OPTIONS ADVANCED STRATEGIES

Summary

- A long call is a great strategy for bullish traders who expect the stock price to rise significantly. It offers high reward potential with limited risk, making it one of the most popular strategies for both beginners and advanced traders.
- A short call is a risky but popular strategy for income generation in a flat or mildly bearish market. It allows you to earn a premium upfront, but it carries the risk of unlimited loss if the stock price rises sharply. Beginners should consider using this strategy only if it’s a covered call, to manage the risk better.
- A long put is an effective strategy to profit from falling prices or hedge against potential losses in a stock. It offers limited risk and unlimited profit potential (limited only by how low the stock price can go). This strategy is useful when you are bearish on a stock or want to insure your portfolio against downside risk.
- A short put option is a good strategy if you expect the stock to remain stable or rise. It allows you to earn premium income, but it comes with the risk of substantial losses if the stock price falls. This strategy is suitable if you are bullish to neutral on a stock and don’t mind owning it at the strike price.

Bull Call Spread

Bull Call Spread

A Bull Call Spread is an options strategy used when a trader expects a moderate increase in the price of the underlying asset. It involves buying a call option at a lower strike price and selling a call option at a higher strike price, both with the same expiration date.
This strategy limits both the profit and loss but reduces the overall premium paid compared to buying a single call option.

How Bull Call Spread Works

- Buy 1 Call (Lower Strike) – This gives you the right to buy the stock at a lower price.
- Sell 1 Call (Higher Strike) – This generates some income and limits the cost of the bought call.
- Example of Bull Call Spread
- Stock Price of XYZ: ₹100
- Buy 1 Call Option: Strike price ₹95 for a premium of ₹10
- Sell 1 Call Option: Strike price ₹105 for a premium of ₹4
- Net Premium Paid
- = ₹10 (premium paid) - ₹4 (premium received)
  = ₹6 (total cost or net debit).

Bull Call Spread

Payoff Scenarios

Scenario 1: Stock Price at Expiration = ₹95 or Below

- Both options expire worthless.
- **Loss** = Net Premium Paid = ₹6.

Scenario 2: Stock Price at Expiration = ₹100 (Between Strikes)

- **₹95 Call:** In-the-money, intrinsic value = ₹5 (₹100 - ₹95).
- **₹105 Call:** Out-of-the-money, expires worthless.
- Net Payoff = ₹5 - ₹6 = -₹1 (Loss).

Scenario 3: Stock Price at Expiration = ₹105 or Above

- **₹95 Call:** In-the-money, intrinsic value = ₹10 (₹105 - ₹95).
- **₹105 Call:** In-the-money, intrinsic value = ₹0 (since it was sold).
- **Net Payoff** = ₹10 - ₹6 = ₹4 (Profit).

Bull Call Spread

Maximum Profit and Loss

Max Profit:

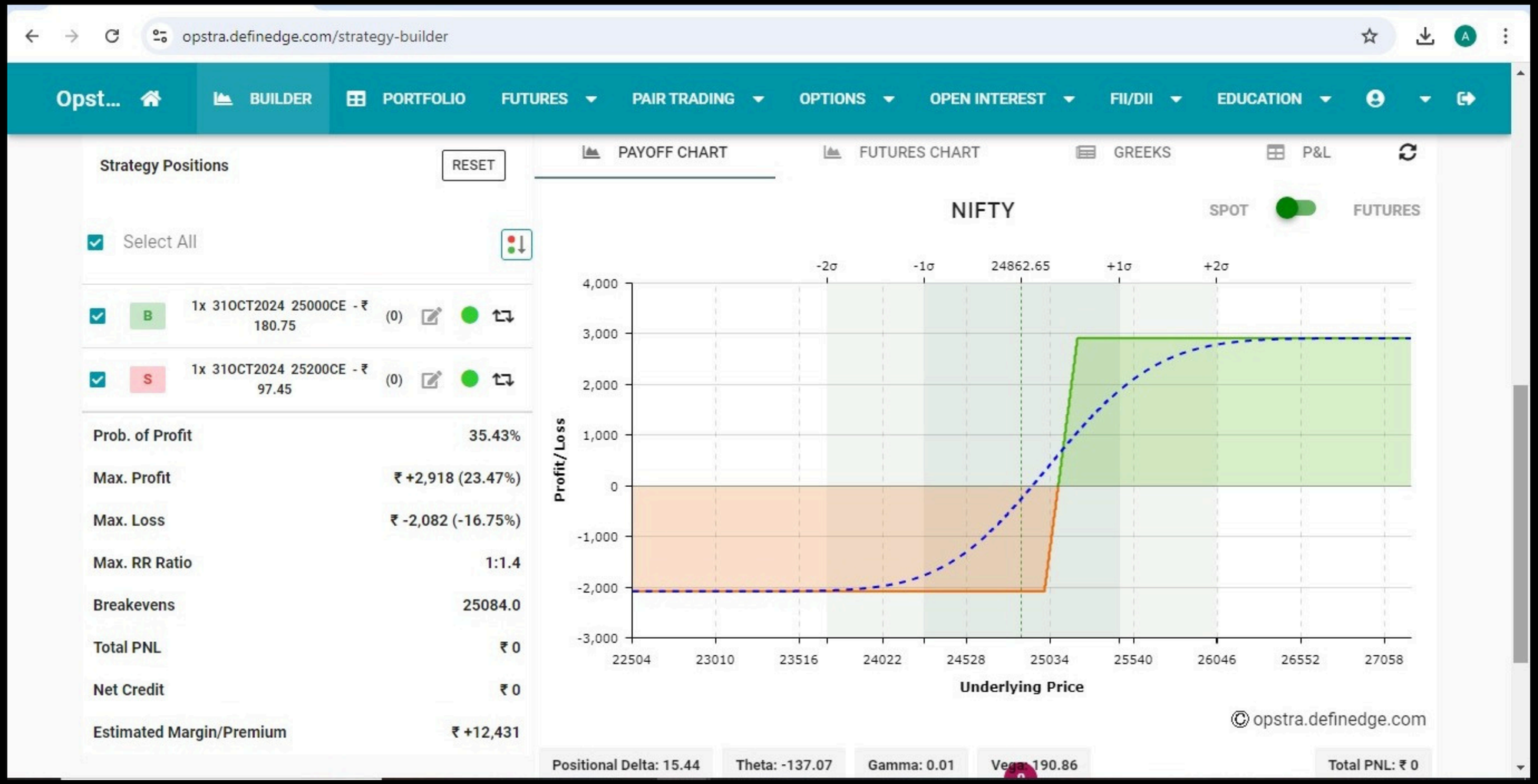
- = Difference between strikes - Net Premium Paid
- = (₹105 - ₹95) - ₹6
- = ₹4 per share.

Max Loss:

- = Net Premium Paid = ₹6 per share.
- Breakeven Point
- = Lower Strike + Net Premium Paid
- = ₹95 + ₹6 = ₹101.

Bull Call Spread

Bull Call Spread



Bull Put Spread

Bull Put Spread

A **Bull Put Spread** is an options strategy used when a trader expects the underlying asset's price to rise or stay above a certain level. This strategy involves:

- Selling a put option at a **higher strike price** (more expensive).
- Buying a put option at a **lower strike price** (cheaper).
- It creates a net credit since the premium received from selling the higher strike put is greater than the premium paid for the lower strike put. The profit is capped, but the risk is limited.

How Bull Put Spread Works

- **Sell 1 Put Option** (Higher Strike) – Obligates you to buy the stock if the price drops below this strike.
- **Buy 1 Put Option** (Lower Strike) – Limits your downside if the stock price drops significantly.

Example of Bull Put Spread

- **Stock Price:** ₹100
- **Sell 1 Put Option:** Strike price ₹105, Premium = ₹8
- **Buy 1 Put Option:** Strike price ₹95, Premium = ₹3
- Net Credit Received
- = ₹8 (premium received) - ₹3 (premium paid)
  = ₹5 (net premium credit).

Bull Put Spread

Payoff Scenarios

Scenario 1: Stock Price at Expiration = ₹105 or Above

- Both put options expire worthless.
- **Profit =** Net Credit Received = ₹5.

Scenario 2: Stock Price at Expiration = ₹100 (Between Strikes)

- **₹105 Put:** In-the-money, intrinsic value = ₹5.
- **₹95 Put:** Out-of-the-money, expires worthless.
- **Net Payoff** = ₹5 (loss) - ₹5 (credit) = ₹0 (breakeven).

Scenario 3: Stock Price at Expiration = ₹95 or Below

- **₹105 Put:** In-the-money, intrinsic value = ₹10.
- **₹95 Put:** In-the-money, intrinsic value = ₹0.
- **Net Payoff** = ₹10 - ₹5 = -₹5 (Max Loss).

Bull Put Spread

Maximum Profit and Loss

Max Profit:

- = Net Credit Received = ₹5 per share.

Max Loss:

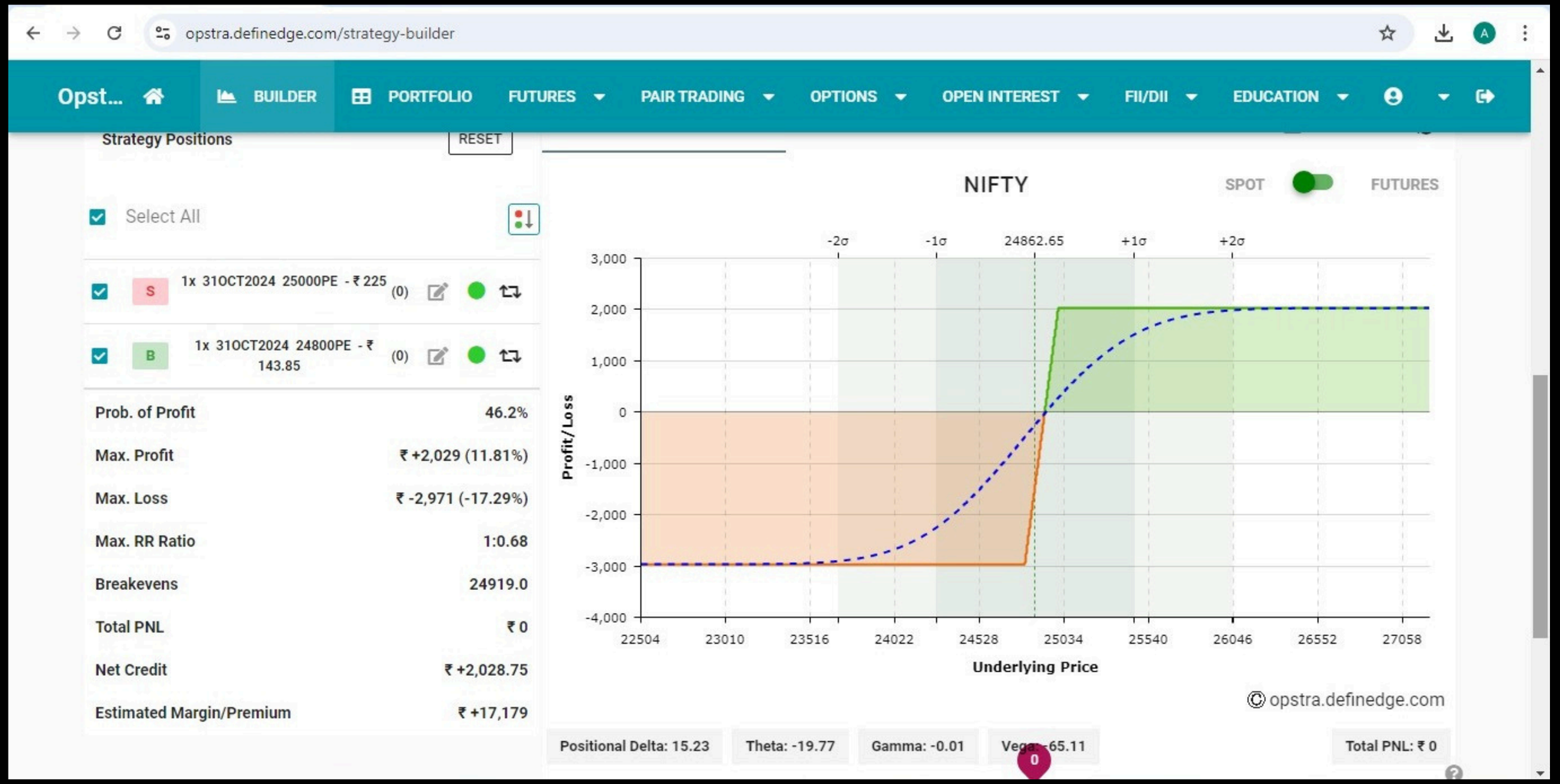
- = Difference between strikes - Net Credit Received
- = (₹105 - ₹95) - ₹5 = ₹5 per share.

Breakeven Point:

- = Higher Strike - Net Credit Received
  = ₹105 - ₹5 = ₹100.

Bull Put Spread

Bull Put Spread



Bear Call Spread

Bear Call Spread

A Bear Call Spread is an options strategy used when a trader expects the underlying asset's price to decline or stay below a certain level. It involves:

- **Selling a call option** at a lower strike price (more expensive).
- **Buying a call option** at a higher strike price (cheaper).
- This strategy creates a net credit because the premium received from selling the lower strike call is higher than the premium paid for buying the higher strike call. It limits both the potential profit and loss.

How Bear Call Spread Works

- **Sell 1 Call Option (Lower Strike)** – Obligation to sell if the price rises above the strike.
- **Buy 1 Call Option (Higher Strike)** – Limits your loss if the stock rises significantly.

Example of Bear Call Spread

- **Stock Price:** ₹100
- **Sell 1 Call Option:** Strike price ₹95, Premium = ₹10
- **Buy 1 Call Option:** Strike price ₹105, Premium = ₹4
- Net Credit Received
- = ₹10 (premium received) - ₹4 (premium paid)
  = ₹6 (net premium credit).

Bear Call Spread

Payoff Scenarios

Scenario 1: Stock Price at Expiration = ₹95 or Below

- Both options expire worthless.
- Profit = Net Credit Received = ₹6.

Scenario 2: Stock Price at Expiration = ₹100 (Between Strikes)

- **₹95 Call:** In-the-money, intrinsic value = ₹5.
- **₹105 Call:** Out-of-the-money, expires worthless.
- **Net Payoff** = ₹5 - ₹6 = -₹1 (Loss).

Scenario 3: Stock Price at Expiration = ₹105 or Above

- **₹95 Call:** In-the-money, intrinsic value = ₹10.
- **₹105 Call:** In-the-money, intrinsic value = ₹0 (since bought).
- **Net Payoff** = ₹10 - ₹6 = -₹4 (Max Loss).

Bear Call Spread

Maximum Profit and Loss

Max Profit:

- = Net Credit Received = ₹6 per share.

Max Loss:

- = Difference between strikes - Net Credit Received
- = (₹105 - ₹95) - ₹6 = ₹4 per share.

Breakeven Point:

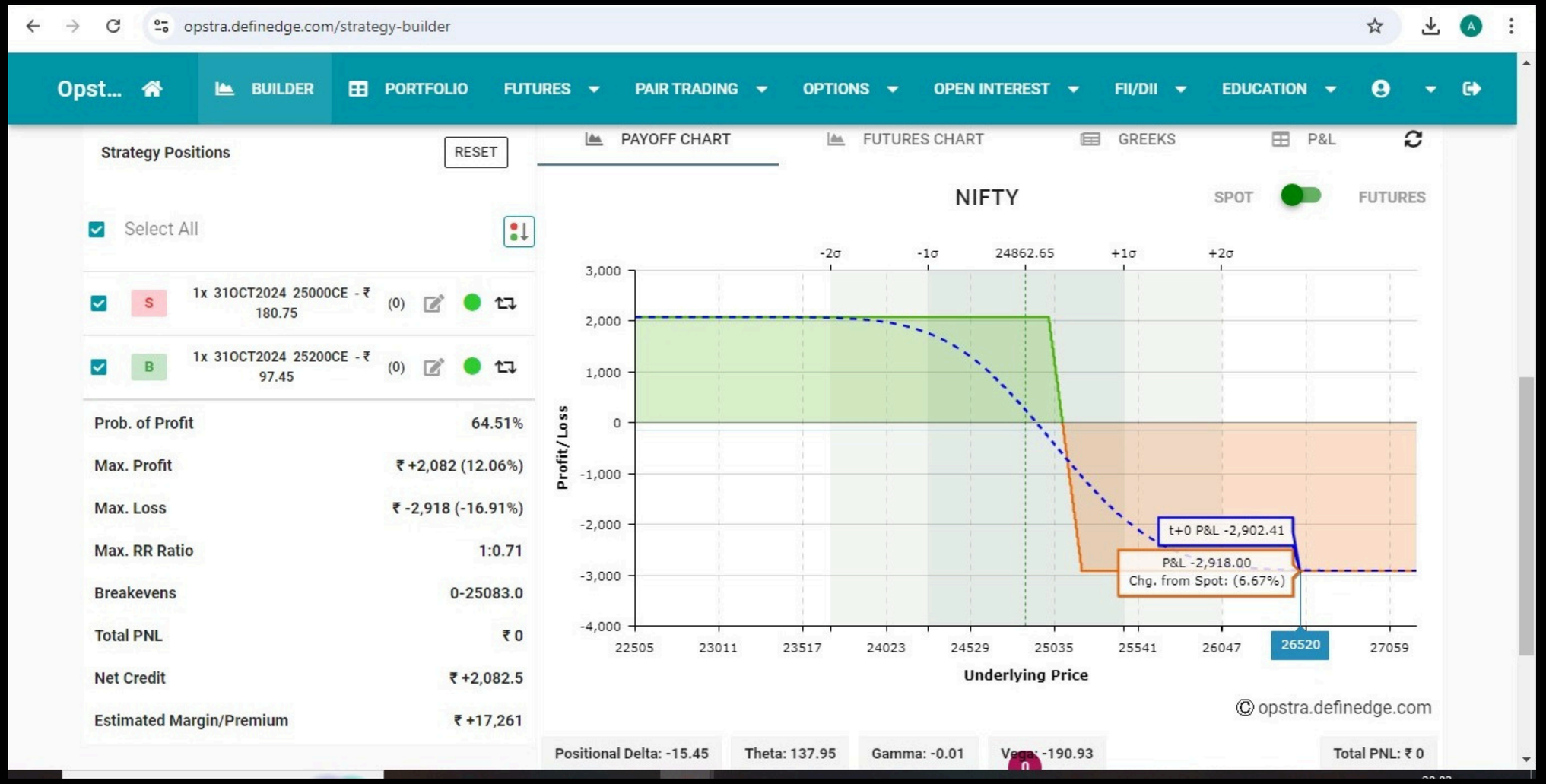
- = Lower Strike + Net Credit Received
- = ₹95 + ₹6 = ₹101.

When to Use a Bear Call Spread?

- **Moderately Bearish Outlook:** Expect the stock price to stay flat or decline slightly.
- **Defined Risk and Reward:** Maximum loss and profit are known at the start.
- **Income Strategy:** Used to generate premium income when volatility is low.

Bear Call Spread

Bear Call Spread



Bear Put Spread

Bear Put Spread

A **Bear Put Spread** is an options strategy used when a trader expects the price of the underlying asset to decline moderately. It involves:

- Buying a put option at a **higher strike price** (more expensive).
- Selling a put option at a **lower strike price** (cheaper).
- This strategy limits both the profit potential and risk, making it suitable for traders with a moderately bearish outlook.

How Bear Put Spread Works

- **Buy 1 Put Option** (Higher Strike) – Gives you the right to sell the stock at a higher price.
- **Sell 1 Put Option** (Lower Strike) – Offsets part of the premium paid and limits the profit.

Example of Bear Put Spread

- **Stock Price:** ₹100
- **Buy 1 Put Option:** Strike price ₹105, Premium = ₹8
- **Sell 1 Put Option:** Strike price ₹95, Premium = ₹3
- **Net Premium Paid** (Net Debit)
- = ₹8 (premium paid) - ₹3 (premium received)
  = ₹5 (total cost or net debit).

Bear Put Spread

Payoff Scenarios

Scenario 1: Stock Price at Expiration = ₹105 or Above

- Both put options expire worthless.
- Loss = Net Premium Paid = ₹5.

Scenario 2: Stock Price at Expiration = ₹100 (Between Strikes)

- ₹105 Put: In-the-money, intrinsic value = ₹5.
- ₹95 Put: Out-of-the-money, expires worthless.
- Net Payoff = ₹5 - ₹5 = ₹0 (breakeven).

Scenario 3: Stock Price at Expiration = ₹95 or Below

- ₹105 Put: In-the-money, intrinsic value = ₹10.
- ₹95 Put: In-the-money, intrinsic value = ₹0 (since sold).
- Net Payoff = ₹10 - ₹5 = ₹5 (Max Profit).

Bear Put Spread

Maximum Profit and Loss

Max Profit:

- = Difference between strikes - Net Premium Paid
- = (₹105 - ₹95) - ₹5 = ₹5 per share.

Max Loss:

- = Net Premium Paid = ₹5 per share.= (₹105 - ₹95) - ₹6 = ₹4 per share.

Breakeven Point:

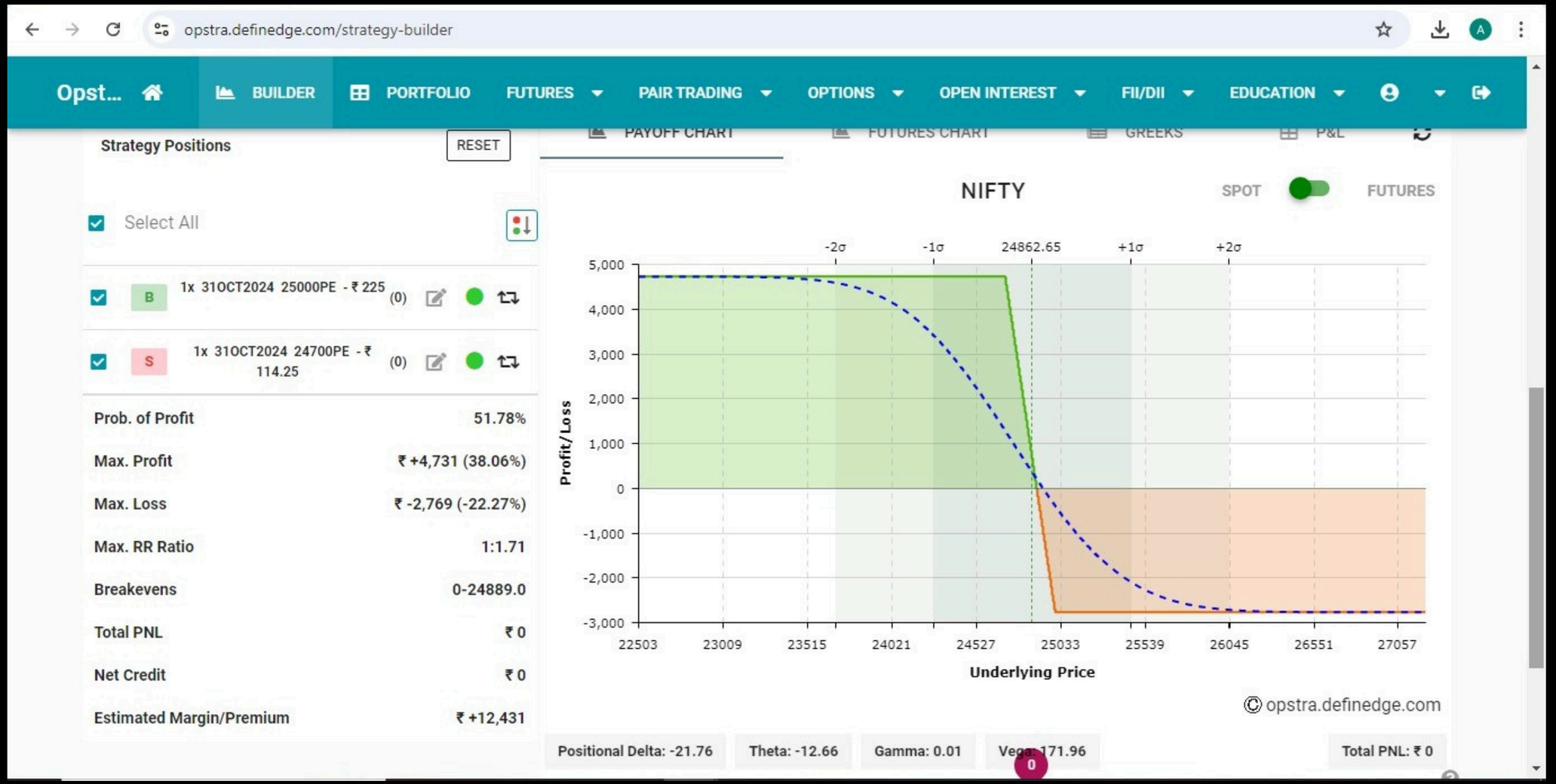
- = Higher Strike - Net Premium Paid
- = ₹105 - ₹5 = ₹100.

When to Use a Bear Put Spread?

- **Moderately Bearish Outlook:** Expect the stock to decline but not drastically.
- **Defined Risk and Reward:** Known maximum loss and profit from the start.
- **Lower Cost Alternative:** Selling the lower strike put offsets some of the premium cost.

Bear Put Spread

Bear Put Spread



Straddle

Straddle

A straddle is a neutral options strategy where a trader buys both a call and a put option with the same strike price and expiration date. The goal is to profit from a significant movement in the stock price, regardless of the direction (up or down). This strategy is ideal when you expect high volatility but are unsure of the direction in which the price will move.

How It Works

- **Buy a call option:** This gives the right to buy the stock at the strike price if the price rises.
- **Buy a put option:** This gives the right to sell the stock at the strike price if the price falls.
- Both the call and put have the same strike price and expiry date.
- You profit if the stock makes a large move (either up or down) beyond the breakeven points.

Straddle

Example

- **Stock XYZ** is currently trading at ₹100.
- You **buy a call option** with a strike price of ₹100 for a premium of ₹5.
- You **buy a put option** with the same strike price of ₹100 for a premium of ₹4.
- **Total cost** (or initial investment) = ₹9 (₹5 + ₹4).

Straddle

Possible Scenarios

Scenario 1: Stock Rises to ₹120

- The call option becomes profitable, with intrinsic value = ₹120 - ₹100 = ₹20.
- The put option expires worthless.
- Profit = ₹20 (call option) - ₹9 (total premium) = ₹11 per share.

Scenario 2: Stock Falls to ₹80

- The put option becomes profitable, with intrinsic value = ₹100 - ₹80 = ₹20.
- The call option expires worthless.
- Profit = ₹20 (put option) - ₹9 (total premium) = ₹11 per share.

Scenario 3: Stock Stays at ₹100 (Strike Price)

- Both the call and put expire worthless.
- Loss = Total premium paid = ₹9 per share.

Breakeven Points

- To calculate breakeven points:
- Upside Breakeven = Strike Price + Total Premium Paid
- = ₹100 + ₹9 = ₹109
- Downside Breakeven = Strike Price - Total Premium Paid
- = ₹100 - ₹9 = ₹91
- The strategy is profitable if the stock price moves beyond ₹109 or below ₹91.

Straddle

Key Benefits

- **Profit from Volatility:** Works well in markets with high volatility, where the stock is expected to move significantly in either direction.
- **Limited Risk:** The maximum loss is limited to the total premium paid (₹9 in the example).

Drawbacks

- **High Cost:** Since you are buying both a call and a put, the strategy involves a high premium cost.
- **Time Decay:** If the stock doesn't move significantly by expiry, both options lose value, resulting in a loss.

When to Use a Straddle?

- **Earnings Announcements:** When a company is about to announce earnings, and you expect a sharp move in the stock price.
- **Events or News:** Use before major events (e.g., elections, central bank meetings) that could cause significant price movement.
- **Uncertain Market Conditions:** When you expect volatility but aren’t sure of the direction.

Long Straddle

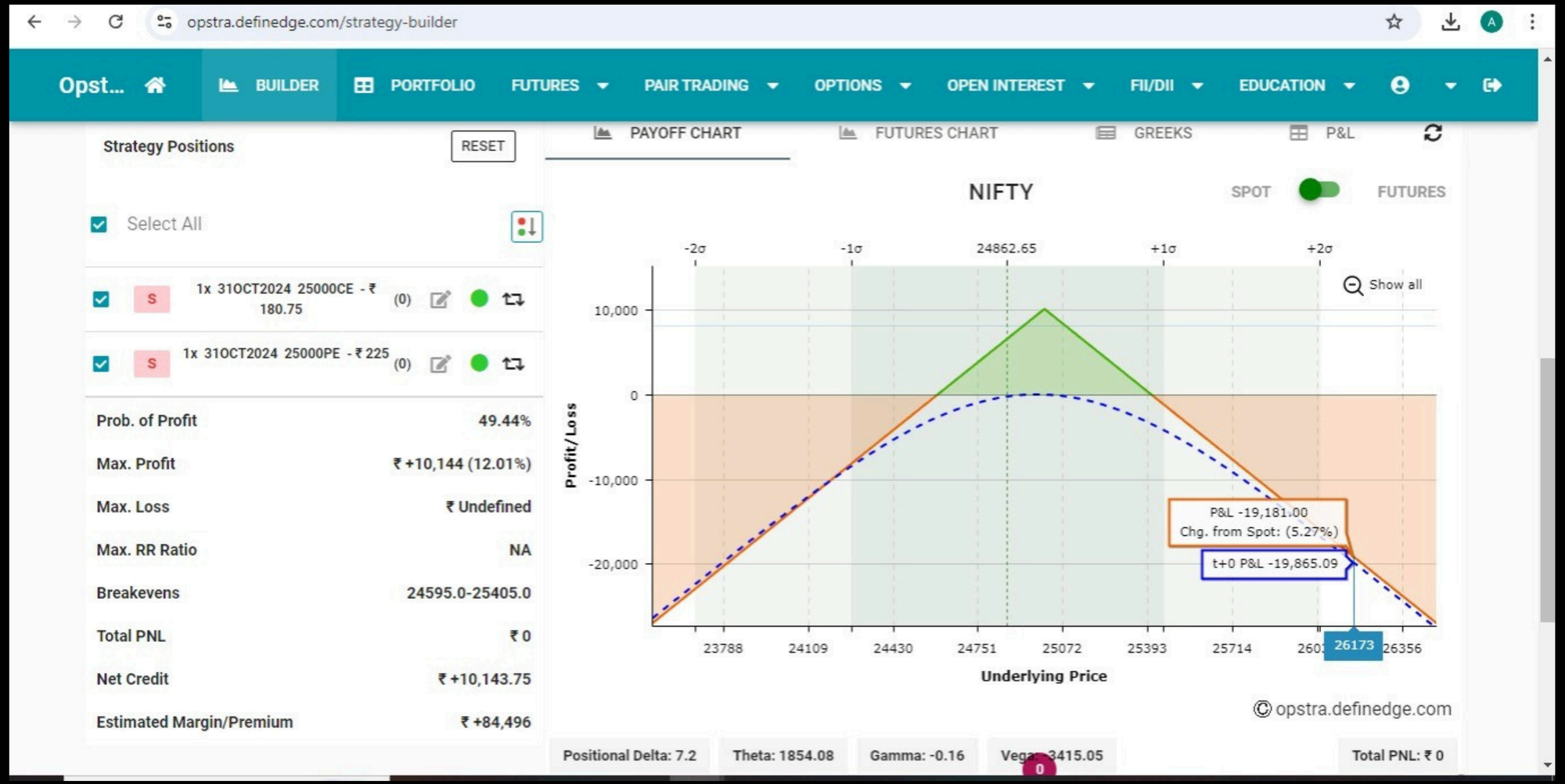
Payoff chart

Long Straddle Payoff chart

Short Straddle

Payoff chart

Short Straddle Payoff chart



Strangle

Strangle

A strangle is a neutral options strategy similar to a straddle, but with a key difference: the strike prices of the call and put options are different. This makes it less expensive than a straddle, but it also requires a larger price movement to become profitable. The goal is to profit from significant volatility in the stock price, regardless of direction.

How It Works

- Buy a call option: Gives the right to buy the stock at a higher strike price.
- Buy a put option: Gives the right to sell the stock at a lower strike price.
- Both options have the same expiration date but different strike prices.
- You profit if the stock moves significantly either up or down, beyond the breakeven points.

Strangle

Example

- **Stock XYZ** is currently trading at ₹100.
- You **buy a call option** with a strike price of ₹110 for a premium of ₹4.
- You **buy a put option** with a strike price of ₹90 for a premium of ₹3.
- **Total cost** (initial investment) = ₹4 + ₹3 = ₹7.

Strangle

Scenario 1: Stock Rises to ₹120

- The call option becomes profitable: ₹120 - ₹110 = ₹10.
- The put option expires worthless.
- Profit = ₹10 - ₹7 (total premium) = ₹3 per share.

Scenario 2: Stock Falls to ₹80

- The put option becomes profitable: ₹90 - ₹80 = ₹10.
- The call option expires worthless.
- Profit = ₹10 - ₹7 (total premium) = ₹3 per share.

Scenario 3: Stock Stays Around ₹100

- Both the call and put options expire worthless.
- Loss = Total premium paid = ₹7 per share.

Breakeven Points

- To break even, the stock must move beyond these points:
- Upside Breakeven = Call Strike Price + Total Premium Paid
- = ₹110 + ₹7 = ₹117
- Downside Breakeven = Put Strike Price - Total Premium Paid
- = ₹90 - ₹7 = ₹83
- The strategy is profitable if the stock price rises above ₹117 or falls below ₹83.

Strangle

Key Benefits

- **Lower Cost than Straddle:** Since the call and put have out-of-the-money strike prices, premiums are cheaper than a straddle.
- **Profit from Volatility:** Works well in volatile markets, as long as the stock makes a big move.

Drawbacks

- **Larger Price Movement Required:** Since the options are bought at different strike prices, the stock needs to move further to achieve profitability.
- **Time Decay:** If the stock doesn't move significantly by expiration, both options lose value, leading to a loss of the premium.

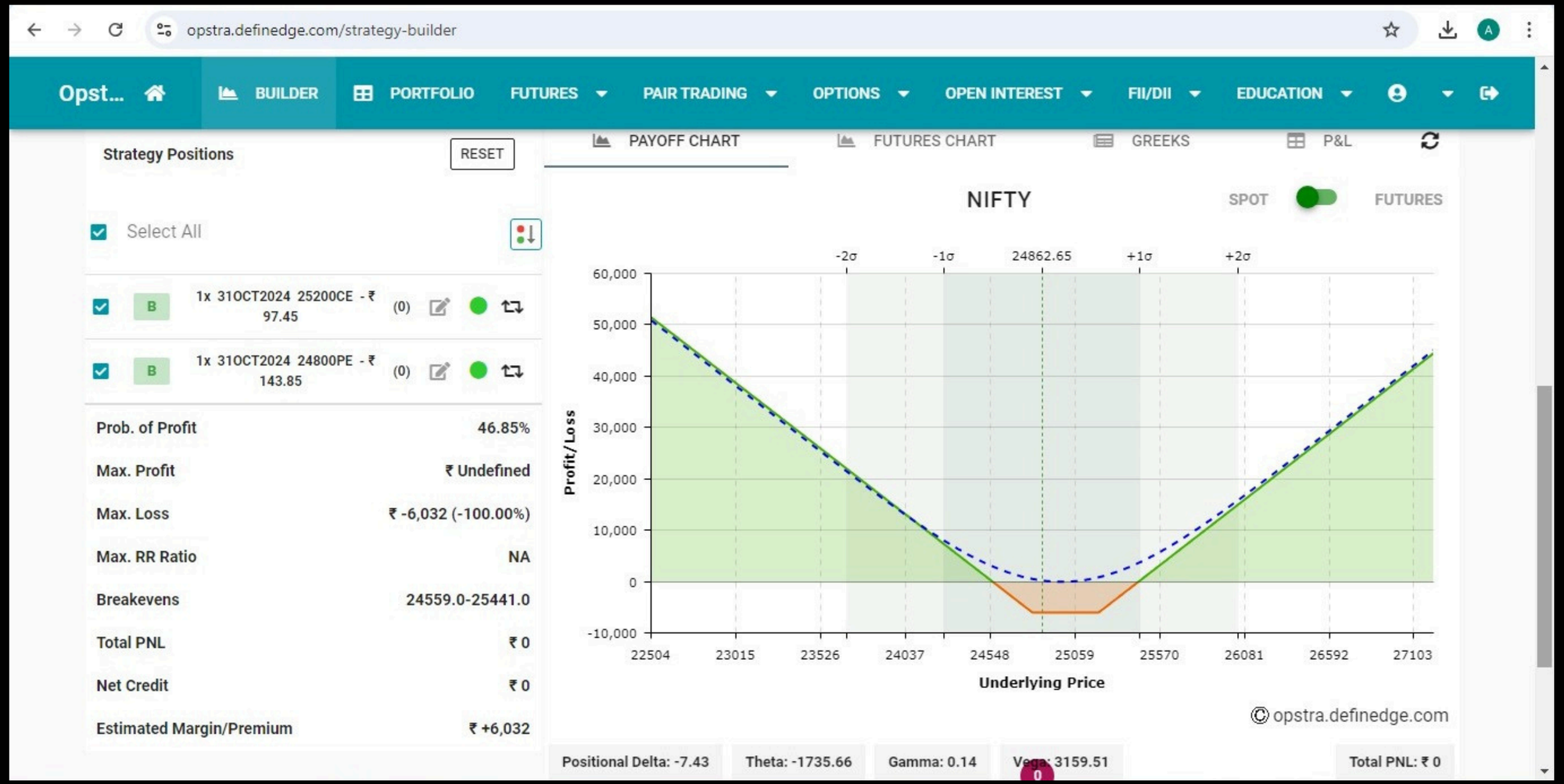
When to Use a Strangle?

- **Earnings Announcements or Major Events:** When you expect large price movement but are unsure of the direction.
- **High Volatility Scenarios:** Use when you expect market turbulence, such as elections or central bank decisions.

Long Strangle

Payoff chart

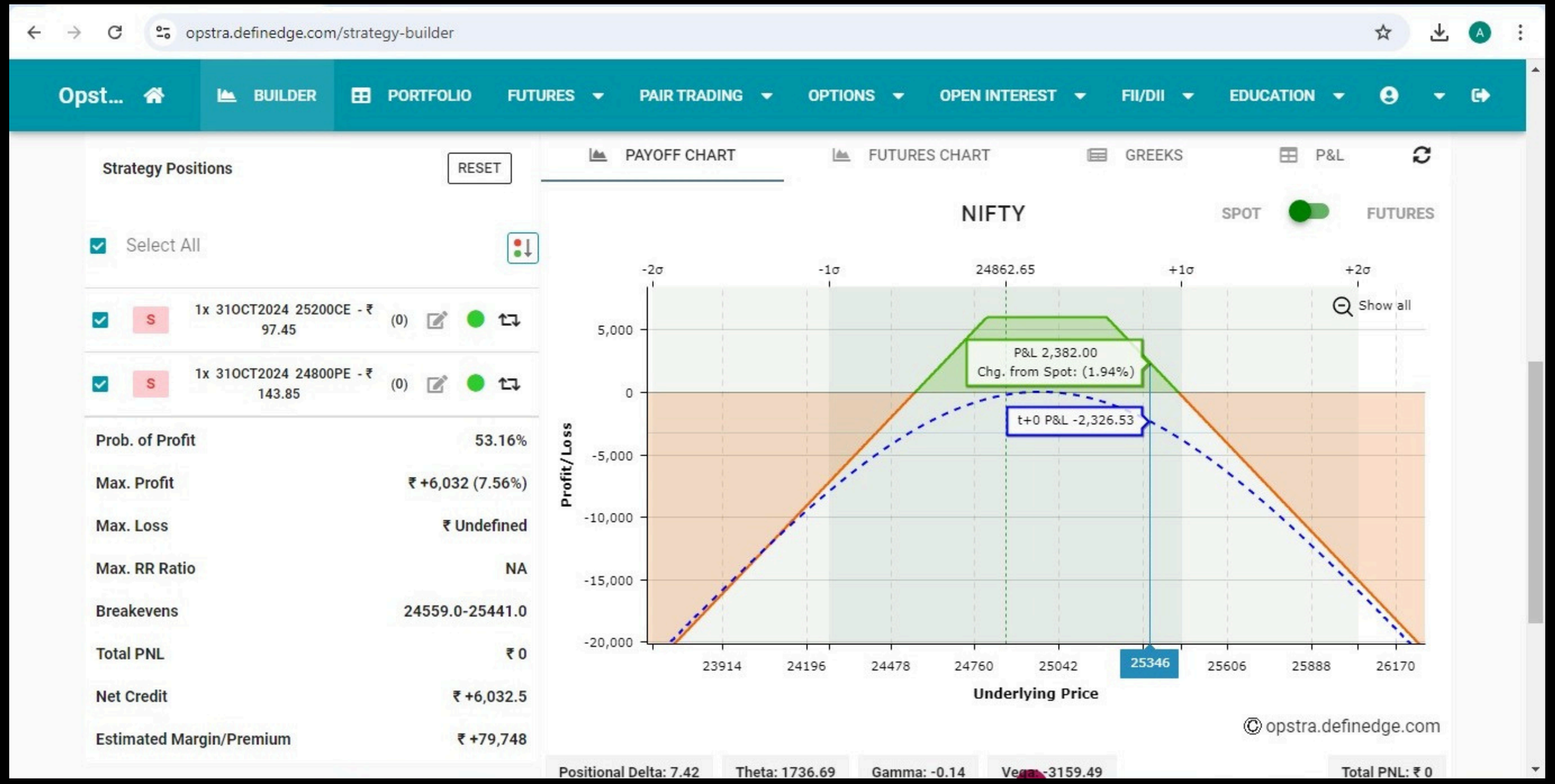
Long Strangle Payoff chart



Short Strangle

Payoff chart

Short Strangle Payoff chart



Iron Condor

Iron Condor

The Iron Condor is an advanced options strategy designed to profit from low volatility. It involves selling both a call spread and a put spread with different strike prices but the same expiration date. The goal is to profit if the underlying asset remains within a certain price range until the options expire. This strategy limits both risk and reward.

How It Works

- The Iron Condor consists of four options positions:
- Sell a lower strike put (short put)
- Buy a lower strike put (long put, for protection)
- Sell a higher strike call (short call)
- Buy a higher strike call (long call, for protection)
- All four options have the same expiration date, and the strike prices are selected to create two spreads:
- Put spread (bearish spread): A short put and a long put.
- Call spread (bullish spread): A short call and a long call.

Iron Condor

Example

- Stock XYZ is trading at ₹100.
- You implement an Iron Condor with the following options:
- Sell 1 put with a strike price of ₹95 for a premium of ₹3.
- Buy 1 put with a strike price of ₹90 for a premium of ₹2.
- Sell 1 call with a strike price of ₹105 for a premium of ₹4.
- Buy 1 call with a strike price of ₹110 for a premium of ₹2.
- Net Premium Received
- = (₹3 + ₹4) - (₹2 + ₹2)
- = ₹3 per share.

Possible Scenarios

Scenario 1: Stock Stays Between ₹95 and ₹105

- All options expire worthless, as the stock stays within the inner strike prices (₹95-₹105).
- Profit = Total premium received = ₹3 per share.

Iron Condor

Scenario 2: Stock Falls Below ₹90

- The put spread becomes fully in-the-money:
- Loss = ₹95 (short put) - ₹90 (long put) - ₹3 (net premium) = ₹2 per share.
- The call spread expires worthless.
- Total Loss = ₹2 per share.

Scenario 3: Stock Rises Above ₹110

- The call spread becomes fully in-the-money:
- Loss = ₹110 (long call) - ₹105 (short call) - ₹3 (net premium) = ₹2 per share.
- The put spread expires worthless.
- Total Loss = ₹2 per share.

Key Points

- Maximum Profit
- Occurs if the stock price stays between the inner strike prices (₹95 and ₹105).
- Max Profit = Net premium received = ₹3 per share.

Iron Condor

Maximum Loss

- Occurs if the stock price goes below ₹90 or above ₹110.
- Max Loss = Difference between strikes - Net premium received
- = ₹5 - ₹3 = ₹2 per share.

Breakeven Points

- Lower Breakeven = ₹95 - ₹3 = ₹92
- Upper Breakeven = ₹105 + ₹3 = ₹108

When to Use the Iron Condor?

- **Neutral Outlook:** When you expect the stock to trade within a range.
- **Low Volatility Markets:** Ideal for stable markets where large price swings are unlikely.
- **Time Decay Advantage:** The options lose value over time, and you keep the premium if the options expire worthless.

Key Benefits

- **Limited Risk and Reward:** Losses are capped, but so are profits.
- **Time Decay Works in Your Favor:** As time passes, the options lose value, benefiting the seller.
- **Profit from a Range-Bound Market:** Ideal for traders expecting little price movement.

Drawbacks

- **Requires Precision:** Profitability depends on the stock staying within the range.
- **Limited Profit Potential:** Maximum profit is the net premium received.
- **High Commissions:** Since the strategy involves four options, transaction costs can be higher.

Iron Condor

Payoff Chart

Iron Condor Payoff Chart

Butterfly

Butterfly

A Butterfly Spread is an options strategy that allows traders to profit from low volatility when they expect the stock price to stay near a specific level. It involves buying and selling options at three different strike prices, typically creating a limited profit and loss scenario. There are two main types:

- Long Butterfly Spread – Used when expecting low volatility.
- Short Butterfly Spread – Used when expecting high volatility.
- We'll focus on the long butterfly spread, which is more common.

How a Long Butterfly Spread Works

- A long butterfly strategy combines bull and bear spreads using call or put options. Most often, it is executed with calls.
- Buy 1 lower strike call (out-of-the-money).
- Sell 2 calls at the middle strike (at-the-money).
- Buy 1 higher strike call (out-of-the-money).
- All options should have the same expiration date. The middle strike is where the trader expects the stock to stay by expiration.

Butterfly

Example

- Stock XYZ is currently trading at ₹100.
- You expect the stock to stay close to ₹100 by expiration, so you execute a long butterfly spread:
- Buy 1 call with a ₹95 strike for a premium of ₹6.
- Sell 2 calls with a ₹100 strike for a premium of ₹3 each (total ₹6).
- Buy 1 call with a ₹105 strike for a premium of ₹2.
- Net Premium Paid
- = ₹6 (lower call) + ₹2 (higher call) - ₹6 (sold calls)
- = ₹2 (total cost or debit).

Possible Scenarios

Scenario 1: Stock Closes at ₹100 (Middle Strike)

- Both bought calls (₹95 and ₹105) expire out-of-the-money.
- The sold calls (₹100 strike) expire worthless.
- Profit = ₹3 (max intrinsic value) - ₹2 (premium paid) = ₹1 per share.

Butterfly

Scenario 2: Stock Closes Below ₹95 or Above ₹105

- All options expire worthless.
- Loss = Total premium paid = ₹2 per share.

Scenario 3: Stock Closes Between ₹95 and ₹105

- The ₹95 call gains intrinsic value as the stock rises, while the ₹105 call stays worthless.
- If the stock is at ₹98 or ₹102, partial profits/losses occur depending on the intrinsic value of the in-the-money calls.

Breakeven Points

- Lower Breakeven = Lower Strike + Net Premium Paid = ₹95 + ₹2 = ₹97
- Upper Breakeven = Higher Strike - Net Premium Paid = ₹105 - ₹2 = ₹103
- You profit if the stock stays between ₹97 and ₹103 by expiration.

Maximum Profit and Loss

- Max Profit: Occurs if the stock closes at the middle strike price (₹100).
- Max Profit = Difference between strikes - Net Premium Paid
- = ₹5 - ₹2 = ₹3 per share.

Butterfly

- Max Loss: Occurs if the stock moves significantly above or below the outer strikes (below ₹95 or above ₹105).
- Max Loss = ₹2 per share (the net premium paid).

When to Use a Long Butterfly Spread?

- Neutral to Low Volatility Outlook: When you expect the stock to stay near the middle strike price by expiration.
- Cost-Effective Trade: Provides exposure to potential profits with limited risk.
- Events with Predictable Outcomes: Useful before earnings announcements or reports where you expect minimal surprises.

Key Benefits

- Limited Risk and Reward: You know your maximum loss (the premium paid) and maximum profit.
- Low Cost: The premium required is typically lower than other strategies.
- Profits from Stability: Works best in low-volatility markets.

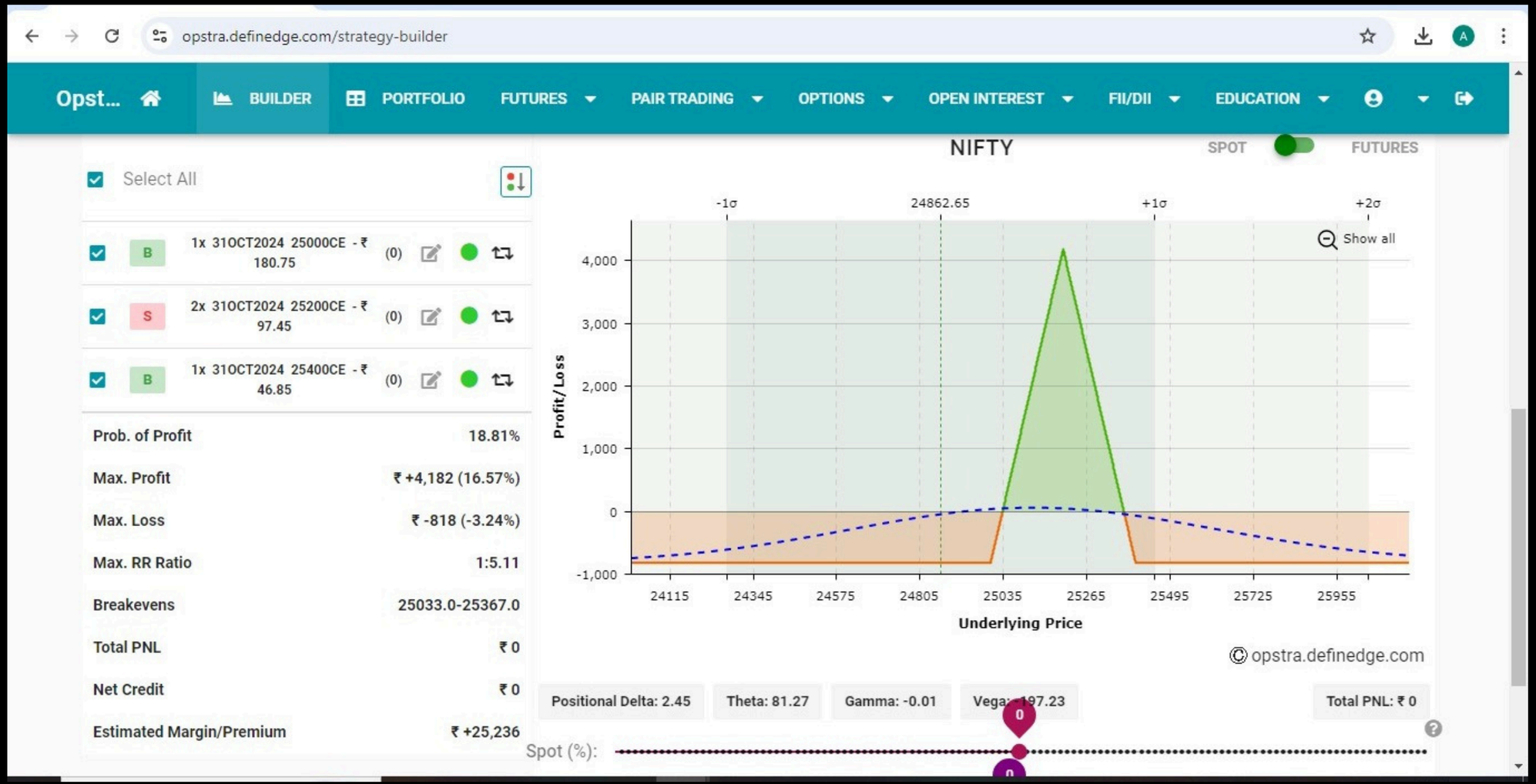
Drawbacks

- Low Probability of Max Profit: For maximum profit, the stock must close exactly at the middle strike price.
- Time Decay: Works against you if the stock doesn’t stay near the middle strike until expiration.
- Limited Profit Potential: Even with the best outcome, the profit is capped.

Butterfly Strategy

Payoff Chart

Butterfly Strategy Payoff Chart



	Risk	Return
Long	Premium paid	Unlimited
Short	Unlimited	Premium received

Summary

Summary

- The straddle strategy allows traders to profit from large price movements in either direction. It's a useful strategy in volatile markets but requires a significant price move to cover the high premium costs. While the risk is limited to the total premium paid, the potential profit is theoretically unlimited if the stock moves far enough beyond the breakeven points.
- A strangle strategy is ideal for traders who expect significant price movements but want to reduce the cost compared to a straddle. While both risk and cost are lower, it requires a larger price move to become profitable. The maximum loss is limited to the total premium paid, but the profit potential is unlimited as the stock can move significantly beyond the breakeven points.
- The Iron Condor strategy is a popular choice for traders looking to profit from stable markets with limited volatility. It offers limited risk and limited profit, making it suitable for range-bound scenarios. However, it requires careful planning of strike prices to maximize the probability of success.
- A butterfly spread is an ideal strategy for traders expecting little movement in the underlying asset. It offers limited risk and limited reward. If the stock stays close to the middle strike price, you can achieve the maximum profit, but if the stock moves significantly, the loss is capped at the net premium paid. This strategy is a low-cost way to profit from market stability.

Summary

- Bull Call spread strategy works well if the trader expects moderate bullish movement in the stock but wants to limit risk. It balances profit potential with reduced cost through the sale of a higher strike call.
- A bull put spread is a strategy used when you expect the underlying asset to stay flat or rise moderately. This strategy provides limited profit and limited risk and works well when you expect a mildly bullish market.
- A bear call spread is a strategy used when you expect the underlying asset’s price to decline or stay below a certain level. This strategy provides limited profit and risk and is ideal when you expect a mildly bearish market.
- A bear put spread is a strategy used when you expect the underlying asset’s price to decline moderately. This strategy provides limited profit and risk and is ideal when you expect moderate bearish movement.