

The Bull Call Spread

- Debit Spread
- Defined Risk
- Defined Reward
- Bullish
- Lower Probability, Higher Reward

www.sharenavigator.ie



| 1. The Bull Call Spread Explained | 2 |
|---|----|
| 1.1. Short Explainer Video | 3 |
| 1.2. How to create a Debit Spread | 3 |
| 1.3. Debit Spread | 3 |
| 1.4. Example | 5 |
| 1.5. Share Price Outlook | 6 |
| 1.6. Motivation for Spreading | 6 |
| 1.7. Maximum Profit | 6 |
| 1.8. Maximum Loss | 7 |
| 1.9. Return on Investment | 8 |
| 1.10. Break-Even Point (Short Term Expiry) | 8 |
| 1.11. Probability of Profit | 9 |
| 1.12. Partial Profit or Loss | 11 |
| 1.13. Profit & Loss Before Expiration | 11 |
| 1.14. Profit and Loss Table | 11 |
| 1.15. Impact of Volatility | 12 |
| 1.16. Impact of Time Decay (Theta) | 12 |
| 1.17. Impact of Delta | 13 |
| 1.18. Picking the Strikes | 14 |
| 1.19. Assignment Risk | 14 |
| 1.20. Equity Options | 14 |
| 1.21. American-Style Index Options | 14 |
| 1.22. Powerpoint Video | 15 |
| 1.23. Bull Call Spread: Actions to take at expiry | 15 |
| 1.24. Bull Call Spread: Our View | 15 |
| 2. Placing and Managing a Bull Call Spread | 16 |
| 2.1. How to place a Bull Call Spread | 16 |
| 2.2. How to manage a Bull Call Spread | 16 |
| 2.3. Rolling out a Bull Call Spread | 16 |
| 2.4. Closing down the trade | 16 |
| 2.5. Test Your Knowledge 1 | 16 |
| 2.6. Test your knowledge 2 | 16 |
| 2.7. Please leave a Review on Google | 16 |
| 3. Mentoring Service | 17 |

3. Mentoring Service

www.sharenavigator.ie



1. The Bull Call Spread Explained

The bull call spread is a bullish strategy that allows you to participate in a stock at a fraction of the price. If the share price moves up substantially, you will benefit from that upward move in the share price. This is one of our favorite bullish strategies when implied volatility is low.

Like the Long Call strategy, the Bull Call Spread is a Lower Probability Strategy (than the Bull But Spread). The upside is that the payout is much greater if you are correct on the direction of the stock.

We prefer this strategy to the Long Call because the 'Time' premium purchased with the Long Call is partially offset by the 'Time' premium received by adding the 'Short Call'.

We are going to show you:

- 1. How to create a Bull Call Spread
- 2. How to calculate Risk and Reward
- 3. How to find Probabilities of success
- 4. How to identify your breakeven price
- 5. When to place the Bull Call Spread

The Bull Call Strategy is a Lower Probability Option Strategy but the probability can be greater than buying shares. It is less risky than buying shares. We use this strategy when we are really bullish on a stock.

With every strategy there are pros and cons. During this course we will highlight these to you.

The course consists of video, pdf, quizzes, assignments etc..... It is important that you complete the assignments. The only way to learn about options is 'to do'. You will have access to a 'Demo' account and will be able to practice implementing the strategies learnt. This is important. So practice, practice, practice.

www.sharenavigator.ie



1.1. Short Explainer Video

CLICK HERE to view.

1.2. How to create a Debit Spread

The bull call spread is made up entirely of call options on the same underlying stock (or index). It's constructed by purchasing a call with one strike price and selling (writing) another call with a higher strike price but the same expiration month.

The ratio of long calls to short must be 1:1. The result is a position consisting of a long call (lower strike) and a short call (higher strike). An investor with this position can be said to be long a bull call spread.

Bull call spread = buy lower-strike call + sell higher-strike call

1.3. Debit Spread

Before you read on simply remember that the Bull Call Spread is a 'DEBIT SPREAD'.

In very simple terms, a spread is an option strategy, or position, that is composed of both long option contracts and short option contracts, of the same type (call or put), and on the same underlying stock (or index). The sides of a spread, i.e., the long option(s) and the short option(s), are commonly called the "legs" of the position, and for most spreads, each leg would by itself benefit from an opposite move, bullish or bearish, in the underlying stock (or index). As opposed to the outright purchase or sale of calls or puts, spreads are termed "complex" strategies, a term that reflects their composition (of different pieces) rather than any level of difficulty in understanding their use.

Spreads can be broadly categorized: vertical spreads, horizontal spreads and diagonal spreads (or variations thereof). Each of these may further be categorized by type: call (composed of only call contracts) or put (composed of only put contracts). The profit & loss profiles of each spread category will be somewhat different. Let's take a closer look at these terms:

- Vertical (call or put) legs have same expiration months but different strike prices
- Horizontal (call or put) legs have same strike prices but different expiration months (also called time spreads or calendar spreads)

www.sharenavigator.ie



• **Diagonal (call or put)** – combination of vertical or horizontal characteristics (different strike prices and expiration months)

The spreads most commonly used by investors are vertical spreads and horizontal spreads.

Another category of widely used complex option strategies comprising two legs, but which are not by definition spread, are straddles and strangles. These don't follow our definition of spreads literally, because they are composed of both calls and puts, either all long contracts or all short ones. However, the two legs of each of these strategies can be characterized as one bullish and one bearish. For educational purposes, or for sake of convenience, we will include these strategies in the larger family of spreads.

In terms of cash flow upon establishing spread, straddle or strangle positions, there are debit spreads and credit spreads:

- **Debit spreads** total cash amount paid out for purchased (long) options is greater than the total cash amount received for sold (short) options
- **Credit spreads** total cash amount received for sold (short) options is greater than the total cash amount paid out for purchased (long) options

Generally, a debit spread will be established (or purchased) at a net debit but will be closed (sold or liquidated) at a net credit. The opposite is true for credit spreads; they may initially be established (or sold) for a net credit, but will be closed (bought back or liquidated) at a net debit. Sometimes, however, a spread may be established or closed for "even money," or with the total cash amount paid out equaling the total cash amount received.

Since the long, lower-strike call will cost more than the premium received for the short, higher strike call with the same expiration, a bull call spread will always be established at a net debit. In other words, the amount of cash paid out is more than the cash received.

Bull call spread = debit spread

www.sharenavigator.ie



1.4. Example

Look at the Facebook call option quotes below. At the time this quote was taken Facebook was trading at \$118.

| Delta | Gamma | Ca ll Theta | Bid | Ask | Description MAR 17 '17 |
|-------|-------|-----------------------|--------------------------|--------|-------------------------|
| 0.590 | 0.024 | -0.033 | 7.90 | 8.05 + | 115 |
| 0.466 | 0.025 | -0.033 | 5.30 | 5.45 + | 120 |

To establish a bull call spread with Facebook options, we might buy 1 FB March 17_{th} \$115 call for \$8.05, and at the same time sell (write) 1 FB March 17th \$120 call for \$5.30.

The result is a long 1 FB March 17th \$115/\$120 bull call spread at a \$2.75 (\$8.05 – \$5.30) net debit or \$275 total.

With the long \$115 call option, we have the right to buy 100 shares of Facebook at \$115. With the short \$120 call option, we are obligated to sell 100 shares of Facebook at \$120.

One of the attractions of the bull call spread versus the long call strategy is the lower costs of participating in the trade. Look at the matrix below:

| | \$115/\$120 Bull | Buy the \$115 | Buy the |
|--------------------|------------------|---------------|----------------|
| | Call | Call | stock at \$118 |
| Capital Investment | \$275 | \$805 | \$11,800 |

As you can see from the above example, the bull call spread offers you an opportunity to invest in Facebook with the least amount of capital.

www.sharenavigator.ie



1.5. Share Price Outlook

The bull call spread is a moderately bullish position. We are bullish on Facebook and we expect to profit from an increase in its price.

However, it's a moderately bullish position since we have capped our upside potential at \$120 by selling the \$120 call. Above \$120, the profit is capped on Facebook. A more bullish investor might simply buy calls outright or simply buy the stock

Bull call spread: moderately bullish

1.6. Motivation for Spreading

Since we are only moderately bullish on Facebook, the cost of buying a call might represent more downside risk than we are willing to take. By selling the higher- strike call and taking in premium, the cost of the long call is reduced.

This premium will at least partially offset a loss on the long call if we are wrong about Facebook. The trade-off for protecting some of the long call's value in this manner is of course the limited upside profit potential.

Bull call spread: reduces risk of long call

1.7. Maximum Profit

The maximum upside profit for a bull call spread is limited to the difference between the calls' strike prices, or the spread's maximum value, less the debit initially paid for the spread.

Maximum profit = difference in strike prices – net debit paid Facebook example:

\$5.00 (difference between \$115 & \$120) - \$2.75 (Debit paid)

= \$2.25 or \$225 total

This profit will be seen if Facebook closes at or above the higher strike price of the short \$120 call at expiration, no matter how high the share price of Facebook increases.

When we compare the bull call versus the long call, you will notice that the profit is capped for the bull call but is unlimited for the long call. This is the only point at which the strategy is less favorable. For example, if Facebook rises to \$130 we still only make

www.sharenavigator.ie



\$225 profit with the bull call spread. With the long call the upside is unlimited. See matrix below.

| | \$115/\$120 Bull | Buy the \$115 | Buy the | |
|--------------------|------------------|---------------|----------------|--|
| | Call | Call | stock at \$118 | |
| Capital Investment | \$275 | \$805 | \$11,800 | |
| Maximum Profit | \$225 | Unlimited | Unlimited | |

We feel however the lower costs and lower break-even price of the bull call spread offer you better chances of being profitable.

1.8. Maximum Loss

The maximum downside loss for a bull call spread is limited entirely to the net debit initially paid for it.

Maximum loss = debit paid

Maximum loss for FB March 17th \$115/\$120 Bull Call example

= \$2.75 or \$275 total

This loss will be seen if Facebook closes at or below the lower strike price of the long \$115 call at expiration, no matter how low Facebook declines. This is an area where the bull call spread has an advantage over the long call strategy and buying the stock. See matrix below:

| | \$115/\$120 Bull | Buy the \$115 | Buy the |
|--------------------|------------------|---------------|----------------|
| | Call | Call | stock at \$118 |
| Capital Investment | \$275 | \$805 | \$11,800 |
| Maximum Profit | \$225 | Unlimited | Unlimited |
| Max Loss | \$275 | \$805 | \$11,800 |

www.sharenavigator.ie



The lower risk nature of the bull call spread versus the other two strategies makes it very attractive.

1.9. Return on Investment

Return on investment is calculated as follows:

(Profit divided cost of the bull call spread) multiplied by 100

In our FB example, return on investment is:

= (\$225/275) * 100

= 81.8%

Look at the comparisons between the three bullish strategies below based on the share price of Facebook reaching \$120 at expiry:

| | \$115/\$120 Bull | Buy the \$115 | Buy the |
|--------------------|------------------|---------------|----------------|
| | Call | Call | stock at \$118 |
| Capital Investment | \$275 | \$805 | \$11,800 |

| Profit (if shares reach | \$225 | -\$305 | \$200 |
|-------------------------|--------|---------|----------|
| \$120 at expiry) | | | |
| Max Loss | \$275 | \$805 | \$11,800 |
| Return on Investment | +81.8% | -37.89% | 1.69% |

The matrix above highlights the advantages and the lower risk nature of the bull call spread versus buying the stock or buying the \$115 call.

1.10. Break-Even Point (Short Term Expiry)

The break-even price for our Facebook \$115/\$120 bull call spread at expiration is a closing share price equal to the lower strike price of the long \$115 call plus the \$2.75 debit paid for the spread.

Break-even price = lower strike price + net debit paid

www.sharenavigator.ie



Facebook Example \$115 (Lower strike) + \$2.75 (Debit paid) = \$117.75

In other words, at expiration, the share price of Facebook must rise above \$117.75 for us to make a profit. This is one of the real benefits of the bull call spread versus the long \$115 call strategy.

If we were to simply buy the \$115 long calls the breakeven would be \$123.05. As you can see the share price of Facebook would have to rise a lot more to get over the break-even price with the long call.

This means that our probability of profit will be higher with the bull call spread. The matrix below compares all three bullish strategies:

| | \$115/\$120 Bull | Buy the \$115 | Buy the |
|-------------------------|------------------|---------------|----------------|
| | Call | Call | stock at \$118 |
| Capital Investment | \$275 | \$805 | \$11,800 |
| Profit (if shares reach | \$225 | -\$305 | \$200 |
| \$120 at expiry) | | | |
| Max Loss | \$275 | \$805 | \$11,800 |
| Return on Investment | +81.8% | -37.89% | 1.69% |
| Break-even | \$117.75 | \$123.05 | \$118.00 |

As you can see the bull call spread in this example has a lowest break-even price. The break-even price on a bull call spread will depend on the strike prices that you pick. The further out-of-the-money with the strike prices, the higher the break-even price will be.

1.11. **Probability of Profit**

One of the major benefits of the bull call spread versus the long call strategy in this example is the probability of profit at expiration. Look at the matrix below:

www.sharenavigator.ie



| | \$115/\$120 Bull | Buy the \$115 | Buy the |
|-------------------------|------------------|---------------|----------------|
| | Call | Call | stock at \$118 |
| Capital Investment | \$275 | \$805 | \$11,800 |
| Profit (if shares reach | \$225 | -\$305 | \$200 |
| \$120 at expiry) | | | |
| Max Loss | \$275 | \$805 | \$11,800 |
| Return on Investment | +81.8% | -37.89% | 1.69% |
| Break-even | \$117.75 | \$123.05 | \$118.00 |
| Probability of Profit | 51% | 43% | 50% |

In the Facebook \$115/\$120 bull call example, the probability of profit is 51%. The probability of profit for simply purchasing the stock is 50% and for buying the \$115 call is just 43%. As you can see from this example, the chances of profit are greater when you place the bull call spread.

The reason that the probability is lower on the long \$115 call strategy in this example is because the break-even price for the long stock and bull call spread is lower than the break-even price of the long call.

This is one of the major reasons we much prefer the bull call spread strategy to the long call strategy. Of course, if we chose higher out-the-money strikes for the bull call spread the break-even would be higher and the probability would be lower, our max profit would increase.

We discuss picking the strike prices in greater detail later.

www.sharenavigator.ie



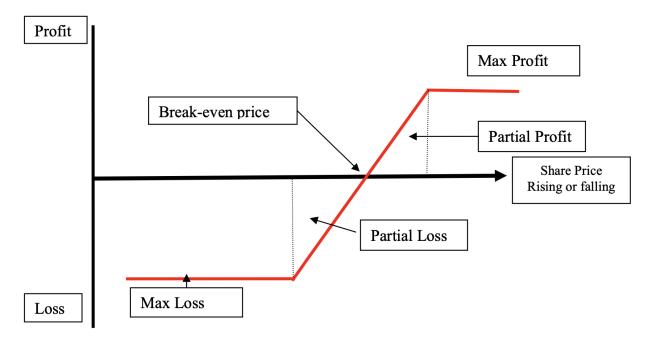


Figure 1: Profit and Loss Dynamics for the Bull Call Spread

1.12. Partial Profit or Loss

At expiration, if Facebook closes at a point between the \$117.75 break-even price and either of the two strike prices, either a partial loss or partial profit would be seen. Above the break-even price there would be a partial profit; below the break- even price there would be a partial loss.

1.13. Profit & Loss Before Expiration

Before expiration, we can take a profit or cut a loss by selling the spread if it has market value. This involves selling the long call and buying the short call, which will be done at a net credit, and these closing trades may be executed simultaneously in one spread transaction. Profit or loss would simply be the net difference between the debit initially paid for the spread and the credit received at its sale.

1.14. Profit and Loss Table

<u>CLICK HERE</u> to watch a video showing you how to do P&L tables for the Bull Call spread.

www.sharenavigator.ie



1.15. Impact of Volatility

The financial impact of a change in volatility depends on whether one or both calls are in-the-money and the amount of time until expiration.

| 1.16. | Impact of | of Time | Decay | (Theta) |
|-------|-----------|---------|-------|---------|
|-------|-----------|---------|-------|---------|

| Delta | Gamma | Call Theta | Bid | Ask | Description MAR 17 '17 |
|-------|-------|---------------|--------------------------|--------|-------------------------|
| 0.590 | 0.024 | -0.033 | • 7.90 | 8.05 + | 115 |
| 0.466 | 0.025 | -0.033 | 5.30 | 5.45 • | 120 |

Theta is the rate of decay in the time value of an option. Positive theta works against you and negative theta works for you. For a bull call spread, we have two positions when we want to consider theta.

First, we own the Facebook Mar 17th \$115 call with a theta of -0.033. Second, we sold the \$120 call for the same expiry with a theta value of - 0.033. Because we sold the \$120 call the theta sign changes to positive +0.033. The net theta position is 0.000.

This means that for our Facebook bull call spread, theta is neither working for us or against us.

In the long call strategy, we mentioned that theta was a real drag on the long call strategy. You can see above the effect of adding a short call option on theta and turning the long call into a bull call spread, it reduces the negative impact of purchasing the long \$115 call.

For a bull call spread, if Facebook is closer to the lower strike of the long \$115 call, losses should increase at a faster rate as time passes. Conversely, if Facebook is closer to the higher \$120 strike of the short call, profits should increase at a faster rate with time.

<u>CLICK HERE</u> to watch a video on the impact of Theta on the Bull Call Spread.

www.sharenavigator.ie



1.17. Impact of Delta

Delta is the rate of change in the value of an option for a \$1 move in the underlying share price. In our example with the FB Mar 17th \$115/\$120 bull call spread we have two positions to consider. See option quote below.

| Delta | Gamma | Ca ll Theta | Bid | Ask | Description TMAR 17 '17 |
|-------|-------|-----------------------|------------------------|--------|-------------------------|
| 0.590 | 0.024 | -0.033 | 7.90 | 8.05 + | 115 |
| 0.466 | 0.025 | -0.033 | + 5.30 | 5.45 + | 120 |

First, we own the \$115 call with a delta of +0.59. Second, we sold the \$120 call with a delta of +0.466. The sign of the delta changes for the \$120 call because we sold the call option and it becomes - 0.466.

The result for the overall position is a delta of +0.124 (0.590 - 0.466).

A delta of +0.124 means that for a \$1 rise in the share price of Facebook the value of the FB Mar 17th \$115/\$120 bull call spread will rise by \$0.124 per share or \$12.40 per contract and vice versa.

We can also consider delta as owning or being long 12.4 shares of Facebook. Think about it...if Facebook rose by \$1 and we owned 12.4 shares we would make a profit of \$12.40. The exact same as the bull call spread.

A couple of things to know about delta:

- 1. Positive delta is a bullish bias
- 2. Negative delta is a bearish bias
- 3. You should always consider the overall delta position in your portfolio we like to be option sellers and keep our overall portfolio delta as neutral as possible. In this way we do not get too upset in moves in the market up or down. As a general rule of thumb we like to keep our deltas below plus or minus 1% of the value of our portfolio.

<u>CLICK HERE</u> to watch a video showing the impact of Delta on the Bull Call Spread.

www.sharenavigator.ie



1.18. Picking the Strikes

Some bull call spreads can be considered more bullish than others. The degree of bullishness depends primarily on the strike price of the short call, which determines how high the underlying stock (or index) needs to increase for maximum profit to be realized at expiration.

- Most bullish: a spread bought when both calls are out-of-the-money. The cost will be lower but the probability of making a profit will also be lower.
- Moderately bullish: a bull call spread bought when the underlying stock (or index) is between the two strike prices. This will cost more but will have a higher probability than out-the-money calls.
- Least bullish: a spread bought when both calls are already in-the-money (primarily to take advantage of time decay). Most expensive but highest probability of profit.

1.19. Assignment Risk

Assignment on any Equity option or American-style index option can, by contract terms, occur at any time before expiration, although this generally occurs when the option is in-the-money.

1.20. Equity Options

For an equity call option, early assignment usually occurs under specific circumstances; such as when underlying shareholders are about to be paid a dividend. Assignment at that time might be expected when the dividend amount is greater than the time value in the call's premium, and notice of assignment may be received as late as the ex-dividend date. If a bull call spread holder is assigned early on the short call, then he may exercise his long call and buy shares to fulfill the assignment obligation. In this case, maximum profit on the bull call spread would be realized.

1.21. American-Style Index Options

If early assignment is received on the short call of a bull call spread, the cash settlement procedure for index options will create a debit in the investor's brokerage account equal to the cash settlement amount. This cash amount is determined at the end of the day the long call is exercised by its owner. After receiving assignment notification, usually the next business day, when the investor exercises his long call the cash settlement amount credited to his account will be determined at the end of that day. There is a full day's market risk if the long option is not sold during the trading day assignment is received.

www.sharenavigator.ie



1.22. Powerpoint Video

CLICK HERE to view

1.23. Bull Call Spread: Actions to take at expiry

The action you take at expiry will depend on where the share price is trading at:

- If the share price is above the short call strike price: both call options will be in-the-money. There is no need for you to do anything as your broker will assign you shares and simultaneously sell them with no trading costs. You will make full profit.
- If the share price is below the long call strike price: Both call options are out-the-money and worthless. Nothing to do here except suffer the full loss.
- If the share price is between the long call and the short call: The short call is out-the-money and worthless, so nothing to do there. But the long call has value in it. The overall position may be in a profit or loss situation depending on how deep in-the-money the long call is. You can close the long call before the close of business on expiry Friday. If you leave the long call expire, you will be assigned the shares by your broker automatically. You can then sell the stock position.

1.24. Bull Call Spread: Our View

We much prefer the bull call spread over the long call strategy. The reason is that the cost and risk is lower with the bull call spread. Probabilities of profit are higher. Also, theta is reduced with the sale of the short call.

However, there is a time and a place to use this strategy. We use the bull call spread in the following scenarios:

- 1. We are very bullish on the stock
- 2. Implied Volatility is low

If we are bullish and implied volatility is high we will choose credit type strategies such as the short put, the put ratio spread or the bull put spread.

www.sharenavigator.ie



2. Placing and Managing a Bull Call Spread

2.1. How to place a Bull Call Spread CLICK HERE to view.

2.2. How to manage a Bull Call Spread CLICK HERE.

2.3. Rolling out a Bull Call Spread CLICK HERE

2.4. Closing down the trade CLICK HERE

2.5. Test Your Knowledge 1

<u>CLICK HERE</u> to take the quiz

2.6. Test your knowledge 2

At this stage it is best if you start practicing for real so this is what we want you to do:

- **1.** Pick any option able stock that you have a mildly bullish outlook
- 2. Place a Bull Call Spread
- **3.** Do a profit & Loss table
- 4. Place the trade in a 'Simulated' or 'Demo' account with an online broker
- 5. Identify your breakeven
- **6.** Identify your Max Loss
- 7. Identify your Max Profit
- 8. Share your insights on our daily members web meetings

2.7. Please leave a Review on Google

<u>CLICK HERE</u> to leave a review of this course on Google. We would love to get your feedback. Thank you.

www.sharenavigator.ie



3. Mentoring Service

Embark on a streamlined journey to financial proficiency with our Stock and Options Mentoring Service. Elevate your learning curve by enlisting a **personal** mentor who will guide you through the intricacies of stock and options trading. Our comprehensive program offers:

- Weekly one-on-one mentoring sessions, ensuring personalized attention and targeted skill development.
- Gain a competitive edge with daily live market updates
- Exclusive access to curated stock watchlists
- Insights into our meticulously crafted options and futures trades.
- Save valuable time, effort, and money as you fast-track your education with our dedicated support system.

With daily assistance and a wealth of resources at your fingertips, you'll not only navigate the markets more confidently but also accelerate your journey toward financial success.

Join us in unlocking the full potential of your trading endeavors.

<u>CLICK HERE</u> to book a FREE Mentoring session to find out more.

www.sharenavigator.ie