

SWAPS

- Exchange and re-exchange of two currencies for two different value dates.
- Unlike spot / forward markets (outright) which trade fixed amounts of the base currency, the swap market trades a fixed amount of either the terms (foreign) currency or the base currency.
- Two dates in a swap: near date and far date.
- Dealers like to use common dates (1 mo. / 2 mo.) as common market dates have greater liquidity.
- Two kinds of swaps:
 - (a). buy / sell swap : buy the fixed currency for the near date and sell it for the far date.
 - (b). sell / buy swap : sell the fixed currency for the near date and buy it for the far date.

VALUE DATES.

Short - Dated Swaps

| | <u>Near Date</u> | <u>Far date</u> |
|------------------|------------------|----------------------------|
| Tomorrow / Next | Tomorrow | Day after tomorrow. |
| Spot / Next | Spot | Day after spot. |
| Spot - a-week | Spot | Same day in following week |
| Spot - two-weeks | Spot | Same day two weeks later |

Forward Swaps

| | <u>Near Date</u> | <u>Far Date</u> |
|-------------------|-------------------------|-----------------------------|
| Spot / forward | Spot | A straight forward date |
| Odd-dates | Spot | A non-straight forward date |
| Forward / Forward | A straight forward date | A straight-forward date. |
| Long-dates | Spot | A forward date past 1 year. |

Examples :

1. Near-date July 24th and far date July 25th (today July 23rd)
Short-dated ; TOM next.

2. Near date Aug 25th, for date Sep 25th:

Forward ; Forward / Forward.

3. Near date July 25th, for date July 26th.

Short-dated ; Spot / Next.

4. Near date July 25th, for date Aug 27 next year.

Forward ; Long-dated.

BID - OFFER SPREADS.

- The spread refers to the forward part of the swap.

- LHS is where MM buys base currency forward; RHS opposite.

e.g. 334 - 301 means MM buys forward Sterling at spot less 0.0334 points, and will sell forward Sterling at spot less 0.0301 points.

- The spread is 33 points (0.0033)

Example: a client wants to buy/sell GBP vs. USD Feb 19, 2003 one-year forward to Feb 23, 2004.

The trader takes the opposite side of this transaction.

- Trader will Sell/Buy GBP/USD Feb 19, 2003 one-year forward to Feb 23, 2004

i.e. Sell GBP/USD on Feb 19, 2003

Buy GBP/USD on Feb 23, 2003.

- Say Feb 19 spot @ 1.5975 and points are -334.

- This means trader will Sell GBP/USD @ 1.5975 on Feb 19, 2003

Buy GBP/USD @ 1.5641 (1.5975 - 0.0334) on Feb 23, 2004.

- We use 334 points, not 301 points, as trader will be buying at a lower rate using the former (1.5641) versus the latter, which would work out to be 1.5674 (1.5975 - 0.0301).

- Trader ticket looks like :

| | | | |
|------------|------------------------|------------|---------------------------|
| WE (+) USD | Customer rate : 1.5975 | WE (-) GBP | Value date. Feb 19, 03 |
| | points : -33+ | | |
| WE (+) GBP | rate : 1.5641 | WE (-) USD | Feb 24, 04. |

Assume these rates prevail:

| | <u>Borrow / "Bid"</u> | <u>Lend / "Offer"</u> |
|---------------|-----------------------|-----------------------|
| Euro Sterling | 9.0% | 9.5% |
| Euro Dollar | 7.0% | 7.5% |

- In the FX market, one buys and sells currency.
- In the Eurocurrency market, one buys and lends.

Example:

- Assume MM does a sell/buy £ swap.
- In a sell/buy £ swap, the MM buys £ forward, so "sells" Sterling spot.
- This leaves MM short £ "balances" for the period of the swap.
- A £ loan would produce the same result, so MM refers to is the offered side of the Euro £ market i.e 9.5%
- MM is selling Sterling spot against dollars, so he is buying USD spot - this leaves him long \$ balances, just as borrowing dollars would.
- MM buys (borrows) dollars at a bid of 7%.
- The differential is 2.5%, 250 points where the market-maker will do a sell/buy Sterling swap.

Conversely :

- a buy/sell Sterling swap means market-maker is selling Sterling forward, so he is buying (borrowing) Sterling spot now and holding it for the period of the swap.
- the MM borrows Sterling against dollar spot, so he is naturally selling the dollar spot.
- He lends dollar on the offer @ 7.5%
- The differential is 1.5% or 150 bps, which is where he will do a buy/sell Sterling swap.

Note :

- Buy (LHS) side of swap is derived from the offered side of the Euromarket for the base currency and bid side for the terms currency.
- Sell (RHS) from bid side of Euromarket for base currency and offered side for the terms currency.