

## The Limited Risk Solution

This is part 2 of 4 articles addressing the concerns associated with covered calls and stocks in general, the possibility of a large price decline. An effective way to address the risk of a decline is to **buy** put options to provide insurance for your stock positions. Put options overcome the problems of stop orders, which can have unpredictable or mistimed execution. Put options can be positioned to provide the insurance without the need to diversify. Put options allow the investor to choose the amount of insurance, the deductible and the time duration just like insurance we all purchase on a home or a car.

Choosing the right strike price choice of a put option allows an investor to select the amount of risk for an investment. The time premium of the put option is a measure of the insurance cost. And the put option price relative to the stock price is a measure of the insurance deductible cost. Ideally, the put option should be positioned in a way to allow the stock investment to continue to grow while limiting the risk in case of a decline. Put option insurance is similar to the purchase of insurance for a home, which does not limit the appreciation in value of the house. As with home insurance, we hope the put insurance will not be needed. While home insurance costs may be high, it is necessary and an expected cost of home ownership. In general, the cost of home insurance is not recovered. A big difference between investors and home owners is investors often purchase stock or mutual funds without insurance, but home owners never consider not insuring their home. In fact, banks will not lend money for a home mortgage without insurance for the home, because banks do not want to be exposed to the risks of a mortgage on a home without insurance. Another way to assess the risks of stock ownership is the high amount of stock required as collateral for a loan. Due to the large risk of the price movement of a stock, the amount of stock needed to secure a loan is generally many times the loan amount. By doing this banks seek to hedge loans with stock as collateral with excess value because of the high risk.

The use of put options for insurance and protection of ones portfolio is not new and has been applied for many years by institutions, mutual funds and individuals. However, the approach presented here is a little different and was inspired by a colleague, Kurt Frankenberg of RadioActive Trading. Many of the income generation techniques used in these articles were first described and published by Frankenberg over the last few years. The married put position that Frankenberg practices differs from a traditional married put in three ways:

- 1) The put that is purchased is ITM, therefore limiting possible percent losses to the realm of single digits. It is therefore a "virtual stop order" that takes the guesswork out of money management;
- 2) The put is purchased very far out in time as compared with most similar ideas, so as to make for a longer horizon for the stock's price to develop, and allow more "management" opportunities;
- 3) The whole arrangement is not an end in itself but rather a platform from which to launch other low- or no-risk trades that Frankenberg calls "Income Methods". Some of these methods involve the "covered call" strategies that are familiar to a number of traders. Others involve "bulletproofing"... ways of manipulating the put option itself. These can leave the upside potential unlimited, but completely eliminate even the initial risk.

The entire insurance process starts with the creation of the married put position:

The profit / loss profile for a married put is shown in Figure 2:

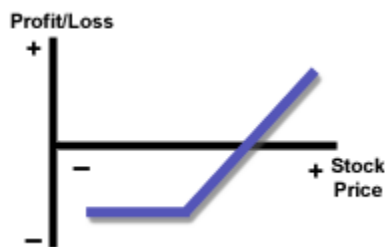


Figure 2. Married Put Profit / Loss Profile

For the married put, the loss is limited, and there is no limit on the price appreciation of the stock, which is a very favorable condition for the investor who expects the stock to rise over the long term. The largest possible loss is set by the strike price of the put. The difference between the maximum loss and breakeven line is the deductible for the insurance. The deductible is approximately the time value of the put purchased. The insurance will be in effect until expiration of the put option. As with any insurance the longer the insurance is in effect the more it will cost. Also the insurance will cost more as risk is reduced. The amount paid for insurance is a sunk cost just like in home insurance unless the asset goes up enough to more than compensate for the insurance cost. Some of these principles can be seen in Figure 3 below:

Figure 3. Married Put Search by Symbol

**Green Mountain Coffee Roasters Inc. (GMCR) \$ 42.07 (-1.00) -2.3 %**

Stock Symbol

GMCR

Expiration Month

December

Filters

More Results

Submit

Lookup Symbol

More Info	Option Sym	Expire/Strike & Days To Exp	Opt Ask	Net Debit	Max Risk	% Max Risk	% Time Value	% In Money	Implied Volat.	Delta	% Prob. Above
	QG MXK	08 DEC 55.0 (197)	14.90	56.97	1.97	3.5	4.7	+30.73	0.47	-0.71	22.6
	QG MXJ	08 DEC 50.0 (197)	11.20	53.27	3.27	6.1	7.8	+18.85	0.48	-0.61	31.4
	QG MXI	08 DEC 45.0 (197)	7.90	49.97	4.97	9.9	11.8	+6.96	0.49	-0.49	42.5
	QG MXH	08 DEC 40.0 (197)	5.30	47.37	7.37	15.6	12.6	-4.92	0.51	-0.36	55.6
	QG MXG	08 DEC 35.0 (197)	3.40	45.47	10.47	23.0	8.1	-16.81	0.55	-0.24	69.6
	QG MXF	08 DEC 30.0 (197)	1.95	44.02	14.02	31.8	4.6	-28.69	0.57	-0.13	82.7
	QG MXE	08 DEC 25.0 (197)	1.00	43.07	18.07	42.0	2.4	-40.58	0.59	-0.05	92.7

Figure 3 illustrates a list of puts that can be purchased with PowerOptions site generated the chart of Figure 3. This tool calculates the price, and month of expiration. The GMCR stock price is \$42.07 and put options listed have a strike price range of \$25 to \$55. The strike price of the put option bought is the price we are guaranteed to be able to sell the GMCR shares of stock. Each put contract can protect 100 shares of GMCR stock. Purchasing one of these puts will guarantee we can sell our stock in the event of a price decline. All of the put options shown are for the month of December, which is about 7 months in the future at the time of this article. This means the insurance we purchased is good for 7 months before it is necessary to renew the policy. In the column labeled "Net Debit", the total cost of buying the stock and buying the put for protection is shown. The December 55 Put cost (\$14.90) plus the stock price (\$42.07) would have a net debit (cost) of \$56.97. This total cost may seem high, but in reality it is very modest. Our put strike at \$55 is almost 13 points in the money (ITM). It has an inherent built in value of \$13. We buy the stock for \$42 and can sell it with the put option at \$55. No matter how low the stock price goes we can always sell it for \$55 per share, with the purchase of the put option.

Buying the \$55 put may seem a little strange when the stock is selling at \$42, especially when you consider the \$55 put is the most expensive put in the list at \$14.90 per contract. Why would someone buy a stock at \$42 and also buy the guarantee to sell it for \$55? Simply stated, it is less expensive when all factors are considered. An option price generally is made up of 2 components, the intrinsic value and the time value.

Option Price = Intrinsic Value + Time Value

Time value is the cost of having the privilege to control the underlying shares for a certain amount of time. In this case you can sell your shares at the strike price of \$55 for the next 197 days. Intrinsic value is the other component of the option price. It represents the inherent value based on the difference between the strike price of the option and the price of the underlying stock. In this case the intrinsic value is  $\$55 - \$42.07 = \$12.93$ . An option will have to sell at a minimum the intrinsic value plus some time value. The time value is the difference between the price of the option and its intrinsic value or  $\$14.90 - \$12.93 = \$1.97$ . We have called this time value your "Max Risk" because if you sold your stock by exercising the option, your loss would be the time value or \$1.97 points. The real cost of the insurance is the time value or "Max Risk". The 1.97 points is only 3.5% of the net debit. Therefore, the put option insurance cost is 3.5% for a 7-month period of time. The "Max Risk" is entirely time value when the put option is ITM.

The cost of a put option goes up as the strike price increases, but the time value is a maximum at the stock price and decreases as the strike price goes more ITM or out of the money (OTM). If the time value (the cost of our insurance) goes down with strike prices under the stock price, why not purchase the \$25 strike put for \$1.00 for insurance (see Figure 3)? The answer is simple a put price of \$25 will not give us any insurance for the market drop between \$42.07 and \$25. Therefore, the OTM component is like an insurance deductible, which adds to the overall cost of the insurance.

Max Risk = Insurance Cost + Deductible  
Max Risk = Put time value + OTM Amount  
Max Risk =  $\$1.00 + (\$42.07 - \$25.00) = \$18.07$

The maximum risk value contains the sum of both time value and the market value down to the strike price (OTM Amount). In this case the maximum risk is  $\$42.07 - 25 = 17.07$  for the market value plus \$1.00 of time value for a total of \$18.07 points or 42% at risk. This would be too much risk for most investors. Using the \$25 strike put would require a very large deductible and dominate the cost of the insurance. In summary the most effective strike price for the put option is slightly ITM to avoid the deductible and to keep the time value low.

The cost of put option insurance would be less if it were for 6 months than it would be more for a 12-month duration. However, if we double the time for the insurance the cost will not double. It will only go up by 40 or 50%. Therefore, it is cheaper per month to acquire the put option insurance for longer periods of time. If you expect to hold the stock for a long period of time, it may be less expensive to insure the stock with LEAPS, which may go out 2 or 3 years in time. The dollar cost for the long term insurance will be more, but the monthly cost will be less than the short term insurance.

An alternative to buying the put for insurance alone is to use the combination of buying the put option and also writing a covered call. Since we own the stock we can use the stock as collateral for writing a call option. We can basically rent our stock while we wait for the stock price to appreciate. The rental income will help pay for the cost of the insurance for the stock. Using the example of insurance with the \$55 put above, if we can earn 1.97 points writing a covered call in the next seven months our investment will be risk free, with no possibility of loss for the investment. In the next part of this article we will show management examples on how to earn the back the cost of the put insurance.

Our experience is that most brokerage firms will allow buying puts and selling covered calls in almost every type of account including retirement accounts. Your broker may require applying for Level I and Level II option trading to be able to trade long puts and covered calls, but some may only require Level I approval. Being approved for these two levels is all you need in order to trade the married put or collar spread strategies.

So you can see how married puts and collars can be preferable to covered calls and long stock investments in terms of preserving your capital invested in the event of a large stock price drop. In our next article, part 3 of 4, specific examples will illustrate the married put and collar strategies by applying various management techniques.