

## Bull put spread (credit put spread or vertical spread)

### SITUATION

An investor enters into a bull put spread when he buys a put option and simultaneously sells another put option on the same stock having the same expiry but with a higher strike price.

This strategy is similar to the bull call spread but, instead of paying the net option premium, you receive it. If the stock drops significantly, the maximum loss is limited to the difference between the higher and lower strike prices minus the net premium received. In this way, the investor knows his potential limits with his opening position.

This strategy is interesting because of its advantages to the investor. First, the initial position generates funds when the options are sold, which avoids any initial layout. On the other hand, a margin will be required to cover the potential loss. Second, it provides some insurance in the event of a significant drop in the stock. Finally, it enables you to benefit from a rise in the stock up to the strike price of the put option written. On the other hand, the potential profit is limited if the stock rises significantly because the options sold will be worthless at expiry. Thus, the advantage of obtaining an opening creditor position (receiving the premium for the options sold) is offset by the limited potential gain if the price of the underlying share rises.

### OBJECTIVE

To profit from views that QRS options are overvalued and that QRS will not be falling in the near term.

The investor also wants to ensure that his risk is limited.

### STRATEGY

QRS stock is trading at \$23.25. An investor believes that the price of QRS will rise in the near future and that QRS options are overvalued. The investor decides to buy 10 QRS APR 20 puts at a premium of \$0.35 and simultaneously sell 10 QRS APR 26 puts at a premium of \$3.05; the net premium received is \$2,700.00.

- Buy 10 QRS APR 20 puts at \$0.35
- Sell 10 QRS APR 26 puts at \$3.05
- Net credit: \$2.70

### RESULTS

The income produced by selling the APR 26 puts also comes with almost unlimited risk should the stock fall. Therefore, the purchase of the APR 20 puts limits the risk of this strategy.

#### Scenario 1: QRS' stock price is above \$26.00.

At expiration, both series would expire worthless. In this case, he keeps the initial \$2,700.00 he received from the strategy and realizes the maximum profit for this spread.

#### Scenario 2: QRS' stock price is between \$20.00 and \$26.00.

At expiration, the investor would be assigned on his APR 26 puts and would thereby be obliged to buy 1,000 shares of QRS at \$26.00. He would then have to sell them on the market at the going price, which is lower. Note that the investor's break-even point for this transaction is \$23.30 (\$26.00 – the \$2.70 received from the strategy), so the strategy is profitable as long as the shares stay above \$23.30.

#### Scenario 3: QRS' stock price drops below \$20.00.

If the stock drops below \$20.00, the investor would be assigned on his short APR 26 put position and he would be obliged to buy the shares at \$26.00. He would also exercise his APR 20 puts and thereby sell 1,000 shares of QRS at \$20.00, locking in a \$6.00 loss. The net loss (including the \$2.70 per share income from the strategy) would therefore be \$3.30 (\$2.70 – \$6.00).

