Institute of Trading and Portfolio Management

Professional Options Trading Masterclass Video Series

POTM

Video 3

Not-Useful Options Trading Strategies

Contents

Introductory Notes

1. Breakeven, Profit and Risk calculations are all shown ignoring brokerage commissions.

2. Net Premium figures represent the cost of the strategy and are positive (Net Debit) when the trader pays money to implement the strategy and negative (Net Credit) when the trader receives money to implement the strategy.

1. Albatross Spread (Wide Condor Spread)

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Short Volatility Strategy (profit gained from a limited range around the current underlying price)
- Net Debit
- Limited Profit
- Limited Risk

Further Explanation

An Albatross Spread is a neutral strategy (no directional bias) where the trader can profit from a (typically wide) equidistant range around the price of the underlying when the strategy is implemented. The strategy has limited upside and downside and is essentially a bearish play on volatility. As long as the underlying price stays within the equidistant range around the starting price until expiry, the strategy will profit.

An Albatross Spread has 4 legs, and can be structured either entirely with calls or entirely with puts - both methods yielding a very similar profit and risk profile. Structuring the trade requires the following 4 option legs implemented with the same expiry date and number of contracts:

- Sell 1 ITM Call [or Put] equidistant to the OTM short
- Sell 1 OTM Call [or Put] equidistant to the ITM short
- Buy 1 ITM Call [or Put] with a wider strike price (than the other ITM Call [or Put]) and equidistant to the OTM long
- Buy 1 OTM Call [or Put] with a wider strike price (than the other OTM Call [or Put]) and equidistant to the ITM long

This results in the strategy becoming a Debit spread which means it requires upfront cost.

An Albatross Spread is very similar to a Condor Spread and in fact is often referred to as a Wide Condor Spread. As the name suggests, it essentially means that the profitable range is wider than for a typical Condor Spread, which increases the likelihood of success but reduces the upside of the profitable range.

Break Even

An Albatross Strategy has two breakeven points:

- **Upper Breakeven Point = Strike Price of Highest Strike Long Call [or Put] - Net Premium**
  - Note: This is a Debit Spread and so the Net Premium will be positive.
  - Example:
    - Strike Price of Highest Strike Long Call [or Put] = 53
    - Net Premium (cost of strategy) = 0.5
    - Upper Breakeven = 53 - 0.5 = 52.5
- **Lower Breakeven Point = Strike Price of Lowest Strike Long Call [or Put] + Net Premium**
  - Example:
    - Strike Price of Lowest Strike Long Call [or Put] = 47
    - Net Premium (cost of strategy) = 0.5
    - Lower Breakeven = 47 + 0.5 = 47.5

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike Price of Lower Strike Short Call [or Put] - Strike Price of Lower Strike Long Call [or Put] - Net Premium.
- Max Profit Range: The Range of Maximum Profit is between the Strike Prices of the two Short Calls [or Puts].

Risk Calculations (Maximum Downside)

- Maximum Loss = Net Premium
- Maximum Loss Range: Where the Price of Underlying is less than or equal to the Strike Price of Lower Strike Long Call [or Put] OR when it is greater than or equal to the Strike Price of Higher Strike Long Call [or Put]

2. Condor Spread

Quick Summary

- Exactly the same as an Albatross Spread but with a narrower profit range and higher maximum profit
- Neutral Strategy (no directional bias in the underlying)
- Short Volatility Strategy (profit gained from a limited range around the current underlying price)
- Net Debit
- Limited Profit
- Limited Risk

Further Explanation

A Condor Spread is a neutral strategy (no directional bias) where the trader can profit from an equidistant range around the price of the underlying when the strategy is implemented. The key difference between a Condor and Albatross spread is that the Condor profit range is set slightly narrower but allows the maximum profit to be slightly higher. The strategy has limited upside and downside and is essentially a bearish play on volatility. As long as the underlying price stays within the equidistant range around the starting price until expiry, the strategy will profit.

A Condor Spread has 4 legs, and can be structured either entirely with calls or entirely with puts - both methods yielding a very similar profit and risk profile. Structuring the trade requires the following 4 option legs implemented with the same expiry date and number of contracts:

- Sell 1 ITM Call [or Put] equidistant to the OTM short
- Sell 1 OTM Call [or Put] equidistant to the ITM short
- Buy 1 ITM Call [or Put] with a wider strike price (than the other ITM Call [or Put]) and equidistant to the OTM long
- Buy 1 OTM Call [or Put] with a wider strike price (than the other OTM Call [or Put]) and equidistant to the ITM long

This results in the strategy becoming a Debit spread which means it requires upfront cost.

Break Even

A Condor Spread has two breakeven points:

- **Upper Breakeven Point = Strike Price of Highest Strike Long Call [or Put] - Net Premium**
  - Note: This is a Debit Spread and so the Net Premium will be positive.
  - Example:
    - Strike Price of Highest Strike Long Call [or Put] = 53
    - Net Premium (cost of strategy) = 0.5
    - Upper Breakeven = 53 - 0.5 = 52.5
- **Lower Breakeven Point = Strike Price of Lowest Strike Long Call [or Put] + Net Premium**
  - Example:
    - Strike Price of Lowest Strike Long Call [or Put] = 47
    - Net Premium (cost of strategy) = 0.5
    - Lower Breakeven = 47 + 0.5 = 47.5

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike Price of Lower Strike Short Call [or Put] - Strike Price of Lower Strike Long Call [or Put] - Net Premium.
- Max Profit Range: The Range of Maximum Profit is between the Strike Prices of the two Short Calls [or Puts].

Risk Calculations (Maximum Downside)

- Maximum Loss = Net Premium
- Maximum Loss Range: Where the Price of Underlying is less than or equal to the Strike Price of Lower Strike Long Call [or Put] OR when it is greater than or equal to the Strike Price of Higher Strike Long Call [or Put]

3. Butterfly Spread

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Short Volatility Strategy (profit gained from a limited range around the current underlying price)
- Net Debit
- Limited Profit
- Limited Risk

Further Explanation

A Butterfly Spread is another neutral strategy where the trader can profit from an equidistant range around the price of the underlying when the strategy is implemented. By setting up this range, much like a Condor or Albatross strategy, the trader is making an implicit short volatility bet. As long as the underlying price does not move too far from the spot price at implementation, the strategy will profit. Implementation requires a Net Debit transaction meaning it costs money to set up the trade and it offers the trader limited upside and downside.

The mechanics behind the strategy are very similar to a Condor/Albatross spread except this time the two Short positions are executed At-The-Money meaning there is only one spot price which will result in a maximum profit rather than a range of spot prices. Typically, this means that the profit range is smaller but the maximum upside is larger than that which you would expect with a Condor Spread on the same underlying (and contract variables). A Butterfly Spread can also be structured either entirely with calls or entirely with puts - both methods yielding a very similar profit and risk profile. Since both Short positions are executed at the same price, this strategy requires only 3 legs rather than the 4 you would need with a Condor Spread and should all be executed with the same expiry date:

- Sell 2 ATM Calls [or Puts]
- Buy 1 ITM Call [or Put] equidistant to the OTM long
- Buy 1 OTM Call [or Put] equidistant to the ITM long

This results in the strategy becoming a Debit spread which means it requires upfront cost.

Break Even

A Butterfly Spread has two breakeven points:

- **Upper Breakeven Point = Strike Price of Higher Strike Long Call [or Put] - Net Premium**
    - Note: This is a Debit Spread and so the Net Premium will be positive.
    - Example:
        - Strike Price of Higher Strike Long Call [or Put] = 55
        - Net Premium (cost of strategy) = 1
        - Upper Breakeven = 55 - 1 = 54
- **Lower Breakeven Point = Strike Price of Lower Strike Long Call [or Put] + Net Premium**
    - Example:
        - Strike Price of Lowest Strike Long Call [or Put] = 45
        - Net Premium (cost of strategy) = 1
        - Lower Breakeven = 45 + 1 = 46

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike Price of Short Calls [or Puts] - Strike Price of Lower Strike Long Call [or Put] - Net Premium.
- Max Profit Range: Maximum Profit occurs at the Strike Price of the Short Calls [or Puts].

Risk Calculations (Maximum Downside)

- Maximum Loss = Net Premium
- Maximum Loss Range: Where the Price of Underlying is less than or equal to the Strike Price of Lower Strike Long Call [or Put] OR when it is greater than or equal to the Strike Price of Higher Strike Long Call [or Put]

4. Iron Albatross Spread

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Short Volatility Strategy (profit gained from a limited range around the current underlying price)
- Net Credit (key difference to a standard Albatross Spread)
- Limited Profit
- Limited Risk

Further Explanation

An Iron Albatross Spread is a neutral strategy with no directional bias where the trader can profit from a (typically wide) equidistant range around the price of the underlying when the strategy is implemented. The key difference between this strategy and the standard Albatross setup is that this is a Net Credit play, meaning you are paid to put it on. That's a great benefit, but the price you pay is a worse risk/reward ratio (max profit to max loss ratio). The strategy has limited upside and downside and is essentially a bearish play on volatility. As long as the underlying price stays within the equidistant range around the starting price until expiry, the strategy will profit.

An Iron Albatross Spread has 4 legs, and is structured with 2 calls and 2 puts. Structuring the trade requires the following 4 option legs implemented with the same expiry date and number of contracts:

- Sell 1 OTM Call equidistant to the OTM Put
- Sell 1 OTM Put equidistant to the OTM Call
- Buy 1 OTM Call with a higher strike price (than the Short OTM Call) and equidistant to the Long OTM Put
- Buy 1 OTM Put with a lower strike price (than the Short OTM Put) and equidistant to the Long OTM Call

This results in the strategy becoming a Credit spread which means you receive the Net Premium upfront.

An Iron Albatross Spread is very similar to an Iron Condor Spread and in fact is often referred to as a Wide Iron Condor Spread. As the name suggests, it essentially means that the profitable range is wider than a typical Iron Condor Spread, which increases likelihood of success but reduces the upside of the profitable range.

Break Even

An Iron Albatross Strategy has two breakeven points:

- **Upper Breakeven Point = Strike Price of the Short Call - Net Premium**
  - Note: This is a Credit Spread and so the Net Premium will be negative.
  - Example:
    - Strike Price of Short Call = 53
    - Net Premium (cost of strategy) = 0.5
    - Upper Breakeven = 53 – (-0.5) = 53.5
- **Lower Breakeven Point = Strike Price of the Short Put + Net Premium**
  - Example:
    - Strike Price Short Put = 47
    - Net Premium (cost of strategy) = 0.5
    - Lower Breakeven = 47 + (-0.5) = 46.5

Profit Calculations (Maximum Upside)

- Maximum Profit = Net Premium
- Max Profit Range: The Range of Maximum Profit is between the Strike Prices of the 2 Short positions (1 Call and 1 Put)

Risk Calculations (Maximum Downside)

- Maximum Loss = Strike Price of Long Call – Strike Price of Short Call – Net Premium
- Maximum Loss Range: Where the Price of Underlying is less than or equal to the Strike Price of Long Put OR when it is greater than or equal to the Strike Price of Long Call

5. Iron Condor Spread

Quick Summary

- Exactly the same as an Iron Albatross Spread but with a narrower profit range and higher maximum upside
- Neutral Strategy (no directional bias in the underlying)
- Short Volatility Strategy (profit gained from a limited range around the current underlying price)
- Net Credit (key difference to a standard Condor Spread)
- Limited Profit
- Limited Risk

Further Explanation

An Iron Condor Spread is a neutral strategy with no directional bias where the trader can profit from an equidistant range around the price of the underlying when the strategy is implemented. The key difference between this strategy and the standard Condor setup is that this is a Net Credit play, meaning you are paid to put it on. Similarly to the Iron Albatross strategy, the price you pay for receiving Net Premium upfront is a worse risk/reward ratio (max profit to max loss ratio). However, an Iron Condor strategy typically has a better risk/reward ratio than an Iron Albatross and that is because the Profit Range is narrower. The strategy has limited upside and downside and is essentially a bearish play on volatility. As long as the underlying price stays within the equidistant range around the starting price until expiry, the strategy will profit.

An Iron Condor Spread has 4 legs, and is structured with 2 calls and 2 puts. Structuring the trade requires the following 4 option legs implemented with the same expiry date and number of contracts:

- Sell 1 OTM Call equidistant to the OTM Put
- Sell 1 OTM Put equidistant to the OTM Call
- Buy 1 OTM Call with a higher strike price (than the Short OTM Call) and equidistant to the Long OTM Put
- Buy 1 OTM Put with a lower strike price (than the Short OTM Put) and equidistant to the Long OTM Call

This results in the strategy becoming a Credit spread which means you receive the Net Premium upfront.

Break Even

An Iron Condor Strategy has two breakeven points:

- **Upper Breakeven Point = Strike Price of the Short Call - Net Premium**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Strike Price of Short Call = 53
        - Net Premium (cost of strategy) = 0.5
        - Upper Breakeven = 53 – (-0.5) = 53.5
- **Lower Breakeven Point = Strike Price of the Short Put + Net Premium**
    - Example:
        - Strike Price Short Put = 47
        - Net Premium (cost of strategy) = 0.5
        - Lower Breakeven = 47 + (-0.5) = 46.5

Profit Calculations (Maximum Upside)

- Maximum Profit = Net Premium
- Max Profit Range: The Range of Maximum Profit is between the Strike Prices of the 2 Short positions (1 Call and 1 Put)

Risk Calculations (Maximum Downside)

- Maximum Loss = Strike Price of Long Call – Strike Price of Short Call – Net Premium
- Maximum Loss Range: Where the Price of Underlying is less than or equal to the Strike Price of Long Put OR when it is greater than or equal to the Strike Price of Long Call

6. Iron Butterfly Spread

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Short Volatility Strategy (profit gained from a limited range around the current underlying price)
- Net Credit (key difference to a standard Butterfly Spread)
- 4 Legs/Transactions (key difference to standard Butterfly Spread =3)
- Limited Profit
- Limited Risk

Further Explanation

An Iron Butterfly Spread is another neutral strategy where the trader can profit from an equidistant range around the price of the underlying when the strategy is implemented. By setting up this range, much like an Iron Condor or Iron Albatross strategy, the trader is making an implicit short volatility bet. As long as the underlying price does not move too far from the spot price at implementation, the strategy will profit. Implementation yields a Net Credit transaction meaning you receive money upfront to set up the trade and it offers the trader limited upside and downside.

The mechanics behind the strategy are very similar to an Iron Condor/Albatross spread except this time the two Short positions (1 Call and 1 Put) are executed At-The-Money meaning there is only one spot price which will result in a maximum profit rather than a range of spot prices. Typically, this means that the profit range is smaller but the maximum upside is larger than that which you would expect for an Iron Condor/Albatross Spread on the same underlying (and contract variables). Since the two short positions are split up into 1 Call and 1 Put (rather than 2 of one kind for a standard Butterfly Spread) this strategy requires 4 legs rather than 3:

- Buy 1 OTM Put equidistant to the Long OTM Call
- Buy 1 OTM Call equidistant to the Long OTM Put
- Sell 1 ATM Call
- Sell 1 ATM Put

This results in the strategy becoming a Credit spread which means you receive the Net Premium upfront.

Break Even

An Iron Butterfly Strategy has two breakeven points:

- **Upper Breakeven Point = Strike Price of the Short Call - Net Premium**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Strike Price of Short Call = 50
        - Net Premium (cost of strategy) = 0.5
        - Upper Breakeven = 50 - (-0.5) = 50.5
- **Lower Breakeven Point = Strike Price of the Short Put + Net Premium**
    - Example:
        - Strike Price Short Put = 50
        - Net Premium (cost of strategy) = 0.5
        - Lower Breakeven = 50 + (-0.5) = 49.5

Profit Calculations (Maximum Upside)

- Maximum Profit = Net Premium
- Maximum Profit Range: Maximum Profit occurs when the underlying price equals the strike price of the Short Call/Put

Risk Calculations (Maximum Downside)

- Maximum Loss = Strike Price of Long Call – Strike Price of Short Call – Net Premium
- Maximum Loss Range: Where the Price of Underlying is less than or equal to the Strike Price of Long Put OR when it is greater than or equal to the Strike Price of Long Call

7. Neutral Calendar Spread (Calls or Puts)

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Short Volatility Strategy (profit gained from a narrow range around the current underlying price)
- Net Debit
- 2 Legs/Transactions (either both Calls or both Puts)
- Limited Profit
- Limited Risk

Further Explanation

A Neutral Calendar Spread constructed with Calls is structured by writing near-term Calls at or near the money and buying the same number of longer-term Calls at the same strike. Since the near-term Calls allows less time for the underlying asset to move in price it has less time value and is thus priced lower than the longer-term Call. This means that the Spread will be Net Debit Strategy (i.e. it costs money to set up).

This is a neutral strategy with an implicit bet on short volatility, meaning that maximum profit is gained when the underlying price doesn't move at all from the strike price that is set. The idea is that the trader can benefit from the increased time decay seen in options that are close to expiry.

For example:

- "XYZ" stock currently trading at $50 (FEB)
- Sell 1 MAR 50 Call in "XYZ" Stock for $300
- Buy 1 OCT 50 Call in "XYZ" Stock for $500
- Net Debit Transaction = $200

As discussed previously, the longer-term call is more expensive because it has more time value. This additional time value is there because the option gives the stock more time to move to a profitable price. Time decay (a loss in the options value due to decreasing time to expiry) increases the closer to expiry the option is. If by March the stock price in the above example remains at $50, and all else remains equal (such as volatility expectations), then the MAR 50 Call would expire worthless due to time decay. However, because the OCT 50 Call has a much longer-term expiry, time decay hasn't set in nearly as rapidly and the option will have lost a lot less in value. For example, it might have decreased to $350. At that time, you can sell the OCT 50 Call and your net profit would be $350 - $200 = $150 once accounting for the Debit Transaction.

Note: This strategy can be employed in exactly the same way using Puts (buying a longer-term Put and selling a shorter-term Put). The Risk/Reward and mechanics of the trade are almost identical to that which has been discussed with Calls.

Break Even

A Neutral Calendar Call Spread has two breakeven points, one either side of the maximum profit price (which is equal to the strike price of the Calls). The Break-even values cannot be calculated easily because it depends on the time value of the options used.

Profit Calculations (Maximum Upside)

- Maximum Profit = Credit Premium from short-term Call – Time Decay of long-term Call
- Maximum Profit Range: Maximum Profit occurs when the underlying price equals the strike price of the Calls

Risk Calculations (Maximum Downside)

- Maximum Loss = Net Premium
- Maximum Loss Range: The range depends on the Time Decay of the longer-term option.

8. Short Straddle

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Short Volatility Strategy (profit gained from a limited range around the current underlying price)
- Net Credit
- 2 Legs/Transactions
- Limited Profit
- Unlimited Risk

Further Explanation

A Short Straddle is a relatively simple trading strategy which involves writing an equal number of Call and Put contracts on the same stock at the same strike (ATM) and with the same expirations. The strategy profits when the underlying price stays within a tight range around the strike price by the time expiration comes around – it is essentially a short volatility play. Since it involves only writing options, it is a Net Credit strategy which means you receive money upfront. The downside of the strategy is that there is unlimited risk, meaning in this case that the further away the underlying price moves away from the strike price the greater loss the trader will take. It is a high-risk play and the trader must be confident of low volatility levels in the underlying before putting on the trade.

Constructing the trade is simple:

- Sell 1 ATM Call
- Sell 1 ATM Put

This results in the strategy becoming a Credit spread which means you receive the Net Premium upfront.

Break Even

A Short Straddle Strategy has two breakeven points:

- **Upper Breakeven Point = Strike Price of the Short Call/Put - Net Premium**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Strike Price of Short Call = 50
        - Net Premium (cost of strategy) = 2
        - Upper Breakeven = 50 - (-0.5) = 52
- **Lower Breakeven Point = Strike Price of the Short Call/Put + Net Premium**
    - Example:
        - Strike Price Short Put = 50
        - Net Premium (cost of strategy) = 2
        - Lower Breakeven = 50 + (-0.5) = 48

Profit Calculations (Maximum Upside)

- Maximum Profit = Net Premium
- Maximum Profit Range: Maximum Profit occurs when the underlying price equals the strike price of the Short Call & Put

Risk Calculations (Maximum Downside)

- Maximum Loss = Unlimited
- Maximum Loss Range: Loss occurs when the Underlying Price > Strike Price – Net Premium OR when the Underlying Price < Strike Price + Net Premium. The further outside these bounds the greater the loss.
    - Loss if underlying price moves below Lower Breakeven:
        - Strike Price of Short Put/Call + Net Premium – Price of Underlying
    - Loss if underlying price moves above Upper Breakeven:
        - Price of Underlying – Strike Price of Short Put/Call – Net Premium

9. Short Strangle

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Short Volatility Strategy (profit gained from a limited range around the current underlying price)
- Net Credit
- 2 Legs/Transactions
- Limited Profit
- Unlimited Risk

Further Explanation

A Short Strangle is very similar to a Short Straddle. It involves writing an equal number of Call and Put contracts on the same stock at **different strikes** and with the same expirations. The strategy profits when the underlying price stays within a tight range around the strike price by the time expiration comes around – it is essentially a short volatility play. Since it involves only writing options, it is a Net Credit strategy which means you receive money upfront. The downside of the strategy is that there is unlimited risk, meaning in this case that the further away the underlying price moves away from the strike price the greater loss the trader will take. It is a high-risk play, although less so that a Short Straddle since the trader can define a wider range of profit by setting wider strikes.

Constructing the trade is simple:

- Sell 1 OTM Call
- Sell 1 OTM Put

This results in the strategy becoming a Credit spread which means you receive the Net Premium upfront.

Break Even

A Short Strangle Strategy has two breakeven points:

- **Upper Breakeven Point = Strike Price of the Short Call - Net Premium**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Strike Price of Short Call = 55
        - Net Premium (cost of strategy) = 2
        - Upper Breakeven = 50 - (-0.5) = 57
- **Lower Breakeven Point = Strike Price of the Short Put + Net Premium**
    - Example:
        - Strike Price Short Put = 45
        - Net Premium (cost of strategy) = 2
        - Lower Breakeven = 50 + (-0.5) = 43

Profit Calculations (Maximum Upside)

- Maximum Profit = Net Premium
- Maximum Profit Range: Maximum Profit occurs when the underlying price is in-between the strike price of the short Call and Short Put.

Risk Calculations (Maximum Downside)

- Maximum Loss = Unlimited
- Maximum Loss Range: Loss occurs when the Underlying Price > Strike Price – Net Premium OR when the Underlying Price < Strike Price + Net Premium. The further outside these bounds the greater the loss.
    - Loss if underlying price moves below Lower Breakeven:
        - Strike Price of Short Put + Net Premium – Price of Underlying
    - Loss if underlying price moves above Upper Breakeven:
        - Price of Underlying – Strike Price of Short Call – Net Premium

10.Calendar Straddle

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Short Volatility Strategy (profit gained from a limited range around the current underlying price)
- Net Debit
- 4 Legs/Transactions
- Limited Profit
- Limited Risk

Further Explanation

Although a Calendar Straddle is fairly complex as far as options strategies go, it is created simply by putting together two standard Straddles. The concept behind it is to sell a near-term Straddle and buy a long-term Straddle (with the same number of contracts, with the same strikes and on the same underlying). Similarly to a Neutral Calendar Spread, this allows the trader to take advantage of rapid Time Decay in the near-term Straddle options as long as the price of the underlying doesn't move too far away from the strike price. As with other Calendar plays, you can also add to the strategy by changing what you do with the longer-term options once the nearer-term ones have expired. However, in its purest form the trader will seek to close all positions once the short-term Straddle has expired and try to benefit purely from Time Decay.

Constructing the trade goes as follows (all options using the same number of contracts on the same underlying, with the same strikes):

- Sell a near-term Straddle
    - Sell 1 ATM Call [Short Expiry]
    - Sell 1 ATM Put [Short Expiry – same as above]
- Buy a long-term Straddle
    - Buy 1 ATM Call [Long Expiry]
    - Buy 1 ATM Put [Long Expiry – same as above]

This results in a neutral and implicitly short volatility strategy since the trader needs the underlying price to be close to the strike price at the expiry of the near-term Straddle. If that is the case, the short-term Straddle will expire worthless and the long-term Straddle will retain plenty of value. It will not lose nearly as much Time Value (which exponentially increases as expiry approaches) as the short-term Straddle (which lost all its value).

At the stage of expiry for the short-term Straddle the trader could also choose to hold the long-term straddle if he thinks that there may be an increase in volatility to come (within the Straddle's expiry).

See sections on "Neutral Calendar Spread" and "Short Straddle" for a deeper understanding of the strategy.

Break Even

A Calendar Straddle has two breakeven points, one either side of the maximum profit price (which is equal to the strike price of all the options). The Break-even values cannot be calculated easily because it depends on the time value of the options used.

Profit Calculations (Maximum Upside)

- Maximum Profit (if Strategy closed after short-term expiry) = Credit Premium from short-term Straddle – Time Decay of long-term Straddle
- Maximum Profit Range: Maximum Profit occurs when the underlying price equals the strike price of all the options.

Risk Calculations (Maximum Downside)

- Maximum Loss = Net Premium
- Maximum Loss Range: The range depends on the Time Decay of the longer-term option.

11.Calendar Strangle

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Short Volatility Strategy (profit gained from a limited range around the current underlying price)
- Net Debit
- 4 Legs/Transactions
- Limited Profit
- Limited Risk

Further Explanation

A Calendar Strangle is very similar to the Calendar Straddle. It is constructed by selling a short-term Strangle and buying a longer-term Strangle with the same number of contracts, on the same underlying and with the same strike price range. The strategy is designed to take advantage of Time Decay in the short term (through the faster deterioration of price in the short Strangle) as long as the underlying price has not moved too much by expiry (of the Short Strangle). It also allows the trader to make a play on suppressed short term volatility in the underlying followed by larger volatility in the long term if he were to hold the long Straddle after selling the short-term one. Again, this is exactly the same as with the Calendar Strangle. The key difference here is, as with a standard Strangle vs Straddle, that a Strangle has a larger profit range (and equally, yields a lower maximum profit potential).

Constructing the trade goes as follows (all options using the same number of contracts on the same underlying):

- Sell a near-term Strangle
    - Sell 1 OTM Call [Short Expiry, same Strike as Long OTM Call]
    - Sell 1 OTM Put [Short Expiry – same as above, same Strike as Long OTM Put]
- Buy a long-term Strangle
    - Buy 1 OTM Call [Long Expiry, same Strike as Short OTM Call]
    - Buy 1 OTM Put [Long Expiry – same as above, same Strike as Short OTM Put]

This results in a neutral and implicitly short volatility strategy since the trader needs the underlying price to be close to the strike price at the expiry of the near-term Strangle (to take advantage of Time Decay). If that is the case, the short-term Strangle will expire worthless and the long-term Strangle will retain plenty of value. It will not lose nearly as much Time Value (which exponentially increases as expiry approaches) as the short-term Straddle (which lost all its value).

At the stage of expiry for the short-term Strangle the trader could also choose to hold the long-term Strangle if he thinks that there may be an increase in volatility to come (within the long Strangle's expiry).

See sections on "Neutral Calendar Spread" and "Short Strangle" for a deeper understanding of the strategy.

Break Even

A Calendar Strangle has two breakeven points, but these values cannot be calculated easily because it depends on the time value of the options used.

Profit Calculations (Maximum Upside) – If Strategy closed after Short Term Expiry

- Maximum Profit = Credit Premium from short-term Strangle – Time Decay of long-term Strangle
- Maximum Profit Range: Maximum Profit occurs when the underlying price is greater than the strike price of the OTM Puts and less than the strike price of the OTM Calls.

Risk Calculations (Maximum Downside) - If Strategy closed after Short Term Expiry

- Maximum Loss = Net Premium
- Maximum Loss Range: The range depends on the Time Decay of the longer-term option.

12.Call Ratio Spread

Quick Summary

- Neutral Strategy (little/no directional bias in the underlying)
- Short Volatility Strategy (profit gained from a limited range around the current underlying price)
- Net Credit
- 2 Legs/Transactions
- Limited Profit
- Unlimited Risk

Further Explanation

A Call Ratio Spread is primarily a neutral and implicit short volatility strategy where the trader makes profit from a limited range of prices. It is constructed by Buying a number of ITM Call Options and selling a larger number of OTM Call Options against them. This yields a strategy with limited risk as the underlying price goes down, but unlimited if it goes up – which is why some argue that it involves a slight directional bet as well. The reason for selling more OTM Calls against the long Call is to make the strategy yield Net Credit meaning you get paid to set it up. So, the strategy is best used when the trader thinks that the underlying price will remain stable around the current price, and if it does move, it is more likely to go down than up.

Strategy Construction Example (2:1 Ratio):

- Buy 1 ITM Call equidistant to the Short OTM Calls
- Sell 2 OTM Calls equidistant to the Long OTM Call

This results in the strategy becoming a Credit spread which means you receive the Net Premium upfront.

Break Even

A Call Ratio Spread has ONE breakeven point:

- **Upper Breakeven Point = Strike Price of the Short Calls + (Long Call Strike – Short Call Strike – Net Premium)/Number of Uncovered Calls**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Buy 1 ITM 45 Call @ Premium of 2
        - Sell 2 OTM 55 Calls @ Premium of 2
        - Net Premium = -2
        - Upper Breakeven = 55 + (55-45-(-2))/1 = 55 + 12 = 67
- **Lower Bound is capped at receiving the Net Credit Premium**
    - As long as the underlying goes down in price, you will be paid at minimum the Credit Premium

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike Price of Short Call – Strike Price of Long Call – Net Premium
- Maximum Profit Range: Maximum Profit occurs at the Strike price of the Short Calls

Risk Calculations (Maximum Downside)

- Maximum Loss = Unlimited
- Maximum Loss Range: The greater the increase in underlying price above that of the Upper Breakeven the greater the loss incurred.

13. Put Ratio Spread

Quick Summary

- Neutral Strategy (little/no directional bias in the underlying)
- Short Volatility Strategy (profit gained from a limited range around the current underlying price)
- Net Credit
- 2 Legs/Transactions
- Limited Profit
- Unlimited Risk

Further Explanation

A Put Ratio Spread is very similar to a Call Ratio spread – the only difference being that the unlimited risk changes to occur when the underlying price goes down and not up. It is primarily a neutral and implicit short volatility strategy where the trader makes profit from a limited range of prices. It is constructed by Buying a number of ITM Put Options and selling a larger number of OTM Put Options against them. This yields a strategy with limited risk as the underlying price goes up, but unlimited if it goes down – which is why some argue that it involves a slight directional bet as well. The reason for selling more OTM Puts against the long Put is to make the strategy yield Net Credit meaning you get paid to set it up. So, the strategy is best used when the trader thinks that the underlying price will remain stable around the current price, and if it does move, it is more likely to go up than down.

Strategy Construction Example (2:1 Ratio):

- Buy 1 ITM Put (equidistant to the Short OTM Puts, and the same expiry)
- Sell 2 OTM Puts (equidistant to the Long OTM Put, and the same expiry)

This results in the strategy becoming a Credit spread which means you receive the Net Premium upfront.

Break Even

A Put Ratio Spread has ONE breakeven point:

- **Upper Bound is capped at receiving the Net Credit Premium**
- **Lower Breakeven Point = Strike Price of the Short Puts - (Long Put Strike – Short Put Strike - Net Premium)/Number of Uncovered Calls**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Buy 1 ITM 55 Put @ Premium of 2
        - Sell 2 OTM 45 Puts @ Premium of 2
        - Net Premium = -2
        - Lower Breakeven = 45 - (55-45-(-2))/1 = 45 - 12 = 33

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike Price of Long Put – Strike Price of Short Put – Net Premium
- Maximum Profit Range: Maximum Profit occurs at the Strike price of the Short Calls

Risk Calculations (Maximum Downside)

- Maximum Loss = Unlimited
- Maximum Loss Range: The greater the decrease in underlying price below that of the Lower Breakeven the greater the loss incurred.

14.Covered Put

Quick Summary

- Neutral/Bearish Strategy (limited bearish directional bias in the underlying)
- Short volatility strategy
- Net Credit
- 2 Legs/Transactions
- Limited Profit
- Unlimited Risk

Further Explanation

A Covered Put is a strategy implemented to recover or profit from a short stock position that hasn't decreased in price or wont for a period of time. For example, a trader may have a long-term bearish outlook on a stock but over certain time periods they expect the price to remain relatively stable. When that occurs, they can sell a ATM Put against the shares and gain the Credit Premium for that option. It is classed as a neutral/bearish (and short volatility) strategy since the trader is expecting low volatility and thus thinks he will benefit more from collecting option premium than the underlying price going down in the period. It is slightly skewed to a bearish outlook because the trader still has conviction that the underlying price will not increase. This strategy yields limited profit and unlimited risk and a Net Credit Premium.

Strategy Construction involves two legs:

- Short 100 Shares
- Sell 1 ATM Put (per 100 Shares shorted)

This results in the strategy becoming a Credit spread which means you receive the Net Premium upfront.

Break Even

A Covered Put has ONE breakeven point:

- **Upper Breakeven Point = Sale Price of Underlying – Net Premium**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Sell 100 Shares at 50
        - Sell 1 ATM 50 Puts @ Premium of 1
        - Net Premium = -1
        - Upper Breakeven = 50 - (-1) = 51
- **Lower Bound is capped at receiving the Net Credit Premium**

Profit Calculations (Maximum Upside)

- Maximum Profit = Net Credit Premium
- Maximum Profit Range: Maximum Profit occurs when the underlying price <= Strike Price of the written Put

Risk Calculations (Maximum Downside)

- Maximum Loss = Unlimited
- Maximum Loss Range: The greater the increase in underlying price above that of the Upper Breakeven the greater the loss incurred.

15.Short Gut

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Short volatility strategy
- Net Credit
- 2 Legs/Transactions
- Limited Profit
- Unlimited Risk

Further Explanation

A Short Gut strategy is very similar to a Short Strangle. It produces profit when the underlying price remains within a specified range around the ATM price (and is thus a short volatility strategy). The slight difference is that it can return profits from a wider price range (using the same strikes) than a Short Strangle but conversely has a lower maximum upside. Similarly to other neutral/short volatility strategies like a Short Straddle and Strangle, the further the underlying price moves away from the ATM price the greater the loss incurred (if it is also outside the strike range set up). It is therefore a limited upside and unlimited downside strategy. It involves two legs and is a Net Credit play.

Strategy Construction involves two legs:

- Sell 1 ITM Call (equidistant strike price to the Put and with the same number of contracts on the same underlying)
- Sell 1 OTM Put (equidistant strike price to the Call and with the same number of contracts on the same underlying)

This results in the strategy becoming a Credit spread which means you receive the Net Premium upfront.

Break Even

A Short Gut has two breakeven points:

- **Upper Breakeven Point = Strike Price of Short Call – Net Premium**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Current Underlying Price = 50
        - Sell 1 ITM Call (Strike = 48) for $3.50
        - Sell 1 ITM Put (Strike = 52) for $3.50
        - Net Premium = $-7
        - Upper Breakeven = 48 - (-7) = 55
- **Lower Breakeven Point = Strike Price of Short Put + Net Premium**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Current Underlying Price = 50
        - Sell 1 ITM Call (Strike = 48) for $3.50
        - Sell 1 ITM Put (Strike = 52) for $3.50
        - Net Premium = $-7
        - Lower Breakeven = 52 + (-7) = 45

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike of Short Put – Strike of Short Call + Net Premium
- Maximum Profit Range: Maximum Profit occurs when the underlying price is in between the two Strike prices

Risk Calculations (Maximum Downside)

- Maximum Loss = Unlimited
- Loss Range: Loss occurs when the Price of the Underlying < Strike Price of Short Put + Net Premium OR Price of the Underlying is > Strike Price of Short Call – Net Premium.

16.Short Albatross Spread (Short Wide Condor Spread)

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Long Volatility Strategy (profit gained from a limited range around the current underlying price)
- Net Credit
- Can be created with either just Calls or just Puts
- Limited Profit
- Limited Risk

Further Explanation

A Short Albatross Spread is a neutral strategy (no directional bias) that is the reverse of the standard Albatross spread. It profits from volatility in the underlying asset. Specifically, profit can be gained by the underlying price moving significantly so that it falls outside the strike range of the options used to implement the strategy. The strategy has limited upside and downside and is essentially a bullish play on volatility of the underlying in either direction.

A Short Albatross Spread has 4 legs, and can be structured either entirely with calls or entirely with puts - both methods yielding a very similar profit and risk profile. Structuring the trade requires the following 4 option legs implemented with the same expiry date and number of contracts:

- Buy 1 ITM Call [or Put] equidistant to the long OTM Call
- Buy 1 OTM Call [or Put] equidistant to the long ITM Call
- Sell 1 ITM Call [or Put] with a wider strike price (than the other ITM Call [or Put]) and equidistant to the OTM short
- Sell 1 OTM Call [or Put] with a wider strike price (than the other OTM Call [or Put]) and equidistant to the ITM short

This results in the strategy becoming a Credit spread which means you receive the Net Premium upfront.

A Short Albatross Spread is very similar to a Short Condor Spread, the only difference being that the profitable range is wider in a Short Albatross Spread than a typical Short Condor Spread, which increases the likelihood of success but reduces the upside of the profitable range.

Break Even

A Short Albatross Strategy has two breakeven points:

- **Upper Breakeven Point = Strike Price of Highest Strike Short Call [or Put] + Net Premium**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Strike Price of Highest Strike Short Call [or Put] = 58
        - Net Premium (cost of strategy) = 0.5
        - Upper Breakeven = 58 + (-0.5) = 57.5
- **Lower Breakeven Point = Strike Price of Lowest Strike Short Call [or Put] - Net Premium**
    - Example:
        - Strike Price of Lowest Strike Short Call [or Put] = 42
        - Net Premium (cost of strategy) = 0.5
        - Lower Breakeven = 42 – (-0.5) = 42.5

Profit Calculations (Maximum Upside)

- Maximum Profit = Net Premium Received
- Max Profit Range: Price of Underlying <= Strike Price of lower Short Call [or Put] OR >= Strike Price of higher Short Call [or Put]

Risk Calculations (Maximum Downside)

- Maximum Loss = Strike of lower Strike Long Call [or Put] – Strike of lower Strike Short Call [or Put] – Net Premium
- Maximum Loss Range: Where the Price of Underlying is in-between the Strike Prices of the two Long Calls [or Puts]

17.Short Condor Spread

Quick Summary

- Exactly the same as a Short Albatross Spread but with a narrower profit range and higher maximum profit
- Neutral Strategy (no directional bias in the underlying)
- Long Volatility Strategy (profit gained from a limited range around the current underlying price)
- Can be created with either just Calls or just Puts
- Net Credit
- Limited Profit
- Limited Risk

Further Explanation

A Short Condor Spread is a neutral strategy (no directional bias) where the trader profits from volatility in the underlying price and it falls outside the bounds created by the spread. The key difference between a Short Condor and Short Albatross spread is that the Condor profit range is set slightly narrower but allows the maximum profit to be slightly higher. The strategy has limited upside and downside and is essentially a bullish play on volatility. It has the some of the opposite characteristics as a standard Condor Spread such as long volatility, and it creates a Net Credit position.

A Short Condor Spread has 4 legs, and can be structured either entirely with calls or entirely with puts - both methods yielding a very similar profit and risk profile. Structuring the trade requires the following 4 option legs implemented with the same expiry date and number of contracts:

- Buy 1 ITM Call [or Put] equidistant to the long OTM Call
- Buy 1 OTM Call [or Put] equidistant to the long ITM Call
- Sell 1 ITM Call [or Put] with a wider strike price (than the other ITM Call [or Put]) and equidistant to the OTM short
- Sell 1 OTM Call [or Put] with a wider strike price (than the other OTM Call [or Put]) and equidistant to the ITM short

This results in the strategy becoming a Credit spread which means you receive the Net Premium upfront.

Break Even

A Short Condor Spread has two breakeven points:

- **Upper Breakeven Point = Strike Price of Highest Strike Short Call [or Put] + Net Premium**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Strike Price of Highest Strike Short Call [or Put] = 55
        - Net Premium (cost of strategy) = 1.5
        - Upper Breakeven = 55 + (-1.5) = 53.5
- **Lower Breakeven Point = Strike Price of Lowest Strike Short Call [or Put] - Net Premium**
    - Example:
        - Strike Price of Lowest Strike Short Call [or Put] = 45
        - Net Premium (cost of strategy) = 1.5
        - Lower Breakeven = 45 – (-1.5) = 46.5

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike Price of Lower Strike Short Call [or Put] - Strike Price of Lower Strike Long Call [or Put] - Net Premium.
- Max Profit Range: The Range of Maximum Profit is between the Strike Prices of the two Short Calls [or Puts].

Risk Calculations (Maximum Downside)

- Maximum Loss = Net Premium
- Maximum Loss Range: Where the Price of Underlying is less than or equal to the Strike Price of Lower Strike Long Call [or Put] OR when it is greater than or equal to the Strike Price of Higher Strike Long Call [or Put]

18.Short Butterfly Spread

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Long Volatility Strategy (profit gained from a limited range around the current underlying price)
- Net Credit
- Can be structured either entirely with Calls or entirely with Puts
- Limited Profit
- Limited Risk

Further Explanation

A Short Butterfly Spread is another neutral, long volatility strategy where the trader can profit from volatility in the underlying asset price outside a small range. By setting up this range, much like a Short Condor or Short Albatross strategy, the trader is making an implicit long volatility bet (since he thinks the underlying price will move outside of these bounds). Implementation requires a Net Credit transaction meaning you receive money to set up the trade and it offers the trader limited upside and downside. As expected, the payoff profile is the opposite to a standard Butterfly Spread.

The mechanics behind the strategy are very similar to a Short Condor/Albatross spread except this time the two Long positions are executed At-The-Money meaning there is only one spot price which will result in a maximum loss rather than a range of spot prices. Typically, this means that the loss range is smaller but the maximum upside is larger than that which you would expect for a Short Condor Spread. A Short Butterfly Spread can also be structured either entirely with calls or entirely with puts - both methods yielding a very similar profit and risk profile. Since both Long positions are executed at the same price, this strategy requires only 3 legs rather than the 4 you would need with a Short Condor Spread and should all be executed with the same expiry date:

- Buy 2 ATM Calls [or Puts]
- Sell 1 ITM Call [or Put] equidistant to the OTM long
- Sell 1 OTM Call [or Put] equidistant to the ITM long

This results in the strategy becoming a Credit spread which means you receive the Net Premium upfront.

Break Even

A Short Butterfly Spread has two breakeven points:

- **Upper Breakeven Point = Strike Price of Higher Strike Short Call [or Put] + Net Premium**
  - Note: This is a Credit Spread and so the Net Premium will be negative.
  - Example:
    - Strike Price of Higher Strike Short Call [or Put] = 55
    - Net Premium (cost of strategy) = 1
    - Upper Breakeven = 55 + (-1) = 54
- **Lower Breakeven Point = Strike Price of Lower Strike Short Call [or Put] - Net Premium**
  - Example:
    - Strike Price of Lowest Strike Short Call [or Put] = 45
    - Net Premium (cost of strategy) = 1
    - Lower Breakeven = 45 – (-1) = 46

Profit Calculations (Maximum Upside)

- Maximum Profit = Net Premium Received
- Max Profit Range: Underlying Price <= Strike Price of lower Strike Short Call OR >= Strike Price of higher Strike Short Call

Risk Calculations (Maximum Downside)

- Maximum Loss = Strike Price of Long Calls – Strike Price of lower Short Call – Net Premium
- Maximum Loss Range: Occurs when the Price of Underlying = Strike Price of Long Calls

19. Reverse Iron Albatross Spread

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Long Volatility Strategy
- Net Debit
- Limited Profit
- Limited Risk

Further Explanation

A Reverse Iron Albatross Spread is a neutral strategy with no directional bias where the trader can profit from volatility in the underlying asset price. As with other "Albatross" plays, a range is set up using two strikes on four options legs which creates two bounds around which the strategy is profitable. A Reverse Iron Albatross Spread profits from the underlying price moving outside of this "strike range" and since Albatross spreads are set up to be quite wide (by definition they are Condor Spreads with wider strikes) the underlying price needs to move significantly in order for overall profit to be made. The difference between a Reverse Iron Albatross Spread and a Short Albatross Spread is that the Reverse Iron Albatross Spread is a Debit spread meaning it costs money to set up BUT it does benefit from a greater Risk & Reward profile than the Short Albatross Spread.

Structurally, it has 4 legs; 2 Puts and 2 Calls:

- Buy 1 OTM Put (equidistant strike to the OTM Call)
- Buy 1 OTM Call (equidistant strike to the OTM Put)
- Sell 1 OTM Put (with a lower strike than the Long OTM Put)
- Sell 1 OTM Call (with a higher strike than the Long OTM Call, and equidistant to the Short OTM Put)

This results in the strategy becoming a Debit spread which means you pay the Net Premium upfront.

Break Even

A Reverse Iron Albatross Strategy has two breakeven points:

- **Upper Breakeven Point = Strike Price of the Long Call + Net Premium**
  - Note: This is a Debit Spread and so the Net Premium will be positive.
  - Example:
    - Strike Price of Long Call = 55
    - Net Premium (cost of strategy) = 1
    - Upper Breakeven = 55 + 1 = 56
- **Lower Breakeven Point = Strike Price of the Long Put - Net Premium**
  - Example:
    - Strike Price Long Put = 45
    - Net Premium (cost of strategy) = 1
    - Lower Breakeven = 45 - 1 = 44

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike Price of Short Call – Strike Price of Long Call – Net Premium
- Max Profit Range: The Range of Maximum Profit is when the Price of Underlying is <= Short Put Strike OR >= Short Call Strike

Risk Calculations (Maximum Downside)

- Maximum Loss = Net Premium
- Maximum Loss Range: Where the Price of Underlying is >= Long Put Strike AND <= Long Call Strike

20. Reverse Iron Condor Spread

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Long Volatility Strategy
- Net Debit
- Limited Profit
- Limited Risk

Further Explanation

A Reverse Iron Condor Spread is a neutral strategy with no directional bias where the trader can profit from volatility in the underlying asset price – it is identical to a Reverse Iron Condor Spread but with narrower strikes meaning it has a higher chance of success (profit) but with a worse Max Profit/Loss profile.

A range is set up using two strikes on four options legs which creates two bounds around which the strategy is profitable. A Reverse Iron Condor Spread profits from the underlying price moving outside of this "strike range". The difference between a Reverse Iron Condor Spread and a Short Condor Spread is that the Reverse Iron Condor Spread is a Debit spread meaning it costs money to set up BUT it does benefit from a greater Profit/Loss profile than the Short Condor Spread.

Structurally, it has 4 legs; 2 Puts and 2 Calls:

- Buy 1 OTM Put (equidistant strike to the OTM Call)
- Buy 1 OTM Call (equidistant strike to the OTM Put)
- Sell 1 OTM Put (with a lower strike than the Long OTM Put)
- Sell 1 OTM Call (with a higher strike than the Long OTM Call, and equidistant to the Short OTM Put)

This results in the strategy becoming a Debit spread which means you pay the Net Premium upfront.

Break Even

A Reverse Iron Albatross Strategy has two breakeven points:

- **Upper Breakeven Point = Strike Price of the Long Call + Net Premium**
  - Note: This is a Debit Spread and so the Net Premium will be positive.
  - Example:
    - Strike Price of Long Call = 103
    - Net Premium (cost of strategy) = 2
    - Upper Breakeven = 103 + 2 = 105
- **Lower Breakeven Point = Strike Price of the Long Put - Net Premium**
  - Example:
    - Strike Price Long Put = 97
    - Net Premium (cost of strategy) = 2
    - Lower Breakeven = 97 - 2 = 95

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike Price of Short Call – Strike Price of Long Call – Net Premium
- Max Profit Range: The Range of Maximum Profit is when the Price of Underlying is <= Short Put Strike OR >= Short Call Strike

Risk Calculations (Maximum Downside)

- Maximum Loss = Net Premium
- Maximum Loss Range: Where the Price of Underlying is >= Long Put Strike AND <= Long Call Strike

21. Reverse Iron Butterfly Spread

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Long Volatility Strategy
- Net Debit
- 4 Legs/Transactions (key difference to standard Short Butterfly Spread =3)
- Limited Profit
- Limited Risk

Further Explanation

A Reverse Iron Butterfly Spread is another neutral strategy where the trader can profit from volatility in the underlying price. It is a very similar strategy to the Reverse Iron Condor but with a very narrow strike range (the "middle" strikes are both ATM). As you might expect, since this is a long volatility play with a small range in which the strategy is unprofitable it has a worse Max Profit/Loss profile than a Reverse Iron Condor and much worse than a Reverse Iron Albatross.

An equidistant range around the price of the underlying at implementation and whenever the underlying price falls outside of the upper and lower bounds of this range the strategy makes a profit. It is a Net Debit transaction meaning it costs money to set up and it has a pre-defined limited upside and downside.

The mechanics behind the strategy are very similar to a Reverse Iron Condor/Albatross spread except this time the two Short positions (1 Call and 1 Put) are executed At-The-Money meaning there is only one spot price which will result in a maximum loss rather than a range of spot prices. This means that the profit range is wider (opposite to a standard Iron Butterfly) but the maximum upside is smaller than that which you would expect for a Reverse Iron Condor/Albatross Spread. Since the two short positions are split up into 1 Call and 1 Put (rather than 2 of one kind for a standard Butterfly Spread) this strategy requires 4 legs rather than 3:

- Sell 1 OTM Put equidistant to the Long OTM Call
- Sell 1 OTM Call equidistant to the Long OTM Put
- Buy 1 ATM Call
- Buy 1 ATM Put

Break Even

An Iron Butterfly Strategy has two breakeven points:

- **Upper Breakeven Point = Strike Price of the Long Call + Net Premium**
  - Note: This is a Credit Spread and so the Net Premium will be negative.
  - Example:
    - Strike Price of Long Call = 70
    - Net Premium (cost of strategy) = 1.5
    - Upper Breakeven = 70 + 1.5 = 71.5
- **Lower Breakeven Point = Strike Price of the Long Put + Net Premium**
  - Example:
    - Strike Price Long Put = 70
    - Net Premium (cost of strategy) = 1.5
    - Lower Breakeven = 70 - 1.5 = 68.5

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike Price of Short Call – Strike Price of Long Call – Net Premium
- Maximum Profit Range: Maximum Profit occurs when the underlying price <= Short Put Strike OR >= Short Call Strike

Risk Calculations (Maximum Downside)

- Maximum Loss = Net Premium
- Maximum Loss Range: Where the Price of Underlying is equal to the Long Call/Put Strike

22.Short Neutral Calendar Spread (Calls or Puts)

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Long Volatility Strategy
- Net Credit
- 2 Legs/Transactions (either both Calls or both Puts)
- Limited Profit
- Limited Risk

Further Explanation

A Short Neutral Calendar Spread constructed with Calls is structured by buying near-term Calls at or near the money and writing the same number of longer-term Calls at the same strike. Since the near-term Calls allows less time for the underlying asset to move in price it has less time value and is thus priced lower than the longer-term Call. This means that the Spread will be a Net Credit Strategy (i.e. you receive money for setting it up).

This is a neutral strategy with an implicit bet on long volatility, meaning that maximum profit is gained when the underlying price moves far from ATM. The idea is that as that if the underlying price moves significantly (in either direction), both options should be priced more on their intrinsic value and less on their extrinsic value (such as time value) meaning they should tend towards being equal in price. When that occurs (or nearly does), you can liquidate both and profit from the Credit Spread.

For example:

- "XYZ" stock currently trading at $50 (FEB)
- Buy 1 MAR 50 Call in "XYZ" Stock for $3
- Sell 1 OCT 50 Call in "XYZ" Stock for $5
- Net Credit Transaction = $2
    - If price moves to $80
        - Both options worth ~$30 (purely intrinsic value)
        - Liquidating both will yield almost the entire Credit Spread

Note: This strategy can be employed in exactly the same way using Puts (writing a longer-term Put and buying a shorter-term Put). The Risk/Reward and mechanics of the trade are almost identical to that which has been discussed with Calls.

Break Even

A Short Neutral Calendar Call Spread has two breakeven points, one either side of the maximum loss price (which is equal to the strike price of the Calls). The Break-even values cannot be calculated easily because it depends on the time value of the options used.

Profit Calculations (Maximum Upside)

- Maximum Profit = Credit Premium
- Maximum Profit Range: The range depends on time decay and the extrinsic value of the options

Risk Calculations (Maximum Downside)

- Maximum Loss = Credit Premium – Cost of Long-term Call at time of sale (assuming at expiry of short-term Call)
- Maximum Loss Range: Maximum Loss occurs when the underlying price equals the strike price of the Calls

23.Long Gut

Quick Summary

- Neutral Strategy (no directional bias in the underlying)
- Long volatility strategy
- Net Debit
- 2 Legs/Transactions
- Unlimited Profit
- Limited Risk

Further Explanation

A Long Gut strategy is the opposite to a Short Gut. It produces profit when the underlying price move outside a specified range and is hence a Long Volatility strategy. Similarly to other neutral/short volatility strategies like a Straddle and Strangle, the further the underlying price moves away from the ATM price the greater the profit incurred (if it is also outside the strike range set up). It therefore has unlimited upside and limited downside since you can only lose as much as the spread costs. It involves two legs and is a Net Debit play strategy.

Strategy Construction involves two legs:

- Buy 1 ITM Call (equidistant strike price to the Put and with the same number of contracts on the same underlying)
- Buy 1 OTM Put (equidistant strike price to the Call and with the same number of contracts on the same underlying)

This results in the strategy becoming a Debit spread which means you pay the Net Premium upfront.

Break Even

A Long Gut has two breakeven points:

- **Upper Breakeven Point = Strike Price of Long Call + Net Premium**
    - Note: This is a Debit Spread and so the Net Premium will be positive.
    - Example:
        - Current Underlying Price = 70
        - Buy 1 ITM Call (Strike = 68) for $3.50
        - Buy 1 ITM Put (Strike = 72) for $3.50
        - Net Premium = $7
        - Upper Breakeven = 68 + 7 = 75
- **Lower Breakeven Point = Strike Price of Long Put - Net Premium**
    - Note: This is a Debit Spread and so the Net Premium will be positive.
    - Example:
        - Current Underlying Price = 70
        - Buy 1 ITM Call (Strike = 68) for $3.50
        - Buy 1 ITM Put (Strike = 72) for $3.50
        - Net Premium = $7
        - Lower Breakeven = 72 - 7 = 65

Profit Calculations (Maximum Upside)

- Maximum Profit = Unlimited
- Maximum Profit Range: Profit increases the further away the underlying price moves from the upper and lower strikes

Risk Calculations (Maximum Downside)

- Maximum Loss = Net Premium
- Maximum Loss Range: Maximum Loss occurs when the Price of the Underlying <= Strike Price of Long Put AND Price of the Underlying is <= Strike Price of Long Call

24.Bull Condor Spread

Quick Summary

- Exactly the same as a standard Condor Spread but with a range extending higher than the current underlying price
- Bullish Strategy
- Net Debit
- Limited Profit
- Limited Risk

Further Explanation

A Bull Condor Spread is a bullish strategy where the trader seeks to make profit by the forecasting the underlying price will rise to within a specified range by the time of option expiry. The profile of the Bull Condor is exactly the same as a standard Condor Spread except that the range of profit (as defined by the strike prices of the option legs) is set deliberately high. For example, if the current underlying price of a stock was $50, a trader setting up a Bull Condor Spread might use strikes of $54 and $58 and hope that the underlying price moves into that range by expiry so that he can yield a profit. The easiest way to think about this would be to set a target price you believe the underlying will go to and set an equidistant range around that – in the above example the target price would have been $56. The strategy has limited upside and downside and is a Net Debit spread.

A Bull Condor Spread has 4 legs, and can be structured either entirely with calls or entirely with puts - both methods yielding a very similar profit and risk profile. Structuring the trade requires the following 4 option legs implemented with the same expiry date and number of contracts:

- E.g.
    - Current Price = $60
    - Target Price = $70
- Sell 1 OTM Call [or Put] low strike and equidistant to other OTM short (e.g. $67)
- Sell 1 OTM Call [or Put] high strike and equidistant to the other OTM short (e.g. $73)
- Buy 1 OTM Call [or Put] lowest strike price and equidistant to the higher OTM long (e.g. $65)
- Buy 1 OTM Call [or Put] highest strike price and equidistant to the lower OTM long (e.g. $75)

This results in the strategy becoming a Debit spread which means it requires upfront cost.

Break Even

A Bull Condor Spread has two breakeven points:

- **Upper Breakeven Point = Strike Price of Highest Strike Long Call [or Put] - Net Premium**
    - Note: This is a Debit Spread and so the Net Premium will be positive.
    - Using Above Example:
        - Net Premium = 1
        - Upper Breakeven = 75 - 1 = 74
- **Lower Breakeven Point = Strike Price of Lowest Strike Long Call [or Put] + Net Premium**
    - Using Above Example:
        - Net Premium = 1
        - Lower Breakeven = 65 + 1 = 66

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike Price of Lower Strike Short Call [or Put] - Strike Price of Lower Strike Long Call [or Put] - Net Premium.
- Max Profit Range: The Range of Maximum Profit is between the Strike Prices of the two Short Calls [or Puts].

Risk Calculations (Maximum Downside)

- Maximum Loss = Net Premium
- Maximum Loss Range: Where the Price of Underlying is less than or equal to the Strike Price of Lower Strike Long Call [or Put] OR when it is greater than or equal to the Strike Price of Higher Strike Long Call [or Put]

25.Bull Butterfly Spread

Quick Summary

- Exactly the same as a standard Butterfly Spread but with a Bullish predisposition and profitable range
- Bullish Strategy
- Net Debit
- Limited Profit
- Limited Risk

Further Explanation

A Bull Butterfly Spread has all the same attributes as the standard Butterfly Spread. The only difference is that the strike prices of the options are setup somewhere OTM – the price at which the trader expects the underlying to go to by the time of option expiry.

The Bull Butterfly Spread is a very similar strategy (with similar goals) to a Bull Condor and Bull Albatross Spread. The difference is that the profitable range is much smaller and hence the accuracy of forecasting on the underlying price needs to be precise. While the profitable range is smaller, however, the maximum upside is larger. The strategy yields a Net Debit transaction meaning it costs money upfront to put on, and it has a limited profit and risk profile.

The mechanics behind the strategy are very similar to a Bull Condor/Albatross spread except this time the two Short positions are executed At-The-Money meaning there is only one spot price which will result in a maximum profit rather than a range of spot prices. A Butterfly Spread can also be structured either entirely with calls or entirely with puts - both methods yielding a very similar profit and risk profile. Since both Short positions are executed at the same price, this strategy requires only 3 legs rather than the 4 you would need with a Condor Spread and should all be executed with the same expiry date:

- Sell 2 OTM Calls [or Puts] at the target price for the underlying
- Buy 1 OTM Call [or Put] lower strike equidistant to the OTM long higher strike
- Buy 1 OTM Call [or Put] higher strike equidistant to the OTM long lower strike

Break Even

A Bull Butterfly Spread has two breakeven points:

- **Upper Breakeven Point = Strike Price of Higher Strike Long Call [or Put] - Net Premium**
    - Note: This is a Debit Spread and so the Net Premium will be positive.
    - Example:
        - Strike Price of Higher Strike Long Call [or Put] = 60
        - Net Premium (cost of strategy) = 1
        - Upper Breakeven = 60 - 1 = 59
- **Lower Breakeven Point = Strike Price of Lower Strike Long Call [or Put] + Net Premium**
    - Example:
        - Strike Price of Lowest Strike Long Call [or Put] = 54
        - Net Premium (cost of strategy) = 1
        - Lower Breakeven = 54 + 1 = 55

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike Price of Short Calls [or Puts] - Strike Price of Lower Strike Long Call [or Put] - Net Premium.
- Max Profit Range: Maximum Profit occurs at the Strike Price of the Short Calls [or Puts].

Risk Calculations (Maximum Downside)

- Maximum Loss = Net Premium
- Maximum Loss Range: Where the Price of Underlying is less than or equal to the Strike Price of Lower Strike Long Call [or Put] OR when it is greater than or equal to the Strike Price of Higher Strike Long Call [or Put]

26.Bull Put Spread

Quick Summary

- Bullish Strategy
- Net Credit
- Limited Profit
- Limited Risk

Further Explanation

A Bull Put Spread allows a trader to benefit from the underlying price increasing during the duration of the option. It limits the upside (limited maximum profit) and the downside (limited maximum loss). It is structured using Puts – the trader buys 1 OTM Put and Sells 1 ITM Put, equidistant around the current underlying price. This yields a Net Credit play (since the ITM Put will have a higher price than the OTM Put) and as long as the underlying price goes up then the trader will realise at least some of the Net Credit by the time of expiry. Conversely, the maximum loss is typically more than the maximum gain and so the trader needs to confident of a price increase in the underlying. There are many other Bullish strategies with a limited downside and so how this one can have its place is by being able to create a very cost-efficient structure to benefit from a **small** increase in price of the underlying.

A Bull Put Spread is constructed as follows:

- Buy 1 OTM Put equidistant to the ITM Put (same number of contracts on the same underlying)
- Sell 1 ITM Put equidistant to the OTM Put (same number of contracts on the same underlying)

Break Even

A Bull Put Spread has one breakeven point:

- **Breakeven Point = Strike Price of Short Put + Net Premium**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Strike Price of Higher Strike Long Call [or Put] = 60
        - Net Premium (cost of strategy) = 2
        - Upper Breakeven = 60 + (-2) = 58

Profit Calculations (Maximum Upside)

- Maximum Profit = Net Premium (Credit Premium)
- Max Profit Range: Maximum Profit occurs at when the Price of Underlying >= Short Put Strike Price

Risk Calculations (Maximum Downside)

- Maximum Loss = Strike Price of Short Put – Strike Price of Long Put + Net Premium
- Maximum Loss Range: Where the Price of Underlying <= Long Put Strike Price

27. Bull Ratio Spread

Quick Summary

- Bullish Strategy
- Can be a Credit or Debit Strategy
- Limited Profit
- Unlimited Risk

Further Explanation

A Bull Ratio Spread is fairly similar to a Bull Call Spread with additional flexibility. Whereas a Bull Call Spread yields limited upside and downside, and helps reduce the **cost (debit)** of the trade by offsetting a Long ITM Call with a Short OTM Call, the Bull Ratio Spread differs by writing more OTM Calls than the number of Long Calls. This does two things. Firstly, it creates a range in which the strategy becomes profitable if the underlying price rises. This means if it rises too much the strategy will actually lose money. The caveat to that is that the trader gets to reduce the cost of the strategy, sometimes enough to actually make it a Credit play, because he is writing more options than he is buying. This not only protects against a bearish move in the underlying but it may also yield a profit even if the underlying price does fall. Equally, you can consider this strategy as a Call Ratio Spread with higher strike to create that "Bullish profit range".

The strategy has limited profit potential but unlimited risk, and it can be set up as a Debit or Credit strategy.

A Bull Ratio Spread is constructed as follows:

- Buy 1 ATM Call (you could also set this up with OTM Calls, but the Long Call must have a lower strike than the written Calls)
- Sell 2 (or more) OTM Calls

Break Even

A Bull Ratio Spread tends to have ONE breakeven point (when it is a Credit Play):

- **Upper Breakeven Point = Strike Price of the Short Calls + (Long Call Strike – Short Call Strike – Net Premium)/Number of Uncovered Calls**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Buy 1 ATM 55 Call @ Premium of 2
        - Sell 2 OTM 60 Calls @ Premium of 2
        - Net Premium = -2
        - Upper Breakeven = 60 + (60-55-(-2))/1 = 60 + 7 = 67
- **Lower Bound is capped at receiving the Net Credit Premium**
    - As long as the underlying goes down in price, you will be paid at maximum the Net Credit Premium
- **IF the Spread is a Debit Strategy, then there are 2 Breakeven Points and the Lower Bound is instead:**
    - **Strike Price of Long Call – Net Premium**

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike Price of Short Call – Strike Price of Long Call – Net Premium
- Maximum Profit Range: Maximum Profit occurs at the Strike price of the Short Calls

Risk Calculations (Maximum Downside)

- Maximum Loss = Unlimited
- Maximum Loss Range: The greater the increase in underlying price above that of the Upper Breakeven the greater the loss incurred.

28.Call Ratio Backspread

Quick Summary

- Neutral/Bullish Strategy
- Long Volatility Strategy
- Net Debit
- 2 Legs/Transactions
- Unlimited Profit
- Limited Risk

Further Explanation

A Call Ratio Backspread is essentially the inverse of a Call Ratio Spread. The profitable range that you would see in a Call Ratio Spread now becomes a loss range, with limited downside and if the underlying price moves outside of the range on the bullish side then the strategy profits and has an unlimited upside. If the price moves outside the range on the bearish side the trader is also protected and depending on the options used may see a neutral outcome or a small loss/profit.

Since the strategy losses money if the underlying stays within a certain range this play has an implicit volatility bet. Construction of the strategy is as follows:

Strategy Construction Example (2:1 Ratio):

- Sell 1 ITM Call equidistant to the Long OTM Call
- Buy 2 OTM Calls equidistant to the Short ITM Calls

This results in the strategy becoming a Debit spread which means you pay the Net Premium upfront.

Break Even

A Call Ratio Backspread has ONE breakeven point:

- **Upper Breakeven Point = Strike Price of the Long Calls + (Long Call Strike – Short Call Strike + Net Premium)/Number of Uncovered Calls**
    - Note: This is a Debit Spread and so the Net Premium will be positive.
    - Example:
        - Sell 1 ITM 55 Call @ Premium of 3
        - Buy 2 OTM 60 Calls @ Premium of 2
        - Net Premium = 1
        - Upper Breakeven = 60 + (60-55+1)/1 = 60 + 6 = 66
- **Lower Bound is capped at Paying the Net Debit Premium**
    - As long as the underlying goes down in price, you will pay at most the Debit Premium

Profit Calculations (Maximum Upside)

- Maximum Profit = Unlimited
- Maximum Profit Range: Profit increases with underlying price and must exceed upper bound above

Risk Calculations (Maximum Downside)

- Maximum Loss = Strike Price of Long Call – Strike Price of Short Call + Net Premium
- Maximum Loss Range: Maximum Loss occurs at the Strike Price of the Long Call

29. Bear Butterfly Spread

Quick Summary

- Bearish Strategy
- Net Debit
- Limited Profit
- Limited Risk

Further Explanation

A Bear Butterfly Spread is exactly the same as a standard Butterfly Spread but with lower strikes which dictate the profitable range of the strategy. The idea is that the trader has conviction that the price will decrease a certain amount within a certain timeframe. He would then setup a Bear Butterfly Spread which has a profitable range around that target price and he uses options with expiry that suits the time horizon of his prediction.

The mechanics behind the strategy are very similar to a Butterfly Spread except this time the two Short positions are executed Out-The-Money meaning, at the same strike which is the target price the trader thinks the underlying price will decrease to. That allows one price at which the strategy returns maximum profit (the target price) but also a profitable range around it.

As with a standard Butterfly Spread, a Bear Butterfly Spread can also be structured either entirely with calls or entirely with puts - both methods yielding a very similar profit and risk profile. Since both Short positions are executed at the same price, this strategy requires only 3 legs:

- Sell 2 OTM Calls [or Puts] (at the target price)
- Buy 1 OTM Call [or Put] with a lower strike than the written Calls (or Puts) and equidistant to the other OTM long
- Buy 1 OTM Call [or Put] with a higher strike than the written Calls (or Puts) and equidistant to the other OTM long

This results in the strategy becoming a Debit spread which means it requires upfront cost.

Break Even

A Butterfly Spread has two breakeven points:

- **Upper Breakeven Point = Strike Price of Higher Strike Long Call [or Put] - Net Premium**
  - Note: This is a Debit Spread and so the Net Premium will be positive.
  - Example:
    - Strike Price of Higher Strike Long Call [or Put] = 48
    - Net Premium (cost of strategy) = 1
    - Upper Breakeven = 48 - 1 = 47
- **Lower Breakeven Point = Strike Price of Lower Strike Long Call [or Put] + Net Premium**
  - Example:
    - Strike Price of Lowest Strike Long Call [or Put] = 42
    - Net Premium (cost of strategy) = 1
    - Lower Breakeven = 42 + 1 = 43

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike Price of Short Calls [or Puts] - Strike Price of Lower Strike Long Call [or Put] - Net Premium.
- Max Profit Range: Maximum Profit occurs at the Strike Price of the Short Calls [or Puts].

Risk Calculations (Maximum Downside)

- Maximum Loss = Net Premium
- Maximum Loss Range: Where the Price of Underlying is less than or equal to the Strike Price of Lower Strike Long Call [or Put] OR when it is greater than or equal to the Strike Price of Higher Strike Long Call [or Put]

30. Bear Call Spread

Quick Summary

- Bearish Strategy
- Net Credit
- 2 Legs/Transactions
- Limited Profit
- Limited Risk

Further Explanation

A Bear Call Spread is a strategy that benefits from a fall in the underlying price, but is most useful when the fall is only a moderate one, since other strategies would yield a better risk/reward profile if the underlying price was expected to fall sharply.

It is a fairly simple transaction with only two legs and has limited upside and downside. The strategy takes advantage of creating a Net Credit Transaction while also having a limited downside.

The strategy can be constructed as follows:

- Sell 1 ITM Call equidistant to the Long OTM Call
- Buy 1 OTM Call equidistant to the Short ITM Call

This results in the strategy becoming a Credit spread which means you receive the Net Premium upfront.

Break Even

A Bear Call Spread has ONE breakeven point:

- **Breakeven Point = Strike Price of the Short Call - Net Premium**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Sell 1 ITM 45 Call @ Premium of 5
        - Buy 1 OTM 55 Calls @ Premium of 2
        - Net Premium = -3
        - Breakeven = 45 – (-3) = 48

Profit Calculations (Maximum Upside)

- Maximum Profit = Net Premium
- Maximum Profit Range: When the Underlying Price <= Strike Price of Short Call

Risk Calculations (Maximum Downside)

- Maximum Loss = Strike Price of Long Call – Strike Price of Short Call + Net Premium
- Maximum Loss Range: Maximum Loss occurs when the Price of Underlying >= Strike Price of the Long Call

31. Bear Ratio Spread

Quick Summary

- Bearish Strategy
- Can be a Credit or Debit Strategy
- Limited Profit
- Unlimited Risk

Further Explanation

A Bear Ratio Spread is very similar to a Put Ratio Spread but instead of a fairly neutral range around the ATM price being set up, the trader constructs a profitable range around a target price that is lower than the current underlying price, hence the bearish predisposition. As with a Put Ratio Spread, the trader sells a higher number of Puts than he buys which makes it likely that he can benefit from a Net Credit Strategy. However, by doing so he also increases his Maximum downside potential, and if the underlying falls below his target range then he could be open to heavy losses.

The strategy has limited profit potential but unlimited risk, and it can be set up as a Debit or Credit strategy.

A Bear Ratio Spread is constructed as follows:

- Buy 1 ATM Put (you could also set this up with OTM Puts, but the Long Put must have a higher strike than the written Puts)
- Sell 2 (or more) OTM Puts (with a lower strike)

Break Even

A Bear Ratio Spread tends to have ONE breakeven point (when it is a Credit Play):

- **Lower Breakeven Point = Strike Price of the Short Puts - (Long Call Strike – Short Call Strike - Net Premium)/Number of Uncovered Calls**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Buy 1 ATM 60 Put @ Premium of 3
        - Sell 2 OTM 55 Puts @ Premium of 2
        - Net Premium = -1
        - Lower Breakeven = 55 - (60-55-(-1))/1 = 55 – 6 = 49
- **Upper Bound is capped at receiving the Net Credit Premium**
    - As long as the underlying goes up in price, you will be paid at maximum the Net Credit Premium

Profit Calculations (Maximum Upside)

- Maximum Profit = Strike Price of Long Put – Strike Price of Short Put – Net Premium
- Maximum Profit Range: Maximum Profit occurs at the Strike price of the Short Puts

Risk Calculations (Maximum Downside)

- Maximum Loss = Unlimited
- Maximum Loss Range: The greater the decrease in underlying price below that of the Lower Breakeven the greater the loss incurred.

32. Put Ratio Backspread

Quick Summary

- Neutral/Bearish Strategy
- Long Volatility Strategy
- Net Debit or Credit
- 2 Legs/Transactions
- Unlimited Profit
- Limited Risk

Further Explanation

A Put Ratio Backspread is the inverse of a Put Ratio Spread. The profitable range that you would see in a Put Ratio Spread now becomes a loss range, with limited downside and if the underlying price moves outside of the range on the bearish side then the strategy profits and has an unlimited upside. If the price moves outside the range on the bullish side the trader is also protected and depending on the options used may see a neutral outcome or a small loss/profit.

Since the strategy losses money if the underlying stays within a certain range this play has an implicit volatility bet. Construction of the strategy is as follows:

Strategy Construction Example (2:1 Ratio):

- Sell 1 ITM Put equidistant to the Long OTM Puts
- Buy 2 OTM Put equidistant to the Short ITM Put

This results in the strategy (typically) becoming a Debit spread which means you pay the Net Premium upfront. However, it can be constructed as a Net Credit Strategy too.

Break Even

A Put Ratio Backspread has ONE breakeven point if Net Debit:

- **Lower Breakeven Point = Strike Price of the Long Put - (Short Put Strike – Long Put Strike + Net Premium)/Number of Uncovered Calls**
    - Note: This is a Debit Spread and so the Net Premium will be positive.
    - Example:
        - Sell 1 ITM 60 Put @ Premium of 3
        - Buy 2 OTM 55 Puts @ Premium of 2
        - Net Premium = 1
        - Lower Breakeven = 55 - (60-55+1)/1 = 55 - 6 = 49
- **Upper Bound is capped at Paying the Net Debit Premium**
    - As long as the underlying goes up in price, you will pay at most the Debit Premium
- **If the Strategy is Net Credit, then the Upper Bound = Strike Price of Short Put**

Profit Calculations (Maximum Upside)

- Maximum Profit = Unlimited
- Maximum Profit Range: Profit increases with underlying price and must be lower than the lower bound mentioned above

Risk Calculations (Maximum Downside)

- Maximum Loss = Strike Price of Short Put – Strike Price of Long Put - Net Premium
- Maximum Loss Range: Maximum Loss occurs at the Strike Price of the Long Put

33.Short Call

Quick Summary

- Bearish Strategy
- Net Credit
- 1 Leg/Transaction
- Limited Profit
- Unlimited Risk

Further Explanation

A short call is a very simple strategy with just 1 leg. Selling a call yields unlimited downside if the underlying price increases and a limited profit if the underlying price decreases. The trader receives a Credit Premium for setting up the trade and the main aim is that the options expire worthless so the trader can benefit from the Premium received.

Strategy Construction Example:

- Sell 1 Call (ITM/ATM/OTM) – the further ITM the bigger the Premium

This results in the strategy (typically) becoming a Credit play which means you received the Net Premium upfront.

Break Even

A Short Call has ONE breakeven point:

- **Breakeven Point = Strike Price of the Short Call – Net Premium**
    - Note: This is a Credit Spread and so the Net Premium will be negative.
    - Example:
        - Sell 1 ITM 50 Call @ Premium of 3
        - Net Premium = -3
        - Breakeven = 50 – (-3) = 50 + 3 = 53

Profit Calculations (Maximum Upside)

- Maximum Profit = Net Premium
- Maximum Profit Range: Maximum Profit occurs when the Underlying Price is <= Strike Price of Short Call by expiry

Risk Calculations (Maximum Downside)

- Maximum Loss = Unlimited
- Maximum Loss Range: Loss increases as the underlying price increases over the breakeven point mentioned previously

34.Arbitrage Strategies

Quick Summary

- Not suitable for retail traders, due to capital, speed and specialist knowledge requirements
- Risk-free profits
- Complex
- Part of the "Price Discovery" process for assets across global markets

Further Explanation

Arbitrage strategies are built to exploit pricing inequalities in financial instruments, such as the same instrument being priced differently in two different markets – you could then buy in in the cheaper market and sell it in the more expensive market with no risk. Strictly speaking, arbitrage should refer to risk-free strategies, such as the one just mentioned. Typically, within many assets in the financial markets, arbitrage is actually part of price discovery. This essentially means that there are always people out there exploiting these inequalities, as you would expect, and by doing so they actually drive prices towards "equality" and opportunities dry up.

One thing to note with arbitrage is that it isn't as simple as an asset having a different price in different markets because it needs to be different enough to overcome all the necessary costs to implement the trade. That will certainly mean commission costs and may also include transportation and storage costs if you are looking at commodities.

The specialised market knowledge, size and speed required to actually take advantage of these arbitrage opportunities means that its very rarely suited towards the retail trader and typically it isn't worth worrying about.

Here are some examples of arbitrage strategies:

- Put Call Parity
    - Theoretically Put and Calls on the same underlying, with the same strike price and time to expiry should have a static price relationship based on something called the Put-Call Parity. However, occasions can occur when this relationship is broken, perhaps in fast moving markets when there are heavy buyers/sellers of either Calls or Puts and market makers can end up mispricing which creates arbitrage opportunities.
- Strike Arbitrage
    - This strategy is used with option contracts on the same underlying and expiry, but different strikes. The idea is that if the strike price difference between the options is less than the difference between their extrinsic values, then there is an arbitrage (risk-free) opportunity.
        - Intrinsic Value is the value of the option assuming there is no time-element. Basically, that means you calculate what the option would be worth if the price of the underlying is what it is now, but at expiry.
        - Extrinsic Value is the option price minus the Intrinsic Value. This essentially is the pricing the time element of the option (remember that volatility is time dependent too).
            - Stock A currently trades at $10
            - Call Option with Strike of $10 is priced at $1.50
                - Intrinsic Value = $0, Extrinsic Value = $1.50
            - Call Option with Strike of $9 is priced at $4
                - Intrinsic Value = $1, Extrinsic Value = $3
            - Both have the same expiry
            - Sell the Call with a Strike of $9 for $3
            - Simultaneously buy the Call with a Strike of $10 for $1
        - The difference in Strikes is $1 while the difference in extrinsic value is $1.50
        - If Stock A goes UP: Net Credit = $2.50, Intrinsic Value = $-1
            - Total Net Profit = $1.50
        - If Stock A stays at $10: Net Credit = $2.50, Intrinsic Value = $-1
            - Total Net Profit = $1.50
        - If Stock A goes DOWN: Net Credit = $2.50, Intrinsic Value = $0
            - Total Net Profit = $2.50
- Other examples include Box Spreads and Conversion & Reversal Arbitrage

35.Synthetic Options

Quick Summary

- Not suitable for retail traders, due to capital, speed and specialist knowledge requirements
- Risk-free profits
- Complex
- Part of the “Price Discovery” process for assets across global markets

Further Explanation

Synthetic positions refer to the use of some assets to emulate the profit and loss profile of other assets. For example, using options you can create positions that have an identical profile to just going long or short the stock in the first place. Equally, you can also create different options profiles by combining long and short stock positions with other options.

As you would expect, this generally isn’t the most efficiently way to create the profit/loss profile that you want since it always takes more assets to build a synthetic position. However, often the reason they are used is to transition from one strategy to another which happens regularly in the markets due to changing financial and economic conditions in assets the trader is looking at. If you already have a position on using a certain strategy, then it could be more cost-effective to then create a synthetic position (by adding an asset or two) to implement the new strategy rather than liquidating the previous positions and opening up new ones instead.

Here are some examples of synthetic strategies:

- Synthetic Covered Call
    - A typical covered call is created by going long the underlying stock and then writing calls against that stock at a higher strike than the underlying was bought for. This strategy usually occurs when the trader has actually bought the underlying stock first because he is bullish on the long-term outlook but then at some point during that investment the short-term outlook looks neutral rather than bullish. To take advantage of that he writes calls against the stock over his neutral time horizon which allows him to collect the option premium and creates additional profit as long as the underlying stock remains relatively stable.
    - A Synthetic Covered Call is created by buying deep In-The-Money calls with a long expiry which gives it a very similar profit/loss profile to the underlying stock. He also writes Calls with a shorter-term time horizon. This yields a very similar profit/loss profile to the Covered Call Strategy and the advantage is that it is cheaper to set up because the Long ITM Calls will be cheaper than buying the underlying. However, this strategy would require the trader to have conviction about the underlying stock having a neutral outlook in the short term and a bullish one in the long term prior to putting the positions on.
    - This strategy’s use is actually the opposite to most Synthetic positions, since usually they are used to adapt a position that already exists, rather than it being cost-effective in the first place.
- Synthetic Straddle
    - A Long Straddle is a neutral strategy that is long volatility. It is implemented by buying a number of ATM Calls and buying an equal number of ATM Puts on the same underlying with the same expiration. The strategy profits the further the underlying price moves from the ATM price in either direction.
    - Imagine a scenario where you are long a stock because of a fundamental bullish predisposition. However, in the short term you can see events that may change the outlook and look to be catalyst events that could swing the price a lot either way. One way you could adapt your position from being long the underlying is to buy twice as many Puts (in equivalent shares) at the current underlying price which would create a Synthetic Straddle. This gives you exactly the same profit/loss profile as a Long Straddle but is much more cost effective if you already have a long position in the underlying since you are buying less options than when you create the Straddle from scratch.