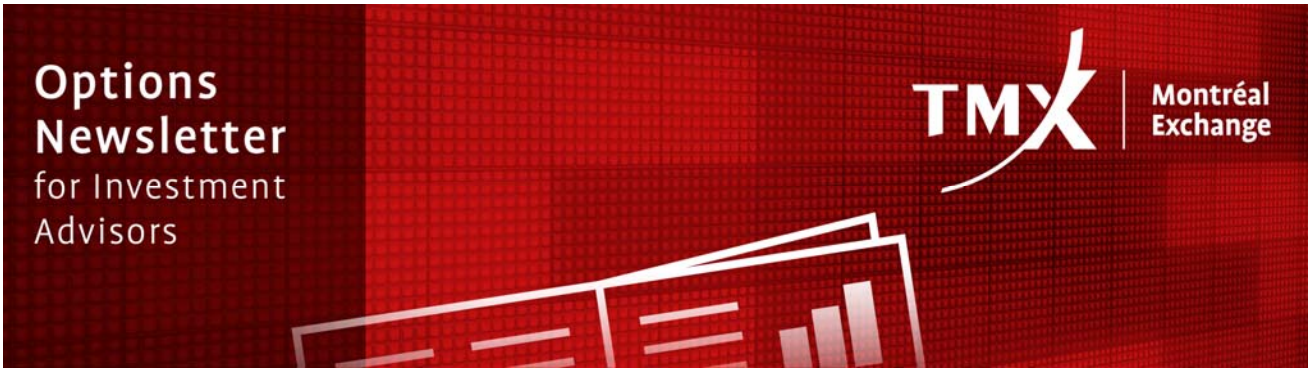

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Maximizing Leverage with Options

We have previously mentioned that the best way to start using options is to adopt the most common strategies targeted at protecting a stock investment or at allowing an investor to buy and sell stocks at a more favourable price. Indeed, the use of options to protect an investor's position allows one to lock-in a purchase or sale price in advance—whether the investor bought call or put options. Both the covered calls and the writing of secured puts are strategies enabling to sell or buy shares at a more favourable price compared to the price one may get by placing limit orders on a stock exchange. Such strategies are perfect for beginners since they don't require a high knowledge level.

However, when investors use options to speculate, it is a different story. They are faced with two major obstacles. The first obstacle (that applies to all investors), is that one needs to be right on the price direction of the stock under analysis. The second one is important and it's the reason so many investors find it difficult to speculate with options: the option time decay.

The cost (or premium) of options is composed of two components: intrinsic value and time value. The intrinsic value represents the value of the option when it expires. For call options, the intrinsic value is the greater value between zero and the difference between the market price of the stock and the strike price of the call. For put options, the intrinsic value is the strike price of the put less the market price of the stock. A negative intrinsic value means the option would not be exercised. The time value is the value over the intrinsic value. The longer the time to expiry, the greater the value of options (for both calls and puts). So, the options holder has a greater risk of loss in relation to the time value. The strategies to limit the impact of the option's time decay require a greater level of knowledge compared to the basic option strategies, and they could be the subject of a separate newsletter. However, it is still possible to succeed despite this obstacle.

By focusing on the first obstacle (the price direction of a stock), it is possible to find which option will provide the greatest leverage relative to the price target of the stock—whether this price target is higher or lower than the current stock price.

To determine which option is best, an investor must first find out the stock price direction and the target price of the stock. Subsequently, after establishing the maximum amount of capital the investor can risk losing in this particular transaction, we can calculate the number of options contracts to buy among the list of available options. Thus, an investor's maximum loss is limited to the cost or the premium paid to buy the options.

Let's use a fictitious stock in the following example showing the steps required to identify the strike price of the option to choose. Suppose that XYZ stock is trading at $62 and that your client has established a target price of $71 for the stock to be reached within the next four months (representing a 15% increase).

Since the price target of the stock is higher than the current stock price, we need to buy call options[1]. We shall focus our attention specifically on the option strike prices that are between the current $62 stock market price and the $71 stock target price, as illustrated in the following table:

	Current Price	Target Price
XYZ	$62	$71

Type	Expiry	Strike Price	Premium
Call	4 months	$62	$2.35
Call	4 months	$64	$1.41
Call	4 months	$66	$0.74
Call	4 months	$68	$0.36
Call	4 months	$70	$0.16

Among these five calls, there is one that must provide the greatest return if the stock target price is reached within the next four months. To find which option provides the greatest return, we need to calculate the target price of the option, as well as the potential profit and the return for each call option.

The following table shows the results obtained for the fictitious stock:

	Current Price	Target Price	Potential Return	Maximum Loss
XYZ	$62	$71	15%	$1,000

Type	Expiry	Strike Price	Premium	Breakeven Price	Target Price	Potential Profit	Potential Return	# of contracts	Total Profit
Call	4 months	$62	$2.35	$64.35	$9	$6.65	283%	4	$2,660
Call	4 months	$64	$1.41	$65.41	$7	$5.59	396%	7	$3,913
Call	4 months	$66	$0.74	$66.74	$5	$4.26	576%	14	$5,964
Call	4 months	$68	$0.36	$68.36	$3	$2.64	733%	28	$7,392
Call	4 months	$70	$0.16	$70.16	$1	$0.84	525%	63	$5,292

The breakeven price is the minimum price required for the position to show no profit, or no loss. It is computed by adding the call option premium and the strike price of the call. We calculate the target price of the option by subtracting the strike price of the call from the $71 stock target price. Hence, the potential profit is derived from the target price of the option minus the option premium. The potential return is simply the potential profit expressed as a percentage return. Among all options, your client should choose the one that offers the greatest potential return.

[1] Note that this method may be used with put options as well.

In this example, the $68-strike option offers the greatest leverage if the $71 stock target price is reached within the next four months. This call option can be bought for a premium of $0.36 per share only, for a total cost of $36 per contract[2]. By risking a maximum of $1,000 (which represents the maximum amount your client is willing to lose on this transaction), your client can buy a total of 28 contracts. At the expiration of the calls, if the $71 stock target price is reached, your client will be able to sell the calls for $3 per share for a net profit of $2.64 per share—representing a return of 733%. Investing $1,000 would produce $7,392 in profit. Impressive! However, a scenario that is likely not realistic. In such a case, it would be more prudent to select a lower target price for the stock. Perhaps the stock target price of $71 is too optimistic and that a lower price target should be selected. Let's determine the call option to buy with a stock target price of $68.

	Current Price	Target Price	Potential Return	Maximum Loss
XYZ	$62	$68	15%	$1,000

Type	Expiry	Strike Price	Premium	Breakeven Price	Target Price	Potential Profit	Potential Return	# contracts	Total Profit
Call	4 months	$62	$2.35	$64.35	$6	$3.65	155%	4	$1,460
Call	4 months	$64	$1.41	$65.41	$4	$2.59	184%	7	$1,813
Call	4 months	$66	$0.74	$66.74	$2	$1.26	170%	14	$1,764
Call	4 months	$68	$0.36	$68.36	-	-	-	-	-
Call	4 months	$70	$0.16	$70.16	-	-	-	-	-

As observed, with a $68 target price, it is the call option with a strike price of $64 that offers the greatest potential return (+184%). At a cost of $1.41 per share, the $1,000 investment offers the potential to realize a profit of $2.59 per share for the seven contracts bought, for a total profit of $1,813. A result that is more realistic than the initial scenario. However, instead of choosing one target price for the stock over the other, your client may decide to invest 70% of the $1,000 on the price target of $68 and 30% on the price target of $71 (or any other weighting of course). With a 70/30 weighting, your client may now buy five call options contracts with a strike price of $64 and eight call options contracts with a strike price of $68 (refer to the following table).

	Current Price	Target Price	Potential Return	Maximum Loss
XYZ	$62	$68	10%	$700

Type	Expiry	Strike Price	Premium	Breakeven Price	Target Price	Potential Profit	Potential Return	# contracts	Total Profit
Call	4 months	$64	$1.41	$65.41	$4	$2.59	184%	5	$1,295

	Current Price	Target Price	Potential Return	Maximum Loss
XYZ	$62	$71	15%	$300

Type	Expiry	Strike Price	Premium	Breakeven Price	Target Price	Potential Profit	Potential Return	# contracts	Total Profit
Call	4 months	$68	$0.36	$68.36	$3	$2.64	733%	8	$2,112

[2] Note that the cost of options does not include commissions, which may vary from one broker to another.

Now once the price target for the stock and the price target for the call options are determined, all that remains is to manage the position until the expiry of the call options. As mentioned at the beginning, the time decay of options was a major obstacle for investors. It is still the case! However, only if the position is held until the expiry of the call options. If we examine the client's hypothetical position, we will notice that the price targets for the stock of $68 and $71 correspond to the price target for the option of $4 for the strike price of $64, and of $3 for the strike price of $68. Consequently, this is all we now need to know. It is possible that before the expiry of the call options, the option's price may reach its price target even if the price target of the stock is not reached. In such a case, there is no need to wait any longer to sell the call options. Therefore, since the price target of the option has been reached, the client sells the options, pockets the profit, and moves on to the next investment opportunity. Managing options position in a systematic fashion, as illustrated above, reduces the impact of the time decay of options without the need to use complex strategies. Keeping things as simple as possible should be the objective, and it is often the key to success[3].

Options Education Days

The Montréal Exchange and the Options Industry Council will be hosting their first 2011 Options Education Days in Toronto and Vancouver.

Toronto
February 26, 2011
For more information or to register, consult the program at:
http://www.m-x.ca/evenements/optionsdayTor11_en?r=MXW.

Vancouver
March 26, 2011
For more information or to register, consult the program at:
http://www.m-x.ca/evenements/optionsdayVan11_en?r=MXW.

We hope to see you at one of these events where we will present a new program taught by a set of experienced instructors. You will be offered the opportunity to learn valuable insight on the challenges that individual investors face when trading options.

For any other information on our educational events, write us at events@m-x.ca.

[3] Note that the author of this article, Mr. Martin Noël, can provide on demand the Excel spreadsheet used to compute the results of the examples illustrated in this article. Mr. Noël can be reached via e-mail at mnoel@financieremonetis.com.