



A Guide to the Traded Options Market



Introduction

Options are derivative contracts which can be used by investors in a diverse set of contexts - to insure their portfolios, purchase shares at a lower level than the prevailing market price, enhance the yield of their equity portfolios or take leveraged positions whilst carrying a limited amount of risk. Options trading is a highly specialised field and is often out of the reach of retail investors. GAM has written this guide as an introduction focussing on our approach to this market.

Definition of an Option

An option is a contract between two parties in which the option buyer (holder) purchases the right, but not the obligation, to buy (known as a “call” option) or sell (known as a “put” option) a specified quantity of a security at a predetermined price (the “strike” price) from or to the option seller (writer) during a certain period of time or on a specific date (exercise date).

Buying and Selling Options

Options can be bought and sold (“written”). You can buy a call (buy the right to buy), sell a call (“sell the right to buy from you), buy a put (buy the right to sell) or sell a put (sell the right to sell to you).

1.a Buying a Call

Investors buy calls for the gearing (they can obtain control of a greater amount of stock than the premium they must pay for the option) whilst benefiting from the fact that their loss is limited to the premium paid.

In this case the investor is bullish. If the underlying is above the strike price at expiration the investor will make money.

For option buyers, we generally recommend that investors buy at-the-money calls with a minimum of six months to expiry.



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1.b Selling a Call

Investors sell calls on shares they hold either to set a price at which they are prepared to sell or to bring in a premium, which is akin to an additional dividend.

In this case, the investor does not believe the underlying will rise to the strike price. If it remains below the strike price the seller will retain the premium.

Calls that are not covered by the underlying stock are known as “naked calls” and are prohibited by GAM due to the theoretical infinite risk.

2.a Buying a Put

Investors buy puts for the gearing, whilst benefiting from the fact that their loss is limited to the premium paid, or to protect the value of an existing position (without having to sell).

In this case the investor is bearish. If the underlying is below the strike price at expiry, the investor will make money. We recommend investors buy at-the-money puts with a minimum of six months to expiry.

2.b Selling a Put

Investors sell puts either to set a price at which they are prepared to buy a stock, and thus buy the shares at a lower price or receive a premium, with the intention of never taking delivery.

In this case, the investor is bullish on the underlying. If the underlying price remains above the strike price the seller will retain the premium.

Traded Options

Options are known as “traded options” for a reason. They do not have to be held to expiry and can be bought and sold at any time. Thus, if an option becomes “in-the-money”, a short (sold) option can be bought back and rolled to a further “out-of-the-money” option. Likewise, an option buyer can sell an option back to the market if the price goes against him and retrieve some remaining time value.

What does an option’s value consist of?

An option is principally made up of “intrinsic” and “time value”.

Intrinsic Value

This is the amount the option is “in-the-money”.

Time Value

The time value of an option decreases as its expiration date approaches and becomes worthless after that date. This is known as time decay, which occurs most during the last 30 days of the options life.

Other factors affecting the value of an option include volatility (higher volatility gives rise to a higher price), dividends and prevailing interest rates.



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Risks

When buying an option, the maximum loss is limited to the premium paid.

When selling an option, the maximum loss is infinite for a call (unless the security is already held i.e. “covered”) or equal to the strike price less the premium received for a put.

Thus, selling options is a high risk strategy which can result in losses that exceed your initial deposit. Trading options may not be suitable for everyone, so ensure that you fully understand the risks involved.

Managing Positions

Option positions must be constantly monitored so that they can be either adjusted or exited should the need arise. The risks can be minimised by rolling up or down using the same or another expiration date should the option become “in-the-money”. This implies buying back the existing position and simultaneously selling a new option. Alternatively, the position can just be closed if market conditions dictate (such as an extreme market event).

GAM’s Approach to Options

GAM has successfully traded the options market for its clients over many years and has been able to consistently make money in all types of markets. GAM advises to generally allocate no more than 10% of a portfolio to options.

Although involving limited risk we rarely buy options. Options buyers think they have a great deal - unlimited profits with limited risk - but the odds are simply not in their favour. The Chicago Mercantile Exchange estimates that approximately 80% of options held to expiration expire worthless. As an option buyer, you can only make money if you correctly determine the movement of the stock and the magnitude of the move. If the market moves in the opposite direction or if it does not move at all, you lose money. The option buyer must not only correctly foretell market direction but their prediction must be accompanied by a major move in the market. A less than significant move can still result in a loss.

On the other hand, the option seller takes maximum advantage of the decaying characteristic of options. As an option seller, you merely wait for the option to lose value on a daily basis to the point of being worthless on expiration day. If you sell puts, you make money if the stock stays flat as well as if the underlying goes up. You can only lose if the underlying drops far enough to hit past your strike price position.

Thus with options selling, you’re trading with the odds in your favour. This does not mean that one is immune from large drawdowns. It does mean that, statistically, the majority of your trades should be winners. Managing the risk on the losers, then, becomes of paramount importance. There’s a high amount of risk for a low reward, but over time, these small profits can turn into a large sum.

It is important to be patient when trading options - remember, the markets will be there tomorrow. And with option selling, every month is a new game, so if you miss this month, just wait a few days.



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If this type of trading sounds interesting, then the strategy of selling options might be for you. In selling options, one simply has to decide where the market is not going to go and select a strike price above or below the level that one believes the underlying price will not reach within a certain time period (for our purposes, generally 30-90 days). One then sells an option at this price level and collects a premium for doing so the day after. If the time period elapses and the market has not reached this price, the option expires and the investor who sold it keeps the premium he collected as a profit.

GAM utilises the following trading strategies:

1) Covered Calls

Selling out-of-the-money covered calls (where the option writer owns the obligated quantity of the underlying security) is a popular strategy that enables the stockowner to generate additional income which is similar to receiving an additional dividend. It does cap the potential gain, particularly painful in the case of a takeover bid, so calls on potential takeover targets are avoided. However in most other circumstances the option can be rolled forward.

2) Naked Puts

GAM recommends writing puts on key stocks it recommends, selecting strike prices based upon a combination of fundamental and technical analysis, which fall into the following categories:

Core Defensive

These comprise ten defensive shares from ten sectors of the economy that tend to perform well throughout the economic cycle (early cycle, mid cycle and late cycle) as well as during a recession. Notable stocks include BAE Systems (Aerospace & Defence), Diageo (Beverages), Scottish & Southern Energy (Utilities) and Tesco (Food & Drug Retailers). These stocks tend to be less volatile in nature and thus we write them for expiry each calendar quarter (March, June, September & December).

Cyclical

These comprise five companies that are forecast to perform well during the next stage of the economic cycle. Our current selection includes BHP Biliton (Mining-late cycle), Aviva (Life Insurance-late cycle) and Standard Chartered (Banks-late cycle). As these stocks tend to be more volatile, we recommend keeping the exercise date as short as possible – two months or even one month, depending upon the level of volatility at the time of writing.

We recommend further cyclical options on a different timescale as opportunities present themselves.

3) FTSE 100 Short Strangle

An options strategy known as a “Short Strangle” takes advantage of the time decay of “out-of-the-money” options as the market stays between the two selected strike price levels.

The Short Strangle strategy allows investors to trade the range of the FTSE 100 rather than the direction using options contracts by selling high strike price call options whilst simultaneously selling low strike price put options. If the market stays within the range, the entire option premium is retained. Most of the time, indices are trading in a range, moving less than 5% from one month to the next 70% of the time.



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Time Decay

A short term out-of-the-money short strangle benefits the most from time decay where the entire premium is considered time value. Sellers of options collect the premium and every additional day that goes by contributes to more time decay in those options, which benefits the option seller. The time value of an option does not fall in a straight line, but rather falls most in the last month before expiration. Thus, options are sold with just one month to expiry.

Expiration

Positions expire monthly (the third Friday of each month). The next trading range is then established and a further call and put option is written. Index options are European style.

How the Strike Prices are Selected

The starting point for calculating the strike prices is establishing where the market itself thinks the market could finish in the next month. This is done through reference to the VIX, the ticker symbol for the Chicago Board Options Exchange Volatility Index, a popular measure of the implied volatility of S&P 500 index options. It is quoted in terms of percentage points and translates, roughly, to the expected movement in the S&P 500 index over the next 12 months. For example, if the VIX is at 15, this represents an expected annual change of 15%. By dividing this by the square root of 12, we can establish the expected move over the next 30 days.

$$\frac{15\%}{\sqrt{12 \text{ months}}} = 4.33\% \text{ over the next 30-day period.}$$

So if the S&P 500 is currently at 1,000 points, index options are priced with the assumption of a 68% likelihood (one standard deviation) that the 30-day change in the S&P 500 will be within 43 points up or down. As the correlation of the S&P 500 to the FTSE 100 is 0.71, the index can still be used as an effective yardstick of market volatility for the UK market.

The strike prices are then extended to take into account known support and resistance levels using technical analysis indicators (such as moving averages and bollinger bands).

The advantage of selling a strangle, in contrast to day trading or swing trading, is that the daily market noise does not necessarily scare you out of the market. This is because you are not trying to predict the market's direction on a daily basis. The other advantage in selling strangles is that the market cannot be in two places at one time at the expiration date. Therefore, any loss on one side of the trade will normally be offset somewhat by a gain on the other.

Risks

Selling a strangle involves unlimited risk and therefore this strategy is not suitable for all investors. However as the underlying security is an index of 100 blue-chip companies, there is a realistic limit as to how far it



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can rise or fall in a small time period of one month.

Capping the Risk

More risk adverse investors can limit their risk by buying a further out-of-the-money put (a strategy known as a “condor”). This protects the investor to the downside from a “black swan” event such as a “flash crash” or a terrorist attack. You receive less premium overall than selling just the naked put option (because you have to buy a hedge) but you also limit your risk to a defined level. The trade-off is well worth it if you are uncomfortable with a naked position. We find it unnecessary to buy further out-of-the money calls as well (a strategy known as an “iron condor”), as the market tends to gap further on the downside than on the upside.

Summary of Dealing Charges

Buying options

£20 plus £2.50 per contract

Selling options

£40 plus £2.50 per contract (reduced to no more than 10% of proceeds, subject to a minimum of £20 plus £2.50 per contract)

Strategies (e.g. condors, spreads) & Rolling

£20 plus £2.50 per contract, each side

Assignments & Exercise

0.825% on first £10,000, 0.25% on remainder, subject to a minimum of £45

Getting Started

To start trading options, you will need to set up an options trading account, which we facilitate via an Introducing Broker Agreement with Berkeley Futures Limited. Once you have set up your account, you can then place trades via GAM. We advise depositing £10,000 to £20,000 initial margin to get you started.

As a full-service advisory broker, GAM is able to provide value-added advice to our clients, providing them with trading recommendations on a regular basis, details of relevant stocks going ex-dividend, potential early assignments and proactive advice on problematic positions.

We guarantee best execution, taking time to obtain the best possible price by working orders direct on the order book and are able to work complex trading strategies in the market.

To establish whether options trading is appropriate for you and, if so, which strategies are suitable to your circumstances, please contact us on +350 200 75181.



Glossary

Assignment

An assignment takes place when the written option is exercised by the options holder. The options writer is said to be assigned the obligation to deliver the terms of the options contract. If a call option is assigned, the options writer will have to sell the obligated quantity of the underlying security at the strike price. If a put option is assigned, the options writer will have to buy the obligated quantity of the underlying security at the strike price.

To ensure a fair distribution of assignments, the “Clearing House” (which guarantees the performance of option contracts through the process of “novation”) uses a random procedure to assign exercise notices to the accounts maintained by each “Clearing Member” (the options broker). In turn, the assigned firm must use an exchange approved way to allocate those notices to individual accounts which have the short positions on those options.

One can never tell when an assignment will take place, though they are generally assigned automatically on the exercise date unless the option has no more time value. The reason it does not make much sense to exercise an option when there is still time value left is because it's more profitable to sell the option to the market instead. At any point in time, the deeper in-the-money the short options are, the more likely they are to be exercised.

Contract Size

The standard contract size for UK equity options is 1,000 shares, 100 shares for European and US options and £10 a point for the FTSE 100 index.

Exercise

To exercise an option is to execute the right of the holder of an option to buy (for call options) or sell (for put options) the underlying security at the strike price.

When an option is exercised by the option holder, the option writer will be assigned the obligation to deliver the terms of the options contract.

Expiration Dates

Options expire on the third Friday of each month, after which the option expires and the right to exercise no longer exists. The expiration month is specified for each option contract. Index options are available every month. The less liquid equity options expire every calendar quarter (March, June, September & December) with more liquid equity options also having the front three months as expiry dates.

Margin

For buyers of options, no margin is required by the options exchange as the loss is limited to the premium paid. For options sellers however, two types of margin are required to be maintained on the account.

“Initial” margin is required to be deposited to cover potential losses, which is designed to theoretically cover one day's worst possible scenario. The initial margin calculations are complicated and are not the same for each type of underlying security and take into account strategies that reduce overall risk.

“Variation” margin is also required to be maintained, which equals the buyback value of the options and is marked to market each day.

We recommend that options sellers use no more than 50% of their account value as margin (with the exception of covered calls) to ensure they have a large cushion should the market turn against them.

Moneyness

Moneyness is a term describing the relationship between the strike price of an option and the current trading price of its underlying security.

An “at-the-money” option is a call or put option whose underlying market price is approximately equal to the strike price.



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Glossary

An option contract is “in-the-money” if the underlying market price is above the strike price (for a call) or below the strike price (for a put). In-the-money options are generally more expensive as their premiums consist of intrinsic value on top of their time value.

An option is said to be “out-of-the-money” if the underlying market price is below the strike price (for a call) or above the strike price (for a put). Out-of-the-money options have zero intrinsic value, their entire premium is composed of only time value and are thus cheaper than in-the-money options.

Option Style

An option contract can be either “American” style or “European” style. These do not refer to the geographical continents but rather to the time when they can be exercised.

“American” style options can be exercised anytime up to and including the expiration date. These tend to be equity-based options.

“European” style options can only be exercised on expiration date itself. These tend to be “cash settled” options where it is not possible to deliver the underlying asset – such as index options.

Premium

In exchange for the rights conferred by the option, the option buyer has to pay the option seller a premium for carrying the risk that comes with the obligation. Money is received by the seller the day following the trade.

Strike Price

The strike price is the predetermined price at which the holder of an option can buy (in the case of a call option) or sell (in the case of a put option) when the option is exercised, hence is also known as the “exercise price”.

The intervals between each strike price vary depending on the market price, ranging from 4p for lower priced stocks to 400p for higher priced stocks.

Underlying

Option contracts are available on most securities – equities (mostly FTSE 100 stocks in the UK), indices, commodities and FX.

Research Disclaimer

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