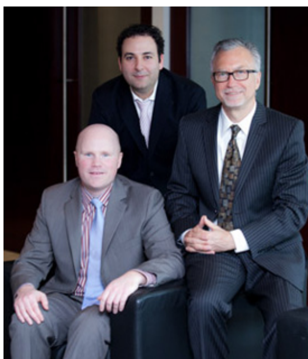
Hedging with interest rate futures

The Simpson/Caputo Group



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We are growing our business so if you have any friends or family members who may benefit from our services, please let us know. We would be happy to meet with them.

While interest rates, both long and short term, remain at historically low levels, there are signs they could be increasing. The Bank of Canada has kept interest rates historically low in order to help stimulate economic growth after the Great Recession. But with more encouraging economic data pointing to a potentially stronger economic recovery, the Bank could start to raise rates soon. In addition, with increasing signs that higher inflation may be lurking in the background, especially from food and energy, the general perception is that the Bank will continue to gradually to push short-term interest rates higher.

KEEPING BORROWING COSTS IN CHECK

Rising interest rates can have a major impact on businesses that use credit in their operations. However, this risk can be reduced or eliminated through interest rate hedging, and provide you with more stable and predictable borrowing costs.

A CASE STUDY

The following is an example of hedging borrowing costs with Bankers Acceptance futures traded on the Montreal Stock Exchange.

A businessman, who will be taking out a one-year loan in eight months in the amount of C$1 million dollars, is concerned about a rising interest rate scenario. He decides to hedge his interest rate risk with three-month Canadian Banker's Acceptances (CBAs).

The size of the CBA contract is C$1 million.

On the surface, it appears that only one contract is needed. But since the maturity of the futures contract is only three months (90 days), and the loan is for one year, four futures contracts are needed to cover the full period.

On April 1, he sold four December CBA futures at 98.15, an implied rate of 1.85% (100 minus 98.15). The current spot BA rate was at 1.35%, or a price of 98.65. By shorting the CBA, the businessman can make money on the futures contract if interest rate rises, or prices fall, which would at least partially offset the higher interest expense when he takes the loan.

In all three scenarios, the businessman locked in the implied rate in the futures contract, but not the current cash rate. Other points worth noting in the above example are that, the premium rate paid, implied rate minus the cash rate, or positive carry, should be evident as long as the yield curve is upward sloping (longer-term rates are higher than shorter-term rates). Also, the loan rate was assumed to be tied to the BA rate. In reality, the loan rate is generally tied to the prime rate. And in that case, the futures contract may not show a 100% correlation, or there might be basis risk involved.

For more information about interest rate hedging, or commodity/financial futures, please contact us.

THE FOLLOWING IS A SCENARIO HOW THE HEDGE PERFORMS:

Interest rate rises by 1% to 2.35%

Annual interest payments = C$23,500
Futures profit = (98.15 – 97.65)/100 x C$1,000,000 = C$5,000
Net interest expense = (C$23,500 – C$5,000) = C$18,500
Interest rate = C$18,500/C$1,000,000 = 1.85%

Interest rate remains at 1.35%

Annual interest payments = C$13,500
Futures loss = (98.65 – 98.15)/100 x C$1,000,000 = C$5,000
Net interest expense = (C$13,500 + C$5,000) = C$5,000
Interest rate = C$18,500/C$1,000,000 = 1.85%

Interest rate falls by 0.5% to 0.85%

Annual interest payments = C$8,500
Futures loss = (99.15 – 98.15)/100 x C$1,000,000 = C$10,000
Net interest expense = (C$8,500 + C$10,000) = C$18,500
Interest rate = C$18,500/C$1,000,000 = 1.85%

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