Product Briefing – Futures

A future is an exchange traded contract that fixes a price on the trade date for delivery of an asset at some future time period. An interest rate future fixes an inter-bank rate for some future time period – say the 3 month rate in 3 months' time. A bond future fixes the price of a bond for delivery at some future time period.

An example of a bond future referenced to German sovereign Bunds is given in figure 1 below:

Trading unit	€100,000 nominal value, notional Bund, 6% coupon
Delivery months	March, June, Sept, Dec
Delivery day	The 10th calendar day of the respective delivery month (at seller's choice)
Quotation	Per €100 nominal (in decimals to 2 places)
Minimum price movement	0.01 (1 tick = €10)
Last trading day	11:00 am, 2 trading days prior to delivery date

Figure 1: Contract specifications for Euro Bund future
Source: Eurex

There are a number of general features that are worth highlighting:

- Futures are generally traded in fixed amounts (€100,000 in this case), although there are exceptions to this such as futures on equity indices. The monetary value of this type of future changes in line with the value of the index
- The contract is linked to a specific underlying asset so that both counterparties know exactly what will be delivered
- Upon expiry of the contract the underlying can be delivered according to an agreed schedule of dates (in the case of the Bund it expires on the 10th calendar day of March, June, September and December)
- The underlying asset may be physically delivered (e.g. Bund futures) or cash – settled where the nature of the underlying asset makes it operationally impractical (e.g. FTSE 100 equity index)
- The smallest price movement is predefined by the exchange and is referred to as a "tick". This tick movement will have an associated monetary value. In the case of the Bund, since the contract size is €100,000 and the tick is defined as 0.01%, the tick value is €10.

Another prominent feature of exchanges is the requirement of both counterparties to post collateral. Termed "margin" this is generally seen in two forms: Initial margin is posted at the outset of the trade; while variation margin is the mechanism whereby profits and losses are transferred between entities on a daily basis.

To facilitate the settlement of exchange traded contracts, a central clearing house will act as the counterparty to both sides of the transaction. So once a transaction is executed between two entities, the clearing house will become the buyer to every seller and the seller to every buyer. This feature removes the counterparty credit risk that would result if a transaction were executed on an over the counter basis.

Futures

- *Exchange traded products*
- *Fixes price for future delivery*
- *Cash or physical settlement depending on contract*
- *Margins paid and received to mitigate credit risk*

However, this argument is somewhat flawed in that each original party to the trade has merely transferred its credit exposure to the clearing house. However, the clearing house is often very heavily capitalized in order to mitigate this potential default risk.