# Information on forward rate agreements-FRA

This fact sheet contains general information on forward rate agreements traded through Danske Bank.

A forward rate agreement (FRA) is an agreement between two parties that determines a future rate of interest with a single interest rate payment date.

FRAs can be traded as a future admitted to trading on a regulated market or over-the-counter (OTC) with Danske Bank as the counterparty.

Instruments admitted to trading on a regulated market are standardised. Strike rates, expiry dates and amounts are fixed by the regulated market, and specific procedures are in place for settlement of losses and gains at the end of each trading day.

OTC transactions can be tailored to specific needs but may also be traded on standardised terms and conditions. This is the case when OTC transactions are derived from futures admitted to trading on a regulated market. Such transactions are settled exclusively on expiry.

The buyer of an FRA hedges against rising interest rates at a future date, while the seller hedges against falling interest rates.

An FRA is settled by settling the difference at the beginning of the interest period – based on the difference between the agreed interest rate and the current market rate for the period.

If the market rate is higher than the agreed interest rate, the buyer will receive and the seller will pay the difference. If the market rate is lower than the agreed interest rate, the buyer will pay and the seller will receive the difference.

The cash-settled amount can be calculated using the following formula:

Settlement amount = C \* (M-A) \* d/D \* DFwhere DF = 1 / (1+M \* d/D)

C = Contractual amount

M = The underlying market rate

A = The agreed interest rate

d = The current number of FRA interest days

D = Interest days per year - either 360 or 365

DF = The discount factor

The cash-settled amount is translated into present value using the discount factor

because, as mentioned above, settlement is effected when the interest period commences.

# Using FRAs

An FRA may be used to hedge the fixing of interest on deposits or loans for an upcoming interest rate payment date.

If a borrower with a floating-rate debt expects the 3-month rate in three months to be higher than current market expectations, buying an FRA would reflect this expectation.

Conversely, an investor holding floating-rate deposits may act on expectations of lower interest rates compared with market expectations by selling an FRA.

## Pricing

The price of an FRA is based on the interest rate for the period from the date the contract is concluded to its effective date and the interest rate for the period from the date the contract is concluded to its end date.

Example of forward rate agreement -FRA "30 against 60 days"



In the example, the theoretical price of the FRA will be determined in such a way that a borrower incurs the same costs and an investor obtains the same return by using one of the following options: borrowing/placing for 30 days and buying/selling an FRA; borrowing/placing for 60 days.

When the theoretical price has been fixed, a client margin is added to the transaction, which results in a negative market value at the date of the transaction. The negative market value corresponds to the present value of the

client margin during the entire term of the transaction.

### Term

An FRA is typically used to hedge interest periods for up to one year which arise within the next-coming three years.

If a transaction is terminated prior to its scheduled maturity, the market value may be negative. The party to whom the transaction has a negative market value must compensate the other party by an amount equal to the absolute value of the negative market value.

#### Risk factors

When you buy or sell an FRA, there is a risk that the transaction must be settled at an interest rate that is unfavourable compared with the market rate at the settlement date. The loss may be unlimited.

During the term of the transaction, interest rate developments will affect the market value of the transaction. If you buy an FRA, falling

interest rates will cause you to incur a loss, while the opposite would apply to the seller. 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.

#### Collateral

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

When you enter into contracts with Stockholmbörsen AB as the counterparty, the stock exchange will require that you provide collateral through Danske Bank. See the rules of the stock exchange on derivatives trading at <a href="https://www.omxgroup.com">www.omxgroup.com</a>.

# 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 fix a price or the stock exchange suspends or restricts trading in contracts.

#### Tax

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

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.