LEVERAGE YOUR INVESTMENT POWER

Option Glossary

Terms	Explanation
Call	Call option is an agreement that gives the buyer the right (but not the obligation) to buy a specified quantity (i.e. contract size) of an underlying asset (e.g. stock) at a specified price (i.e. strike) within a specific time period (i.e. expiry).
Contract Notional Value	Contract Notional Value is the value of a derivative contract's underlying assets at the spot price. In the case of an option contract, this is the number of units of an asset represented by the contract, multiplied by the spot price of the asset.
Contract Size (Shares)	This is the number of shares of the underlying stock represented by the option contract.
Delta	Delta of an option refers to the sensitivity of an option price to the change in its underlying asset price. For example, a call option with a delta of 0.6 (or 60%) means that for every $1 the underlying stock increases, the call option value will approximately increase by $0.60, assuming other factors being constant. Delta of put option is negative, however. A put option with a delta of -0.6 (or -60%) will approximately increase by $0.60 for every $1 the underlying decreases in price, assuming other factors being constant. An in-the-money call (put) option nears expiration will have a delta very close to 1.00 (-1.00). Please note that delta changes as other factors like option price, stock price, implied volatility, and time etc change.
Effective Gearing	Effective gearing is the relative percent change of the value of the option for one percent change in the price of the underlying stock. Note that effective gearing is not constant. It changes with other factors. For out-of-the money options or options which are close to expiry, the effective gearing will be higher. Effective gearing is calculated by multiplying delta with gearing.
Expiry	The last day that an options is valid. The option expires and becomes worthless if the buyer chooses not to exercise the option on or before the expiry date.

	The expiry date of stock options listed in HKEx is the business day immediately preceding the last business day of the contract month.
Gamma	Gamma is the rate of change of Delta. Delta shows how much an option price will change for a one-point move of the underlying. However Delta is not constant and will increase or decrease at different rates. Gamma is the rate that delta will change based on 1% change in the stock price. Think of delta is the speed at which option prices change. Gamma is then the acceleration of the option prices changes. Gamma is the highest when the option is at-the-money. As option expiry day draws nearer, the gamma of at-the-money options increases while the gamma of in-the-money and out-of-the-money options decreases. Gamma is the same for call or put with the same strike and same expiry. Gamma is positive for longing a call or a put. Gamma is negative for shorting a call or a put.
Gearing	Gearing is the ratio of the underlying stock price to the option price. If the gearing of an option is 5 times, then the investment cost of such option is 1/5 of the underlying stock. Note that gearing only shows the relationship between investment cost of the underlying stock and the option. It does not reflect the price movement relationship between the option and the underlying stock. Please refer to effective gearing for such relationship.
Gross Open Interest	It is defined as either the sum of the total number of long or short positions in options contract held by all market participants. For details, please read "How to read open interest figures".
Historical Volatility (HV)	HV is calculated from historical pricing data on the stock. It is calculated by determining the standard deviation from the average price of the stock in the given time period. HV is frequently compared with implied volatility to determine if options prices are over-priced or under-priced.
Implied Volatility (IV)	Unlike historical volatility, implied volatility is deduced from option prices instead of calculated from historical pricing data on the stock. It reflects the expectation on the volatility of the underlying stock in the market prices of the option. Assuming all other factors remain constant, the higher the implied volatility, the higher the value of the option (both call and put) and vice versa.
Moneyness	Moneyness describes the relationship between the strike price of an option and the current price of its underlying asset. An option can be classified as in-the-money (ITM), at-the-money (ATM) or out-of-the-money (OTM). ITM option A call option is ITM when its strike price is below the current price of the underlying asset. While a put option is ITM when its strike price is above the current price of the underlying asset. An ITM option consists of intrinsic value. ATM option An ATM option is a call or put option that has a strike price that is equal to the current price of the underlying asset. ATM options possess no intrinsic value and contain only time value.

	<u>OTM option</u> Call option is OTM when its strike price is above the current price of the underlying asset. While put option is OTM when its strike price is below the current price of the underlying asset. OTM options possess no intrinsic value and contain only time value.
Net Open Interest	Net Open Interest (NOI), as suggested by its name, has added the "netting" effect. The long and short positions in a particular contract held by a Participant in all its accounts are netted to arrive at either a net long or net short figure before being summed up to arrive at the NOI. This represents the total exposure from individual Participants to the clearing house. NOI, which eliminates the gross effect, provides an alternative angle for analysis. For details, please read "How to read open interest figures".
No. of Board Lot(s) of Underlying	This is the number of board lots of the underlying stock represented by the option contract. Please note that some of the option contracts represent more than one board lot of its underlying shares.
Option Premium (%)	It is the amount paid/received expressed in percentage of spot underlying stock price when and investor buy/sell and option.
Put	Put option is an agreement that gives the buyer the right (but not the obligation) to sell a specified quantity (i.e. contract size) of an underlying asset (e.g. stock) at a specified price (i.e. strike) within a specified time period (i.e. expiry).
Rho	Rho is the change in option value because of movements in interest rates. It is shown as the change in option price for 1% point movement in the underlying interest rate. For example, if a call option has a theoretical price of 3.8 with a Rho value of 0.1. If interest rates increase from 1% to 2%, then the theoretical price of the call option will increase from 3.8 to 3.9. (Note: Increase in interest rate has a positive effect on call option and negative effect on put option.)
Strike	Strike price is also known as exercise price. It is the price at which an option can be exercised (i.e. the underlying asset is bought or sold at strike price upon exercise).
Theta (Daily)	Option price consists of intrinsic and time value. Theta shows how much of time value is eroding for every day that passes, assuming all other factors being constant. Theta will always be a negative number since its impact on option price is always negative. For example, if a call option has a theoretical price of 1.80 with a theta (daily) of -0.02. Assuming the underlying stock opens unchanged tomorrow (plus other factors like implied volatility and interest rate etc being constant), the theoretical price of the option will be 1.78 tomorrow. Theta is not a constant number throughout the option's life. It increases as an option approaches its expiry date.
Underlying	Underlying is the asset on which the price of a derivative (e.g. option, futures) is based.
Vega	Vega indicates the theoretical change in option value for a 1-percentage point increase in implied volatility. For example, if the theoretical option price is 3.8 and the option vega is 0.2, then if the implied volatility moves from 20% to 21%, the theoretical option price will increase to 4.0. At-the-money options have the greatest vega. The further an option goes in-the-money or

	out-of-the-money, the smaller is the vega.
	Vega decreases with option life. Vega is greater for long-dated options than for short dated options.