

Professional Options Trading Masterclass Video Series

POTM

Video 16

Ratio Spreads 1 – Short Bull Ratio Spread

Short Bull Ratio Spread

Quick Explanation

Buy Long Call Option and Write a Call Option with a Lower Strike with the same Expiration date.

The Short Bull Ratio Spread is an Options trading strategy that is used to profit from a security increasing in price in a similar way to simply buying Calls. Specifically, it's designed to reduce the upfront costs of taking a simple Long Call Position while still allowing for unlimited profits. It is a straightforward strategy to apply because it only requires two transactions, but there are some complexities involved, such as choosing an appropriate ratio and knowing which Strike Prices to use. This strategy is best used when you are expecting a security to make a strong rise. It's very similar to the simple long call in that the potential for profits is unlimited; however, while it does not make quite the same level of returns as the long call, it significantly reduces the upfront costs. It's an ideal strategy to use if you are reasonably confident of a security going up, but have some concerns that it may fall in price and don't want to invest too much capital upfront.

The Short Bull Ratio spread requires two simultaneous transactions. Buying Calls and Writing Calls with a lower Strike, but with the same expiration date. You need to buy a greater number of Call Options than you Write, and the idea is to keep the upfront cost as low as possible by buying ones that are cheaper than those that you write.

- **Directional Bet**
- **Bullish Strategy**
- **Simple**
- **Two Transactions**
- **Debit or Credit (As close to Zero as possible or Credit)**
- **Max Risk (Limited)**
- **Max Gain (Unlimited)**

When to Use the Strategy

Buy a Long Call Option and Write a Call Option with a Lower Strike with the same Expiration date.

The Short Bull Ratio Spread strategy will return a profit if, by the time of expiration, the price of the underlying Stock rises sufficiently so that the price of the Calls you own is high enough to make them worth more than the ones you have written, bearing in mind the ones you have written have a Lower Strike and a higher price. As an example (assuming you have applied a 3 to 1 ratio), if the Calls you own are worth \$1 each and the ones you have written are worth \$2.50 each, the higher the price of the underlying security goes up, the more profit you will make.

The Maximum loss occurs when the price of the underlying security is equal to the Strike of the Calls bought at the time of expiration. This would mean the Calls you own expire worthless, but you will have a liability on the ones you have written with the Lower Strike. Unusually for a Bullish strategy, you will actually be better off if the price of the underlying security falls dramatically than you will be if it only falls a little bit. If the price does drop far enough to be below the Strike of the Call Options you have written, then they will expire worthless too and you will only lose any upfront cost you incurred on the overall Strategy. This is why you should try and make the upfront cost as close to zero as possible.

In assessing the usefulness of the Short Bull Ratio Spread strategy we assess it as High usefulness because of its Unlimited Gain, Limited Risk AND because it costs very little, Zero or you can actually receive a Credit for putting it on. Due to the payoff nature of the Strategy in that it pays for the Stock to move either up aggressively or down and not be Neutral, the best times to use the Short Bull Ratio Spread is if you are Fundamentally Bullish on a Stock Long Term but you believe it might take a fair amount of time for the Stock to go up by a long way and the Stock might have a fair chance of going lower. If you didn't think it had a fair chance of going lower (for whatever reason) then you would just put on a Long Call or Bull Call Spread.

Different Strategies lend themselves to different Fundamental Scenarios. You can be Bullish on a Stock and it could be down 70% in the last 2 years due to real Fundamentally bad reasons but now you assess that the Fundamental turnaround for the Company is beginning. Typically, in these "Turnaround" stories simply buying Stock or Buying Calls or Buying a Bull Call Spread can either be dangerous or wasted money spent on premium, because it might take a long time or longer than expected for them to "Turnaround" the Fundamentals. A Short Bull Ratio Spread can help in this situation, because if its put on with a long time till expiration, it is improbable that over the Long Term that the Stock will still be roughly the same price as when you put it on, if a Fundamental Turnaround in the company's earnings happens or doesn't happen. It will either go up massively (genuine fundamental turnaround) or continue to go down (the fundamental bleed continues). It may also be a takeover target. The Short

Bull Ratio Spread can also be useful with growth / momentum plays where you have a Bullish fundamental pre-disposition BUT when you have assessed buying Long Calls or doing a Call Spread it just seems too “expensive” to do so. If you put on a Long Dated Short Bull Ratio Spread, you can get it on for close to Zero cost, at Zero Cost or even at a Credit and play the momentum of a stock not just in the short term but over the Long term. Remember you are writing In The Money Calls so the Longer-term expiration that you write the more expensive the Options will be and the more money you will take upfront. You will make money on this side of the trade through time decay.

You could also use the Short Bull Ratio Spread as a Hedge against a Short Stock position. Let’s say you are Short a Stock that you think might go up for a short period of time but the fundamentals of the Stock will not change. So, you still want to be fundamentally Short the Stock because the fundamentals are so bad that you think it could just collapse at any moment BUT in the short term you want to defend against a potential technical Short Squeeze in the stock. You could create a Short Bull Ratio Spread at Zero Cost and get yourself a “Free Hedge” so if the Stock does rise in price aggressively you do lose on the capital value of the Short Stock position but you make the same amount on the Short Bull Ratio Spread as a Hedge. You can then unwind the Spread when you believe the Stock has topped out leaving yourself Short the Stock at higher prices BUT having lost no money when it rallied. This adds a significant advantage to simply buying a Call as a Hedge or buying a Call Spread as a Hedge because you don’t pay anything for it. You will make a proportionately less amount of money on the Ratio Spread versus being Long a Call or a Call Spread but you payed nothing for it.

It is worth mentioning here so we do not get carried away thinking the Short Bull Ratio Spread is the “Ultimate” Options Strategy. You still have to get the Strikes and the Ratios right for the trade to be worthwhile, which on many occasions can be difficult. If you can’t get it on for a Ratio at prices and strikes that make sense then it has no incremental value to being Long a Call or Long a Call Spread.

How to Use the Strategy

Perhaps the biggest advantage of this strategy is the fact that you technically have the best of both worlds. Providing the price of the underlying Stock goes up by at least a fair amount then there is no limit to the profits you can make, but you don’t stand to lose anything (or at least very little) if the price of the underlying Stock goes down by a fair amount.

The only risk is that the security doesn’t move much in price at all and you lose the money spent on the options bought, but you still have a liability on the ones written. You will just have to unwind the Options positions and claw back as much as you can if it becomes obvious prior to expiration that the underlying Stock is not going to move by much either way before expiry. The fact that you can implement the spread without any upfront cost is also obviously appealing.

The only major hurdle you have to overcome is that you do need to get the calculations right in terms of the ratio of the strikes for the strategy to work properly. This might seem simple enough once you know what you are doing, but it can be difficult when you are starting out. The only minor drawback is that you won’t make profits at quite the same rate as just buying Options, but that’s the trade-off for reducing the upfront costs.

As mentioned in the previous section “When to Use the Strategy” it is best to give yourself a Long-dated shot at making money on the trade in either Fundamental Turnaround stories or Longer-Term Momentum plays. Getting in for free but also giving it enough time to work is the best way to play this Strategy. This is when its most useful versus simply owning Stock, buying a Long Call (which has an upfront cost & can suffer from time decay) or buying a Bull Call Spread (which has an upfront cost too). However, where the Short Bull Ratio Spread is most optimal is in the “Fundamental Turnaround” situation because with a “Momentum Play” it is difficult to justify over simply buying a Call because there is less doubt that the stock will go down in the near to medium term due to a continuation of poor company earnings. Additionally, you won’t make as much money on the upside with a Short Bull Ratio Spread versus just being Long a Call Option. You won’t have to pay for it BUT you won’t make as much. So, the incremental advantage of the Short Bull Ratio Spread as a Strategy for a Trader is in these “Fundamental Turnaround” stories in Stocks, where upside can be explosive but downside could still occur. You may want to look 6-12 months out in the calendar to play these turnaround stories that have had 1 or 2 bad years of fundamental decline. This gives the company a few more quarters to get the turnaround in place and for investors to wake up to the turnaround and start buying the stock again.

Break Even

Leg A = Buy 3X ATM or slightly OTM Calls, Leg B = Write 1X Lower Strike OTM Call Option

The break-even points of the Short Bull Ratio spread will depend on the ratio used, the upfront costs (if any) and the strike prices used. Here we have used a 3-1 Ratio. It could be 2-1, 4-1 etc etc and you could get in for a cost (Debit) at Zero cost or for a

Credit. You need to carry out your own calculations when applying the Short Bull Ratio Spread to determine where the break-even points are.

Profit Calculations (Maximum Upside)

Maximum profit is unlimited.

Profit = $((\text{Price of Underlying Security} - \text{Strike Price Leg A}) \times \text{Number of Options in Leg A}) - ((\text{Price of Underlying Security} - \text{Strike Price Leg B}) \times \text{Number of Options in Leg B})$.

If you incurred a net debit when creating the spread, then that would have to be deducted from your profits.

Risk Calculations (Maximum Downside)

Maximum loss is limited

Maximum loss is made when **Price of Underlying Security = Strike Price of Leg A**

Maximum loss is $(\text{Price of Underlying Security} - \text{Strike Price Leg B}) \times \text{Number of Options Leg B}$

If you incurred a net debit when creating the spread, then that would have to be added to your losses.

Strategy Example

Please note this is just a rough guide to how the strategy works, and it doesn't take into account commission costs. The options prices are obviously hypothetical.

- Company X stock is trading at \$50, and you expect a strong increase in price.
- At The Money calls on Company X stock (Strike Price \$50) are trading at \$2 and In The Money calls on Company X stock (strike price \$45) are trading at \$6.
- You buy 3 Call Contracts with a Strike Price of \$50 (3X contract = 300 shares) at a cost of \$600. This is Leg A
- You write 1 call contract with a Strike Price of \$45 (1X contract = 100 shares) for a credit of \$600. This is Leg B
- You have created a Short Bull Ratio spread for zero upfront cost.

If Company X stock increases to \$53 by expiration

The Calls you have bought in Leg A will be worth around \$3 each, for a total of \$900. The ones you have written in Leg B will have a liability of around \$8 each for a total of \$800. You will have made a profit of approximately \$100.

If Company X stock increases to \$55 by expiration

The Calls you have bought in Leg A will be worth approximately \$5 each, with a total of \$1,500. The ones you have written in Leg B will be worth approximately \$10 each, and a total of \$1,000. Your profit will be around \$500.

If Company X stock remains at \$50 by expiration.

The Calls you have bought in Leg A will be At The Money and worthless. The ones you have written in Leg B will have a liability of around \$5 each for a total of \$500. You will have lost approximately \$500.

If Company X stock falls to \$45 by expiration.

The Calls you have bought in Leg A will be worthless, and so will the ones you have written in Leg B. You will have roughly broken even on the trade.

The higher the price of Company X stock by expiration, the more profit you would make. If the stock fell any lower than \$45, then nothing would change and you would be about break even.