

Options

Options contracts work just like the futures: they are bought and sold openly in the pit of an exchange. They are sometimes called ‘derivatives’ because options are derived from the underlying futures contract. The cost of an option is referred to as its ‘premium.’

Owning an option gives the holder the right, but not the obligation, to buy or sell the specified futures contract at a certain level, called the ‘strike price’. Calls give you the option to buy the underlying futures; put options allow you to sell them.

Options Contract Mechanics

There is a different option contract for each strike price, trading against each futures contract. In the case of canola, there is a call and a put option contract on the board for each \$10 increment in the price. The price at which each option trades (its premium) depends on its strike price, i.e. it is related to the option’s intrinsic value or distance to moving ‘in-the-money’.

Here’s an example. If you own a \$400-strike November call option and the futures contract is trading at \$410 per tonne, in theory you could exercise your option, buy the futures at \$400 and make a quick \$10 by selling them back at the going market price.

For this reason, options are always worth as much as or more than their intrinsic, or exercise value, which in this example would be \$10 per tonne. Before an option expires, there is always the chance it will move further into the money, which adds to its value. Even an out-of-the-money option (for example a \$430-strike Nov canola call, when the market is trading at \$410) holds value because of the chance it will move into-the-money before expiring.

Valuing Options

Far out-of-the-money options, i.e. those with strike prices much higher or lower than the underlying futures, often don’t trade. As with futures, a lack of liquidity makes it dangerous to trade such options contracts. If there is little or no open interest in a particular strike-price-denominated option contract, then it is not a good tool for hedging.

Once an option is found with an acceptable level of open interest, the question arises at what price would one want to own it at? To answer this question, one needs to assess the option’s time value. This is determined by the amount of time before the contract expires, and the volatility of the underlying futures market.

The further away an option is from expiry, the more ‘time value’ it has. Thus, options on the November 2004 canola futures are more expensive than options on the July 2004 contract. For this reason, buying options against the nearby futures month is always a cheaper way to hedge than owning deferred options.

Part of an option contract's value is tied to volatility in the underlying futures market. The wider futures prices swing from day to day, the higher the likelihood of an option moving into-the-money before the contract expires.

An option's volatility value is measured by its 'delta', which is calculated as the change in the option premium relative to the change in the underlying futures price. This can be a complex calculation to work through, but it's important to recognize the connection between option premiums and market volatility. Options are cheap when the market is dead and very expensive when prices move around wildly.

It's also important for hedgers to realize that an option isn't worthless just because it doesn't have intrinsic value. Due to the value associated with the time to expiry and the volatility in the underlying futures market, out-of-the-money options still provide coverage against the risk of prices rising or falling. Even if it never moves into-the-money, the value of a call option will rise as the underlying futures contract approaches its strike price. Out-of-the-money options can be a very cheap and effective way to hedge cash price risk.

Prepared by Brenda Tjaden Lepp, Mercantile Consulting, 947 3032.