Introduction to Options

I like the word "**option**" because that's exactly what this financial instrument gives to the buyer…options. An "**option**" in the stock market is essentially a **contract** between the buyer and the seller of the option. The financial instruments that control a certain block of stock are interchangeably referred to as "**options**", "**contracts**", or as "**calls**" and "**puts**".

Just as in any contract, there is an exchange of money for a promised product or service in a certain way at some time in the future. **Option contracts** are made up of several components: the **underlying** stock whose price it refers to, terms for the **sale** or **purchase** of the **underlying**, a price for the option itself called the **premium**, and an **expiration date**.

In the stock option contract, the **buyer** purchases the ***right*** to buy or sell a given stock at an agreed-upon price called the **strike price.** The **seller** of the option contract takes on the ***obligation*** to perform; that is, he or she promises to buy or sell a given stock at the agreed price if the buyer of the option contract so demands.

The buyer of the contract is **given control** of the stock (for a specified period of time) in exchange for money. On the other hand, the seller **gives up control** of the stock in order to receive this money. In RadioActive Trading, a unique combination of options for both control and income is used.

Calls and Puts

The following paragraphs contain a lot of information in a hurry, but don't be dismayed. It'll all make sense once you get the whole picture.

In a **call option**, the contract demands that the seller will make a certain stock available for sale at a predetermined price. Again, this price is called the **strike price.** The **buyer has the right, but not the obligation**, to buy at the strike price at any time before the contract's expiration. The **seller has an obligation to perform** if the buyer wishes to **exercise the option** at any time before **expiration. Expiration** happens at midnight on the third Friday of the option's designated month.

The buyer of a **call option** believes that the stock's price will go up, therefore, he or she is willing to pay for the right to buy it later at a price agreed on today. The seller is happy to accept the premium today because he believes that the stock's price may stay the same or go down before the term of the contract expires.

In a **put option** contract, the seller **must buy** a stock at the Strike Price from the buyer of the option, if the buyer **exercises** his **option**. The *seller* of a **put option** has entered into a contractual agreement that *obligates him to buy* at the agreed **strike price**. The *buyer* of the put has the *right, but not the obligation*, to sell the stock at this price.

The **buyer** of a **put** is typically betting that the stock's price will fall and that he may exercise his right to sell at a locked-in, high price. The **seller** of the **put**, on the other hand, believes that the **underlying** stock's price will rise or stay the same. He accepts the **premium** thinking that he might never have to buy the stock before the **put** expires.

Working with Option Chains & Option Terminology

Look at the option chain shown below. The October 2008 Calls are **call option contracts** for Microsoft Corp. stock. The option **symbol** MSQJE refers to the **call option contract** giving the buyer the privilege to buy 100 shares of Microsoft stock. The buyer can exercise his right to buy the shares at the Strike Price of $25.00 any time before expiration in October – in this case, October 18th 2008. Most option chains show the calls and puts at the same strike price lined up next to each other on the same row.

More Info	Strike	Call Sym	Opt Bid	Opt Ask	Curr. Opt. Vol.	Open Int.	Implied Volat.	% Dnsd. Prot.	% If Asgnd.	% In Money	Put Sym	Opt Bid	Opt Ask	Curr. Opt. Vol.	Open Int.	Implied Volat.	% Dnsd. Prot.	% Break Even	% In Money
Microsoft Corp. (MSFT) $ 24.65								OCTOBER Expiring 10/18/2008 4 days left										Hold
	20.00	MQFJD	4.65	4.75	120	4141	1.20	18.9%	0.0%	18.9%	MQFVD	0.03	0.05	635	24983	1.13	0.1%	19.0%	-18.9%
	21.00	MQFJU	3.65	3.75	103	1555	0.96	14.8%	0.0%	14.8%	MQFVU	0.05	0.06	395	2897	0.96	0.2%	15.0%	-14.8%
	22.00	MSQJN	2.74	2.79	72	4598	0.90	11.1%	0.4%	10.8%	MSQVN	0.10	0.12	239	12158	0.87	0.4%	11.2%	-10.8%
	23.00	MSQJQ	1.86	1.90	352	7273	0.81	7.5%	0.9%	6.7%	MSQVQ	0.21	0.24	1470	39524	0.79	0.9%	7.6%	-6.7%
	24.00	MSQJD	1.11	1.14	2324	28448	0.75	4.5%	2.0%	2.6%	MSQVD	0.45	0.47	11111	58544	0.73	1.8%	4.5%	-2.6%
	25.00	MSQJE	0.55	0.57	5774	46316	0.70	2.2%	3.7%	-1.4%	MSQVE	0.88	0.91	14305	63066	0.68	3.6%	2.2%	1.4%
	26.00	MSQJR	0.23	0.24	2542	40978	0.68	0.9%	6.5%	-5.5%	MSQVR	1.56	1.58	439	56662	0.65	6.3%	0.9%	5.5%
	27.00	MSQJS	0.07	0.09	1736	47901	0.67	0.3%	9.8%	-9.5%	MSQVS	2.40	2.45	579	20933	0.64	9.7%	0.2%	9.5%
	28.00	MSQJT	0.01	0.04	613	58149	0.67	0.0%	13.6%	-13.6%	MSQVT	3.30	3.40	26	18081	0.00	13.4%	-0.2%	13.6%
	29.00	MSQJB	0.01	0.03	1693	52863	0.79	0.0%	17.7%	-17.6%	MSQVB	4.30	4.40	0	12847	0.00	17.4%	-0.2%	17.6%
Microsoft Corp. (MSFT) $ 24.65								NOVEMBER Expiring 11/22/2008 39 days left										Hold	
	20.00	MQFKD	5.35	5.45	83	1704	0.84	21.7%	3.6%	18.9%	MQFWD	0.76	0.79	755	20148	0.83	3.1%	22.6%	-18.9%
	21.00	MQFKU	4.50	4.60	45	2715	0.78	18.3%	4.2%	14.8%	MQFWU	0.89	0.94	1015	3390	0.77	3.6%	19.1%	-14.8%
	22.00	MSQKN	3.70	3.80	104	8939	0.73	15.0%	5.0%	10.8%	MSQWN	1.10	1.13	294	18244	0.72	4.5%	15.9%	-10.8%
	23.00	MSQKQ	2.98	3.05	542	11756	0.68	12.1%	6.1%	6.7%	MSQWQ	1.36	1.39	1651	13887	0.67	5.5%	12.9%	-6.7%
	24.00	MSQKD	2.30	2.34	1058	27907	0.63	9.3%	7.4%	2.6%	MSQWD	1.67	1.72	1796	25145	0.63	6.8%	10.1%	-2.6%
	25.00	MSQKE	1.71	1.75	2404	27746	0.60	6.9%	9.0%	-1.4%	MSQWE	2.08	2.13	2415	18615	0.59	8.4%	7.7%	1.4%
	26.00	MSQKR	1.21	1.25	597	12004	0.56	4.9%	10.9%	-5.5%	MSQWR	2.58	2.64	182	3960	0.55	10.5%	5.6%	5.5%
	27.00	MSQKS	0.82	0.85	1774	42873	0.53	3.3%	13.3%	-9.5%	MSQWS	3.15	3.25	137	5518	0.52	12.8%	3.7%	9.5%
	28.00	MSQKT	0.52	0.55	677	15226	0.51	2.1%	16.0%	-13.6%	MSQWT	3.85	3.95	60	2211	0.49	15.6%	2.4%	13.6%
	29.00	MSQKB	0.31	0.34	71	8806	0.48	1.3%	19.1%	-17.6%	MSQWB	4.55	4.75	10	940	0.45	18.5%	1.0%	17.6%

Source: Power Financial Group, Inc. – PowerOptions - poweropt.com

Another way to refer to this contract without using its symbol would be to name it the **MSFT October $25 call**. When you phone your broker or enter your trade online to buy or sell the option contract, you use its symbol.

In our example, the MSFT OCT $25 call is trading at $0.55 X $0.57. The two prices are the "**bid**" and the "**ask**". That is, a seller of this contract entering a market order would get the **bid price**, or $0.55 if he sold it right now. The buyer of this contract would have to pay the **ask price** of $0.57. The difference between the bid and the ask of any stock or option is called the **spread**, and this is where the market maker collects his money. In this example, the market maker keeps the spread of $0.02 per contract.

In some option contracts, particularly ones whose expiration is a long way out, the **spread** may be as high as a dollar or more. When trading RadioActively, we look for options with a

tighter **spread, decent option volume, and decent open interest** because that indicates more **liquidity**. The more **liquid** a stock or option is, the easier it is to move in and out of it at fair prices.

The liquidity of options is not only gauged by the spread, but also gauged by the, **volume,** and **open interest** of the contract. **Volume** is the amount of option contracts at this strike price and expiration month that have changed hands so far *today*, while **open interest** is the number of option contracts that have been opened and not closed *to date* over the contracts history, as of the previous trading session. Essentially, an accurate way to look at **open interest** is that it's the total number of bets that have been placed. They are bets (placed largely by speculators and hedgers) regarding the stock's closing price at the contract's expiration.

Exercise:
Let's get comfortable with the terms and syntax of option contracts.

Can you find where the November $27 calls are?

What is the symbol?

What is the lowest price you could buy the November $27 put for?

How many November $25 put contracts are open right now?

Options are Tools for Financial Leverage

Let's say I believe that MSFT will go up from $24.65 to $27.50 a share. I could place an order to buy it right now at $24.65. What's the amount at risk? It's the full amount of $24.65 per share, or $2,465 on 100 shares, because MSFT could conceivably go completely broke! What I might do instead is place an order for MSQKD, the November $24 call at $2.34. Remember that this is the price *per share* that I control. An option contract always controls stock in lots of 100 shares; so one contract at $2.34 means that I pay $234.00 plus the commission. To avoid confusion, multiply option prices by 100 in your head.

Now what's the amount I have at risk? It's only $2.34 ($234). If MSFT goes up to $27.50 a share, I'm **I**n **T**he **M**oney (**ITM** – stock price higher than strike price for a call option). I have a contract in place that gives me the **right** to buy 100 shares of MSFT at only $24. If I **exercise** my option, I get the 100 shares of MSFT for exactly $2,400. I can then keep the 100 shares, or immediately sell them on the open market for $2,750! In reality, the price of my option would also have gone up, so if my prediction was correct, I may just sell the option contracts rather than actually exercise to own the shares, but owning the contract gives me the right to make that decision, but no obligation to do so.

Leverage is what enables a smaller person in the martial arts to overcome the strength of a larger person. Leverage can also be used to increase gains **or losses** in the market. Leverage is just a tool, and used improperly, can harm the individual investor as well. This is why it is of paramount importance to fully understand the implications of trading options,

even RadioActive ones. I need to recommend a little booklet to you called *Characteristics and Risks of Standardized Options.* Your broker can't even let you place option trades until you've read this booklet and sign affidavits that you understand the risks of Option trading.

Let's look again at our MSFT example and compare the leverage of using an option contract versus buying the stock outright. On the one hand, if we bought MSFT at $24.65 and it goes up to $27.50, we've made a profit of $2.85 ($285 per hundred shares) or a return on our investment of almost 12%. On the other hand, if we buy the call option at $2.34 ($234 to control 100 shares of MSFT) and the price action of MSFT is the same, we're looking at a very different risk and return.

Our option allows us to pick up the 100 shares of MSFT at $24 ($2,400) and immediately sell them at $27.50 ($2,750) for a profit of $350! Of course, we must consider the price of the option, which was $234, and subtract it from our gross profit. Our net profit, then, is $116 ($350 - $234).

At first glance, it seems as though the option play yielded a lower profit; $116 versus the $350 we got from the straight **stock play**. If we look at this play in terms of return on money invested. We put $2,465 into the **stock play** and took out $2,750 for a 12% percent return. In the **option play**, the other hand, we only put $234 into it and took out $116 for about a 50% return!

What about the risk comparison on these plays? In the stock purchase gambit, the full $2,465 was at risk. If shares of MSFT went down to $10 a share and we closed the position, we'd take back out $1,000 for a $1,465 loss! And that's before we consider paying for commissions. What would the option play have lost if MSFT did the same price action? Only as much as we put into it: $234 plus commissions.

It should be obvious that the leverage that options provide can be a useful tool for investing. But let the buyer (or seller) of options beware! Leverage is a two edged sword, so to speak. Using options improperly can also lose you money in a most efficient manner.

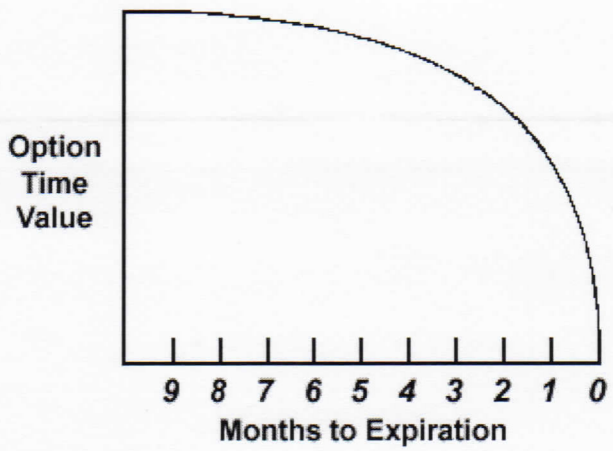
The two-edged sword of options is that the price action of the **underlying** stock *multiplies the price action* on the option contract. There is both a positive and a negative side to the leverage that options produce. For example, a stock's price might rise 10% but the price of the option is *doubled.* On the other hand, the same stock might lose only 10% but the value of the option could be *absolutely wiped out*- a 100% loss.

The great equalizer in the field of trading options is that *time always goes forward.* Because of this, the portion of an option's price that is related to time is guaranteed to *always go down as expiration approaches.*

The Value of Time

Now we're finally getting into the meat and potatoes of what RadioActive Trading is all about. Rather than buying and selling goods and services, our goal is to buy and sell *time.* It's impossible to predict the future action of a stock's price. Anyone telling you differently is misinformed or a liar. "Buy low and sell high" is the mantra of the speculator, but it's impossible with 100% certainty to know whether tomorrow's price will be what we expect it to be.

On the other hand, there are ways to buy *time* cheaply and to sell it dear. The good thing is that it's possible to know before entering into a RadioActive Trade whether or not this manipulation of time is likely to yield a worthwhile profit.



Here's why it works: A **time value** is associated with every option contract. Some options have **intrinsic value**, or "real" value, and all options also have time value. There is something remarkable about **time value**: it **always** goes to zero by expiration. If we separate the **time value** from the rest of what makes up the option's price, and graph its decay as time marches forward, it drops faster and faster. The curve of exponential decay resembles the decay of a radioactive element.

Ohhh…That's why it's called RadioActive Trading!

This loss of time value puts an unfair advantage in the hands of the sellers of options, whether those options are calls or puts. Whether it's a put option or a call option, it's the *seller* of the option that profits when the contract expires worthless. Think about it: The real, high volume sellers of options are the market makers and the institutions. If anyone has the inside story on what a stock is likely to do, it's these people. Four investors buying five contracts each might be the "customers" of one institutional trader selling twenty contracts. At expiration, the finances of the many that bought flow to the hands of the few that sold the options.

Our choice as RadioActive Traders is to be in a similar situation to those market makers, which is to buy time cheaply, then to be on the selling side for the most part. Remember how the DVD store makes its money? First it makes the purchase of a DVD, and then it rents out little segments of time (at a premium) for the customer to enjoy temporary control of that video. We'll soon get to how this same situation is possible in the stock market, but we need to lay a little more groundwork first.

In The Money, Out of The Money, At The Money

Also called ITM, OTM, and ATM. These terms deal with the portions of an option's pricing. As we stated before, part of an option's price (called the **premium**) may include real value, and the rest is what we'll call time value.

Let's consider a call option contract with a strike price of $24 and expiration in November. We'd refer to this contract as the November $24 call (see option chain on page 2). Say the stock is trading at $24.65. What should this option be worth?

Part of the option's value is **intrinsic value**. That is, to have the right to buy a $24.65 stock at $24, the option's premium has to be worth *at least* the difference of $0.65! In truth, however, the premium might be going for $2.30 X $2.34. A seller of this call can pick up

$2.30 right now, or a buyer can expect to pay $2.34. Remember to multiply by 100 because each contract governs the price of 100 shares of the underlying.

Why is the premium inflated? The difference between the $0.65 **intrinsic value** and the actual price of $2.34 is the **time value**, or the amount that the buyer should expect to pay for the length of time during which the seller is obligated to perform. This time value is affected by a number of factors. Some of these factors are predictable, like the length of time to expiration. The longer the term of the contract, the more one can expect to pay in time value.

Time Value = Option Premium – Intrinsic Value = $2.34 - $0.65 = $1.69

When an option has **intrinsic value**, it's said to be **in the money** (ITM). The premium of an ITM contract has both time value and intrinsic value components.

Some options have no intrinsic value at all, only time value. These options are more risky for the buyer, who will be **out of the money** he spent if the stock doesn't move as expected. For an **out of the money** contract to be worth more than he paid, the underlying has to move in the desired direction before expiration.

An example of an **out of the money** (OTM) option contract in our example of the $24.65 stock would be the November $25 call. If I hold a contract that entitles me to buy 100 shares of stock at $25, so what? I could get the same 100 shares on the open market right now for $24.65. As we saw before, the advantage of buying an out of the money call option is the leverage it produces. If this stock happens to go to $30 before expiration, I'll be **in the money** again, which is my hope.

Notice that the further in the money a call contract is, the more its worth? The further out of the money, the less it trades for.

In the money (ITM) calls are calls whose strike price is *lower* than the stock's actual price. Out of the money (OTM) calls are those contracts with a strike price *higher* than the present, actual price.

For *put* contracts, the definitions of ITM and OTM are upside down. That is, an OTM put has a strike price that's *lower* than the actual price. In order to be in the money and have intrinsic value, a put contract's strike price must be *higher* than the actual price. Think of it this way: you hold a November put contract with a strike price of $30. If the stock is trading at $35, then so what? You could get more on the open market by selling without exercising the option. At least for now, you're out of the money.

On the other hand, if the stock in question was MSFT trading at $24.65, your $30 put is worth using, isn't it? Since MSFT is only $24.65, and you have the right to sell it at $30, you're in the money by $5.35.

The term, at the money (ATM) would refer to an option whose strike price is exactly what the underlying is trading for at the time. For example, if MSFT were trading at exactly $22.50, then both the April $22.50 call and the April $22.50 put could be said to be at the money.

What determines whether an option is in, at, or out of the money is the movement of the underlying. This is one of the things that make options trading so profitable, and so dangerous. An out of the money contract can go in the money, or vice versa, in a matter of moments.

Since the seller of an option is obligated to perform according to the terms of the contract, these swings affect him the most. However, a wise trader will calculate the risk of selling an option contract in advance and determine whether or not he is willing to accept the risk of the option being exercised. Sometimes a trader will *want* to be exercised.

If, for example, a trader decided he wanted to buy MSFT today at $24.65, he might have *sold* the November $24 **put option** (MSQWD). If MSFT's price only went to $23.95 on November expiration, he would be forced to buy 100 shares at the full $24. Remember, though, that he accepted $1.67 (according to the above table) to take on this obligation. So his **net cost** for MSFT ends up being $24 *minus* the $1.67, or $22.33. Not a bad discount for a stock that's trading for $23.95. Here's the rest of the story: if MSFT had stayed up above $24, he would just keep the $1.67 ($167 per contract) for selling the put. And if MSFT went down, well, he was happy to buy it in the first place wasn't he? Only instead of buying it at $24.65, he ended up picking it up for only $22.33. That discount cushions the blow if MSFT went down during the term of the contract. However, there is an underlying flaw with this approach to acquiring the MSFT stock. The downside protection is limited to the premium received ($1.67) and the upside has a limited gain of $1.67. If the stock goes to zero because of some catastrophic event, we will be put the stock at $24. This Blueprint will address this major problem.

How to get into Trouble with Options

In RadioActive Trading, we don't use calls and puts as gambling chips, although options can be misused in that way. Remember the Martingale: a gambler is ruined because he fails to manage his money. Straight option plays (just buying a call or put and hoping) promise great profits but there is no guarantee of delivery. As the speculator loses some of his stake, he bets more and more to "come out even". Perhaps the worst thing that could happen is that he scores big on a play, because this will reinforce his self-destructive behavior.

Look again at the above option chain with MSQKD, the MSFT November $24 **call option**. In this case, $2.34 would have been turned into $3.50 if MSFT had gone up to just $27.50. Wow! Almost a 50% return. But the problem is, MSQKD would be worthless if MSFT closes trading at or below $24 on expiration day. The whole amount of this wager would have been lost. If our gambler's stake was $10,000 and he had traded 10 contracts, this would represent a loss of $2,340. He would be out more than 20% of his available funds. To win it back, he would place ever-larger bets until he got totally cleaned out or quit while he was behind.

Consider this: even a bet of the same size would be a larger percentage bet because our gambler now has less to lose! When he placed a $2,340 bet from a $10,000 stake, his risk was a little more than 20%. Now with his account down to $7,660 a $2,340 wager would now risk about 30%. If he has two losses in a row, his account sinks to $5,320. A third $2,340 bet would make for a risk of almost 44% of his available capital!

Obviously, misusing options can be dangerous. But it's not the options themselves that are dangerous. It's the way that people use them. It's just as easy to lose all one's money playing stocks or commodities, and again, it's not the stock or commodity's fault. Every losing play has a winner on the other side of it. Failure on the part of the investor to properly *hedge* and *manage* plays is the real culprit.

The RadioActive method gives the protection and income of properly used options. Nothing can guarantee that the value of your option contract will rise or fall. What an option *can* offer is a certain, **guaranteed**, buy or sell price on the underlying! It's this feature that makes it possible to use them as a hedge for investments with stock or with other options. We'll learn about hedging techniques in the next chapter.

Options Charts Exercise

Look up the options chain tables on some of your favorite stocks. You can get free information on the Internet at **PowerOpt.com/rat/,** just sign up for the 14-day trial and use the Option Chain tool. Remember that some stocks do not have options associated with them, so check out several.

Look at the option chain tables and identify the calls and puts.

Can you tell which are **in the money** and which are **out of the money**?

Can you **separate the time value from the intrinsic value**? What behavior do you see in the options that are more in the money versus the options of the same month that are out of the money?

Look at the options at the same strike price for several different expiration months. Also look at the same month, but different strike prices. What patterns do you see?

Check out the **open interest**. This is the number of open contracts, or essentially the bets that have been placed regarding a stock's finishing price by expiration Friday. If there were any technical indicator regarding the price of a stock by a certain date, you'd have to say that this is the consensus of the voters, wouldn't you?

Finally, **place paper trades** with both put and call options, in the money and out of the money. Pick at least four trades. Your job is not to "win", but to observe patterns. Choose an expiration at least a month from today and check it daily. When you are on the PowerOptions option chain tool, you can click the MORE INFO button next to any option row and slide your mouse to "Add To Portfolio", from there choose which option (call or put) and that you want to buy it. Once the bought options are in your paper-trading PORTFOLIO, you can watch the prices adjust in real-time throughout trading days. You'll be surprised at the behavior of various options!

QUIZ

Let's review what we know about options so far:

- An option is a contract between the _____ and _____ of the option.
- The seller of a contract gives up control for this period of time in exchange for the option _____.
- The further the strike price is above the actual price, the more _____ a put option becomes. The more a strike price is below the actual price, the more _____ a call option becomes.
- The part of any option's value that is in the money is called the _____ value.
- ____ ___ ___ _____ (OTM) means that all of an option's premium is time value.
- Any time before expiration, the buyer has the right to _____ his option.
- At any time before expiration, the seller of an option has an obligation to _____ at the demand of the buyer.
- The stock that is controlled by an option contract is called the _____.

True or False

- Options that control the purchase price of a stock are called puts. _____
- Options that control the selling price of a stock are called puts. _____
- The buyer of an option never has any obligation to perform. _____
- The seller of an option always takes on the most risk. _____
- Options cannot be misused by or cause any risk to the buyer. _____
- Options cannot be misused by or cause any risk to the seller. _____
- It's vital to RadioActive Trading to be comfortable with options. _____

Reflections

Let's pause for a moment and go over ideas from this chapter. Writing your thoughts here will help you interact more meaningfully with the material. Use extra paper if you need it. We'd be very pleased if you'd share your reflections with us as well! Send copies of this sheet with your suggestions for improvement in the supplied envelope to RadioActive Trading. Thank you!

1. Do you find options intimidating? Why or why not? Has this chapter caused you to reconsider some of the things you've been doing up to now? If so, in what areas might you change or try something new?

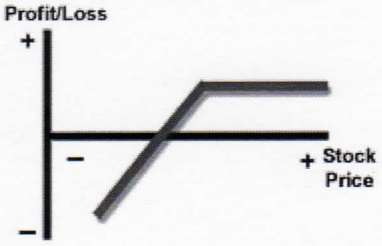
2. What else, if anything, have you gained from this chapter?

Using Options to Limit Risk

The reason that most people get in trouble with options is that they mistreat and use them as a tool for gambling. The following strategies do have an element of risk to them, but are typically less risky than simply buying a stock and hoping. As you read, compare how stock ownership would have done side by side with the option play.

Basic Hedge Strategy #1 – The Covered Call

One of the most famous strategies for using options is the "covered call." Let's say that you own 100 shares of XYZ Corp. (DON'T look this up – it's a made up company) that you bought in November at $20 a share.



You would be happy to sell XYZ for $22.50, which would represent a $2.50 gain, or 12.5%. Trouble is, there's no one in the marketplace right now willing to buy it today at $22.50. But wait! We've been reading about covered calls, so let's try one.

Looking at your stock tables, you see that there is an XYZ January $22.50 call trading at $2.50 X $2.60. Christmas is coming up, and you'd appreciate some cash in hand right now. So you dial up your broker, or get online, and sell 1 XYZ January call at $2.50. You now have $250 in your account, regardless of what XYZ does.

Now let's look at scenario #1. Time has passed, all the presents have been opened, the tree is down…and January expiration is upon us. XYZ is trading at $23. On or before expiration, the nameless, faceless person or corporation out there that purchased your call contract punches a button, demanding delivery of your stock. Immediately, you have no more XYZ, and three days later $2,250 more shows up in your account!

Let's look at the return. We collected $250 the day we sold the contract. Option money clears in one day, so we get it right away. Some time before expiry, probably on the very day of expiry, we were "called out", or "assigned". These expressions mean the same thing. The holder of the call option exercised his option to buy 100 shares XYZ from you at $22.50. Three days later, $2,250 shows up in your account for a total gain on this stock of $500, or 25%!

You were happy to sell XYZ and accept only $22.50. Now you're ecstatic, because you actually made more. Comparing this with placing a limit sell order at $22.50, you doubled your return.

Now let's look at a scenario #2: What if the price actually went down? Let's say it's the third Friday in January, a cold, blurry day. You get up and drink your hot chocolate, rub your eyes, and log on to your free quotes site. XYZ is down to $18. But that can't be, everybody was just raving about XYZ in the news! Nevertheless, you grin because you collected $2.50 for every share of XYZ that you put up for grabs, and now nobody wants it. The $250 is still in your account, *and* you still own the 100 shares of XYZ at $18.

You're actually ahead. $18.00 plus $2.50 equals $20.50, *more* than you spent on the XYZ in the first place. And that's not all: since you still have XYZ, you can sell another call against it for even more income.

No wonder covered calls are so popular. They provide extra income on one side, and a hedge against loss on the other side. This hedge strategy is perhaps the one most used by individual investors. There are scores of books, tapes, seminars, newsletters, websites, and consultants all willing to help you trade covered calls. This technique is so highly regarded as safe that they'll even let you do it in an IRA account.

What the gurus may not be telling you is that there are **two big risks** to covered calls. I know this firsthand because I lost everything in my account in one covered call trade, which you read about in the introduction. The twofold risk of covered calls is if the value of the underlying travels **outside of the range of the premium.** If XYZ goes up or down by more than the $2.50 you collected, **you lose.**

That is, what if you've sold a covered call against your $20 stock and collected $2.50, but your stock's value suddenly drops by $10? The $2.50 serves as a small buffer, but you still suffer all the risk of owning the stock.

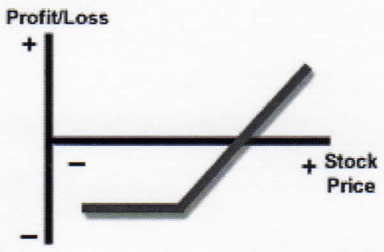
On the other hand, in scenario #1 above, we collected $2.50 for the call and sold the stock at $22.50 when it went to $23. What if XYZ went through the roof? Perhaps XYZ was on the brink of announcing a revolutionary drug that cures cancer while making your teeth whiter than ever. You'd feel pretty sheepish if XYZ was trading two months from now at $40 a share, when all you accepted for it was a piddly amount in comparison. This is the other risk of trading covered calls: missing the upside.

It's for just this kind of situation that "married puts" were invented.

Basic Hedge Strategy #2 – The Married Put

In our example of XYZ Corporation, let's say that in November there was a lot of buzz about the new drug. Researchers are working around the clock. CNN can't shut up about the benefits. Protesters are demonstrating, upset that the product uses eel jelly from a known endangered species. XYZ has called press conferences announcing where it is in the stages of FDA and ADA approval.

You place an order for 100 shares of XYZ at $20, and looking out to January, see that the $20 put is trading at $2.00. You pick up one of those also.



Stock Cost + Put Cost = Total Cost = $20 + $2 = $22.00.

Now, as the news develops, it turns out that the product has a certain, interesting side effect: It makes you look younger too! 60% of female subjects that were tested in clinical trials were mistaken afterward for their daughter's younger sister. XYZ tops the charts, trading over 10,000,000 shares in one day.

When are you obligated to sell? *Never.* The buyer of an option has all the rights, remember? When XYZ hits $40, you sell. If you had bought at $20 and sold at $40, it would double your money. But your total cost was $22.00 ($20 for the stock +$2 for the put), remember? In this example, you got less of a return because the cost of the option added to your bottom line expense. The good news is that you didn't miss out on the big move! As to the added expense of the put option, well it didn't seem to be necessary after all.

Now let's consider what happens in a scenario #2. When it's discovered that the FDA refuses to approve the drug, the ADA has pulled its backing, and fringe environmentalists set a fire in XYZ's main laboratory, XYZ plummets. Yesterday, everybody wanted in and today they all want out. XYZ opens at $3. You grin, turn off the TV set, and make this trade from your cell phone: EXERCISE 100 XYZ @ $20. Three days later most of your investment is back in your account. Your loss is less than 10%. Think of what your accountant would have said if you had only bought the stock, without the protection of the put option!

Either of these extreme scenarios shows the profit of buying married puts. The put contract is insurance in case of disaster. A downturn in the stock is "covered" by the put, which gives you the right to liquidate XYZ at a predetermined price. If XYZ goes up, the expense of the put can be seen as part of the cost of doing business. The best feature of a married put is that the buyer is never under compulsion to do anything.

How can an investor lose by investing in a married put? The greatest risk of married puts comes when the stock's price doesn't travel very far. It's the opposite of a covered call; while selling a call exposes the trader to risk on either side, the married put results in a loss when the stock doesn't move much and reduces profits on any gains. Just as home fire insurance reduces any profits made on the sale of a home, but it is a necessary expense.

Let's Review what We Know about Hedge Strategies:

Covered calls provide **income now** with the possibility of **receiving a little more** later. There is no guarantee, however, of the stock's final sell price, and it may fall. Also, if the trader's instincts were correct and the stock is headed up, a covered call limits the amount that he can collect.

Married puts **insure against loss** while retaining all the **freedom of ownership**. The put premium spent is an expense incurred to reduce risk. If the trader's instincts are wrong, he has determined from the beginning the maximum amount that he can lose. If his instincts about the stock prove to be correct, he may sell on the open market to the highest bidder.

Here's an added tidbit about the married put strategy: In case the put has not expired, it more than likely still has value even if it's out of the money. The owner of a married put can exit the position separately if desired. That is, if the stock goes up, it doesn't take the exercise of a put option to sell it at a high price. So the put contract can be passed along (for premium) to another trader. This is one of my favorite features of married put ownership.

Since we're betting on a stock to go up when we buy it, the more logical of the two hedge strategies is the married put. It's just not as exciting as receiving income.

If there was a way to combine the safety and freedom of married puts with the excitement of receiving income from covered calls, this would be the ideal situation. **RadioActive Trading does this!** Before we get into how the RadioActive Trading principles manipulate time for money, we need to look in the next section at option **spreads**.

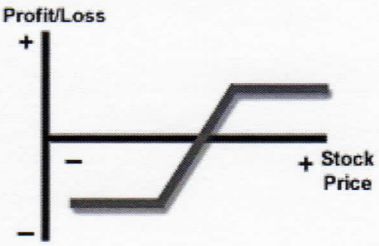
Using Options to hedge other Options – Spreads

Spreads are created when a trader buys one option, then sells another. These trades are hedge strategies betting on the future direction of the market, not the actual price at expiry.

Unlike the stock hedging strategies mentioned above, spreads have no ownership of the underlying at all. If a stock continues to move in a certain direction, a spread strategy may turn a profit. If it moves unfavorably, the trader will suffer a smaller loss. He may even exit the trade with no ill effects at all! Spread strategies are generally safer than just buying a call or put and hoping for the best. In the following examples, we'll look at two **debit spreads.** A debit spread is a spread that costs money to enter, but has the potential for a large percent return.

The Bull Call Debit Spread

The **Bull Call Spread** (buy a call and sell a higher strike call) is bullish; that is, the trader expects the price of the underlying to rise. The maximum profit for the spread is realized if the stock finishes above the higher (short) call option strike price at expiration.



Let's say that YNOT is trading around $25.00 a share. Our spread trader expects the price to rise. Rather than risk $25 per share on the stock, he **buys** a July $20 call for $6.00. Now, if the stock rises, he gets a healthy return. But, if it falls below $20 by July expiry, he loses everything. Rather than risk a whole $600 ($6.00 X 1 contract controlling 100 shares), our trader decides that he'll also **sell** the July $25 call for $2.35. This reduces his risk to only $3.65 ($6.00 - $2.35) per share, or $365 total. It doesn't matter how low YNOT goes, the **maximum** that he can lose is $365.

Let's fast-forward the calendar. On expiration Friday, YNOT will be trading either above, below, or at $25. If it's below $20, the trade is a total bust. On the other hand, if YNOT's trading at $25, he can **exercise his option** and buy it at $20! However, he also has an **obligation to sell** YNOT at $25. He gets to keep the difference, which is $5.

In this scenario, the bull call spread produced a return of about 37%. With a risk of $365, the return was $500. The profit was $135 ($500 - $365) on a very small amount risked.

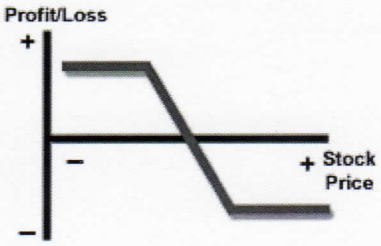
What if YNOT had gone way up to $100 a share? How would our trader have fared? Exactly the same. Remember that the spread did **lock in the privilege to buy** YNOT at $20. But he also **obligated himself to sell** YNOT at $25, no matter what price it actually ended up reaching.

The impressive thing about the bull call spread is that it skews chances in favor of the trader, even if he was wrong. The expectation was that YNOT would go up, right? Let's say that YNOT actually fell to $23.65. If the actual stock had been purchased, the loss would be $1.35, or $135 for one hundred shares. With the bull call spread, the **loss is zero**. The $25 call that our trader sold would not be exercised, but he *could* exercise his own privilege to buy the stock at $20 and sell it now at $23.65. The $3.65 difference exactly equals his original risk. The bull call spread, set up correctly, can be a very forgiving investment vehicle.

The Bear Put Debit Spread

A Bear Put Spread is set up in exactly the same way as the bull call spread, only everything is upside down. The expectation is that the stock will fall. Our trader buys an ITM (In The Money) put with a high strike price and sells an OTM put with a low strike price. If the underlying stock falls below the bottom, the maximum gain is the difference in the strike prices, minus the original investment. If the stock closes above the upper strike price, the whole investment is lost. If the stock ends up closing in the middle, this bear put spread can be a wash just like in the YNOT example. It might also yield a very small gain or loss.

Let's see an example. BCUZ is having difficulty staying above $90. If our trader thought BCUZ was headed down, he might buy a $95 put for $6.20. Now, $620 per contract is a lot to wager. If BCUZ breaks out of its funk and heads up again, he could lose it all. So instead of just straight buying a put, he also sells the next lower strike price, the $90 put for $3.20. Now the total risk is now only $3.00.



If something goes wrong and the stock rises past $95, the $3.00 ($300 per contract) is all that's lost. Both puts expire worthless. On the other hand, if the stock closes at $90 or lower, both puts are exercised! Our trader *has* to buy the stock BCUZ he sold a put. But after spending the $90 he can immediately sell BCUZ he holds a $95 put! The difference of $5.00, *minus* the $3.00 it took to get into this trade equals the maximum gain of $2.00. Here's the risk/reward for this Bear Put Spread:

Maximum Gain: $200
Maximum Loss: $300

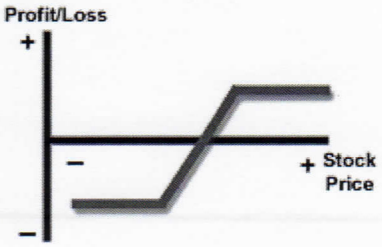
Credit Spreads

Are you confused yet? Hold on! The next kind of spread doesn't cost you anything to enter the trade – it *pays* up front when you enter. Credit Spreads are a way to get cash now, with the risk that you may have to give it back up and then some. As with the debit spreads, credit spreads put a cap on the maximum risk. Of course, in both credit and debit spreads, the maximum gain is decided up front as well.

The Bull Put Credit Spread

Let's say you're looking at AOK, which is trading at about $22.50. You have a feeling that AOK is headed up. So you sell the May $22.50 put for $1.30. What you're betting is that

AOK will close above the $22.50 strike price and the put will expire worthless. You would then get to keep the $1.30 ($130 per contract) premium!



But then nervousness sets in…what if the bubble bursts and AOK plummets? If AOK doesn't do well on the upcoming earnings announcement, it could fall down to $10. No matter what you can get for AOK on the open market, you'd still be obligated to buy it for $22.50. That's too much exposure to worry about for the next four weeks. So you look at the next lower strike price of $20 and see that the $20 put is trading at $.30. That's cheap insurance.

Now the situation is different, isn't it? We still have a healthy income of $1.00 ($1.30 - $.30), or $100 per contract. As long as our stock closes above $22.50 at expiry, everything will be AOK for AOK. Both puts expire worthless and we can keep the income.

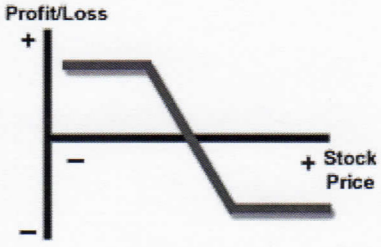
On the other hand, if AOK falls to $10 (like it would in our nightmares if we had taken on all the exposure of selling a naked put), we can exercise our $20 put and pass AOK right along to someone else. When the $22.50 put we sold is exercised against us, we exercise our own $20. The difference of $2.50 comes out of our pocket. Of course, there's already $1.00 in our pocket so our total out of pocket is only $1.50.

Here's the calculated risk of this particular Bull Put Credit Spread:

Maximum Gain: $1.00 per contract
Maximum Loss: $1.50 per contract

The Bear Call Credit Spread

The Bear Call Spread is another credit spread; that is, rather than paying money to get into it, money is extracted up front. There is, however, a risk that we might have to give it all back plus a little extra. The Bear Call Spread is set up when we sell a call at a lower strike price and buy one at a higher strike price.



Let's say that POOH is trading at $42 and we expect that it'll crash. So we sell the July $40 call for $4.80. Of course, we've been wrong before, so it seems prudent to also buy a July $45 call as well – just to be safe. We pick one up for $2.35. The difference of $2.55 ($4.80 - $2.35) is ours to keep until expiry or until we're exercised.

If July expiry comes and POOH is below $40, we keep the whole credit of $2.55 ($255 per contract). On the other hand, if POOH goes up, we have an obligation to deliver it for $40, don't we?

If we had been "naked", and simply sold the call for income, here's what might have happened: POOH goes all the way up to $78. We *still* have to buy 100 shares and turn around and deliver them for only $40. We'd be up a tree for sure.

Good thing we own the $45 call, locking in our buy price at $45. Because this was a spread trade, we'd only suffer the loss of the difference between the $40 price of delivery and our $45 cost: $5.00. And this cost is offset by the $2.55 income we received to get in the trade. Here's the risk/reward for this Bear Call Spread:

Maximum Gain: $2.55 per contract
Maximum Loss: $2.45 per contract

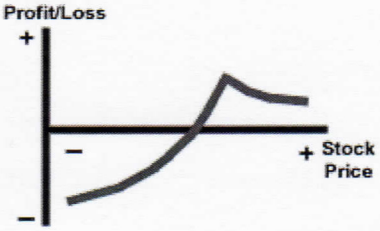
Let's review what we know about Spreads:

Spreads are a kind of hedge that sets limits on both losses and gains. A trader using a spread trade stands to make a very good return on his invested dollar, while limiting the amount he can lose to a predetermined amount.

While option spreads can be a good income generator, the RadioActive approach uses them in a special way. A RadioActive Trader uses spreads in response to a price move the stock *has already made* instead of speculating on its future action. We'll get more specific later when we cover the maintenance of the RadioActive Profit Machines (RPMs). For now we'll look at how options can be used in plays that manipulate *time*.

Calendar Spreads

This spread involves buying and selling calls or options with different expiration dates. Say we wanted to do a Bull Call Spread, and capitalize on an upward move, but weren't sure when it might happen. A normal, "**vertical**" Bull Call Spread would involve buying a lower strike price and selling a higher strike price in the same month, say, the October $25 call and the October $30 call. A ***diagonal*** spread would involve different strike prices, but different months also.

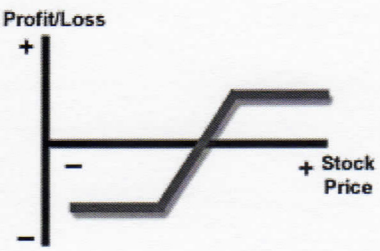


What would be the profit in this? Well, let's say in January we purchase the October $25 call but sell the $30 *March* call. We'll get less premium because There's less time between now and March than there is between now and October.

If our stock makes the desired move between now and March, we profit in very much the same manner as any Bull Call Spread. However, if our stock *doesn't* move above $30 before the March $30 call expires, we can then sell the June $30 call.

We can keep selling calls month after month until either we get called out and exercise our spread for profit, or we bank all the income. It's possible to make money on a trade like this even if the stock tanks because we sell time value, month after month.

The Collar



Perhaps one of the most interesting stock and option plays is the Collar. A collar trade is long shares of stock, a long put option for protection, and a short call to help finance the cost of the long put. These can be done in a variety of ways by varying the strike and expiration of the put as well as the strike and expiration of the call.

One type of collar, commonly known as a Conversion is a risk-less trade. Done correctly, this play cannot lose any money, but it can gain. Let me repeat, in case you skimmed that last line: *The Collar is a play that, done correctly, CANNOT LOSE ANY MONEY, but it can gain.*

Conversions are used mainly by very large institutions, though it's possible for the individual investor to set them up. Conversions are simply collar trades where your options are farther out in time and since the call and put are at the same strike price, they are totally risk-less. A conversion involves owning stock, guaranteeing its value with a long term (year or two away) put, and selling a long-term call to cover expenses. Conversions are very safe, but they're not sexy. That is, you don't even know if you're going to make any money until a year or two passes, and there's no guarantee up until the expiration of both options. Here's an example conversion-style collar trade:

First we buy a highly liquid stock with good prospects for going up. Let's say we pick up a thousand shares of CLLR for $26.82. Now, the problem with stock ownership is that you never know what might happen to it...CLLR might just tank. So we don't really own a reliable asset at all, do we? It's not like we own a piece of gold or real estate (as if those were truly reliable either). But we *can* lock in the sell price of the stock by using a put option.

Remember the married put hedge play? $3.90 gets us into a January LEAPs put $26 strike. That guarantees the value of the arrangement at $26 up until expiration.

Our cost so far is $30.72 ($26.82 + $3.90) for an asset that's guaranteed to be worth at least $26. Our risk is about 15%, and our upside is unlimited.

Now all we have to do is wait a year to find out if we lost 15%. Excited? Me either. But there is more we can do. The put option is a contract that we own. Therefore, we have the right, but not the obligation to sell CLLR at $26. Can we encumber the stock by selling a covered call against it? Certainly! Looking out to January LEAPs calls, we can sell a $27 call for $4.80. This brings our expense down to $25.92 ($30.72 for the married put position, minus $4.80 for the covered call).

Now a lot of things can happen in a year. But one thing that won't happen to us is losing money. The "collar" wraps up our security tightly so that no matter what, we never collect less than $26 from this investment that cost $25.92 to get into. On the other hand, if the stock goes up above $27, we do get to keep the proceeds up to that much. This collar is **bulletproof**...it cannot lose, only gain.

It may not seem very exciting to make a 4% gain, but consider this: Right now, will the bank guarantee you that rate of interest? Also, will they allow you to withdraw up to half to use in other investments? Your broker will lend you money against this arrangement in the form of margin at any time.

Finally...The RadioActive Profit Machine

The RadioActive Profit Machine, or RPM, is a vehicle for using all of the stock and options arrangements you've seen so far. It's set up very much like a collar. The RPM is a unique

married put arrangement having the protective put in the money and out in time. Then, one of the ten **Income Methods** can be used to generating profit from the married put arrangement. One of the income methods is to **sell O**ut of **T**he **M**oney **(OTM) call options,** which creates a collar. As the call options expire, new ones can be written. If the underlying stock changes drastically, the investment can be adjusted by modifying the call option or the put option.

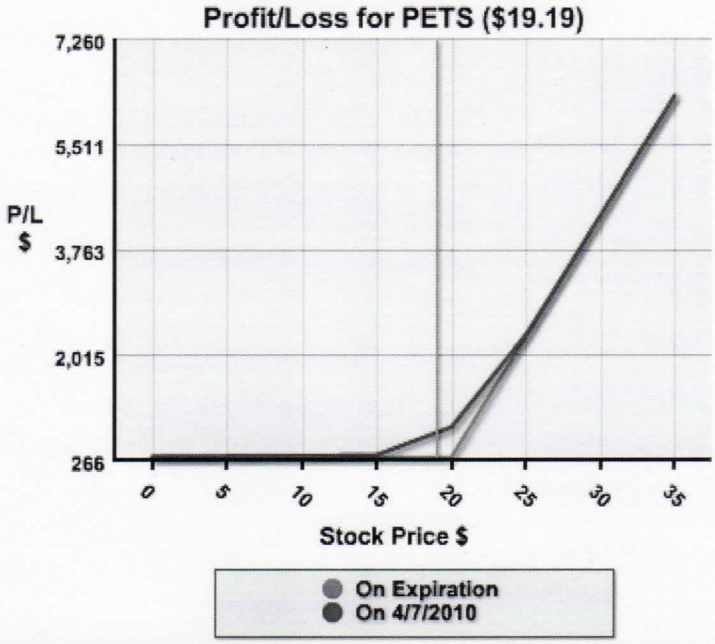
At a certain point the RPM investment may become **bulletproof**. That is, no matter what the underlying does, a profit locked is in, but there is potential to earn more. The graph shown below illustrates a position in PETS. If the stock goes to ZERO this results in a profit of $313, which is a 4.1% return. However, there is no limit on the upside profit which can be realized. The position is bulletproof with infinite potential. This example illustrates the best feature of RadioActive Trading, the potential to realize infinite profit with a defined downside. In the next chapter this will be discussed in more detail.

Custom Spread Analysis for PetMed Express Inc. ($19.19)

Trade Details [Add to Portfolio]		Cost Basis
Buy 400 shares of PETS (PetMed Express Inc.)	@ $16.08	$6,440.00
Buy 4 contracts of TRQRD (PETS Jun 2010 20 Put)	@ $3.10	$1,247.00

Current Stock Price : $19.19	Total Cost:	$7,687.00
	Monetary Requirement:	$0.00
	Total Requirement:	$7,687.00
	Put Guarantee Price:	$8,000.00
	Max Risk:	$-313.00
	% Max Risk:	-4.1%
	Max Profit:	Infinite

Price	4/7/2010 Profit/Loss
$0.00	$313
$5.00	$321
$10.00	$329
$15.00	$345
$19.19	$649
$20.00	$801
$25.00	$2,353
$30.00	$4,313
$35.00	$6,313



Source: Power Financial Group, Inc. – PowerOptions - poweropt.com

QUIZ

- By locking in an agreed upon price, options can be used to _____stocks or even other options.
- Covered calls protect you a little bit from a downturn, but absolutely limit your _____ potential.
- Married puts protect you with a _____ price in a downturn. They cost a little but afterward put no limit on your upside potential.
- Spreads _____ both your risk and your potential gain.
- Credit spreads put money in your pocket ____, but you may end up paying _____. Debit spreads cost ____ but may end up paying you _____.
- _____ spreads can be done over and over.
- A _____ is an arrangement that limits the downside movement of a stock from costing the holder any money, but retains the profit potential of a covered call.
- A _____ _____ _____ uses all of these principles.

Reflections

Let's pause for a moment and go over ideas from this chapter. Writing your thoughts here will help you interact more meaningfully with the material. Use extra paper if you need it. We'd be very pleased if you'd share your reflections with us as well! Send copies of this sheet with your suggestions for improvement in the supplied envelope to RadioActive Trading. Thank you!

1. Have you done any options trading? Have spreads and hedge strategies been a part of your repertoire? How have they worked out for you?
2. How did you feel about married puts before the comparison in the early part of this chapter? How do you feel about them now?
3. What, if anything, appeals to you about credit spreads? Debit spreads? Which do you think you'd be more comfortable doing?
4. Has this chapter caused you to reconsider some of the things you've been doing up to now? If so, in what areas might you change or try something new?
5. What else, if anything, have you gained from this chapter?

How RadioActive Trading Harnesses the Power of Math

This is one of my favorite chapters because it deals with nothing but absolutes. Everything you find here will be true about stocks, options, and commodities traded anywhere, in any kind of market.

The adage "buy cheap and sell dear" has come to be regarded as passé. "Sure…like it's that easy!" But it is. We've just been looking in the wrong place.

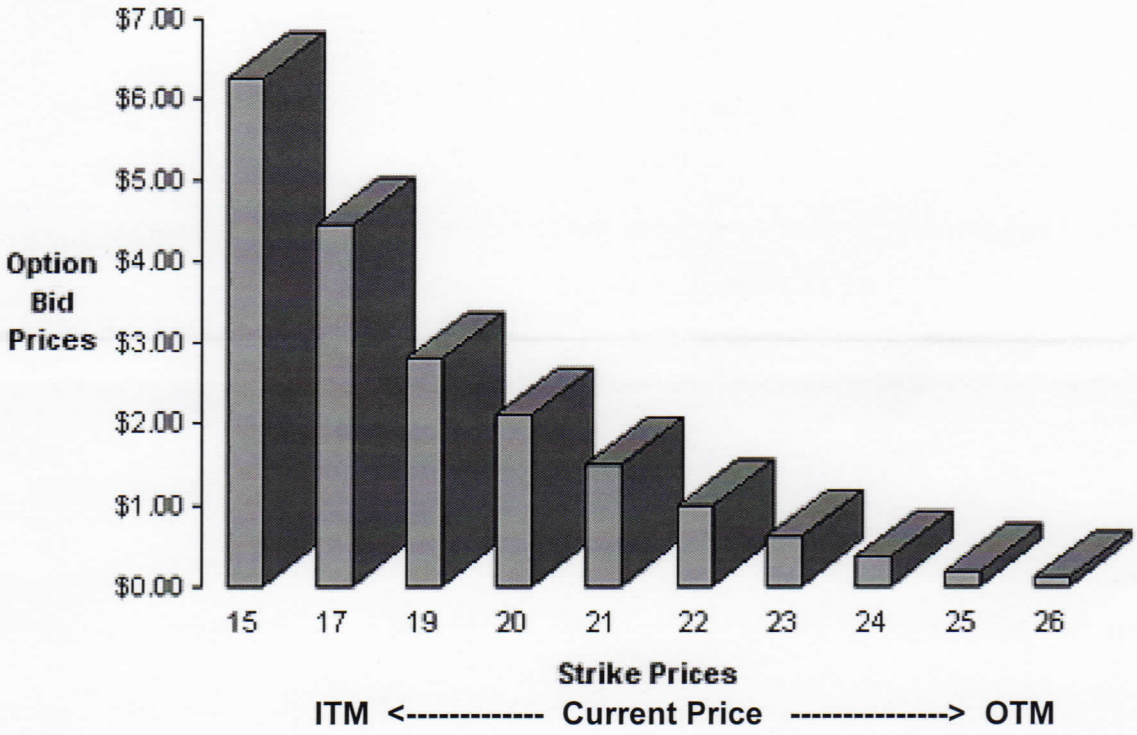
One of my best friends fell into a sweet way of making money just out of high school. Keith would make a trip once a week from Grand Junction, Colorado, to Denver. His purpose was to obtain a car for sale. He had learned that Grand Junction had high-priced garages and used car lots because they were in a somewhat isolated area. Lack of competition made prices high, but in Denver you were hard-pressed to get rid of a used car.

Keith and a friend would show up very early Saturday morning and bring coffee and donuts to the delivery guys at the Denver Post. Then he'd get the paper and tear through the classifieds. Before any used car dealer in town was rubbing sleep out of his eyes, Keith had marked his five best prospects and was on the road. Armed with 50 hundred-dollar bills, he'd pull them out and give his bottom dollar, best offer. Sometimes his prospect's eyes would pop because in that big city, even with all the other cars for sale, someone was willing to pay cash now. If he couldn't get a good price, he'd walk. But by noon, he was headed back to Grand Junction in a used car with a clear title.

What happens next is amazing…Keith would wash and vacuum the car, place an ad in the local rag, and sell it in a day or two for $500 profit. He had grateful buyers, too, because the prices in Grand Junction were so out of sync with the rest of the world. Who was going to drive three hours for a good deal on a car? Keith would. He got so good at this game that he could place an ad for a specific make and year of car and have a buyer in G.J. *before* he picked the car up in Denver!

What Keith did was look and realize *where* the money was. Then he went through the necessary steps to capture it. He wasn't in the traditional used car business, where you try and scalp a car cheaply off one person and try to pawn it off expensively to another in the same town. Keith was in the business of serving people at their price on the buy side or on the sell side, and only so long as it profited him in the meantime.

It's our business as RadioActive Traders to find *where* time can be bought cheaply and *where* it can be sold dear. They say that a picture is worth a thousand words. The following graphs are worth millions of dollars. Study them.



The values of call options decline as the strike price gets **O**ut of **T**he **M**oney. These, the actual dollar amounts, are all that average options traders really *see*. Speculators aim to buy OTM calls and see them double if the underlying advances by a few percent.

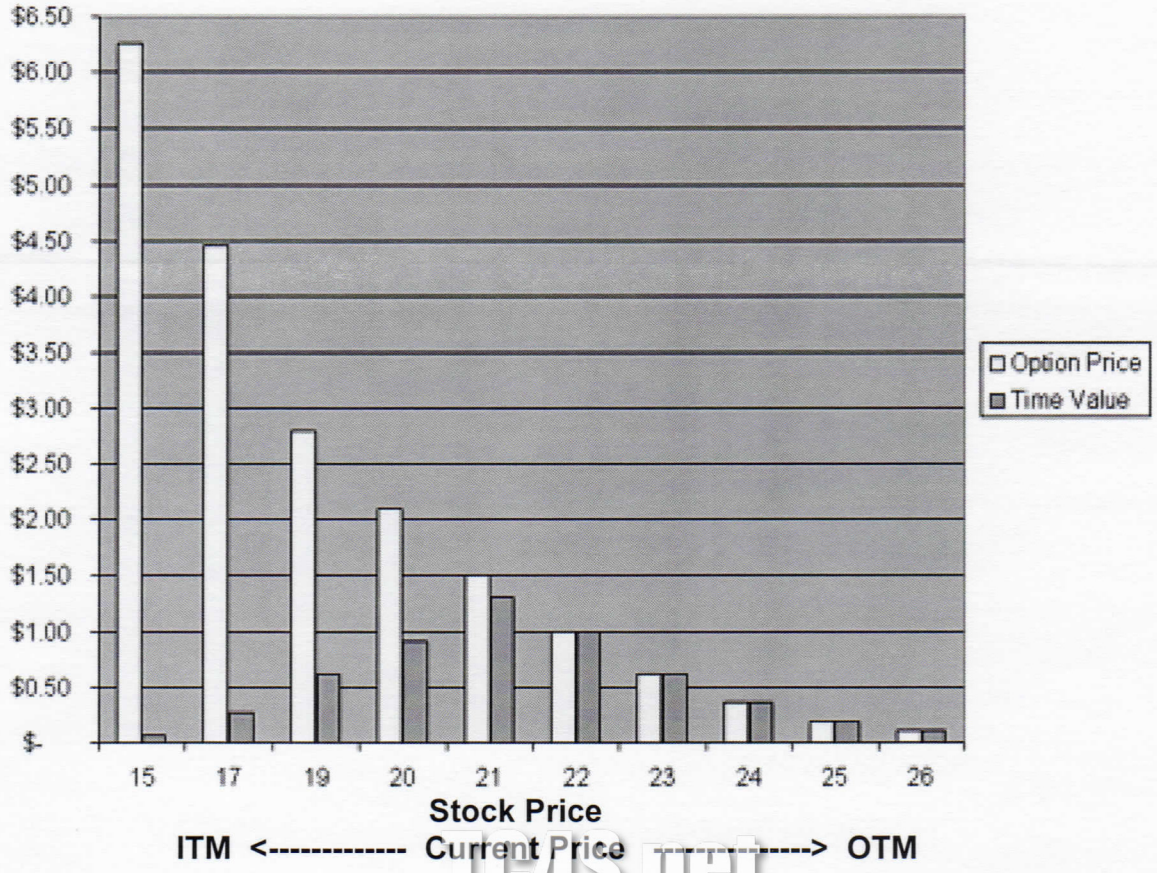
These gamblers are for the most part *buyers* of option contracts, purchasing control for pennies on the dollar. The flux of these prices is all that seems to command their attention. Remember that these prices are only part of a snapshot – the actual prices can change quickly, making huge percent advances or losses in hours or even minutes.

The dollar amounts represented by this chart are the actual amounts that each contract would be traded for. Looking simply at the bottom line price, one would think that the lowest-priced OTM contracts would represent the lowest risk to buy. Following the same logic, we might conclude that selling the higher-priced ITM contracts would represent the most income with the least risk. This is exactly opposite of the truth. We'll see why as we continue to analyze.

The more successful spread strategies involve *buying* a call or put with less time value, and *selling* a call or put with more time value.

Remember Keith's example of buying cheap and selling dear? He knew exactly where to look for higher *and* lower prices on the same issue-cars. At one time, he could judge whether both the buy and sell price made sense and only then would he take action.

Let's take another look at the same options - this time, we'll consider the time value:

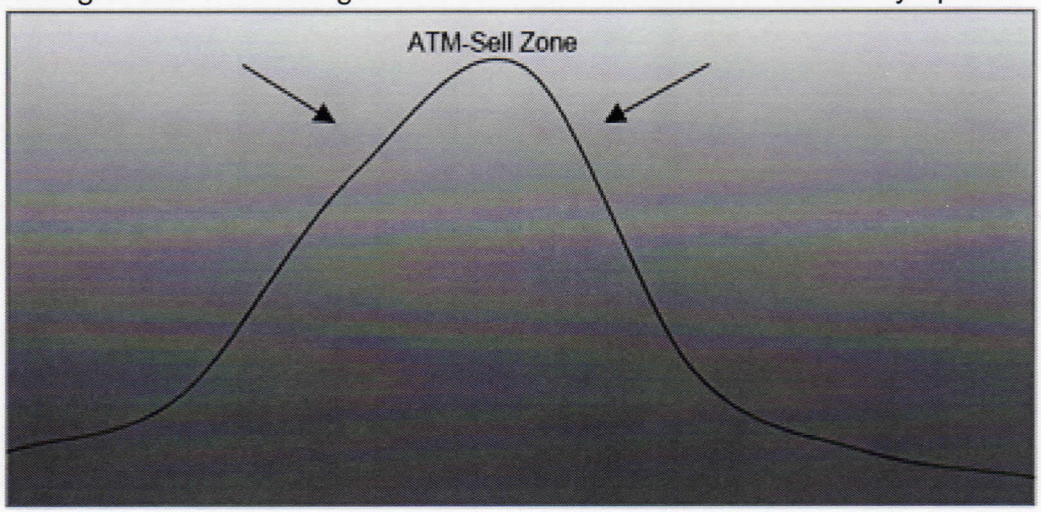


The time value peaks **A**t **T**he **M**oney (**ATM**) or at the strike price that's nearest to the money. Right now, the highest time value options to take advantage of selling are at the $21 and $22 strike prices. Right in between is MSFT's current stock price at the time of this snapshot: $21.18. But, tomorrow, this chart may look completely different. If MSFT trades at $30, then the highest time value will be situated at the $30 call and put.

Next we'll look at this same data once again. This time it'll be a line graph of the time value only. I'll take out the strike prices and the dollar value and smooth the lines. The time value graph of options on any issue will describe a similar bell curve.

The ABC's of Time Value – Introducing the ATM Bell Curve

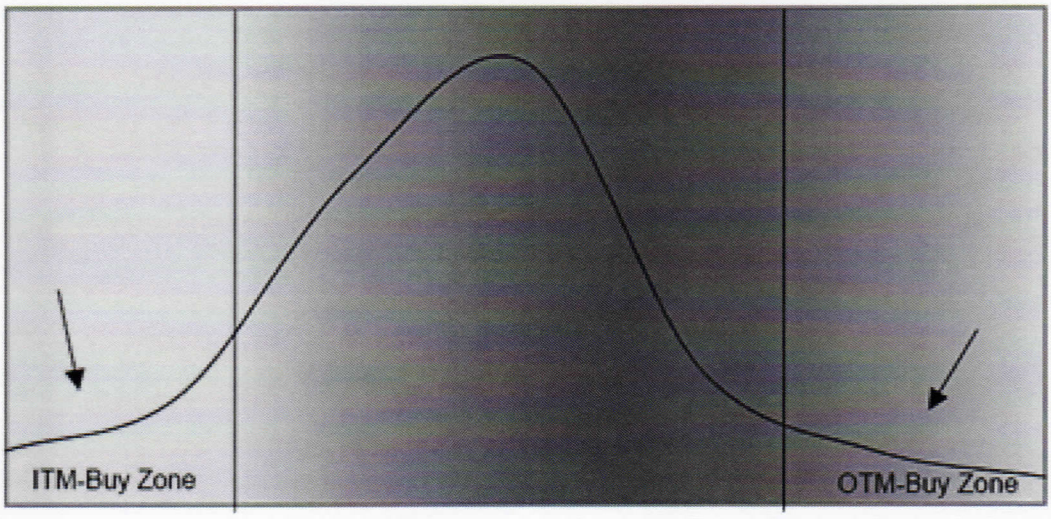
The following charts show the general distribution of **time value** for any option:



In The Money ← **At The Money** **→ Out of The Money**
Stock Price

The price of time is highest At The Money (ATM), the strike price nearest what the stock is actually trading for. This is where we **sell** time.

The further we go from the stock's present price, the more the time value erodes. This is where we **buy** time.



In The Money ← **At The Money** **→ Out of The Money**
Stock Price

Got it so far? In order to buy time cheap and sell it dear, we've first got to know where on the options chart to look. Toward the middle of the bell curve, the premiums swell skyward. This is At The Money (ATM). On either side of the bell, the time value of premiums slope down. Whether an option is Out of The Money (OTM) or In The Money (ITM), its time value is most affordable if the strike is far away from the stock's actual price.

Now we've settled the question of **where** to buy and sell options. On **the ATM Bell Curve**, it's obvious that the fatter time value is At The Money. The strike price of the contracts that we sell is always juiciest close to the stock's present price level. We sell the options in the middle of the ATM Bell Curve for maximum income with minimum exposure.

On either side of the ATM Bell Curve, the time value gets cheaper. This is where we buy our options. **In The Money options** both have intrinsic value and are cheaper in time value, so these are the ones we want to purchase with the expectation of selling or exercising later. Speculators like to buy **ITM** options because they move more rapidly with the price of the stock. **Out of the money** options are cheap too, but they are more risky for speculative buys as an investment since they are all time value and move slowly with stock price. However, if you previously sold an option, **OTM** are good places to buy it back cheaply. For example, if our company was trading at $24.40 today and we sold a $25 call option that would bring in an ideal income. If it takes a big, one day hit and falls to $20 (on bad news, earnings announcements, analyst opinions), and then the $25 call would be far out of the money. We could buy it back cheaply to close the obligation. In a few days, our company may well have recovered and we're ready to sell another call as close to At The Money as possible.

The time value components of options behave the same way whether they are **calls or puts**. The same bell curve peaks at the strike price that most nearly matches the stock's current price and falls on either side.

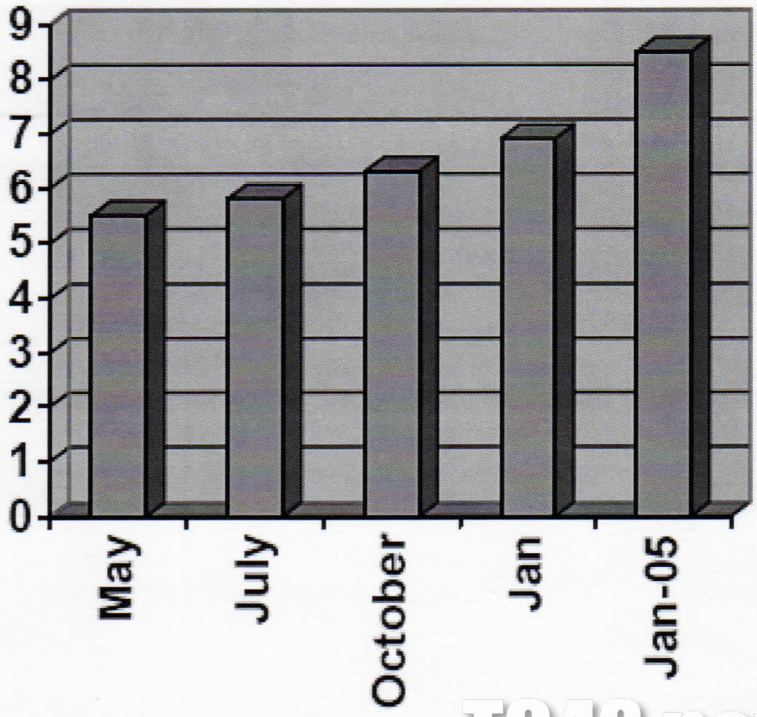
Now, we know from The Sketch that there are three components to an RPM:

- A well-traded, liquid stock with good chances of going up
- A protective put option guaranteeing that stock's price
- Options sold against the arrangement for income

I came up with this arrangement after losing what seemed to me to be a small fortune by doing covered calls. I found out that stock ownership by itself is not really an asset. In fact, if it was purchased on margin, the stock (or more accurately, the loan against it) can very quickly become a liability. We can sell covered calls against our stock, but if the stock plunges we could end up with our assets in the proverbial sling.

We know from the ATM Bell Curve that option's **time values peak At The Money**. They are **lower Out of The Money** or **In The Money**. An RPM is assembled with an In The Money Put for protection. SO, the deeper In The Money we can go, the more cheaply we can have the protection. I recommend one or two strike prices *above* the current price of the stock as a minimum. We'll look at some of the things that make a stock a good prospect for building an RPM in the next chapter. They have to do with the stock's chart, its daily volume, open interest in the contracts, and other details. For now, however, let's learn about another important factor in choosing which options to trade: duration.

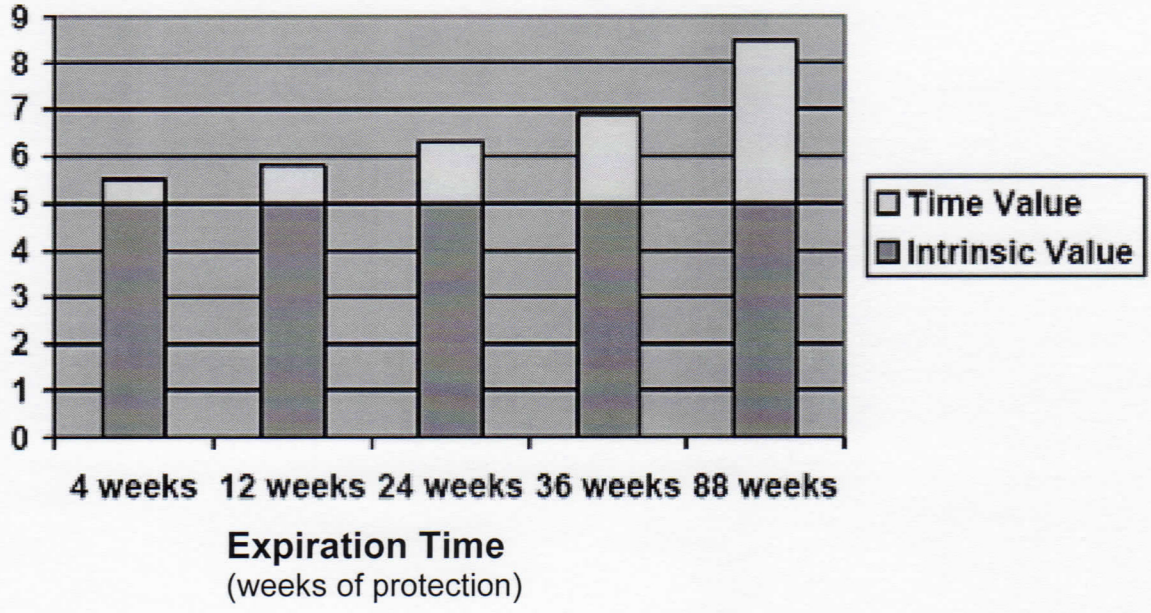
Buying the Protective Put: The Right Expiration Month



The following graph of **options pricing** will look a little misleading. We're going to look at the $30 strike price this time, but across different months of expiration.

Looks like the options get more and more expensive the further we get from today, doesn't it. But wait! Have you ever heard the saying, "You get what you pay for?" This is especially true when it comes to insurance. And insuring our asset is the only purpose of the protective put.

Let's look again at the same data. Only this time, let's express it in terms of the cost of the time value, added to the intrinsic value:



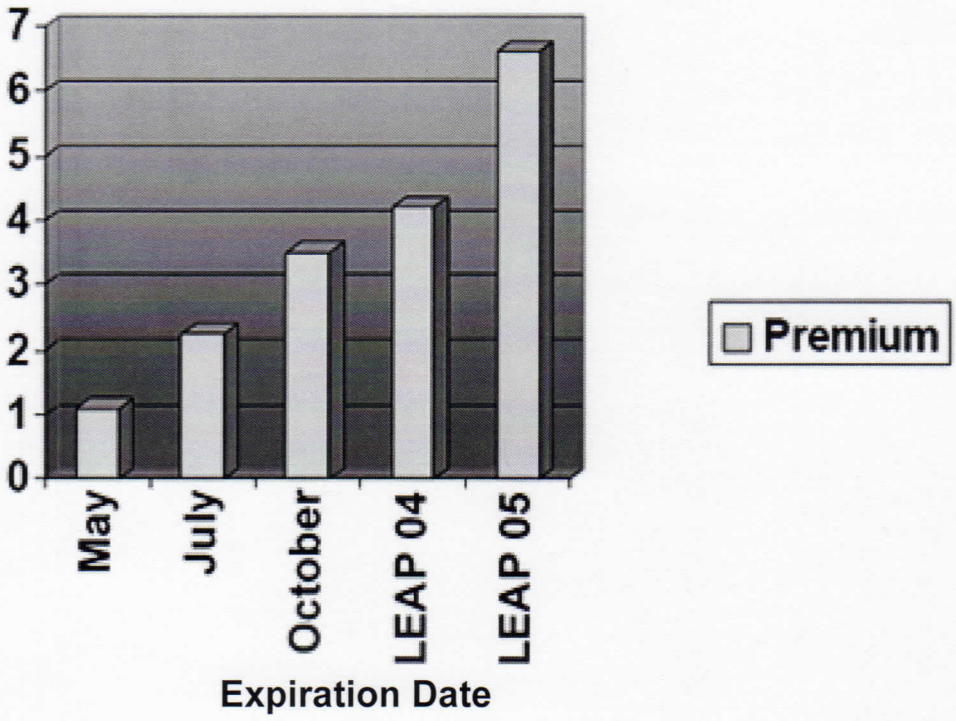
Weeks of Protection	Time Value	Cost Per Week
4	$0.50	12.50 cents
12	$0.80	6.67 cents
24	$1.30	5.42 cents
36	$1.90	5.27 cents
88	$3.50	3.97 cents

Rather than looking at the total price of the premium, we look at **how much coverage** the premium purchases for us. The longer the term, the more cheaply we can buy protection at the same level. Therefore, the longer the term of the ITM put, the better protection we have for the money.

Buy Cheap...Sell Dear

On the buying side of options, we want to **buy time as cheaply as possible**, with as much control and value as possible. Money is about power and control. We want to purchase as much power as we can and to control it as long as we can. We want time on our side. Therefore, any put we buy is both long-term and has intrinsic value to keep the cost per week low. It's In The Money.

On the **selling side** of options however, we **give up** a certain amount of power. It's just like renting out a DVD that we own. We want that control to be for as **short a term as possible**, and yet get as much income as we can for the time. Let's say that we've decided on an ATM (At The Money) call to sell for income. Look at the following chart. At first glance, which call would be the best to sell?



We've used the ATM Bell Curve to determine the correct call strike to sell. Now we want to decide on the correct month of expiration. To the untrained eye, of course, the longest-term call seems to be the most attractive. After all, it's the beefiest one to sell right now. The January 2005 call is six times the amount of the May call.

We need to realize something, however: Every day that we're holding that stock is a day that we can't do anything else with the money. We need to be fairly compensated for our *time*. Actually, compensation that's more than fair would be all right with me.

Remember the exercise with the video store again. Think of your stock as the DVD. Who would rent a video to someone for a period of six months? That length of time would give up too much control of the asset. No, the video store will charge you about a quarter of what the video costs, then get it back in two days. Then they'll rent it out again. This is what we're doing with our stock - we're giving up a little control for a short period of time and for a premium price.

The key to wealth by manipulating time is to chop it up into small, affordable chunks. The sum of all the little chunks of time that you sell should far outweigh the economy-priced chunk of time that you bought by setting up your RPM.

Again, let's look at the same data in terms of income per week of exposure.

Weeks of Exposure	Premium/Income	Per Week
4	$1.10	$0.275
12	$2.25	$0.187
24	$3.50	$0.145
36	$4.20	$0.116
88	$6.60	$0.075

Obviously, the best deal for the time spent is $0.275. In fact, this is the only call on this chart that is acceptable to sell by RadioActive standards. We want to collect $0.20 to $0.25 **or better** for every week that our stock is at risk. Now, if the stock does rise past the strike price, we're exposed to the possibility of being assigned (exercised or called out). That is, the owner of the call option that we sold may decide to use it. He would then buy the stock from us at the agreed upon price. This might actually be beneficial, but we can prevent it in case it isn't.

The very exciting thing about RadioActive Trading is that we can absolutely control at what price we'll exit a particular stock. The protective put contract provides long-term insurance. In the meantime, we can sell options against the stock for income. If our stock rises in value, we can make money. If it falls or stays flat, we can still make money by adapting details in the arrangement, the contracts we have entered into.

Rather than focusing on what a stock's price may or may not do tomorrow, we are released into the only time over which we have any control: the *present.* And as the price does move, we can change and adapt this strategy to put us into more and more advantageous positions.

QUIZ

- The ATM Bell Curve shows _____ the most money for time value can be found.
- "Buy _____, sell _____!"
- The puts we buy are _____-term and ___ The Money.
- The options that we sell are _____-term for the best money per week of exposure.
- The exposure that we have from selling an option is the possibility of that option being _____.
- To manipulate time for profit, it is essential to make the total of the _____ that we sell cost more than the _____ _____ that we buy.

Reflections

Let's pause for a moment and go over ideas from this chapter. Writing your thoughts here will help you interact more meaningfully with the material. Use extra paper if you need it. We'd be very pleased if you'd share your reflections with us as well! Send copies of this sheet with your suggestions for improvement in the supplied envelope to RadioActive Trading. Thank you!

1. Do you see how the ATM Bell curve shows where both the bargain basement and full retail prices for time can be found? What do you think of using this information to your advantage?

2. From what you understand about the married put strategy, could this be used without selling options for income? Why or why not? Is this more or less attractive to you than straight stock ownership, or selling covered calls? What do you like about married puts so far? What don't you like?

3. How comfortable are you with the "exposure" of being called out, exercised, and assigned? In the covered calls strategy, often the greatest return possible is the situation of being called out. What makes an RPM different? Do you think there are ways to mitigate the risk of being assigned if you don't want to be?

4. Some strategists recommend selling an ITM call against a stock in order to receive more income, provide more security, and add to the chances of being called out. Can you see that this puts a restrictive cap on your possible return? Does it really add much to your security? Would selling a near term or long-term call is more beneficial if you did participate in such a strategy? Why?

5. Has this chapter caused you to reconsider some of the things you've been doing up to now? If so, in what areas might you change or try something new?

6. What else, if anything, have you gained from this chapter?