



## Using Covered Calls to Enhance Portfolio Returns

November, 2011

*Over the past decade, markets have become increasingly volatile, alternating periods of strong gains, with periods of sharp losses. In this environment, income has become a more dominant theme amongst investors, as capital gains have become more elusive for all but the most agile traders. Covered call writing can help many investors to meet their income needs, while also establishing a more firm sell-discipline than many investors currently employ. In addition, covered call writing can help investors to achieve the appropriate trade-off between risk and return.*

### Covered call writing

A covered call is one of the most popular option strategies for investors seeking a combination of up front income and lower overall portfolio risk. Under this strategy, the investor must have a position in the underlying security. The stock holder then sells call contracts against his/her existing stock position, generating a cash inflow. At expiration of the call contract, if the stock price rises beyond a certain point, the calls will be exercised and the investor will have to surrender his/her shares. In return, the investor would receive the strike price of the option. Let's look at a quick example of how this might work ([Chart 1](#)).<sup>\*</sup>

- Investor buys 100 shares of TD Bank (TD) for \$72.
- Investor sells 1 call contract against position, expiring six months later, with a strike price of \$76 and receives \$2.00.
- At expiration, if TD shares are above \$76, the covered call investor surrenders the shares in return for \$76 and exits with an overall profit of \$6 per share (\$4 capital gain + \$2 initial option premium) + any dividends paid on TD stock.
- At expiration, if TD shares are below \$76, the option expires worthless and the covered call investor can either reinitiate a new option

position, sell the position in TD or maintain the position uncovered. In this case, the investor's portfolio has benefitted by the \$2 in option premium, providing the investor an additional source of return in a down or sideways market.

### Benefits of covered call investing

- **Up front income:** When a covered call position is initiated, the investor receives an upfront premium, which from a taxation perspective will normally be taxed as a capital gain and not ordinary income.
- **Higher risk-adjusted returns:** Assume we had a portfolio of government bonds that returned 5% in a given year and a portfolio of stocks that generated 10% in a given year. Despite the fact that the portfolio of stocks generated a better absolute return, it is not accurate to say that the portfolio of stocks offered a superior return to the portfolio of bonds. Rather, one must first look at the risk taken within the stock and bond portfolios (as measured by the volatility of the portfolio over time) and adjust the returns for this risk. Various studies have shown that covered call strategies will tend to offer comparable absolute returns to uncovered strategies and superior risk-adjusted returns to uncovered strategies. This occurs largely because covered call strategies will tend to lower portfolio volatility over time.
- **Sell-discipline:** Many investors struggle with the decisions of when and at what price to exit a stock position. Covered call strategies help to instill a sell-discipline within a portfolio, as at inception, both a set price and set date of exit are established.

### Risks to covered call investing

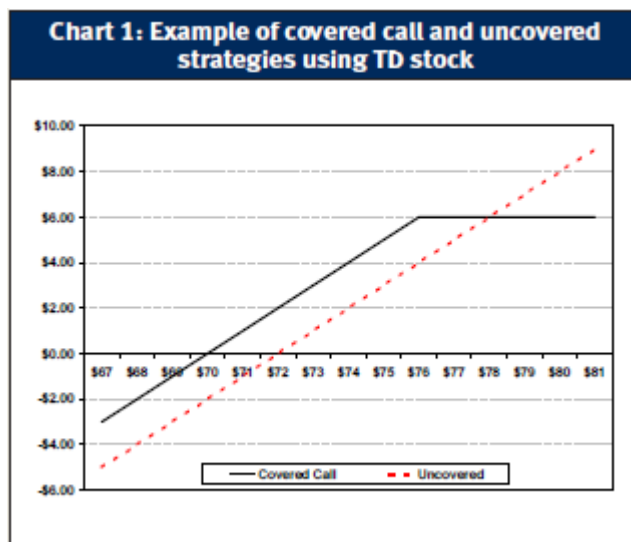
- **Upside is limited:** A covered call position limits an investor's upside to the strike price of the call option plus the initial premium received. Thus, should a stock rise in value significantly over a short period of time, the

<sup>\*</sup> Please note that this is intended for example purposes only and should not be construed as a specific recommendation.

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covered call investor's return, while positive, would lag that of the uncovered investor.

- **Early exercise:** Generally, if a stock price is well above the strike price of the option, the holder of the option may exercise early in order to collect the dividend on the underlying stock. Returning to the TD example, were TD to pay a dividend just prior to expiration and were the stock to be sufficiently above \$76, there is the potential that the option holder would exercise early to receive the dividend. Thus, when calculating expected returns on a covered call strategy, the risk that all dividends will not be received should be taken into account.
- **No strategy works consistently,** 100% of the time. As with any investment strategy, superior long term results may be accompanied by individual years in which the strategy does not outperform. Generally, this strategy will perform best in a sideways or down trending market.



### Performance of selected Canadian securities

Option values are determined by a variety of factors including: time to expiry of the option, the exercise price of the option, the value of the underlying stock, the level of interest rates and volatility (risk) of the underlying investment. Of particular importance for covered call investors is risk. The riskier the stock, the costlier the options will tend to be, as the likelihood of a large price move is greater (and thus the greater the likelihood that the option ends up in-the-money). Utilizing a model that looks at the performance of a number

of Canadian stocks over the past decade and makes certain reasonable assumptions as they relate to risk, one can measure the benefits, both on an absolute and risk-adjusted basis, from using covered call strategies over time. This model should be used for informational purposes only and should not be deemed to be a guarantee of future returns.

**TD Bank example:** Let's return to TD Bank for a moment and ask the question, what would have been the difference in returns between the period from January 1, 2000 to December 31, 2009 of a covered call and an uncovered strategy? For the covered call position, we will assume that the strategy was undertaken on a rolling three-month basis and every time we were called away, we simply reinitiated the position. We will assume no early exercise and exclude all dividends from returns for both strategies.

Notice from [Table 1](#) that over the 10-year period, a covered call strategy for TD would have outperformed an uncovered strategy by about 2% per annum. Further, the covered strategy would have generated substantially better risk-adjusted returns, as it would have generated significantly less volatility. Finally, it should be reiterated that this strategy did not outperform on an absolute basis every year, but produced superior results when applied consistently over time.

**Table 1: Comparison of TD returns**

Year	Covered	Uncovered	Relative
2000	16%	12%	4%
2001	4%	-5%	10%
2002	-21%	-17%	-4%
2003	37%	39%	-2%
2004	31%	27%	5%
2005	23%	24%	-1%
2006	8%	14%	-6%
2007	0%	-1%	1%
2008	-37%	-42%	5%
2009	64%	65%	-1%
CAGR	7%	5%	2%
Volatility	22%	26%	-4%
Risk/Unit of Return	2.9%	4.7%	-2%

Source: Thomson One, PAG

\* Lower is better;

### A look at the performance of various Canadian stocks

Table 2 compares the performance of covered versus uncovered strategies for an array of Canadian stocks for the period from 2000 to 2009. Note that with only a few exceptions, a covered strategy would have compared favourably with an uncovered strategy on both an absolute and risk-adjusted basis. In one particular instance – Teck Resources – both the absolute and risk-adjusted returns have dramatically favoured uncovered strategies over the period, which is largely the

product of the sharp decline in Teck shares in 2008 and the sharp rebound in 2009.

### Conclusion

Covered call writing can be an effective strategy for investors seeking to augment portfolio returns. When properly implemented, it can generate a steady, tax-efficient income stream, institute a self-discipline, mitigate portfolio risk and in many cases enhance both absolute and risk-adjusted returns.

For more detail on the appropriateness of this strategy for your portfolio, please consult your Investment Advisor.

**Table 2: A comparison of returns**

Company name	Covered return	Uncovered return	Relative	Covered risk	Uncovered risk	Covered risk per unit of return*	Uncovered risk per unit of return*	# of years covered outperformed	# of years uncovered outperformed
TD Bank	7%	5%	2%	22%	26%	2.9%	4.7%	5	5
Royal Bank of Canada	16%	14%	3%	19%	5%	1.2%	0.3%	8	2
CIBC	12%	7%	5%	21%	23%	1.7%	3.3%	8	2
Bank of Nova Scotia	14%	12%	2%	20%	23%	1.5%	1.9%	5	5
Bank of Montreal	12%	9%	3%	21%	25%	1.8%	3.0%	5	5
Rogers Comm.	9%	6%	3%	26%	36%	2.9%	5.6%	5	5
Research In Motion	11%	20%	-9%	50%	87%	4.6%	4.3%	4	6
Suncor Energy	23%	17%	6%	27%	29%	1.2%	1.7%	6	4
Transcanada	13%	11%	2%	15%	18%	1.1%	1.6%	5	5
Enbridge	15%	13%	2%	13%	16%	0.9%	1.2%	6	4
Canadian Natural Res.	27%	24%	3%	27%	33%	1.0%	1.4%	4	6
Barrick Gold	17%	5%	13%	18%	21%	1.0%	4.2%	9	1
Teck Resources	7%	18%	-11%	44%	68%	6.0%	3.7%	4	6
Cameco	19%	25%	-6%	31%	42%	1.6%	1.7%	5	5
CP Railway	16%	14%	2%	21%	26%	1.3%	1.9%	7	3
Potash Corp Sask	17%	26%	-9%	28%	41%	1.7%	1.6%	5	5
Average	14.7%	14.2%	0.5%	25.2%	32.4%	2.03%	2.63%	5.7	4.3

Source: Thomson One, PwG  
\* Lower is better

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