

# THE POWER OF FOREX OPTIONS

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## TOPICS COVERED

- **Option basics**
- **Call options**
- **Put Options**
- **Why trade options?**
- **Covered call**
- **Covered put**
- **Hedging your position using options**
- **How to repair a trading position**

# THE POWER OF FOREX OPTIONS

**Many traders think of stocks and index when they think of options; however the Forex market also allows the traders to benefit from these powerful strategies**

## Options - Understanding the Basics

An option is a contract between two parties, the buyer and the seller of the option. The buyer of the option has the right but not the obligation, to buy or sell a security at a set price (strike price) and time (expiry date of the option), from the option seller.

The Options seller (writer) is obligated to sell the security should the buyer choose to exercise his right.

Still confused? The concept of an option is present in our day to day life. Say, for example, that you discover a house that you'd love to purchase. Unfortunately, you won't have the cash to buy it for another three months. You talk to the owner and negotiate a deal that gives you an option to buy the house in six months for a price of £500,000. The owner agrees, but for this right, you pay a premium of £5,000.

Now, consider two theoretical situations that might arise:

### Scenario 1

It's discovered that the house is actually the true birthplace of a celebrity! As a result, the market value of the house skyrockets to £2 million. Because the owner sold you the option, he is **obligated to sell** you the house for £500,000. In the end, you stand to make a profit of £1,495K (£2 million - £500,000 - £5,000).

### Scenario 2

While touring the house, you discover that the house is close to a proposed dump site for waste products. Though you originally thought you had found the house of your dreams, you now consider it worthless. On the upside, because you bought an option, you are **under no obligation to go through** with the sale. Of course, you still lose the £5,000 price of the option.

This example demonstrates two very important points. First, when you buy an option, you have a right but not an obligation to do exercise your option, IF it is in your favour. You can always let the expiration date go by, thereby the option becomes worthless. If this happens, you lose 100% of your investment, i.e. the premium paid to buy the option. Second, an option is merely a contract that deals with an underlying asset. For this reason, options are called derivatives, which mean an option *derives* its value from something else. In our example, the house is the underlying asset. Most of the time, the underlying asset is a share, or an Index, a commodity or a currency.

Investors buy and sell options just like stocks. There are two basic types of options:

- The call option
- The put option

## **The Call Option**

The call option is the right to buy the underlying security at a certain price on or before a certain date. Buying a call is similar to having a **long position** on a security. Buyers of the option expect the price of the security to go up before the expiry of the option.

### Example

On Thursday 28<sup>th</sup> September GBPUSD is trading at a spot price of 2.0230 and if you were very bullish on this currency pair, you could buy a call option. You are taking a very short term view of less

than 2 days. You decide to buy the option expiring the next day. Your trade would look something like this:

Date: 28<sup>th</sup> Sep  
Currency Pair: GBPUSD  
Current Spot price: \$2.0230  
Strike price: \$2.0250  
Option trade: Buy calls  
Premium: 25 pips

### Scenario 1

You were wrong and the price did not rise above your strike price. So in this case you would lose the 25 pips. This would be the maximum loss that you would sustain. On the other hand the seller of the option would keep the entire 25 pips as his profit.

### Scenario 2

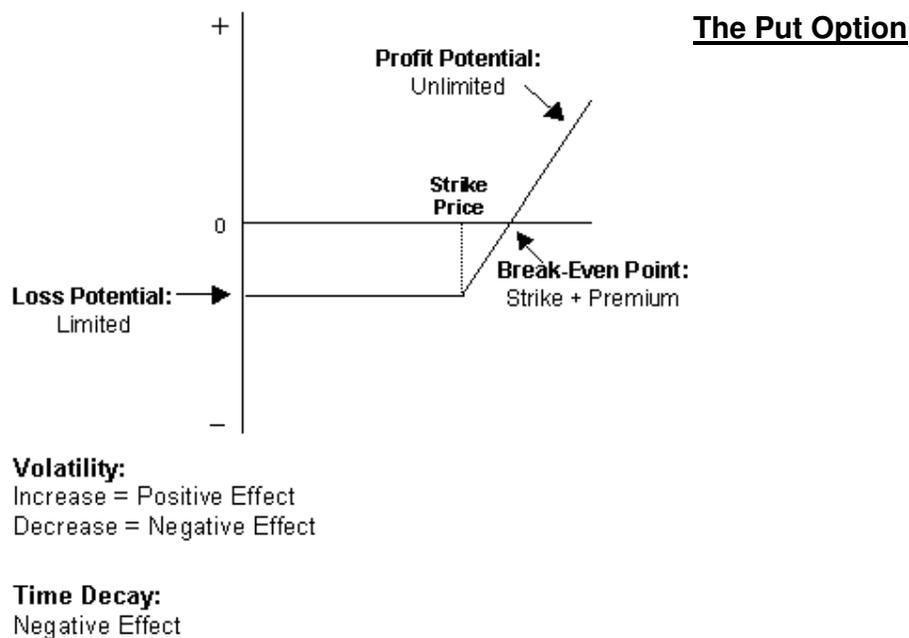
You got it right and the price reached a maximum of 2.0490 the next day. This is 240 pips above the strike price. What are your options?

You can trade the options at any time before expiry; you can choose to take partial profits as the currency moves in your favour. You can close the position as soon as your target is achieved or you choose to close the bet as the signal may have reversed, or you could run the option till expiry, in which case you will be able to close the option at the price it expired.



Many traders simply trade the option for a profit without actually buying the currency contract.

## BUYING CALLS



The put option is the right to sell the underlying security at a certain price on or before a certain date. You would buy a put option if you were bearish of a currency pair and expected the price to head lower before the option reached expiration.

### **Example**

On Tuesday 25<sup>th</sup> September CHF is trading at a spot price of 1.1720 and if you were very bearish on this currency pair, you could buy a daily PUT option. You are taking a very short term view of a day. Your trade would look something like this:

Date:	25 <sup>th</sup> Sep
Currency Pair	CHF
Current Spot price	1.1720
Strike price:	1.1700
Option trade:	Buy PUTS
Premium:	15 pips

### **Scenario 1**

You were wrong and the price did not fall below your strike price. So in this case you would lose the 15 pips. This would be the maximum loss that you would sustain. On the other hand the seller of the option would keep the entire 15 pips as his profit.

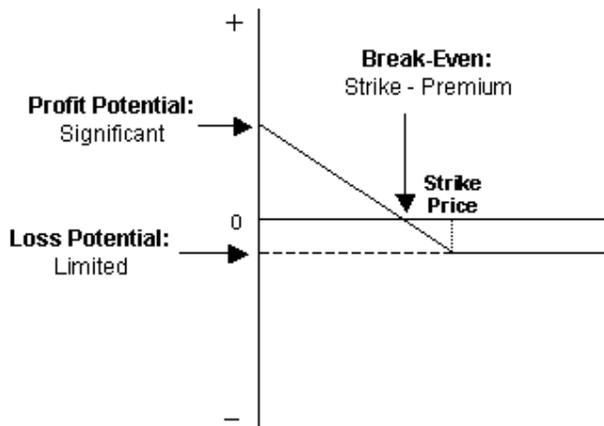
### **Scenario 2**

You got it right and the price reached a maximum of 1.1635 during the day. This is 65 pips above the strike price. What are your options?

You can trade the options at any time before expiry; you can choose to take partial profits as the currency moves in your favour. You can close the position as soon as your target is achieved or you choose to close the bet as the signal may have reversed, or you could run the option till expiry, in which case you will be able to close the option at the price it expired.



## BUYING PUTS



**Volatility:**  
Increase = Positive Effect  
Decrease = Negative Effect

**Time Decay:**  
Negative Effect

## Participants in the Options Market?

There are 4 types of participants in the options market.

1. Buyers of calls – gives you a right to buy the security.
2. Sellers of calls – you have the obligation to sell the security.
3. Buyer of puts – gives you a right to sell a security.
4. Seller of puts – you have an obligation to buy a security.

Selling options is more risky, if you do not know what you are doing as it can involve unlimited risk. If the price goes up and you have sold a call option you have the obligation to deliver the security at the strike price. If you do not own the security then you have to buy it in the market at a loss.

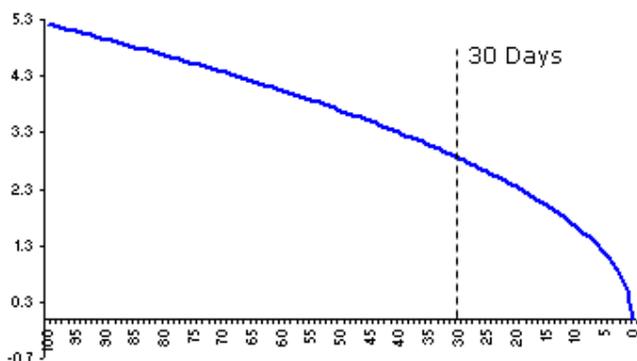
## Why trade options?

1. Your downside is limited to only the amount of option premium paid, so in the above example of the CHF your maximum loss was only 15 pips
2. You have unlimited profit potential. So in the example of the GBP call option, the price shot up by more than 200+ pips, whilst the signal was still long. Downside was very limited but you had unlimited profit potential.
3. Leverage - You may pay less margin upfront than compared to a spot forex position or buying the security outright.
4. You select the strike price and also the expiration date.
5. You can use your option positions to hedge against your open spot positions.
6. Trade during fundamental news – without risking lot of capital, you can trade during the release of fundamental news.
7. Flexibility – Options can be used in a wide variety of strategies and can be tailored to meet your risk profile, from a cautious strategy to even a high risk.

## Disadvantages of Options

1. Buying options involves paying for time value. Sometimes you could still be right in the direction of the price movement, yet not profit from the move because of the time value paid.

**Option Price as Time Passes**



It is said that due to this time decay, the majority of options expire worthless, this applies to those traders who bought the options. Seller of options will benefit as they keep the premiums.

2. The premium varies according to the volatility. Often during high volatility, the options may be very expensive.
3. Options have an expiration date. Sometimes very difficult to predict the exact time period and the price movement to occur before the expiration of the options.
4. As soon as the option expires you have no position, so should the market then go in your favour you do not gain as the option has expired.
5. An option does not fluctuate in a 1:1 relationship like the spot market. This is because when you buy the option you start with paying for the time value. So effectively you are starting out with a loss, however as the option becomes more and more heavily in the money, the option value will fluctuate very closely with the pip value change. The term used to describe the relationship between the changes in the option price with the change in the price of the security is called Delta.
6. Unlimited Risk – Option writing can involve unlimited risk and should be avoided completely by amateur traders. Having said that this strategy is widely used by professional traders.

## Intrinsic Value and Time Value

At this point it is worth explaining more about the pricing of options.

**Intrinsic value** – This is the value of an option when the option is exercised. It is defined as the difference between the options strike price and the actual current price.

Example;

Strike price	100.00
Current price	105.25
Intrinsic value	5.25

If the strike price is greater than the current price than the intrinsic value equals to zero;

Strike price	110.00
Current price	105.25
Intrinsic value	Zero

Your option would not be worth anything if it were to be exercised today. The intrinsic value will always be above zero.

**Time Value** – this is the second component of an option's price. It is defined as any value of an option other than its intrinsic value;

Example

Strike price	100.00
Current price	95.00
Options premium	1.00

Intrinsic value	Zero	(because the current price is lower than strike price)
Time Value	1.00	

Options that have zero intrinsic value are comprised entirely of time value. Time value reflects the probability that the option will gain in intrinsic value or become profitable to exercise before it expires.

Time value = Option premium – intrinsic value

Example;

Strike price	100.00
Current price	105.00
Option premium	7.50

Intrinsic value	5.00 (105.00 – 100)
Time value	2.50 (7.50 - 5.00)

**Option Pricing** - Pricing of options requires complex mathematical calculations and also several factors that impact on the premium. One is the relationship between the futures price and the strike price. The more an option is in the money, the more it is worth.

A second factor is volatility. Often during periods of uncertainty, the markets will be very volatile and this will be reflected in the price movements of the security. This volatility will stimulate the demand of options. The greater volatility means that the options writers demand higher premiums.

The third factor affecting the premium is the length of the option contract – expiration date. The longer the expiration date, the higher the time premium as the buyer of the option has more time in his favour for the price of the security to move in his direction.

## **COVERED CALL**

### **Definition**

The selling of a call option, while simultaneously holding an equivalent position in the underlying security.

Example;

You buy or own a security

Current price           100.00

Strike price            105.00

Options premium       1.50

This strategy is ideal for a trader who is taking a long term view of a bullish stance on the security, but would like to derive additional profits. By selling the out of the money option, giving him a buffer of £5.00, the trader is collecting a premium of £1.50.

In this example if the price is below the strike price before expiry than the option expires worthless and you keep the premium. You can keep repeating this exercise every day/week/month, and keep collecting option premiums. A successful outcome of a covered call strategy leads to lowering the holding cost of the security.

### **How can a covered call help?**

With this strategy you assume the role of an options seller. However you are not going to take unlimited risk by selling a naked call option because you already own the underlying security. By doing a covered call you are protected against unlimited losses in the event the option goes deep in the money and is exercised

### **When to use a covered call?**

There are a number of reasons why traders use covered calls as part of their strategy;

1. Produce regular income from holding the security.
2. Regular income received reduces the holding cost of the security.
3. Profiting from the option premium due to the time decay, but the trader does not want to take unlimited risk by writing a naked call option.
4. Look for overvalued call options to benefit from time value.
5. Neutral to bullish view – The covered call strategy works best when you do not expect much volatility in price, either to the upside or the downside. Ideally you want to hold your security and consistently collect premiums thereby lowering your average holding cost each period.

## How to improve the covered call

Covered call does not remove the risk to the downside. Although you are receiving a limited premium by selling the call, you are still exposed to a risk of a substantial market downturn. You can limit the downside by adopting the following steps;

1. Have a stop loss on your security, so this limits the amount of your loss. However once you are stopped out, you must ensure that you do close the call written as you do not want to be exposed to a sudden market reversal. The call written would be closed for a profit, as the market has gone in the opposite direction and also there would be time decay. The profit from the call would in some way compensate for being stopped out.
2. Buy a protective put – you are insuring against the market downturn, so in the event of a significant move in the market to the downside, your losses would be minimized as the puts would now generate a healthy profit. The protective put would have the effect of capping your downside until the expiration of your option.

## What to do at expiration

1. If the option is out of the money, it will just expire worthless and will not be exercised. In this case no action required by you, you keep the premium as a profit.
2. Roll out – you could repeat the exercise again and write another option thereby collecting premiums.
3. If the option is in the money. The option is likely to be exercised and called away. But often many traders will tend to close the position before the expiry.

## COVERED CALL TRADE EXAMPLES



On 15<sup>th</sup> June 2007 the Bindal FX system issues a long signal – swing trade. The technical indicators are looking very bullish and a long trader may want to hold the position indefinitely until the swing trade signal changes to short.

An aggressive trader can be on the long side, but can sell daily calls when the intraday system issues a short signal.

Often between the times of London Open and US open there is a significant time value in the daily options, this can be used to your advantage. The average at the money options would normally cost around 35 to 50 pips.

You can easily collect at least 350 pips during the 6 week period on the above GBP Bull Run, and just the premiums collected would amount to over a 1000 pips.

Finally on a bearish 1-2-3 the trader closes the long position for over 850 pip profit! Using the daily covered call strategy removes the fear of a loss and you are regularly collecting premiums from the market to lower your average entry cost of your long position.

Can forex traders have their (profit) cake and eat it too? Although conventional wisdom states that you can't 'have your cake and eat it too!' the covered call strategy above has proven that you can! In summation the covered call enables you to own a security, have room for profit, pocket daily premiums from selling calls and thereby be protected on the downside.

### Using Covered Call for a volatile currency – GBPJPY

GBPJPY can offer excellent trading opportunities due to its volatility. But many traders stay away from this currency due to fear of a loss, and also not wanting to place wider stops. Often this currency can move 100 pips within few minutes.

Consider the following example;



Bindal FX system issues a long signal at 231.10, but placing a tight stop you run the risk of being stopped out. You may not want to risk 100+ pips on this long trade;

You may do the following;

1. Enter long @ 231.10 with a 100 pip stop
2. Simultaneously sell a weekly 28<sup>th</sup> Sep Call option and receive a premium of 95 pips, strike price 232.00.

### **Scenario 1**

Price stays above the strike price of 232.00, you are guaranteed a profit of 185 pips ( $232.00 - 231.10 = 90 + 95 = 185$  pips). The 185 pips is the maximum profit you can make, even though the currency goes up by nearly 400 pips.

### **Scenario 2**

Let's assume that the price rises to only around 231.50.

Your profit will be 135 pips ( $231.50 - 231.10 = 40 + 95 = 135$  pips) the call option you sold expires worthless and you keep the premiums. Yet again a low risk trade strategy.

### **Scenario 3**

Let's assume that the price goes down to 230.50, so you have lost 60 pips from the long trade. But the call option will expire worthless and you keep the premium of 95 pips. So despite the market moving against you, you still make a profit of 35 pips! ( $95 - 60 = 35$  pips profit)

### **Scenario 4**

Let's assume that you get stopped out, so your loss is -100 pips. At this stage you would look to close your calls you sold. You received 95 pips for it, but because the price has fallen and also due to the decay in time value you would be able to buy back the option for around 30 pips, thereby making a profit of 65 pips on the option.

Overall you lost  $100 - 65 =$  loss of 35 pips, not bad on a swing trade GBPJPY.

Conclusion – This strategy would give you a maximum profit of around 185 pips and the lowest possible loss of approx 35. A risk reward ratio of over 1:5. Surely a great way to trade.

**WARNING** – On being stopped out, you must ensure that you close the call option for a profit.

# COVERED PUT

## Definition

The covered put, also known as selling a covered put, is a lesser known variant of the popular covered call option strategy. A covered put is the selling of a put option while being short an equivalent amount in the underlying security

## Example:

You short a security and then sell a put option

Current price            100.00

Strike price            95.00

Options premium        1.50

This strategy is ideal for a trader who is taking a long term view of a bearish stance on the security, but would like to derive additional profits. By selling the out of the money option, giving him a buffer of £5.00, the trader is collecting a premium of £1.50.

In this example if the price is above the strike price before expiry than the option expires worthless and you keep the premium. You can keep repeating this exercise every day/week/month, and keep collecting option premiums. A successful outcome of a covered put strategy leads to averaging down the cost of the overall short position.

## When to use a covered put?

There are a number of reasons why traders use covered puts as part of their strategy;

1. Produce income whilst shorting the security.
2. Regular income received reduces the holding cost of the security.
3. Profiting from the option premium due to the time decay.
4. Look for overvalued put options to benefit from time value.
5. Neutral to bearish view – The covered put strategy works best when you do not expect much volatility in price, either to the upside or the downside. Ideally you want to hold your short position security and consistently collect premiums thereby improving your average short entry price.
6. If you are extremely bearish then you would not use this strategy as it would cap your profits

## What to do at expiration

1. If the option is out of the money, it will just expire worthless and you keep the premium as a profit.
2. Roll out – If you are still neutral to bearish, you could repeat the exercise again and write another option thereby collecting premiums.
3. If the option is in the money. The investor will have the security put to them at the short put strike price. This can now be off set against the security you were short. But often many traders will tend to close the position before the expiry.

## Cautions with this strategy

1. The maximum risk is infinite, as the security can keep going high.
2. Most investors avoid shorting the stocks.
3. If there are good fundamental news for the security, the price could rise dramatically thus it could result into a bigger loss than anticipated.
4. You run the risk of missing out on the large gain should the security price crash.

## **COVERED PUT TRADE EXAMPLE**

You short a security and then sell a put option

Current price	100.00	also the price of your short trade
Put Strike price	95.00	
Put Options premium	1.50	

### **Scenario 1**

At Expiry the price is at 98. Your profit will be 3.50 ( $100 - 98 = 2.00 + 1.50 = 3.50$ ) the options expires worthless and you keep the premium. You are still short of the security and you can decide to carry on with the short position if you are bearish.

### **Scenario 2**

At expiry the price is 90. The option will be exercised by the buyer so you must buy the security at 95.00 (strike price). You will profit because you already sold it at 100. Your overall profit will be  $100 - 95 = 5 + 1.50 = 6.50$

In this case 6.50 is your maximum profit, you can simply not gain more than this amount. If however it was a normal short trade and not a covered put than your profit would be 10 ( $100 - 90$ )

### **Scenario 3**

At expiry the price has risen to say 120. The put option will expire worthless and you keep the premium of 1.50. However as you were short and the price has risen to 120, your overall loss would be 18.50 ( $100 - 120 = -20 + 1.50 = -18.50$  loss)

As you can see this can be a dangerous strategy if you do not manage it well. Obviously as soon as the signal reversed you would close the short position for a loss and also realize the profit from the put.

As with every strategy, it can be dangerous if you do not manage it. But if you know what you are doing than even a covered put can give you handsome profit.

I use this strategy a lot on GBPJPY; because of the volatility the put option prices are often very expensive. So when I have an iron clad signal, I will combine it with a covered put.

Have a look at the following trade example using covered put strategy;



Bindal FX system issues a Short signal at 232.80, but placing a tight stop you run the risk of being stopped out. You may not want to risk 100+ pips on this short trade;

You may do the following;

1. Enter short @ 232.80 with a 100 pip stop
2. Simultaneously sell a weekly 28<sup>th</sup> Sep put option and receive a premium of 210 pips, strike price 232.00.

Two days later the prices goes down by nearly 300 pips, and when the price is at 230.50, a buy signal is issued. The puts are deep in the money, but at the same time it would have lost some of the time value and the delta of the option would have gone up. The 232 put option may be worth 320 pips

You could at this stage, close the shorts at 230.50, thereby banking a profit of 230 pips on shorts. You could also close the puts at a loss of 110 (320-210). So overall you still make a profit of 120 pips from the covered put.

## Scenario 2

Let's assume the price closes at 233.50 at expiry. Your overall profit & loss position would be as follows;

Loss on the short trade 232.80-233.50	-70
Put expires worth less; you keep the premium	+210
Overall	+140 profit.

Yet again this example illustrates the power of option strategies, the spot price went against you, yet you still ended up with a profitable trade.

# HEDGING YOUR POSITIONS

Options can be used as an insurance policy to hedge your Long or Short positions.

Example; - Hedge for a Short.



This was a live trade taken by a Bindal FX member during one of the live trading Webinar sessions;

Date:	28 <sup>th</sup> Sep	
Currency pair	CHF	
Strategy:	Short	
Short entry	1.1710	
Hedge Call	1.1750	Strike price
Option premium	10 pips	

If the price goes up above the strike price the maximum loss will be 50 pips  
 $(1.1750 - 1.1710 = 40 + 10 = 50)$

The trader will not lose more than 50 pips no matter how high the price goes up.

The price subsequently fell to a low of the day of 1.1620. Before the market close the position was closed for a profit of 70 pips on the short trade.



## HOW TO REPAIR AN OPTIONS TRADE THAT WENT WRONG

The following trade was taken live by Bindal FX members during a live trading webinar;

Currency pair        EUR  
Strategy:            Short Buy PUT options  
Option Expiry:      28 Sep  
Strike Price:        1.3850  
Premium              52 pips  
Incremental profit   35 pips        50% position closed for 35 pip profit

After banking an incremental profit of 35 pips, the net cost of the remainder of the option position was  $52 - 35 = 17$  pips. Therefore your total investment is now only 17 pips



A put option taken on the basis of a Bearish Divergence signal. Subsequently there was a breakout. The breakout was confirmed with a bullish 1-2-3 setup. Long trade recommended at 1.3920.

The Put option purchased, was now being used as a protection to the long trade.

At the expiry of the Put option on 28<sup>th</sup> Sep 2007, the signal was still long. But at this stage the spot long trade closed for a +300 pip profit. A powerful strategy illustrating how a put option trade was repaired on a breakout.