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Stock Exchange

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# Covered warrants - an introduction





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## Covered warrants - an introductory guide

Covered warrants were made available to UK private investors for the first time when they were introduced on the London Stock Exchange in October 2002. These versatile instruments, which have already proved popular in other countries, offer a variety of investment solutions for a range of investors.

This guide is designed to introduce covered warrants and to help you decide whether they meet your investment needs. The brochure outlines the different types of covered warrants available, considers their benefits and features, and also the risks associated with them.

## What is a covered warrant?

Covered warrants are listed securities issued by financial institutions and then made available for trading on the London Stock Exchange. A covered warrant gives the holder the right, but not the obligation to buy or sell an underlying asset, at a specified price, on or before a predetermined date.

For many investors, covered warrants will seem similar to options. Covered warrants typically have longer maturities than options, and are issued over a wider range of assets. The terms are also more varied – covered warrants are highly flexible and can be issued with terms structured to meet market demand.

With covered warrants you cannot lose more than your initial investment. Your maximum loss is known in advance, and there are no margin calls, ie further payments to maintain your position. This differentiates covered warrants from some other forms of derivatives.

### Fact box

One of the questions many investors ask is where the name comes from – why are they called covered warrants? The term 'covered' denotes the fact that when the issuer sells a warrant to an investor, they will often 'cover' (hedge) their exposure by buying the underlying stock in the market, or by using other instruments. Covered warrants have on average a life of six to twelve months, although some have a longer (or occasionally open-ended) lifespan. They can be bought and sold at any point during their lifetime.



## Types of covered warrants

### Stock warrants

Covered warrants on single stocks represent a significant number of those available. The main focus is on popular UK 'blue-chip' shares. There are also some covered warrants on popular shares in other markets.

### Baskets

For exposure to a particular theme or sector, a number of stocks are sometimes grouped together in a 'basket'. Investors can then obtain exposure to this basket simply and efficiently by buying one single security in the form of a covered warrant.

### Index

In most covered warrant markets around the world, the most actively traded instruments are those on the main domestic market index. In the UK, the FTSE 100 Index has been a consistently popular underlying. Covered warrants have also been issued over other UK market indices such as the FTSE 250 Index, and a range of overseas indices including the Dow Jones Industrial Average, Nasdaq 100 Index, Nikkei 225 Index, Hang Seng Index, DAX Index, CAC 40 Index amongst others.

### Commodity

It can be difficult for private investors to gain exposure in sterling to major commodities. Using covered warrants it is possible for investors to take positions on commodities in small size and in sterling.

### Currency

The same applies to currencies. Covered warrants are available on a range of exchange rates.

Covered warrants offer a wide variety of underlying products including equities, indices, commodities and currencies.



# Features of covered warrants

## Calls and puts

Covered warrants exist in two basic forms – a call or a put. They allow the holder to benefit from either a rising or a falling market.

The holder of a covered warrant has the right but not the obligation to either buy (call) or sell (put) an underlying asset at a predetermined price (known as the exercise or strike price) on or before a certain date in the future. A call warrant usually rises in value when the underlying asset rises in value, whilst a put warrant usually rises in value when the underlying asset falls in value.

## Expiry date

Covered warrants usually have a predetermined maturity which is set when the warrant is first issued. The expiry date is the last date that the covered warrant can be exercised.

## Strike price (or exercise price)

The strike price represents the price at which the investor has the right to buy (call) or sell (put) an underlying asset. Covered warrant issuers often issue a range of strike prices over each underlying security, providing investors with a choice of covered warrants to reflect their particular view of the market.

## Conversion ratio

The conversion ratio is the number of covered warrants required to gain exposure to one unit of the underlying asset. It is sometimes called parity, the cover ratio, or simply the ratio.

## Exercise style

Covered warrants can either be European or American style. A European-style warrant allows you to exercise your right only on the expiry date, whereas with an American-style warrant you can do this at any time between the date of issuance and the expiry date. In practice, this distinction has little influence over covered warrant pricing or trading given that during the lifetime of the covered warrant selling the instrument will almost always be more profitable than early exercise.

## Intrinsic value and premium/time value

Covered warrant prices are typically composed of two elements. The first element is the value which a covered warrant would have if it were to be exercised immediately, which is called the intrinsic value. In the case of a call covered warrant, for example, carrying the right to buy one share at 100p, if the underlying share is trading at 150p, then the covered warrant (assuming a conversion ratio of 1:1) has an intrinsic value of 50p. In practice, however, the covered warrant will trade at a market price higher than 50p. There is a second element in the price, namely time value, which reflects the time to expiry. Time value diminishes as covered warrants near their final maturity.

### Loss of time value

As a general rule of thumb, covered warrants lose one-third of their time value during the first half of their lives, and two-thirds during the second half. The accelerating loss of time value on approach to expiry means that short-dated warrants with significant levels of premium can carry a high risk.

### Gearing and leverage

For most investors a prime reason for buying covered warrants is the gearing or leverage which they offer. Both terms relate to the capacity of covered warrants to magnify returns.

### Gearing

Gearing is calculated by dividing the asset price by the covered warrant price (adjusted for the conversion ratio if necessary). If an underlying share price is 100p, for example, and a covered warrant with a ratio of 1:1 is trading at 20p, the gearing is five times. This figure measures the amount of additional exposure gained by investing in covered warrants rather than directly in the underlying asset. An investor buying a warrant at 20p is effectively gaining exposure to an asset worth 100p – five times as much.

This gearing benefit can be interpreted aggressively or defensively. The former means that investors can invest their normal investment sum in covered warrants, thereby 'gearing up' and gaining exposure to a much larger asset value. The alternative is to 'gear down' and to gain the same exposure by investing a lesser amount in covered warrants. This latter strategy can be used to reduce the potential maximum loss from a holding.

## Leverage

Often, investors are most interested in the extra degree of price movement which covered warrants can provide exposure to. This is not measured by simple gearing, which usually overstates the multiple of movement, but by leverage, sometimes called elasticity or 'effective gearing'.

Leverage is calculated by multiplying simple gearing by another indicator called the delta, and measures the additional degree of price movement which might be expected from the covered warrants. Covered warrants with leverage of four times, for example, might be expected to move four times as much in percentage terms as their underlying asset.

Leverage should only be used as an approximation, however, as the figure changes constantly with changes in the price of the underlying asset, the covered warrants, and with the time remaining to expiry.

Gearing and leverage are different measures of the same basic principle. Covered warrants can give you more for your money in terms of exposure (gearing) and/or price movement (leverage).

## Key benefits of covered warrants

- offer access to a range of markets, including international markets
- offer a wide variety of underlying products including equities, indices, commodities and currencies
- give you the opportunity to expand your portfolio in new directions without actually buying the underlying products
- provide gearing, but limit the risk to the amount invested
- all covered warrants are 'cash-settled' – the gain achieved on the covered warrant is transferred to the holder without the holder having to carry out a buy or sell trade – this means holders do not have to pay stamp duty that is usually incurred on UK share purchases
- unlike traded options, covered warrants do not require margin accounts or margin calls
- allow you to profit from falling as well as rising markets
- the major advantage covered warrants have over equities is leverage
- covered warrants can be held in a Self Invested Personal Pension (SIPP).

**Covered warrants are most suitable for active investors able to monitor market movements. Those with more passive objectives should, perhaps, concentrate on collectives or lower volatility equities.**



## Pricing of covered warrants

It is valuable to have an understanding of how covered warrants are priced. Unlike shares, and traditional company and investment trust warrants, the prices of covered warrants are not determined principally by supply and demand. Rather, the issuers calculate covered warrant prices against the underlying assets using largely automated, arithmetic pricing models. These are based on options pricing theories such as the Black-Scholes model and the binomial method, though detailed knowledge of the complex mathematics behind these pricing models is not required.

This system of pricing is more efficient, which can be a disadvantage for investors hoping to hunt for price anomalies. A benefit is that pricing is quite 'faithful' to movements in the underlying assets, especially for covered warrants which have a high amount of intrinsic value. Depending on the particular security, and to varying degrees, covered warrant pricing can be influenced by:

- price or level of the underlying instrument
- exercise price of the covered warrant
- the time left to expiry
- volatility of the underlying instrument
- interest rates
- dividends
- exchange rates

On the London Stock Exchange, two-way prices are available for all covered warrants with a maximum percentage spread and a minimum dealing size maintained throughout the trading day. This is a key advantage over some other derivative products such as traded options.

# Comparison of covered warrants

## Covered warrants versus other investment products

Covered warrants have been listed and traded in several of the major European markets for many years. They are in many ways similar to options contracts that are currently traded on derivatives exchanges around the world, but with some important differences:

- Covered warrants are securitised derivatives quoted on the London Stock Exchange, in contrast to options which are financial contracts traded on a derivatives exchange or over the counter.
- Investors can only buy a covered warrant, unlike an option where it is possible to sell or 'write' the option. Although this reduces the number of possible strategies an investor could execute, it does mean that investors can never lose more than they invest in an individual covered warrant. Selling or 'writing' options can be risky as they are unlimited in the losses which may be incurred.
- Contracts for Difference (CFDs) require investors to run a margin account (a cash account) containing a percentage sum of the value of the CFD. Because of this, the potential losses are not limited to the initial investment. Similarly, spread betting can leave you with unlimited losses. This contrasts with covered warrants where you can only lose the amount invested.
- Covered warrants are ineligible for inclusion in the tax-efficient shelter of an Individual Savings Account (ISA) or Personal Equity Plan (PEP). However, they can be held in a Self Invested Personal Pension (SIPP), where Contracts For Difference (CFDs) are not permitted assets.

## Strategies and risks involved

### Strategies

The variety of covered warrants available, coupled with their range of terms, means that different investors can use them in different ways. Three of the common strategies are cash extraction, speculation and hedging.

### Cash extraction

Covered warrants can be used to reduce the amount of capital at risk. By interpreting gearing defensively, investors can replicate exposure to an asset with a smaller investment in covered warrants. A holder of blue-chip shares, for example, with a value of £10,000, may be able to replicate the exposure by buying £2,000 worth of covered warrants with five times gearing. In this example, £8,000 of cash may be extracted by selling the shares and buying covered warrants instead.

### Speculation

One feature of covered warrants is a comparatively narrow 'spread' between the buying and selling prices. This can make covered warrants a very useful instrument for short-term trading, and to take a geared position based on a bullish or bearish view on an underlying asset. Many investors buy covered warrants for this purpose.

### Hedging

Hedging works like an insurance policy to protect the value of your portfolio, neutralising the effect of a fall in the market. For example, if you think a particular share is going to fall in value, you can buy a put covered warrant (the right to sell the share) to cover the extent of the fall and provide a compensatory gain.

### Risks involved

The leveraged nature of covered warrants means that losses are amplified as well as gains. For this reason, before you can deal in covered warrants, your stockbroker will ask you, at a minimum, to read, understand and accept the contents of a risk warning, which highlights the covered warrants' volatility and the fact that you could lose the full value of your investment. Some brokers, particularly those with an online dealing facility, will also ask you to complete a suitability assessment. These forms can sometimes be completed online. Although the full risk warning can look daunting, it makes important points. You should read it before you decide to invest.



## How to start using covered warrants

When investing in warrants investors should first consider the following questions:

- What am I trying to achieve?
- How much risk/leverage am I prepared to accept?
- What is my time frame?
- How much can I afford to lose?

When investors have answers to these questions they can begin to look at the range of available covered warrants to find which one best fits their requirements.

One of the most attractive elements of the covered warrant market is that you can buy and sell these instruments as easily as you would trade ordinary shares. The costs of dealing in covered warrants are relatively low, similar to those of an execution-only dealing service. Indeed, most brokers will deal in covered warrants for the same price as they deal in ordinary shares.

### Trading covered warrants

You trade covered warrants through a stockbroker and not with an issuer. You can choose between advisory and execution-only brokers, as well as between brokers that offer internet/telephone and telephone-only services. The trading day runs from 8.15am until 4.30pm. All covered warrants are CREST-settled in T+3 like equities. Unlike equities, covered warrants are not subject to stamp duty. There is no need to set up a separate, dedicated account, as is required for spread betting.

To ensure that you can track the market effectively there are a number of online services available from the London Stock Exchange, the major issuers and a number of information service providers. Newspapers and popular investment magazines may also publish the prices of covered warrants on a regular basis.

### Exercising covered warrants

UK covered warrants are cash-settled instruments. This means that the issuer will pay a cash amount for the intrinsic value of the covered warrants on exercise or at the expiry date. In other words, although the terms of call covered warrants are usually expressed as a right to buy, and put covered warrants as a right to sell, they are more accurately a right to receive a cash payment equivalent to the difference between the exercise or strike price and the value of the underlying asset at expiry.

In practice, few investors ever exercise covered warrants, or wait for this cash settlement at final expiry. While the value of the covered warrant is derived from the exercise terms, the majority of trades occur within the lifetime of a covered warrant, with investors trading in and out and taking their profits or losses before the final maturity date.

One concern which often arises is the fear of losing value by forgetting to exercise a covered warrant at the end of its life. Investors can be reassured on this point. For London Stock Exchange listed warrants there is a regulatory requirement for the automatic exercise of warrants in these circumstances. If you neglect to exercise your covered warrants before their final maturity, for any reason, a safeguard is in place to ensure that the appropriate cash value is credited for covered warrants which are 'in the money' (ie they have intrinsic value) at expiry.

### Know your TIDMs

Warrant names can be long and complicated. Rather than the name, the key identifier that you need is the Tradable Instrument Display Mnemonic – TIDM. The TIDM consists of four characters. The letters identify the issuer and the numbers identify the individual covered warrant.

### Final thoughts

Careful groundwork will bring long-term rewards. The usual investment disciplines apply. Set clear goals and objectives, particularly prices at which to lock in profits and cut losses. Following them will be important in ensuring that covered warrants prove a successful instrument for enhancing and protecting your investment returns. For a better understanding of covered warrants, please refer to **Covered warrants – an in depth guide**. This guide explores covered warrant dynamics as well as examining trading strategies in more depth and applications for the investor in more detail.

You can also visit:

[www.londonstockexchange.com](http://www.londonstockexchange.com) for more information and to get covered warrant prices.



## Q&A

### 1) What is a covered warrant?

A covered warrant is a financial product that gives the holder the right, but not the obligation, to either buy or sell an underlying asset at a specified price on or before a predetermined date.

### 2) How can I employ covered warrants in my trading?

Covered warrants offer a number of trading opportunities including gearing, hedging, cash extraction and diversification.

### 3) What are the potential risks of covered warrants?

Although the gearing element magnifies potential returns, it can also magnify losses. The maximum loss is 100%, but is limited to your initial investment. The limited lifespan of covered warrants also means the time to expiry affects the price of covered warrants. You should monitor warrants frequently, especially when they are nearing expiry.

### 4) Are they stamp duty free?

All covered warrants are cash-settled (where the investor receives the cash profit rather than the underlying asset if they exercise the covered warrant) and therefore free of stamp duty.

### 5) Are they eligible for ISAs?

No, covered warrants are not eligible for ISAs, but they are eligible for inclusion in SIPPS.

### 6) What is the typical lifespan of a covered warrant?

The lifespan of the covered warrant is limited and set by the issuer and will be influenced by market demand. Covered warrants typically have a life of six to twelve months, although some have a longer lifespan.

### 7) How do I trade covered warrants?

Covered warrants can be bought and sold through a broker using a regular broking account. To start trading covered warrants, or for further information, simply contact your broker or visit [www.londonstockexchange.com/coveredwarrants](http://www.londonstockexchange.com/coveredwarrants)

# Glossary

## **Abandon**

The choice made by the holder of a covered warrant to allow the covered warrant to expire without exercise.

## **American-style warrants**

An American-style covered warrant allows the holder to exercise the covered warrant at any time on or before the expiry date.

## **Ask**

The price at which the market maker is prepared to sell a covered warrant. It is therefore the price at which an investor can buy the covered warrant.

## **At-the-money**

A covered warrant is at-the-money when the strike price is the same, or very close to the price of the underlying asset. It applies to both call and put covered warrants.

## **Basket covered warrants**

Covered warrants linked to a 'basket' of securities. A basket is a portfolio consisting of more than one security that may, or may not, replicate an index, but basket covered warrants are usually linked to groups of shares that are all listed within a single market sector.

## **Bid**

The price at which the market maker is prepared to buy a covered warrant. It is therefore the price at which an investor can sell the covered warrant.

## **Black-Scholes**

A derivative pricing formula constructed by Fischer Black and Myron Scholes in 1973, and very widely used for 'fair value' calculations.

## **Call**

A covered warrant that gives the holder the right, but not an obligation, to buy the underlying asset at a future date and at a specified price. Call covered warrants are normally used to back bullish judgement.

## **Cash extraction**

A defensive strategy, where covered warrants are used to replace the exposure to assets at a lower price, thereby releasing cash.

## **Cash settlement**

If the covered warrant can be exercised profitably at expiry, the investor receives cash, rather than a physical asset, equal to the intrinsic value of the warrant. The gain achieved on the warrant is transferred to the holder without the holder having to enact a buy or sell trade.

## **Conversion ratio**

The conversion ratio is calculated as the number of covered warrants that must be held to gain exposure to a single unit of the underlying asset – eg one share. A higher conversion ratio will produce a lower covered warrant price. However, sometimes the ratio is expressed as an inverse figure, so that a conversion ratio of 100 is shown as 0.01. It is also known as the cover ratio, subscription ratio, exercise ratio, entitlement ratio, parity ratio, multiplier or set.

## **Corporate warrants**

Also known as traditional or equity warrants, these are issued directly by listed companies and are exercisable into their own shares. Corporate warrants are a distinct asset class and are not traded in the same way as covered warrants.

**Delta**

The change expected in a covered warrant price for a given change in the underlying instrument (ie a delta of 0.5 indicates that for every 1p price increase in the underlying price, there will be a 0.5p price increase in the covered warrant [ignoring the conversion ratio]).

**Leverage**

Sometimes also called elasticity. This measures the theoretical increase, or decrease, in the price of a covered warrant, in percentage terms, based on a 1% move in the price of the underlying asset. It is calculated by multiplying the delta by the gearing.

**European-style**

A European-style warrant is one that may only be exercised on the last trading day, or at other fixed times.

**Exercise**

The process of using the right to buy or sell the underlying at the specified price.

**Exotics**

Warrants with complex exercise terms.

**Expiry date**

The date, stipulated by the issuer, on which the covered warrant may no longer be exercised or traded and the holder's rights in respect of the covered warrant end.

**FSA**

The Financial Services Authority, the regulator for UK covered warrants.

**Gearing**

The degree of additional exposure gained by buying a covered warrant. Covered warrants typically provide exposure to an underlying asset for less than the price of the underlying itself. Gearing, therefore, reflects the greater potential gain or loss on the covered warrant in relation to the underlying – although the loss is limited to the amount of premium paid, and is calculated by dividing the price of the underlying asset by the covered warrant price.

**Hedge**

Hedging is a strategy designed to protect the value of an asset or a portfolio. A hedge is typically accomplished by making approximately offsetting transactions that will largely eliminate one or more types of risk.

**Holder**

The owner of a covered warrant.

**In-the-money**

A covered warrant with positive intrinsic value. For a call covered warrant, this is where the strike price is less than the price of the underlying. For a put covered warrant, this is where the strike price is greater than the price of the underlying.

**Intrinsic value**

The value which would be realised if the covered warrant were to be exercised immediately. It is calculated by taking the difference between the strike price and the market price of the asset. For call covered warrants, this is the underlying asset price minus the strike price; for puts it is the strike price minus the underlying asset price.

**Liquidity**

The ease of dealing in a covered warrant.

**Long**

A long position is established when someone buys ('holds') a covered warrant or holds the underlying asset. This contrasts with a short position.

**Out-the-money**

A covered warrant with a negative intrinsic value. For a call covered warrant, this is where the strike price is greater than the price of the underlying asset. For a put covered warrant, this is where the strike price is less than the price of the underlying.

**Plain vanilla**

Covered warrants with more or less standard exercise terms and without special clauses.

**Premium**

A term used to describe the price paid for a covered warrant.

**Put**

A covered warrant that gives the holder the right, but not the obligation, to sell the underlying at a future date and at a specified price. They are usually used to back bearish judgement.

**Strike price**

The price at which the investor may buy or sell the underlying during (if it is an American-style warrant) or at the end of (if it is a European-style warrant) the expiry period. It is also referred to as the 'exercise price'. It is known when the covered warrant is issued.

**Time value**

Time value is the intrinsic value subtracted from the market price. Time value represents the remaining value that has been attributed to a covered warrant by the market, and the fact that the market might move before the expiry date. It can also, somewhat confusingly, be known as the 'premium'.

**Underlying**

The asset on which the covered warrant is based and from which it derives its value. The underlying may be a security, such as a share, a share index, a commodity or a currency. Some covered warrants are based on a 'basket' of underlyings, providing exposure to the performance of more than one security.

**Volatility**

A measure of the amount of movement in the price of an instrument, measured by standard deviation.

**Source: The London Stock Exchange/Andrew McHattie on Covered Warrants**



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London Stock Exchange  
10 Paternoster Square  
London EC4M 7LS  
Telephone: +44 (0)20 7797 1000  
[www.londonstockexchange.com](http://www.londonstockexchange.com)