

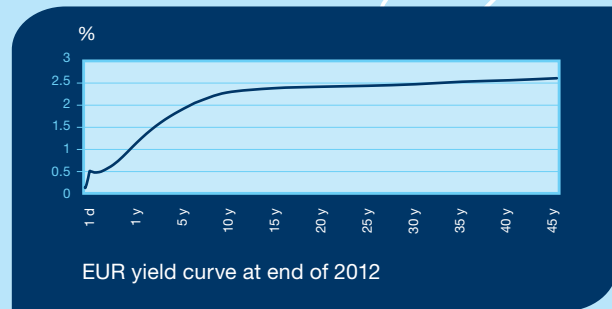
➔ 2. fixed interest rate loan

MIFID complexity

IR 2

product description

As an alternative to a normal floating interest rate loan, your company can borrow with interest payments fixed in the loan contract. This is available for working capital, investment or agricultural loans. In this case your company is not exposed to the constant fluctuation of interest rates and the interest payments can be calculated and predicted in advance for the whole tenor. The parties agree that the borrower pays fixed interest for the given notional and tenor. If you choose this product to lower interest rate risk, a separate interest rate swap with treasury limit requirement is not necessary, moreover there will be no need for revaluation in the company's books. If you plan to take out a loan, we suggest asking for a fixed rate alternative along with a pricing for floating interest.



EUR yield curve: increasing, protection might be provided by IRS against the increase of interest rates by a larger extent than expected by the market

example, fixed interest rate loan: a company plans to take out a loan of EUR 300 000 for 3 years with floating interest and asks for a fixed rate pricing as well. The current 3-month EURIBOR is 0.50%, the 3-year fixed EUR market reference rate is 0.85%. The company expects the interest rates to rise more on the medium term than it is indicated in the yield curve (see on chart), thus the company takes out a fixed interest rate loan rate instead of floating rate. The company can expect also that the shape of the yield curve remains unchanged, but wishes to fix interest payments for 3 years. The company takes out the loan **with a fixed 0.60%** interest rate for 3 years instead of the floating 3-month EURIBOR. After concluding the deal it is not possible to benefit from an interest rate decline which is not indicated by the yield curve (see on chart) or from a smaller rise in interest rates than it is indicated by the yield curve. The difference between the fixed reference market rate and your company's interest payments is caused by the unique parameters of your loan.

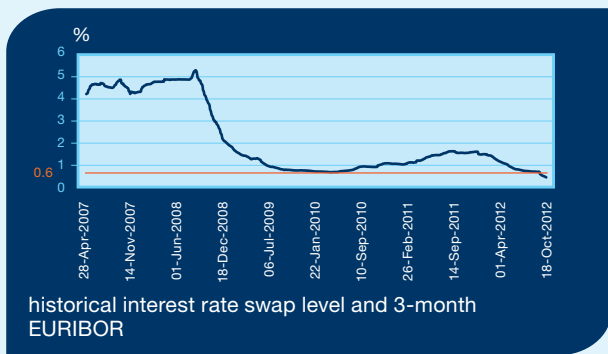
parameters of the fixed interest rate loan

notional	EUR 300 000
tenor	3 years
variable notional	no
interest payable by client	fixed 0.60% per month
frequency of interest payment	quarterly
interest rate calculation convention (fixed rate)	actual number of days / 360
current 3-year ICAP EURO offer rate against 6-month EURIBOR (market reference rate)	0.85%
current 3-month EURIBOR	0.50%
transaction cost	zero

financial outcome of some possible scenarios 1 year after the trade date, supposing that the 3-month EURIBOR evolves as below in the last quarter of the given year

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

end of period (outstanding principal: EUR 300 000)	3-month EURIBOR at the start of the interest period (%)	interest expense with floating interest rate (3 months, EUR)	interest expense with fixed interest rate (3 months, EUR)
1 year	-1.00	-750	450
1 year	0.00	0	450
1 year	0.50	375	450
1 year	1.50	1 125	450
1 year	2.50	1 875	450



The chart shows the interest level(s) of the treasury deal and the historical evolution of 3 month EURIBOR. The historical data is intended merely to compare the interest level(s) of the deal to the historical rates. Future evolution of interest rates and interest changes for the remaining tenor are unforeseeable in advance, actual profit and loss depends on the interest rate prevailing on the fixing days. The chart is not suitable to forecast interest rates and market value of the position.

advantages of transaction

- paying fixed interest rate gives you protection against actual interest rates in the future which are higher than those “predicted” by the market at the inception of the deal
- reliable planning: you can quantify your future interest expenditure or income due to the fixed interest rate
- there is no need to reevaluate the interest rate swap deal concluded for a floating rate loan at the end of the year as you borrowed inherently on a fixed interest basis.
- if the yield curve is downward sloping, you can immediately at inception benefit from the interest rates cuts expected by the market
- if the yield curve is upward sloping, you can shield yourself from a rise in interest rates that is of a greater extent than what is expected by the market
- can be concluded in euro, forint or swiss franc
- the date of expiry, as well as the periods of fixed or floating interest rate payment, can be set at your will, in accordance with your expectations, plans and budget; the change of one parameter will cause the rest of the parameters to change, too
- can be concluded to fit any repayment schedule
- there is no need for a treasury limit
- contracting and disbursement may occur at separate dates

risks of transaction

- partial or full early repayment may involve higher costs than repayment of a floating rate loan if interest rates changes are adverse
- because of the fluctuation of market rates, early repayment or termination involves settlement obligations, which may result in a profit or a loss, depending on the current situation in the interest rate market at the time concerned
- the fixed interest loan provides that you (client) should not pay more than the fixed interest plus usual loan fees after the loan capital if neither voluntary prepayment, nor termination because of breach of contract, nor any other event (e.g. liquidation procedure) which makes the debt due before the expiration date, not occur. Should any of the before

mentioned events arise the bank will charge to you (to client) all the costs and losses of termination (together: break cost) of that interest rate swap deal which made possible for the Bank to provide the loan on fixed interest rate. Among certain circumstances, depending on the remaining tenor and the extent of unfavourable interest rate movements, the break cost might exceed 100% of the outstanding amount of the debt payable (see table below), hence we (the Bank) suggest the you should always contact your relationship manager before voluntary prepayment in order to know the actual scale of the break cost.

- the break cost payable shall be counted by the formula below:

$$MTM(\text{fix loan}) = \sum_{i=1}^n K_i T_i \frac{d_i}{dc} V_i$$

n = number of interest payment periods remaining until maturity set by the loan contract

K_i = fixed interest (in percentage) payable on the ith interest payment date minus the interest rate swap (IRS) rate calculated on the prepayment (final repayment) day according to market conditions, the repayment schedule and the remaining tenor of the loan

T_i = outstanding loan notional on the ith interest payment date

d_i = number of days from “i-1” to “i”

V_i = discount factor for the ith interest payment date, obtained by linear interpolation of zero coupon rates calculated from the relevant interest rate swap fixings with the closest tenors

dc = day-count convention (360 or 365 days per year)

The expected approximate break cost of a fixed interest loan in case of early repayment expressed in percentage of the outstanding loan notional:

		fixed loan interest rate minus market IRS rate at early termination (K _i , percent)			
		0.5%	2%	5%	15%
remaining maturity (years)	1	0.5%	2%	5%	15%
	2	1%	4%	10%	30%
	3	1.5%	6%	15%	45%
	5	2.5%	10%	25%	75%
	10	5%	20%	50%	150%

examples: the repayment of a 10-year EUR loan at 2% fixed interest rate at the end of the 5th year in case of -3% 5-year EUR IRS rate would entail a break cost of approximately 25% of the outstanding loan notional. The repayment of a 10-year HUF loan at 6% fixed interest rate at the end of the 5th year in case of -4% 5-year HUF IRS rate would entail a break cost of approximately 25% of the outstanding loan notional.

- if a fixed interest rate loan is repaid before maturity, you will realise a loss in case that the fixed interest rates have decreased in the meantime
- by paying fixed interest rate, it may happen that you will not benefit from an interest rate change of unexpectedly large extent, otherwise favourable for your business
- in principle, any extent of interest rate loss is possible in the event that the evolution of interest rates takes an unexpected sharp turn to a more favourable level during the tenor of the deal
- 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.