



deal types



1. short term interest refund deal

MIFID complexity

FX 2

product description

The interest burden of a loan available in multiple currencies can be reduced by means of a short-term interest refund deal, if the client is willing to run foreign exchange risk. On expiry, the client receives guaranteed interest refund. In return, conditional conversion obligation must be undertaken with respect to its loan, for an exchange rate that is more advantageous than the forward rate applicable at the trade date to the end date of the tenor.

The obligation to execute the conversion will take effect if on the date of expiry the current market exchange rate is:

- above the conditional exchange rate for HUF loans, and
- below the conditional exchange rate for foreign currency loans.

The tenor of this product is always shorter than the tenor of the loan, since if necessary, the loan itself will be converted.

example for a HUF loan: a company has a HUF loan with a remaining tenor of one year, and a HUF 29 000 000 notional, which can be drawn in multiple currencies. The client would like to reduce the related interest expenditure, but at the 290 EUR/HUF exchange rate it is of the opinion that the immediate conversion of the loan into euros would mean exaggerated foreign exchange risk. At the EUR/HUF rate of 296, the client would already be willing to convert the loan into euros, but in the meantime it would like to reduce the interest burden of the HUF loan. Therefore, the company in our example enters into a 3-month interest refund deal, as part of which it is willing to run the risk that if in three months the EUR/HUF exchange rate exceeds 296, the loan will be converted into euros. The conversion of the loan can be effected thus, at a rate that is far better than the 3-month forward exchange rate applicable on the trade date (293 EUR/HUF) but less advantageous than the market rate applicable on the date of expiry. The interest refund will be credited by the bank in all cases at the end of the tenor of the deal, to the client's account and in HUF, irrespective of whether or not the loan is converted into euros.

parameters of interest refund deal for HUF loans

notional	HUF 29 000 000
tenor	3 months
currencies	EUR/HUF
expiry date (date of exchange rate monitoring)	2 business days before end of tenor
delivery date (crediting of interest refund)	end of tenor
spot exchange rate at time of pricing	290 EUR/HUF
3-month forward rate	293 EUR/HUF
ATMF volatility	15%
conditional exchange rate	296 EUR/HUF
condition	the spot market rate at 12:00 p.m. on the expiry date is higher than the conditional exchange rate
notional in the event of conditional conversion	$29\,000\,000 / 296 = \text{EUR } 97\,972.97$
rate of interest refund (annual)	5.00%
currency of interest refund	HUF

possible outcomes on expiry as a function of spot market rates at 12:00 p.m. on the expiry date

exchange rate below 296 EUR/HUF	The bank credits the interest refund to the client's account on the delivery date. The loan will continue to be maintained in HUF, and the client can reduce the interest burden of the loan with similar deals in the future as before, and can freely consider the conversion of the loan, as well.
exchange rate above 296 EUR/HUF	The bank credits the interest refund to the client's account on the delivery date. The loan will be converted to EUR at the 296 EUR/HUF exchange rate, and the client will in the future pay interest at a rate tied to the EURIBOR.
best-case scenario (treasury transaction on a standalone basis)	On the expiry date the market exchange rate is lower than the conditional rate. The loan is not converted. The client receives guaranteed interest refund in HUF.
worst-case scenario (treasury transaction on a standalone basis)	On the expiry date, the market exchange rate is higher than the conditional rate. The client's loan is converted at the conditional rate. The client receives guaranteed interest refund.

the market value of the position two weeks after the trade date from the customer's point of view

market value: the cost of closing the position calculated at a given point of time and under the prevailing market terms and conditions (deal can be closed with profit if the market value is positive)

(assumption: except for the spot market rate, all other factors are unchanged, monthly HUF-EUR interest differential remains 1 forint)

The number of possible outcomes is unlimited, and there may be even more extreme values than the ones presented below.

spot exchange rate in two weeks' time (EUR/HUF)	market value of the position (HUF)
260	- 60 000
290	- 483 000
320	- 2 755 000

financial outcome of some possible scenarios on the expiry date

The number of possible financial outcomes is unlimited, and there may be even more extreme values than the ones presented below.

exchange rate on expiry (EUR/HUF)	conversion of loan without interest refund transaction	conversion of loan as part of a forward transaction	loan + interest refund transaction
260	$29\,000\,000 / 260 = 111\,538.46$ EUR	$29\,000\,000 / 293 = 98\,976.11$ EUR	no obligation to convert loan interest refund: HUF 362 500
290	$29\,000\,000 / 290 = 100\,000$ EUR		conversion of loan: $290\,000\,000 / 296 = \text{EUR } 97\,972.97$
320	$29\,000\,000 / 320 = 90\,625.00$ EUR		interest refund: HUF 362 500

example for a EUR loan: a company has a EUR loan with a remaining tenor of one year, and a EUR 1 000 000 notional, which can be drawn in multiple currencies. The client would like to reduce the related interest expenditure, but at the 290 EUR/HUF exchange rate it is of the opinion that the immediate conversion of the loan into forint would mean exaggerated foreign exchange risk. At the EUR/HUF rate of 285, the client would already be willing to convert the loan into forint, but in the meantime it would like to reduce the interest burden of the EUR loan. Therefore, the company in our example enters into a 3-month interest refund deal, as part of which it is willing to run the risk that if in three months the EUR/HUF exchange rate drops below 285, the loan will be converted into forint. The conversion of the loan can be effected thus, at a rate that is far better than the 3-month forward exchange rate applicable on the trade date (293 EUR/HUF) but less advantageous than the market rate applicable on the date of expiry. The interest refund will be credited by the bank in all cases at the end of the tenor of the deal, to the client's account and in EUR, irrespective of whether or not the loan is converted into euros.

parameters of interest refund deal for EUR loans

notional	EUR 100 000
tenor	3 months
currencies	EUR/HUF
expiry date (date of exchange rate monitoring)	2 business days before end of tenor
delivery date (crediting of interest refund)	end of tenor
spot exchange rate at time of pricing	290 EUR/HUF
3-month forward rate	293 EUR/HUF
ATMF volatility	15%
conditional exchange rate	285 EUR/HUF
condition	the spot market rate at 12:00 p.m. on the expiry date is higher than the conditional exchange rate
notional in the event of conditional conversion	$100\,000 * 285 = 28\,500\,000$ HUF
rate of interest refund (annual)	1.35%
currency of interest refund	EUR

possible outcomes on expiry as a function of spot market rates at 12:00 p.m. on expiry date

A) exchange rate above 285 EUR/HUF	The bank credits the interest refund to the client's account on the delivery date. The loan will continue to be maintained in EUR, and the client can reduce the interest burden of the loan with similar deals in the future as before, and can freely consider the conversion of the loan, as well.
B) exchange rate below 285 EUR/HUF	The bank credits the interest refund to the client's account on the delivery date. The loan will be converted to EUR at the 285 EUR/HUF exchange rate, and the client will in the future pay interest at a rate tied to the BUBOR.
best-case scenario (treasury transaction on a standalone basis)	On the expiry date the market exchange rate is higher than the conditional rate. The loan is not converted. The client receives guaranteed interest refund in EUR.
worst-case scenario (treasury transaction on a standalone basis)	On the expiry date, the market exchange rate is lower than the conditional rate. The client's loan is converted at the conditional rate. The client receives guaranteed interest refund.

the market value of the position two weeks after the trade date from the customer's point of view

market value: the cost of closing the position calculated at a given point of time and under the prevailing market terms and conditions (deal can be closed with profit if the market value is positive)

(assumption: except for the spot market rate, all other factors are unchanged, monthly HUF-EUR interest differential remains 1 forint)

The number of possible outcomes is unlimited, and there may be even more extreme values than the ones presented below.

spot exchange rate in two weeks' time (EUR/HUF)	market value of the position (HUF)
260	- 2 252 000
290	- 228 000
320	- 21 500

financial outcome of some possible scenarios on the expiry date

The number of possible financial outcomes is unlimited, and there may be even more extreme values than the ones presented below.

exchange rate on expiry (EUR/HUF)	conversion of the loan without interest refund transaction	conversion of the loan as part of a forward transaction	loan + interest refund transaction
260	$100\,000 * 260 = 26\,000\,000$ HUF	$100\,000 * 293 = 29\,300\,000$ HUF	conversion of loan: $100,000 * 285 =$ HUF 28,500,000 interest refund: EUR 337.50
290	$100\,000 * 290 = 29\,000\,000$ HUF		no obligation to convert loan interest refund: EUR 337.50
320	$100\,000 * 320 = 32\,000\,000$ HUF		

advantages of transaction

- on expiry, the client receives guaranteed interest refund, irrespective of the market exchange rate effective on the expiry date
- the client has an obligation to convert the loan at a future exchange rate that is more advantageous than the one effective at the time the deal is concluded
- the possible conversion of the loan will take place at an exchange rate the client knows in advance
- available in most liquid currencies
- free of charge, this transaction can be concluded without any special premium
- the conditional exchange rate, the extent of the interest refund, as well as the tenor of the instrument can be set at your will, in accordance with your company's plans, budget and/or expectations; the change of one parameter will cause the rest of the parameters to change, too
- your position can be closed at any time by means of a counterdeal at any time before expiry, resulting, of course, in a profit or a loss, depending on the current market situation.

risks of transaction

- during the tenor of the instrument, your company can at any time convert your HUF-based loan to a foreign currency basis, but then the interest refund deal may result in a net settlement obligation to the bank, provided that when the transaction expires, the conversion obligation becomes effective
- on expiry, the loan will be converted at the pre-determined conditional exchange rate even if the exchange rate has changed by a larger extent, the resulting exchange rate loss may be unlimited
- closing your position before expiry will cause you to suffer a loss
- in the case of HUF-based loans, if the loan is converted into foreign currency as a result of the interest refund deal, and subsequently your company converts the loan back to HUF at an exchange rate above the conditional exchange rate, or if you decide not to convert it back but

to repay the loan from HUF at an exchange rate above the conditional exchange rate, then your company will incur foreign exchange loss

- in the case of foreign currency loans, if the loan was converted into HUF as a result of the interest refund deal, and subsequently your company converts it back into foreign currency at an exchange rate below the conditional exchange rate, then you will incur a foreign exchange loss
- the market value of options is determined by the evolution of the spot exchange rate, the interest rate levels of the two currencies for the given tenor, the difference between the interest rates for the given tenor, the number of days remaining until the expiry of the transaction, and the evolution of market volatility. The drop in market liquidity could lead to a bid-offer spread widening, which could also affect the market value of the position negatively.
- the change in market value could lead to an obligation of temporary or permanent increase of collateral which may affect the company's liquidity and solvency negatively. In case of exceptional market circumstances (eg, money market and other crisis) the negative market value of the position from the Client's viewpoint could reach so extreme levels that providing the adequate collateral may lead to the company's insolvency. Moreover if you fail to provide additional collateral when requested it may lead to the closure of your open positions and prompt realization of losses and this also may affect the company's liquidity and solvency negatively.
- chapter I/b. entitled "Risk Factors" of "K&H Treasury Handbook of Market Risk Management" lists those risks that do not originate exclusively from the nature of the product described here, but rather, from other factors.

product structure

This product is built up of a single plain vanilla option. The explanation concerning the plain vanilla options, provided in chapter I/c. entitled "5 Basic Products" of "K&H Treasury Handbook of Market Risk Management", also applies to this product.