

SITUATION

An investor “sells a straddle” when he sells both put and call options on the same stock with identical strike prices and expiration months. This strategy is a means of profiting when the investor is confident of a stable stock price. For this strategy to be covered, the investor should hold the underlying shares to cover the calls sold, and the necessary cash to buy the shares in case he is assigned on the puts sold. The writer of a straddle is always subject to the risk, however small it may be, of being assigned on both legs of the straddle, in the event, for example, of a large drop in the price of a stock followed by a rapid recovery.

The straddle writer collects premium revenue from both the call buyer and the put buyer but has obligated himself to either make or take delivery (or, in rare cases, both) of the underlying stock at the strike price. The premiums collected reduce the investor’s purchase price and increase his selling price in the case he is assigned.

OBJECTIVE

Take in revenues that are proportionate with the yields available in the stock market and consequently increase the return of the portfolio. This strategy is used to take advantage of a non-volatile stock.

STRATEGY

An investor holds 1,000 shares of RST common stock. The current price is \$30.00 per share and the investor feels that it is likely to be stable for the next few months. The investor decides to write a straddle of RST stock by simultaneously writing 10 RST JUN 30 call options at a premium of \$1.50 (or \$150.00 per contract) and 10 RST JUN 30 put options at a premium of \$1.00 (or \$100.00 per contract). His total premium income is \$2,500.00 (or \$2.50 per share).

Finally, he sets \$30,000.00 aside to buy 1,000 shares of RST should the stock’s price drop.

RESULTS

The investor will retain all of his premium revenues if he is not assigned on either leg before expiration and the price of RST is at \$30.00 on the date of expiration.

A useful exercise is the calculation of the investor’s break-even points (the strike price of \$30.00 plus or minus the total premium revenue per share of \$2.50)—the upper and lower limits of possible stock prices on the option’s expiration date between which the investor will not lose money. In our example, the break-even points are \$27.50 and \$32.50, since the total premium revenue of \$2.50 per share will protect the writer between those points.

Scenario 1: RST’s stock price is below \$30.00 at expiration.

If the price of the stock drops, the calls expire worthless. The writer will be assigned on his JUN 30 puts and will be obliged to purchase 1,000 shares at \$30.00. It is to be noted that the net purchase price is \$27.50 ($\$30.00 - \2.50). Given that he had the funds set aside, this is a much less risky transaction.

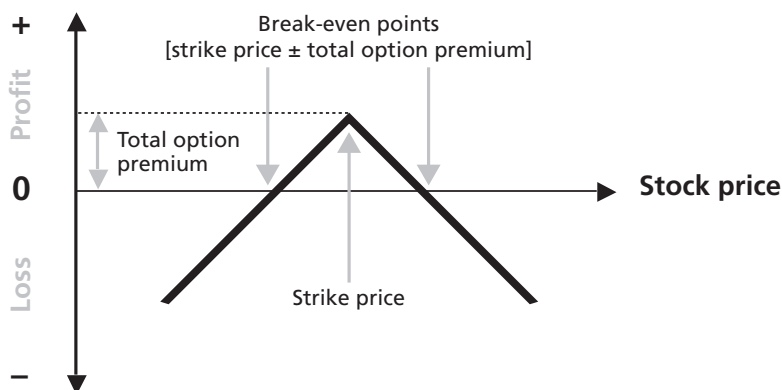
Scenario 2: RST’s stock price is above \$30.00 at expiration.

If the price of the stock rises, the puts will expire worthless. The writer will be assigned on his JUN 30 calls and will be obliged to sell his shares at \$30.00. He makes no gain on the sale of his shares but he keeps the \$2.50 initially received for taking on this position and makes quite a handsome return. His final selling price is \$32.50.

Note that the investor incurs losses if the stock price is outside the 27.50;32.50 range.

[See other side >>](#)

**Payoff diagram at expiry
Short straddle**



A few words on the strangle

The sale of a strangle is usually executed with at-the-money strike prices. An investor can also sell a combination with different strike prices through the sale of a strangle. This strategy implies selling out-of-the-money call and put options. As a result, the premium received from the sale of a strangle is lower than the premium of a straddle. However, the investor has more chances of keeping the maximum profit.

Like the straddle, a strangle establishes lower and upper break-even points. The investor will make the maximum profit if the price of the underlying stock is between the two strike prices at expiration since both options will be worthless. When the stock price is outside this bracket, the investor's profit decreases. There is a risk of loss when the break-even points are reached.

The diagram below shows that straddle writing is an interesting strategy when the market is fairly stable. The objective is to profit from stock price variation inside a range of prices.

**Payoff diagram at expiry
Short strangle**

