

Example

Company A uses short-term finance by issuing bankers' acceptances. The treasurer expects short-term rates to rise and wishes to hedge his next roll-over. Assume the following applies:

Notional amount	R1 000 000
Roll-over date/	15 August
Settlement date	6 May
Spot rate on 15 August	18,5%
FRA spot (bid/offer)	16,0/16,6%

To hedge his roll-over, the treasurer must buy an FRA at 16,6 percent. On 15 August he will issue bankers' acceptances at 18,5 percent. The cost (discount) of this transaction will be as follows:

$$\frac{18,5 \times 90 \text{ days} \times 1\,000\,000}{365 \times 100}$$

= R45 616

In order to lock in a discount rate of 16,6 percent, the company will have to receive an amount of R4 685 from the other party, determined as follows:

Spot 90-day liquid bankers' acceptance rate	18,5
Less rate secured by the FRA	16,6
The difference in rate needed to lock in 16,6% is	1,9%

The rand value of the difference is:

$$\frac{1,9 \times 90 \text{ days} \times 1\,000\,000}{365 \times 100}$$

= R4 685

The cost to the company of the roll-over will come to R45 616 7 R4 685 = R40 931 which is equal to a discount rate of 16,6 percent.

If the spot rate changes to 16,2 percent on 15 August, the treasurer will lose the opportunity income because of his not being able to take advantage of financing at a lower discount rate. He may take up bankers' acceptances at 16,2 percent but will have to compensate the bank for the difference between the spot rate and the rate secured by the FRA. This compensation can be calculated as follows:

Spot 90-day liquid bankers' acceptance rate	16,2
Less rate secured by the FRA	16,6
Difference in rate needed to lock in 16,6%	0,4

In rand terms, this amounts to:

$$\frac{0,45 \times 90 \text{ days} \times 1000\ 000}{365 \times 100}$$

$$= (\text{R}986)$$

This will bring the discount rate back to 16,6 percent.