C | G | B™

Hedging a 10-year bond

Situation

At the end of June, an investor wishes to hedge against a change in yield of a ten-year bond using the CGB September contract. The cheapest-to-deliver (CTD) is the 5.5% June 1, 2010, with a conversion factor of 0.9662.

Objective

Hedging a bond investment.

Strategy

Conversion factor	0.9662
Relative price sensitivity	1
Nominal value of bonds to be hedged	25,000,000 $
Nominal value of the futures contract	100,000 $
Hedge ratio	0.9662
Nombre de contrats	**242**

Results

Considering a hedge on $25 million face value of the CTD, the formula applies as follows:

$$\textbf{Number of contracts} = 0.9662 \times \frac{\$25{,}000{,}000}{\$100{,}000}$$

$$= 241.55 \text{ or } 242 \text{ contracts}$$

Conversion factors may also be used for bonds other than the CTD. However, as the futures price tracks and converges towards the price of the CTD, the hedge will only be effective if both bonds react in the same way to interest rate changes.

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