

The category includes trading in barrier currency options. The factsheet assumes that you are familiar with the basic concepts of options (see also *Basic options*).

Barrier currency options are derivative financial instruments and are relevant for those who wish to hedge a future exchange rate or speculate on an expected movement between two currencies.

A barrier currency option is a contract between two parties, where the buyer obtains the right - but not the obligation - to buy (call) or sell (put) a currency. The return depends on whether the exchange rate crosses a predetermined trigger rate during the term of the contract.

Knock-out

The option ceases to exist if the knock-out trigger is hit at any point.

Knock-in

The option can only be exercised at expiry if the knock-in trigger has been reached at some point during the term of the contract.

There can be multiple trigger levels, e.g., both an upper and a lower trigger. One trigger may cause knock-out, while another may trigger knock-in. If both conditions can occur, knock-out always takes precedence.

- When buying barrier currency options, you can hedge exchange rate risk within the agreed barriers without giving up the potential for gains if the market develops favourably.
- When selling barrier currency options, you assume risk because you have the obligation to buy or sell currency if the option is exercised and knock-in has occurred while knock-out has not. You receive a premium for assuming this risk.

Barriers create a probability that the contract either terminates (knock-out) or cannot be exercised (knock-in). As a result, the premium is typically lower than for a standard currency option. At expiry, the option will only be exercised if it yields a positive gain (e.g. the exchange rate is above the strike for a call option).

Opportunities offered by barrier currency options

Barrier currency options are customised agreements, which means that the currency pair, contract size, term and structure are not standardised. They are traded OTC with a financial counterparty.

You can use buying and selling barrier currency options to:

- increase your exposure to a currency;
- hedge risk on a currency position;
- trade with limited liquidity needs, as you only pay the premium when buying; and
- leverage your investment

Because barrier currency options include additional conditions compared to standard options, the premium is typically lower.

A barrier currency option is relevant if you want to hedge a position, but only if the market reaches a specific level.

1. Benefits and drawbacks

Benefits	Drawbacks
Potential for leveraged returns (for the buyer) if the market develops favourably, while losses are limited to the premium.	Often no clear market price - pricing is model-based.
Can eliminate risk from exchange rate movements within certain ranges or time periods.	Risk of unlimited loss when selling barrier currency options.
You can invest in a currency without having the full liquidity available. Barriers can provide greater leverage than normal currency options.	Barrier currency options can be complex and difficult to assess.
The premium is typically lower than for standard currency options.	Multiple conditions must be met for the option to have value.

2. Return

The value of a currency option is influenced by, among other factors:

- volatility between the two currencies;
- term to maturity;
- strike prices; and
- specific barrier parameters (knock-in/knock-out)

As a buyer of an option you have unlimited profit potential, while losses are limited to the premium. As a seller, the opposite applies, you have potentially unlimited loss risk, while the gain is limited to the premium.

3. About risk

Barrier currency options have an asymmetric risk profile.

As a buyer of a currency option, your maximum loss is limited to the premium you have paid. Conversely, as a seller, you are exposed to potentially unlimited risk, as the exchange rate can move without an upper limit.

Barrier currency options are traded OTC, which means that the price when opening and closing a position depends on whether other market participants are willing to take the opposite side. Under normal conditions, there is liquidity, but in stressed or volatile markets, liquidity can decline, which affects the price.

4. What you should know before trading

When trading derivative financial instruments with the Bank, you may be required to enter into a framework agreement. This agreement outlines how the Bank monitors the risk you assume and gives the Bank the right to terminate the contract or require collateral if the market value moves so far against you that it exceeds the agreed credit limits.

If you wish to receive individual advice on setting up and managing options transactions on an ongoing basis, you should contact your adviser.

Tax

We only provide general tax advice. The applicable tax rules depend on how you invest - whether as a private individual, a personal business, a company or through pension savings. For specific advice, you should consult an accountant.

Costs

Trading options involves a markup or markdown depending on market conditions. The size of the markup depends on daily market turnover and the agreed margin, which covers the Bank's costs and earnings. When buying options, the costs are typically included in the premium.