

# Information about Currency Swap transactions

This fact sheet provides general information about currency swap transaction that can be traded through Danske Bank. A swap transaction can be entered into as an OTC transaction with Danske bank as counterparty.

## WHAT IS A CURRENCY SWAP TRANSACTION?

A currency swaptransaction is a binding agreement between two parties to exchange a specific currency amount at a fixed exchange rate at a near date and to reverse the transaction at another fixed exchange rate at the maturity date of the swap.

#### USING CURRENCY SWAP TRANSACTIONS

A currency swap transaction is generally used to manage liquidity in connection with cash flows in foreign currency.

A Danish company has excess USD liquidity for a period of time, but payables in USD in general. The company can use a currency swap to exchange the USD liquidity into DKK to cover any negative balance in his DKK account in the period. When the swap transaction matures, the USD amount is returned to the company against paying DKK. The company can pay his invoice in US Dollars without being exposed to exchange rate fluctuations in the period, which would have been the case if the USD was exchanged to DKK in the start and exchanged back, when invoice should be paid.

A currency swap transaction can essentially be broken down into two opposite forward currency transactions simultaneously; one near leg against one far leg.

## PRICING A CURRENCY SWAP TRANSACTION

The price of a currency swap in US Dollars against Danish Kroner is determined by the following factors:

- The current market rate, M (the spot rate)
- Interest rates in the quoted currency DKK, R1
- Interest rates in the base currency USD, R2
- The interest rate differential between the currencies traded (R1 less R2)
- Maturity of the swap transaction, D.

If the transaction involves a currency with higher interest rate than Danish Kroner, the swap rate will trade at a discount compared to the current spot rate, such that the far leg DKK exchange rate is lower, compared to the near leg DKK exchange rate. Conversely, a premium is added if the transaction involves a currency with lower interest rates than Danish Kroner.

The swap premium or discount relative to the spot rate is determined as follows:

M\*(R1-R2)\*D/(360\*100).

Once the swap premium/discount have been determined, a client margin is added to the transaction to cover credit, funding, and capital costs, resulting in a negative impact on the market value at the time the transaction is concluded.

The swap rates, then, is determined as follows: Near leg: Spot rate Far leg: Spot rate + swap premium/discount

#### MATURITY OF CURRENCY SWAP TRANSACTIONS

Currency swap transactions are settled at both maturity dates, using the agreed near leg spot rate and the far leg forward rate. The following events may take place when the far leg of the swap matures:

- The parties exchange the agreed currency amounts
- The transaction is extended with full exchange rate adjustment and cash settlement of the difference

An extension of the maturity of a currency swap transaction generally involves full exchange rate adjustment, meaning that the transaction is adjusted to the current market exchange rate.

In other words, if the transaction is loss-making at the maturity date, exchange rate adjustment means that you will be required to pay the difference between the agreed forward rate and the current market rate.

If the transaction is profitable at the maturity date, exchange rate adjustment means that you will receive the difference between the agreed forward rate and the current market rate.

# CALCULATING THE LIQUIDITY PREMIUM

If the transaction is extended partially, a liquidity premium is calculated based on the following:

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

in the following equation:

#### $(T-M) \times R \times D / (360 \times 100)$

The divisor, shown above as 360, depends on the actual day convention of the currency in which the gain or loss is expressed.

#### **EARLY TERMINATION**

If the basis for the agreement terminates in whole or in part before the transaction matures, the transaction should be considered to be terminated accordingly by entering into an opposite forward transaction. In case the company would like to settle the gain/loss this can be achieved by early settlement of both forward transactions. In such case, the rate originally agreed will be adjusted to reflect the forward premium or discount for the remaining period, and interest on the gain/loss on the transaction.

#### **TERM**

When involving the most liquid currencies, currency swap transactions typically have a maximum term of two-three years. For currencies in less liquid forward markets, liquidity in excess of 12 months may be limited.

#### **RISK FACTORS**

A currency swap transaction involves a risk that the forward rate is unfavourable relative to the spot rate at which the transaction will be settled at the settlement 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 equals the difference between the forward rate and the spot rate. Conversely, the transaction will be profit-making if the forward rate is lower than the spot rate at the settlement date.

If you sell foreign currency in a forward transaction that is to be settled at an exchange rate that is lower than the spot rate applying at the settlement date, the transaction will be loss-making. The loss equals the difference between the spot rate and the forward rate. Conversely, the transaction will be profit-making if the forward rate is higher than the spot rate.

If a currency swap transaction is settled prior its scheduled maturity, a change in the interest rate difference 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/profit on the transaction.

#### **COLLERATERAL**

We may require you to provide collateral when you enter into a transaction with us as counterparty.

# SPECIAL MARKET CONDITIONS Under special market conditions, it may be difficult or impossible to liquidate a position. This may occur, for example, at times of rapid price movements if the prices rise or falls to such extent that we are unable to stipulate a price or trading of financial instruments are suspended or restricted under the rules of the regulated market place. TAXATION The tax treatment of a gain or a loss on a currency swap transaction depends on whether you are dealing as a private individual or on behalf of a company.