

DERIVATIVE WARRANTS

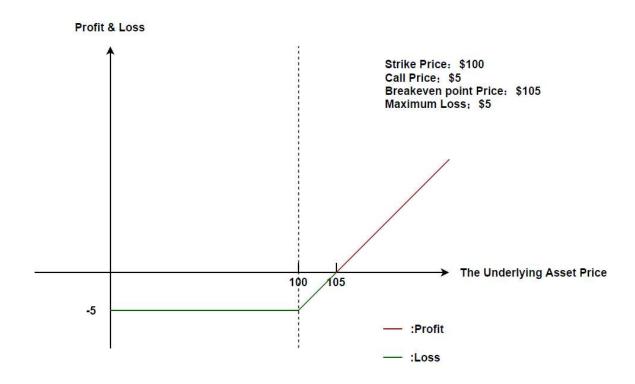
Derivative warrants (known as "Warrants"), they are an instrument that gives an investor the right to "buy" or "sell" an underlying asset at a pre-set price prior to a specified expiry date. They may be bought and sold prior to their expiry in the market provided by HKEX. At expiry settlement is made in cash rather than a purchase or sale of the underlying asset. Derivative warrants can be issued over a range of assets, including stocks, stock indices, currencies, commodities, or a basket of securities.

There are two types of warrants – call warrants and put warrants. A bullish investor may buy a call warrant to benefit from upward movements of the underlying asset price; while a bearish investor may buy a put warrant to capitalize on the downward movements of the underlying asset price.

Maximum Loss: Total Loss of Investment

Call Warrants

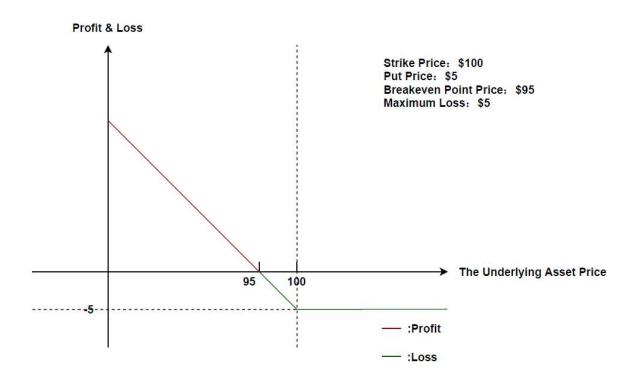
A call warrant is in-the-money if the underlying asset price is higher than the strike price. The intrinsic value and potential gain of a call warrant increase as the underlying asset price rises. On the contrary, a call warrant is out-of-the-money if the underlying asset price falls below the strike price, rendering it not exercisable. It will become worthless on the expiry date and the investor will lose all of the capital.



Put Warrants

A put warrant is in-the-money if the underlying asset price is lower than the strike price. The lower the underlying asset price, the higher the intrinsic value and potential gain of the put warrant. On the other hand, a put warrant is out-of-the-money if the underlying asset price is above the strike price and will become worthless upon expiry. The investor will then lose all of the capital invested.





Common Terms Related to Warrants:

Strike Price or Level	A pre-set benchmark price or level to determine the potential cash settlement payout at expiry.		
In-the-money	Call warrant: Underlying Asset Price > Strike Price Put warrant: Underlying Asset Price < Strike Price		
Out-of-the-money	Call warrant: Underlying Asset Price < Strike Price Put warrant: Underlying Asset Price > Strike Price		
At-the-money	Underlying Asset Price = Strike Price		
Intrinsic Value	The difference between the underlying asset price and the strike price of a warrant. The intrinsic value of an in-the-money warrant has a positive value; while an out-of-the-money or at-the-money warrant has zero intrinsic value.		
Time Value	Time value = warrant price – intrinsic value The warrant price is the sum of the intrinsic value and time value. The time value will decrease with time and become zero when the warrant expires.		
Expiry Date	The date on which the term of a structured product expires		

Factors Affecting the Warrant Price



The value of a warrant is influenced by the supply of and demand for the warrant, and its underlying asset. In general, the value of a warrant is affected by the following factors:

Factors	Price of Call Warrant	Price of Put Warrant
Underlying asset price 1	1	Ţ
Implied volatility of the underlying asset 1	1	Ť
Time to expiry of the warrant ↓	ţ	1
Dividends of the underlying asset 1	ţ	t
Interest rate 1	t	1

Key Risks Involved in Trading Derivative Warrants

1. Time decay risk

All things being equal, the value of a derivative warrant will decay over time as it approaches its expiry date. Derivative warrants should therefore not be viewed as long term investments.

2. Volatility risk

Prices of derivative warrants can increase or decrease in line with the implied volatility of underlying asset price. Investors should be aware of the underlying asset volatility.