Danske Bank

Information about Inflation swaps

This fact sheet provides general information about inflation swaps that can be traded through Danske Bank. Inflation swaps can be entered into as an OTC transaction with Danske Bank as counterparty.

WHAT IS AN INFLATION SWAP?

An inflation swap is an agreement between two parties to swap floating rate linked to an inflation index (realized inflation) to fixed rate coupon in the same currency.

When entering into an inflation swap, the parties agree to swap:

- floating rate linked to an inflation index for a fixed rate coupon

An inflation swap may be adjusted to suit individual needs. When entering into an agreement to trade an inflation swap, the two counterparties will typically agree on the following parameters:

- the start and end date;
- the currency and notional amount;
- the profile of the notional amount during the term of the transaction;
- the inflation index to be swapped;
- the resetting frequency for inflation (typically annually); and
- the frequency for payments (typically annual payments in order to avoid effects from seasonality in the CPI index).

The profile of the notional amount can be a so-called bullet profile, for which the notional amount is not amortized during the term of the transaction. An alternative is a serial profile, for which the notional amount is amortized by equal amounts during the term. The profile can also be completely customized to suit individual needs.

Taking the above terms into consideration, the two parties will agree on a fixed rate coupon.

The floating rate is determined relative to a reference inflation index. For example in Eurozone this is typically EUR CPI index. In Europe normal market practice is to use unrevised inflation index with 3 months lag. This means that for example June payments are calculated based on same year March inflation index level. Other methods can also be used.

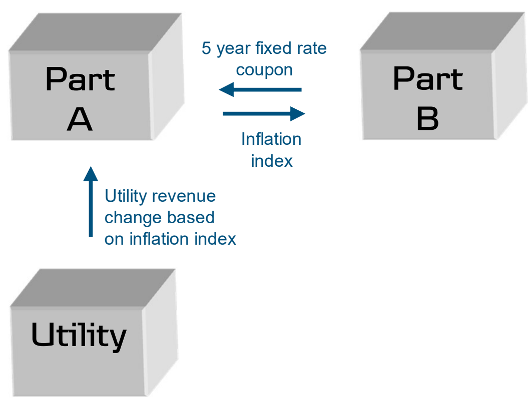
Payments are determined according to the notional amount agreed upon for every payment period and paid on the pre-agreed dates.

- If the floating rate amount is greater than the fixed rate amount, the party paying the fixed amount will receive from the other party the difference between the two;
- If the floating rate amount is below the fixed rate amount, the party paying the fixed amount will pay to the other party the difference between the two.

If floating inflation index is negative, the party receiving the corresponding floating rate amount will instead pay that amount.

USING INFLATION SWAPS

The following is an example of how inflation swaps can be used.



In the example part A is a utility company. Its revenue changes are based on inflation index. Company A wants to fix its revenue changes for next 5 years. To do that company A enters an inflation swap agreement with bank B. After inflation swap is done Part A forwards its utility revenue changes annually to Part B for next 5 years. At the same time Part A receives fixed rate coupon for the same notional. Fixed rate coupon payments are also done annually.

Hence Part A has fixed its revenue changes for next 5 years for the part of revenue which corresponds notional of the inflation swap agreement.

Pricing inflation swaps
The basic principle of determining the price of inflation swap is that the present values of the two cash flows (with addition of a possible upfront payment) should be identical so that the transaction has no market value when it is entered into.

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Future of the floating inflation index is unknown. Floating inflation index level will follow the realized inflation and it will be determined during the inflation swap in the fixing days. One can approximate future values by using a markets calibrated forward curve of corresponding inflation index. The curve is modelled using data from realized inflation swap contracts. These approximations are used when present value of floating inflation index payments is priced.

The fixed rate coupon is then determined as an average rate (effective yield) of the expected development in the floating inflation index. The rate is fixed so the present values of the two cash flows are identical.

During the pricing client margin is added to the transaction, which results in a negative market value at the time the transaction is entered into. Negative market value is corresponding to the present value of the client margin during the entire term of the transaction.

TERM

The term of an inflation swap varies from inflation index to another. For example in EUR CPI index swaps are done up to 30 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

The risk of an inflation swap relates to the future development in inflation index.

The greatest risk for a payer of fixed coupon is a general and long lasting decline in realized inflation and in inflation expectations, which would increase the present value of the future payment obligation. The opposite applies when realized inflation go up.

The market value reflects the difference between the present value of future floating inflation index payments and future fixed coupon payments.

COLLATERAL

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

TAXATION

The tax treatment of a gain or a loss on an inflation swap depends on whether you are dealing as a private individual or on behalf of a company.

Due to the complex nature of the relevant tax rules, we recommend that you consult an accountant, tax advisor or other professional adviser to clarify the tax and accounting consequences.

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