Covered Call Option Strategy

The covered call option strategy, also known as a buy–write strategy, is implemented by writing (selling) a call option contract while owning an equivalent number of shares of the underlying stock. This is considered a conservative strategy because it decreases the risk of stock ownership while providing additional income; however, it caps upside potential on significant price increases.

A call option is a contract which allows the purchaser to benefit from a rise in the stock price over a limited time period. Each contract has a stated exercise price which is the price at which the purchaser has the option to buy the underlying stock. If the stock price rises above the exercise price, the purchaser will exercise their option. If the stock price falls below the exercise price, the purchaser will let the worthless option expire. The price of the option will be determined based on the difference between the stock price and the exercise price, the volatility of the underlying stock (where greater volatility leads to a higher price) and the time to expiration of the option contract (where a longer time period leads to a higher price).

BENEFITS OF COVERED CALLS

The covered call option strategy enables the seller to generate income from the written call option premiums. Combined with the dividend income from the underlying stocks, this may allow investors to realize higher cash flow streams from the equity allocation in their portfolios. Historically, covered call strategies have provided similar overall return to the underlying portfolio of stocks with a significantly lower level of risk. As such, a covered call strategy may be suitable for an investor wishing to gain equity exposure, but at a lower risk level than normally associated with equity investments.

MECHANICS OF COVERED CALLS

The covered call strategy generally involves selling out of the money call options which cap the return of the underlying stock at the option strike price until the option expires.

As an example, consider a portfolio that consists of 100 shares of Bank of Montreal (BMO) at a current price of $60, for a total value of $6,000. At the money (ATM) call options (strike price of $60) that expire in one month are valued at a premium of $1.50 per contract. To implement a covered call strategy, the portfolio writes call options on 100 BMO shares and receives $150 in premium.
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**Scenario A**
If the stock price remains at $60, the calls are not exercised, and the portfolio benefits from the premium received. The new portfolio value is $6,150.

**Payoff without exercise:**
Premium received adjusted for any difference in stock price.

**Scenario B**
If the stock price drops to $58.50, the calls are not exercised, but the portfolio value drops. The new portfolio value is $6,000 ($5,850 + $150) which is the break-even point. The portfolio will devalue at any price below $58.50.

**Break-even point:**
Stock purchase price less premium received.

**Scenario C**
If the stock price rises to $62, the calls are exercised at $60 eliminating the benefit of the rising stock price except for the premium received. The new portfolio value is $6,150.

**Payoff with exercise:**
Premium received adjusted for any difference between stock price and exercise price.

The following chart illustrates the payoff characteristics:

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**Owning 100 shares of BMO and selling 100 ATM call options**

![Chart illustrating payoff characteristics for covered call option strategy.](chart_image)
Covered Call Option Strategy

IMPACT OF MARKET CONDITIONS

Covered call strategies tend to outperform plain vanilla equity strategies in flat or down markets, and underperform in periods of rapid market appreciation.

As an example, we can compare the total return of the S&P 500 Index (SPXT) with the total return of the CBOE S&P 500 2% OTM BuyWrite Index (BXY) in various market conditions. The BXY represents the performance of a hypothetical covered call strategy on the SPXT, using call options that are 2% out of the money (for more information please see http://www.cboe.com/micro/bxy/introduction.aspx).

The covered call strategy provides limited protection when stock prices decline significantly, as the decline of the underlying stocks is partially offset by the call premium received. As an example, during the period from December 31, 2001 to February 28, 2003 the SPXT returned -25.3%. Over the same time period, the BXY returned -13.9%.

When stock prices rise significantly and exceed the strike price, the call option will move into the money. This caps the gain for the call writer based on the strike price and premium received. Using the same indices, during the period from March 31, 2003 to February 29, 2004 the SPXT returned 37.2% while the BXY returned 29.9%.
In volatile or choppy markets, the covered call option strategy will provide the exposure of the underlying stocks with less volatility. The covered call strategy may outperform or underperform the underlying stocks in these conditions. During various time periods, the BXY performed similarly to the SPXT, but exhibited lower volatility.
In order to take maximum advantage of time decay, BMO Asset Management Inc. generally implements its covered call strategies using options with expiry one to two months away. Options experience more time decay impact, the closer they are to expiry. All else being equal, this method allows the majority of the value of the call option to be realized in a relatively short time period.

An Example of Time Decay:
Covered Call Option Strategy

COVERED CALL INVESTMENTS

BMO Global Asset Management through its affiliates such as BMO Asset Management Inc. continues to be a global leader and innovator in the covered call space. The BMO Enhanced Equity Income Fund uses covered calls to generate additional option premiums to supplement monthly income with the potential for capital appreciation. In addition to the BMO Enhanced Equity Income Fund, there are other covered call solutions such as the BMO Covered Call Canadian Banks ETF (ZWB), the BMO Covered Call Utilities ETF (ZWU) and the BMO Covered Call Dow Jones Industrial Average Hedged to CAD ETF (ZWA). We are confident that these extensive covered call offerings will serve your client’s needs.

GLOSSARY

ATM – A call option is “At the Money” when the underlying stock price is equal to the strike price of the option.
Call option – A call option gives the buyer the right, but not the obligation, to buy the underlying stock at an agreed upon price (“Strike Price”) until the expiry date of the option.
Covered Call – A covered call position owns underlying shares, and sells call options against the underlying shares. If the calls are exercised, the underlying shares are delivered to the owner of the call option, and the covered call writer receives an amount equal to the strike price multiplied by the number of calls exercised. If the calls are not exercised, then a covered call strategy keeps the premium received for selling the calls, in addition to continuing to own the underlying shares.
Exercise – When the owner of the option executes the right to purchase the underlying stock for the strike price. The seller of the option must deliver the underlying shares to the owner of the option, and in return receives a cash amount equal to the strike price multiplied by the number of call options exercised.
ITM – A call option is “In the Money” when the underlying stock price is greater than the strike price of the option.
OTM – A call option is “Out of the Money” when the underlying stock price is less than the strike price of the option.
Premium – The dollar amount paid by the buyer, and received by the seller of the call option.
Strike Price – The price at which the underlying stock can be purchased before the maturity date. At maturity, the call option will have positive value to the buyer if the underlying stock price is greater than the strike price. At maturity, if the stock price is less than the strike price, then the option will expire worthless.
Time Decay – The process by which the option loses a portion, or all (in the case of the option expiring worthless), of its value as the option approaches maturity. The time value of an option is determined by the time to expiry, the underlying share price, strike price, underlying volatility, and is associated with the potential of the option to increase its value prior to expiry. Time Decay is earned by the option seller.
Volatility – A measure of the variability/risk of the underlying stock. Higher volatility stocks will imply higher option prices, and lower volatility stocks imply lower option prices. For the option seller, higher volatility means that equivalent premiums can be earned by selling options that are further out of the money (OTM). Lower volatility will result in selling options less OTM in order to earn an equivalent amount of premium.

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