

➔ 2. dual currency tower investment

MIFID complexity

dynamic

The dual currency tower investment is an alternative to regular term deposits. The investment gives you the opportunity to gain higher interest rate than the regular term deposit rates, profiting from your exchange rate expectations while the minimum interest is guaranteed. The payment of the interest rate will happen in the deposit currency in which the deposit was made, the evolution of the exchange rate has an effect only on **the level of the interest** amount achieved on the investment and determines the currency in which the deposit will be repaid to the investor.

product description

The client places deposit at a bank. The interest paid for this deposit is a function of the fluctuation of a currency pair (one of them being the currency in which the deposit is placed). The interest rates premiums are paid if the product's conditions are met. If the evolution of the exchange rate is in-line with the conditions set when the deal is concluded, then an interest rate above the regular term deposit rate is achievable, in other case the minimum interest rate will be guaranteed, and this is lower than the regular term deposit rate.

interest rate premium's conditions	possible exchange rate monitoring
the interbank exchange rate of a given currency pair reaches or exceeds at least once the exchange rate level fixed in advance over the tenor	from the trade day until the second business day before the expiry day OR over the tenor in any partial period
the interbank exchange rate of a given currency pair does not reach or exceed the exchange rate level fixed in advance over the tenor	
the interbank exchange rate of a given currency pair remains in the exchange rate range fixed in advance over the tenor	
the interbank exchange rate of a given currency pair exceeds or touches at least once either the top or the bottom of the exchange rate range fixed in advance over the tenor	
the interbank exchange rate of a given currency pair reaches or exceeds at least once an exchange rate level fixed in advance over the tenor and in the same time it does not reach or exceed a further exchange level fixed in advance	
the interbank exchange rate of a given currency pair is above / below an exchange rate level fixed in advance on the monitoring day	at a given time on the second business day before the expiry day
the interbank exchange rate of a given currency pair is within an exchange rate range fixed in advance on the monitoring day without touching the top or bottom of the range	
the interbank exchange rate of a given currency pair is out of an exchange rate range fixed in advance on the monitoring day without touching the top or bottom of the range	

Based on the above, your investment can bring in high interest not only if the exchange rate is less volatile but also when it evolves in the direction you predicted.

This product has a variant in which not only one exchange rate condition is defined. In that case you can have different interest rate premiums tied to different conditions.

The currency in which the investment is repaid depends on the spot market rate at 12 p.m. on the exchange rate monitoring date. A dual currency tower investment involves an investment placed in a certain currency (base currency) with the proviso that the Bank may repay the principal in another currency (secondary currency), if at expiry the cross rate of the two currencies is above or below – depending on the direction of conversion – a pre-defined exchange rate level (conditional exchange rate). If the conversion condition is met, the invested capital is returned to the client in the “secondary currency”. Interest payments, however, will always be made in the base currency, regardless of whether the principal has been converted or not. The investment cannot be cancelled during the tenor (security investment). Interest is paid at the end of the tenor in one sum.

example of HUF investment (with an exchange rate range): an investor has HUF 100 million, which he intends to deposit in a dual currency tower investment for the next 3 months. The rate on conventional 3 month deposits is 7%. The EUR/HUF spot rate is 290 and the investor expects no significant volatility in the exchange rate in the coming 3 months, and would like to turn this expectation into profit. He is ready to accept lower yield if his expectations turn out to be wrong eventually, and accepts the risk that the capital is repaid in euro at the end of the tenor. Therefore, this investor places his savings in a dual currency tower investment with the following conditions (the conditional conversion rate or the width of the range can be set at the investor's will, we calculate the interest payments accordingly)

some possible combinations of exchange rate ranges - conditional conversion rates and enhanced interest rates for HUF deposit (one option should be chosen from the table upon placing the investment)

exchange rate range (EUR/HUF)	conditional conversion rate (EUR/HUF)	maximum interest (annualised)	minimum interest (annualised)
275-305	270	13.50%	0.10%
270-305	270	11.00%	0.10%
270-300	270	15.00%	0.10%

parameters of the dual currency tower deposit (upon choosing the first row)

notional	HUF 100 000 000
tenor	3 months
expiry date	end of tenor
exchange rate monitoring period	up to 2 business days before end of tenor
3-month BUBOR at time of pricing (annualised)	7.00%
spot exchange rate	290 EUR/HUF
ATMF volatility for 3 months	10%
EUR/HUF exchange rate range	275-305 EUR/HUF
maximum interest (annualised)	13.50%
condition to crediting achievable maximum interest	the EUR/HUF interbank market exchange rate does not leave the fixed EUR/HUF exchange rate range, and does not touch either boundary, during the tenor
guaranteed minimum interest (annualised)	0.10%
conditional exchange rate	270 EUR/HUF
conditional conversion exchange rate monitoring day	2 bank days before maturity
currency of the credited enhanced interest refund	HUF
condition of conversion of principal	the spot market rate at 12:00 p.m. on the date of exchange rate monitoring is below the conditional exchange rate
exchange rate of capital conversion	conditional exchange rate
value date of capital conversion and crediting of enhanced interest	end of tenor (expiry date)

possible scenarios on expiry depending on the spot market rates at 12:00 p.m. on the expiry date

A) exchange rate above 270 EUR/HUF	the investment stays denominated in HUF, and the 13.50% interest is credited by the bank to the client's account (in HUF) on the expiry date of the investment if the exchange rate has not left the range, has not even touched the boundaries. Otherwise minimum interest is guaranteed.
B) exchange rate below 270 EUR/HUF	the investment is converted into EUR at 270 EUR/HUF, and guaranteed minimum interest is credited by the bank to the client's account (in HUF)
transaction charges	none

example for HUF investment (with an exchange rate level): an investor has HUF 100 million, which he intends to deposit in a dual currency tower investment for the next 3 months. The rate on conventional 3 month deposits is 7%. The EUR/HUF spot rate is 290 and the investor expects significant volatility in the exchange rate in the coming 3 months, and would like to turn this expectation into profit. He is ready to accept lower yield if his expectations turn out to be wrong eventually, and accepts the risk that the capital is repaid in euro at the end of the tenor. Therefore, this investor places his savings in a dual currency tower investment with the following conditions, which pays an interest higher than the minimum interest upon reaching the closer exchange rate level, while pays the maximum interest premium if the farther exchange rate level is reached. (the conditional conversion rate or the exchange rate levels can be set at the investor's will, we calculate the interest payments accordingly):

some possible conditions for HUF deposit (one option should be chosen from the table upon placing the investment)

farther exchange rate level (EUR/HUF)	maximum interest (annualised)	closer exchange rate level (EUR/HUF)	intermediate interest (annualised)	minimum interest (annualised)	conditional conversion rate
282	15.00%	285	4.00%	0.10%	275
284	12.50%	285	4.00%	0.10%	275
284	11.00%	288	4.00%	0.10%	275
284	10.50%	288	4.00%	2.00%	275
282	13.50%	285	4.00%	2.00%	275

parameters of the dual currency tower deposit-upon choosing the first row

notional	HUF 100 000 000
tenor	3 months
expiry date	end of tenor
exchange rate monitoring period	up to 2 business days before end of tenor
3-month BUBOR at time of pricing (annualised)	7.00%
spot exchange rate	290 EUR/HUF
ATMF volatility for 3 months	10%
farther exchange rate level (EUR/HUF)	282 EUR/HUF
maximum interest (annualised)	15%
condition to crediting achievable maximum interest	the EUR/HUF interbank market exchange rate touches the farther exchange rate level over the tenor
closer exchange rate level (EUR/HUF)	285 EUR/HUF
intermediate interest (annualised)	4.00%
condition to crediting achievable intermediate interest	the EUR/HUF interbank market exchange rate touches the closer exchange rate level over the tenor
guaranteed minimum interest (annualised)	0.10%
conditional exchange rate	275 EUR/HUF
conditional conversion exchange rate monitoring day	2 bank days before maturity
currency of the credited enhanced interest refund	HUF
condition of conversion of principal	the spot market rate at 12:00 p.m. on the date of exchange rate monitoring is below the conditional exchange rate
exchange rate of capital conversion	conditional exchange rate
value date of capital conversion and crediting of enhanced interest	end of tenor (expiry date)
possible scenarios on expiry depending on the spot market rates at 12:00 p.m. on the expiry date	
A) exchange rate above 275 EUR/HUF	the investment stays denominated in HUF, and the interest is credited by the bank to the client's account (in HUF).
B) exchange rate below 275 EUR/HUF	the investment is converted into EUR at 275 EUR/HUF, and the interest is credited by the bank to the client's account (in HUF)
transaction charges	none

advantages

- it is possible to achieve higher yield than in a regular term deposit, while it is guaranteed that a minimum interest will be repaid at the end of the investment term
- it is possible to profit from your predictions about the evolution of the cross exchange rate between a given pair of currencies (that is, to achieve extra yield) if your predictions prove to be right
- if the amount invested is eventually converted, this will always be done at a more advantageous exchange rate than the spot rate at the time of placement
- the maximum interest rate, the minimum interest rate, the conditional conversion rate or the width of the range can be set at the investor's will, and the rest of the parameters will be calculated accordingly; the change of one parameter will cause the rest of the parameters to change, too.

risks

- if conversion takes place at maturity on the conditional exchange rate, this will always mean that the investment is converted to the term currency at a less advantageous rate than the current market rate applicable on expiry

- if the investment is not converted, the exchange rate of a spot conversion can be less advantageous than it would have been if done on the date of placement
- if during the investment period the exchange rate's evolution is not in-line with the conditions of the interest premium, the guaranteed minimum interest is lower than regular term deposit interest that was achievable on the market when the investment was made
- the invested capital is not guaranteed (so if conversion takes place, a spot re-conversion could result a lower amount in the base currency than it was originally)
- the investment cannot be broken before expiry (security deposit)
- further risks, arising not exclusively from the characteristics of the product described here but from other factors, are explained in chapter 1.2. of the "K&H Treasury Handbook of Market Risk Management" on risk factors.

product structure

This product is the combination of a security deposit, a digital option and a plain vanilla option. The explanation concerning digital options and plain vanilla options provided in chapter 1.3 of the "K&H Treasury Handbook of Market Risk Management" on the five basic products, will also apply to this product.