## MONTRÉAL EXCHANGE

# Stock Repair <br> (Covered Ratio Spread) 

## Description

Originally bullish and long on shares, an investor is now looking to recover some or all of the original investment prior to exiting a long stock position, as share prices have declined.

## Outlook \& Motivation

Originally bullish and long on shares, an investor is now looking to recover some or all of the original investment prior to exiting a long stock position, as share prices have declined. The investor, who expects a partial rebound over the next ninety days and is not willing to buy additional shares or commit additional cash, decides to employ a stock repair strategy. While the options must be traded in a margin account, if the trade is completed for even money or a credit, no additional cash equity is required.

## Position Description \& Example

The investor owns 100 shares bought at $\$ 45.00$ per share. The stock has since declined to $\$ 35.00$ per share, or by about $20 \%$. The stock repair strategy is a combination of two bullish strategies: the covered call and the bull call spread.

## Example

Own 100 shares
Buy one at-the-money call
Sell two calls with a higher strike

## Position

Long 100 Shares C $\$ 45 /$ share
Long one 90-day \$35 call
Short two 90-day $\$ 40$ calls

## Position Summary

When selecting strikes for the stock repair strategy, the increment between strike prices should represent about one half of the stock loss. To determine how many option contracts to use, the options purchased should represent the equivalent number of shares originally purchased. A standard option contract typically controls 100 shares of stock, so one contract is needed for every 100 shares owned. Ideally, the OTM calls sold will have a premium that is about half the price of the ATM calls purchased. As such, selling twice the number of out-of-the-money options covers the cost of buying the at-the-money options, so the stock repair strategy costs next to nothing to implement. Using longer-dated options can often produce a net credit.

## Variations

The covered ratio call spread could be established as a single bullish strategy by simultaneously pairing a moderately bullish buy-write strategy (buy stock, sell call) with a directional bull call spread.

## Max Loss

The maximum loss on this strategy is the original purchase price of the stock. There is risk in continued ownership of the stock in a declining market.

## Max Gain

While it is possible to turn a profit on this strategy, the objective is to recover most (or all) of the original investment.

## Breakeven

The objective of this strategy is to recover most or all of the original investment by reducing the breakeven point on the long stock. In this example, the breakeven point is with the stock at $\$ 40.00$ per share on expiration, compared to original price paid of $\$ 45.00$ per share.

## Volatility

Somewhat neutral, at-the-money options are typically the ones that are most sensitive to changes in volatility.

## Time Decay

Time decay typically helps the position. At expiration, the options will only have intrinsic value.

## Assignment Risk

Although most option holders and writers close out their options positions by an offsetting closing transaction, spread traders should nonetheless be familiar with the rules and procedures applicable to exercise and assignment. An options writer needs to understand exercise procedures because of the possibility of being assigned an exercise. For many spread traders, the risk of assignment of an at-the-money or just out-of-themoney option in a "physical delivery" contract is the rationale for closing out spread positions prior to expiration.
Call writers should also take note of when ordinary dividends are paid. A call writer's chances of being assigned an exercise may increase as the ex-date for a dividend on the underlying security approaches. Early assignment, while possible at any time, generally occurs only when the stock goes ex-dividend. Be forewarned: using the long call to cover the short call assignment will require establishing a short stock position for one business day, due to the delay in assignment notification. In-the-money options are usually exercised at expiration.

Stock and Option Profit (Loss) Price Chart at Expiration

| Stock Price at Expiration | Long 100 Shares a $\mathbf{\$ 4 5 . 0 0}$ | Long one 90-day \$35 call 1 a $\$ \mathbf{5} .00$ | Short two 90-day <br> $\$ 40$ calls <br> a \$2.50 ea. | Net Profit (Loss) at Expiration |
| :---: | :---: | :---: | :---: | :---: |
| \$45.00 | \$0.00- | +\$5.00 | -\$5.00 | \$0.00 |
| \$44.00 | -\$1.00 | +\$4.00 | -\$3.00 | \$0.00 |
| \$43.00 | -\$2.00 | +\$3.00 | -\$1.00 | \$0.00 |
| \$42.00 | -\$3.00 | +\$2.00 | +\$1.00 | \$0.00 |
| \$41.00 | -\$4.00 | +\$1.00 | +\$3.00 | \$0.00 |
| \$40.00 | -\$5.00 | \$0.00 | +\$5.00 | \$0.00 |
| \$39.00 | -\$6.00 | -\$1.00 | +\$5.00 | -\$2.00 |
| \$38.00 | -\$7.00 | -\$2.00 | +\$5.00 | -\$4.00 |
| \$37.00 | -\$8.00 | -\$3.00 | +\$5.00 | -\$6.00 |
| \$36.00 | -\$9.00 | -\$4.00 | +\$5.00 | -\$8.00 |
| \$35.00 | -\$10.00 | -\$5.00 | +\$5.00 | -\$10.00 |
| \$34.00 | -\$11.00 | -\$5.00 | +\$5.00 | -\$11.00 |
| \$33.00 | -\$12.00 | -\$5.00 | +\$5.00 | -\$12.00 |

## Options at Expiration Scenarios

## All Options are In-the-Money at Expiration

If the shares close above $\$ 40.00$ per share, the long $\$ 35$ call option is in-the-money, and the two short $\$ 40$ call options also expire in-the-money.
The resulting position if the underlying closes above the $\$ 40$ call strike price: provided all option positions are exercised and assigned, there will no longer be stock or option positions, and the trader has recovered the original investment. Investors should consult their brokerage firm to confirm which rules and procedures apply to exercise, and the consequences of submitting exercise instructions.

## All Options are Out-of-the-Money at Expiration

If the shares close below $\$ 35$ per share, the resulting position if all the options expire worthless and unexercised has the investor owning 100 shares of the stock at the original purchase price. The loss is based on the difference between purchase price of the stock and its current market value.

## Long Option is In-the-Money, Short Options are Out-of-the-Money at Expiration

Let's say that the shares close in between the call strike prices of $\$ 35$ and $\$ 40$. If the investor were to exercise the in-the-money $\$ 35$ call, it would require an additional $\$ 3,500(\$ 35 \times 100)$ in cash to purchase 100 more shares of the stock, which was not the original objective. If no action is taken in the options market, the investor will now have two hundred shares, and twice the amount of market risk.
The out-of-the-money $\$ 40$ call options will typically expire worthless and unexercised.
Investors need to be familiar with the rules and procedures applicable to exercise, and the consequences of submitting exercise instructions.

## Expiration Risk

An option that expires unexercised becomes worthless. An option holder who intends to exercise an option before expiration must give exercise instructions to his brokerage firm before the firm's cut-off time for accepting exercise instructions on the last trading day before expiration. Investors should be aware of their brokerage firm's policies in this regard.

Many brokerage firms accept standing instructions to exercise, or have procedures for the exercise of, every option that is in the money by a specified amount at expiration. Investors should consult their brokerage firm to confirm the applicable cut-off times, the firm's procedures for submitting exercise instructions, and whether any of their options are subject to automatic exercise. Investors should also determine whether the exercise of their options is subject to their brokerage firm's standing instructions, and if so, they should discuss with the firm the potential consequences of such instructions.

## Related Position

The covered ratio call spread can be established as a single bullish strategy by simultaneously pairing a moderately bullish buy-write strategy (buy stock, sell call) with a directional bull call spread.
Opposite Positi /A

