Danske Bank

Information on forward exchange contracts

This fact sheet contains information on forward exchange contracts traded through Danske Bank.

Forward exchange contracts may be traded in an OTC transaction with Danske Bank as the counterparty.

A forward exchange contract is a binding agreement between two parties to buy or sell a specific amount of currencies at a fixed exchange rate at a specified future date.

The strike rate is agreed by the parties on conclusion of the contract.

Using forward exchange contracts
A forward exchange contract is typically used to hedge receivables and obligations denominated in foreign currency.

A Danish entity exporting goods to the USA and receiving income in USD can use forward exchange contracts to hedge the exchange rate risk by selling USD against DKK on forward contracts. At the due date, the entity delivers the agreed amount in USD and receives an amount in DKK translated using the agreed forward rate.

Forward exchange contracts may also be used for refinancing loans from DKK to another currency. If, for example, a customer wishes to refinance a loan denominated in DKK at the next interest payment date, he may opt to sell the foreign currency against DKK. The due date of the contract will coincide with the next interest payment date of the loan.

Pricing forward exchange contracts
The price of buying or selling foreign currency against e.g. Danish kroner via a forward exchange contract is determined by:

- the current market rate, *M* (spot rate)
  The current market rate, or spot rate, is the exchange rate in force at the time when currency is exchanged. A spot transaction is usually settled two business days after the contract is concluded.
- the interest rate on the variable currency (DKK) for buying or selling USD against DKK, R^1
- the interest rate on the base currency (USD) for buying or selling USD against DKK, R^2
- the interest rate differential between the currencies traded, $R^1 - R^2$
- the term of the forward transaction, *D*.
  The premium to and deduction from the spot rate is calculated as: $M * (R^1 - R^2) * D /(R^2 * D)+(360 *100)$.
  As a result, the forward rate is calculated as: Spot rate (+/-) forward premium.

If you buy or sell a currency with a higher interest rate than DKK, the forward rate will be lower than the current spot rate. Conversely, a premium will be added if the currency you buy or sell has a lower rate of interest than DKK.

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Maturity of forward exchange contracts
Forward exchange contracts are settled at the maturity date at the agreed forward rate. On expiry of the forward contract:

- the agreed amounts of currency may be exchanged;
- the contract may be extended subject to full or partial market value adjustment and cash settlement.

If the maturity of the forward exchange contract is extended, the price of the transaction will usually be adjusted fully to reflect the current market rate.

If the transaction produces a loss on maturity, the price adjustment will entail that you must pay the difference between the agreed forward rate and the current market rate.

If the transaction leads to a gain on maturity, the price adjustment will entail that you will receive an amount corresponding to the difference between the agreed forward rate and the current spot rate.

Calculating the liquidity premium
The liquidity premium is calculated on the basis of the following:

- the original forward rate agreed, *T*;
- the market rate at the time of extension, *M*
- the deposit or lending rate, *R*; and
- the number of days for which a transaction is extended, *D*.

The premium is calculated as
(T-M) * R * D / (360*100)

The day-count factor, 360, depends on the actual currency in which the gain or loss is denominated.

Early settlement
If the basis of the transaction ceases to exist in whole or in part before maturity, the transaction may be settled early. In such case, the rate originally agreed will be adjusted in order to reflect the forward premium or discount for the remaining period with the addition of interest on the gain/loss on the transaction.

Some currencies are subject to restrictions and are not traded internationally. Instead, the risk on those currencies can be hedged by a Non-Deliverable Forward (NDF) contract.

The main difference between a traditional forward transaction and an NDF lies in the settlement at maturity. For an NDF, there is no physical exchange of the underlying currencies. Instead, cash settlement is used, typically based on the difference between the strike rate and the market rate (spot rate) applying – usually – two business days prior to maturity. Cash settlement is usually made in USD.

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Term
When involving the most liquid currencies, forward exchange contracts typically have a maximum term of from two to three years. For currencies in secondary forward markets, liquidity in excess of 12 months may be limited.

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Risk factors
You should be aware that trading in forward exchange contracts involves substantial risk.

Under the executive order on risk-labelling of investment products, this product type is in the “RED” category.
The “Red” category consists of: “Investment products involving a risk of losing more than the amount invested, or product types which are difficult to understand”.

The risk-labelling categories defined by the Danish Financial Supervisory Authority (“DFSA”) can be found at www.danskebank.dk/risikomaerkning [(in Danish only)].
The risk-labelling system should not form the exclusive decision-making basis of an investment. It is only intended as a supplement to the information you should obtain before making an investment or to the advice you receive from the bank after defining your investment profile.

Trading in forward exchange contracts involves a risk that the strike rate is unfavourable relative to the market rate the contract is settled against at the due date.

Accordingly, if you buy foreign currency in a forward transaction that is to be settled at an exchange rate that is higher than the market rate applying at the settlement date, the transaction will be loss-making. The loss will equal the difference between the strike rate and the market rate. Conversely, the transaction will yield a gain if the strike rate is lower than the market rate at the settlement date.

If you sell foreign currency in a forward transaction that is to be settled at an exchange rate lower than the market rate, the transaction will be loss-making. The loss may be unlimited corresponding to the difference between the market rate and the strike rate. Similarly, the transaction will yield a gain if the strike rate is higher than the market rate.

If a forward exchange contract is settled early, a change in the interest rate differential will trigger a change in the premium or discount in excess of the change triggered by the shorter term to maturity. This could cause you to incur a loss on the transaction.

Collateral
When you enter into transactions with Danske Bank as the counterparty, we may require that you provide collateral.

Special market conditions
Under special market conditions, it may be difficult or impossible to close a position; for example if, during periods of frequent price fluctuations, prices rise or fall to such an extent that we are unable to provide a price.

Tax
The tax treatment of gains or losses on forward exchange contracts depends on whether you are trading as a private individual or on behalf of a company.

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Due to the complex nature of this area, we recommend that you consult an accountant or other professional adviser to clarify the tax and accounting consequences to you of engaging in such trading.

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