

## Bullish Strategies

Bullish options strategies are employed when the options trader expects the underlying stock price to move upwards. It is necessary to assess how high the stock price can go and the time frame in which the rally will occur in order to select the optimum trading strategy.

In most cases, stocks seldom go up by leaps and bounds. Moderately bullish options traders usually set a target price for the bull run and utilize bull spreads to reduce risk. While maximum profit is capped for these strategies, they usually cost less to employ.

### 1. Long Call

Buying a call is the most basic of all options strategies. It constitutes the first options trade for someone already familiar with buying / selling stocks and would now want to trade options. Buying a call is an easy strategy to understand. When you buy it means you are bullish. Buying a Call means you are very bullish and expect the underlying stock /index to rise in future.

**When to Use:** Investor is very bullish on the stock / index.

#### Risk / Reward

Maximum Loss: Limited to the premium paid up front for the option.

Maximum Gain: Unlimited as the market rallies.

**Breakeven:** Strike Price + Premium

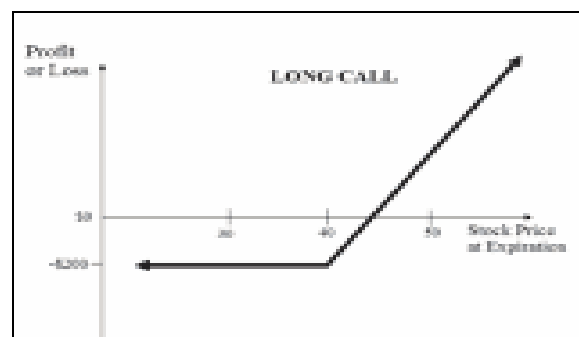
#### Example

Mr. XYZ is bullish on Nifty on 24th June, when the Nifty is at 4191.10. He buys a call option with a strike price of Rs. 4600 at a premium of Rs. 36.35, expiring on 31st July. If the Nifty goes above 4636.35, Mr. XYZ will make a net profit (after deducting the premium) on exercising the option. In case the Nifty stays at or falls below 4600, he can forego the option (it will expire worthless) with a maximum loss of the premium.

Break Even Point (Rs.) (Strike Price + Premium): 4636.35

#### Payoff Table:

On expiry Nifty closes at	Net Payoff (Rs.)
4100	-36.35
4300	-36.35
4500	-36.35
4636.35	0
4700	63.65
4900	263.65
5100	463.65
5300	663.65



This strategy limits the downside risk to the extent of premium paid by Mr. XYZ (Rs. 36.35). But the potential return is unlimited in case of rise in Nifty. A long call option is the simplest way to benefit if you believe that the market will make an upward move and is the most common choice among first time investors in Options. As the stock price / index rises the long Call moves into profit more and more quickly.

### 2. Short Put

Selling a Put is opposite of buying a Put. An investor buys Put when he is bearish on a stock. An investor Sells Put when he is **Bullish** about the stock – expects the stock price to rise or stay sideways at the minimum. When you sell a Put, you earn a Premium (from the buyer of the Put). You have sold someone the right to sell you the stock at the strike price.

**When to Use:** Investor is very **Bullish** on the stock / index. The main idea is to make a short term income.

**Risk / Reward**

Maximum Loss: Unlimited in a falling market.

Maximum Gain: Limited to the premium received for selling the put option.

**Breakeven:** Put Strike Price – Premium

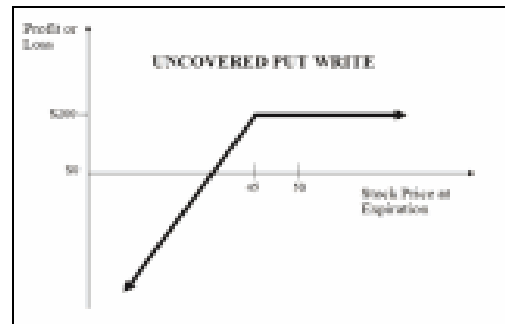
**Example**

Mr. XYZ is bullish on Nifty when it is at 4191.10. He sells a Put option with a strike price of Rs. 4100 at a premium of Rs. 170.50 expiring on 31st July. If the Nifty index stays above 4100, he will gain the amount of premium as the Put buyer won't exercise his option. In case the Nifty falls below 4100, Put buyer will exercise the option and the Mr. XYZ will start losing money. If the Nifty falls below 3929.50, which is the breakeven point, Mr. XYZ will lose the premium and more depending on the extent of the fall in Nifty.

**Break Even Point (Rs.):** (Strike Price - Premium)= 3929.5

Payoff Table:

On expiry Nifty closes at	Net Payoff (Rs)
3400	-529.5
3500	-429.5
3700	-229.5
3900	-29.5
3929.5	0
4100	170.5
4300	170.5
4500	170.5



Selling Puts can lead to regular income in a rising or range bound markets. But it should be done carefully since the potential losses can be significant in case the price of the stock /index falls. This strategy can be considered as an income generating strategy.

**3. Long Synthetic: Buy Stock, Buy Put**

In case the price of the stock rises you get the full benefit of the price rise. In case the price of the stock falls, exercise the Put Option (remember Put is a right to sell). You have capped your loss in this manner because the Put option stops your further losses. It is a strategy with a limited loss and (after subtracting the Put premium) unlimited profit (from the stock price rise). The result of this strategy looks like a Call Option Buy strategy and therefore is called a Synthetic Call.

**When to use:** When ownership is desired of stock yet investor is concerned about near-term downside risk. The outlook is conservatively bullish.

**Risk / Reward**

Maximum Loss: Losses limited to Stock price + Put Premium – Put Strike price

Maximum Gain: Unlimited

**Break-even Point:** Put Strike Price + Put Premium + Stock Price – Put Strike Price

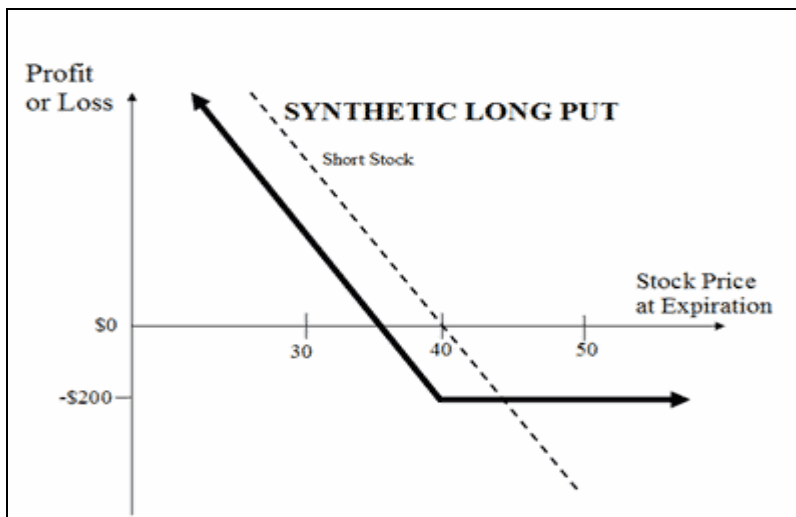
**Example**

Mr. XYZ is bullish about ABC Ltd stock. He buys ABC Ltd. at current market price of Rs. 4000 on 4th July. To protect against fall in the price of ABC Ltd. (his risk), he buys an ABC Ltd. Put option with a strike price Rs. 3900 (OTM) at a premium of Rs. 143.80 expiring on 31st July.

**Break Even Point (Rs.):** (Put Strike Price + Put Premium + Stock Price – Put Strike Price)= Rs. 4143.80

Payoff Table:

ABC close at expiry	Stock	Put	Net Payoff (Rs.)
3400	-600	356.2	-243.8
3600	-400	156.2	-243.8
3800	-200	-43.8	-243.8
4000	0	-143.8	-143.8
4143.8	-143.8	-143.8	0
4200	200	-143.8	56.2
4400	400	-143.8	256.2
4600	600	-143.8	456.2
4800	800	-143.8	656.2



This strategy is used when an investor is very aggressive and has a strong expectation of a price fall (and certainly not a price rise). This is a risky strategy since as the stock price / index rises, the short call loses money more and more quickly and losses can be significant if the stock price / index falls below the strike price. Since the investor does not own the underlying stock that he is shorting this strategy is also called Short Naked Call.

**4. Covered Call: Long Stock and Sell call**

The covered call is a strategy in which an investor Sells a Call option on a stock he owns (netting him a premium). The Call Option which is sold is usually an OTM Call. The Call would not get exercised unless the stock price increases above the strike price. Till then the investor in the stock (Call seller) can retain the Premium with him. This becomes his income from the stock.

**Risk / Reward**

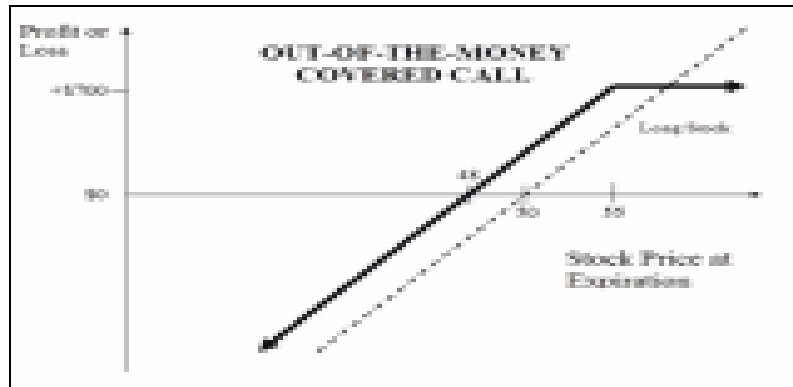
Maximum Loss: Unlimited on the downside.

Maximum Gain: Limited to the premium received from the sold call option.

**Breakeven:** Stock Price paid -Premium Received

### Monthly Income

Covered and protected covered calls are usually the strategies used by advisory services that promote option strategies for "generating monthly income" while "protecting capital". Services like Call Writer will provide you with real time lists and a trade management calculator where you will learn how to select, plan and manage covered call trades for consistent monthly cash flow.



### 5. Collar

A Collar is similar to Covered Call but involves another leg – buying a Put to insure against the fall in the price of the stock. It is a Covered Call with a limited risk. So a Collar is buying a stock, insuring against the downside by buying a Put and then financing (partly) the Put by selling a Call.

The put generally is ATM and the call is OTM having the same expiration month and must be equal in number of shares. This is a low risk strategy since the Put prevents downside risk. However, do not expect unlimited rewards since the Call prevents that. It is a strategy to be adopted when the investor is **conservatively bullish**. The following example should make Collar easier to understand.

**When to Use:** The collar is a good strategy to use if the investor is writing covered calls to earn premiums but wishes to protect him from an unexpected sharp drop in the price of the underlying security.

#### Risk / Reward

Maximum Loss: Limited to the difference between the two strikes less the net premium paid or received less the loss on the stock leg.

Maximum Gain: Limited to the difference between the two strikes plus the net premium paid or received plus the gain on the stock leg.

**Breakeven:** Purchase Price of Underlying – Call Premium + Put Premium

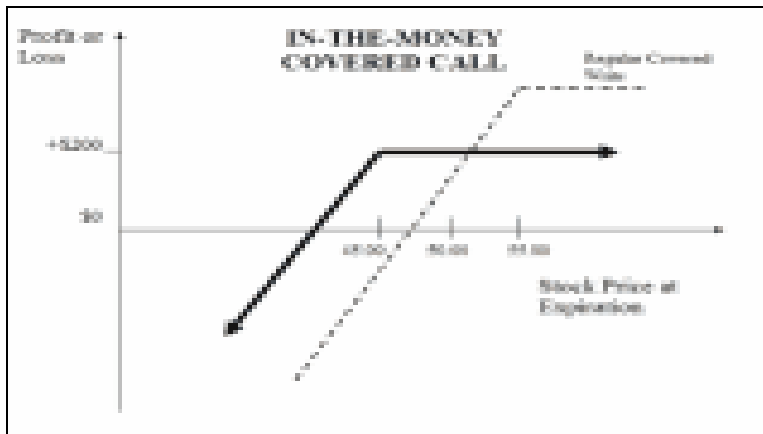
#### Example

Suppose an investor Mr. A buys or is holding ABC Ltd. currently trading at Rs. 4758. He decides to establish a collar by writing a Call of strike price Rs. 5000 for Rs. 39 while simultaneously purchasing a Rs. 4700 strike price Put for Rs. 27. Since he pays Rs. 4758 for the stock ABC Ltd., another Rs. 27 for the Put but receives Rs. 39 for selling the Call option, his total investment is Rs. 4746.

Mr. A Receives Premium (Rs.)= 39  
 Mr. A Pays Premium (Rs.) = 27  
 Net Premium Received(Rs.) =12  
 Break Even Point (Rs.) =4746

**Payoff Table:**

ABC Ltd.	Call	Put	stock	Net payoff (Rs.)
4400	39	273	-358	-46
4450	39	223	-308	-46
4500	39	173	-258	-46
4600	39	73	-158	-46
4700	39	-27	-58	-46
4750	39	-27	-8	4
4800	39	-27	42	54
4850	39	-27	92	104
4858	39	-27	100	112
4900	39	-27	142	154
4948	39	-27	190	202
5000	39	-27	242	254
5050	-11	-27	292	254
5100	-61	-27	342	254
5150	-111	-27	392	254
5200	-161	-27	442	254
5248	-209	-27	490	254
5250	-211	-27	492	254
5300	-261	-27	542	254



**6. Bull Call Spread: Buy call & Sell Call**

A bull call spread is constructed by buying an in-the-money (ITM) call option, and selling another out-of-the-money (OTM) call option. Often the call with the lower strike price will be in-the-money while the Call with the higher strike price is out-of-the-money. Both calls must have the same underlying security and expiration month. The net effect of the strategy is to bring down the cost and breakeven on a Buy Call (Long Call) Strategy.

**When to Use:** Investor is **moderately bullish**.

**Risk / Reward**

Maximum Loss: Limited to premium paid for the long option minus the premium received for the short option.

Maximum Gain: Limited to the difference between the two strike prices minus the net premium paid for the spread.

**Break-Even-Point (BEP):** Strike Price of Purchased call + Net Debit Paid

**Example:**

Mr. XYZ buys a Nifty Call with a Strike price Rs. 4100 at a premium of Rs. 170.45 and he sells a Nifty Call option with a strike price Rs. 4400 at a premium of Rs. 35.40. The net debit here is Rs. 135.05 which is also his maximum loss.

Mr. XYZ Pays Premium (Rs.) =170.45

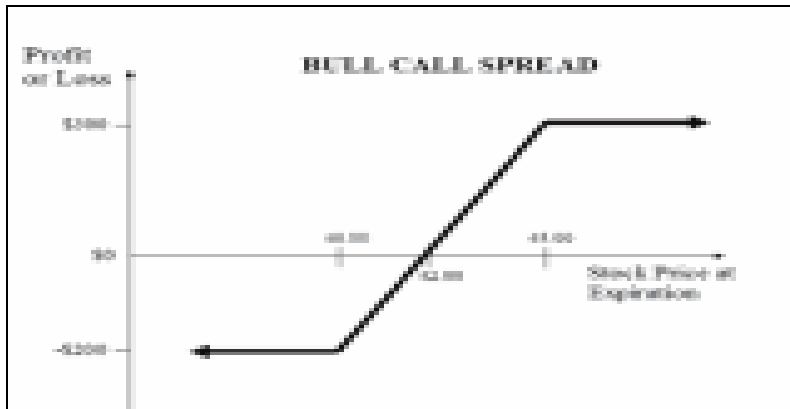
Mr. XYZ Receives Premium (Rs.) =35.40

Net Premium Paid (Rs.)= 135.05

Break Even Point (Rs.) 4235.05

**Payoff Table:**

On expiry Nifty Close	Call Buy	Call Sold	Net Payoff
3500	-170.45	35.4	-135.05
3600	-170.45	35.4	-135.05
3700	-170.45	35.4	-135.05
3800	-170.45	35.4	-135.05
3900	-170.45	35.4	-135.05
4000	-170.45	35.4	-135.05
4100	-170.45	35.4	-135.05
4200	-70.45	35.4	-35.05
4235.05	-35.4	35.4	0
4300	29.55	35.4	64.95
4400	129.55	35.4	164.95
4500	229.55	-64.6	164.95
4600	329.55	-164.6	164.95
4700	429.55	-264.6	164.95
4800	529.55	-364.6	164.95
4900	629.55	-464.6	164.95
5000	729.55	-564.6	164.95
5100	829.55	-664.6	164.95
5200	929.55	-764.6	164.95



## 7. Bull Put Spread: Sell Put & Buy Put

A bull put spread can be profitable when the stock / index is either range bound or rising. The concept is to protect the downside of a Put sold by buying a lower strike Put, which acts as an insurance for the Put sold. The lower strike Put purchased is further OTM than the higher strike Put sold ensuring that the investor receives a net credit, because the Put purchased (further OTM) is cheaper than the Put sold. This strategy is equivalent to the Bull Call Spread but is done to earn a net credit (premium) and collect an income.

**When to Use:** When the investor is **moderately bullish**.

### Risk / Reward

Maximum Loss: Limited to the difference between the two strike prices minus the net premium received for the position.

Maximum Gain: Limited to the net credit received for the spread. I.e. the premium received for the short option less the premium paid for the long option.

**Breakeven:** Strike Price of Short Put - Net Premium Received

### Example:

Mr. XYZ sells a Nifty Put option with a strike price of Rs. 4000 at a premium of Rs. 21.45 and buys a further OTM Nifty Put option with a strike price Rs.3800 at a premium of Rs. 3.00 when the current Nifty is at 4191.10, with both options expiring on 31st July.

Mr. XYZ Receives Premium (Rs.) =21.45

Mr. XYZ Pays Premium (Rs.) =3.00

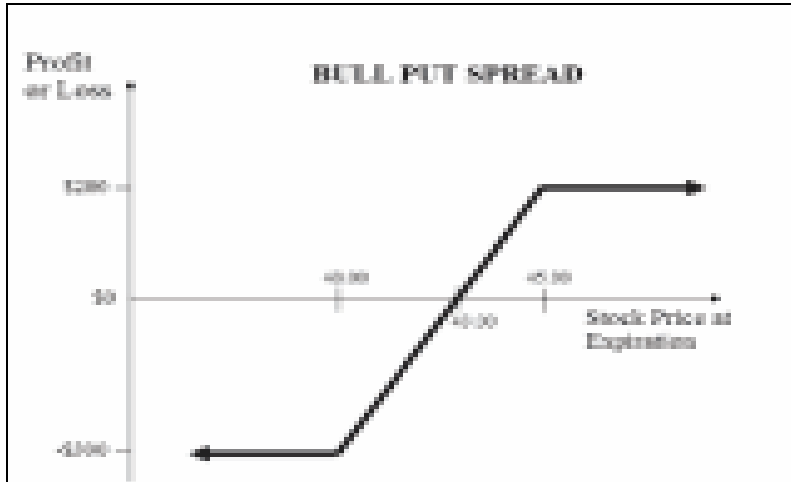
Net Premium Received (Rs.) =18.45

Break Even Point (Rs.) =3981.55

### Payoff Table:

On expiry Nifty Close	Put Buy	Put Sold	Net Payoff
3500	297	-478.55	-181.55
3600	197	-378.55	-181.55
3700	97	-278.55	-181.55
3800	-3	-178.55	-181.55
3900	-3	-78.55	-81.55
3981.55	-3	3	0
4000	-3	21.45	18.45

4100	-3	21.45	18.45
4200	-3	21.45	18.45
4300	-3	21.45	18.45
4400	-3	21.45	18.45
4500	-3	21.45	18.45
4600	-3	21.45	18.45
4700	-3	21.45	18.45
4800	-3	21.45	18.45



## Bearish Strategies

### 1. Short Call

When you buy a Call you are hoping that the underlying stock / index would rise. When you expect the underlying stock / index to fall you do the opposite. When an investor is very bearish about a stock / index and expects the prices to fall, he can sell Call options. This position offers limited profit potential and the possibility of large losses on big advances in underlying prices. Although easy to execute it is a risky strategy since the seller of the Call is exposed to unlimited risk.

#### Risk/ Reward:

Maximum Loss: Unlimited

Maximum Gain: Limited to the amount of premium

**Break-even Point:** Strike Price + Premium

#### Example:

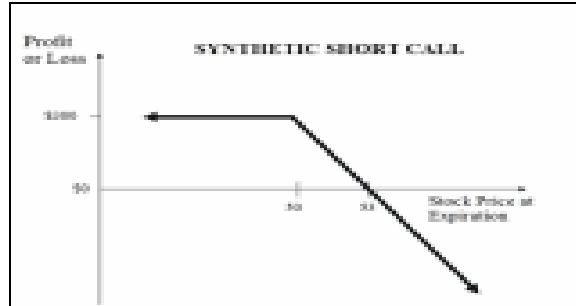
Mr. XYZ is bearish about Nifty and expects it to fall. He sells a Call option with a strike price of Rs. 2600 at a premium of Rs. 154, when the current Nifty is at 2694. If the Nifty stays at 2600 or below, the Call option will not be exercised by the buyer of the Call and Mr. XYZ can retain the entire premium of Rs. 154.

Break Even Point (Rs.) (Strike Price +Premium) =2754

#### Payoff Table:

On expiry Nifty Close	Net Payoff
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2400	154
2500	154
2600	154
2700	54
2754	0
2800	-46
2900	-146
3000	-246



This is a risky strategy since as the stock price / index rises, the short call loses money more and more quickly and losses can be significant if the stock price / index falls below the strike price. Since the investor does not own the underlying stock that he is shorting this strategy is also called Short Naked Call.

## 2. Long Put

Buying a Put is the opposite of buying a Call. When you buy a Call you are bullish about the stock / index. When an investor is bearish, he can buy a Put option. A Put Option gives the buyer of the Put a right to sell the stock (to the Put seller) at a pre-specified price and thereby limit his risk.

**When to use:** Investor is bearish about the stock / index.

### Risk / Reward

Maximum Loss: Limited to the net premium paid for the option.

Maximum Gain: Unlimited as the market sells off.

**Break-even Point:** Stock Price - Premium

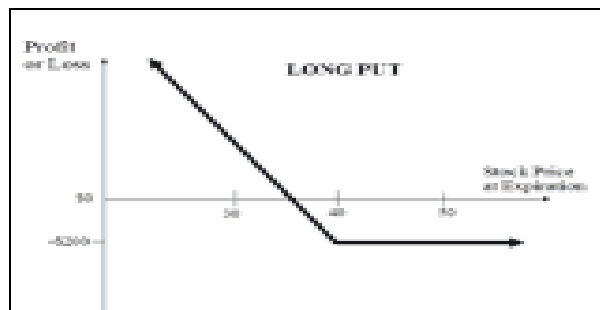
### Example:

Mr. XYZ is bearish on Nifty on 24th June, when the Nifty is at 2694. He buys a Put option with a strike price Rs. 2600 at a premium of Rs. 52, expiring on 31st July. If the Nifty goes below 2548, Mr. XYZ will make a profit on exercising the option. In case the Nifty rises above 2600, he can forego the option (it will expire worthless) with a maximum loss of the premium.

Break Even Point (Rs.) (Strike Price - Premium) =2548

### Payoff Table:

On expiry Nifty Close	Net Payoff
2300	248
2400	148
2500	48
2548	0
2600	-52
2700	-52
2800	-52
2900	-52



A bearish investor can profit from declining stock price by buying Puts. He limits his risk to the amount of premium paid but his profit potential remains unlimited. This is one of the widely used strategy when an investor is bearish.

## 3. Bear Call Spread: Sell Call and Buy Call

The concept is to protect the downside of a Call Sold by buying a Call of a higher strike price to insure the Call sold. In this strategy the investor receives a net credit because the Call he buys is of a higher strike price than the Call sold. The strategy requires the investor to buy out-of-the-

money (OTM) call options while simultaneously selling in-the-money (ITM) call options on the same underlying stock index. This strategy can also be done with both OTM calls with the Call purchased being higher OTM strike than the Call sold.

**When to use:** When the investor is **mildly bearish** on market.

**Risk / Reward**

Maximum Loss: Limited to the difference between the two strikes minus the net premium.  
 Maximum Gain: Limited to the net premium received for the position. I.e. the premium received for the short call minus the premium paid for the long call.

**Break Even Point:** Lower Strike + Net credit

**Example:**

Mr. XYZ is bearish on Nifty. He sells an ITM call option with strike price of Rs. 2600 at a premium of Rs. 154 and buys an OTM call option with strike price Rs. 2800 at a premium of Rs. 49.

Mr. XYZ receives Premium (Rs.) =154

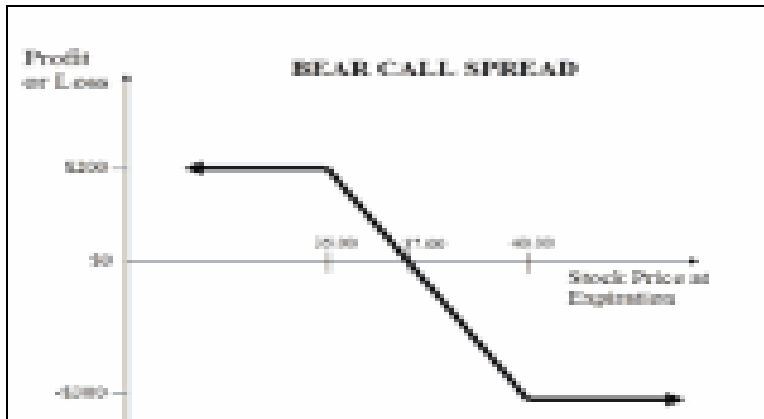
Mr. XYZ pays Premium (Rs.) =49

Net premium received (Rs.) =105

Break Even Point (Rs.) =2705

**Payoff Table:**

On expiry Nifty Close	Call Sold	Call bought	Net Payoff
2100	154	-49	105
2200	154	-49	105
2300	154	-49	105
2400	154	-49	105
2500	154	-49	105
2600	154	-49	105
2700	54	-49	5
2705	49	-49	0
2800	-46	-49	-95
2900	-146	51	-95
3000	-246	151	-95
3100	-346	251	-95
3200	-446	351	-95
3300	-546	451	-95



The strategy earns a net income for the investor as well as limits the downside risk of a Call sold.

#### 4. Bear Put Spread: Buy Put and Sell Put

This strategy requires the investor to buy an in-the-money (higher) put option and sell an out-of-the-money (lower) put option on the same stock with the same expiration date. This strategy creates a net debit for the investor. The net effect of the strategy is to bring down the cost and raise the breakeven on buying a Put (Long Put). The strategy needs a Bearish outlook since the investor will make money only when the stock price / index fall. The bought Puts will have the effect of capping the investor's downside. While the Puts sold will reduce the investors costs, risk and raise breakeven point (from Put exercise point of view).

**When to use:** When you are **moderately bearish** on market direction

#### Risk / Reward

Maximum Loss: Limited to the net amount paid for the spread. I.e. the premium paid for the long position less the premium received for the short position.

Maximum Gain: Limited to the difference between the two strike prices minus the net paid for the position.

**Break Even Point:** Strike Price of Long Put – Net Premium Paid

#### Example:

Nifty is presently at 2694. Mr. XYZ expects Nifty to fall. He buys one Nifty ITM Put with a strike price Rs. 2800 at a premium of Rs. 132 and sells one Nifty OTM Put with strike price Rs. 2600 at a premium Rs. 52.

Mr. XYZ pays Premium (Rs.) =132

Mr. XYZ receives Premium (Rs.) =52

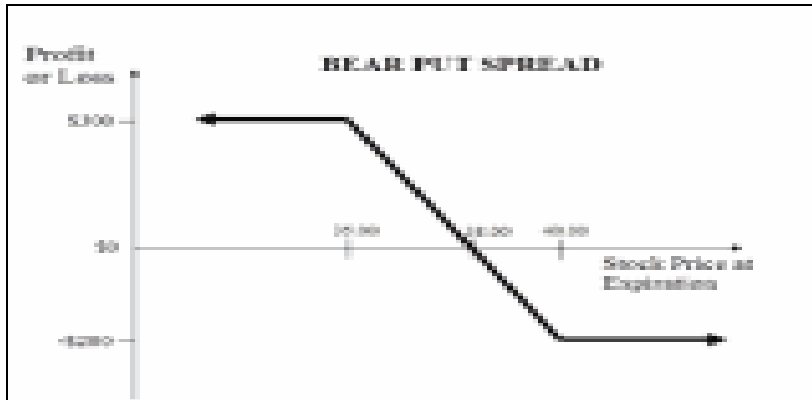
Net Premium Paid (Rs.) =80

Break Even Point (Rs.) =2720

#### Payoff Table:

On expiry Nifty Close	Put Buy	Put Sold	Net Payoff
2200	468	-348	120
2300	368	-248	120
2400	268	-148	120
2500	168	-48	120
2600	68	52	120
2720	-52	52	0

2700	-32	52	20
2800	-132	52	-80
2900	-132	52	-80
3000	-132	52	-80
3100	-132	52	-80



## Neutral Strategies

### 1. Long Straddle

A Straddle is a volatility strategy and is used when the stock price / index is expected to show large movements. This strategy involves buying a call as well as put on the same stock / index for the same maturity and strike price, to take advantage of a movement in either direction, a soaring or plummeting value of the stock / index. If the price of the stock / index increases, the call is exercised while the put expires worthless and if the price of the stock / index decreases, the put is exercised, the call expires worthless.

**When to Use:** The investor thinks that the underlying stock / index will experience significant volatility in the near term.

#### Risk / Reward

Maximum Loss: Limited to the total premium paid for the call and put options.

Maximum Gain: Unlimited as the market moves in either direction.

#### Breakeven:

Upper Breakeven Point = Strike Price of Long Call + Net Premium Paid

Lower Breakeven Point = Strike Price of Long Put - Net Premium Paid

#### Example

Suppose Nifty is at 4450 on 27th April. An investor, Mr. A enters a long straddle by buying a May Rs 4500 Nifty Put for Rs. 85 and a May Rs. 4500 Nifty Call for Rs. 122. The net debit taken to enter the trade is Rs 207, which is also his maximum possible loss.

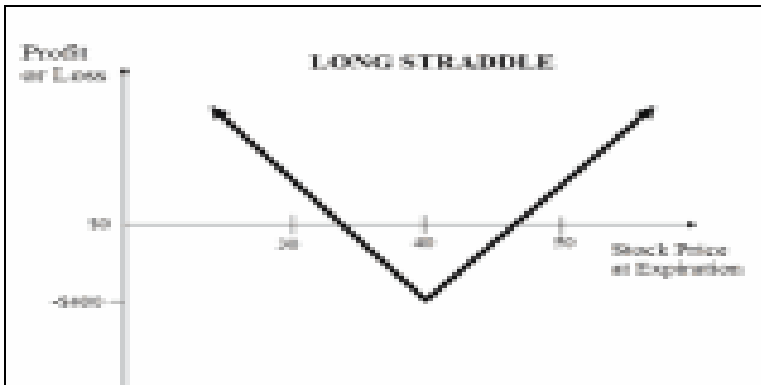
Total Premium (Call + Put) (Rs.) =207

Break Even Point (Rs.) =4707(U)

Break Even Point (Rs.) =4293(L)

#### Payoff Table:

On expiry Nifty Close	Put Buy	Call Buy	Net Payoff
3800	615	-122	493
3900	515	-122	393
4000	415	-122	293
4100	315	-122	193
4200	215	-122	93
4234	181	-122	59
4293	122	-122	0
4300	115	-122	-7
4400	15	-122	-107
4500	-85	-122	-207
4600	-85	-22	-107
4700	-85	78	-7
4707	-85	85	0
4766	-85	144	59
4800	-85	178	93
4900	-85	278	193
5000	-85	378	293
5100	-85	478	393
5200	-85	578	493
5300	-85	678	593



## 2. Short Straddle

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 / index for the same maturity and strike price. It creates a net income for the investor. If the stock / index does not move much in either direction, the investor retains the Premium as neither the Call nor the Put will be exercised. However, incase 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 / index will experience very little volatility in the near term.

### Risk / Reward

Maximum Loss: Unlimited as the market moves in either direction.

Maximum Gain: Limited to the net premium received for selling the options.

### Breakeven:

□ Upper Breakeven Point = Strike Price of Short Call + Net Premium Received

□ Lower Breakeven Point = Strike Price of Short Put - Net Premium Received

### Example

Suppose Nifty is at 4450 on 27th April. An investor, Mr. A, enters into a short straddle by selling a May Rs 4500 Nifty Put for Rs. 85 and a May Rs. 4500 Nifty Call for Rs. 122. The net credit received is Rs. 207, which is also his maximum possible profit.

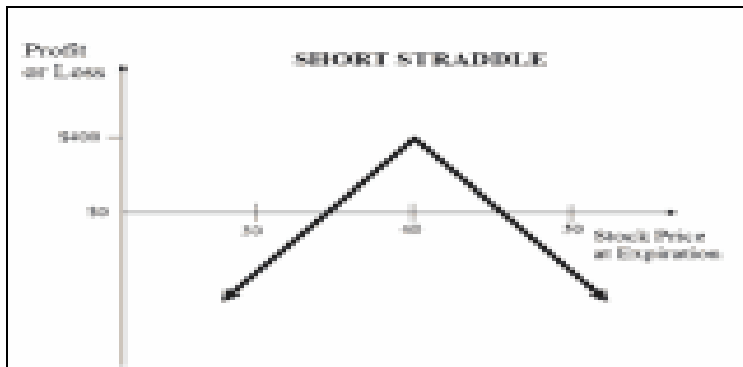
Mr. A receives Total Premium (Call + Put) (Rs.) =207

Break Even Point (Rs.) =4707(U)

Break Even Point (Rs.) =4293(L)

### Payoff Table:

	Put	Call	Net
On expiry Nifty Close	Sold	Sold	Payoff
3800	-615	122	-493
3900	-515	122	-393
4000	-415	122	-293
4100	-315	122	-193
4200	-215	122	-93
4234	-181	122	-59
4293	-122	122	0
4300	-115	122	7
4400	-15	122	107
4500	85	122	207
4600	85	22	107
4700	85	-78	7
4707	85	-85	0
4766	85	-144	-59
4800	85	-178	-93
4900	85	-278	-193
5000	85	-378	-293



### 3. Long Strangle

A Strangle is a slight modification to the Straddle to make it cheaper to execute. This 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 / index and expiration date. Here again the investor is directional neutral but is looking for an increased volatility in the stock / index and the prices moving significantly in either direction. Since OTM options are purchased for both Calls and Puts it makes the cost of executing a Strangle cheaper as compared to a Straddle, where generally ATM strikes are purchased. Since the initial cost of a Strangle is cheaper than a

Straddle, the returns could potentially be higher. However, for a Strangle to make money, it would require greater movement on the upside or downside for the stock / index than it would for a Straddle.

**When to Use:** The investor thinks that the underlying stock / index will experience very high levels of volatility in the near term.

**Risk / Reward**

Maximum Loss: Limited to the total premium paid for the call and put options.

Maximum Gain: Unlimited as the market moves in either direction.

**Breakeven:**

Upper Breakeven Point = Strike Price of Long Call + Net Premium Paid

Lower Breakeven Point = Strike Price of Long Put - Net Premium Paid

**Example**

Suppose Nifty is at 4500 in May. An investor, Mr. A, executes a Long strangle by buying a Rs. 4300 Nifty Put for a premium of Rs. 23 and a Rs 4700 Nifty Call for Rs 43. The net debit taken to enter the trade is Rs. 66, which is also his maximum possible loss.

**Buy Call Option** Strike Price (Rs.) =4700

Mr. A pays Premium (Rs.) =43

Break Even Point (Rs.) =4766

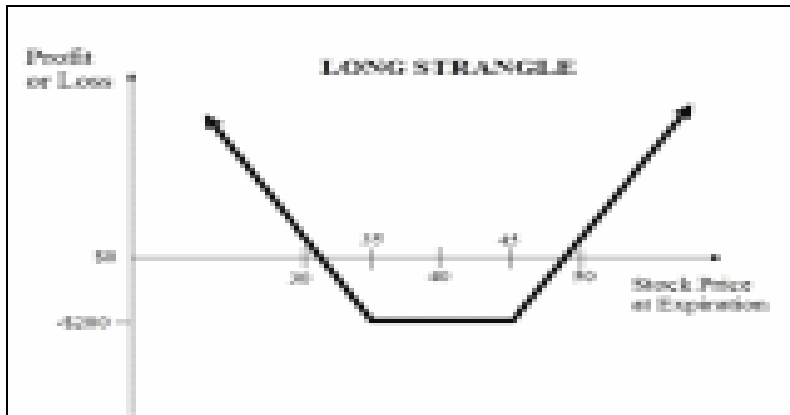
**Buy Put Option** Strike Price (Rs.) =4300

Mr. A pays Premium (Rs.) =23

Break Even Point (Rs.) =4234

**Payoff Table:**

	Put	Call	Net
On expiry Nifty Close	Buy	Buy	Payoff
3800	477	-43	434
3900	377	-43	334
4000	277	-43	234
4100	177	-43	134
4200	77	-43	34
4234	43	-43	0
4300	-23	-43	-66
4400	-23	-43	-66
4500	-23	-43	-66
4600	-23	-43	-66
4700	-23	-43	-66
4766	-23	23	0
4800	-23	57	34
4900	-23	157	134
5000	-23	257	234
5100	-23	357	334
5200	-23	457	434
5300	-23	557	534



#### 4. Short Strangle

A Short Strangle is a slight modification to the Short Straddle. It tries to improve the profitability of the trade for the Seller of the options by widening the breakeven points so that there is a much greater movement required in the underlying stock / index, for the Call and Put option to be worth exercising. This strategy involves the simultaneous selling of a slightly 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. If the underlying stock does not show much of a movement, the seller of the Strangle gets to keep the Premium.

**When to Use:** This options trading strategy is taken when the options investor thinks that the underlying stock will experience little volatility in the near term.

#### Risk / Reward

Maximum Loss: Unlimited as the market moves in either direction.

Maximum Gain: Limited to the net premium received for selling the options

#### Breakeven:

□ Upper Breakeven Point = Strike Price of Short Call + Net Premium Received

□ Lower Breakeven Point = Strike Price of Short Put - Net Premium Received

#### Example

Suppose Nifty is at 4500 in May. An investor, Mr. A, executes a Short Strangle by selling a Rs. 4300 Nifty Put for a premium of Rs. 23 and a Rs.4700 Nifty Call for Rs 43. The net credit is Rs. 66, which is also his maximum possible gain.

**Sell Call** Option Strike Price (Rs.) =4700

Mr. A receives Premium (Rs.) =43

Break Even Point (Rs.) =4766

**Sell Put** Option Strike Price (Rs.) =4300

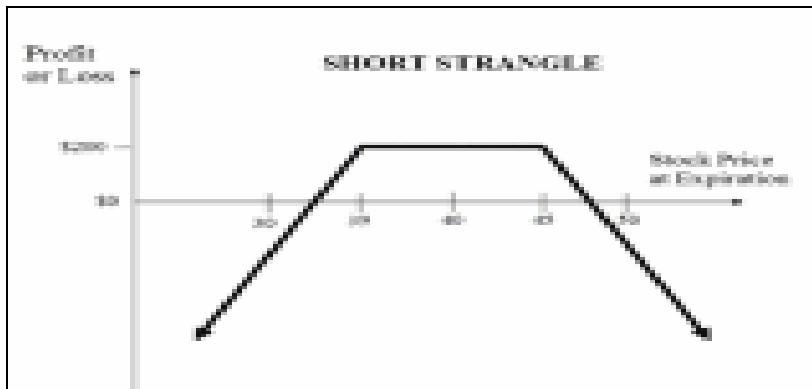
Mr. A receives Premium (Rs.) =23

Break Even Point (Rs.) =4234

#### Payoff Table:

On expiry Nifty Close	Put Sold	Call Sold	Net Payoff
3800	-477	43	-434
3900	-377	43	-334

4000	-277	43	-234
4100	-177	43	-134
4200	-77	43	-34
4234	-43	43	0
4300	23	43	66
4400	23	43	66
4500	23	43	66
4600	23	43	66
4700	23	43	66
4766	23	-23	0
4800	23	-57	-34
4900	23	-157	-134
5000	23	-257	-234
5100	23	-357	-334
5200	23	-457	-434
5300	23	-557	-534



### 5. Long Call Butterfly: Short two ATM call options + long one ITM call option + long one OTM call option.

A Long Call Butterfly is to be adopted when the investor is expecting very little movement in the stock price / index. The investor is looking to gain from low volatility at a low cost. The strategy offers a good risk / reward ratio, together with low cost. A long butterfly is similar to a Short Straddle except your losses are limited.

#### Risk / Reward

Maximum Loss: Limited to the ATM strike less the ITM strike less the net premium paid for the spread.

Maximum Gain: Limited to the net premium received from the spread.

#### Break Even Point:

Breakeven Point (up) = Strike Price of Higher Strike Long Call – Net Premium Paid

Breakeven Point (lower) = Strike Price of Lower Strike Long Call + Net Premium Paid

#### Example:

Nifty is at 3200. Mr. XYZ expects very little movement in Nifty. He sells 2 ATM Nifty Call Options with a strike price of Rs. 3200 at a premium of Rs. 97.90 each, buys 1 ITM Nifty Call Option with a strike price of Rs. 3100 at a premium of Rs. 141.55 and buys 1 OTM Nifty Call Option with a strike price of Rs. 3300 at a premium of Rs. 64. The Net debit is Rs. 9.75.

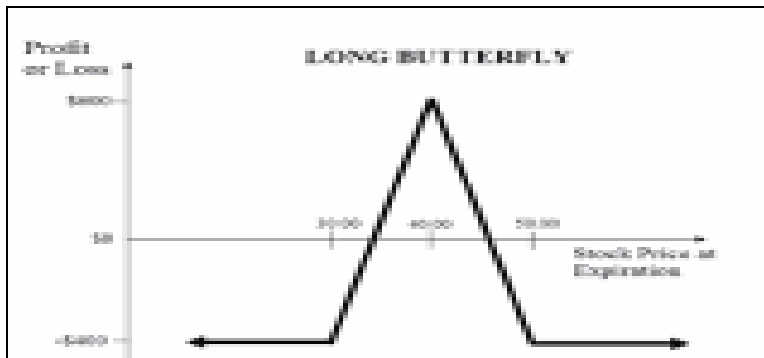
**Premium:  $195.80 - 141.55 - 64 = -9.75$**

Break Even Point (Up) (Rs.) = 3290.25

Break Even Point (Lower) (Rs.) = 3109.75

**Payoff Table:**

Nifty close on expiry	2 ATM Calls	1 ITM Call	1 OTM Call	Net Payoff
2700	195.8	-141.55	-64	-9.75
2800	195.8	-141.55	-64	-9.75
2900	195.8	-141.55	-64	-9.75
3000	195.8	-141.55	-64	-9.75
3100	195.8	-141.55	-64	-9.75
3109.75	195.8	-131.8	-64	0
3200	195.8	-41.55	-64	90.25
3290.25	15.3	48.7	-64	0
3300	-4.2	58.45	-64	-9.75
3400	-204.2	158.45	36	-9.75
3500	-404.2	258.45	136	-9.75
3600	-604.2	358.45	236	-9.75
3700	-804.2	458.45	336	-9.75
3800	-1004.2	558.45	436	-9.75
3900	-1204.2	658.45	536	-9.75



**6. Short Call Butterfly: Long two ATM call options+ short one ITM call option + short one OTM call option.**

There should be equal distance between each strike. A Short Call Butterfly is a strategy for volatile markets. It is the opposite of Long Call Butterfly, which is a range bound strategy. The resulting position will be profitable in case there is a big move in the stock / index.

**Risk / Reward**

Maximum Loss: Limited to the net difference between the ATM strike less the ITM strike less the premium received for the position.

Maximum Gain: Limited to the net premium received for the option spread.

**Break Even Point:**

Upper Breakeven Point = Strike Price of Highest Strike Short Call - Net Premium Received

Lower Breakeven Point = Strike Price of Lowest Strike Short Call + Net Premium Received

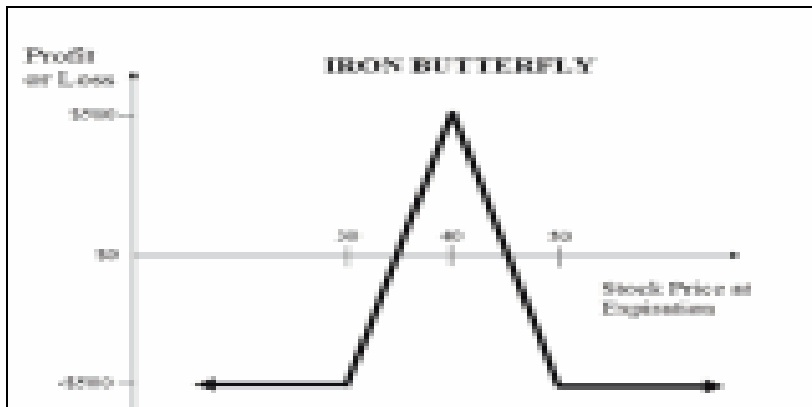
**Premium:  $195.80 - 141.55 - 64 = -9.75$**

Break Even Point (Upper) (Rs.) = 3290.25

Break Even Point (Lower) (Rs.) = 3109.75

**Payoff Table:**

Nifty close on expiry	2 ATM Calls Purchased	1 ITM Call sold	1 OTM Call sold	Net Payoff
2700	-195.8	141.55	64	9.75
2800	-195.8	141.55	64	9.75
2900	-195.8	141.55	64	9.75
3000	-195.8	141.55	64	9.75
3100	-195.8	141.55	64	9.75
3109.75	-195.8	131.8	64	0
3200	-195.8	41.55	64	-90.25
3290.25	-15.3	-48.7	64	0
3300	4.2	-58.45	64	9.75
3400	204.2	-158.45	-36	9.75
3500	404.2	-258.45	-136	9.75
3600	604.2	-358.45	-236	9.75
3700	804.2	-458.45	-336	9.75
3800	1004.2	-558.45	-436	9.75
3900	1204.2	-658.45	-536	9.75



**7. Long Put Butterfly**

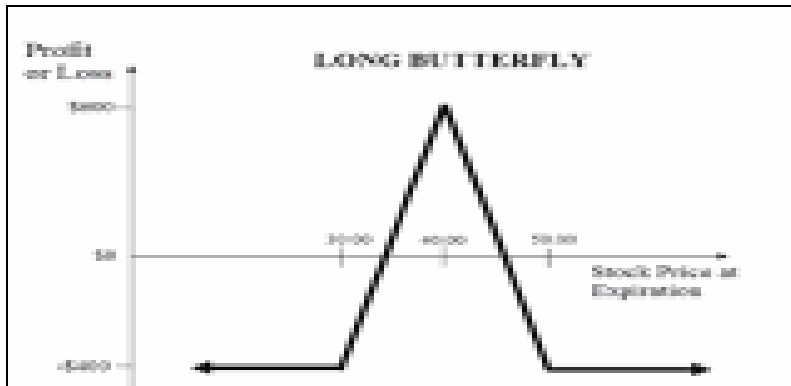
Sell two ATM put options, buy one ITM put option and buy one OTM put option. This strategy is the same as the Long Call Butterfly except we use put options instead of call options. A Long Put Butterfly is used with similar intentions to the Short Straddle except your losses are limited if the market moves out of your favors. Whereas a Short Straddle has unlimited losses if the market moves.

**When to use:** When you are neutral on market direction and bearish on volatility.

**Risk / Reward**

Maximum Loss: Limited to the ATM strike less the ITM strike less the net premium paid for the spread.

Maximum Gain: Limited to the net premium received from the spread.



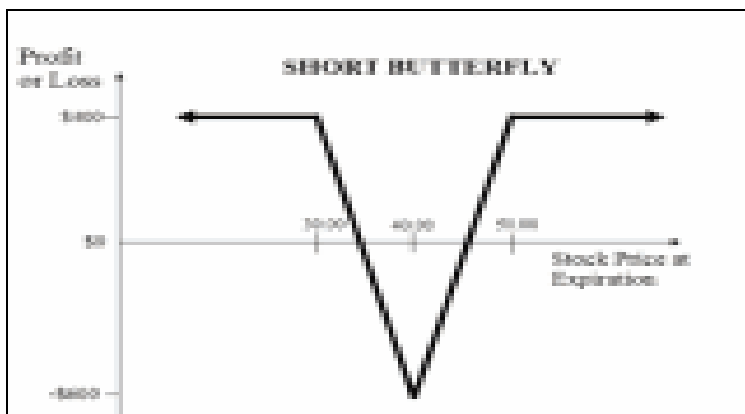
**8. Short Put Butterfly: Long two ATM put options, short one ITM put option and short one OTM put option.**

Short put butterflies have the same characteristics as the Short Call Butterfly - the only difference is that we use put options instead of call options. Short butterflies are an excellent strategy if you expect the market to move, however, you are unsure about what direction the market will move. For example, say there is an announcement due regarding earnings or a Government figure to be released. You might be nervous about market activity and expecting a large move in either direction

**Risk / Reward**

Maximum Loss: Limited to the net difference between the ATM strike less the ITM strike less the premium received for the position.

Maximum Gain: Limited to the net premium received for the option spread.



**9. Long Call Condor: Long ITM Option + Short ITM Option + Short OTM Option + Long OTM Option**

A condor (also known as an "Iron Condor") is very similar to a butterfly strategy. The difference is that the middle strike of the butterfly is split into two strikes. A Long Call Condor is very similar to a long butterfly strategy. The difference is that the two middle sold options have different strikes. The profitable area of the pay off profile is wider than that of the Long Butterfly (see pay-off diagram). The strategy is suitable in a range bound market.

**When to Use:** When an investor believes that the underlying market will trade in a range with low volatility until the options expire.

### Risk/ Reward

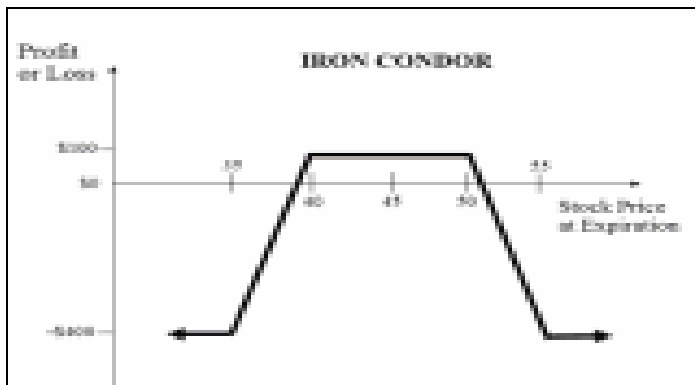
Max loss: Limited. The maximum loss of a long condor occurs at the wings of the option spread. It is the minimum of the difference between the lower strike call spread less the higher call spread less the total premium paid for the condor.

Max gain: Limited. The maximum profit of a long condor will be realized when the stock is trading between the two middle strike prices. When you look at the Condor as 2 call spreads, take the one that has the maximum distance between the strike prices, subtract the net premium paid for the spread and that is the max loss.

### Break Even Point:

Upper Breakeven Point = Highest Strike – Net Debit

Lower Breakeven Point = Lowest Strike + Net Debit



**10. Short Call Condor:** Short ITM Option + Long ITM Option + Long OTM Option + Short OTM Option

A Short Call Condor is very similar to a short butterfly strategy. The difference is that the two middle bought options have different strikes. The strategy is suitable in a volatile market.

**When to Use:** When an investor believes that the underlying market will break out of a trading range but is not sure in which direction.

### Risk/Reward

Max loss: Limited. The maximum loss of a short condor occurs at the center of the option spread. If you've broken the Condor down as 2 call (put) spreads, take the one that has the maximum distance between the strike prices, add the net premium received for the spread and that is the max loss.

Max gain: Limited. The maximum profit of a short condor occurs on the wings, when the underlying asset is trading past the upper or lower strike prices.

### Break Even Point:

Upper Break even Point = Highest Strike – Net Credit

Lower Break Even Point = Lowest Strike + Net Credit

