

## Rolling an Option Position

Adjusting an option position may occur for many reasons. The easiest and most common reason is without doubt when the position is profitable and an investor wants the position to generate additional profits. Another reason may be linked to defensive measures taken in order to avoid being assigned the shares on a short option position, and as a result, obligated to sell, or to buy as the case may be, the underlying shares of the options contract. In this article, we will examine how to roll an option position as a defensive measure on the following basic options strategies: the covered call and the cash-secured put.

### The covered call

An investor put on a covered call by purchasing 1,000 shares of XYZ at \$30 per share and by simultaneously selling 10 XYZ 30-day \$30 call options contracts at \$0.90 per share, or \$90 per contract, for a total premium collected of \$900.

#### Initial Transaction

Purchase of 1,000 XYZ shares at \$30 per share		-\$30,000.00
Sale of 10 XYZ 30-day \$30 call options contracts at \$0.90		\$900.00
	Total	-\$29,100.00
	Breakeven per share	\$29.10
	Maximum Profit	\$900.00

We observe that this strategy offers a maximum profit potential of \$900 if the stock price of XYZ closes above the \$30 strike price of the call options at the expiration date, and offers some downside protection as well down to the breakeven level of \$29.10.

## Rolling Up and Out

Five days prior to the expiration date, XYZ stock is trading at \$31 per share, and the probabilities are high that the investor will be assigned the shares on the call options contracts, and as a result, the investor will be obligated to sell the shares at the strike price of \$30. The investor would like to avoid this outcome, and consequently, will have to close out the position by buying-back the call options contracts previously sold, realizing a loss in the process since the call options are now trading at \$1.10 per share. In order to cover part of the loss and to have another opportunity to realize a profit, the investor could sell some at-the-money (ATM) call options contracts with a more distant expiration date, and hence, execute what is called "rolling up and out" an options position. This operation requires placing an order to close out the position by buying-back the 10 XYZ \$30 call options contracts originally sold expiring in 5 days at a price of \$1.10 per share, and to sell 10 XYZ 35-day \$31 call options contracts at a price of \$1 per share. The net debit is \$0.10 per share, for a total premium paid of \$100, before commissions which are not included in this example.

### Initial Transaction

Purchase of 1,000 XYZ shares at \$30	-\$30,000.00
Sale of 10 XYZ 30-day \$30 call options contracts at \$0.90	\$900.00
Rolling Up and Out	
Purchase of 10 XYZ 5-day \$30 call options contracts at \$1.10	-\$1,100.00
Sale of 10 XYZ 35-day \$31 call options contracts at \$1.00	\$1,000.00
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Total	-\$29,200.00
Breakeven per share	\$29.20
Maximum Profit	\$1,800.00

As a result of "rolling up and out" of the position, the investor slightly increases the risk of the position, as the breakeven level is now \$29.20 rather than \$29.10, while improving the maximum profit potential which doubled from \$900 to \$1,800.

## Rolling Out

Another alternative is to roll out the position keeping the same strike price. It is accomplished by buying back the call options contracts previously sold and by selling new call options contracts with the same strike price but with a more distant expiration date. In doing so, the investor maintains his original view that the price of XYZ shares should not decline below the strike price of \$30 while keeping the opportunity to realize the original strategy. This operation requires placing an order to close out the position by buying-back the 10 XYZ \$30 call options contracts originally sold expiring in 5 days at a price of \$1.10 per share, and to sell 10 XYZ 35-day \$30 call options contracts at \$1.60 per share for a net credit of \$0.50 per share and a total premium collected of \$500.

### Initial Transaction

Purchase of 1,000 XYZ shares at \$30	-\$30,000.00
Sale of 10 XYZ 30-day \$30 call options contracts at \$0.90	\$900.00

### Rolling Out

Purchase of 10 XYZ 5-day \$30 call options contracts at \$1.10	-\$1,100.00
<u>Sale of 10 XYZ 35-day \$30 call options contracts at \$1.60</u>	<u>\$1,600.00</u>
Total	-\$28,600.00
Breakeven per share	\$28.60
Maximum Profit	\$1,400.00

Rolling out reduces the risk in the position, by lowering the breakeven level from \$29.10 to \$28.60, while increasing the profitability of the position to a maximum profit potential of \$1,400 rather than \$900.

## The cash-secured put

An investor enters into a cash-secured put when XYZ stock is trading at \$50 per share. The objective is to profit from the time decay of the XYZ puts since the investor believes that the price of XYZ stock will not fluctuate much either on the upside or the downside until the expiration of the options in 30 days. The investor decides to sell 10 XYZ 30-day \$50 put options contracts at a price of \$1.40 per share for a total premium collected of \$1,400.

### Initial Transaction

<u>Sale of 10 XYZ 30-day \$50 put options contracts at \$1.40</u>	<u>\$1,400.00</u>
Total	\$1,400.00
Breakeven per share	\$48.60
Maximum Profit	\$1,400.00

We observe that this strategy offers a maximum profit potential of \$1,400 if the price of XYZ shares close at a price lower compared to the strike price of \$50 at the expiration of the put options while offering downside protection to the breakeven level of \$48.60.

## Rolling Down and Out

Five days prior to the expiration of the put options, XYZ stock is trading at \$48 per share and the investor faces the possibility of being assigned on the put position, and obligated to buy the XYZ shares at the strike price of \$50. The investor would like to avoid this outcome, and consequently, the decision is made to close the short put options position and take a loss since the put options are now trading at a price of \$2.05 per share. In order to cover a part of the loss, and at the same time, preserve the opportunity to realize a profit, the investor could sell new ATM put options contracts with a more distant expiration date, and hence, execute what is called "rolling down and out" an options position. This operation requires placing an order to close-out the position by buying-back the 10 XYZ \$50 put options contracts originally sold expiring in 5 days at a price of \$2.05 per share, and to sell 10 XYZ 35-day \$48 put options contracts at a price of \$1.45 per share. The net debit is \$0.60 per share, for a total premium paid of \$600, before any commissions.

### Initial Transaction

Sale of 10 XYZ 30-day \$50 put options contracts at \$1.40		\$1,400.00
Rolling Down and Out		
Purchase of 10 XYZ 5-day \$50 put options contracts at \$2.05		-\$2,050.00
<u>Sale of 10 XYZ 35-day \$48 put options contracts at \$1.45</u>		<u>\$1,450.00</u>
	Total	\$800.00
	Breakeven per share	\$47.20
	Maximum Profit	\$800.00

We observe that “rolling down and out” reduces the risk in the position by lowering the breakeven level from \$48.60 to \$47.20. However, the lower risk results in a lower profit potential of \$800 rather than \$1,400.

## Rolling Out

In this example, the investor simply rolls out the put options position by buying back the put options previously sold and by selling new put options contracts with the same strike price but with a more distant expiration date. By doing so, the investor anticipates the price of XYZ shares to climb back above the strike price of \$50, and preserve the opportunity to realize additional profits. This transaction is executed by placing an order to close-out the position by buying-back the 10 XYZ \$50 put options contracts originally sold expiring in 5 days at a price of \$2.05 per share, and to sell 10 XYZ 35-day \$50 put options contracts at a price of \$2.65 per share for a net credit of \$0.60 per share, and a total premium collected of \$600.

### Initial Transaction

Sale of 10 XYZ 30-day \$50 put options contracts at \$1.40	\$1,400.00
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### Rolling Out

Purchase of 10 XYZ 5-day \$50 put options contracts at \$2.05	-\$2,050.00
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<u>Sale of 10 XYZ 35-day \$50 put options contracts at \$2.65</u>	<u>\$2,650.00</u>
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	Total	\$2,000.00
	Breakeven per share	\$48.00
	Maximum Profit	\$2,000.00

We observe that “rolling out” reduces the risk in the position, by lowering the breakeven level from \$48.60 to \$48.00, and at the same time increases the maximum profit potential from \$1,400 to \$2,400.

## Conclusion

The writer of call options contracts, or put options contracts, wishing to avoid being assigned, and hence being obligated to sell, or to buy as the case may be, the underlying shares, must initiate some type of defensive measures. By rolling their options positions, investors must buy-back the options contracts

previously sold, and sell new options contracts in relation to the desired level of risk tolerance and profit objective. In this article, we analyzed the rolling of options contracts as a defensive measure using the covered call and the cash-secured put options strategies.

“Rolling up an out” and “rolling out” are strategies that allow an investor to keep the underlying shares that may have otherwise been sold following the assignment on the call options contracts originally sold in the case of the covered call option strategy. The “rolling up an out” strategy provides the potential for greater profitability<sup>1</sup> while keeping the same level of risk, whereas, the rolling out strategy reduces the level of risk and improves the profitability of the position.

In the second strategy, “rolling down and out” and “rolling out” allow the investor to avoid buying the underlying shares following a high probability that the put options contracts sold, in the case of the cash-secured put options strategy, could be exercised by the holder. The “rolling down and out” and “rolling out” strategies allow, to different degrees, to reduce the risk level and to improve the potential profit of the position. The choice in the type of rolling strategy to adopt is dependent on the investor's level of risk tolerance and profitability objective.

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<sup>1</sup> Please take note that the examples in this article represent only a small sample amongst all possible scenarios, and consequently, the results may vary considerably under real market conditions.