Currency derivatives

Introduction

Currency derivatives are complex financial instruments and this is a collective term for instruments such as options, futures and swaps.

The derivative's value is based on the underlying asset; the price is influenced partly by the interest rate, remaining maturity and volatility (describes how much the underlying asset is estimated to vary during the term to maturity).

The characteristic of a derivative is that it is linked to events or conditions at a specified time or period in the future.

Different derivative instruments have different risk levels and factors that affect the return. It is therefore important that you find out what applies to the particular derivative that you will be investing in.

How currency derivatives work

Currency derivatives are used to hedge a future payment or receivable in a foreign currency or to change a currency exposure over time.

- A currency derivative primarily reflects the interest spread between its component currencies (a currency future).
- A currency derivative is tailored to customer needs regarding maturity, level, amount, and more. It is usually an unlisted instrument and is traded OTC (Over The Counter).

Transactions in some currency derivatives require that you pledge collateral, and as the price of the underlying asset changes, the collateral requirement also changes.

Different types of currency derivatives

Currency options

A currency option is an agreement between two parties which gives the holder:

- The right but not the obligation to buy (call option) or sell (put option) a currency in exchange for another currency at a predetermined price (strike price) at a predetermined date (expiry date).

If the price of the currency on the expiry date is lower than the strike price of the call option or higher than the strike price of the put option, the option expires as worthless and the premium paid is lost. The premium can also be lost if the price on the expiry date is equal to the strike price of the call or put option.

A currency option is an agreement between two parties which gives the issuer:

- The obligation but not the right to sell (call option) or buy (put option) a currency at a predetermined price (strike price) at a predetermined date (expiry date).

A call option means that the issuer must sell the currency to the holder at the strike price, even if the price of the currency on the expiry date exceeds the strike price.

A put option means that the issuer must buy the currency at the strike price, even if the price of the currency on the expiry date is lower than the strike price.

- The price of the option is called the premium and is paid by the holder of the option (the buyer) to the issuer of the option (the seller).
- Currency options are typically European style. This means that the option can only be utilised or settled for cash on the expiry date. “American options” can be exercised by the holder during the term to expiration.

When the underlying currency’s value rises or falls, the relative value of an investment in a currency option can be influenced more than the relative value of an investment in the underlying currency (leverage effect).

Currency forwards

The purpose may be to hedge a future payment or receivable at a known foreign exchange rate, thus avoiding a currency risk.

A currency forward is an agreement between two parties, where both the buyer and seller agree to buy or sell the underlying asset at a predetermined price with delivery at a later date.

- The difference in price between a forward and the current exchange rate consists mainly of an interest premium or interest deduction calculated up to the forward’s expiry date.
- The forward price is affected by the currency's current exchange rate and by the difference in interest between the currencies for the maturity in question.
- The maturity is normally less than one year.
- Both parties are required to fulfil specified contractual undertakings.

Flexible currency forwards

- A flexible currency forward is a combination of a currency forward and a currency option.
- Like a normal currency forward, a flexible currency forward offers a pre-agreed price for delivery at a later date.
- The option portion of a flexible currency forward can make the outcome higher or lower than for a corresponding currency forward.
- Some examples of flexible currency forwards are Mixtermin (mixed forward), Flextermin (flexible forward) and Intervalltermin (range forward).

Currency swaps

- A currency swap is an agreement between two parties to exchange payment flows in two different currencies with each other on two different dates.
- A currency swap consists of both the purchase and sale of one currency for another currency, on two different dates.
- The amounts are usually the same on both dates, denominated in one currency. However, the opposing currency amount will differ between the two dates, due to the difference in interest between the two currencies between the dates.
- The currency swap price consists of the interest rate differential between the currencies for the maturity in question.
- The purpose may be to change currency exposure over a specified time; for example, if you want to postpone or bring forward an expiring currency forward transaction.
Risk

In an investment context, risk signifies the probability that the invested capital will fall in value. Taking a greater risk often means more opportunity of a high yield, but at the same time the risk of losing money also increases.

- The higher the risk, the greater the fluctuations in price you may expect.
- With lower risk, you can expect smaller fluctuations in price performance.

The risk can vary dramatically between different derivatives. Derivatives can be used to either increase or reduce the risk.

There is a risk that the counterparty in a currency derivative will not fulfil its obligations.

By using a currency derivative, you can avoid the risks involved in future changes in foreign exchange rates. If you choose to use currency derivatives for speculative purposes, you are taking a higher risk.

Options

- Price fluctuations may be greater for the option than for its underlying asset.
- If you buy an option, the maximum you can lose is the paid premium.
- If you issue an option, the loss can be unlimited.

Futures

- In general, the risk in a future is the same as for the underlying asset.

Currency swaps

The risks of a currency swap consist mainly of counterparty risk, flow risk and interest rate risk. Counterparty risk is the risk that the counterparty will not be able to fulfil its obligations on the delivery date. Flow risk is the risk that the payment flows will have changed between entering into the currency swap and delivery of the currency swap. Interest rate risk is the risk that the interest rates that were the basis of your entering into a currency swap will differ negatively from the interest rates prevailing at a later date.

If you need help in finding the risk level that suits you, our advisers will be pleased to assist.

Always ask for supplementary marketing material or further information with more details about the financial instrument you are interested in.

If you would like to read more about risk, see the agreement “Trading in financial instruments and currencies”. The agreement is available from your branch, or at www.handelsbanken.com

Advantages and disadvantages of currency derivatives

- A currency forward enables you to avoid currency risk during the hedge period.
- With a currency swap, you can change currency flows over time.
- Currency forwards and currency swaps are not traded over a marketplace, but are tailored to a specified risk.
- They can produce yields regardless of whether the market rises, falls or remains unchanged.
- Currency swaps are appropriate as a risk distribution tool, since they:
  - can be used to protect a holding.
  - can produce a higher yield with a lower capital investment than normally required for an equivalent transaction directly in the underlying currency pair.
  - create the opportunity to realise a profit in an underlying asset, while also profiting from further price rises.
  - They require extensive monitoring of the price performance in the derivative instrument and the underlying exchange rate.
  - The risk of loss may be unlimited when issuing options.

Important information

- The historical return of a financial instrument is not a guarantee of future return. The value of financial instruments can rise or fall, and it is not certain that you will get back all the capital you have invested.
- You must familiarise yourself with Handelsbanken’s agreement – “Trading in Financial Instruments and Currencies”, as well as the other terms and conditions that may apply to trading in financial instruments.
- Check the information on the contract slip and if there are any errors, immediately inform us.
- You should regularly monitor your holdings and positions.
- You are responsible for investigating the taxation consequences that owning the instrument may entail for you.
- You are responsible for taking any action necessary to reduce the risk of losses.
Appropriateness test

By law, financial institutions are obliged to ascertain whether you have sufficient knowledge and/or experience to understand the risk involved in trading in financial instruments.

If you as a customer are classified as a retail client, and are buying currency derivatives through Handelsbanken for the first time, we will need to go through the following questions with you:

1. Do you have previous experience of, and sometime during the last two years have carried out trading in currency derivatives, and/or have knowledge of this group of instruments?
2. Are you familiar with the risk involved in investing in currency derivatives?

If you do not have sufficient experience and/or knowledge to understand the risks, we can take you through the workings of currency derivatives, as well as the risks involved in investing in them.

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<thead>
<tr>
<th>Currency derivatives</th>
<th>Knowledge</th>
<th>Answer</th>
<th>Risk</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1. Are currency derivatives normally traded over a stock exchange?</td>
<td>Yes No ?</td>
<td>1. Does the leverage effect mean that the loss on a derivative can be greater than for the underlying asset?</td>
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<td>2. Is the buyer of a currency forward obliged to buy the underlying currency on the expiry date?</td>
<td>Yes No ?</td>
<td>2. Does a sold (issued) option involve greater risk than a held one?</td>
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<td>3. Does a currency forward have a daily settlement?</td>
<td>Yes No ?</td>
<td>3. Is the performance of the underlying currency the only factor affecting the price of the derivative during its lifetime?</td>
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<td>4. Does the interest rate affect the currency forward price?</td>
<td>Yes No ?</td>
<td>4. Can a currency forward enable you to avoid currency risk?</td>
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<td>5. Does a currency swap consist of both a purchase and a sale?</td>
<td>Yes No ?</td>
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<td>6. Is a flexible forward a combination of a forward and an option?</td>
<td>Yes No ?</td>
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<td>7. Does the issuer of an option pay a premium?</td>
<td>Yes No ?</td>
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<td>8. Does the price of a put option increase if the price of the underlying currency decreases?</td>
<td>Yes No ?</td>
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<td>9. Does the holding of a call option give the right but not the obligation to buy the underlying currency?</td>
<td>Yes No ?</td>
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<td>10. Can a typically European style currency option be exercised only on the expiry date?</td>
<td>Yes No ?</td>
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