THE VALUE LINE
Guide to Option Strategies

How to Invest Using Options

If you need assistance with our service, feel free to contact us at 1-800-825-8354

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Preface - Options and the Value Line Daily Options Survey

Option trading, as we know it, began in 1973. That was the year when Fischer Black and Myron Scholes published their groundbreaking work on how to calculate option premiums and how to trade options. It was also the year that the Chicago Board Options Exchange (CBOE) started trading listed options on a small number of stocks. By setting standard strike and expiration dates (always the third Saturday of the month), the CBOE made it easy for investors to compare one option with another. In addition, the CBOE set up a mechanism that made it easy for buyers or sellers to find a third party to take over their position at any time during the life of the option. Soon, other U.S. exchanges started listing options as well. Currently, five exchanges in addition to the CBOE trade options in the U.S; the American Stock Exchange (AMX), the Boston Options Exchange (BOX), the International Securities Exchange (ISE), the New York Stock Exchange (NYSE ARCA) and the Philadelphia Stock Exchange (PHLX).

Option trading got a significant boost in the early 1990s, when the Security and Exchange Commission specified that the exchanges must allow options on any qualified stock to trade on any exchange that wanted to list them. (Previously, individual exchanges were allowed to have a monopoly on options on individual stocks). Today, most stocks (that qualify) have options listed on more than one exchange. This multiple listing among exchanges has made the options market much more competitive than it had been.

The 1990s was also the beginning of the electronic revolution. The personal computer, the Internet and online brokerage have all greatly facilitated the growth in options trading. Options trade on more then 3,000 stocks (most of which are followed by the either The Value Line Investment Survey, by The Value Line Investment Survey Small & Mid-Cap Edition or by the Value Line database).

Value Line and Options: For more than 80 years, Value Line has been in the business of offering unbiased evaluations of U.S. equities. In 1965, Value Line introduced its renowned Timeliness™ Ranking System, which ranks stocks from 1 to 5 for relative future performance. In the early 1970s, Value Line launched its Convertibles service, combining the Value Line Timeliness ranks and Value Line's proprietary convertible evaluation model. Using a variant of this convertible evaluation model, Value Line was able to offer a printed option publication, shortly after listed options started to trade in 1973.

The Value Daily Options Survey went online in 1995, evaluating about 10,000 options. We now cover virtually the entire listed equity options market - about 200,000 options. In our service, we evaluate and rank options for the five basic strategies; *call buying, put buying, call writing, put writing* and *covered call writing*. We also rank options for *married put buying*, which is a combination of owning the stock and hedging the position by purchasing a put.

Introduction - The Chapters Ahead

We designed this book to give you a firm grounding in the basics of options and to show how you can successfully use our product, *The Value Line Daily Options Survey*, as part of your overall investment strategy. In the upcoming chapters, we cover the following topics.

1) *Option Basics*: Here we describe the basic option strategies – Buying Calls and Puts, Writing Uncovered or "Naked" Calls and Puts, and Writing Covered Calls. We also define the most widely used option terms, and tell you where you can find additional option information (from our service and from the option exchanges).
2) In *Finding the Most Attractive Options,* we explain Value Line's option ranks, and we show how you can find the best options for your needs from the 200,000 options that we rank every day.
3) In *Spotlight on Call Buying,* we describe in some detail why call buying is really insurance against financial uncertainty. This insurance is often a lot cheaper than many people think.
4) Our next chapter is a *Spotlight on Buying "Naked" Puts.* Here we describe what goes into our put buying recommendations and we show you how adding puts to your portfolio can improve your overall performance.
5) *Spotlight on Uncovered Call and Put Writing* describes the potential profits (and the potential pitfalls) of writing options when you don't have a position in the underlying stock.
6) *Spotlight on Covered Call Writing* describes covered call writing in some detail and shows you what goes into our covered call ranks. The chapter also offers pointers on how to use our Online Option Screener to find covered calls that meet your requirements.
7) In *How Much Should I Invest in Options,* we help you answer the following questions: What option strategies are right for you? How much can you expect to make? And, how much can you afford to lose?
8) In *When to Close out an Option Position,* we tell you how to use our ranks and other considerations in making your decision to close your long option, uncovered write or covered call.
9) *Managing a Covered Call Portfolio:* The management of a covered call portfolio is more complicated than the management of a simple stock portfolio; however, knowing a few simple calculations and following a few simple guidelines can make the task relatively easy.
10) In *Option Trading Tips,* we show where managing an option portfolio is similar to managing a stock portfolio and where it is different.
11) *Managing a Market-Neutral Hedge:* Our performance numbers demonstrate how a market-neutral portfolio can produce the best risk-adjusted results. In this chapter, we show you how to set up such a hedge and how to manage it.
12) In *A Review of Our Performance Data,* we specify exactly how we gauge the performance of our option ranks and show how you can access our performance data.

Appendix A: Here we show a list of our *Weekly Option Strategist Reports.* These reports are designed to cover a number of topics. They include; (1) option investing and strategies, (2) new and advanced features of the product, (3) our option model's performance and (4) developments in the options market.

Appendix B: Here we provide a glossary of the more commonly used option terms and also of terms that are specific to our Service.

Chapter 1 – Option Basics

Defining Some Terms

If you are already familiar with options (what they are, what gives them value, the terms that describe them and how they are traded), you can probably skip this chapter. However, if you are uncertain about some of the terms or concepts, this chapter will probably answer your questions. We start with some basic definitions.

Call: a contract in which the buyer pays a **premium** for **the right but not the obligation** to buy the stock (usually 100 shares) at the exercise (or strike) price anytime until the expiration of the contact. (Calls are so named because the call buyer can "call" the stock from the option seller at the exercise price.)

Put: a contact in which the buyer pays a premium for **the right but not the obligation** to sell the stock (100 shares) at the exercise price anytime over the life of the option. (Puts are so named because the put buyer can "put" stock to the option seller at the exercise price.)

Premium: this is the price that the buyer pays for the call or for the put. An option premium consists of **time value** (basically an insurance premium) and, if the option is **in-the-money**, **tangible value**.

Tangible value: This is the amount that you get if you exercise the option. For a call, it is the difference between the stock price and the strike price if the stock is above the strike. For a put, it's the difference between strike and the stock price if the strike is above the stock. Since you are not obliged to exercise an option if it is not profitable to do so, an option can never have negative tangible value.

In-the-money: This means that the option has tangible value. A call is in-the-money when the stock is above the strike price. A put is in-the-money when the stock is below the strike price.

At-the-money: a call and a put are at-the-money when the stock is equal to the strike price.

Out-of-the-money: A call is out-of-the-money if the stock is below the strike price. A put is out-of-the-money when the strike is below the stock price.

Time value: This is the part of an option's premium that is not tangible value. It is also the "insurance" component of an option premium, as we will demonstrate later. In-the-money options have both tangible value and time value. At-the-money and out-of-the- money option premiums only have time value.

Some Sample Premiums

Table 1 on the next page gives you an idea of the above definitions. With the stock at $100, the $90 strike call is in-the-money with a total premium of $12.50 ($10 tangible value and $2.50 time value). The $100 strike call is at-the-money with a premium of $7.50 (zero tangible value and $7.50 time value). The $110 strike call is out-of-the-money with a $2.50 premium (zero tangible value and $2.50 time value.)

Table 1- Sample 90-Day Call and Put Premiums: Stock Price = $100.

	Calls			Puts		
Strike Prices	Total Premiu	Tangible Value	Time Value	Total Premiu	Tangible Value	Time Value
$ 90.00	$ 12.50	$ 10.00	$ 2.50	$ 2.50	$ -	$ 2.50
$ 100.00	$ 7.50	$ -	$ 7.50	$ 7.50	$ -	$ 7.50
$ 110.00	$ 2.50	$ -	$ 2.50	$ 12.50	$ 10.00	$ 2.50

With the puts in Table 1, the $110 strike put is in-the-money with a total premium of $12.50 ($10 tangible value and $2.50 time value). The $100 strike is at-the-money, with a premium of $7.50, consisting of zero tangible value and $7.50 time value. The $90 strike put is out-of-the-money with zero tangible value and $2.50 time value.

Buying a Call

In Table 2 below, we show an example of the gains and losses at expiration from buying one at-the-money call (on 100 shares) for $7.50 with the stock and the strike at $100. With this option, the most you can lose is $750 (100 times the $7.50 premium). On the upside, your gains are unlimited, minus, of course, the call's $750 in premium that you paid. Basically, you buy a call for two reasons: (1) because you are bullish and expect the stock to go up; and (2) because you believe that the call premium is fairly priced (or better yet, underpriced) considering your profit opportunities.

Table 2 Profit/Loss of Call Buy (100 shares) at Expiration: Strike = $100; Premium = $7.50

	Stock Price at Expiration								
	$80	*$85*	*$90*	*$95*	*$100*	*$105*	*$110*	*$115*	*$120*
Tangible Value of Call	$0	$0	$0	$0	$0	$500	$1,000	$1,500	$2,000
Less $750 Premium Paid	-$750	-$750	-$750	-$750	-$750	-$750	-$750	-$750	-$750
P/L of Call Purchase	**-$750**	**-$750**	**-$750**	**-$750**	**-$750**	**-$250**	**$250**	**$750**	**$1,250**

Buying a Put

In Table 3, we show an example of the gains and losses at expiration of buying an at-the-money, $100 strike put at $7.50 (or $750 on a 100 share option contact). In this example the most you can lose is the $750 total premium paid, while your gains at expiration will be the tangible value of the put minus the $750 that you paid.

Table 3 - Profit/Loss of Put Option at Expiration: Strike = $100, Premium = $7.50

	Stock Price at Expiration								
	$80	*$85*	*$90*	*$95*	*$100*	*$105*	*$110*	*$115*	*$120*
Tangible Value of Put	$2,000	$1,500	$1,000	$500	$0	$0	$0	$0	$0
Less $750 Premium Paid	-$750	-$750	-$750	-$750	-$750	-$750	-$750	-$750	-$750
P/L of Put Purchase	**$1,250**	**$750**	**$250**	**-$250**	**-$750**	**-$750**	**-$750**	**-$750**	**-$750**

Options as Insurance: Many people think of buying an option as a highly speculative venture, but in fact when you buy a call or a put, you are really buying insurance. This is because the option gives you the "**right but not the obligation**" to exercise it. Thus, you are insured against an unfavorable price move. For instance, if you own a $100 strike call, and if the stock ends up below the strike price, say at $80, you don't have to buy the stock. At the same time, you get to make a profit if the stock rises far enough. So, in a sense, you are also insured against missing out on a financial opportunity. Similarly, when you buy a put, you don't have to exercise it if the stock ends

up above the strike price. At the same time, you retain the opportunity to make a profit if the stock falls below the strike price. We say a lot more about options as insurance in Chapter 3 ("Spotlight on Buying Calls") and Chapter 4 ("Spotlight on 'Naked' Put Buying") of this book.

Selling before expiration

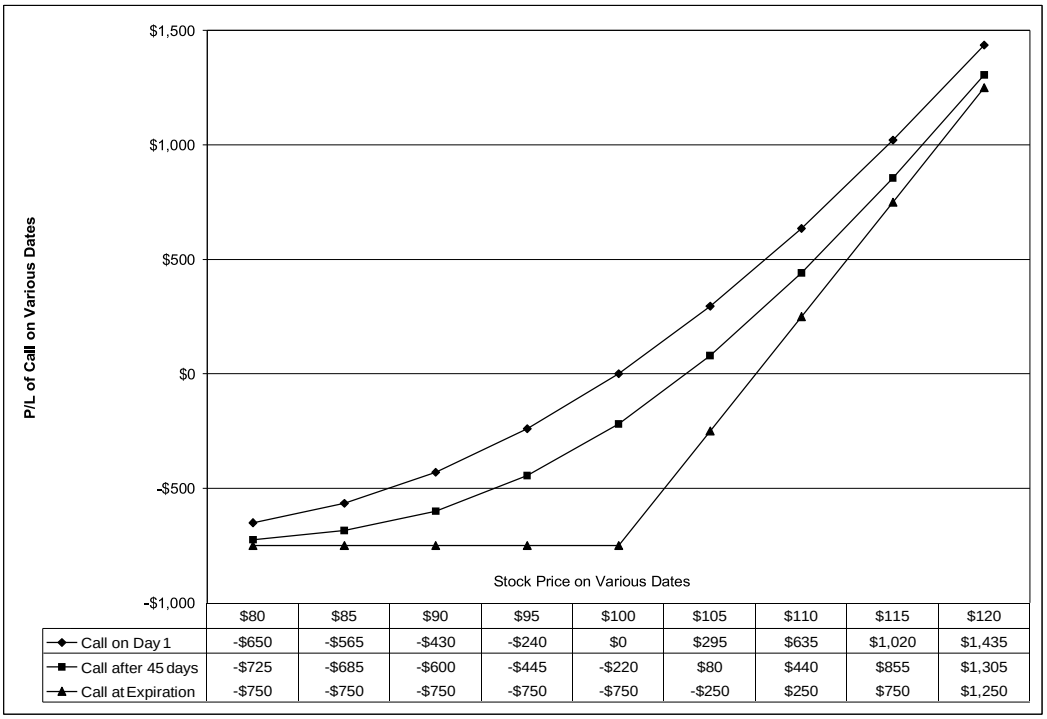
An attractive (and often overlooked) feature of owning an option is that you can sell it before expiration. Thus, you don't have to lose your entire premium if the stock moves against you. Also, since the premium usually trades for more than tangible value, you can earn more by selling the option than by exercising it. In Table 4 below, we show an example of what a 90-day call is likely to be worth at different stock prices on three dates over the life of the option; (1) on the day you buy it (day 1), (2) after 45 days have passed and (3) at expiration.

Table 4 –Value of a $100 Strike Call Option on 100 Shares on Various Dates

	Stock Price on Various Dates								
	$80	*$85*	*$90*	*$95*	*$100*	*$105*	*$110*	*$115*	*$120*
Call on Day 1	$100	$185	$320	$510	$750	$1,045	$1,385	$1,770	$2,185
Call after 45 days	$25	$65	$150	$305	$530	$830	$1,190	$1,605	$2,055
Call at Expiration	$0	$0	$0	$0	$0	$500	$1,000	$1,500	$2,000

In the graph below, we show the profit or loss (P/L) of this contract, netting out the value of the call on different dates at different stock prices against the $750 that you paid for the call. For instance, if the stock has gone to $110 after 45 days, the P/L would be $440 ($1,190 value of option minus initial $750 premium). This type of graph presentation is often used when showing what to expect from an option contract over its life.

Graph 1 - P/L of 90-Day Call on 100 Shares on Various Dates



	$80	$85	$90	$95	$100	$105	$110	$115	$120
Call on Day 1	-$650	-$565	-$430	-$240	$0	$295	$635	$1,020	$1,435
Call after 45 days	-$725	-$685	-$600	-$445	-$220	$80	$440	$855	$1,305
Call at Expiration	-$750	-$750	-$750	-$750	-$750	-$250	$250	$750	$1,250

Writing Uncovered or "Naked" Options

Instead of buying an option, you can write a call or put, provided that you post the required margin. The standard margin requirement consists of the option premium plus at least 10% to 20% of the underlying stock value.

When you write an uncovered or "naked" call, you receive a premium in return for assuming the obligation of selling someone else the stock at the strike price. Because you want the stock to end up below the strike price (so that you don't get exercised), you are basically bearish with this position. You also believe that the call premium is overpriced and that you are more than compensated for the risk of the stock moving against you.

Table 5 - Profit/Loss on Uncovered Call Write at Expiration: Strike = $100; Premium = $7.50

	Stock Price at Expiration								
	$80	*$85*	*$90*	*$95*	*$100*	*$105*	*$110*	*$115*	*$120*
Tangible Value of Call Write	$0	$0	$0	$0	$0	-$500	-$1,000	-$1,500	-$2,000
Plus $750 Premium Received	$750	$750	$750	$750	$750	$750	$750	$750	$750
P/L of Call Write	**$750**	**$750**	**$750**	**$750**	**$750**	**$250**	**-$250**	**-$750**	**-$1,250**

When you write a "naked" put, you receive a premium in return for giving someone else the right to sell you the stock at the strike price. Because you want the stock to end up above the strike price, you are basically bullish. Also, you believe that the premium more than compensates you for the risk.

Table 6 – Profit and Loss of Put Write at Expiration: Strike = $100; Premium = $7.50

	Stock Price at Expiration								
	$ 80	$ 85	$ 90	$ 95	$ 100	$ 105	$ 110	$ 115	$ 120
Tangible Value of Put Write	-$2,000	-$1,500	-$1,000	-$500	$0	$0	$0	$0	$0
Plus $750 Premium Received	$750	$750	$750	$750	$750	$750	$750	$750	$750
P/L of Put Write	**-$1,250**	**-$750**	**-$250**	**$250**	**$750**	**$750**	**$750**	**$750**	**$750**

Writing Covered Calls

You can buy (or own) the stock and write a call on this same stock. This long stock/short call combination is known as a **covered call**. In return for the call premium, you give someone else the right to buy the stock from you at the strike price. Compared to just owning the stock, covered call writing tends to have fewer losses but also fewer large gains. You write a covered call because you are basically bullish on the stock; however, you believe that the premium is attractive enough to compensate you for giving some of your upside potential. Implicitly, you believe that the call is overpriced.

Table 7 - Covered Call at Expiration

	Stock Price at Expiration								
	$80	*$85*	*$90*	*$95*	*$100*	*$105*	*$110*	*$115*	*$120*
P/L of 100 Shares	-$2,000	-$1,500	-$1,000	-$500	$0	$500	$1,000	$1,500	$2,000
P/L of Call Write	$750	$750	$750	$750	$750	$250	-$250	-$750	-$1,250
P/L of Covered Call	**-$1,250**	**-$750**	**-$250**	**$250**	**$750**	**$750**	**$750**	**$750**	**$750**

Which strategy is best?

You will find successful investors who write covered calls, buy naked calls, sell naked calls, buy naked puts and sell naked puts. Each strategy or mix of strategies has its place. The additional information you need to choose the strategy or strategies that best meet your objectives will be found in the following chapters. In general, as profit potential rises, risk does, too. Whatever your strategy mix, however, you will find that having *The Value Line Daily Options Survey* will give you an important edge in your options investing.

Additional Information

New Subscribers may want to read the following reports in *Educational Strategy Reprints* (available online at the www.valueline.com homepage and in our *Interactive Options Study Guide: "*Buying Naked Calls*," "Buying Naked Puts"* and *"Covered Calls, Doing the Math."*

Finally, you may also want to browse through our archive of *The Weekly Options Strategist Reports.* Simply select the *Options Reports* from our *Options Home* page. A list of some of these reports is shown in Appendix A on page 44 of this book.

For a listing of other training materials, we suggest you read our report, "What's Free (or Almost Free) from Commercial Websites," (Ot110623.pdf) in online *Survey Issues* directory.

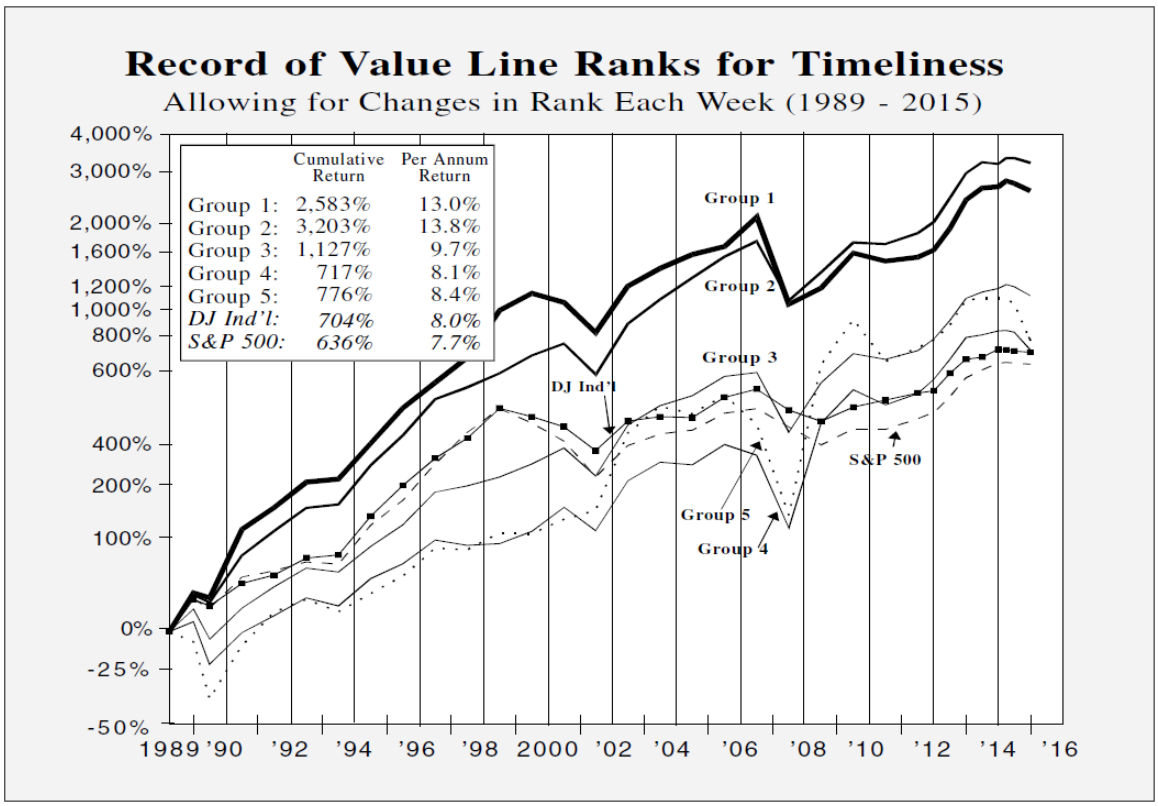
Chapter 2 – Finding the Most Attractive Options

In this chapter, we provide an explanation of Value Line's common stock and options ranks, and we show how you can find the best options from the 200,000 plus options that we rank every day.

Value Line's Common and Option Ranks

Since 1965, Value Line has been successfully ranking major 1,700 stocks from 1 to 5 for Timeliness™ (relative future performance). Graph 2 below shows how successful Value Line has been in this endeavor.

Graph 2 - Performance of the Value Line Timeliness Ranks



How We Rank Options

We base our ranking of options on a weighted combination of the Value Line common stock ranks and our option model's calculation of whether the options are underpriced (good for buying) or overpriced (good for writing).

Under/Over Priced: To calculate whether an option is underpriced or overpriced, we compare the *implied volatility* of each option premium ("ask" price for buying and "bid" price for writing) with our model's *Adjusted Volatility Forecast* for that particular stock price, strike price, and time to expiration. (*Implied volatility* is the volatility "implied" by the market price of an option using a standard options model, such as Black-Scholes, and all the known determinants such a stock, strike, expiration, interest and dividend. Our *Adjusted Volatility Forecast* is our expectation of future volatility adjusted for the degree to which the stock deviates from a normal distribution.

Option Buying Ranks: we rank call and put ask (offer) prices from 1 to 3 for buying, with 1 being a "buy", 2 being a "hold" and 3 being "close". A typical rank 1 call is a call with an underpriced ask price and an underlying common stock rank of 1. A typical rank 1 put is an underpriced put (again ask price) with an underlying common stock rank of 5.

"Naked" Option Writing Ranks: We rank call and put bid prices from 5 to 3 for uncovered ('naked") writing, with 5 being a "write" recommendation, 4 a "hold" and 3 a close recommendation

(i.e. buy back the written option). A typical rank 5 call for "naked" call writing is a call with an overpriced bid price that is based on a rank 5 stock. A typical rank 5 put is a put with an overpriced bid price with an underlying common stock rank of 1.

Covered Call Ranks: we rank covered calls based on a combination of the common stock rank and the degree that the call's bid price is overvalued. A typical rank 1 covered call is a stock with a common stock rank of 1 and an overpriced call bid price.

Where will I find the most attractive recommended options? The 200 most attractive options for each strategy (out of the more than 200,000 that trade every day) are set out online in our *Interactive Options – Recommended Options* pages. Subscribers can access these pages at our website, www.valueline.com. A list of these tables is shown in Table 8 below.

Table 8 - Selected Option Pages

Page in Interatctive Options	*Direction of Stock*	*Under/ Over Priced*	*Options on Page are Ranked*	*Commn Stocks are Ranked*
Selected Options for "Naked" Call Buying	Bullish	Under Priced	1	1 or 2
Selected Options for "Naked" Call Writing	Bearish	Over Priced	5	5 or 4
Selected Options for Covered Call Writing	Bullish	Over Priced	1*	1 or 2
Selected Options for "Married" Put Buying	Bullish	Under Priced	1**	1 or 2
Selected Options for "Naked" Put Buying	Bearish	Under Priced	5	5 or 4
Selected Options for "Naked" Put Writing	Bullish	Over Priced	1	1 or 2
* This rank covers the stock and call write as a combined position.				
** This rank covers the stock and put purchase as a combined position.				

Using our Selected Options

Table 9 below is a sample segment of one of these pages, *Selected Options for Naked Call Buying.* At first, the information on this page may appear daunting, but it is rather easy to see the logic of why the data is presented the way that it is.

Table 9 - Selected Options for Naked Call Buying

Option Ticker	Ticker	Company/Index	Common Rank	Technical Rank	Exp. Date	Strike	Common Price	Premium Ask	Delta	I/O	Ask Implied	Ask UN/OV	Relative Volatility	Lower Common	Ask Low Prem.	Higher Common	Ask High Prem.
MMM 161021C00180000	MMM	3M Company	1	2	10/21/16	180.0	168.58	2.15	23.45	-7%	16%	-6%	684.54	$166.59	$1.72	$170.59	$2.66
MMM 170120C00185000	MMM	3M Company	1	2	01/20/17	185.0	168.58	2.66	22.38	-10%	17%	-6%	512.89	$166.59	$2.24	$170.59	$3.14
MMM 180119C00200000	MMM	3M Company	1	2	01/19/18	200.0	168.58	3.90	20.74	-19%	18%	-5%	316.22	$166.59	$3.51	$170.59	$4.32
ACN 160819C00125000	ACN	Accenture Plc New	1	3	08/19/16	125.0	117.69	1.45	24.50	-6%	21%	-2%	920.74	$116.01	$1.07	$119.40	$1.92
ACN 161118C00130000	ACN	Accenture Plc New	1	3	11/18/16	130.0	117.69	1.70	21.18	-10%	19%	-15%	692.57	$116.01	$1.37	$119.40	$2.10
ACN 170120C00130000	ACN	Accenture Plc New	1	3	01/20/17	130.0	117.69	2.90	27.06	-10%	21%	-6%	474.08	$116.01	$2.47	$119.40	$3.39

We sort these pages in order of company name, expiration and strike price. You can re-sort the data by simply clicking on most of the column heading.

You can tag one or more of the boxes (as many as you like) on the left to get a detailed *Options Profile* on these options. (You can get a description of these *Profiles* online.)

After the option ticker, stock ticker and company name (in this example, 3M Company), you will see the Value Line common stock rank and after this, we show the Value Line technical rank, The technical rank is like the common stock rank, but uses only price data in its calculations. We include it in our output as an additional indicator of future stock price performance.

In the next three columns, we show the expiration date, the strike price and the option's premium. In the next column, marked *Delta*, we indicate the option's sensitivity to a small move in the

common. If this number is 25, it means that if the stock rises by $1.00, the call will rise by $0.25. In the column marked *I/O*, we indicate the degree that the option is in-the-money (positive number) or out-of-the-money (negative number). In the next column *UN/OV*, we indicate whether the option is undervalued (a minus number) or overvalued (a positive number). When you buy an option, you generally want it to be undervalued (i.e. underpriced, the cheaper the better) and when you write an option (either with a "naked" write or a covered call), you want it to be overvalued (i.e. overpriced, the more expensive the better). In the column marked *Relative Volatility* we show how risky the option is compared with the option on the average stock in the Value Line Investment Survey, which has a benchmark volatility of 100 (equal to 54% annual standard deviation). An option with a Relative Volatility of 684 can be said to be 6.84 times as volatile as the stock.

Executing your trades: In the last four columns, we provide premiums at different stock prices. These tell you the premium at which you should still do the trade if the stock goes to these prices. These numbers can also help you place buy or sell orders with your broker. For instance, if the 3M common falls from $168.58 to $166.59 (i.e. to the *lower stock* price), we would still recommend buying the October 2016 $180.00 call as long as its premium is $1.72 or less. (In the case of Selected Options for covered call writing, you will want to sell the option at the indicated price or higher.)

Finding Options by Stock Ticker

What should I do if options on a stock I am interested in are not in the daily Selected Options files? The trades listed in these daily selected options pages are the 200 highest scoring and most liquid ones for their respective strategies. On any given day, however, there can be many other attractive options. You can look at these options a number of different ways.

If you know which stock you are interested in, you can access all the options on that stock by placing the stock ticker code in the box so marked, in *Options by Ticker Code.* You will then get all the regularly listed options on that stock as shown in Table 10 below. At the top of this listing, you will see the *Company Profile*. As with the *Selected Options*, you can click on the box (or boxes) to the left and get a detailed more details on the options you have selected.

Table 10 - Options by Stock Ticker Code

Company Profile

Company	Industry	Ticker	Common Price	Common Rank
3M Company	Diversified Co.	MMM	168.56	1
Dividend: 2.61%	**Tech Rank:** 2	**Historical Volatility:** 18.84%		

Results: 694 Add Selected to Portfolio Printable Version Save as CSV format

Check one or more boxes for more information then click continue: Continue Printable Reset

					Premium			Implied Vol.		Un/Ov Value		CC/PW			Op. Rank		CC/MP
Option Ticker	C/P	Common Price	Exp.	Strike	Bid	Ask	Delta	Bid	Ask	Bid	Ask	PA	PT	MX	Bid	Ask	Rank
MMM 160617C00085000	C	168.56	06/17/16	85.0	81.50	85.55	99.84	0%	654%	-100%	450%	-429%	48%	-2%	0	0	0
MMM 160617C00090000	C	168.56	06/17/16	90.0	76.40	80.25	99.87	0%	584%	-100%	431%	-425%	45%	-2%	0	0	0
MMM 160617C00095000	C	168.56	06/17/16	95.0	71.60	75.05	99.88	0%	526%	-100%	417%	-366%	42%	-2%	0	0	0
MMM 160617C00100000	C	168.56	06/17/16	100.0	66.60	70.10	99.85	0%	490%	-100%	422%	-348%	40%	-2%	0	0	0
MMM 160617C00105000	C	168.56	06/17/16	105.0	61.50	64.95	99.86	0%	441%	-100%	410%	-349%	37%	-2%	0	0	0
MMM 160617C00110000	C	168.56	06/17/16	110.0	56.55	60.60	99.62	0%	446%	-100%	463%	-325%	34%	-2%	0	0	0

How then do you find the best options on a stock so selected? The answer depends partly on your own view of what is going to happen to the stock, and partly on our evaluations of whether the options are underpriced or overpriced.

For example, if you expect a large near-term rise in the stock and you see that the calls are undervalued, (with a minus sign in ASK UN/OV), then you should probably be a buyer of an intermediate-term call (3 to 6 months) with a strike price that is reasonably close to the stock price.

Alternatively, you may be bullish, but with no clear indication of when the stock will rise. Here you may want to be a buyer of a longer-term option (9 months or more), again struck reasonably close to the money (rule of thumb; pick an option with a delta of between 40 and 60). Finally, you may be bullish, but find that the premiums are overvalued. In this case, you might consider writing a covered call, especially if the rate of return on this investment is attractive.

Using our Quick Screener

One quick way to find the best options on a particular stock (or from a selection of stocks) is to use our *Quick Screener*. Here you simply enter the stock ticker codes (separated by commas) and select which of the six basic strategies you want and our model then selects the five most favorably priced options on each stock for that strategy.

Table 11 - Quick Screening for Call Buys on GE and ITC

Enter your Stock List: ge, itc (Example: IBM, CSCO, AMD)

Options that are best for: Call Buying ▼ Run Screen

Best Naked Call Buying Options for GE, ITC

Results: 10 Add Selected to Portfolio Printable Version Save as CSV format

Check one or more boxes for more information then click continue: Continue Reset

								Premium			Implied Vol.		Un/Ov Value		CC/PW			Op. Rank		CC/MP
Option Ticker	C/P	Common Ticker	Common Rank	Common Price	Exp.	Strike	Bid	Ask	Delta	Bid	Ask	Bid	Ask	PA	PT	MX	Bid	Ask	Rank
ITC 160617C00045000	C	ITC	0	45.33	06/17/16	45.0	0.05	4.60	54.79	0%	333%	-100%	2,140%	-111%	0%	-1%	0	0	0
ITC 160715C00045000	C	ITC	0	45.33	07/15/16	45.0	0.05	2.00	55.80	0%	36%	-100%	108%	-6%	0%	0%	0	0	0
ITC 160819C00045000	C	ITC	0	45.33	08/19/16	45.0	0.10	2.50	54.26	0%	31%	-100%	73%	-1%	1%	0%	0	0	0
GE 161021C00031000	C	GE	2	30.31	10/21/16	31.0	0.92	0.95	41.12	19%	19%	-20%	-18%	12%	4%	7%	3	1	2
GE 161118C00032000	C	GE	2	30.31	11/18/16	32.0	0.58	0.71	30.76	17%	19%	-30%	-22%	8%	3%	9%	3	1	3
ITC 161118C00045000	C	ITC	0	45.33	11/18/16	45.0	0.05	3.00	52.39	0%	25%	-100%	35%	0%	1%	0%	0	0	0
ITC 161118C00050000	C	ITC	0	45.33	11/18/16	50.0	0.00	4.80	32.07	0%	57%	-100%	176%	2%	1%	11%	0	0	0
GE 161216C00032000	C	GE	2	30.31	12/16/16	32.0	0.69	0.78	32.01	17%	18%	-29%	-24%	8%	4%	10%	3	1	3
GE 170120C00032000	C	GE	2	30.31	01/20/17	32.0	0.89	0.91	34.06	18%	19%	-24%	-23%	8%	5%	11%	3	1	2
GE 170317C00032000	C	GE	2	30.31	03/17/17	32.0	1.01	1.11	35.52	18%	19%	-26%	-21%	8%	6%	12%	3	1	3

Continue Reset Add Selected to Portfolio Printable Version Save as CSV format

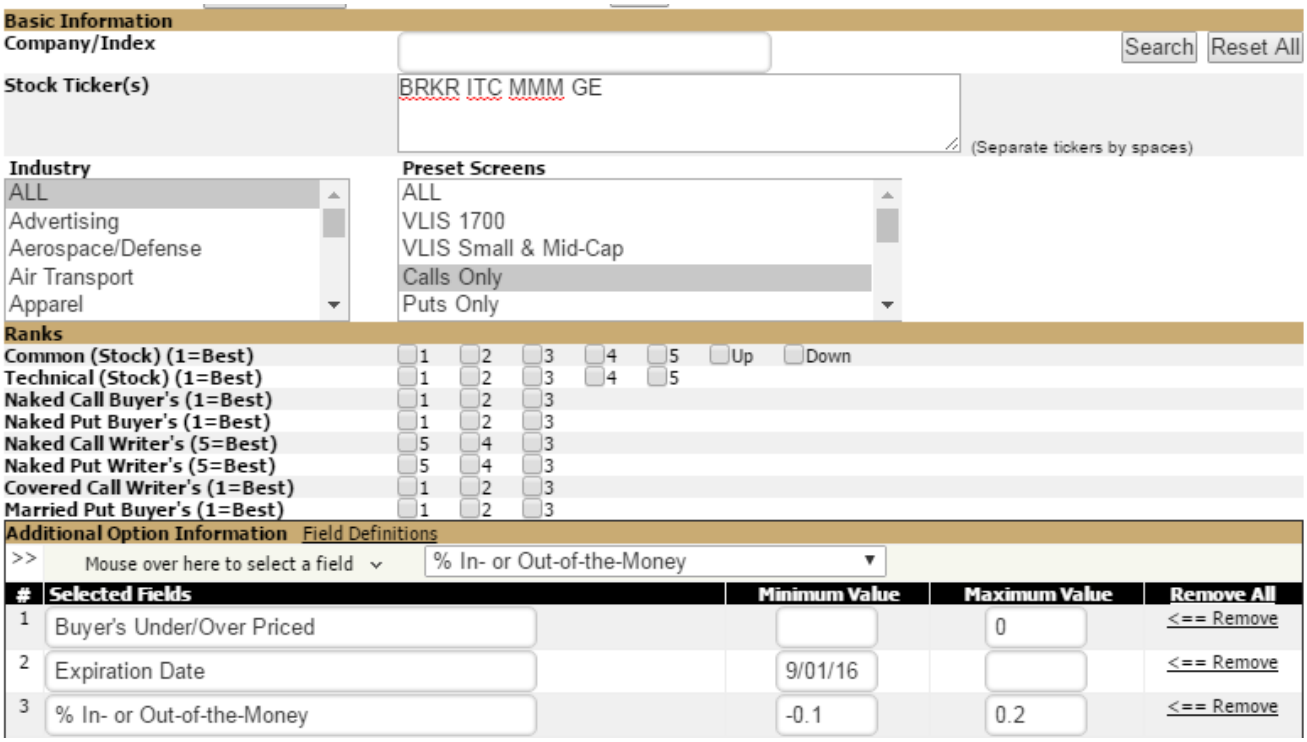
OPRA data is delayed 15 minutes.

Using our Option Screener

Most of our subscribers quickly graduate to using our online *Option Screener*. Here you can search for the best options from a list of stocks. Or you can specify a particular set of criteria, including common and technical ranks, and get the options that meet those criteria.

Example 1 - Screening for the Best Call Buys: In the example in Table 12 on page 16, we have set the screener to search for underpriced calls from among a list of stocks for calls that are favorably priced for buying. We want these calls to cost relatively little to hold. Hence, we have chosen longer-term calls that are either at-the-money or moderately in-the-money.

Table 12 - Screening for Call Buys



Under *Preset Screens*, we have selected *Calls*. Under *Additional Option Information*, we have selected *Buyer's Under/Over Priced* with a maximum of zero, meaning that all the calls selected are underpriced. We have also selected an Expiration Date with a minimum date of 9/01/16, meaning that the options will expire later than September 1st. Finally, we have selected % in- or Out-of- the-Money with a minimum of -0.1 (minus 10%) and a maximum of 0.2 (20%), meaning that the calls are struck between 10% out-of-the-money and 20% in-the-money.

Getting Started

We have set up the Daily Value Line Options Survey as much as possible to be an educational product as well as an advisory product. You will want to download and read our *Quick Study Guide (*located under the *resources* tab and by following the link entitled *Educational and "How to Guides"*. Subscribers should take advantage of our online help links and other education articles located in this area of our website.

Chapter 3 – Spotlight on Buying Calls

Should you buy calls? Many people say you should not, but we beg to differ. In the early days of options trading (the 1970s and 1980s), calls and puts were often prohibitively expensive. That situation has definitely changed since the beginning of the 1990s. Indeed, our performance numbers suggest that even the most conservative investors should add some call purchases to their portfolios. Even when markets are volatile and premiums are high, you can find attractively priced calls, if you know where to look.

Paying Premium

When you buy a call, you pay a premium for the right, but not the obligation, to buy the underlying stock at a specified price - known as the strike price - until a certain specified date - known as the expiration date.

At Value Line, we base our call buying recommendations on a combination of our expectations for the common stock (usually ranked 1 for highest performance) and the pricing of the call itself. The less expensive (i.e. undervalued) the call is in terms of the risk of the position, the better we like it.

What makes a call cheap or expensive? What we are really talking about is an option's time premium. Time premium is that part of an option premium that is not "tangible" value. **Think of time premium as insurance against making the wrong financial decision.**

Time premium is determined by five "known" variables - stock price, strike price, time to expiration, dividend rate and interest rate- and one "estimated" variable – **volatility.** More specifically, volatility is the number that gives us expected range, or dispersion, of the stock price over the life of the option.

A semiconductor equipment stock such as Applied Materials Inc. (AMAT) can be 65% more volatile and have a sharply higher time premium (as a percent of the stock price) as a diversified company stock such as 3M Company (MMM). As of June 16, 2016, we were recommending calls on both stocks, based on a high ranking for the common stock and our model's estimation that premiums were attractively priced based on our volatility forecasts.

Calls with undervalued or reasonably priced premiums can be very attractive investments. In terms of risk versus reward, calls can run the gamut from those that trade very much like the stocks themselves to more leveraged positions that pay off in many multiples of their initial premium if the stock makes a big move.

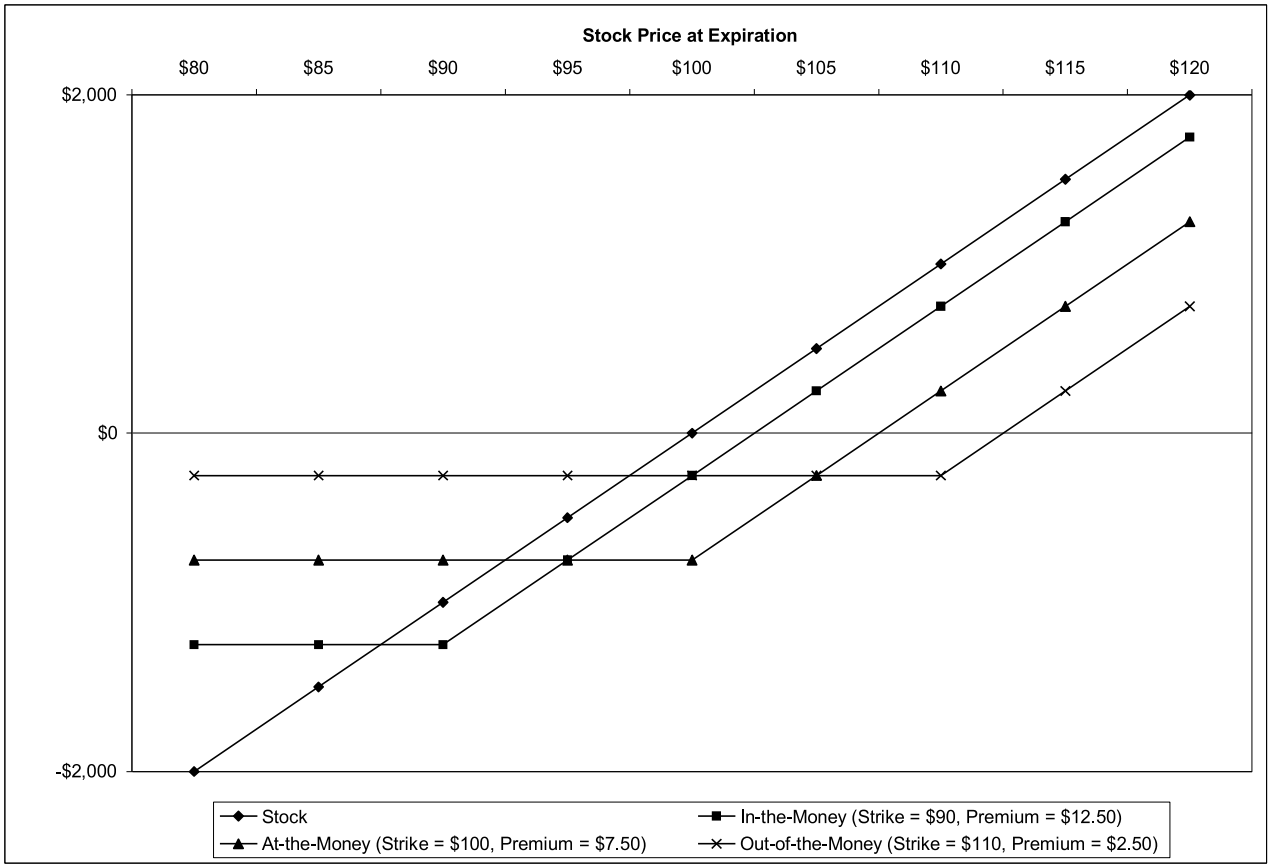
An In-the-Money "Deductible"

An *in-the-money call* is one in which the stock is above the strike price; thus, the option has tangible value. In addition, this option has time value. This time value is insurance against the stock going below the strike price. Think of the difference between the stock and the strike price as the "deductible" on an insurance policy and you will get the concept. The lower the strike price on an in-the-money call, the more the investor can lose and the lower will be the time premium.

Look at the in-the-money call example in Graph 3 on the following page. Here we have bought the $90 strike call for $12.50 with the stock at $100. The call has $10 worth of tangible premium ($100 minus $90) and $2.50 worth of time premium ($12.50 minus $10). What this time premium is doing is insuring you against losses below the $90 level. If you wanted a position in this stock,

but were willing to live with the possibility of a larger loss, you could buy a call that is even further in-the-money and has even less time premium.

Graph 3 - Comparison on In-, At- and Out-of-the-Money Call Buys



At-the-Money: Insurance in Both Directions

A call that has a strike price that is equal to the stock price is known as an *at-the-money call*. Naturally, for an at-the-money call, which is insuring against losses below the current stock price, we pay a higher time premium than we would for the in-the-money call, which insures against losses below the current stock price. However, when you buy an at-the-money call, you are also buying insurance against the stock going up! This is because you can participate in all gains in the stock above the current stock price. After the fact, you will not have to say; "I wish I had bought that stock." Thus, at-the-money options have the highest time premiums because they offer the maximum insurance against uncertainty. Notice in Graph 3 above that if the stock falls sharply, the at-the-money call does better than the in-the-money call and if the stock rises sharply, it does better than the out-of-the-money call.

Out-of-the-Money: Insurance against Missing the Big Move

You can also buy a call in which the strike price is higher than the stock price. This is known as an *out-of-the-money call.* In Graph 3 above, the out-of-the-money call is struck at $110. With this option, you are insuring yourself against the chance that the stock will make a very big rise and that you will miss out. On a certain level, an out-of-the-money call can be highly speculative, since

there is a good chance that it will expire worthless. However, if you want to be mainly invested in cash and bonds, but want some insurance against missing a big rise in stock, then out-of-the-money calls can be the way to go.

Your Best Call?

Which call is best - in-the-money, at-the-money or out-of -the-money? That depends on your risk/reward appetite. With an in-the-money call, the stock doesn't have to rise by very much for you to start making a profit, but you are taking a position that is a bit more like owning the stock with some of the same downside. With an at-the-money call, you have no downside exposure other than your premium – and you are also insured against missing out if the stock rises. However, you pay the highest time premium for this "two-way" coverage. With an out-of-the-money call, you can get a very handsome return if the stock makes a big move, but you also run the very real risk of the option expiring worthless.

Which of these options do we recommend? In fact, our model has no bias for in-, at- or out-of the-money calls. If the premiums are attractively priced and the underlying stock is highly ranked (by Value Line), it is likely that the calls will be highly ranked as well.

Chapter 4 – Spotlight in Buying 'Naked" Puts

In this chapter, we review what goes into our put buying recommendations, and we show how adding some puts to your portfolio can improve your overall performance.

Varying Bearish Positions

When you buy a put, you pay a premium for the right, but not the obligation, to sell the stock at the strike price anytime until the expiration date. By itself, a long put constitutes a bearish position, one that will make money if the stock declines. If the stock rises, the most you can lose is the premium paid, since you do not have to sell the stock at the strike if it is trading at a higher level. As with calls, puts can be in-the-money, at-the-money, or out-of-the-money.

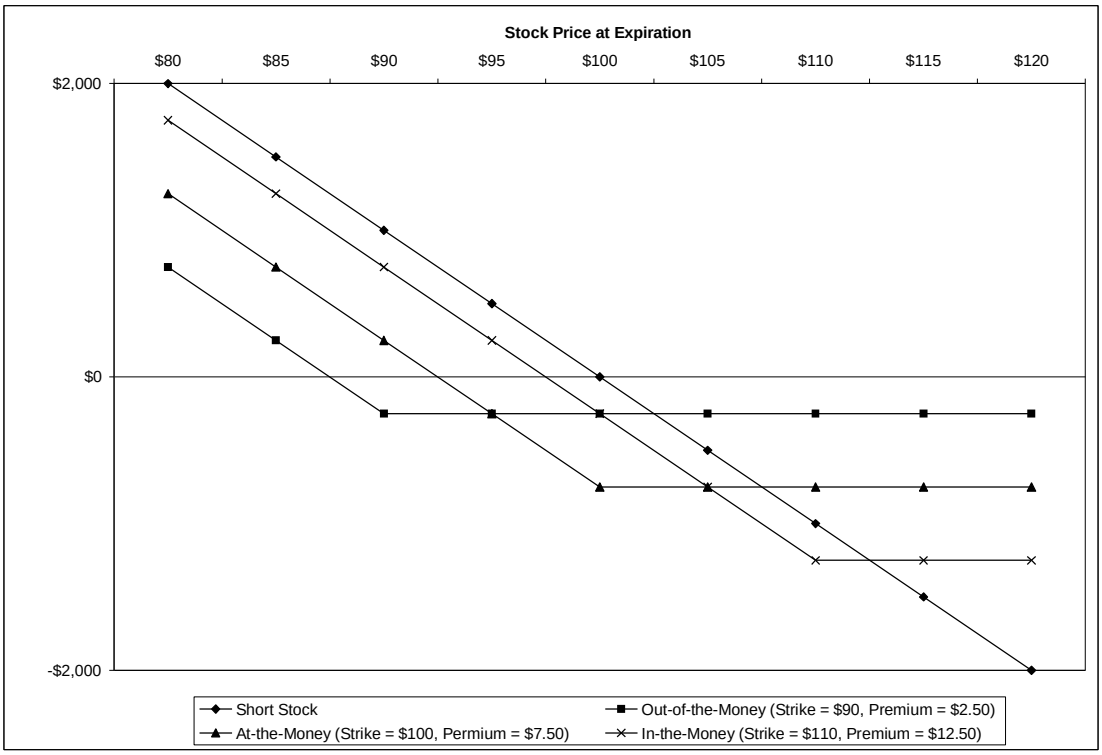
An *in-the-money* put is one in which the strike price is above the stock price. This put has what we call tangible value since the put holder can buy the stock at the lower market price and sell it at the higher strike price. The remaining component of the put premium is its time value - or time premium. Think of this out-of-the-money time premium as insurance with a deductible against making the wrong decision. The more the put is in-the-money, the more you can lose, the higher will be your deductible - and the lower will be your time premium insurance.

In Graph 4 on page 21, you can see an example of buying an *in-the-money*, $110 strike put for $12.50 with the stock at $100. This premium consists of intrinsic value of $10 and time premium of $2.50. The most you can lose on one put option (on 100 shares) is $1250. This happens if the stock ends up above $110. If the stock stays at its current price of $100, the option will still be worth its $10 intrinsic value at expiration. In this instance, the most the investor will have lost is the original $2.50 time premium (or $250 on a 100-share contract). If you are very bearish on the stock, but want to limit your losses should the stock rise rather than fall, you should buy an in-the- money put.

An *at-the-money put* is one in which the strike price is equal to the stock price. As the stock goes down, the put immediately begins to pick up tangible value. Alternatively, if the stock rises, the put has no exposure other than the time premium paid. Also in the graph, we show an example of buying an at-the-money, $100 strike, put at $7.50. In this example, if the stock ends at the $100 strike or above, the investor loses the entire premium. If the stock declines below $100, the investor will reap the put's intrinsic value at expiration, but he/she will have lost the time premium.

At-the-money puts have higher time premiums than do in-the-money puts or out-of-the-money puts. This is because you are in a sense buying coverage in both directions with no deductible. If the stock falls, your tangible value gains kick in right away. If the stock rises above its current price, the most you can lose is the $7.50 premium ($750 on a 100-share contract).

Graph 4 - In-, At- and Out-of-the-Money Puts



Also shown is the example of the *out-of-the-money put*. Notice that the stock has to be below $90 at expiration for you to reap a profit. On the other hand, if the stock does not move, the most you will have lost is $2.50 (or $250 on a 100-share contract).

You want to buy out-of-the-money puts to insure that you do not miss an especially large decline in the stock. In a sense, you are buying cheaper insurance on something that may never happen.

Our Put Buying Picks

Our model bases its put buying recommendations on a combination of the common stock rank and the pricing of the put itself. If the common stock rank is sufficiently low and our model calculates the put to be underpriced, then we are likely to recommend buying the put for put buying. However, some puts can be so underpriced that our model will rank them for put buying even if the underlying common stock rank is neutrally ranked.

Adding Puts to Your Portfolio

Adding even a small amount of puts to your portfolio can greatly reduce the volatility of your portfolio. Historically, a portfolio consisting of the S&P 500 (98%) and puts ranked 1 and 2 (2%) has actually outperformed the S&P by a wide margin.

Chapter 5 - Spotlight on Uncovered or "Naked" Option Writing

Uncovered or "naked" option writing is selling an option short without having an offsetting position in the underlying stock or an offsetting option on the same stock. "Naked" writing is not a strategy that we recommend to option beginners or to investors whose pockets are not sufficiently deep. However, when you chose your "naked" writes wisely and manage them with care, you can make substantial profits from the opportunities that our model finds.

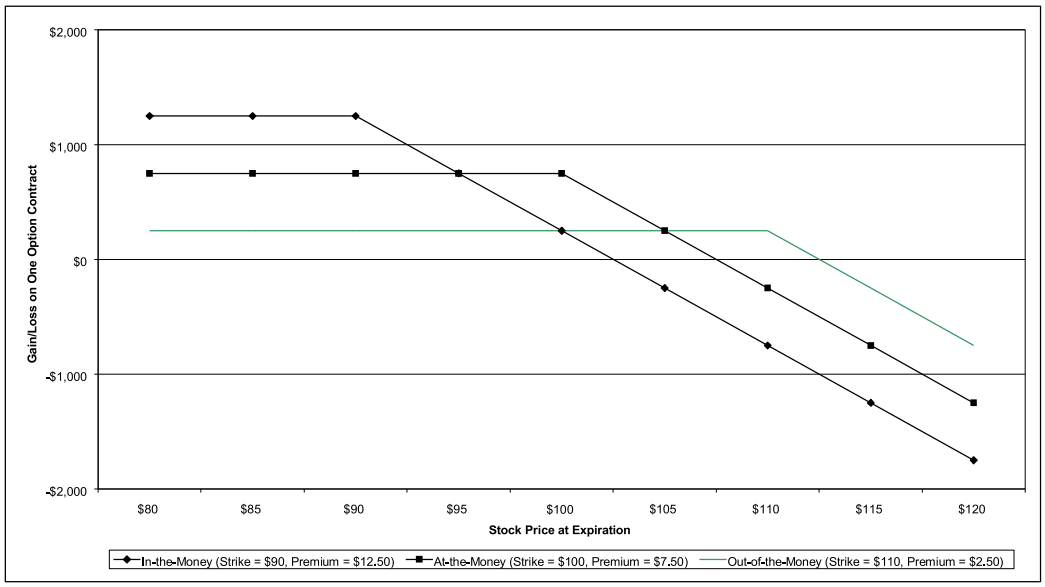
Why Write?

For every option that is purchased there has to be an option seller or option "writer." As an option writer, you receive premium in return for taking on the obligation of the option contract. For the call writer, it is the obligation to sell the stock at the strike price. For the put writer, it is the obligation to buy the stock at the strike price.

Why write an option rather than buy one? You write an option because you believe that the option premium is overpriced with respect to the risk that the stock will move against you. When you write a call, you are basically bearish because you think the value of the call will go down so that you can buy it back for less than you received. (Your best outcome, of course, is if the stock ends up below the strike price). When you write a put, you are basically bullish, because you think the value of the put will go down. (Here your best outcome is if the stock ends up above the strike price.)

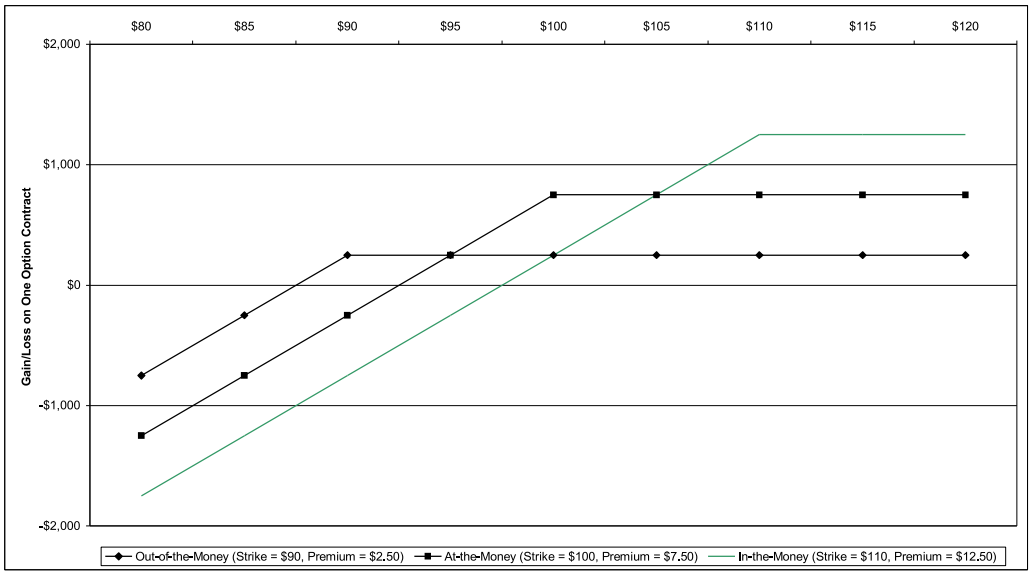
In Graph 6 below, we show the gains and losses at different price outcomes at expiration of writing one call option (on 100 shares) at different strike prices when the underlying stock is initially at $100. If you write the out-of-the-money $110 strike call, you get the lowest premium $2.50 (or $250 on one option contract), but you also have the best chance of keeping your premium. If you write the in-the-money $90 strike call, you have the greatest profit potential - $12.50 or ($1250 on one option contract), but the stock has to fall to the $90 strike price to realize this full profit potential. When you write the at-the-money $100 strike call, you receive $7.50 in premium, which you get to keep if the stock ends up at or below $100.

Graph 6 - In-, At- and Out-of-the-Money Call Writes



In Graph 7 below, we show the different outcomes at expiration from writing put options at different strike prices. Writing the out-of-the-money $90 strike put for $2.50 ($250 for one option) gives you the highest chance for success but also the lowest premium. Writing the in-the-money $110 put gives for $12.50 you the greatest profit potential ($1,250 for one contract), but only if the stock rises to the strike price. Writing the $100 strike at-the-money put for $7.50 gives you an ample profit as long as the stock stays at or above $100.

Graph 7 - In-, At- and Out-of-the-Money Put Writes



Capital Requirements

When you write "naked" or uncovered options, you must cover your risk by posting and maintaining a margin with your broker. The "Exchange Minimum" amount (set by the exchanges and the Federal Reserve) is the premium amount, plus a percentage of the value of the underlying stock. This percentage is either (1) 20% of the underlying stock value less the amount the option is out-of-the money, or (2) 10% of the underlying stock value – whichever is greater.

There are several things you should know about the margin on "naked" writes. One is that many brokers required a margin greater than the exchange minimum. Another is that the margin on a naked short option is recalculated daily (or even intra-daily) based on the latest stock and option prices; therefore, investors can expect margin calls should the stock move against them. Often these margin calls can be well in excess of the original margin. Note: In 2007, the SEC initiated a new, more flexible, "Portfolio Margin" system for qualified accounts. This system is based on dynamic risk analysis (see "News on the Margin Front," Ot071105.pdf in our *Options Reports* directory).

Seeking Writing Opportunities

Every day, the Value Line options model selects thousands of calls and puts to which we assign a rank of 5, meaning that they are recommended for uncovered writing. A typical rank 5 call has an overpriced bid price and an underlying common stock rank of 5 or 4 (expected to underperform most other stocks). A typical rank 5 put has an overpriced bid price and an underlying common rank of 1 or 2 (expected to outperform most other stocks).

Chapter 6 - Spotlight on Covered Call Writing

Because they involve both long stock and short call positions, covered calls are a bit more complicated than stocks alone or even simple "naked" option trades. In this chapter, we present some spreadsheet examples that can help you understand and analyze covered calls. The return and breakeven analysis in these spreadsheets are the same as we use in our twice-daily online covered call evaluations. In Chapter 9, we will show how to use the analysis in managing your covered call portfolio.

In-, At- & Out-of-the-Money

You create a covered call when you buy or own a stock and write a call on this stock. In effect, you collect a premium in return for giving up some potential gains in the stock. This is because if the stock ends up above the call's strike price, your short call will be exercised and you will be required to sell your stock at the strike price – or, if you want to keep the stock, you will have to buy the call back. Understand that when you write a covered call, you are basically bullish; you want the stock to end up at or above the strike price. At the same time, however, you believe you are amply compensated by the call premium for selling off the possible gains above the strike price.

In Table 13 below, we show three examples of writing a January covered call on United Therapeutics with the stock at $105. In the top part, we have written an out-of-the-money $115 strike covered call at $8.10. In the middle, we have written the at-the-money $105 strike covered call at $12.30. In the bottom part, we have written the in-the-money $95 strike covered call at $17.70.

Table 13 - Profit and Loss of Covered Calls on United Therapeutics at Different Stock Price Outcomes

	Stock	$	105	Dividend		0%	Trade Date	6/30/2016												
Out-of-the-Money Covered Call	Strike:	$	115	Expiration		2/17/2017	Premium:	$	8.10											
Stock Price at Expiration	$	70	$	80	$	90	$	105	$	110	$	120	$	130	$	140				
Gain/Loss on 100 Shares	$	(3,500)	$	(2,500)	$	(1,500)	$	-	$	500	$	1,500	$	2,500	$	3,500				
Dividend on 100 Shares	$	-	$	-	$	-	$	-	$	-	$	-	$	-	$	-				
Gain/Loss on Call Write	$	810	$	810	$	810	$	810	$	810	$	310	$	(690)	$	(1,690)				
Gain/Loss on Covered Call	**$**	**(2,690)**	**$**	**(1,690)**	**$**	**(690)**	**$**	**810**	**$**	**1310**	**$**	**1810**	**$**	**1,810**	**$**	**1,810**				
At-the-Money-Covered Call	Strike	$	105				Premium =	$	12.30											
Stock Price at Expiration	$	70	$	80	$	90	$	105	$	110	$	120	$	130	$	140				
Gain/Loss on 100 Shares	$	(3,500)	$	(2,500)	$	(1,500)	$	-	$	500	$	1,500	$	2,500	$	3,500				
Dividend on 100 Shares	$	-	$	-	$	-	$	-	$	-	$	-	$	-	$	-				
Gain/Loss on Call Write	$	1,230	$	1,230	$	1,230	$	1,230	$	730	$	(270)	$	(1,270)	$	(2,270)				
Gain/Loss on Covered Call	**$**	**(2,270)**	**$**	**(1,270)**	**$**	**(270)**	**$**	**1,230**	**$**	**1,230**	**$**	**1,230**	**$**	**1,230**	**$**	**1,230**				
In-the-Money Covered Call	Strike =	$	95	Expiration		2/17/2017	Premium =	$	17.70											
Stock Price at Expiration	$	70	$	80	$	90	$	105	$	110	$	120	$	130	$	140				
Gain/Loss on 100 Shares	$	(3,500)	$	(2,500)	$	(1,500)	$	-	$	500	$	1,500	$	2,500	$	3,500				
Dividend on 100 Shares	$	-	$	-	$	-	$	-	$	-	$	-	$	-	$	-				
Gain/Loss on Call Write	$	1,770	$	1,770	$	1,770	$	1,770	$	270	$	(730)	$	(1,730)	$	(2,730)				
Gain/Loss on Covered Call	**$**	**(1,730)**	**$**	**(730)**	**$**	**(270)**	**$**	**770**	**$**	**770**	**$**	**770**	**$**	**770**	**$**	**770**				

In all these examples, we show the results as if we are keeping the stock at expiration and buying the call back if it is in-the-money. Letting the stock be called away at expiration at the strike price would give you the same set of outcomes.

Let us look at the *out-of-the-money* covered call first. Here we get to keep the entire premium as long as the stock ends up below this $115 strike price. This is an excellent strategy for investors who want to be long the stock but also want extra income. Notice that below $115, you have a clear profit of $810 on your short call. Above $115, you will have to buy the call back at its tangible value (or you have to let the call get exercised); however, you will still have that original $810 premium. At expiration, the stock would have to be above $113.10 for the stock position alone to have done better than the covered call.

Next, we look at the *at-the-money covered* call, a position in which we are moderately bullish on the stock and like the income from the premium. Here we take in $12.30 per share or $1,230 on one covered call. Although you can only keep this entire premium if the stock ends up at or below $105, the stock would have to rise to above $117.30 for the covered call to under perform just owning the stock. If the stock stays unchanged at $105, you still keep the premium. The stock would have to fall below $92.70 before we would lose money on this trade.

Lastly, let us look at *the in-the-money covered* call, selling the $95 strike call for $17.70. In this example, we are only moderately bullish, and are willing to take a highly protected position which pays an attractive net income but also offers a breakeven point well below the current stock price. As long as the stock ends up above the $95 strike price, we net out with a $770 profit. This profit represents the time premium on the call that we just wrote (i.e. $17.70 minus the call's tangible value of $10.00).

Calculating the Percentages

In Table 14 below, we show how you can calculate the various risk and return percentages on covered calls. We make a spreadsheet version of this file available in our Excel Software directory (filename Ccalc.xls). We also use these formulas in our twice-daily updates on options. All these covered calls are reasonably attractive but offer different combinations of maximum profit, downside protection and annual return on the premium.

Table 14 – Risk and Return Percentage Calculations for Different Covered Calls

Evaluation Date			11/19/07		Call	Number				Return	Return p.a.	Downside
	Stock	Dividend	Expiration	Strike	Premium	of Days	Cost	Time	Maximum	No Change	No Change	Protection
	Price	p.a.	Date	Price	(Bid)	To Exp	Basis	Premium	Profit	In Common	In Common	(Break
Out-of-the-Money	$ 105	0%	2/17/17	$ 115	$ 8 .10	232	$ 96.90	$ 8.10	8.36%	5.31%	8.35%	7.80%
At-the-Money	$ 105	0%	2/17/17	$ 105	$ 12.30	232	$ 92.70	$12.30	13.27%	8.43%	13.27%	11.80%
In-the-Money	$ 105	0%	2/17/17	$ 95	$ 17.70	232	$ 87.30	$ 7.70	20.28%	8.82%	13.87%	16.90%

Calculations ("*" = "Multiplied by" in Microsoft Excel)			
Cost Basis		=	Stock - Premium =
Time Premium		=	If Stock > Strike, Premium-(Stock-Strike), Else Premium =
Max Profit %		=	(Strike/Cost)-1+Dividend p.a.*Number of Days to Expiration/365
Return		=	If Stock > Strike, (Strike/Cost-1), Else (Stock/Cost-1) + Dividend p.a.*Number of Days to Expiration/365
Return p.a.		=	Return*(365/Number of Days to Expiration)
Downside Protection		=	1-(Cost/Stock)+Dividend p.a.*Number of Days to Expiration/365

Take a look at the *out-of-the-money* $115 strike covered call. Here you see that the maximum profit is equal to 8.36%. This is based on the fact that it costs you $96.90 per share to establish the position ($105 - $8.10) and you get a maximum payoff of $115 per share. If the stock stands still, you get a return of $8.10 (based on paying $96.90 to establish the position and getting $105 at expiration). Multiplying this number by the 365 over the number of days gives you an annualized return of 8.35%. Your downside protection is predicated on the fact that you paid only $96.90 to establish the position so the stock could fall to the level before you would lose money.

With the *at-the-money* covered call, your maximum profit of 13.27% is based on your having to pay $92.70 to establish the position and getting $105 at expiration as long as the stock ends up above the $105 strike price. This is also your return if there is no change in the common and your annualized return is 13.27%. Your downside protection is 11.80%.

The $95 strike *in-the-money* with a premium of $17.70 covered call consists of both tangible value of $10 ($105 - $95) and the $7.70 time premium. By writing the call against your stock, you effectively have to give up your stock at the $95 strike price as long as the stock ends up above $95; however, you only had to pay $87.30 to establish the position (i.e. your cost basis). On an annualized basis, your return works out to be 13.87%. Since, the stock would have to fall to $87.30 before you would lose money, your downside protection is equal to $17.70 or 16.90% of $105.

A Word on Dividends and Early Exercise

The stock we chose to display, United Therapeutics, pays no dividend. However, if there is a dividend, we have to incorporate that into our return and breakeven calculations. Investors who write covered calls on dividend paying stocks need to be aware that they can run the risk of having the stock called away if the call is in-the-money and there is an “ex-dividend” date before the expiration. This ex-dividend date is the day the company establishes the holder of record to whom the dividend gets paid. Therefore, before you write a covered call on a dividend paying stock, you should check if there is an ex-dividend date before the expiration of the short call.

Chapter 7 – How Much Should I Invest in Options

In this chapter, we help you answer the following questions: What option strategies are right for you? How much capital do you need? How much can you expect to make? And, how much can you afford to lose?

Define Objectives

As with any other type of investing, the first thing you should think about when considering options is to take a financial inventory of yourself (and of your family). Look at the big picture, and do not be afraid to ask personal questions. How old are you? Do you plan to live off your option trading? How secure is your job or retirement? What is the dollar value and the composition of your net worth (including IRAs, pensions, social security benefits and equity in your home)? You should also factor in future commitments, such as mortgage, tuition and medical care payments into these net worth calculations.

This financial inventory will help you chose the type of option strategies you want to pursue. For instance, if a large portion of your net worth is invested in stocks, then you should probably employ strategies (such as covered call writing and put buying), that can reduce your exposure to a decline in the stock market.

The first principle is that there is usually a tradeoff between risk and return. This, of course, does not mean that all risky investments will have high returns, or that low-risk investments will always under-perform high-risk ones. Regardless of the tradeoff, if you are dependent on maintaining the value of your assets, you should attempt to reduce the volatility of your portfolio as much as possible, keeping in mind your profit objectives.

Using Relative Volatility

To compare the risk of individual securities, be they stocks, Exchange Traded Funds (ETFs), call and put purchases and writes and covered calls, we use a common benchmark, which we call *Relative Volatility.*

We calculate relative volatility by first calculating the annualized standard deviation of returns of all stocks over a seven-year period (a standard measure of volatility). We then benchmark these risk numbers by dividing them by the average for all stocks, indexes and ETFs in our service (55% as of this publication date) and multiply this number by 100. Thus, a stock with a Relative Volatility of 100 is one with an annualized standard deviation of returns of 55%, while one with a relative volatility of 150 is one with an annualized standard deviation of 83% (i.e. 100 times 83/55). Indexes and ETFs, which are diversified, tend to have lower relative volatilities. The S&P 500 index, for instance, has a relative volatility of only about 35.

The *relative volatility* of a call or put by itself is an indicator of the volatility of the underlying stock and the degree of leverage that the option has. Since even a modest move in the underlying

stock can produce a large percentage change in an option premium, the option by itself is likely to have a relative volatility that is several multiples of the underlying stock.

The relative volatility of a covered call is another story. Because the covered call is not leveraged, and because the short call acts as a hedge on the stock, most covered calls have relative volatilities that are less than that of the underlying stock.

Using Diversification

The second basic principal is to reduce risk through diversification. You can (and probably should) diversify among different underlying stocks in your portfolio, among different option positions and among different strategies as well. One way to achieve more diversification with a fewer number of securities is to diversify among underlying industries.

Example: A portfolio of five covered call positions will have only about half the risk of a portfolio that consists of just one covered call. The addition of some put purchases to the portfolio mix will reduce this risk still further.

Another example of diversification is with our market-neutral portfolios, such as the long/short hedge, which we will cover in Chapter 11. Here we advise combining bullish and bearish as well as premium buying and premium writing strategies. These combinations can produce very positive rewards for very reasonable levels of risk.

By following our Value Line Daily Options Survey recommendations, it is possible to structure your portfolio in such a way that will prepare you for an unexpectedly sharp move in the market that might otherwise wipe you out. Naturally, as with all investing, you also must be prepared to live through periods in which you suffer losses. In the sections below, we describe the rewards and risks of the main option strategy alternatives.

How Much for Call and Put Buying

Here we mean buying options when the investor has no other position in the underlying stock. Many investors are drawn to buying options in hopes of making a killing. Few appreciate, however, that no matter how well the odds can be tilted in their favor, the market can go against them, wiping out most or all of their investment. Therefore, we advise allocating only a portion (e.g. 20%) of a portfolio to option purchases, and rebalancing back to the original 20% options and 80% cash ratio on a periodic basis (e.g. monthly or quarterly).

Analysis of our performance record, which goes back to the first quarter of 1980, indicates that a portfolio of 87% cash, 3% put buys and 10% call buys would produce the best results if your desired relative volatility was 37%, about the same as a growth stock mutual fund. This, of course, is hardly a no-risk strategy with losses occurring approximately one-third of the time. Based on call and put premiums being in the $1.00 to $5.00 per-share range, a portfolio of 15 to 20 different option positions might require between $3,000 to $7,000 in premiums and between $25,000 and $35,000 to pursue this strategy.

How Much for "Naked" Call and Put Writes

By writing uncovered or "naked" options, we mean writing an option with no offset in the underlying stock. To write an uncovered option, the investor must have a margin account. The standard margin requirement on uncovered put and call writes consists of the premium amount plus

10% to 20% of the underlying stock value (depending on how much the option is out-of-the-money). No matter how much you think that the odds might be in you favor, you need to bear in mind that you can lose much more than your initial margin on a "naked" write if the underlying stock moves against you.

Often, however, if the premium is sufficiently overpriced, writing "naked" options can be attractive. A portfolio of 10 to 20 different short option positions with a total premium of $3,000 to $7,000 would likely entail a margin commitment of between $6,000 and $20,000 and a total portfolio of about $25,000 to $40,000.

How Much for Covered Calls

Over the past 35 years, covered call writing has been a very successful strategy in terms of reward versus risk. It has provided profits averaging about 21% a year (effectively doubling your money every three and three quarter years) with about the same level of risk as holding a stock index mutual fund. In addition to being a very powerful strategy on its own, covered call writing lends itself very well to combinations with put buying and with call buying (but not with "naked" put writing which is too similar a strategy to covered call writing for effective diversification). A diversified portfolio of 10 covered call positions, and several call buy and put buy positions would probably entail a minimum portfolio of about $50,000, although a portfolio of $75,000 would be closer to the recommended amount.

How Much for Market-Neutral Hedges

One way to prepare for adverse market moves when trading options is to be positioned on both "sides" of the market (see Chapter 11). You can do this by buying and selling naked calls (or naked puts) simultaneously. Because The Value Line Daily Options Survey can pinpoint the options to buy and the options to write to tilt the odds in your favor, this "Long/Short" Hedge strategy can pay off handsomely. Make no mistake, however, that while this hedge can produce exceptional profits, there can also be periods when substantial (though far from total) losses occur. Therefore, if you choose this strategy, you would be wise not to devote your entire net worth to it. Our performance numbers show both the call and the put hedges have been profitable over the long haul. Usually it takes a minimum of $25,000 to $35,000 to establish a "Long/Short" hedge portfolio. In addition, we recommend leaving a substantial equal amount in more mainline investments, such as stocks, bonds and cash. Thus, the investor using the Long/Short Hedge will want to have a total investment portfolio of at least $50,000 to $70,000.

Testing Different Strategy Mixes

Our template, Trakrec.xls (found in our *Excel Software* directory), allows you to test out different strategy allocations. In addition to the investment results of our option recommendations, this template allows you to test out different allocations of stocks, bonds and cash (see "Using our Track Record Template," Ot110414 in our *Options Reports* archive).

Chapter 8 – When to Close Out an Option Position

You have bought (or written) an option. Then what? In this chapter, we discuss at what point you should close out your option position.

Follow the Ranks

One of our goals is to enable the subscriber to replicate (as much as possible) the performance of our option ranks. (For a summary of our performance, go to the *Weekly Option Performance* directory at our web site.) With this goal in mind, we advise subscribers to initiate new call and put purchases when the rank of the "ask" price is a 1, new covered call positions when the covered call rank (for the "bid" price) is a 1 and new "naked" call and put writes when the writer's rank (of the "bid" price) is a 5.

In general, we advise subscribers to hold their option position until the rank goes to a neutral 3. Thus, you can hold a call or a put purchase (or a covered call), even if its rank has gone to a 2. And you can hold a "naked" call or put write even if its rank has shifted from 5 to 4.

Our performance numbers tend to bear out this "follow the ranks" principle. Since the third quarter of 2001, our option buying and writing ranks, and our covered call ranks, have shown the correct rank order discrimination. This is: for call buying, put buying, and for covered call writing, the 1s have outperformed the 2s, which in turn have outperformed the 3s. On the writing side, the rank 5s have outperformed the 4s (as expected), which in turn have outperformed the 3s (see Chapter 12, "A review of our Performance Data").

Other Considerations

Beyond the option ranks, investors need to consider other factors when deciding whether or not to close out an option position. Here are some pointers that may help you make your decision.

Diversification: In order to emulate the performance of our option ranks, you need to be reasonably diversified. Ideally, you should have at least 8 to 10 different option positions of approximately equal size for any given strategy.

Relative Size: if one position gets unduly large (or unduly small) in relation to the others, you need to rebalance your option portfolio. For option purchases and for "naked" writes, a simple rule of thumb is to close out if the position rises by 100% from its original size. This, of course, means that you take your profits on option purchases and that you cut your losses on 'naked" writes that have moved against you.

Alternatively, you should consider what to do if the size of a naked option position drops by 50%. The answer here is somewhat different depending on whether you are a buyer or a writer of options.

If you have bought an option and its value has fallen 50% (but its rank is still a 1 or a 2), then you need to consider whether that option is worth holding. Does the option now conform to your original investment objectives? Remember that a drop in premium usually means that the stock has moved in the wrong direction (down for a call, up for a put) - or that time has passed so that the likelihood of the option making its original profit has diminished. If your option no longer conforms to your original profit objective (and risk tolerance), then depending on the ranks of other

options, you should either roll your option into another one on the same stock or close it out entirely and buy another option on a different stock.

Taking Profits on Option Writes: If you have written an option and the price has dropped by 50%, it means that you have made a profit (you can now buy back the option for less money than you collected). If the call or the put has moved far enough out-of-the-money (a good outcome for you), then you need to decide whether the remaining reward is worth the risk. Bear in mind that even an out-of-the-money option can tie up a fairly large amount of margin capital. It helps to calculate the yield of the remaining premium as a percentage of the margin funds. If this return is low compared to the forecast probability that the option will end up in the money, then you should consider closing out the short position.

Covered Calls: A covered call is a hedged position with less volatility than the underlying stock. Therefore, beyond waiting for the rank to go to a 3, these are other guidelines for closing out or rolling over your covered call. Basically, you need to consider whether the covered call still offers you an attractive combination of income, profit potential and downside protection. We cover this topic in our next chapter, "Managing a Covered Call Portfolio."

Table 15 - Open and Close Criteria for Options and Covered Calls

	Call and Put Buying			
	Buy (Open)	Hold	Close (Sell)	Other Considerations
Calls	Rank 1	Rank 2	Rank 3	Sell if position grow by 100%. Observe Objectives
Puts	Rank 1	Rank 2	Rank 3	Sell if position grow by 100%. Observe Objectives
	"Naked" Call and Put Writing			
	Write (Open)	Hold	Close (Buy)	Other Considerations
Calls	Rank 5	Rank 4	Rank 3	Buy if position grow by 100%.Observe risk and return.
Puts	Rank 5	Rank 4	Rank 3	Buy if position grow by 100%.Observe risk and return.
	Covered Call Writing			
	Buy Stock/Write Call	Hold	Close (Sell Stock & Buy Call)	Other Considerations
Calls	Rank 1	Rank 2	Rank 3	Observe yield and downside protection. See Chapter 9.

Chapter 9 - Managing a Covered Call Portfolio

A covered call portfolio is more complicated to manage than a stock portfolio, but a few simple calculations and basic guidelines can make its management a whole lot simpler. In this report, we show how to decide when to hold your covered call, when to roll the call and when to close both the stock and the call.

Why a Covered Call?

You create a covered call when you buy the stock and sell a call on the same number of shares of the stock. In effect, you have agreed to sell the stock at the strike price if the stock is up above that strike price. Covered call writing is a basically bullish, premium selling, strategy.

The Value Line Daily Options Survey ranks covered calls based on a combination of the common stock rank and the degree to which our option model calculates the call to be overpriced. Attractive calls can be found anywhere on a continuum running from higher-strike out-of-the-money covered calls that are aggressively bullish and offer only a modicum of downside protection and extra yield, to lower-strike in-the-money covered calls that offer substantial downside protection but virtually no profit potential beyond the time value of the call.

Looking at Your Portfolio

Whether you initially write a covered call that is at-the-money, in-the-money or out-the-money, you do so because the combined position offers you an attractive package of profit potential and downside protection. However, as time passes, and the stock and the call change in value, your covered call either loses its potential for gains or its downside protection. The trick to managing a covered call portfolio is to monitor your positions and look for signals as to when it is time to roll or to close your positions.

Look at the calculations in columns I, K, L and M in Table 15 on page 34;

I. The maximum profit potential,
K. The annualized return if there is no change in the stock,
L. The downside protection (the % the stock can fall before a loss would result), and
M. The “profit protection” (the % the stock can fall without reducing the original profit potential).

Table 16 - Sample Covered Call Portfolio

A	B	C	D	E	F	G	H	I	J	K	L
Evaluation Date			7/14/16								
		Divi-			Call	Number	Current		Return p.a.	Downside	
	Stock	dend	Expiration	Strike	Premium	of Days	Cost	Maximum	No Change	Protection	Profit
Company	Price	p.a.	Date	Price	(Bid)	To Exp	Basis	Profit	In Common	(Break	Protection
ADP	$ 95.42	2%	11/18/16	$ 95	$ 3.40	127	$ 92.02	3.2%	9.3%	3.6%	.4%
Amazon	$ 748.00	0%	2/17/17	$ 870	$ 27.10	218	$ 720.40	20.8%	6.3%	3.6%	-16.4%
Kimberly Clark	$ 137.00	3%	10/21/16	$ 135	$ 4.70	99	$ 131.88	2.4%	8.7%	3.4%	1.2%
3M Company	$ 181.00	3%	1/19/18	$ 180	$ 14.15	554	$ 166.64	8.0%	5.3%	7.8%	.4%
Calculations											
Cost Basis		=	Stock - Premium =								
Time Premium		=	If Stock > Strike, Premium-(Stock-Strike), Else Premium =								
Max Profit %		=	(Strike/Cost)-1+Dividend p.a.*Number of Days to Expiration/365								
Return		=	If Stock > Strike, (Strike/Cost-1), Else (Stock/Cost-1) + Dividend p.a.*Number of Days to Expiration/365								
Return p.a.		=	Return*(365/Number of Days to Expiration)								
Downside Protection		=	1-(Cost/Stock)+Dividend p.a.*Number of Days to Expiration/365								
Max Profit %		=	(Strike/Cost)-1+Dividend p.a.*Number of Days to Expiration/365								
Profit Protection		=	1-(strike/stock)								

To make the calculations shown for your own portfolio, you can use the equations at the bottom of the table. Notice that we use the current *cost basis* (stock minus premium) of the covered calls, not the original cost basis, as the basis for most of these calculations. We also include most of these calculations for all calls in our Service. (See "Why We Like Covered Calls," Ot110503.pdf in our *Options Reports* archive. If you want an excel version of this table, you can download it under the "Resources" tab and then following the link to Excel Software, Covered Call Calculator CCALC.

Simply cast your eye down these columns to see which positions deserve your immediate attention. You can see that these positions have a relatively good amount of time left before expiration as well as healthy annual returns.

Some positions that you may wish to act on.

- Option rolling. If an option position has practically no time premium to collect. And it offers a low annualized return over the remainder of time left until expiration. It is time to roll out the covered call to one that offers a more acceptable annualized return.
- ADP is still quite attractive. It offers modest downside protection of 3.6%. We would like to see a bit higher downside protection given the 127 days left until expiration. Should the stock declined by any more than .4% within this period our full return on the position would begin to erode. That said, the 9.3% annualized return is a plus.
- AMAZON also offers downside protection of 3.6%. However, with 218 days to expiration it might be wise to seek out another call with greater downside and profit protection. On the plus side, the maximum profit of 20.8% is hefty.
- The out-of-the-money covered call on Kimberly Clark has roughly 3 months left to run. With an annualized return of 8.7% it still appears attractive.
- The covered call on 3M offers the greatest time horizon with roughly 1.5 years left until expiration. The annualized return of 5.3% and downside protection of 7.8% are also nice

features.

Note that your decision to roll a covered call (as opposed to closing it out entirely) should depend on a combination of your current outlook for the stock, on the covered call's returns, and on the downside protection that the covered call offers. When looking at a particular covered call, you should seriously consider whether the underlying stock position is worth keeping and whether current premium levels warrant writing calls against the stock.

Summary: After a covered call position has been established, the movement of the underlying stock will alter the characteristics of the position. Your "gut" feeling may be to hold a position in which the stock has slumped for its superior potential return, but if downside protection and yield are lacking, there is a risk that it is out of sync with the basic philosophy of covered call writing. The analysis described here can tell you which positions are worth holding and which should be closed out or rolled.

Chapter 10 – Option Trading Tips

Managing an option portfolio takes a bit more time than managing a stock portfolio, but the principles are similar.

Always Diversify

Beyond selecting the best options for your strategy, the next three rules of successful option investing are diversify, diversify and diversify. Whether you set up a portfolio of naked options, a hedged option portfolio or a covered call portfolio, the objective is to start out diversified and to stay diversified.

Diversification is important because it is highly likely that at least some of your options will move against you some of the time. Therefore, you need to hold a sufficient number of positions to reduce the likelihood that losses in one or more options will sink your portfolio. Here are our general guidelines for how many positions you should hold**.**

For **"naked" call buying**, we recommend that you hold 10 to 15 different positions. This is similar to the number of stocks you should hold in a diversified stock portfolio. In setting up your portfolio, try to diversify as much as possible among industries.

For **"naked" put buying**, we also recommend about 10 to 15 different positions on different stocks, also diversified among industries. However, if you are using index or ETF options as part of a portfolio hedge, you can probably use as few as four or five different positions in your hedge (again in different industries).

For **covered call writing**, we recommend eight to twelve different positions on different stocks (and different industries). Because the covered call is a partly hedged (and less risky) position, you need fewer of them to keep your risk at a reasonable level.

For **"naked" (or uncovered) call and put writing**, we recommend no less than 12 to 15 different positions. Since an uncovered option write can move against you with losses well in excess of your original capital outlay, you should be careful not to concentrate too much in any one position no matter how attractive the trade might appear.

For our **market neutral hedges**, we recommend 20 to 40 different positions in a portfolio (half bullish, half bearish). For a sample market neutral portfolio, see Chapter 11, "Managing a Long/Short Hedge."

As time passes, stock prices will change and so will the size of your individual option positions, thus upsetting the balance of your portfolio. In general, you should consider paring back a position that has grown by more than 100% from its original size. (See Chapter 8, "When to Close an Option Position,")

Capital Considerations

The capital requirements for a covered writer, an option buyer, and a seller of naked options are quite different. Some types of positions require that you post margin and others do not. Be aware that the margins described below are the *Exchange Minimum* margins (set by the Federal Reserve Board). Many brokers require greater margins than these exchange minimum amounts.

With a **covered call**, there are no margin requirements, since the risk of the call you wrote is covered by the long position in the stock. To establish a covered call, you need to post an amount equal to the value of the shares minus the call premium. Some brokers will allow you to establish covered calls by buying the stock on margin; however, there may be better ways of achieving more leverage. (See "Capital Efficient Covered Call Alternatives," Ot110428.pdf.)

With **call buying** or **put buying**, there also is no margin requirement. Options buyers must put up the full initial cost of the options (plus commissions).

With **"naked" call writing** or **"naked" put writing**, there is a margin requirement. For equity options, this requirement is the current premium plus the greater of the following; (1) 20% of the underlying stock less the amount the option is out-of-the-money, or (2) 10% of the underlying stock amount. Be aware that this margin requirement can change as the stock moves or the premium rises or falls.

For example, if you were writing a put (on 100 shares) with a stock price at $40.00, the strike price at $35.00 and the premium at $1.00, the total margin requirement would be $400. We calculate this as follows: $100 ($1.00 x 100, premium received) plus $800 (20% of $4,000) minus $500 ($5.00 x 100), the amount the put is out of the money).

If after having written this put, the stock drops to $35.00 and the put premium rises to $5.00, the new margin requirement would be $1,200. We calculate this new margin requirement as follows: $500 ($5.00 x 100, new put premium) plus $700 (20% of $3500).

With most brokers, the writer of "naked" options can post marginable securities (stocks, bonds or mutual funds, usually in a ratio of 1.20 or greater) to satisfy the margin requirements.

Option Spreads may or may not have a margin requirement depending on the type of spread.

Bull and Bear Spreads: These involve buying an option (a call or a put, but not both in the same spread) at one strike price and selling another on the same stock at a different strike price but with the same expiration.

With so-called "debit" spreads in which you buy the higher premium option and sell the lower premium one (bull call spreads and bear put spreads), there are no margin requirements. This is because the most you can lose is the net premium paid.

With so-called "credit spreads" in which the option you sell has a higher premium than the one you buy (bull put spreads and bear call spreads), the margin requirement is the difference between the two strike prices times the number of underlying shares. However, with credit spreads, you are allowed to apply the premium you take in towards meeting this margin requirement. ("See Option Spreads I: Basic Bull and Bear Spreads," Ot070813.pdf.)

Calendar Spreads: A "long calendar" spread consists of writing a shorter-dated option (call or put but not both in the same spread) and buying a longer-dated one at the same strike price. There is no margin requirement on a long calendar spread.

A "short calendar spread" consists of writing the longer-dated option and buying the shorter-dated one at the same strike price. With a short calendar spread, you must post the exchange minimum margin on the option that you wrote.

Trading

All registered stock brokers get some training in options, but some are more experienced than others. Discuss your objectives with your broker. You may wish to shop around to find one that suits you best. Many brokers have a higher level of certification, which make them a *Registered Options Principal.*

If you are using an online broker, be aware that some of these firms are better equipped than others to handle your option trades. Carefully review the resources that these companies make available to their customers. (For a review of online options brokers, we recommend that you read the March 19, 2016, report in Barron's titled "Best Online Brokers: Fidelity Wins in Barron's 2016 Survey" by Theresa W. Carey.)

Naked Options: Option values are tied to the price of the underlying stock. Thus, option orders should be "limit orders," which are contingent on the stock price. For example, order your broker to "Buy four Bed Bath & Beyond October $30 calls at $14.00 with the stock at $43.60 or higher." Not all brokers are aware that orders may be placed this way. If your broker will not accept such an order, it may be time to shop for another.

Covered Calls: Order a covered call position by stating the net price you wish to pay per share. For example, if American Eagle Outfitters is trading at $30.00 and the $30.00 call is at $1.85, say "Buy 500 shares of American Eagle Outfitters (AEOS) and sell five September $40 calls (ticker, AQU IF) at a net cost of $28.15 a share - with the stock $30 or higher."

Rolling Covered Calls: As explained in Chapter 9, "Managing a Covered Call Portfolio," the time may come when you want to "roll" your covered call rather than close it out. Rolling consists of repurchasing the existing short call and writing a new one at a different strike price and/or a different expiration. You can place this as a spread order.

Suppose on July 31, 2016, with the stock trading at $32.00, you want to roll the soon-to-expire and in-the-money August $30 call (priced at $2.30) on BMC Software (BMC) into the out-of-the-money August $35 call (priced at $2.45). Specify your order as follows: "Buy (to close) one August $30 (ticker, BMC DF) call and sell (to open) one August $35 (BMC HG) call at a net credit of $0.15 with the BMC common at $32.00 or higher."

When rolling, remember that as the stock rises and falls, the higher priced call will move faster than the lower priced call. Thus, your order should be contingent on the price of the stock, as follows:

If you are BUYING THE HIGHER PRICED CALL, the order should read: "With the stock at (its present price) or HIGHER"

If you are BUYING THE LOWER PRICED CALL, the order should read: "With the stock at (its present price) or LOWER"

Chapter 11 - Managing a Market-Neutral Hedge

Here, we show how you might set up and manage a balanced market-neutral "hedge" portfolio consisting of long and short calls and puts. Such a portfolio is designed to take advantage of our model's ability to distinguish between underpriced and overpriced options and the ability of the Value Line Common Stock Ranking System to predict relative stock price performance.

How the long/short hedge works.

Because the results of our options ranks in any given period is likely to be influenced by what the market has done, we often gauge the effectiveness of our options ranks by how well our market-neutral "hedges" have performed. These hedges are always combinations of bullish and bearish options positions. There are four such market-neutral combinations.

1. The *long/long hedge* consists of the purchase of (bullish, long premium) rank 1 or 2 calls and (bearish, long premium) rank 1 or 2 puts.
2. The *short/short hedge* consists of the writing of (bearish, short premium) rank 5 or 4 calls and (bullish, short premium) rank 4 or 5 puts.
3. The *long/short call hedge* consists of the purchase of (bullish, long premium) rank 1 or 2 calls and the writing of (bearish, short premium) rank 4 or 5 calls.
4. The *long/short put hedge* consists of the purchase of (bearish, long premium) rank 1 or 2 puts and of (bullish, short premium) rank 4 or 5 short puts.

Which Hedge is Best?

Different hedges do better in different markets. Obviously, the bullish strategies of call buying and put writing do well when stocks rise and the bearish strategies of put buying and call writing do well when stocks decline. What is perhaps not so obvious is that the long premium strategies of call and put buying combined tend to do well when premiums are low and there is a large move in the market, while the short premium strategies of call and put writing perform the best when premiums are high and the market shows little net change. Thus, a combination of the long/short call and put hedges (or, if you will, a combination of the long/long and short/short hedges) tends to produce the best risk-adjusted results over time. When you combine these four strategies (balancing each type of position against the other), you are also effectively combining all four basic naked option strategies – call buying, put buying, call writing and put writing and taking a fully diversified approach to your option investing.

Setting Up Your Hedge

Your main objective when establishing a combined hedge is to make sure that your portfolio is balanced and diversified, observing the need to offset one position with one on the other side. To keep your hedge reasonably diversified, we suggest that you keep at least 10 bullish options positions offsetting 10 bearish option positions. In our example in Figure 1 below, we have 20 long positions (10 call buys and 10 put buys), which offset 20 short positions (10 call writes and 10 put writes). Note that in setting up this hedge, we observed the following rules.

- The purchased options should have their "ask" prices ranked 1 or 2 for "naked" buying, while the written (short) options should have their "bid" prices ranked 4 or 5 for "naked" writing.

- The number of bullish premiums should approximately offset bearish premiums and premium selling should approximately offset premium buying.
- The individual option positions should have approximately the same size. On average our premium amount was $450.
- Each side of the hedge is diversified as much as possible among industries. It is perfectly acceptable, however, to have bullish and bearish positions in the same industry.

In constructing this hedge, we used *PortfolioTemplate.xls*, our portfolio tracking template, which you can download from our *Excel Software* directory. This template is particularly useful for calculating the net premium and the total capital requirements. You can also use this template to calculate the daily P/L of your portfolio and to check for any rank changes. (See "How to Use our Portfolio Template," Ot110721.pdf.)

All Four Hedges Combined

We show our portfolio consisting of all four hedges in Table 17 on the next page (Historical example prices as of 3/17/08). Notice that the premiums roughly offset each other with a small net debit of $475 (in the column marked "beginning cost basis"). However, it really takes $25,645 to establish this portfolio. Notice that we paid out $3,905 for call buying and $5,365 for put buying with a total outlay of $9,270. We are not allowed under "Reg. T" margin rules to apply the short premium to the long premium. In addition to the premium paid, we had to post $16,375 for margin ($5,370 for call writes and $11,005 for put writes). These are the Exchange minimum amounts, calculated by the following rule: the greatest of (1) 20% of the underlying stock value minus the amount that the option is out-of-the-money or (2) 10% of the stock value.

You might note that in establishing this hedge, you immediately have a mark-to-the-market loss of $1,792, based on the bid/ask spreads. This is what it would cost you to close out the hedge right away (buying back your writes and selling your long options.)

Maintaining the Hedge

As time passes, the size of some positions can change substantially, upsetting the diversification. Generally, we suggest that if a single position grows to two times or more its original size (long or short), it be trimmed back. Finally, keep an eye on the rank of the position. If it turns unfavorable (i.e. goes to a neutral rank of 3), then consider replacing it. Bear in mind, however, that each transaction will incur commissions, so if the expiration is near and commissions may negate any advantage from re-aligning the hedge, hold off.

Table 17 – Market Neutral Hedge Example: Historical Example

Symbol	# of Shares	Begin. Price	Tran	Company	Expiration	STRIKE	Common Price	Option Bid	Option Ask	Beginning Cost Basis	Mark to Market	Gain/ Loss	$Delta	Nked Opt. Rank	Naked Write Margi
			Grand Total							475	(1,317)	(1,792)	6,486		16,375
			CB Total							3,905	3,715	(190)	17,176		-
QEL FB	100	$ 2.45	CB	Amkor Technology	6/21/08	$ 10.00	11.37	2.30	2.45	245	230	(15)	808	2	-
GLW ED	100	$ 3.90	CB	Corning Inc.	5/17/08	$ 20.00	23.22	3.70	3.90	390	370	(20)	1,884	2	-
QCJ EE	100	$ 4.10	CB	CTC Media Inc	5/17/08	$ 25.00	28.09	3.90	4.10	410	390	(20)	2,162	2	-
HMY HV	100	$ 2.90	CB	Harmony Gold Min	8/16/08	$ 12.50	14.01	2.75	2.90	290	275	(15)	984	2	-
MSQ GE	100	$ 4.50	CB	Microsoft Corp.	7/19/08	$ 25.00	28.30	4.40	4.50	450	440	(10)	2,123	2	-
OMG FL	100	$ 4.50	CB	OM Group	6/21/08	$ 60.00	54.50	4.10	4.50	450	410	(40)	2,371	2	-
ORQ FC	100	$ 4.80	CB	Oracle Corp.	6/21/08	$ 15.00	19.28	4.70	4.80	480	470	(10)	1,683	2	-
TRA FI	100	$ 3.70	CB	Terra Inds.	6/21/08	$ 45.00	38.49	3.40	3.70	370	340	(30)	1,603	2	-
WDC GF	100	$ 3.70	CB	Western Digital	7/19/08	$ 30.00	29.69	3.50	3.70	370	350	(20)	1,664	2	-
XLQ FD	100	$ 4.50	CB	Xilinx Inc.	6/21/08	$ 20.00	23.74	4.40	4.50	450	440	(10)	1,895	2	-
			CS Total							(4,835)	(5,462)	(627)	(20,107)		5,370
KMX GX	-400	$ 1.05	CS	CarMax Inc.	7/19/08	$ 22.50	18.21	1.05	1.20	(420)	(480)	(60)	(2,418)	5	728
FNM FG	-300	$ 1.45	CS	Fannie Mae	6/21/08	$ 35.00	22.21	1.45	1.80	(435)	(540)	(105)	(1,852)	5	666
HD EY	-400	$ 1.05	CS	Home Depot	5/17/08	$ 27.50	25.70	1.05	1.15	(420)	(460)	(40)	(3,915)	5	1,234
HOV HB	-300	$ 1.70	CS	Hovnanian Enterpr	8/16/08	$ 10.00	8.59	1.70	1.90	(510)	(570)	(60)	(1,411)	5	258
M HE	-300	$ 1.70	CS	Macy's Inc.	8/16/08	$ 25.00	21.54	1.70	1.85	(510)	(555)	(45)	(2,582)	5	646
OAN AB	-300	$ 1.55	CS	Medarex Inc.	1/17/09	$ 10.00	8.00	1.55	1.85	(465)	(555)	(90)	(1,279)	5	240
VMA AB	-300	$ 1.40	CS	Motorola Inc.	1/17/09	$ 10.00	9.25	1.40	1.44	(420)	(432)	(12)	(1,454)	5	305
QPF GW	-300	$ 1.85	CS	Parallel Petrol.	7/19/08	$ 17.50	17.11	1.85	2.00	(555)	(600)	(45)	(2,784)	5	873
VN AU	-400	$ 1.25	CS	Sprint Nextel Corp	1/17/09	$ 7.50	5.66	1.25	1.30	(500)	(520)	(20)	(1,182)	5	226
WUI AA	-500	$ 1.20	CS	Unisys Corp.	1/16/10	$ 5.00	3.87	1.20	1.50	(600)	(750)	(150)	(1,231)	5	194
			PB Total							5,365	4,760	(605)	(15,359)		-
OEQ SV	300	$ 1.45	PB	Advanced Energy	7/19/08	$ 12.50	13.29	$ 1.30	$ 1.45	435	390	(45)	(1,405)	2	-
CTX SV	400	$ 1.35	PB	Centex Corp.	7/19/08	$ 12.50	19.43	$ 1.25	$ 1.35	540	500	(40)	(1,172)	1	-
DDS TV	400	$ 1.15	PB	Dillard's Inc.	8/16/08	$ 12.50	16.19	$ 1.00	$ 1.15	460	400	(60)	(1,334)	2	-
MDC UX	500	$ 1.20	PB	M.D.C. Holdings	9/20/08	$ 22.50	38.32	$ 1.10	$ 1.20	600	550	(50)	(1,859)	2	-
OOS MA	300	$ 2.00	PB	Pacific Ethanol	1/17/09	$ 5.00	4.29	$ 1.55	$ 2.00	600	465	(135)	(512)	2	-
RF QW	400	$ 1.30	PB	Regions Financial	5/17/08	$ 17.50	19.50	$ 1.10	$ 1.30	520	440	(80)	(2,358)	2	-
SWQ SW	400	$ 1.25	PB	SanDisk Corp.	7/19/08	$ 17.50	21.60	$ 1.10	$ 1.25	500	440	(60)	(1,864)	2	-
TGT SG	400	$ 1.40	PB	Target Corp.	7/19/08	$ 35.00	48.50	$ 1.25	$ 1.40	560	500	(60)	(2,539)	2	-
OGY MV	500	$ 1.10	PB	Tyson Foods 'A'	1/17/09	$ 12.50	15.61	$ 1.00	$ 1.10	550	500	(50)	(1,703)	2	-
WM SA	500	$ 1.20	PB	Washington Mutua	7/19/08	$ 5.00	9.24	$ 1.15	$ 1.20	600	575	(25)	(613)	1	-
			PS Total							(3,960)	(4,330)	(370)	24,776		11,005
VCA MD	-300	$ 1.75	PS	CA Inc.	1/17/09	$ 20.00	21.85	$ 1.75	$ 1.90	(525)	(570)	(45)	2,042	5	721
KO QK	-200	$ 1.15	PS	Coca-Cola	5/17/08	$ 55.00	57.69	$ 1.15	$ 1.30	(230)	(260)	(30)	3,480	5	1,731
DIS SY	-200	$ 1.00	PS	Disney (Walt)	7/19/08	$ 27.50	30.46	$ 1.00	$ 1.10	(200)	(220)	(20)	1,574	5	609
VGS MW	-200	$ 1.90	PS	Gap (The) Inc.	1/17/09	$ 17.50	19.68	$ 1.90	$ 2.05	(380)	(410)	(30)	1,173	5	394
KHQ VC	-400	$ 1.10	PS	Hudson City Banc	10/18/08	$ 15.00	17.01	$ 1.10	$ 1.20	(440)	(480)	(40)	1,918	5	680
IBM SS	-200	$ 2.00	PS	Int'l Business Mac	7/19/08	$ 95.00	115.55	$ 2.00	$ 2.05	(400)	(410)	(10)	3,358	5	2,311
LLY SI	-300	$ 1.80	PS	Lilly (Eli)	7/19/08	$ 45.00	48.87	$ 1.80	$ 1.95	(540)	(585)	(45)	4,341	5	1,759
MWV RE	-300	$ 1.35	PS	MeadWestvaco	6/21/08	$ 25.00	26.24	$ 1.35	$ 1.60	(405)	(480)	(75)	2,873	5	1,181
SHQ RW	-300	$ 1.35	PS	Schwab (Charles)	6/21/08	$ 17.50	18.77	$ 1.35	$ 1.45	(405)	(435)	(30)	1,916	5	732
URQ RE	-300	$ 1.45	PS	Urban Outfitters	6/21/08	$ 25.00	29.57	$ 1.45	$ 1.60	(435)	(480)	(45)	2,102	5	887

Chapter 12 - A Review of Our Performance Data

In this chapter, we specify exactly how we evaluate the performance of our options ranks. We also show you where you can access our past performance data.

How We Rank Options

We base our option ranks on a weighted combination of the Value Line common stock ranks and our option model's calculation of whether the options are underpriced (good for buying) or overpriced (good for writing).

Under/Over Priced: To calculate whether an option is underpriced or overpriced, we compare the *implied volatility* of each option premium ("ask" price for buying and "bid" price for writing) with our model's *Adjusted Volatility Forecast* for that particular stock, strike, and expiration. (Implied volatility is the volatility "implied" by the market price of an option using a standard options model, such as Black-Scholes, and all the known determinants such a stock, strike, expiration, interest and dividend. Our *Adjusted Volatility Forecast* is our expectation of future volatility adjusted for the degree to which the stock deviates from a normal distribution. (See "Understanding Option Volatility Forecasts, Ot080211.pdf.)

Option Buying Ranks: we rank call and put ask (offer) prices from 1 to 3 for buying, with 1 being a "buy", 2 being a "hold" and 3 being "close". A typical rank 1 call is a call with an underpriced ask price and an underlying common stock rank of 1. A typical rank 1 put is an underpriced put (again ask price) with an underlying common stock rank of 5.

"Naked" Option Writing Ranks: We rank call and put bid prices from 5 to 3 for uncovered ('naked") writing, with 5 being a "write" recommendation, 4 a "hold" and 3 a close recommendation (i.e. buy back the written option). A typical rank 5 call for "naked" call writing is a call with an overpriced bid price that is based on a rank 5 stock. A typical rank 5 put is a put with an overpriced bid price with an underlying common stock rank of 1.

Covered Call Ranks: we rank covered calls based on a combination of the common stock rank and the degree that the call's bid price is overvalued. A typical rank 1 covered call is a stock with a common stock rank of 1 and an overpriced call.

Married Put Ranks: these are stocks that are hedged with puts. We rank married puts based on the common rank of the stock and the degree that the put's ask price is undervalued. Thus, a typical rank 1 married put is a combination of rank 1 stock hedged with an underpriced put.

Calculating Weekly Rank Performance

We calculate our rank performance by comparing prices for the different options ranks on a weekly basis. Thus, for the week ending Tuesday, July 26, 2016, we calculate how all calls that were ranked 1 on the prior Tuesday (July 19) performed over the week that followed (regardless of what the ranks might be on July 26th). Although we base our options ranks on actual ask prices (for buying) or bid prices (for writing), all our weekly performance calculations are based on the weekly change in the mid-point premiums.

For call and put buying, the base (denominator) for each week's percentage change is the (mid-point) starting premium. Weekly performance is the average of these percentage gains and losses in mid-point premiums.

For "naked" writing, the denominator is the exchange minimum uncovered option requirement (i.e. between 10% and 20% of the underlying). For each option, the weekly gain and loss is the starting week premium minus the current premium, divided by the starting margin requirement. Again these percentage gains and losses are averaged to arrive at an average for the week.
For covered call writing, the base is the beginning stock price minus the premiums (mid-point between bid and ask). For each covered call, the weekly performance is the percent change in stock minus these premiums. We then calculate the average of these percentages.

For Married Put Buying, the base is the stock price plus the mid-point premium. For each married put, the weekly performance is the percent change in stock plus the premium.

Each week on the back page of *The Weekly Option Strategist*, we provide a table that shows how our ranks performed over the week ending the prior Tuesday.

Calculating Cumulative Performance in Ranksfile.xls

We show all our weekly performance numbers going back six and a half years in our file *Ranksfile.xls*, which you will find in our *Weekly Option Performance* directory. The cumulative performance shown in this spreadsheet is the sum of the natural logs of the weekly performance numbers. We do this for ease of calculation and to make performance graphs more readable. Note: the use of cumulative natural logs tends to show narrower gains and wider losses than if the performance numbers were calculated from normal compounding. For instance over the approximately 15 year span ending July 19, 2016, cumulative logs show our rank 1 covered calls gaining 182.4% and our naked call writes losing 622.9%.

Our Quarterly Track Record File – Trakrec.xls

You can find Trakrec.xls in our *Options Templates Directory*. With this template spreadsheet, we try to show subscribers how well (or poorly) they might have fared using our ranks. Here, we have assumed that call and put purchases and covered calls are initiated when the rank goes to a 1, and held until the rank goes to a 3, and that naked call and put writes are initiated when the rank goes to a 5 and held until the rank goes to a 3. (Thus for purchases and covered calls, we typically give a 66% weight to rank 1s and a 33% weight to rank 2s, while for writes, we give a 66% weight to rank 5s and a 33% weight to rank 4s. Also, to reflect transaction costs, we narrow the gains and widen the losses of naked option transactions by 5% each quarter.)

Trakrec.xls has a number of interesting and useful features. One is that it allows you to back-test different option strategies, combined not only with each other, but with major asset classes (S&P 500, bonds and interest-bearing cash) as well. The template also allows you to find the highest yielding combinations of assets and options for desired levels of volatility. (See "Using Our Track Record template," Ot110414.pdf).

Final Note: It always helps to remember that past performance is no guarantee of future profits. We should also point out that all these performance numbers assume a degree of diversification and rebalancing that is not achievable in the real world. Nevertheless, our track record does indicate how powerful a tool intelligent option investing can be.

Appendix A – Recent Weekly Option Strategist Reports

Description (Reports prior to 12/31/03 available by downloading quarterly ".exe" files)	**File Name**	**Topic Category**
How to Use The Value Line Daily Options Survey Quick Study Guide	QuickStudy.pdf	Educational
Buying Naked Calls	Ot121025.pdf	Strategy
Spotlight on Naked Option Writing	Ot120920.pdf	Strategy
Verizon Communications	Ot120913.pdf	Strategy
When to Close Out an Option Position	Ot120906.pdf	Strategy
How Much Should I Invest in Options	Ot120816.pdf	Strategy
10 Myths about Equity Options	Ot120809.pdf	Strategy
Suggested Screening Criteria	Ot120726.pdf	Strategy
Screening for LEAPS	Ot120705.pdf	Strategy
When to Close an Option Position	Ot120621.pdf	Strategy
Screening for Out-of-the-Money Bull Put Spreads	Ot120531.pdf	Strategy
Screening for Puts	Ot120510.pdf	Strategy
Creating and Maintaining Multiple Screens	Ot120503.pdf	Strategy
Taking Some Money off the Table	Ot120426.pdf	Strategy
How We Evaluate our Performance	Ot120419.pdf	Performance
What are LEAPS?	Ot120412.pdf	Product
Using the Screen to Display our Recommended Options	Ot120405.pdf	Strategy
Single Stock Futures	Ot120322.pdf	Strategy
Using Spreadsearch2.xls to Find Covered Call Alternatives	Ot120215.pdf	Strategy
Writing Covered Calls on Volatile Stocks	Ot120308.pdf	Strategy
Understanding Our Volatility Forecasts	Ot120301.pdf	Product
Building a Library of Option Screens and Displays	Ot120223.pdf	Strategy
How We Evaluate Our Performance	Ot120209.pdf	Performance
Establishing Your Spreads at the Best Prices	ot070917.pdf	Strategy
10 Covered Call Myths (or Myth Conceptions)	Ot120202.pdf	Strategy
Using Your Screener to Create Covered Calls on LEAPS	Ot120126.pdf	Strategy
Protecting Your Assets with Options	Ot120119.pdf	Strategy

Appendix B – Glossary of Basic Terms

Adjusted Strike Price: When there is a stock split or stock dividend, the exchanges adjust the strike prices to reflect the change. Usually, if the split is 2 for 1, the strike prices are cut in half and the number of contracts is doubled with the number of shares per contract remaining at 100. However, for some other splits, the number of shares per contract and the strike price are both changed. For example, when there is a 3-for-2 split, the exchanges can change the strike prices (e.g. from $60 to $40) and the number of shares per contract (from 100 to 150). Sometimes, when there is a spin-off, the option will be exercisable into a composite of more than one stock (and sometimes some cash).

American-Style Option: An American-style option is exercisable at any time until expiration. All U.S. exchange traded stock options are American-style.

Ask Price: This is the price at which the market is willing to sell the option. The ask price (also known as the "offer" price) is always higher than the bid price, which is the price at which the market maker will buy the option.

At-the-Money: The strike price of an option equals the market price of the underlying stock or index.

Automatic Exercise: All exchange-traded options held by retail investors are automatically exercised at expiration if they are at least $0.25 in-the-money.

Bid Price: This is the price at which the market maker would be willing to buy the option.

Binomial Options Model: Otherwise known as the Cox-Ross-Rubinstein model, the Binomial Model calculates the value of an American-Style option, which can be exercised anytime over the life of the option.

Black Scholes Model: Named for Fischer Black and Myron Scholes, who developed it in 1973. This is the standard option-pricing model. Today, most models are variations of the Black Scholes model. Note: The Black Scholes model assumes that the options can be exercised only on the expiration date

Breakeven: This is the stock price (or prices in the case of some spreads) at which the option position will neither make nor lose money. For example, the breakeven price on a long call is the strike price plus the premium.

Call Option: A call option gives you the right but not the obligation to buy the stock at a particular strike price over a specified time period (American-Style) or on a specified date (European-Style).

Capital Change: A stock split, stock dividend, merger, or spin-off that affects the number, and

sometimes, the composition of shares of stock owned by an investor. See **Adjusted Strike Price.**

Cash Covered Put: This a combination of a put write plus enough cash to cover the strike price less the premium. A cash covered put is a "synthetic" or "equivalent position" to a covered call at the same strike price. It requires approximately the same amount of cash to establish and offers approximately the same dollar risks and rewards.

Class of Options: All listed option contracts on the same type (i.e. calls or puts) on the same underlying security (e.g., all listed IBM call options).

Closing Transaction: This is the transaction that offsets your existing long or short option position. Usually, you should specify whether you are entering into an opening or closing transaction.

Contingent Orders: These are orders which specify only doing a particular transaction when the stock price reaches a particular level.

Covered Call: This is a combination of a long stock and a short call position. Covered call writers keep the entire call premium if the stock ends up below the strike price, while the strike price and the call's time premium limit the maximum profit.

Delta: Also known as Change-Per-Point. Delta is the expected dollar change in an option price for a given dollar change in the stock price. Delta is largely derived from the probability that the option will end up in-the-money.

Dividend (cash): A payment to shareholders by the company. When all other things are equal, the higher the dividend, the lower the call premium and the higher the put premium. (See Ex-dividend date)

European Style Option: A European style option is exercisable only at the expiration date. Most index options, with the exception of the S&P 100 (OEX), are European-style.

Exchange Traded Fund (ETF): These are basically stocks, which are based on specific and known weighting of regular corporate equities. Like regular stocks, their prices are updated during normal trading hours. Options trade on more than 40 ETFs and we rank these options in the Value Line Daily Options Survey.

Ex-Dividend Date: The cut-off date on which a stockholder will be entitled to a particular dividend. Usually the stock price drops by the dividend amount right after the ex-dividend date.

Exercise of an Option: Purchase or sale of the underlying stock at the strike price by the holder of a put or call.

Exercise Price: Same as the Strike Price

Expiration Date: The date after the options last trading day. In the case of listed stock options, this is the third Saturday of the month. The option buyer should check carefully the time of day by

which he must notify his broker to exercise or sell an option.

Fair Value of an Option: The option value derived from a forecast of future volatility. Our *Estimated Normal Premiums* are fair value because we base these premiums on our adjusted forecast of future volatility.

Good until Canceled: A type of order, which as its name implies, stays in place until the investor notifies the broker to cancel. (Most orders are for one day only, unless otherwise specified.)

Hedge: To reduce the risk of loss from an investment position by making offsetting transactions that will reduce one or more types of risk.

Historical Volatility: See Volatility (Historical)

In-the-Money: A call is in-the-money if the stock price is higher than the strike price. A put is in-the-money if the stock price is below the strike price.

Intrinsic Value: An option's intrinsic value is what the option is worth if exercised. Only options that are in-the-money have intrinsic value.

IRA: This stands for individual retirement account. There are two different types of IRAs, Traditional IRAs, which allows pretax annual contributions, and Roth IRAs, in which the contributions are after tax but allow the eventual withdrawals to be tax exempt. For both types of IRAs, brokers generally allow covered calls, cash-covered put writing and protective put buying. Some brokers also allow naked call and put buying and limited risk option spreads in IRAs.

LEAPS: Stands for Longer-Term Anticipation Security. LEAPS are standardized options with a maturity of between 10 months and 3 years. LEAPS currently trade on more than 250 underlying stocks.

Limit Order: To buy or sell a predetermined number of shares at (or better than) a specified price. Limit orders guarantee a price, if executed, but not execution.

Listed Option: An option traded on a national securities exchange.

Long/Short Hedge: This strategy consists of simultaneously buying and selling uncovered calls (or puts). The success of this hedge depends on Value Line's ability to discriminate between those options worth buying and writing from the more than 20,000 ranked equity options. The Long/short hedge is a market neutral strategy. See Chapter 11.

Margin: The minimum equity required by law to support an investment position. No margin is required when you buy an option or when you write a covered call. For credit spreads, such as bull put spreads, and bear call spreads, the margin is the difference between the two strike prices times the number of the underlying shares. Buying stocks on margin refers to borrowing part of the purchase price of the security from a brokerage house. Often brokerage firms will accept a ratio

greater than 1:1 ratio if bonds, mutual funds, or stock is used as collateral in place of cash. For uncovered or "naked" option writes, the margin is the premium taken in, plus the greater of (1) 20% of the underlying stock value, less the amount the option is out-of-the-money or (2) 10% of the underlying stock value.

Market Maker: A member of an options exchange, who trades on the floor with his or her own capital. Market makers are required to make a two-sided price (bid and offer) on all incoming orders. Market makers enjoy certain trading advantages, such as being able to buy options at the bid price and sell them at the offer price. They also enjoy very favorable margin rules.

Married Put: The combination of owning the stock and a put on this stock. With a married put, your losses are covered but your potential gains (if the stock rises) are unlimited. See "Hedging Stocks with Married Puts," Ot010702.pdf.

National Best Bid or Offer (NBBO): The SEC requires that brokers show customers the best available bid price when they sell securities and the best available ask price when they buy them. The prices we collect for the Value Line Daily Options Survey are the NBBO prices selected from all the Exchanges.

Open Interest: The number of contracts, long or short, outstanding on a particular option series that have not been offset by a closing transaction. Note: since each option has both a buyer and a writer, open interest refers to both long and short positions.

Opening Transaction: This is a trade that creates a new position or adds to an existing one. The new position can consist of either short or long options on a stock. Usually, when entering a trade, you specify whether it is an opening or closing transaction.

Option Class: Refers to all the options on a particular stock or index, e.g. all the options on IBM.

Option Clearing Corporation (OCC): The guarantor of listed security option contracts. The OCC is owned jointly by each of the options exchanges that trade listed security option contracts in the United States. See www.optionsclearing.com.

Option Contract: In conventional options, the actual contract is in bearer form and sets forth the provisions of the contract. The buyer's evidence of ownership is his confirmation slip from the executing broker.

Option Series: A particular listed option e.g. the IBM January 100 calls.

Option Type: Refers to whether an option is a put or a call.

Options Exchange: One of the six exchanges, regulated by the SEC, which are authorized to trade listed stock options. These six exchanges are the American Stock Exchange, the Boston Options Exchange, the Chicago Board Options Exchange, the International Securities Exchange, the New York Stock Exchange and the Philadelphia Stock Exchange.

Out-of-the-Money: A term referring to an option that has no intrinsic value because the current stock price is below the striking price of a call or above the striking price of a put. For example, a put struck at $100 when the stock is selling at $105 is said to be $5 out-of-the-money. See At the Money, In-the-Money.

Parity: The circumstance in which option's premium is equal to its tangible value.

Premium: The amount of money an option buyer pays (or the writer receives) for a conventional put or call.

Put Option: A put option gives you the right but not the obligation to sell the stock at a particular strike price over a specified time period (American-Style) or on a specified date (European-Style).

Put/Call Parity: The relationship whereby the combination of a short call and a long put with the same expiration and strike prices fully offsets a long stock position. This relationship helps bring call and put time premiums in line with each other.

Rank 1: Top rank for Call buying (a bullish strategy), Put Buying (a bearish strategy), or covered call writing (a bullish strategy) or married put buying (a bullish strategy).

Rank 5: Top rank for Call writing (a bearish strategy), Put writing (a bullish strategy).

Relative Volatility (Covered Call): This is based on the expected percentage changes in the covered call given certain moves and on the volatility of the stock itself. Because changes in the stock and call written against it partly offset each other, a covered call on a stock will have a lower Relative Volatility than the stock itself.

Relative Volatility (Married Put): A married put's relative volatility is the risk of the combined position (long put plus stock) relative to the median risk stock in The Value Line Investment Survey.

Relative Volatility (Option): An indicator of leverage and of the volatility (or breadth of dispersion) of the underlying stock price.

Relative Volatility (Stock): The volatility relative to the average of the over 1,700 stocks in the Value Line Investment Survey.

Relative Volatility: In our service, we calculate the risk of stocks, options, covered calls and married puts to the median risk stock in The Value Line Investment Survey.

Securities and Exchange Commission (SEC): The regulatory agency charged with the regulation of securities and stock option markets in the United States.

Short Option Position: (Same as Write) The position of the writer or seller of a call or a put. A call writer must sell the stock at the strike price if the option is exercised. The writer of the put must buy the stock at the strike price if the option is exercised.

Stop Order: A contingency order to buy or sell the stock when the price reaches a particular level. When the price specified in the stop order is reached, the stop order becomes a market order and is executed at the best possible price.

Strike Price: The price at which the owner of the call (put) can purchase (sell) the stock.

Synthetic Stock: Most commonly, a combination of a long call and a short put or a short call and a long put on the same stock with the same expiration date. Other ways of approximating the risk-reward characteristics of a long or short stock position are usually called stock equivalents.

Tangible Value (Intrinsic Value): The in-the-money portion of an option's price.

Terms of Option Contact: These terms include (1) the exercise or strike price, (2) expiration date, (3) underlying security, (4) dividend, if any, (5) provision for capital changes, and (6) quantity of the underlying security that makes up the unit of trading.

Theoretical Value: Another name for fair value. The term is occasionally used disparagingly to suggest a lack of substance. Disparagement may be appropriate if the assumptions are unsound.

Theta: An option's expected daily loss in premium if the stock remains unchanged, usually expressed in dollar terms.

Time Value or Time Premium: An option's time value is that portion of an options premium that is not intrinsic value. Time premium is mainly a function of time to expiration, stock price, strike price and volatility.

Transaction Costs: Transaction Costs associated with a trade include the purchase or sale commission charged by the brokerage firm executing the trade and the spread between the bid and asked price.

Uncovered Writer: An option writer who does not own the underlying stock. See Naked Option Writing

VIX: The CBOE's index of the 30-day implied volatility of S&P 100 (OEX) options.

VLX: The CBOE's index of the 30-day implied volatility of NASDAQ 100 (NDX) options

Volatility (Historical): An option's historical volatility is the standard deviation of log price changes over a particular time period, usually expressed as a per-annum rate.

Volatility (Implied): An option's implied volatility is the volatility that it would take to produce a particular premium level using a standard options model such as Black Scholes.

Warrant: An option to purchase securities at a given price and time, or at a series of prices and times outlined in the warrant agreement. A warrant differs from a call option in that it is usually the

obligation of the corporation itself. Ordinarily, a warrant's exercise increases the number of outstanding shares, whereas a call is an option on shares already outstanding.

Writing (Uncovered or "Naked"): An "uncovered" option writing position, requiring the posting of a margin. A call writer must sell the stock at the strike price if the option is exercised. A put writer must buy the stock at the strike price if the option is exercised. Naked option writing can produce attractive returns, but losses can be very large. For this reason, we urge investors to monitor their "naked" option positions very closely

Prepared by the Options Strategist Team.