2. swap for buying / selling commodity

MIFID complexity
COMM 2

product description

You can fix the price of buying / selling a commodity for a future time period now. Whatever the average market price of the commodity is during the period, your company will buy or sell the commodity at the swap 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 average daily market price and the swap 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 easnings not to realise a financial profit on a standalone basis.

example for buying milling wheat: our client needs to buy milling wheat for its business on a continuous basis, in a monthly quantity of about 50 metric tonnes. The actual physical purchases are characterised by the fact that hedging is tied to the EURONEXT LIFFE milling wheat index. The current swap price is around 200 EUR/ton at the market for the following 12. This company must procure protection against rising milling wheat prices so it buys this swap price for the next 12 months (or else for 12 calculation periods), for a quantity of 50 metric tonnes per month. If in the course of monthly settlements, the average of fluctuating daily prices is above the swap price of 200 EUR/ton then the bank pays the client the difference of the current and the fixed price for the given month's quantity of milling wheat. At the same time, if in a month the daily fixings of the fluctuating prices result in an average that is lower than 20 EUR/ton then the company will pay the bank the difference of the swap price and the floating price with respect to the given month's quantity of milling wheat bought.

parameters of the swap	
notional	50 mt/expiry (mt = metric ton, 1 metric ton = 1 000 kg) in total: 600 mt
futures	Euronext Liffe Milling Wheat
tenor	12 months, monthly expiries
calculation periods (expiry date = last day of period)	1-12 months
settlement dates	every month, 2 business days after end of each calculation period
fixed price	200 EUR/mt
fixed price payable by	client
variable price	average of prices fixed during a calculation period, on the basis of reference prices published by EURONEXT
variable price payable by	bank
possible outcomes on a given expiry:	
the variable price (average of daily prices) is below 200 EUR/mt	the Client completes net payment = 50 mt * (200 EUR/mt –variable price)
the variable price (average of daily prices) is above 200 EUR/mt	the Client receives net payment = 50 mt * (variable 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
option premium	zero
best-case scenario (treasury transaction on a standalone basis)	the variable price (average of fluctuating daily prices) is above 200 EUR/mt. In this case the Client receives net settlement.
worst-case scenario (treasury transaction on a standalone basis)	the variable price (average of fluctuating daily prices) is below 200 EUR/mt. In this case the Client completes net settlement.

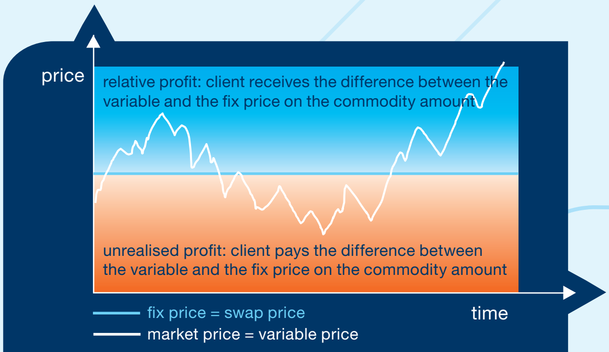
evolution of market value of the position and the associated risk

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.

swap price (EUR)	average of floating price (EUR)	notional (mt)	floating price – fixed 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 swap – purchase of commodity at fix average price, net settlement of the difference between the variable and the swap price

advantages of transaction

- if variable commodity prices are swapped for a fixed price, you enjoy 100% protection against adverse price changes
- predictability: fixed price to plan exactly your commodity expenses or income
- 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 ont he 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 a commodity swap. The section of Chapter I/c entitled "5 Basic Products" of "K&H Treasury Handbook of Market Risk Management" also applies to this product.