

## Protective Put Strategy in different scenarios

As previously stated, when we buy a stock, three potential outcomes exist. The stock can go up, go down, or remain stagnant. Let's hypothesize results across these three scenarios. Say you buy the stock for \$31.00 and buy the front month 30 put for \$1.00.

In the "up" scenario, let's assume the stock price is \$31.50 at expiration. The results are that you have a \$.50 gain from capital appreciation and a \$1.00 loss from the purchase of the put which combined gives us a \$.50 overall loss.

It is important to realize that the up scenario will only produce a positive return if the stock gain is greater than the amount paid for the put. That being the case, you calculate the breakeven point for the protective put strategy by adding the purchase price of the stock to the price of the put.

In the "up" scenario, add the stock price \$31.00 plus the option price \$1.00 and you get a breakeven of \$32.00. So, until the stock reaches \$32.00, the position will not produce a positive return. Above \$32.00 the position will gain the amount equal to the stock price minus the premium paid for the option..

In the "stagnant" scenario, the position will produce a loss. Since the stock hasn't moved, there will be no capital gain or loss and with the stock at \$31.00 at expiration, the puts are worthless. The position lost \$1.00, the amount you paid for the puts.

In the "down" scenario, the position will again produce a loss. If the stock price were to trade down \$1.00 to \$30.00, then you would have a \$1.00 capital loss.

With the stock at \$30.00, the 30 puts will be worthless, thus you incur a \$1.00 loss because that is what you paid for them. Your total loss will be \$2.00.

However, in the "down" scenario, the protective put will set a cap on your losses. Let's see how that works. We'll set the stock price down to \$28.00. Since you purchased the stock at \$31.00, there will be a capital loss of \$3.00.

The puts, however, are now in the money with the stock below \$30.00.



With the stock at \$28.00, the 30 puts are worth \$2.00. You paid \$1.00 for them so you have a \$1.00 profit in the puts.

Combine the put profit (\$1.00) with the capital loss (-\$3.00) and you have an overall loss of \$2.00. The \$2.00 loss is the maximum amount you can lose regardless of how low the stock declines, even if it goes as low as zero. This is what is meant by maximum protection.

In every protective put position it is possible to calculate your anticipated maximum loss. Use the formula: (stock price minus strike price) minus the option's price equals total maximum loss.

$$\text{Maximum Loss} = (\text{Stock Price} - \text{Strike Price}) - \text{Option Price}$$

For example, suppose you paid \$30.00 for your stock. You bought the front month 27.5 put for \$1.00. Next, assume the stock closes at \$27.50 on expiration day.

Your maximum loss calculation would be:

$$(\$30.00 - \$27.50) - \$1.00 = \$3.50$$

\$30.00 (stock price) minus 27.5 (strike price) equals a \$2.50 capital loss. Do not forget that with the stock at \$27.50, the 27.5 puts will be worthless.

Add the capital loss (\$2.50) plus the option loss (\$1.00). The total is \$3.50 which is your maximum possible loss in that position. This formula will work every time.

Protective Put Example Return Table			
Stock Price	Stock P & L	Option P & L	Total P & L
34.00	+3.00	-1.00	+2.00
33.50	+2.50	-1.00	+1.50
33.00	+2.00	-1.00	+1.00
32.50	+1.50	-1.00	+ .50
32.00	+1.00	-1.00	0
31.50	+ .50	-1.00	+ .50
31.00	0	-1.00	+1.00
30.50	- .50	-1.00	+1.50
30.00	-1.00	-1.00	+2.00
29.50	-1.50	- .50	-2.00
29.00	-2.00	0	-2.00
28.50	-2.50	+ .50	-2.00
28.00	-3.00	+1.00	-2.00
27.50	-3.50	+1.50	-2.00
27.00	-4.00	+2.00	-2.00

Looking at the three hypothesized scenarios, we find that only one scenario, the "up" scenario, can produce a positive return and that's only when the stock increases more than the amount you paid for the puts.

The other two scenarios produced losses. If the stock is stagnant, you lose the amount you paid for the put. If the stock goes down, you lose again but the loss is limited. It is the limiting of loss that makes the protective put an attractive and useful strategy.

For more Information about option trading, please click here:  
[www.options-university.com](http://www.options-university.com)