1. forward deal for buying / selling commodity

MIFID complexity
COMM 2

product description

You can fix the price of buying/selling a commodity for some time in the future at the present. Whatever the market price of the commodity is upon expiry, your company will buy or sell the commodity at the forward price set as part of the net settlement of this deal. Your company will have a physical delivery with your partner based on the trade agreement while there will be a net settlement with the bank between the market price and the forward price. In other words, your company will acquire a right as well as an obligation for a net settlement and both the potential foreign exchange gains and losses can be unlimited in theory. The balance of gains and losses of the underlying position can be offset by the gains and losses of the treasury transaction if the company had identified its underlying exposure and market status properly. The aim of the treasury transactions is to stabilize the company's earnings not to realise a financial profit on a standalone basis.

example for buying milling wheat: the company is buying milling wheat regularly, 50 mt monthly. Its actual physical buying is best hedged by concluding a deal related to EURONEXT LIFFE milling wheat futures. The forward price for 1 month is around 200 EUR/ton at the market. The company has to hedge itself against increasing wheat prices so it buys at this price for 1 month 50 mt wheat. If on the date of expiry the futures closing price is above the forward price of 200 EUR/ton the bank pays the difference between the forward price and the futures closing price based on the contracted amount to the company. If on the date of expiry the futures closing price is below 200 EUR/ton the company pays the difference between the futures closing price and the forward price based on the contracted amount to the bank.

parameters of the forward deal	
notional	50 mt (mt = metric ton, 1 metric ton = 1 000 kg)
direction	buying wheat
tenor	1 month
fixing date	specified date in 1 month
settlement date	2 business days after the fixing date
forward price	200 EUR/mt
basis for net settlement	futures closing price effective on the day of closing
futures	Euronext Liffe Milling Wheat
reference futures at expiry for the calculation of futures closing price	see the reference futures table below
possible outcomes on a given expiry:	
futures closing price is below 200 EUR / mt	the Client completes net payment = 50 mt * (200 EUR/mt –futures closing price)
futures closing price is above 200 EUR / mt	the Client receives net payment = 50 mt * (futures closing price – 200 EUR/mt)
settlement	net settlement in EUR, no physical settlement
precondition for signing contract	K&H Treasury master agreement including a section relating to the hedging of commodities depending on the current K&H Treasury master agreement
transaction cost	zero
best-case scenario (treasury transaction on a standalone basis)	the futures closing price is above 200 EUR/mt. In this case the Client receives net settlement.
worst-case scenario (treasury transaction on a standalone basis)	the futures closing price is below 200 EUR/mt. In this case the Client implements net payment. The loss can be unlimited.

evolution of market value of the position and the associated risk

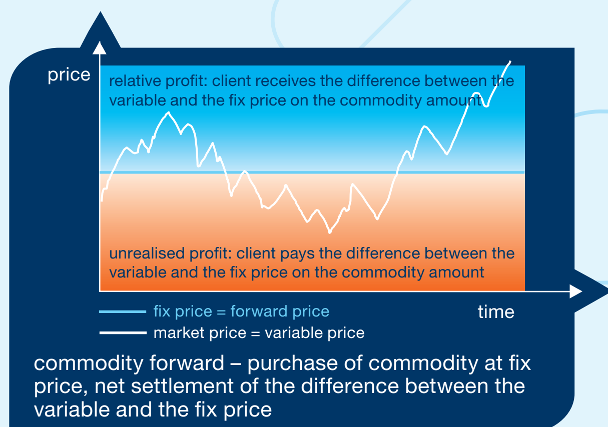
The cash flows of the deal depend on the evolution of wheat price. The market value of the deal changes during the tenor, the payment from a given settlement is only one component of the transaction's market value. The market value of the transaction is determined by the present value of future payments based on current market conditions. While client may benefit from a settlement payment for a given period, the market value of the transaction may be negative at the same time if the discounted value of client's aggregate future payment obligations exceeds the discounted value of the future receivables. As a result, client may have to pay a high compensation if he wants to terminate the transaction early during its lifetime. Moreover, there is

a risk that client may have to enter a significant negative market value into his balance sheet during the lifetime of the transaction. The liquidity or lack of liquidity of the underlying stock market indices may significantly affect the positions value negatively. Market liquidity may have a significant effect on the market value of commodity deals.

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.

forward price (EUR)	futures closing price on the day of expiry (EUR)	hedged notional (mt)	futures closing price forward price – (EUR)	payment (EUR)	settlement
200	230	50	30	- 1 500	client receives
200	220	50	20	- 1 000	client receives
200	210	50	10	-500	client receives
200	200	50	0	-	no settlement
200	190	50	-10	500	client pays
200	180	50	-20	1 000	client pays
200	170	50	-30	1 500	client pays



commodity forward – purchase of commodity at fix price, net settlement of the difference between the variable and the fix price

advantages of transaction

- if variable commodity prices are swapped for a fixed price, you enjoy 100% protection against adverse price changes
- predictability: you can plan your commodity expenses or income with a fixed price
- cash flow can be calculated with certainty
- net settlement: only the difference of the fixed and the variable price is settled between the parties
- available for all commodity types
- the expiry date can be set at your will, in accordance with your needed / superfluous commodity quantities, your plans and your budget; the change of one parameter will cause the rest of the parameters to change, too
- no cost or separate fee charged
- if the hedge is no longer needed, the position can be closed with a counter deal. This may result in profit or loss, depending on the prevailing market conditions.

risks of transaction

- you may incur a loss on this deal if commodity prices evolve in an advantageous direction, as in this case your financial outcome would have been more favourable without the treasury transaction. Namely if the average of the Floating prices for given calculation period is under the Fixed price, client will pay a cash settlement to the bank for relevant period, consequently is not able to benefit from the favourable market prices below the Fixed price. The worst case scenario, taking the treasury deal itself into consideration, is that floating price will be 0. In this case the difference of the fixed and the variable price to be paid by the client is the highest. The resulting loss can be unlimited.
- if the underlying transaction ceases to exist, the character of this Swap transaction changes. Instead of a hedging transaction it becomes an open position with market risk, and the client may incur unlimited loss.
- market value risk: The evolution of the market value depends on the price change of the underlying product, volatility and the evolution of the settlements. The market value of the transaction is determined by all its discounted future payments under the current market conditions. While client may benefit from a settlement payment for a given period, the market value of the transaction may be negative at the same time if the discounted value of client's aggregate future payment obligations exceeds the discounted value of the future receivables. As a result, client may have to pay a high compensation if he wants to terminate the transaction early during its lifetime. Moreover, there is a risk that client may have to enter a significant negative market value into his balance sheet during the lifetime of the transaction.
- 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 (e.g. money market and other crises) the negative market value of the position from the Client's viewpoint could reach such extreme levels that providing sufficient collateral may cause the company to become insolvent. Moreover, failure to provide additional collateral in time might lead to the closure of open positions thus prompt realization of losses, which 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 forward deals. The section on forward deals of Chapter 1.c. entitled "5 Basic Products" of "K&H Treasury Handbook of Market Risk Management" also applies to this product.