

# PROFITING WITH FUTURES OPTIONS

**David L. Caplan**

Disclaimer: Trading in futures and options is not suitable for all investors as the risk of loss is substantial. Purchasers of options may lose their entire investment. Sellers of Options are subject to unlimited risk.



**Center for Futures Education, Inc.**

P.O. Box 309

Grove City, PA 16127

(724) 458-5860

FAX: (724) 458-5962

e-mail: [info@thectr.com](mailto:info@thectr.com)

<http://www.thectr.com>

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# INTRODUCTION

Options provide one of the most overlooked opportunities available to traders today. Properly used, options provide significant advantages for all traders; however, most traders tend to misuse them.

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**Often traders who use options purchase  
or sell the wrong option, or use the  
wrong option strategy.**

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New traders often use options solely to limit risk, in which case they only buy them. They do little investigation to determine whether the option was relatively “undervalued” or “overvalued,” or which strike price or month was the best. Typically, the conversation between a trader and his broker goes something like this:

TRADER: “I think gold is going up.”

BROKER: “O.K. What would you like to do?”

TRADER: “I want to buy gold, but I only have \$1,000 to risk.”

BROKER: “Let’s see, with \$1,000, we can buy 4 June \$400 calls.”

TRADER: “Great! Go ahead.”

There is no consideration given to time decay or premium levels—the most important factors in option trading—or whether an option strategy would provide a better risk/reward ratio than a futures position.

Traders who limit their analysis of options to buying a call option if they are bullish on a market or buying a put if they are bearish with the expectation that they will profit if the market moves in the predicted direction not only fail to take advantage of the most important aspect of options (under/over pricing, premium disparity, and time decay), but also find that indiscriminate option purchases can lead to losses

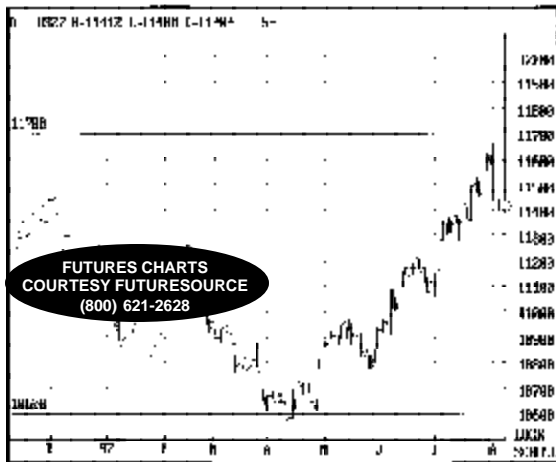
even if the market moves in your favor!

**There are three objectives that we have when trading options:**

“NEUTRAL” POSITIONS THAT HAVE HIGH PROBABILITY OF PROFIT, OR SITUATIONS THAT HAVE IN THE PAST ALWAYS LED TO EXPLOSIVE MARKET MOVES, PROVIDING US WITH RISK/REWARDS OF 20-1 OR MORE!

1. “NEUTRAL OPTION POSITIONS” WITH A HIGH PROBABILITY OF PROFIT. THESE TRADES MEET THE FOLLOWING CRITERIA:
  - A. They can be profitable over a wide range of prices that can be calculated by statistical probability to be profitable a high percentage of the time;
  - B. They can be successful without having to predict exact market direction;
  - C. They benefit from mispriced options (premium disparity) and from selling “overvalued” options;
  - D. They take advantage of “time decay” of out-of-the-money options that will lose some of their time value every day.

**Bond Neutral Options**



**Figure 1**

## 2. USING OPTION PURCHASES IN CONSOLIDATING MARKETS IN COMBINATION WITH LOW OPTION VOLATILITY LEVELS TO PRODUCE TRADES THAT CAN HAVE A 20-1 OR MORE PROFIT TO RISK RATIO!

Option purchasing is one of the most misused of all trading techniques. Most traders prefer to purchase options because of their limited risk (with premium plus commissions and fees), and their unlimited profit aspect, which provides the trader, in effect, a “*lottery ticket*” with the potential of large gains. However, similar to a lottery ticket, well over 90% of traders who purchase options in this manner end up losing! (In fact, our “*Neutral Strategies*” are designed to take advantage of people who purchase options in this indiscriminate manner.)

However, there is one situation where the odds in option buying are favorable and can produce some of our biggest gains. It is one of the easiest patterns of all to recognize and trade.

This occurs when a market consolidates into a quiet trading range. Traders say that the market has reached its “*equilibrium*” level and that it will have very little movement.

Futures contracts open near unchanged levels, and move only a few ticks in either direction every day. Traders are lulled “asleep” by this action. Option volatility then moves to record low levels making options very cheap.

**WHAT HAS HAPPENED IN THESE SITUATIONS ? THE MARKET HAS QUICKLY BROKEN OUT AND MOVED SHARPLY HIGHER.**

The soybean market in 1988; the coffee market in 1997, are examples of markets that were trading just a few ticks a day for long periods of time with extremely low option volatility that eventually broke out and ***moved much higher.***

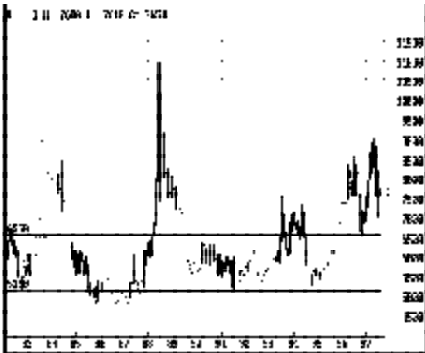
As an additional benefit, these situations are the easiest to recognize and trade of any possible technical pattern. That’s because they all look and act the same. As you can see in Figure 1, they are all easily recognized by the long, consolidating, quiet action. We then wait for the market to “tell us” that it is ready to begin moving before initiating any trades.

## 3. USING OPTION STRATEGIES AND PREMIUM DISPARITY TO INITIATE POSITIONS THAT PROVIDE SIGNIFICANT BENEFITS (DESCRIBED IN CHAPTERS III TO VIII).



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**Monthly Gold**



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**Monthly Copper**

## Figure 2

# CHAPTER I

## THE BASICS OF OPTION TRADING

There are two types of options: calls and puts. A call option gives the option *buyer* the right to buy the underlying asset at a specified price (the strike price) within a certain time. It obligates the option *seller* to sell that asset at the strike price before the expiration date, should the call buyer exercise his right. Conversely, a put option gives the option buyer the right to sell the underlying futures at a specified price within a certain time, and obligates the seller to take delivery at the strike price on or before the expiration date if the put buyer exercises his right. (Although the examples in this book refer to futures options, the principles apply to other option markets also).

All option transactions are opened either by buying or selling a call or put.

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**Over 90% of options transactions are closed out with an offsetting sale or purchase of the same option, or by letting the option expire without exercising the right to take or tender delivery.**

Options can be bought or sold to take advantage of a market move; for example, if an investor thinks the price of gold is going to rise, he can purchase a call or sell a put on the futures. If he purchases a call and the price of gold rises, the investor will profit if the premium he paid for the call increases during the time he holds the option.

If he sells a put instead and the price of gold rises above the strike price at expiration, the premium he received for selling the put will be his profit. If the investor anticipates the price of gold falling, he can buy a put or sell a call option.

### Option Strike Price

The price (premium) that the option buyer must pay for an option is

determined by several factors. One is the strike price of the option; for example, if gold is trading at \$320 an ounce, an investor who is bullish on gold could buy a call option at a strike price of \$310, \$320, or \$330 an ounce. A \$310 call option is “in-the-money,” that is, the strike price is lower than the market price. This is the most expensive of the options in this example. The \$320 strike price is “at-the-money” (close to the market), the second most expensive option. The \$330 option is the “out-of-the-money” and is the least expensive of these options. The farther “out-of-the-money” an option is, the less expensive it is, because it is less likely to have any real (intrinsic) value before expiration.

In our example, let’s say the December \$310 call costs \$1500; the \$320 call costs \$1000; and the \$330 call costs \$700. If, at the expiration of the December gold option, gold is trading at \$330 an ounce, the \$310 option would be worth \$2,000\* (gold options are for 100 oz. contracts) and thereby have a profit of \$500\* (\$2,000 value minus \$1,500 we paid for the option); the \$320 option would be worth \$1000 and our investor would break even; and the \$330 call option buyer would lose his entire \$700\* investment. Although the price of gold has risen \$10 dollars, his option still lost money, because the price of gold did not exceed the price he paid for the call.

On the other hand, the seller of the \$330 call was wrong in his price prediction for gold, but he still profited on this sale; thus, you can be right in your prediction of market direction and still lose money! How is this possible? There are two reasons for this.

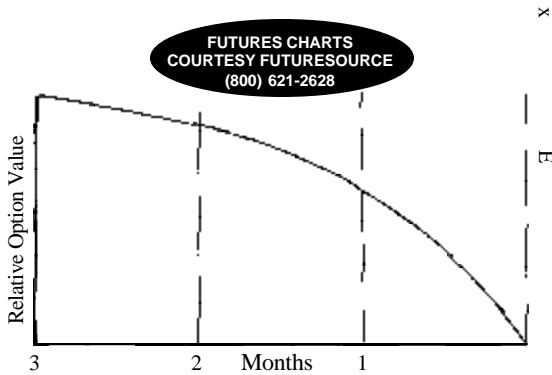
1. An option is a “wasting asset.” The option premium is partially comprised of time value; the longer the option has until expiration, the more value it should have. With every passing day, the option will lose some of its time value. Even if the buyer of the call option is correct in his assessment of the direction of the market—the market is rising—the time value of the option will decrease.

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**Only when a sustained or  
swift, sharp upward move  
occurs will the call purchaser make money.**

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\* Less commissions and fees.



**Figure 3**

Option time premium declines slowly when there is a long time remaining until expiration. As expiration approaches, the disintegration accelerates.

- Options are often overpriced because the public is willing to pay professional writers and grantors of options large premiums so the public can speculate in the markets, attempting to make a large profit with a limited risk of loss (option premium plus commissions and fees). If options were not overpriced, grantors would be unwilling to sell them and take the risk of a theoretically unlimited loss.

## Expiration

A second important aspect in the determination of option premium is the time until expiration; for example, an October gold call will cost less to purchase than a December gold call of the same strike price. The reason: the additional time before expiration gives the December option buyer a greater opportunity for profit.

## Volatility

The third item of importance is the volatility of the underlying futures contract. Volatility is a measure of historical price changes. A commodity such as soybeans or silver, which at times can be subject to violent price moves, normally commands very high premium values, especially during periods of violent price moves; e.g., soybeans during the summer months.

Volatility is by far the most important aspect in option trading, yet it is the least understood and most misused.

Volatility is a mathematical computation of the magnitude of movement in an option. This is based on the activity in the underlying market. If the market is making a rapid move up or down, volatility will increase. In a quiet market, volatility will be low.

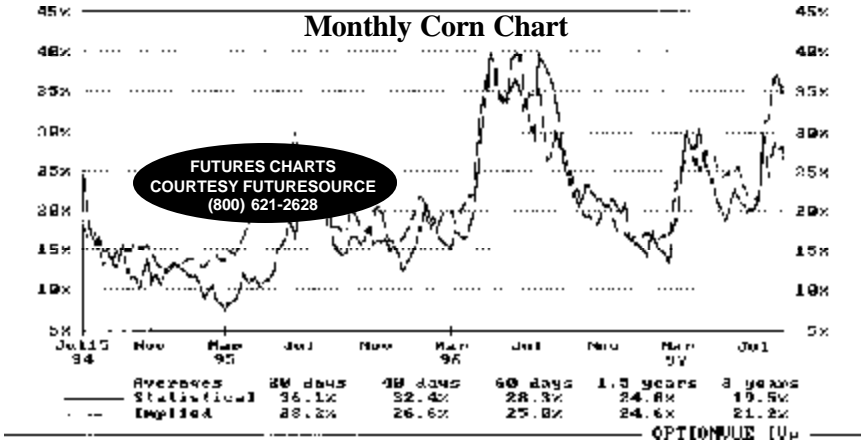


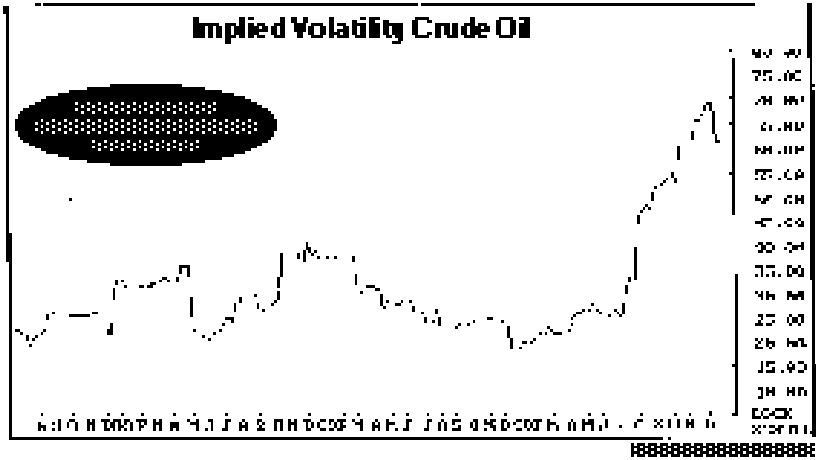
Figure 4

When volatility is relatively low, a trader should look for option buying strategies, as the market is quite likely to make a strong move. When option volatility is high, option selling strategies should be considered to take advantage of the relatively overvalued premiums.

An overlooked area is the difference in volatility between different months and strike prices of options. Often, premiums of out-of-the-money options can be distorted greatly; for example, in April-May 1994, soybean ratio spreads provided a high probability of profit because the volatility for the out-of-the-money calls was double the volatility of the at-the-money calls. This scenario can lead to significant opportunities. When options approach expiration, volatility for all the strike prices tends to equalize. In this instance, if you purchase the most fairly priced calls (near the money), and sell the most overvalued calls (out-of-the-money), you could expect the options sold to lose premium faster as the market moves in either direction. Even if the market were to move higher (unless making a straight-up vertical move), this spread would also work as the nearer-to-the-money option would

gain in value faster than the already overpriced out-of-the-money options.

Another overlooked characteristic of volatility is that it tends to drop gradually, then level off; however, volatility increases can be characterized by very sharp changes driving option premiums to extremely high levels. These events occur rarely, but when they do, they can be very damaging to those holding short option positions. An example of this was the volatility increase in many stocks at the beginning of the Gulf War. Oil volatility doubled, while other markets such as gold, bonds, and currencies increased 20% or more. Even in seemingly unrelated markets such as cattle, volatility



**Figure 5**

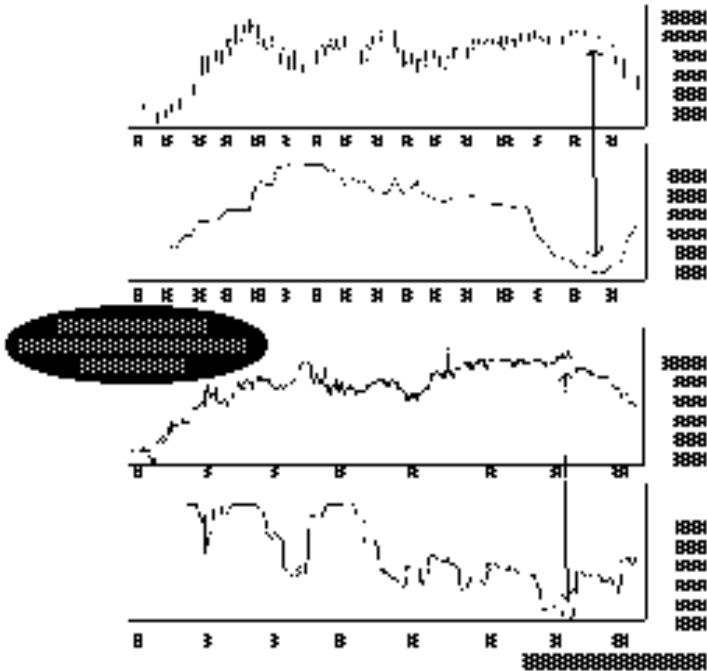
Quickly rising volatility in crude oil caused option premiums to expand to very “overvalued” levels.

Changes in volatility affect the premium levels in options that are going to be purchased, as well as those already purchased or sold. An example of this is crude oil and the S&P 500 option markets where volatility has ranged between 20% to more than 100%.

With high volatility, if one were to purchase an out-of-the-money option, he would need a substantial price rise before that option would be profitable at expiration. Both the expense of the purchase price of the option and time value would be working severely against him; however, with volatility at lower levels, this option would not only cost much less, but it would also require a smaller move for the position to be profitable. This is because, many times as prices begin to rise, volatility also increases, thereby increasing

the premium of the option purchased.

Option volatility can also alert the trader in advance to significant market moves. When option volatility is at low levels, there is a high probability that a large move is about to occur. Often, when a contract is very quiet, traders seemingly “fall asleep,” not expecting anything to happen. Of course, this is exactly when everything explodes!



**Figure 6**

Again, in this case, historically low option volatility provided an advance indication of an impending breakout. (We wait for the market to tell us which way it wants to go before jumping on board!)

The concept of option volatility and the time decay characteristic of options are the two most important and overlooked factors in option trading. These concepts can be difficult to learn and use, but their proper use can result in a “trading edge” over the markets.

When trading options, one must learn to be flexible, using what the market gives to best advantage. Sticking to one strategy may not be appropriate for current conditions. Changes in volatility levels require the use of different option strategies depending on the relative level of volatility in the option and underlying market as we discuss in the upcoming chapters.

# CHAPTER II

## WHEN TO USE OPTIONS

### The Trading Edge

Options should be used instead of outright futures contracts whenever the trader can realize a “trading edge” or advantage. They are advantageous whenever they offer a higher mathematical probability of profit; less risk of sudden, unpredictable, adverse market moves; a better risk/reward ratio; and/or increased trading opportunities.

1. *Higher Probability of Profit:* Through the proper use of option premiums, positions can be constructed that offer a high probability of profit. For example, selling an out-of-the-money, overvalued call on an overvalued, overbought commodity, or buying an at-the-money put in the same situation. A simple method of detecting an undervalued option is to compare current volatility to past readings. This can determine whether the volatility is at the high or low end of its range, commonly referred to as “theoretically under- or overvalued.”
2. *Less Risk of Sudden, Unpredictable, Adverse Market Moves:* Option buyers may insulate themselves from large, unlimited losses that occur from overnight adverse moves by using one of many limited-risk option strategies. Options can also be used to prevent being “stopped out” intraday on a trade that later would become favorable. Even close-only stops (stop orders to close out positions in the closing range if the contract reaches a predetermined loss level, ignoring intraday price movements), may inflict losses when the contract is limit up or down against the trader. As most futures contracts are subject to daily price movement limitations beyond which a trader cannot exit his position, he may find himself “locked in” for another day, which may be another limit day.

By using limited risk option net and spread positions, a trader may greatly reduce his trading risks. In such option positions, risk is limited only to the *premium* paid for the option position plus commissions and fees. Because the option trader has 1) a predetermined risk, and 2) is not subject to being “stopped out,” he has more time to properly evaluate his position when there are sudden changes.

### 3. *A Better Risk/Reward Ratio:*

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**By selling overvalued and/or buying undervalued options, trades may be initiated to take advantage of disparities in option premiums.**

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Temporary inefficiencies in the market may provide the trader some of the most significant trading opportunities with exceptionally high mathematical probabilities of profit.

4. *Increased Trading Opportunities:* Option strategists may enjoy opportunities that do not exist with outright futures positions lacking trend or having too much volatility. Moreover, option strategists are the only traders who can initiate trades to profit in flat, trendless markets. In fact, such markets provide the option strategist opportunities with some of the highest mathematical probabilities of profit, such as “Neutral Option Positions.”

## **When To Buy Options**

Because an option contains time value, the purchaser of an option is buying a “wasting asset” that is declining in value. Option purchases, therefore, must be restricted to special situations. One of the best circumstances is when volatility is low and the trader’s system or the market is likely to face a change of direction. An option purchase allows the trader to take a position with a limited risk of loss; however, unless a significant market move occurs, the trader should have set objectives that permit him to close out this position before time decay erodes the option premium.

Here are a few points to remember:

1. Options that are close-to- or in-the-money are more likely to be profitable than out-of-the-money options. You must have almost perfect timing to make money with far out-of-the-money options. Out-of-the-money options offer enormous leverage for *big* moves only.

- Options are usually cheaper after market declines or in flat markets, and relatively more expensive in bull markets. Small traders generally prefer to take a long position by purchasing calls; they have less demand for puts, thus, calls are usually more expensive than puts. The public prefers to be “long” and is predominantly buyers of call options.

## **When To Sell Options**

Option sellers appear to be at a great disadvantage because their reward (profit) is limited to the premium they collect, while their loss is potentially unlimited.

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**However, the mathematical odds favor the option seller for several reasons.**

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First, option sellers have mathematical probability in their favor because options are usually overpriced. Options are often overpriced compared to fair value formula pricing because of the nature of the participants in the market.

Second, in addition to their being overpriced, the seller of calls has a further advantage in that he will profit if the market is flat, moves lower, or even if it moves slightly against him (higher). Only if the market moves swiftly and sharply against him will the option seller lose.

Third, by selling out-of-the-money options containing only time value, the options continually lose time value and, therefore, some of their premium.

Because naked option selling potentially entails an unlimited risk of loss, the trader should not only have predetermined parameters for taking profits and accepting losses, but also confine trading to market conditions that are most favorable, such as over bought/over sold markets, high option premiums, etc. The trader should carefully monitor his positions.

## When To Use Options with Futures

Options may be *purchased* to protect a futures position instead of using stop loss orders; for example, a trader who is bullish on gold purchases the the futures contract at 320. At the same time, a December 320 gold put is purchased for \$500. In this case, risk is limited to \$500 (plus commissions and fees), and the futures position can be held no matter how severely the market goes against it.

“Covered writing” of futures positions is also one of the best, most conservative, and overlooked of all option selling strategies. This is discussed in greater detail in Chapter 8.



## **Option Strategies that Provide the Trader with a Significant Advantage**

- 1. Neutral Option Position—High–medium option volatilities/trading range market** (*sell out of-the-money put and out-of-the-money call of the same expiration month*). The *Neutral Option Position* is best used in markets that have extremely high premium (by selling far out-of-the-money options), and trading range markets at any volatility level that have little likelihood of significant movement.
- 2. Free Trade—Low option volatility trade/trending market** (*buy close-to-the-money call or put and, if the market moves in the direction indicated, later sell much farther out-of-the-money call or put at the same price*). The *Free Trade* is used in trending markets to purchase options of low to medium volatility that are close to the money (particularly on pullbacks or reactions against the trend). Farther out-of-the-money options which can have much higher volatility levels are sold on rallies to complete the *Free Trade*.
- 3. Ratio Option Spread—Premium disparity between option strike prices, high volatility in out-of-the-money options/mildly trending market** (*buying close-to-the-money option and selling two or more farther out-of-the-money options*). The *Ratio Spread* is used when disparity in option premiums exists. This generally occurs in extremely high volatility markets such as gold, silver, and soybeans. In this case, the close-to-the-money option is purchased and two or more farther out-of-the-money options (which can have up to twice as high option volatility levels) are sold.
- 4. Calendar Option Spread—Premium disparity between option months, high volatility in close-to-expiration options** (*sell close-to-expiration month, buy deferred month in the same option*). The *Calendar Option Spread* is used to take advantage of disparities in volatility between contract months of the same option. The trend is not significant for this position as long as we feel the option we sell will probably not be “in-the-money” at expiration.
- 5. In-the-Money Debit Spread—Premium disparity between strike prices/trending market** (*buy in-the-money or at-the-money option*

*and sell farther out-of-the-money option*). The *In-the-Money-Debit Spread* is initiated in volatile markets that are trending. Similar to the ratio spread, the at-the-money option which is more fairly valued is purchased and the farther out-of-the-money overvalued option is sold.

**6. Free Option Position—Higher option volatility in out-of-the-money options take advantage of strong technical support and resistance levels** (*buy near-money option, sell out-of-the-money put and call*). The *Free Option Position* allows you to purchase an option with the premium received from selling other options.

You may want to use other positions or invent complicated multi-legged positions, but we have found those described above to be effective ones that can be used practically by off-floor traders to provide a significant advantage.

In the following chapters, we describe the situations where we use these positions, how to manage these positions, and we look at examples of how they have worked in the past.

# CHAPTER IV

## USING NEUTRAL OPTION POSITIONS

The *Neutral Option Position* is a trading strategy that provides the trader with many benefits over a long or short futures or options position. While option purchases and futures trades are only successful if the market moves in the direction predicted (without the trader being “stopped out” first), a *Neutral Option Position* can be successful in a non-trending market or a choppy market (studies have shown that markets are in a non-trending or sideways pattern almost two-thirds of the time) or if the market moves slowly lower or higher.

In addition to allowing the trader to be successful without having to predict the exact direction of the market, the *Neutral Option Position* incorporates the advantages of:

1. Special Circumstances
2. Price Disparity
3. Option Time Decay
4. Mathematics
5. Probability
6. Money Management

This strategy involves selling an out-of-the-money put and an out-of-the-money call containing only time value, with the expectation of collecting the entire amount of time value premium as the underlying futures remains within a wide trading range.

We are, in effect, taking the other side of trades from participants on both sides of the market who are attempting to pick the direction of the underlying futures contract. Some feel that the market is going up, while others believe that the market will head lower. The traders who feel that the market is going up purchase calls, while those negative on the market purchase puts.

We, in effect, are staying evenly balanced in our positions; however, we have an advantage in doing so. With our *Neutral Option Position* we can profit on both sides of the market (if the market stays within our predicted or adjusted trading range).

For example, with treasury bonds trading near 113, we can take the view that the market is going to remain within the range between 110 and 120 and sell the 110 put and the 120 call.

These options are sold to other traders who were acting on their prediction

of market direction—that the market was going below 110 (puts) or above 120 (calls). We were making no predictions other than that it would remain in a wide trading range.

**Neutral Option Position**

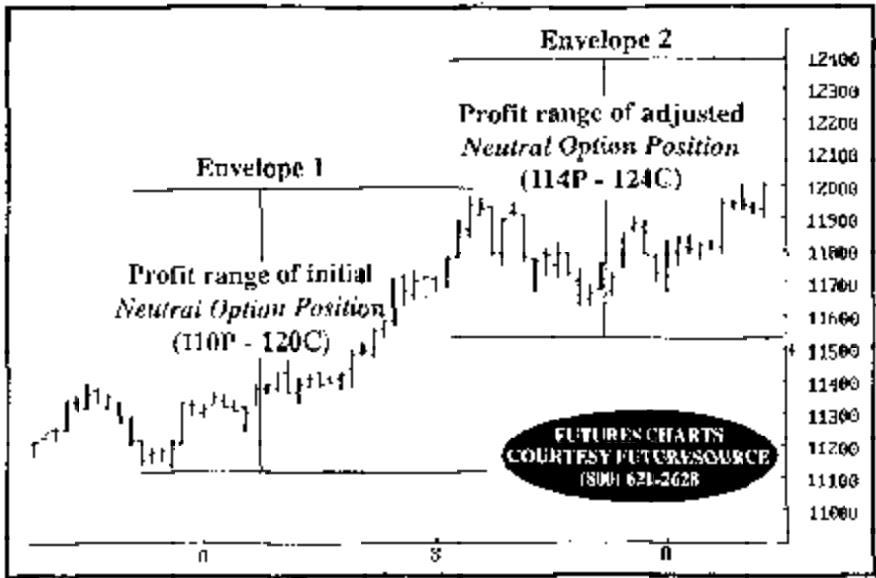
(110 Put—120 Call)



100      105      109 110      115      120 121      125      130

**Market Price**

Every day, both options sold lose some of their time value. Further, adjustment techniques are available, allowing us to “rebalance” this position when necessary. Remember, there is always unlimited risk of loss when an option is sold, so risk management is always important.



**Figure 8**

Adjustment of Neutral Option Position when futures approaches strike price or option sold.

The benefits of this position include:

1. Not having to predict market direction.
2. Being able to profit from both sides of the transaction—both from the buyers of puts and buyers of calls.
3. Being able to take advantage of the “overvalued” time value of out-of-the-money options because, while the amount of option premium changes from time to time, traders continue to buy options, thinking they can “beat the market.”
4. We can increase the number of positions based on favorable market conditions (high option premium), and we have forty different commodities from which to choose for the sale of options.
5. Finally, we have the ability to both adjust our positions and increase our position size. It has been mathematically proven that with sufficient capital, the probability of making a profit becomes greater.

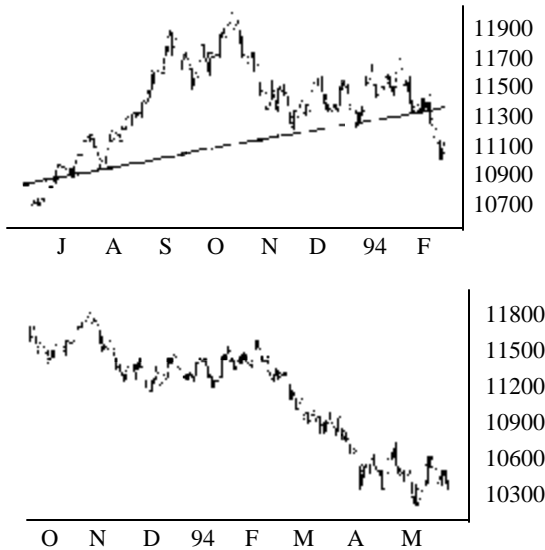
# CHAPTER V

## THE “FREE TRADE”

The *free trade* combines the best principles of money management and the advantage of “undervalued” and “overvalued” options; however, the most exciting aspect of the *free trade* is that it allows you to build a large position in a trending market without increasing your initial risk.

To initiate the *free trade*, first purchase the best-priced option. When (and if) the price and volatility (premium) rise, sell a farther out-of-the-money option at the same price. Of course, if the market does not move in your favor, you cannot complete the *free trade*. Another benefit of the *free trade* is that after it is completed, there is no margin capital necessary, or potential loss (other than brokerage fees and costs). For example, in February 1994, in bonds (see top of chart 8a), you could purchase the 112 and 110 puts. Thereafter, the market continued to decline (see bottom of chart 8a), and you could sell further out-of-the-money options, such as 106 and 108 puts *at the same price as we purchased the 110 and 112 puts*.

For example, if you purchased the 112 put and paid 32 (\$500) and thereafter sold the 106 put for the same amount, you would then have a position that had a net cost to you of \$0 (except for commissions and fees) and a profit potential of \$6,000.



**Figure 8a**

The *free trade* accomplishes several objectives:

First, it keeps your account intact if the market turns around. Just as quickly as markets rise, they can also fall. The *free trade* position provides protection from loss in this situation.

Second, if the market moves in your favor, you can continue to add to your position on the next pullback. If the trend remains intact and the market pulls back, as it eventually does, you are then in a position to purchase another option to begin building a larger position. You can look to turn the second position into a *free trade* using the same method without increasing your initial risk. By doing this you can take advantage of the normal swings of the market to purchase options when they are the cheapest and sell them when they are the most expensive, on rallies. Further, you will be purchasing “closer-to-the-money options” which are normally the most fairly valued options, and selling “out-of-the-money options” which are usually the most overpriced options.

Also, the collateral benefits of the *free trade*—being able to look at other potential opportunities because this position is secure from loss and requires less monitoring, and the emotional security of having your equity protected—should not be overlooked.

Another benefit of the *free trade* is that it gives you time to unemotionally examine your position without the panic other traders experience as their profitable positions begin to nose-dive. Because you are protected, you can wait for emotions to subside and the market to give you a better indication of its next move. You can then decide to hold your position and look for full profit potential (knowing you are completely protected from loss), or you can cash out and take your existing profits.

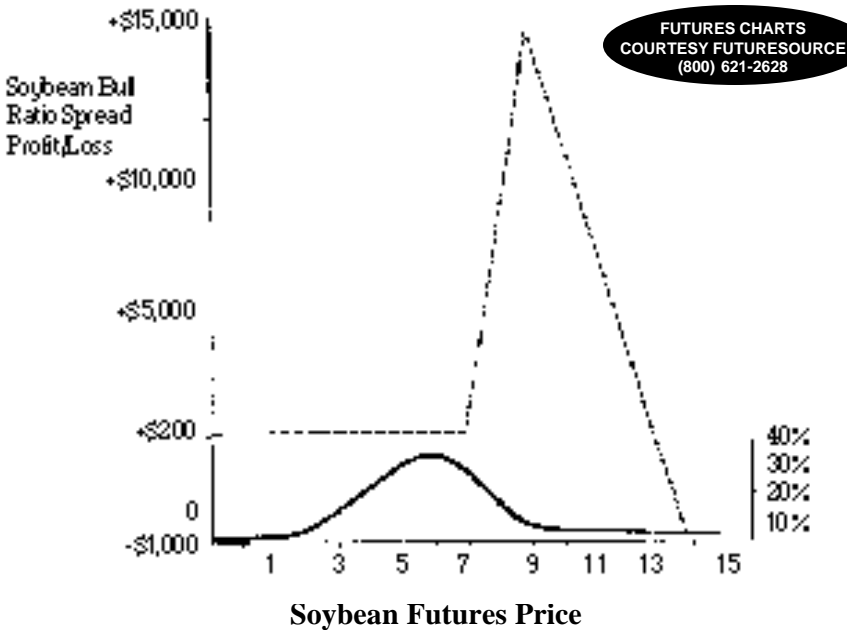
The final benefit of *free trades* is that, when they are completed, because your capital is protected, you can turn your attention elsewhere. You may find opportunities in another commodity, or even in the market in which you have completed *free trades* to add more positions. This can be accomplished without increasing your original risk because your first positions are now risk-free! It is difficult to closely monitor more than two or three net positions, especially in volatile markets. The *free trade* allows you to concentrate more fully on other situations.

The *free trade* also allows you to meet your objective of getting a “trading edge” over the markets by using options. You are taking advantage of the increased volatility of the out-of-the-money options, which can be quite exaggerated on market rallies.

# CHAPTER VI

## THE “RATIO SPREAD”

A *ratio spread* is initiated by purchasing a close-to-the-money option and selling two or more farther out-of-the-money options. For example, with November soybeans trading at \$6, we may decide to purchase a November \$7 call and sell two \$10 calls. Let’s assume that the \$7 call is trading at a premium of 20 cents and the \$10 call at a premium of 12 cents. We would then pay 20 cents for the \$7 call ( $0.20 \times 50 = \$1000$ ); and receive two times 12 cents or 24 cents for the \$10 calls we sell ( $0.24 \times 50 = \$1,200$ ). In this case, because we receive \$200 more than we paid out, we are doing the spread at a credit of 4 cents, or \$200.



**Figure 9**

- The probability of the futures price achieving a given price level.
- The profit or loss potential of a soybean ratio option spread comprised of 1 long \$7.00 call and 2 short \$10.00 calls receiving a credit of \$200.

Receiving this credit is very important when doing the *ratio spread*, and beneficial for the following reasons:

1. First, if the market goes up as we expect in this example, we will receive a profit of \$50 for every penny soybeans move over \$7.00 at expiration (up to \$10) for a maximum profit potential of \$15,000.
2. Unlike a normal option purchase, there is no cost for your initial option purchase because it was paid for by the sale of the two \$10 calls.
3. In making this trade, we are also taking advantage of the disparity in option premiums between strike prices. We find in most markets options that are closer-to-the-money have lower volatility (premium costs) than farther out-of-the-money options.

These out-of-the-money options have no intrinsic value because they have only what is known as “*time value premium*.” This is a specific amount people will pay for an option because it has a chance of becoming valuable some time in the future.

There is more demand by smaller traders to purchase “cheap” options. This can greatly increase the time value of these out-of-the-money options to a point where they, at times, are much more expensive than one might expect. Because the options are so far out-of-the-money, it is very unlikely that the options will go into-the-money, yet the premiums do not reflect this lack of probability. Thus, they are, relative to the probability of profit, much more expensive than the close-to-the-money options. By using the *ratio spread* we can take advantage of this disparity in premium because it allows us to purchase the more reasonably priced close-to-the-money option and sell the relatively more expensive options that are farther out-of-the-money.

4. The farther out-of-the-money options we sell will also lose their time value faster as they approach expiration. Time value decreases for both an option at-the-money and out-of-the-money as it approaches expiration. This decline in time value is much more dramatic for the out-of-the-money option.
5. Finally, one of the biggest benefits of the *ratio spread*, is the fact that, if the market does not move as expected, as long as we obtain a credit

when the spread is initiated, we will not have a loss. In our example above, let's assume that soybeans drop to \$4. In that case, the options we purchased and sold will all be worthless at expiration. At that time, the net difference to our account from taking this position will be the \$200 premium that we collected when we initiated this position; therefore, our account will increase by \$200 (less commissions and exchange fees) even though the market moved against us!

There is only one case where the *ratio spread* can run into trouble: when the price of the futures exceeds the strike price of the options sold. For example, in our previous discussion of the soybean *ratio spread*, if at expiration in November soybeans expire at \$10, we make 300 points times \$50, or \$15,000; however, if the price of soybeans exceeds \$10, we begin to lose \$50 of our profit for each penny that soybeans exceeds \$10. At the price of \$13, we would break even on this position, and over \$13 we would begin to have a net loss of \$50 for each penny move that exceeds the price of \$13.

To help control the potential for large losses under these conditions, we follow a rule that requires us to close out our *ratio spread* if the futures price exceeds the strike price of our short option; therefore, if soybeans rise above \$10 at any time, we would recommend closing out the position.

We normally find that if the market rises slowly toward the strike price of the options we sold, we still have a profit on the position when we close it out. Usually, only in the case of a quick rise is it necessary to close the position out as a loss.

The best time to initiate a *ratio spread* is when the market has made a quick straight-up move. This is because this type of action normally increases the demand for out-of-the-money "cheap" options for the reasons mentioned above. This also seems to be when there is the greatest disparity in premiums between the close-to-the-money and the out-of-the-money options, providing the best opportunity for *ratio spreads*. (The one exception currently is the S&P 500, when put option premium expands on market declines.)

We feel that the benefits of the *ratio spread* far outweigh the single problem area, that of the market rising too quickly, too soon. Also, these problems are handled by the rules we described above. The ability to initiate a spread that can be profitable over a wide range of prices and market conditions (in the case of our soybean example this position is profitable from \$0-\$13!) allows you to have both financial and emotional security in the markets.

# CHAPTER VII

## THE MOST OVERLOOKED OPTION BUYING STRATEGIES (DON'T TRADE ANOTHER FUTURES CONTRACT UNTIL YOU READ THIS!)

### 1. The In-The-Money Debit Spread

The *In-the-Money Debit Spread* consists of purchasing an in-the-money option and selling an out-of-the money option of the same expiration month. It is a position that requires us to pay a premium—the cost difference between the option we purchase and the option we sell—in exchange for potentially receiving the difference between the two strike prices.

For example, currently, the September S&P is trading at 1260. A trader who is bearish on the S&P could purchase the September put 1260 for 4000 points (\$10,000) and sell the 1240 put for 2800 points (\$7,000) for a net cost or debit of \$3000. The potential profit on this position is the difference between these two strike prices 1260 minus 1240, 2000 points (\$5,000) less the initial cost of the option.

As uninspired as this position may seem, it actually has substantial benefits over a short futures position including:

1. Lower cost
2. Limitation of risk
3. Ability to take advantage of premium disparity.

The cost or debit of the September S&P in-the-money debit spread in this example is \$3,000; however, the margin for initiating a short futures position is substantially higher, at more than \$10,000. This allows a trader to commit less of his capital to any one trade.

The second, and probably more important advantage, is limitation of risk. While a short futures position burdens the trader with unlimited risk, the risk of the *In-the-Money Debit Spread* is absolutely limited to the amount paid for the spread plus commissions and transaction fees. This can be more of a substantial benefit than most traders realize. Even though many futures traders feel that they can limit their risks by the use of “stops,” what is not taken into account is that many times, they can be “stopped out” because of the risk of taking a large loss in a market that has begun to make a big move against this position only to then see the market reverse and

move in their favor. With the *In-the-Money Debit Spread* the trader knows that not only is his risk limited, but he is actually hedging some of his losses if the market goes against him with the gains on the option he sold.

These factors can be very important, especially to a trader who finds that, although his ability to predict market direction is good, he is emotionally and financially unable to handle the normal market “noise” of corrections, even when the market is trending in his favor. This psychological advantage of knowing that your losses are absolutely limited can make the difference between a winning or losing trade.

The third benefit of this position is being able to take advantage of disparity in option premiums. In the spread described above, the volatility of the 985 was less than that of the 965 put. This means that we were selling an option that was trading at a volatility higher than the option we were purchasing, providing another significant benefit.

The advantages of this position seem so overwhelming that one wonders why anyone would trade the outright futures contract. Still, there are some disadvantages that should be considered by all traders before they initiate this position. First, we are initiating a spread of two positions instead of one, so there is an extra commission for each trade. Second, orders should always be placed at a specific limit price to avoid slippage that can occur with less liquid options. Third, profit on a “Debit Spread” is limited, as opposed to the unlimited profit potential of futures positions; however, we feel that these disadvantages are a small price to pay for the benefits that accrue with this type of position, and could make the difference between a profitable or unprofitable trade.

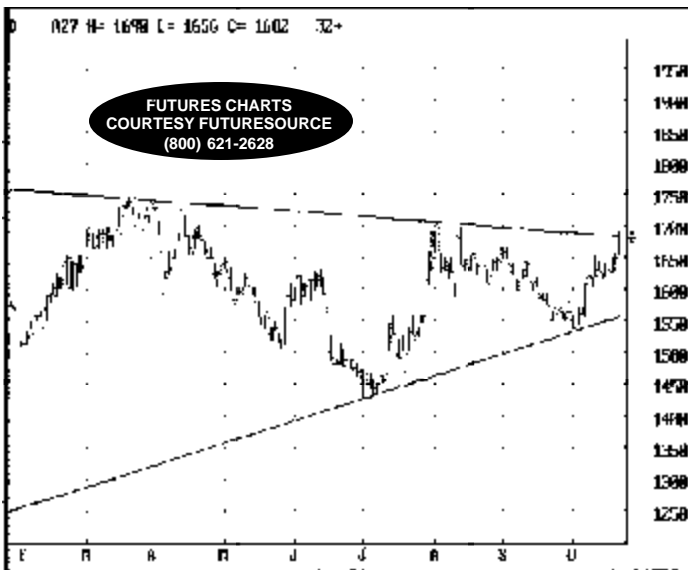
## **2. Option Straddle Purchase**

This “non-directional” option strategy is also greatly overlooked. The *Option Purchase Straddle* is the purchase of a put and a call of the same month and underlying market. As in all option purchasing strategies, we recommend that at-the-money or close-to-the-money options be used. Similar to the *In-the-Money Debit Spread*, risk is absolutely limited to the premium paid for the options plus commissions and transaction fees; however, not only is the potential profit unlimited, but we can also profit by a move in either direction. This is why we call it a non-directional option strategy—we don’t care which way the market moves, as long as it moves.

Since this strategy will be unsuccessful only if the underlying futures contract does not make a significant move in either direction, we only recommend initiating this position during the following times:

1. Before important reports, meetings, and releases of information that could substantially affect the futures prices in either direction;
2. When option volatility (premium cost) is low; or
3. When the futures' technical pattern suggests a large breakout is imminent.

This strategy was recommended in July, 1997 just prior to the G-7 meeting. We expected these meetings to have a severe impact on the currency market, either by action or disappointment from non-action. Further, the option volatility in the D-Mark was near historical low levels in spite of large daily moves occurring in the underlying futures market. This strategy worked well as the D-Mark jumped almost 200 points the day after the meetings concluded, allowing traders who initiated this position to turn their call purchases into *Free Trades*. In fact, since the market began to turn around right after this jump, the puts began to gain significantly in value, and on a continued move down, traders were in a position to turn the puts into *Free Trades*. This is the ultimate of all positions, to have a *Free Trade* in both directions, and be able to profit without having to pick market direction!



**Figure 10**

This is a triangle pattern in December Oats.

This position is also recommended when the market has moved itself into an explosive chart pattern. Our favorite type of chart pattern for this position is the “triangle” pattern, where the futures have made lower highs and higher lows over an extended period of time. The market then “coils” itself into a tighter and tighter trading range from which a large breakout always occurs. The problem is in guessing which way this move will take place. The option straddle removes this question, allowing the investor to profit by a large move in either direction. Further, this is normally an opportune time to purchase options, as volatility often falls to very low levels as the market “quiets down” and moves into this trading range. Then, after the breakout, not only does the option gain from the price movement, but volatility can increase substantially thereby also further increasing the value of the options purchased.

These two positions are not only the most overlooked option purchasing opportunities, but they are strategies that can provide the investor with significant advantages in the right circumstances—a substantial “trading edge” over the markets.

# CHAPTER VIII

## THE MOST OVERLOOKED OPTION SELLING STRATEGIES

We have discussed the benefits of the *Neutral Option Position* (which is our favorite option strategy for choppy, flat, or non-trending markets) and the *Ratio Option Spread*, one of our favorite option strategies when out-of-the-money option premiums are extremely overpriced; however, two positions that have great benefits in many situations, *Covered Call Writing* and *Calendar Spreads*, are also often overlooked. These overlooked strategies can provide a trader with overwhelming advantages when used in the right circumstances.

### 1. Covered Call Writing—Additional Income; No Risk or Margin

This strategy is one of the best methods of increasing your returns without any additional risk, margin, or capital necessary. This strategy is initiated by selling an out-of-the-money option against a futures position. For example, a trader purchases a silver futures contract at \$4.50. At the same time, he sells the September \$5.00 call for \$300. There is no additional cost or margin for this position because the calls you sell are “covered” by the long futures position. Thereafter, the market can react in four ways:

- a. It can move lower;
- b. It can remain stable;
- c. It can move higher, but remain below \$5.00;
- d. It can move above \$5.00 (an increase of over 11%).

In the first three instances, the net effect of initiating the covered call would be to add a risk free \$300 to our account to lower our losses in situation a), or increase our profits in situations b) and c). Even in situation d), which is the only scenario in which writing a call would be detrimental to us, the only loss here is the limitation of potential profits (an opportunity loss) above the \$5.00 price. Our initial profits of \$2,500 in the futures plus the \$300 we received for selling the option (less commissions and fees) would be ours to keep. We just would receive no *additional* profits if silver really took off and continued to move substantially above \$5.00.

There is also a variation of *covered writing* that can provide the investor with a more aggressive position with additional profits in a trending market situation. In this case, after purchasing the silver at \$4.50, you also purchase a \$4.50 call and sell two \$5.00 calls. Our existing position now is long one futures contract of silver at \$4.50, long one silver \$4.50 call; and short two \$5.00 calls. In this situation, our maximum profit level is \$5,600 if silver is at \$5.00 by September, instead of the \$2,800 that we could make if we purchased only the futures without the aggressive option strategy. In fact, silver would have to go all the way from \$4.50 to \$5.50, a move of more than 22%, to make as much money with the futures alone as we would make with the aggressive option strategy. What's more, only above \$5.50 does this strategy become detrimental to us, as profits are limited above this level.

In summary, this option strategy works as follows:

1. If silver moves under \$4.50, there is no detriment from this strategy (except for commissions and fees);
2. If silver moves above \$4.50, but remains at or below \$5.00, our profits will be double what we would make with a futures position alone;
3. There are additional profits for traders while silver is between \$4.50 and \$5.00, above those that would be made on the futures alone; and
4. Only above \$5.50 are profits limited (however, by this time we would have made \$2,800 for each option strategy and futures purchase).

## **2. Calendar Option Spread—Take Advantage of Disparities in Futures and Options Price**

The *Calendar Option Spread* is initiated by purchasing a deferred month option and selling a closer-to-expiration option. The advantage of this position is the steep time decay that close-to-the-money options undergo. This in itself is a substantial advantage to an investor; however, there are two additional situations when this trade turns the odds overwhelmingly in favor of the option strategist. The first is when option volatility for the closer-to-expiration months is trading at substantially higher levels than the deferred option. This happens in volatile markets, as there is an increased demand for these “more active” options for speculation and hedging. Often, we find

that the deferred month options are “forgotten” and trading at volatility levels 50% or more below the active front month option. Examples of this occurred in 1996–1997 in the cocoa and coffee markets when they began to break out; in the grains during their rally attempt this spring, where front month premiums were higher; and in live cattle in May and June after it rallied to new highs.

One of the best instances illustrating the benefits of this strategy occurred in the live hog option market. The spread between February and October live hogs had moved from February being 100 over October in the beginning of June, to February being more than 150 under in July. Our research showed that this does not happen often and usually such a disparity in the futures contract is quickly corrected. Additionally, because of the volatility in the live hog market, the February calls were 20% less expensive than the October calls; therefore, we recommended a *Calendar Spread* to purchase in-the-money February call options while selling out-of-the-money October options that were close to expiration and entering a period of their most severe time decay. This trade combined the best of both worlds for the *Calendar Spread* allowing:

1. the trader to take advantage of the undervaluation of the deferred month option contract;
2. the overpricing of the close-to-expiration option; and
3. the rapid time decay of the close-to-expiration options.

## CONCLUSION

When I began trading options in 1982, I decided that I would read and study all the books I could find on option trading, so that I could choose which methods worked best. What I didn't know was that, if my education had been limited to this information, my abilities as a trader would have been strictly limited. While there is no substitute for this knowledge, other areas, such as having a trading plan and money management principles, are equally necessary to succeed.

When I began researching option trading, I was very excited because of the mathematical possibilities of combining options, and what I discovered as certain characteristics that seem to provide significant benefits, such as premium disparities between option strike prices and time decay of overvalued options. After reading all existing option material, I felt almost helpless because there was no "road map" to guide my option trading from that point. I hope that this booklet can be the beginning point of your "road map to success."

*DAVID L. CAPLAN*  
*MALIBU, CALIFORNIA*

# Appendix 1

## COMMON OPTION STRATEGIES FOR ALL MARKETS

<b>Option Spread Strategy</b>	<b>Position</b>	<b>Characteristics</b>	<b>Best Time to Use</b>
<b>Neutral Strategies</b>			
Neutral Option Position	Sell out-of-the-money put and call	Maximum use of time value decay	Trading range market with volatility peaking
Guts	Sell in-the-money put and call	Receive large premium	Options have time value premium and market in trading range
Arbitrage	Purchase and sell similar options simultaneously	Profit certain if done at credit	Any time when credit is received
Conversion	Buy futures, buy at-the-money put and sell out-of-the-money call	Profit certain if done at credit	Any time when credit is received
Box	Sell calls and puts same strike price	Profit certain if done at credit	Any time when credit is received
Butterfly	Buy at-the-money call (put) sell 2 out-of-the-money calls (puts) and buy out-of-the-money call (put)	Profit certain if done at credit	Any time when credit is received
Calendar	Sell near month, buy far month, same strike price	Near month time value will decay faster	Small debit, trading range market

<b>Option Spread Strategy</b>	<b>Position</b>	<b>Characteristics</b>	<b>Best Time to Use</b>
<b>Mixed Strategies</b>			
Ratio Call	Buy call, sell calls of higher strike price	Neutral, slightly bullish	Large credit and difference between strike prices of option bought and sold
Ratio Put	Buy put, sell puts of lower strike price	Neutral, slightly bearish	Large credit and difference between strike prices of option bought and sold
Straddle Purchase	Buy put and call	Options will lose time value premium quickly	Options undervalued and market likely to make a big move
Covered Call	Buy futures, sell call	Collect premium on calls sold	Neutral—slightly bullish
Covered Put	Sell futures, sell put	Collect premium on puts sold	Neutral—slightly bearish
<b>Bullish Strategies</b>			
Buy Call	Most bullish option position	Loss limited	Undervalued option with volatility increasing
Sell Put	Neutral–bullish option position	Profit limited	Option overvalued, market flat to bullish

<b>Option Spread Strategy</b>	<b>Position</b>	<b>Characteristics</b>	<b>Best Time to Use</b>
<b>Bullish Strategies, <i>Continued</i></b>			
Vertical Bull—Call	Buy call, sell call of higher strike price	Loss limited	Small debit, bullish market
Vertical Bull—Put	Buy put, sell put of higher strike price	Loss limited	Large credit, bullish market
<b>Bearish Strategies</b>			
Buy Put	Most bearish option position	Loss limited	Undervalued option with increasing volatility
Sell Call	Neutral—bearish option position	Profit limited	Option overvalued, market flat, bearish
Vertical Bear—Puts	Buy-at-the-money put, sell in-the-money put	Loss limited	Small debit, bearish market
Vertical Bear—Calls	Sell call, buy calls at higher strike price	Loss limited	Large credit, bearish market



## **5. Ratio Calendar Spread (combine ratio and calendar)**

Requirements:

1. Large spread between options bought and sold
2. Zero premium or small debit
3. Futures price not likely to reach strike price of options sold

Example:

Buy 1 Oct 12 cent call and sell 2 July 14 cent calls

## **6. Ratio, Calendar and Strangle Combination**

Example:

Buy (1) March 14 cent sugar call	Sell (2) March 16 cent sugar call
Sell Dec 16 cent sugar call	Sell March 12 cent sugar put

## **7. Butterfly (ratio spread plus purchase of an out-of-the-money option)**

Example:

Buy call or put  
Sell 2 calls or puts (Strangle or Straddle)  
Buy call or put

Example:

Buy Call  
Sell call and put (Straddle or Strangle)  
Buy put

## **8. Conversion (buy futures, sell out-of-the-money call(s), and buy at-the-money put)**

Requirements:

1. Look for an at- or close-to-the-money put with a premium equal to the debit on an out-of-the-money call (possible because calls are usually valued higher than puts).
2. Use when market has declined and calls are overvalued

Example:

Buy Sep. futures  
Buy Sep 925 put for 3000 points  
Sell Sep 930 call for 3000 points  
(Risk = debit if put is at-the-money)

## Appendix 3

### OPTION STRATEGY SUMMARY

#### Strategy/Characteristics

**PUR PURCHASE**—High cost/risk is loss of option premium; reward limited to prevention of loss of stock or bond portfolio value; requires good skill in timing and premium evaluation.

**CALL SALE**—Reward limited to premium received; limits profit bear market, but can potential of underlying portfolio, requires good skill in timing and premium evaluation.

**SELL FUTURES**—Unlimited risk/reward requires maximum skill in timing.

**STRANGLE SALE**—Reward equal to amount of premiums collected. High mathematical probability of profit; does not require prediction of market direction; requires good market monitoring and premium evaluation skills.

**BUY PUT/SELL CALL**—Eliminates for downside risk without premium cost; does not require prediction of market direction or monitoring.

**RATIO WRITE**—Reward equal to premiums collected; high probability of profit; requires monitoring of extra short options.

#### Requirement for Profit

Loss of premium results unless significant downside move occurs.

Will add income to portfolio in flat or limit profit of underlying positions in a bull market.

Can provide hedge against loss in a declining market, but can limit profit of underlying positions in a bull market.

S&P 500 remains in trading range of puts and calls sold.

Excellent strategy portfolio after significant market rally to lock in profits.

Best used after significant rally to add return to portfolio.

## **Appendix 4**

# **GLOSSARY OF OPTION TERMS**

ARBITRAGEUR	Someone who simultaneously buys and sells the same or equivalent options in different markets.
ASSIGNMENT	The notice to an option writer that the option has been exercised by the option holder.
AT-THE-MONEY	An option with a strike price equal to the market value of the underlying futures.
BETA	A measure of how an option's price movement correlates to the movement of the option market as a whole.
CALL OPTION	An option which gives the option buyer the right to buy the underlying futures contract at a specified price within a certain time, and the seller of the option the obligation to sell the futures at the strike price if exercised by the buyer before the expiration date of the option.
COVERED OPTION	An option written against an opposite position in the futures market.
CREDIT	Money received from the sale of options.
DEBIT	Money paid for the purchase of options.
DELTA	The amount by which an option's price will change for a unit change in the underlying futures price. An option's delta may change from moment to moment as the option premium changes.
EXERCISE	The action taken by the holder of a call option if he wishes to purchase the underlying commodity, or by the holder of a put option if he wishes to sell the underlying commodity.

EXPIRATION	The date on which the option contract can no longer be exercised, and therefore becomes worthless.
HEDGE	Buying and/or selling offsetting positions to provide protection against an adverse change in price.
IN-THE-MONEY	Describes a call with a strike price lower than the futures price, or a put with a strike price higher than the futures price.
INTRINSIC VALUE	The amount that an option is in-the-money; i.e., futures price minus strike price for calls, or strike price minus futures price for puts.
MARGIN	The sum of money which must be deposited and maintained by an option seller or futures seller.
NAKED WRITING	Writing a futures option for which the writer has no underlying futures position.
OUT-OF-THE-MONEY	An option with no intrinsic value—a call option with a strike price higher than the futures price, or a put option with a strike price lower than the futures price.
PREMIUM	The price of an option contract.
PUT OPTION	An option which gives the buyer the right to sell the underlying futures contract, and the seller the obligation to deliver the futures contract at the strike price on or before the expiration date, if the buyer exercises.
SPREAD	A position consisting of two or more options.

THEORETICAL VALUE	The price of an option as computed by a mathematical model such as the Black-Scholes Model.
TIME VALUE	The amount of an option's premium exceeding the option's intrinsic value. The premium for out-of-the-money options is all time value.
VOLATILITY	A measure of the change in the price of a futures contract over a period of time.

2005-CINV-00588