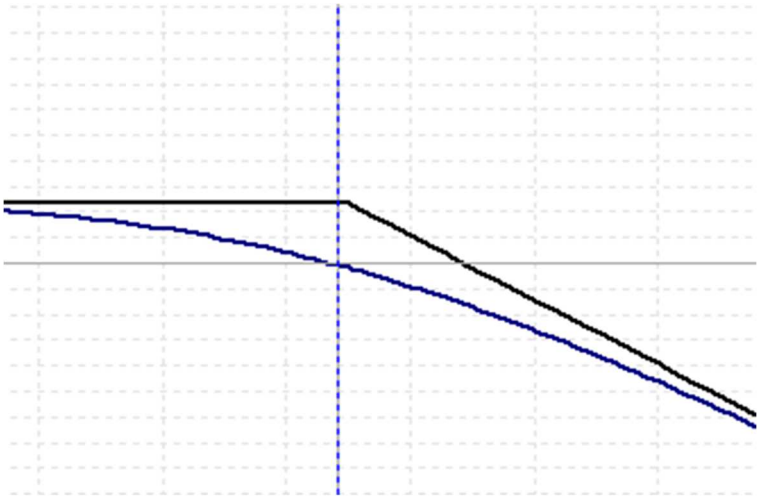
Credit Spread

Introduction

Bearish credit spread

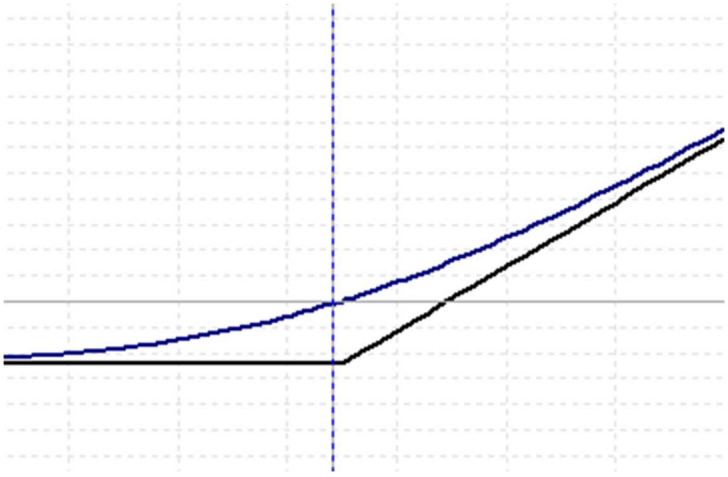
The basics of a short call.



The owner of a short call (call seller) has the obligation, but not the right, to sell the specified underlying at the specified strike price before the specified expiry date if the option is exercised.

From the options greeks perspective, a short call has negative delta, negative gamma, positive theta and negative vega.

The basics of a long call.

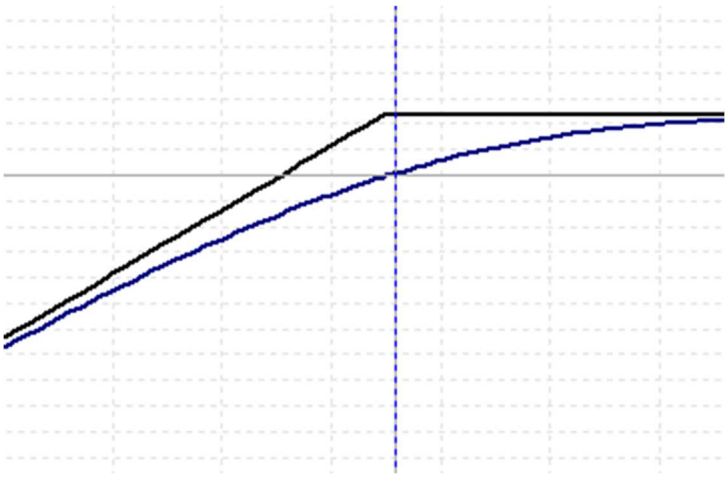


The owner of a long call (call buyer) has the right to buy the specified underlying at the specified strike price before the specified expiry date.

From the options greeks perspective, a long call has positive delta, positive gamma, negative theta, and positive vega.

Bullish credit spread

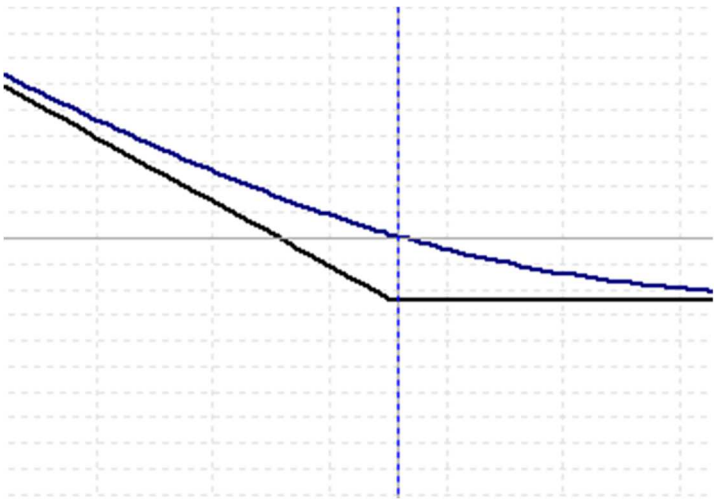
The basics of a short put.



The owner of a short put (put seller) has the obligation, but not the right, to buy the specified underlying at the specified strike price before the specified expiry date if the option is exercised.

From the options greeks perspective, a short put has positive delta, negative gamma, positive theta, and negative vega.

The basics of a long put.



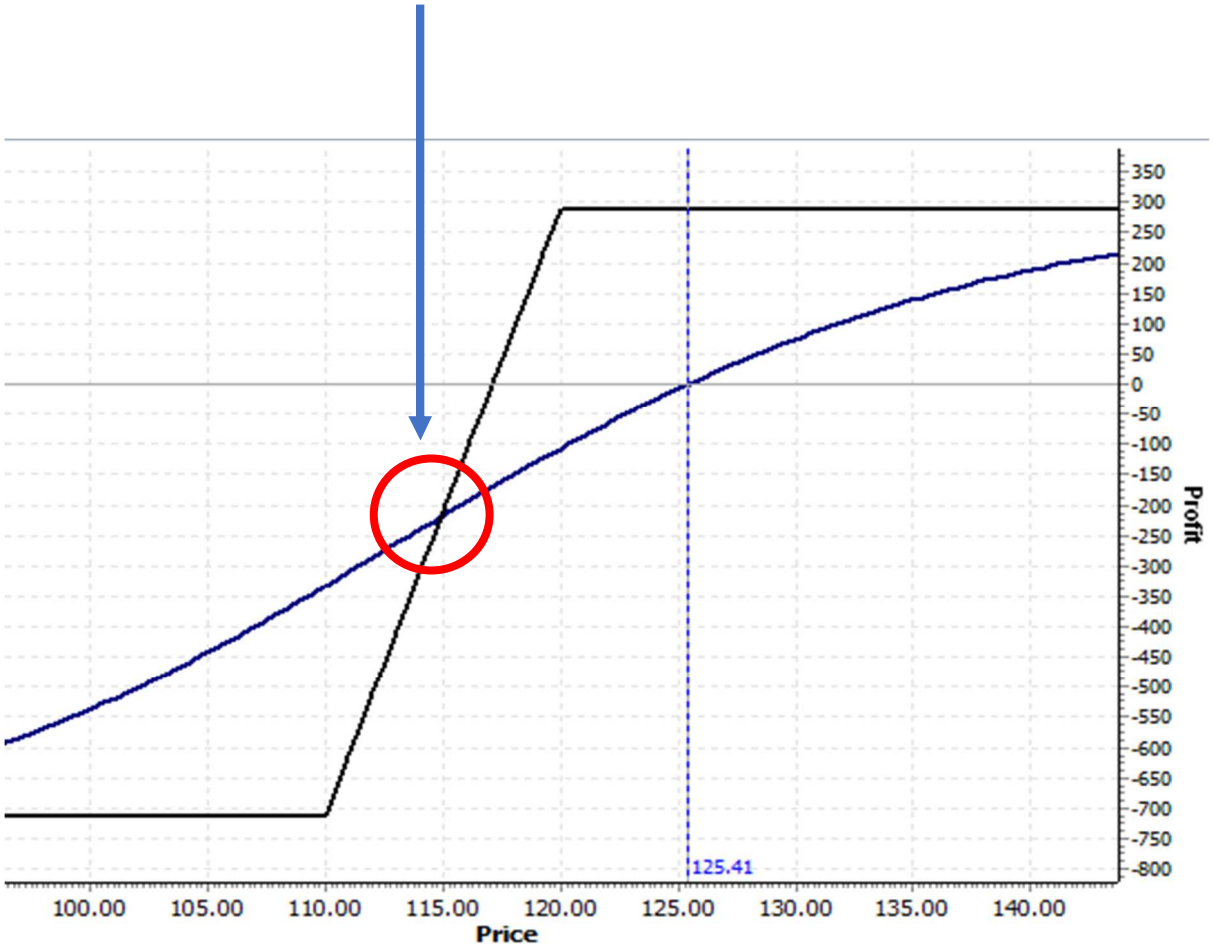
The owner of a long put (put buyer) has the right to sell the specified underlying at the specified strike price before the specified expiry date.

From the options greeks perspective, a long put has negative delta, positive gamma, negative theta, and positive vega.

Generic facts about credit spreads (a member of the vertical spread family)

- They are a “spread” as they have multiple legs.
- They are a “credit” spread as the strategy brings in money when selling it.
- They can be bullish or bearish.
- If bullish, it may be called a ”bull credit spread” or a “bull put spread”.
- If bearish, it may be called a “bear credit spread” or a “bear call spread”.
- One side of the trade (direction) will have limited profit.
- The other side of the trade (direction) will have limited loss.
- Credit spreads are usually traded as a non-directional options strategy, with a time target.
- Credit spreads are often set at 15 - 45 DTE, and are held to expiry to generate theta gains.
- Since credit spreads contain both bought and sold options, the greeks are mitigated.
- Delta will be positive for a bullish credit spread and negative for a bearish credit spread.
- Gamma will be negative when constructed, but becomes positive below the nexus point.
- Theta will be positive when constructed, but becomes negative below the nexus point.
- Vega will be negative when constructed, but becomes positive below the nexus point.

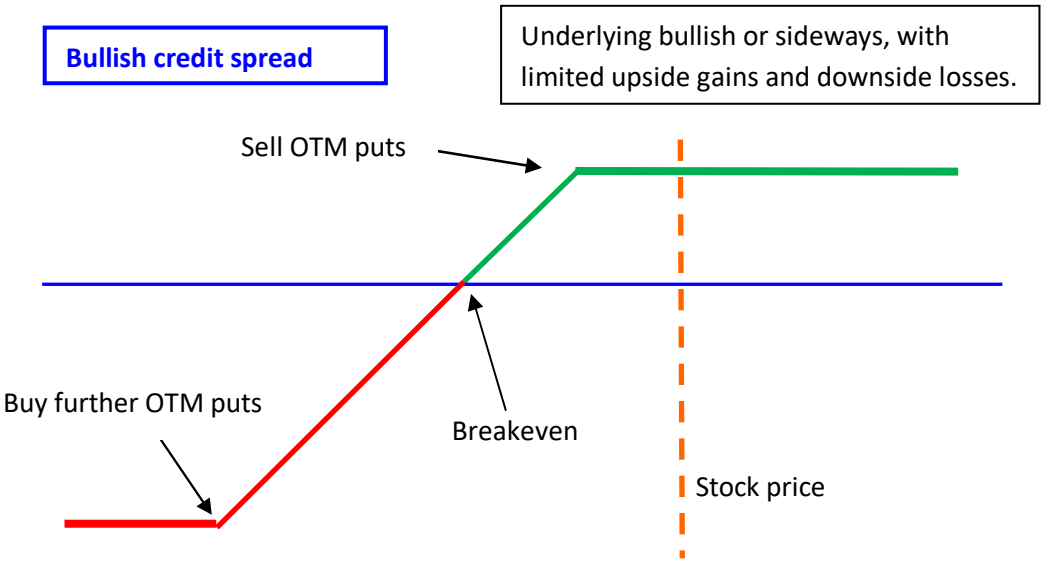
The nexus point is where the today curve crosses the expiry curve.



Generic bullish credit spread structure

The following instructions are for a generic bullish credit spread.

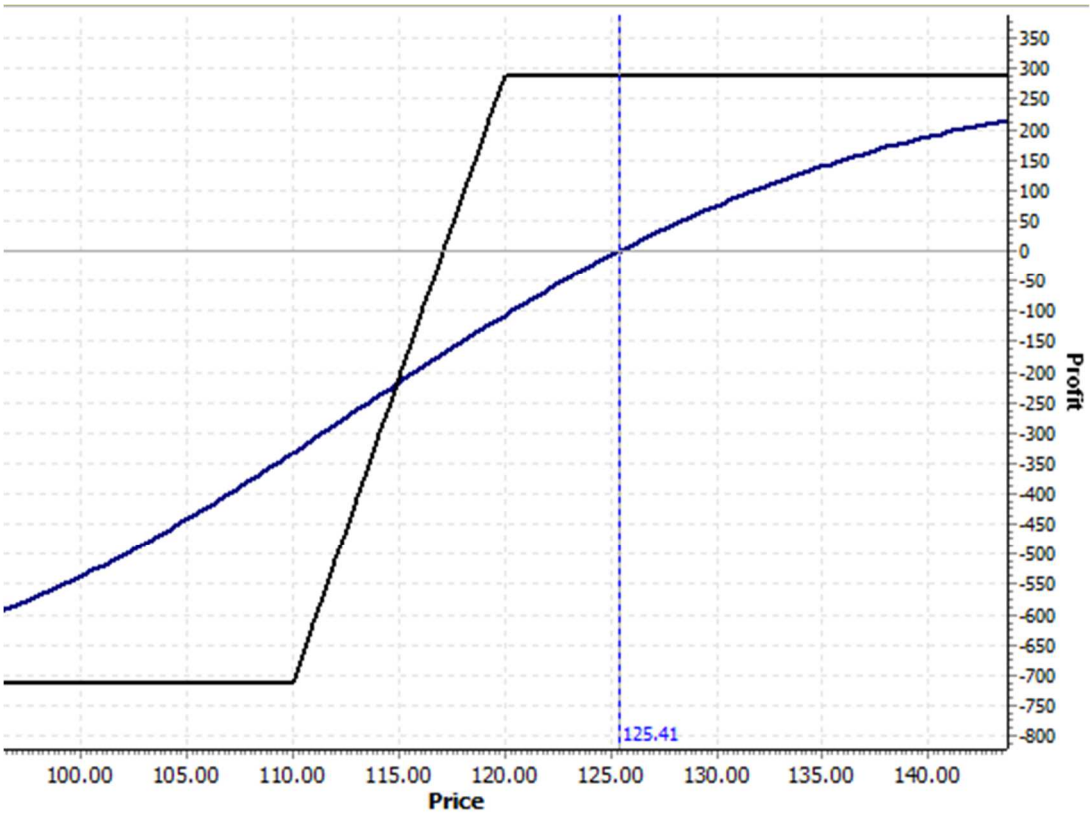
- Have a bullish or sideways prognosis on a stock.
- Select the same expiry for both legs, to be within 15 – 45 days.
- Sell a near OTM put, one or two strikes below the ATM strike.
- Buy the same number of puts, but further OTM, to act as insurance.



Example:

On 02 October 2017, BLUE is $125.41 and has just displayed a large volume spike and price drop, thus creating a high Implied Volatility situation. The candle shows a significant lower wick, and the stock has been in a bullish trend. The trader desires a bullish trade to collect implied volatility and time decay premium over the next couple of weeks.

Sell	1	BLUE	20 Oct 17	120 (OTM)	Put
Buy	1	BLUE	20 Oct 17	110 (OTM)	Put



Bullish credit spread

The straight lines in the above picture represent the risk graph of the trade at the date of expiry, with the underlying value on the horizontal axis and the options value on the vertical axis.

The bending dark blue line is called the “today curve” and it represents the options value as the underlying changes in value.

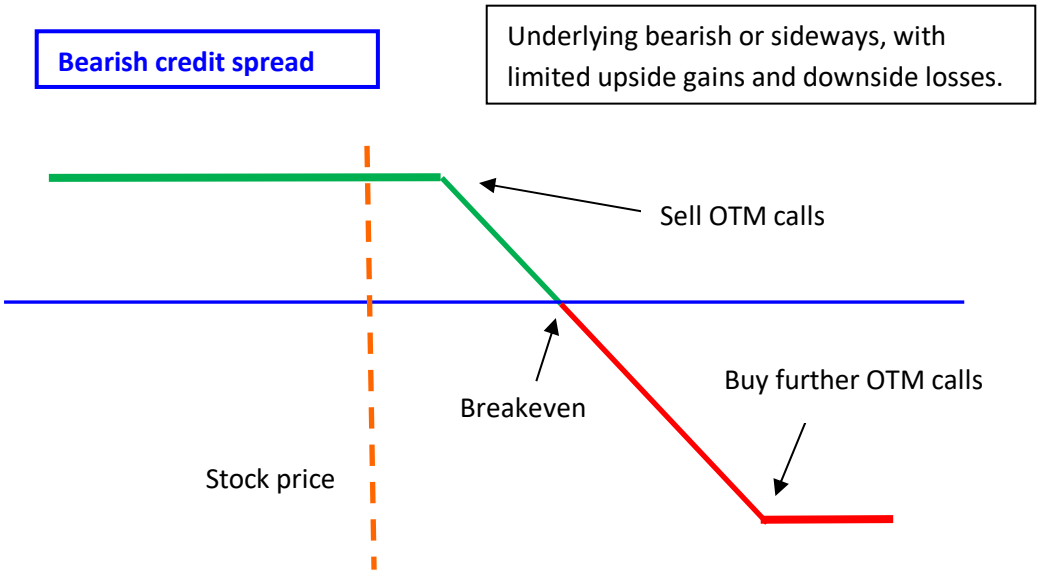
The light blue vertical line is the “price line” and it shows the current underlying price. For instance, if the underlying price were to increase (bullish), then the price line would move to the right and you could read the options value on the today curve.

Selling this bullish credit spread is acceptable, as the strategy has a good sideways and bullish probability with a possible profit of about 40% in 18 days. The strategy has a negative vega value so it will react well to the expected implied volatility drop.

Generic bearish credit spread structure

The following instructions are for a generic bearish credit spread.

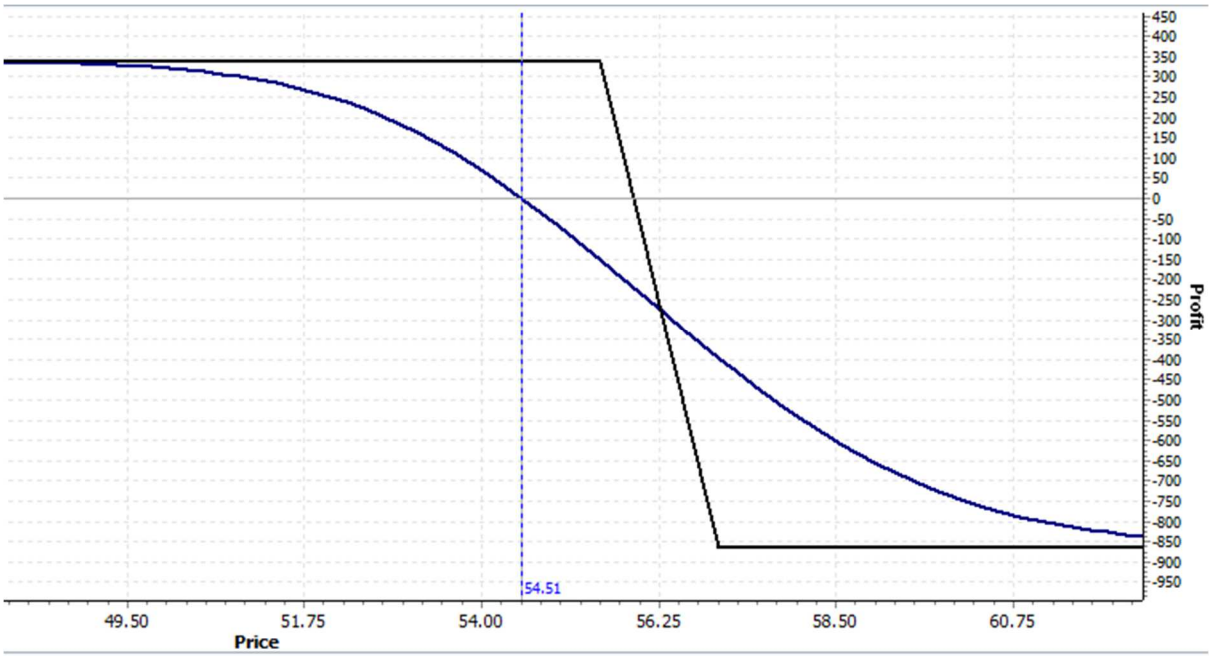
- Have a bearish or sideways prognosis on a stock.
- Select the same expiry for both legs, to be within 15 – 45 days.
- Sell a near OTM call, one or two strikes below the ATM strike.
- Buy the same number of calls, but further OTM, to act as insurance.



Example:

On 27 June 2017, HOG is $54.51 and shows evidence of rolling over to resume a long-term bearish trend after a bullish correction. The trader is concerned that it may find support at about $52, and so prefers to trade a high-probability sideways or bearish strategy over the next few weeks.

Sell	8	HOG	14 Jul 17	55.50	(OTM)	Call
Buy	8	HOG	14 Jul 17	57	(OTM)	Call



Bearish credit spread.

The straight lines in the above picture represent the risk graph of the trade at the date of expiry, with the underlying value on the horizontal axis and the options value on the vertical axis.

The bending line is called the “today curve” and it represents the options value as the underlying changes in value.

The light blue vertical line is the “price line” and it shows the current underlying price. For instance, if the underlying price were to increase (bullish), then the price line would move to the right and you could read the options value on the today curve.

Selling this bearish credit spread is acceptable, as the strategy has a good sideways and bearish probability, with a possible profit of about 38% in 17 days. The strategy has a positive theta value that will generate a profit as long as the stock stays below about $56.

Further details.

The credit spread strategy has a high risk-to-reward value due to the large losses that a trade can realise if it is not managed well, or if it gaps through the strikes.

It is generally traded to make profits from theta and/or vega whilst taking advantage of the high probability risk:reward graph.

When setting up a credit spread, it is desirable to have a strong level of resistance between the underlying price and the short strike. This provides a level of technical protection before the price crosses the nexus point, thus protecting the trade from the large loss side of the strategy.

When the price moves beyond the nexus point, the theta, vega and gamma polarities reverse, and the strategy greeks perform like a debit spread in the wrong direction, and so it can quickly generate a maximum loss. In this situation, a trader should close the trade immediately as the greeks working in favour of the original prognosis are now reversed.

As long as the nexus point is is not crossed, the trade will have positive theta, and therefore the trade value will improve through time decay.

A trade can be rolled vertically, horizontally or diagonally if desired in order to create better profits or to delay realising a loss. If adjusting a credit spread in this way, the trader should also ensure the prognosis is correct for the trade. Simply adjusting a credit spread to avoid realising a bad trade will generally result in larger losses if the trade continues to fail the original prognosis.