9. There are different strategies for varying market expectations. They are:

- Long Call Spread - Bullish Trend
- Short Call Spread- Bearish Trend
- Long Put Spread- Bearish Trend
- Short Straddle- Neutral / Volatile Bearish Trend
- Long Strangle- Neutral
- Short Strangle- Neutral / Volatile Bearish Trend
- Long Guts- Neutral
- Short Guts- Neutral
- Long Butterfly- Neutral / Volatile Bearish Trend
- Short Butterfly- Neutral / Volatile Bullish Trend
- Long Condor- Neutral
- Short Condor- Neutral / Volatile Bullish Trend
- Long Call Strip- Bullish Trend

Short Call Strip- Neutral / Bearish Trend

10. The strategies that are mentioned above may or may not work due to market imperfections.
11. Almost all of the Advisory Team and most of their investors trade for current month contacts in options market on index.
12. The profit margin kept by the advisors on behalf of their clients is 30% - 60%.
13. The risk - reward ratio that is expected by the 40% advisors as well as their clients is 1:1; by the remaining 60% advisors it is 1:2.

THE FOLLOWING ARE THE FINDINGS BASED ON THE ANALYSIS OF STRATEGIES ADOPTED

1. The Long Call Spread Strategy is used profitably when the markets are in Bullish trend.
2. The Short Call Spread Strategy is used profitably when the markets are in Bearish trend.
3. The Long Put Spread Strategy is used profitably when the markets are in Bearish trend.
4. The Short Straddle Strategy is used profitably when the markets are in Volatile / bearish trend.
5. The Long Straddle Strategy is used profitably when the markets are in Neutral trend.
6. The Short Strangle Strategy is used profitably when the markets are in Volatile / Bearish trend.
7. The Long Guts Strategy is used profitably when the markets are in Neutral trend.
8. The Short Guts Strategy is used profitably when the markets are in Neutral trend.
9. The Long Butterfly Strategy is used profitably when the markets are in Neutral trend.
10. The Short Butterfly Strategy is used profitably when the markets are in Neutral trend.
11. The Long Condor Strategy is used profitably when the markets are in Neutral trend.
12. The Short Condor Strategy is used profitably when the markets are in Neutral trend.
13. The Long Call Strip Strategy is used profitably when the markets are in bullish trend.

14. The Short Call Spread Strategy is used profitably when the markets are in Neutral / Bearish trend.

SUGGESTIONS & RECOMMENDATIONS

1. As the Indian derivatives markets grow more sophisticated, the brokers, dealers, traders and investors should be educated.

2. This study reveals that most of the investors are unaware of the strategies followed in options market and the awareness is limited to people at work in broking houses and to those who do technical analysis. Therefore, the investors have to be educated through training programs. It can be done by following ways:

- By conducting seminars.
- By providing more information about Derivatives and the Strategies of Options on the company's website.

3. The appropriate Option Strategies that suit the market conditions should be adopted based on the market information and the technical analysis as they are subject to market imperfections. This will help derive maximum profits out of the positions taken for hedging or trading for profits.

4. In derivatives, it is very vital to choose the contract maturity period as the risk - reward ratio depends on this. The longer the contract maturity period, the higher is the risk and lesser are the returns. Therefore, it's better to trade for current month contract maturity period and to some extent the following month.

THE SUGGESTIONS BASED ON THE STRATEGIES TO BE ADOPTED ARE AS FOLLOWS

1. When the market is Bullish, using Long Call Spread or using Short Put spread strategy will generate limited profits. So,the profit potential for the investor is limited. It is suitable for the investors who look for limited profit by minimizing the loss.

2. When the market is Bearish, using Short Call Spread or Long Put Spread strategy will generate a limited profit if the underlying falls and limited losses if the underlying rises. Therefore, an investor who expects limited profit as well as limited loss can go for this strategy.

3. Short Straddle strategy can be adopted when market is Volatile/Bearish and the underlying is not expected to move dramatically. It is a risky strategy as the profits are limited to the premium received but the losses are unlimited. So the investors who are high risk takers can go for this strategy.

4. Long Strangle strategy can be adopted in the neutral markets. Here, the profit potential is unlimited but a substantial directional movement is necessary and the loss is limited to the premium paid. So, an investor who expects a major movement in the market but is unsure as to its direction can go for this strategy.

5. An investor can adopt the Short Strangle strategy when the markets are Volatile Bearish and when he/she expects low volatility and no major directional moves. Here, the investor has to be more cautious than a Straddle as profit potential spans a larger range although maximum potential profits will be lower.

6. An investor can go for Long Guts in neutral markets wherein a large directional move in the underlying is anticipated. The investor can be benefited by the unlimited profit potential only if a substantial directional movement is possible.

7. When the markets are Directional/ Neutral, the investor can take the benefit of limited profits by adopting the Short Guts strategy but he/ she has to expose to unlimited loss in case there is substantial rise or fall in the market.

8. When the markets are Neutral, Long Butterfly can generate maximum profits the proper strikes are chosen as stated in the strategy construction

9. An investor can adopt the Short Butterfly strategy if there is an expectation of directional move in the underlying or a rise in implied volatility. This will maximize the profits and limit the losses.

10. The Long Condor strategy shall be adopted in Neutral markets as it allows for greater degree of volatility and hence, a wider band of profit potential than a Long Butterfly.

11. The Short Condor strategy in the Neutral markets which shows the sign of rise in market but the direction is uncertain can be adopted by the investor who looks for minimum profits.

12. When markets are in Bullish trend, using a Long Call Strip will give the holder an increased exposure to a positive movement in the underlying price and thereby generates unlimited profits for limited loss.

13. When markets are in Bearish trend, using a Long Call Strip will generate limited profits and it is suitable for the

investors expecting minimum profits in the falling market.

CONCLUSION

Though trading in Derivative Instruments is riskier, it is catching the attention of traders very rapidly due to its specialty such as margin payment system, short-term nature, etc. Risk transfer, price discovery and market completeness are important functions of derivatives instrument in the financial system of a country. Numerous studies have led to broad consensus, both in the private and public sectors that derivatives provide substantial benefits to the users. Derivatives are a low-cost, effective method for users to hedge and manage their exposures to interest. It is found from the present study that use of appropriate option strategies based on the market conditions has helped the trader in managing the risk by minimizing the loss and obtaining maximum profits. Now, the world markets for trade and finance have become more integrated as derivatives have strengthened these important linkages among the global markets, increasing market liquidity, efficiency and facilitating the flow of trade and finance. Thus, Derivatives have become one of the important investment alternatives available for the investors. A thorough knowledge of Derivatives will definitely help the investors to optimize their investment decisions and thereby, the profits.

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