Standard

| WARRANTS |

What are warrants?

Trade on the JSE just like ordinary shares

WARRANTS WERE FIRST launched in South Africa in 1997. Since then this market has grown exponentially. All investors should consider including a warrants component in their portfolio. Over the next two weeks we'll discuss what warrants are, their advantages and disadvantages compared to ordinary equities and how to trade them. But let's start with some basic definitions and terminology.

It's a right but not an obligation. **Brett Duncan**

A warrant, according to Standard Bank, "gives you the right, but not the obligation to buy (call) or sell (put) a predetermined asset (most often a share) at a pre-determined price (strike/exercise) by a predetermined date (expiry). (Call warrants allow traders to profit from share price increases, while put warrants let traders make money when the share price falls.)

Brett Duncan, Standard Bank's head of retail derivatives, says that warrants are options. In a nutshell, an option gives an investor or trader the right – but not the obligation – to buy or sell an underlying share or index at a specified price at a specified future date.

Warrants are usually issued by a financial institution (such as Standard Bank, Deutsche Bank, Absa, Investec and Nedbank) and not the company itself. Warrants trade on the JSE just like ordinary shares. The issuers act as market makers and keep the market running efficiently by quoting bid (buying) and offer (selling) prices all the time. In SA, the Financial Services Board regulates warrants under the Stock Exchange Control Act.

It's possible to have more than one warrant on a particular underlying share: in fact, some shares, such as US ones, have a number of different warrants from different issuers.

Warrants are classified according to the way in which they can be exercised. A United States-style warrant can be exercised at any time up to the expiry date. In contrast, a European option can only be exercised on the expiry date. For traders in the warrants the difference between American and European is of little concern as the warrant issuers provide continuous bid and offer prices for their respective warrants.

Warrants are in profit (in-the-money), at a loss (out-of-the-money) or breaking even (at-the-money) depending on where the current share price is relative to the exercise price. ¤

Advantages and disadvantages of warrants

MANY SMALL INVESTORS like to trade small capitalisation shares (small caps) because they offer the potential for higher returns than some of the more established larger companies. However, small cap counters can be tricky to invest in successfully, as there's often little credible research coverage by stockbroking analysts, the companies themselves often have a short trading history and there's often a lack of liquidity in the shares.

For the risk-inclined investor, trading in warrants can provide the same type of upside associated with small cap shares without some of the pitfalls. Trading in warrants has a significant number of advantages, which is why investors should consider including this asset class in their portfolio. However, there are some risks – but those can be managed if you're aware of them.

Brett Duncan, Standard Bank's head of retail derivatives, says there are seven main advantages to trading in warrants. To start, warrants offer a low cost entry into blue chip shares, as the actual rand amount you need to invest initially to gain exposure to the underlying is less than it would cost to buy it directly in the market.

Second, there's the potential to leverage or gear up your investment. That means you only have to invest a smaller amount of money to gain exposure to the full movement of the underlying share. That increases both your potential profits and losses.

Third, the downside is limited to the initial premium (price of the warrant) paid. Duncan contrasts that to futures, where an investor can lose more than the money they initially put into their investment.

Fourth, warrants have the transparency of a listed instrument. In addition, Duncan says that the warrants market is liquid with tight spreads (the difference between buying and selling prices) provided by the market makers (or issuers of the warrants).

Fifth, warrants allow small investors to short the market or hedge their portfolios through the use of put warrants and so profit

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from falls in the market.

The sixth advantage is that the warrants market is extremely liquid, as the issuer is required to provide both bids and offers. The spread (or difference) between these buying and selling prices is quite small as a result.

Lastly, warrants are traded on a regulated market – the JSE.

Duncan says that there's just one cost to investing in warrants. "Investors pay a premium for a warrant and that premium decays on a daily basis over the life of a warrant. The decay – known as 'theta' or 'time decay' – accelerates over a warrant's life and will cost cash if you hold on to the warrant and the market goes nowhere."

There are other risks that investors in warrants need to manage if they're to succeed in this asset class. All investments have risks, but as a geared investment warrants are riskier than ordinary equities.

The first risk that an owner of a warrant faces is that it may expire worthless if the share price is below the strike price for a call warrant (and above for a put warrant) on the exercise date. Technically, a warrant holder can still exercise his right to buy or sell an underlying share but there's no point in paying more for a share than it costs on the JSE.

Finally, warrants have an expiry date – and so a limited life. If the warrant expires out-of-the-money it will be worthless.

Other risks relate to the underlying share or index over which the instrument is listed, as the warrant ultimately derives its value from that source.

For example, if the underlying share price goes down then the price of a call warrant will also fall (or rise in the case of a put warrant).

Investors must remember that the warrant-specific risks are manageable with time and knowledge.

However, investors must remember that the warrant-specific risks are manageable with time and knowledge. Before starting to trade in warrants take the time to get to know the instruments by attending a seminar, which are hosted free of charge by Online Share Trading. ¤

How to price a warrant

SIX FACTORS GO INTO THE PRICING of a warrant:

- The price of the underlying instrument over which it is issued.
- The time to expiry of the warrant.
- The strike/exercise price of the warrant.
- The dividends that are expected over the life of the warrant.
- The expected interest rate.
- And the volatility that the warrant is priced at.

Some of these variables have been given Greek names that indicate their effect on the price of the warrant.

The most commonly referred to variable is "Delta". The Delta of a warrant gives the theoretical change in the price of a warrant for a 1% change in the price of the underlying share. It's measured between 0 and 1 or can be expressed as a percentage. For example, if a warrant price moves 0,8c every time the share price moves 1c, then that warrant has a Delta of 0,8 or 80%. Delta is not a static variable and changes as the share price changes.

Theta or "Time Decay" measures the rate of reduction in the price of a warrant as a result of the passage of time. In a nutshell, a warrant's price declines at an increasing rate as the warrant nears expiry. As a result, traders should be careful when trading warrants that are close to expiry as Theta or time decay can erode returns quickly. Theta is expressed as the expected change of the warrant's price per day.

Warrant holders don't receive a dividend when it's paid by the underlying share. While they do not receive the physical dividend, its benefit is priced into the price of the warrant upfront, making call warrants cheaper and puts more expensive.

Rho or Iota measures a warrant's sensitivity to interest-rate changes. In a nutshell, be aware that higher interest rates make call warrants more expensive and put warrants cheaper.

Lastly, volatility is important because warrant traders are interested not just in the direction in which a market is moving, but also the speed at which it does so. In slow moving (low volatility) markets, the warrants will be worth less as there is lower chance of them reaching their strike price before expiry. Vega quantifies a warrant's sensitivity to volatility. It tells us, in cents, how much a warrant's price will change if the volatility changes.

Be aware that higher interest rates make call warrants more expensive and put warrants cheaper.

All six of these variables are entered into the Black-Scholes pricing model, which in turn determines the price of the warrant. The good news is that Standard's Online Share Trading offers supply clients with daily warrant matrices that show you the price of a warrant over a range of prices of the underlying share.

This provides clients with a quick reference pricing guide and allows you to easily track the price of your warrant as the underlying share price moves.

If you want to learn more about warrants, download the interactive warrant course from Online Share Trading at www.warrants.co.za. ¤

VARIABLES THAT AFFECT THE PRICE OF WARRANTS

MARKET VARIABLE	CHANGE IN VARIABLE	CHANGE IN CALL WARRANT PRICE	CHANGE IN PUT WARRANT PRICE
Underlying price	⇧	⇧	⇩
Time to expiry	⇩	⇩	⇩
Volatility	⇧	⇧	⇧
Interest rates	⇧	⇧	⇩
Dividend expectations	⇧	⇩	⇧

Source: Online Share Trading from the Standard

KEY WARRANT TERMINOLOGY

TERM	MEANING
American style	The warrant can be exercised at any time up to and including the date of expiry.
At-the-money	Term used to describe a warrant with an exercise price equal to the current market price of the underlying.
Barriers	A barrier level is an underlying price level that causes some event to occur, normally the expiry of the warrant.
Call warrant	A contract giving the holder the right, but not the obligation, to buy a share for the exercise price at a future date. Taking up this right is known as "exercising" the warrant.
Cash extraction	A strategy whereby investors use warrants to gain equivalent exposure to the underlying while freeing up cash for other uses.
Cash settlement	The procedure by which index warrants and unexercised warrants are settled. Warrants are cash settled by allocating a rand value to each warrant.
Closing out	A transaction in which a party that has bought (sold) a warrant exits the position.
Conversion ratio	The number of warrants that must be exercised in relation to one underlying share.
Delta	The Delta of a warrant represents the relative change in the value of the warrant to changes in the underlying value of the share price.
European style	Means that the warrant may be exercised only on the expiry date.
Exercise price	Fixed price at which a warrant holder may buy (in the case of calls) or sell (in the case of puts) a share.
Expiry date	The last day on which a warrant may be exercised.
Gearing	Simple gearing is the ratio of the share price to the warrant price. Effective gearing is the simple gearing multiplied by the warrant's delta.
Intrinsic value	The amount a warrant would be worth if it expired today: the difference between the underlying price and the exercise price per share, divided by the conversion ratio.
In-the-money	When the exercise price of a call (put) warrant is below (above) the current market price of the underlying asset.
Index warrants	Index warrants are linked to the price of an index such as the Top 40 Index.
Option	A contract between two parties giving the buyer the right, but not the obligation, to buy or sell an underlying asset at a particular price on or before a certain date.
Out-of-the-money	A call (put) option is out-of-the-money when the current market price of the underlying is below (above) the exercise price.
Premium	The amount of money payable by the buyer of the warrant to the issuer for the warrant.
Put warrant	A contract giving the holder the right, but not the obligation, to sell a share for the exercise price at a future date.
Strike price	See exercise price.
Time value	The additional value of a warrant (if any) over the intrinsic value due to the remaining term of the warrant and its limited risk characteristics
Volatility	A measure of the variation in a share price over time.
Warrant	An option contract traded on the JSE.
Warrant issuer	The financial institution that issues the warrant. Warrants may only be issued by institutions that meet the eligibility criteria set out by the JSE.

Source: Online Share Trading at the Standard

QUIZ

EACH WEEK we'll publish three questions related to the week's content. At the end of the 12 weeks Online Share Trading will give R10 000 worth of Satrix shares in an online account to the reader who has correctly answered each week's questions.

To take part in the draw just answer the following questions and submit your answers either online to SBquizz@finweek.co.za or by fax to (011) 884-0851.

1. What's the type of warrant that you buy in anticipation of share prices going up?
2. What two different styles of warrants are available?
3. How many advantages are there to trading in warrants? ¤

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