

# EQUITY OPTIONS STRATEGY

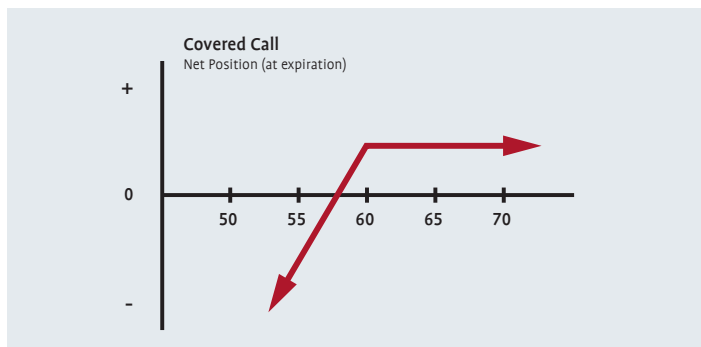
## Covered Call (Buy/Write)

### DESCRIPTION

An investor who buys or owns stock and writes call options in the equivalent amount can earn premium income without taking on additional risk. The premium received, adds to the investor's bottom line regardless of outcome. It offers a small downside 'cushion' in the event the stock slides downward and can boost returns on the upside.

Predictably, this benefit comes at a cost. For as long as the short call position is open, the investor forfeits much of the stock's profit potential. If the stock price rallies above the call's strike price, the stock is increasingly likely to be called away. Since the possibility of assignment is central to this strategy, it makes more sense for investors who view assignment as a positive outcome.

Because covered call writers can select their own exit price (i.e., strike plus premium received), assignment can be seen as success; after all, the target price was realized. This strategy becomes a convenient tool in equity allocation management.



### EXEMPLE

Long 100 share XYZ stock  
Short 1 XYZ 60 call

#### MAXIMUM GAIN

Strike price - stock purchase price + premium received

#### MAXIMUM LOSS

Stock purchase price - premium received (substantial)

The investor doesn't have to sell an at-the-money call. Choosing between strike prices simply involves a tradeoff between priorities.

The covered call writer could select a higher, out-of-the-money strike price and preserve more of the stock's upside potential for the duration of the strategy. However, the further out-of-the-money call would generate less premium income, which means there would be a smaller downside cushion in case of a stock decline. But whatever the choice, the strike price (plus the premium) should represent an acceptable liquidation price.

A stockowner who would regret losing the stock during a nice rally should think carefully before writing a covered call. The only sure way to avoid assignment is to close out the position. It requires vigilance, quick action, and might cost extra to buy the call back especially if the stock is climbing fast.

### OUTLOOK

The covered call writer is looking for a steady or slightly rising stock price for at least the term of the option. This strategy not appropriate for a very bearish or a very bullish investor.

### SUMMARY

This strategy consists of writing a call that is covered by an equivalent long stock position. It provides a small hedge on the stock and allows an investor to earn premium income, in return for temporarily forfeiting much of the stock's upside potential.

### MOTIVATION

The primary motive is to earn premium income, which has the effect of boosting overall returns on the stock and providing a measure of downside protection.

The best candidates for covered calls are the stockowners who are perfectly willing to sell the shares if the stock rises and the calls are assigned.

Stockowners that would be reluctant to part with the shares, especially mid-rally, are not usually candidates for this strategy. Covered calls require close monitoring and a readiness to take quick action if assignment is to be avoided during a sharp rally; even then, there are no guarantees.

### VARIATIONS

Covered calls are being written against stock that is already in the portfolio. In contrast, 'Buy/Write' refers to establishing both the long stock and short call positions simultaneously. The analysis is the same, except that the investor must adjust the results for any prior unrealized stock profits or losses

### MAX LOSS

The maximum loss is limited but substantial. The worst that can happen is for the stock to become worthless. In that case, the investor will have lost the entire value of the stock. However, that loss will be reduced somewhat by the premium income from selling the call option.

It is also worth noting that the risk of losing the stock's entire value is inherent in any form of stock ownership. In fact, the premium received leaves the covered call writer slightly better off than other stockowners.

### MAX GAIN

The maximum gains on the strategy are limited.

The total net gains depend in part on the call's intrinsic value when sold and on prior unrealized stock gains or losses.

The maximum gains at expiration are limited by the strike price. If the stock is at the strike price, the covered call strategy itself reaches its peak profitability, and would not do better no matter how much higher the stock price might be. The strategy's net profit would be the premium received, plus any stock gains (or minus stock losses) as measured against the strike price.

That maximum is very desirable to investors who were happy to liquidate at the strike price, whereas it could seem suboptimal to investors who were assigned but would rather still be holding the stock and participating in future gains. The prime motive determines whether the investor would consider post-assignment stock gains as irrelevant or as a lost economic opportunity.

## PROFIT/LOSS

This strategy may be best viewed as one of two things: a partial stock hedge that does not require additional up-front payments, or a good exit strategy for a particular stock. An investor whose main interest is substantial profit potential might not find covered calls very useful.

The potential profit is limited during the life of the option, because the call caps the stock's upside potential. The main benefit is the effect of the premium income. It lowers the stock's breakeven cost on the downside and boosts gains on the upside.

The best-case scenario depends in part on the investor's motives. First, consider the investor who prefers to keep the stock. If at expiration the stock is exactly at the strike price, then the stock theoretically will have reached the highest value it can without triggering call assignment. The strategy nets the maximum gains and leaves the investor free to participate in the stock's future growth.

By comparison, the covered call writer who is glad to liquidate the stock at the strike price does best if the call is assigned - the earlier, the better. Unfortunately, in general it is not optimal to exercise a call option until the last day before expiration. An exception to that general rule occurs the day before a stock goes ex-dividend, in which case an early assignment would deprive the covered call writer of the stock dividend.

While the profit from the option is limited to the premium received, it's possible the investor might be holding a significant unrealized gain on the stock. You could view the strategy as having protected some of those gains against slippage.

As stated earlier, the hedge is limited; potential losses remain substantial. If the stock goes to zero the investor would have lost the entire amount of their investment in the stock; that loss, however, would be reduced by the premium received from selling the call, which would of course expire worthless if the stock were at zero. Note however, that the risk of loss is directly related to holding the stock, and the investor took that risk when the stock was first acquired. The short call option does not increase that downside risk.

## BREAKEVEN

Whether this strategy results in a profit or loss is largely determined by the purchase price of the stock, which may have occurred well in the past at a different price. Assume the stock and option positions were acquired simultaneously. If at expiration the position is still open and the investor wants to sell the stock, the strategy loses money only if the stock price has fallen by more than the amount of the call premium.

**Breakeven = starting stock price - premium received**

## VOLATILITY

An increase in implied volatility would have a neutral to slightly negative impact on this strategy, all other things being equal. It would tend to increase the cost of buying the short call back to close the position. In that sense, greater volatility hurts this strategy as it does all short option positions.

However, considering that the long stock position covers the short call position, assignment would not trigger losses, so a greater chance of assignment should not matter. As for the downside, the premium received buffers the risk from a stock decline to some extent. Increased implied volatility is a negative, but not as risky as it would be for an uncovered short option position.

## TIME DECAY

The passage of time has a positive impact on this strategy, all other things being equal. It tends to reduce the time value (and therefore overall price) of the short call, which would make it less expensive to close out if desired. As expiration approaches, an option tends to converge on its intrinsic value, which for out-of-the-money calls is zero.

The covered call writer who would rather keep the stock definitely benefits from time erosion. In contrast, for the investor who is anxious to be assigned as soon as possible, the passage of time may not seem like much of a benefit. However, let's say the call has not been assigned by expiration. That's OK. The investor keeps the premium and is free to earn more premium income by writing another covered call, if it still seems reasonable.

## ASSIGNMENT RISK

If the strategy was selected appropriately, there should be no problem here. A covered call strategy implicitly assumes the investor is willing and able to sell stock at the strike price (premium, in effect). Therefore, assignment simply allows the investor to liquidate the stock at the pre-set price and put the cash to work somewhere else.

Investors who have any reluctance about selling the stock would have to monitor the market very closely and stay ready to act (i.e., close out) on short notice, possibly having to pay a higher price to buy the call back. Until the position is closed out, there are no guarantees against assignment.

And be aware, a situation where a stock is involved in a restructuring or capitalization event, such as a merger, takeover, spin-off or special dividend, could completely upset typical expectations regarding early exercise of options on the stock.

## EXPIRATION RISK

For reasons described in 'Assignment Risk', there should be no issue with expiration risk, either. The appropriate use of this strategy implicitly assumes the investor is willing and able to sell stock at the strike price.

It should not matter whether the option is exercised at expiration. If it is not, the investor is free to sell the stock or redo the covered call strategy. If the call is assigned, it means the stock surpassed its target price (i.e., strike) and the investor was pleased to liquidate it.

There is some risk that a call that expired slightly out-of-the-money may have been assigned, yet notification won't go out until the following Monday. The investor should take care to confirm the status of the option after expiration before taking further steps involving that stock.

## COMMENTS

As long as the short call position remains open, the investor isn't free to sell the stock. It would leave the calls uncovered and expose the investor to unlimited risk. To understand why, see the naked call strategy discussion.

Unless they are completely indifferent to being assigned and to the cost of closing out the short position, all investors with short positions must monitor the stock for possible early assignment.

## RELATED POSITION

Comparable Position: **Cash Secured Put**

Opposite Position: **Synthetic Long Put**