

Hedging a bankers' acceptance (BA) position

Situation

On March 5, an investor has \$50,000,000 of 1-month bankers' acceptances (BAs) as a position. He wants to hedge his position against a possible interest rate increase until a buyer comes along.

Objective

To hedge a BAs position against a possible increase in rates.

Strategy

MARKET CONDITIONS ON MARCH 5:

March 30-day overnight repo rate futures price	97.50
March 30-day overnight repo futures rate	2.50%
Average dealer repo rate	2.39%

Anticipating that the non-farm payroll of March 8 could drive-up overnight rates, the dealer sells 30-day overnight repo rate futures to hedge the position.

$$\begin{aligned} \text{Hedge ratio} &= (\text{number of days}/30) \times (\text{amount hedged}/\text{contract size}) \\ &= (30/30) \times (\$50,000,000/\$5,000,000) \\ &= 10 \text{ contracts} \end{aligned}$$

The BAs discount rate is 2.57%, to a principal of \$49,894,606.

Results

MARKET CONDITIONS ON MARCH 22:

30-day overnight repo rate futures price	97.45	
Average repo rate for the period	2.47%	
Tick value	$\$5,000,000 \times (30/365) \times 0.001$	\$41.10
Repo financing expense	$\$49,894,606 \times 0.0247 \times (17/365)$	\$57,399.30
Gain on futures position	10 contracts x 5 basis point x \$41.10 per basis point	\$2,055.00
Net interest expense	$\$57,399.30 - \$2,055$	\$55,344.30
Effective cost of funds	$(\$55,344.30/\$49,894,606) \times (365/17)$	2.38%

The financing cost for the period from March 5 to March 22 was reduced from 2.47% to 2.38%. This is 9 basis points below the daily repo rate and allowed the investor to neutralize mark-to-market losses.