THE ULTIMATE GUIDE TO THE WORLD OF OPTIONS TRADING

Introduction: What You'll Learn in this Guide

Options are growing more popular every day, and why shouldn't they be? After all, with options, you can profit in a *bull market*, a *bear market*, or even a *sideways market*. You can use options to provide "***insurance***" for your portfolio, thus diminishing your risk—or you can ***leverage*** a little money into controlling a huge amount of stock. Simply put, options offer something for everybody.

In this guide you'll learn about ***calls*** and ***puts***, which can either be ***short*** or ***long***. That's right—you can have a ***long call*** or a ***short put***, a ***short call*** or a ***long put***, and by the time you're finished reading this book, it will all make sense to you!

Once you've got the basics down, we'll move on to multi-options strategies such as ***collars***, ***spreads***, ***straddles***, and ***combinations***. Each of these can be used to your advantage in helping you meet your stated investment objectives—don't ignore them just because they seem "complex." Every trader should be aware of these strategies, because if you don't, you risk being on the losing side of a game you aren't even aware you're playing.

Finally, we'll look at how to open an ***options account*** with an ***online broker***, and how ***commissions*** can eat into your profits. We'll even review some of the top online options-brokers to help you see which one sounds best for you.

Learning about options may seem like a daunting task at first. In many ways, it's like learning a new language. But once you "get it," it will begin to intuitively make sense. And then it becomes fun… And profitable! So read on and learn how you too can profit and hedge just like the big boys on Wall Street. It's easier than you might think!

Chapter 1: Beginning with Call Options

Today, the investment world presents people with a great number of choices. Instead of building mundane portfolios with common stocks, individual investors can get instant diversification with mutual funds and ETFs (exchange-traded funds), invest conservatively with bonds and other "debt instruments," or even play the commodities or foreign-exchange (forex) currency markets.

Options are yet another…well, option. But individual investors are often steered away from buying (or selling) options by brokers who say they're "too risky." Indeed, investors need special clearance from most brokerages in order to trade options. What's more, many individual investors think options are too "complicated," and thus they ignore them—but they do so at their own financial peril. That's because while options may not be right for literally *every* investor's portfolio, they are flexible financial instruments that can (and in most cases, *should*) be used by investors of all risk tolerances, experience levels, and portfolio sizes.

Some Clarifications

First, let's cut through the confusion: The "options" you hear about in the news most of the time are ***employee stock options***, and not the same as the options we're talking about. Employee stock options are contracts between a corporation and one of its employees often upper-level management, at least in the stories that make the news. ***Exchange-traded options***, the subject of this guide, are contracts between two individuals: a buyer and a seller. In other words, the options-backdating scandals so frequently on the front page of the Business section have *nothing* to do with the kinds of options you can buy and sell through OptionsXpress or another broker.

Secondly, there are options for most every kind of security. There are options on foreign currencies, commodities, and even more sophisticated financial instruments., but this guide will deal exclusively with ***equity options***, which are options that give their owner the *right* to buy or sell shares of a given stock at a given price, on or before a given date.

Finally, there are two types of option contracts: ***Call options***, which give the holder the *right*, but not the obligation, to *buy* the underlying stock; and ***put options***, which give the holder the *right*, but not the obligation, to *sell* the underlying stock. Most beginners are confused by puts so we'll begin with calls. Actually, when most people generically speak of "options" they're referring to call options on common stock.

A 'Real' World Example

To begin, let's back out of the stock market for a moment and look at how options work in real estate.

Let's say your rich uncle left you $300,000 and you were convinced that the best thing to do with it was purchase a new home. The day after learning of his bequest, you find a great place on the market for exactly $300k. The problem is, you don't get the inheritance until your twenty-first birthday, which is three months away.

You tell the home-seller that you'll gladly pay $300,000 in one lump sum if he's willing to wait three months to cash the check. Not surprisingly, he laughs in your face, and tells you to come back in three months when you have the money.

The real-estate market is in bad shape, so there's a decent chance it will still be on the market in three months' time. But this house is a bargain—it would have sold for at least $450,000 a year or two ago—and you're afraid that someone might come along and snatch it up before you get your hands on the $300k. So you make an offer to the home-seller: "What if I give you $3,000 as a down-payment right now?" you ask.

After thinking about it for a while, the home-seller makes a counter offer: You give him the money and he promises not to sell the home for three months. But the $3,000 will be treated as a fee—or *premium*—and not as a down-payment. You'll still owe the full $300k at the end of three months, and if you don't come through, he gets to keep the $3,000.

The above is almost precisely how equity options trade in the open market.

Options Standardization

Almost precisely. First, let me clarify that options *do* exist in the real-estate market and they *do* work exactly as described above. The difference with options on stock is that you don't have to reach a detailed agreement with an individual seller in order to buy an option. Stock-market options are *standardized*.

This wasn't always the case. There was a time before "exchange-traded" options, and it wasn't that long ago. Options, in their current form, have only been around since 1973, and they've only gained their current level of popularity recently. For example, in 1999, the volume of options contracted traded in the U.S. stood at around 500 million a year. By 2006, that number had leaped to more than two billion.

Standardization is the key to making options widely accessible to individual investors. Whereas a real-estate option deals with a particular house, of which there is only one in the world, a stock-option contract deals with 100 shares of a given stock, for which there are *millions* exactly alike. To understand what is meant by standardization, let's take a look at an example option quote:

Ticker	Strike	Exp.	Last	Bid	Ask
QXBHX.X	22.50	Aug	2.58	2.50	2.54
QXBHE.X	25.00	Aug	0.75	0.7	0.78

Above are two quotes for August options on eBay (Ticker: EBAY). At the time this quote was retrieved (July 28, 2008), eBay was trading at $24.78 per share.

Each ***series*** of options has its own ticker symbol. A series is defined by three criteria: Issuer (in this case, eBay); strike price ($22.50 for QXBHX.X and $25.00 for QXBHE.X); and expiration (August for both series).

The ***bid price*** of an option is the price at which you can sell the option; the ***ask price*** is the price at which you can buy the option. We're dealing with buying call options to start, so let's focus on the ask prices.

Options are purchased in ***contracts***, which, thanks to standardization, are always in terms of 100 shares. Therefore, one contract of QXBHX.X, with a $2.54 ask price, would cost you $254 (plus brokerage commission, which we will ignore until later in this guide). As the holder of that contract, you would have the right—*but not the obligation*—to buy 100 shares of eBay at the ***strike price***, in this case $22.50, any time between now and ***expiration***, in this case the Saturday following the third Friday of August.

Note: Options always expire on the Saturday following the third Friday of the month.

Three Examples of Call Options

If, for example, eBay went from $24.78 to $30, you—as the holder of one QXBHX.X contract—would have the right to purchase 100 shares at just $22.50 (the strike price). You could then turn around and sell them for $30 each, turning an investment of $254 into a quick profit of $496.

Here's how:

Your option contract, purchased for $254, gives you the right to buy 100 shares at $22.50. When the stock reaches $30, you exercise your option and buy 100 shares at $22.50 for $2,250. You then immediately turn around and sell them for $3,000. All said and done, you spent $2,504 ($254 + $2,250) and received $3,000, for a profit of $496 ($3,000 - $2,504).

Now what if the stock had instead fallen to $20 a share? Well, remember: Options give you the right, *but not the obligation*, to buy a stock at a given price. There would be no point in buying shares at $22.50 when you could buy them for $20 on the open market, so you would simply let your option *expire worthless*. You'd be out $254, but just as with shares of common stock, you can't possibly lose more than your initial investment when buying options.

Finally, let's look at what would happen if the stock stayed exactly where it was. eBay was at $24.78 when you purchased your option contract on July 28, and, in this example, after bouncing around for three weeks, it closed the third Friday of the month right back at $24.78. Well, your option contract gives you the right to purchase shares at $22.50, so you can still make $2.28 a share by exercising your option. You would thus make $228 ($2.28 * 100) and end up with a net loss of $26 ($228 - $254). Still, a loss of $26 is a lot better than a loss of $254, so it would make sense to exercise your option and mitigate your losses.

'In-the-Money' and Intrinsic Value

In the example above, you purchased an option that was ***in-the-money***. In the case of a call option, that means the strike price is lower than the price of the underlying stock at the time it is purchased. An option that's "in-the-money" is said to have ***intrinsic value***.

For example, an option with a strike price of $22.50 and a current stock price of $24.78 could be exercised immediately for $2.28 in per-share profit. It thus has $2.28 of *intrinsic value*. But notice that the ask price for the contract is $2.54 per share. If $2.28 of the $2.54 is intrinsic value, what is the remaining $0.26?

Time Value

The difference between an option's ask price and its intrinsic value is commonly referred to as ***time value***—although this is not a universally accepted term. Some traders prefer "speculative" value as an alternative, but for now, let's stick with the term "time value."

How time plays a factor is obvious when one looks at options with the same strike prices but different expirations. For example, here are some more eBay option quotes:

Ticker	Strike	Exp.	Last	Bid	Ask
QXBHX.X	22.50	Aug	2.58	2.50	2.54
QXBIX.X	22.50	Sep	2.80	2.93	2.98
QXBJX.X	22.50	Oct	3.60	3.30	3.35
QXBAX.X	22.50	Jan	4.25	4.10	4.20

The only difference between QXBHX.X (with an August expiration) and QXBIX.X (with a September expiration) is their expiration dates, and yet the ask price for QXBIX.X (September expiration) is $0.44 higher. The ask prices for the later-expiring options are higher still.

Why? Well, it should be obvious: The longer you have to exercise an option, the greater the chances that the stock will go up and thus give the option intrinsic value.

'Out-of-the-Money'

So far, the options we've been dealing with have been "in-the-money." Again, this means that the *strike price* of the call option—the price at which the holder of the option has the right to buy the underlying stock—is lower than the current price of the stock itself. Thus, the option has "intrinsic value."

But what about our other example from earlier, QXBH**E**.X? Let's review:

Ticker	Strike	Exp.	Last	Bid	Ask
QXBHE.X	25.00	Aug	0.75	0.7	0.78

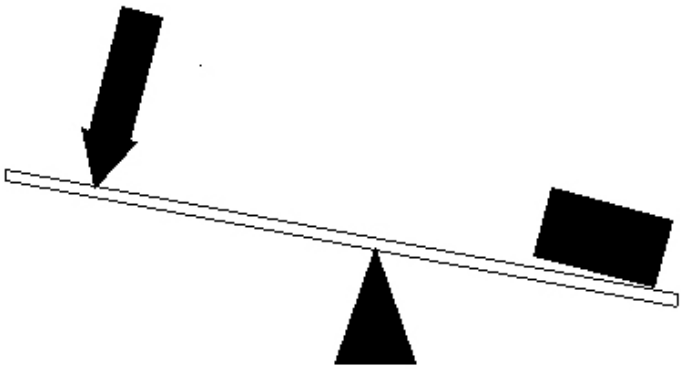
If you bought a QXBH**E**.X contract, with a strike price of $25, you wouldn't want to immediately exercise the option. After all, you could buy shares for $24.78—the current stock price, in this example—on the open market, so why would you want to pay $25 instead? This option has *no* intrinsic value, and thus the ask price of $0.78 is all time value.

So let's imagine you purchased one QXBH**E**.X contract for $78 ($0.78 ask price * 100 shares—remember, each options contract is for 100 shares) and the stock price of eBay hit $30 before expiration. You could then exercise the option and buy 100 shares at $25 (the strike price) and immediately sell them for $30, thus making $5 profit per share. Your total net would be $422 ($5 per share * 100 shares - $78 for the option's premium) on an investment of $78—a 540% gain.

One important concept: An out-of-the-money option is considered to have *no* intrinsic value—not negative intrinsic value. In the example above, with a stock price of $24.78 and strike price of $25, the option is considered to have $0 intrinsic value—not -$0.22.

Options Advantage #1: Leverage

By now one advantage of buying call options instead of actual shares of stock should be apparent: *Leverage*.



In the case of QXBH**X**.X, which had a $22.50 strike price and a $2.54 ask price, you could control 100 shares of eBay for $254. If, instead, you had to purchase 100 shares of the actual stock, it would cost you $2,478. If you actually had $2,478 to play with, you could instead buy nine options contracts and control 900 shares—and still have some change.

In the case of our out-of-the-money option, QXBH**E**.X, with its $25 strike price and $0.78 ask, you could control 100 eBay shares for just $78. Or, if you wanted to spend up to $2,478, you could buy 31 contracts and control 3,100 shares.

Options allow you to control more shares of stock for less money.

To Exercise or Not To Exercise

But in both examples we used, you still had to come up with the money to buy 100 shares at the strike price. What if you didn't have the $2,250 from the first example or $2,500 from the second? Would you have to let your option expire unexercised?

No! In fact, only around 10% of options are *ever* exercised. Instead, it's much easier to simply *sell your option contract*. This achieves the same effect without having to go to the hassle (and commissions!) of buying and selling the underlying shares.

For example, if eBay hit $30 at 3:59 P.M. on the third Friday of August, the value of the QXBH**X**.X contract, with the $22.50 strike price, would be $750. We know this because each share of the contract would have $7.50 of intrinsic value and no time value, since there would be no time left. Instead of exercising the option and buying 100 shares at $22.50 and then selling them for $30 ($750 profit), you could simply sell the options contract and let the buyer do it.

Even better: If eBay hit $30 well before the last minute of the last day before expiration, the contract would still have *time value*. That's because the stock could go higher than $30 before expiration, and thus, your option contract would be worth more than just its intrinsic value, and thus you could make more money by selling the contract than by exercising it.

The Big Picture

Now the advantages of using options for leverage should really come into focus.

Let's stick with QXBH**X**.X, with the $22.50 strike price. Imagine you think eBay is going to do really well between now (July 28) and August 16, the options' expiration day for August. You could either spent $2,478 to buy 100 shares of eBay or spend $254 to purchase one contract worth 100 shares.

If eBay hit $30 at 3:59 P.M. on August 15, and you held 100 shares of the stock, you could sell them for $750 profit. Or, if you had instead purchased an options contract, you could sell it for $750, which would be $496 profit ($750 – the $254 purchase price of the contract).

If you purchased shares, you would have made $522 on an investment of $2,478—a 21% gain.

If you purchased an options contract, you would have made $496 on an investment of $254—a 195% gain.

It's a matter of 21% vs. 195%.

Or, looking at it another way, if you used the same amount of money to buy options that it would have taken you to buy 100 eBay shares ($2,286 for nine contracts vs. $2,478 for 100 shares), you would have made $4,446 on the options versus just $522 on the shares.

Now for the Downside

But what if instead of going to $30, eBay's share price fell to $22.49? Options with a $22.50 strike price would be worthless—there would be no intrinsic value in them, and as they drew nearer to expiration, their time value would rapidly depreciate. If you purchased one contract for $254, you would lose all $254—and if you purchased nine contracts for $2,286, then you'd be $2,286 poorer.

Conversely, if you bought 100 shares at $24.78 each, you'd have a paper loss of $229 if the stock closed at $22.49 on August 15—but you wouldn't be obligated to sell for a loss. You could still

hold on to the stock and hope that it climbed higher. But even if it didn't and you eventually sold at $22.49 per share, your $229 loss on an investment of $2,478 would represent a 9.2% loss—versus a 100% loss if you bought options instead.

This is the double-edged sword of leverage: It works for you when a stock goes up, and against you when a stock goes down. But there are ways you can mitigate the risks you take.

Upping the Ante

Maybe you've already noticed that your leverage is increased by two factors: (1) The further out-of-the-money the option's strike price is, and (2) the more imminent its expiration date.

Conversely, leverage and risk are lessened by buying options that are in-the-money (the "deeper" in-the-money they are, the less leverage and risk) and have a lot of time value.

Let's go back to the QXBH**E**.X example, with the $25 strike price and $0.78 ask. By purchasing one contract of this series, you would spend $78 to control 100 shares of eBay. If the stock hit $30 one minute before expiration, your profit would be $422 on an investment of $78—541%.

Consider this: A +21% move in eBay's stock price would generate a 195% gain on an options contract with a $22.50 strike price, and a 541% profit on a contract with a $25 strike price.

What if, instead, you purchased QXBH**Y**.X, with a $27.50 strike price?

Ticker	Strike	Exp.	Last	Bid	Ask
QXBHY.X	27.50	Aug	0.13	0.12	0.14

In this case, you could have purchased the contract for just $14 ($0.14 ask price * 100 standard shares per contract). At expiration, the contract would be worth $250 ($2.50—the difference between the strike price of $27.50 and the share price of $30—multiplied by 100 shares), which would result in a net gain of $236 ($250 - $14) or 1,686%.

Or let's take things even further. Suppose you were absolutely sure that eBay was headed to $38—perhaps you had a vision or your neighbor's cat told you. You could purchase a contract of XBAH**U**.X, with a $37.50 strike price, for $1. And then, if eBay did hit $38 at 3:59 P.M. on August 15, the intrinsic value of the contract would be $50 (the $0.50 difference between the share price and the strike price * 100). If you invested $100 and bought 100 contracts at $1 each, you'd have a net gain of $4,900 or 4,900%.

Don't Try This At Home

Of course, using options in such an aggressive manner amounts to little more than gambling. The example above is not a recommended investment strategy but is simply intended to illustrate how options can be used to leverage relatively limited funds for comparatively larger profits.

Of course, if you do have a hunch that a stock will experience a rapid gain, it's okay to make a play similar to the one outlined above—so long as you do it with money you can afford to lose. Options don't have to be risky, but out-of-the-money calls with little time before expiration *are* risky, and there's a very good chance you'll lose your entire investment.

American-Style vs. European Style Options

In the examples above, we've used the "3:59 P.M. on the third Friday of the month" example because it is hard (impossible) to predict the time value of options when there is still meaningful time left before expiration. It must be reiterated here, however, that ***American-style options*** can

be exercised or sold at *any time* (while the market's open) prior to expiration. When an options contract still has time value, you'll make even more than in the examples listed above. What's more, you can sell a contract that doesn't appear to be going your way and has no intrinsic value—but still some time value—to mitigate your losses.

European-style options are the alternative. These cannot be exercised at any time prior to expiration, but only *at the time of* expiration. This style, which has nothing to do with the underlying company's nation of origin, is used mostly for options that trade "over the counter" rather than on an options exchange. For the most part, European-style options can be safely ignored.

Important Concepts to Remember

- ***Call options*** give the holder the right—*but not the obligation*—to buy a given stock at a specified price before their expiration date.
- When people generically talk about "options," they are almost always talking about call options.
- ***Equity options***—the subject of this guide—have nothing to do with the employee stock options that have been the cause of many corporate scandals as of late.
- Options are traded in ***contracts*** of 100 shares.
- The quote of an options contract is priced per-share, and must be multiplied by 100 to get the real contract price.
- The ***strike price*** of a call option is the price at which shares of the underlying stock can be purchased.
- Options contracts expire the Saturday after the third Friday of the given month.
- A call option with a strike price lower than the current share price of the underlying stock is considered ***in-the-money***.
- A call option with a strike price higher than the current share price of the underlying stock is considered ***out-of-the-money***.
- The ***intrinsic value*** of an in-the-money call option is the difference between the share price of the underlying stock and the strike price of the option.

- Out-of-the-money options have no intrinsic value, and *not* negative intrinsic value.
- The difference between the per-share contract price of an option and its intrinsic value is its ***time value*** or ***speculative value***.
- You don't have to exercise your options to make a profit—you can sell the contract on the open market. Only about 10% of options contracts are actually exercised.
- Options afford investors financial ***leverage***—they can control more shares with less money.
- Leverage is a double-edged sword: It compounds the gains you make if the underlying stock goes up, but also compounds the losses you endure if the stock goes down.
- The "deeper" in-the-money and more time value an option has, the less risky it is.
- It is fairly easy to lose your entire investment with options—especially out-of-the-money options with little time value.

Chapter 2: Writing Calls, Covered and Naked

Thus far, we've looked at options from the perspective of the buyer. Yes, we've talked about selling options contracts *after they've been purchased*, but you can also sell options *short*—just as with stocks.

Remember our real-estate example? In that case, there was an option buyer and an option seller. In order for the buyer to purchase the contract, the seller had to *write* it first. The options market for stocks works the same way.

Mr. Market Maker

There is one minor difference: Since options contracts are standardized, ***market makers***—middlemen—stand ready to buy and sell options contracts. Although there doesn't have to be one buyer for every seller, the spread between the bid and ask prices will shift to encourage balance. For example, if there are more sellers than buyers, the market maker will lower the bid and ask prices to encourage more buyers and discourage sellers until he's achieved relative parity. So while the balance between buyers and sellers may not be perfect, it is usually very close to 50-50.

An Example of Options Writing

The best way to understand "going short" on an options contract is to think of it this way: In order for you to buy an options contract, someone has to create it first. This process is called ***writing***—just as the homeowner physically *wrote* a contract in our real-estate example.

Imagine you own 10,000 shares of Intel (Ticker: INTC) which, at the time of this writing, was worth $21.67 per share. You don't think the stock is going to do much in the near future, but you expect it to perform really well by the end of the year. You could sell the stock for $216,700 and buy a short-term CD and earn interest for a few months and then buy it back—but the proceeds

from the stock sale would be subject to capital gains taxes, which would greatly cut into your rate of return. Luckily, there's a way you can earn money on your $216,700 without selling your stock and subjecting yourself to the Tax Man.

In our real-estate example, the homeowner earned a $3,000 *premium* for writing the option contract for the buyer. But thanks to standardization, stockholders don't need to hunt down buyers—they can write contracts and sell them to the market maker.

In the case of Intel, which was trading at $21.67 on July 28, you could write a call option with a strike price of $24 and an expiration of September 20, and receive a premium of $0.30 per share. If you wrote 100 contracts, covering all 10,000 of your shares, you would receive $3,000.

> Note: These numbers are not being pulled from thin air. Options quotes can be looked up online at http://finance.yahoo.com and several other sites. On Yahoo! Finance, enter a stock ticker symbol and then click "Options" on the left sidebar.

To be clear: You own 10,000 shares of Intel and you want to generate some income on your investment without selling the shares. So you simply place a *sell order* for 100 contracts of NQIB.X—the Intel options series with a $24 strike price and September expiration—and you receive $3,000 in your brokerage account… It's that simple!

But, of course, there's a catch: As the seller of 100 call option contracts worth 100 shares each, you now have the *obligation* to sell 10,000 shares of Intel at $24. If the stock goes to $30 (for example) before expiration, your contracts *will* be exercised, and you'll have to sell your 10,000 shares at $24 apiece. In this case, you will have lost the potential of $6 per share, and gained just $0.30 per share in premium—your net "loss" would therefore be $5.70 per share.

Of course, "loss" is in quotes because you would have really lost nothing, assuming you purchased the Intel shares for less than $24. Still, imagine that Intel went to $50 or $100 a share, and you were contractually obligated to sell your shares for $24. Even though your loss would only be theoretical, it would still be painful.

Covered vs. Naked

In the example above, we were examining what are known ***covered calls***. This term refers to writing calls for which you own the underlying stock. Writing covered calls is one of the most conservative investment strategies an individual can employ—so much for options being universally "risky." Even Warren Buffett (pictured, right) recommends generating investment income with covered calls!

But the opposite of covered calls—***naked calls***—are very risky indeed. For these are call-option contracts written by investors who *do not own* the underlying stock.

Sticking with our earlier example, let's assume that you think Intel is going nowhere between now and October. Now, you don't own any shares of Intel—why would you want to own a stock you think is going to be flat for the next two months?—but you still want to profit from this hunch you have.

So, just as in the example above, you write 100 NQIB.X contracts with a $24 strike price and September 20 expiration. Just as in the example above, you're immediately paid $3,000 ($0.30 per-share premium * 10,000 shares). And just as in the example above, if Intel closes September 19 at $24 or lower, you'll pocket the three grand and live to speculate another day.

But what if Intel goes to $30? Or $50? Or $100?

In any such case, you will be obligated by your contracts to sell 10,000 shares at $24 apiece. Where do you come up with the shares? You have to buy them on the open market—for $30, $50, or $100—whatever the current price is.

Let's imagine your contracts are exercised when Intel is at $30 per share. You would then be contractually obligated to sell 10,000 shares at $24 each. If you don't own 10,000 shares, you would have to go into the open market and purchase them for $30 apiece--$300,000 in all—and then sell them for $24. Your net loss would be $57,000 ($6 per share * 10,000 shares – the $3,000 premium you pocketed).

As you can no doubt see, writing naked calls is a very risky proposition, and because of this, not everyone is approved by their broker to do it. In order to write naked calls, you have to have a *margin account* and enough value in your portfolio to cover reasonably expected losses. In other words, if you have an account with $500 worth of Microsoft shares, don't expect your broker to allow you to write a naked call for $200,000 worth of Intel!

Naked Calls: High Leverage and High Risk

Clearly, writing naked calls is an exceptionally high-risk investment activity. So why bother doing it? Well, as with most cases, with great risk comes the potential for great reward.

Looking at the previous example, what is your rate of return if you sell NQIB.X ($24 strike price) contracts and Intel closes at or below $24 on expiration day? Your investment in this case was $0 and your reward would be $30 per contract. That's an *infinite* rate of return!

We've been ignoring commissions for illustration purposes thus far, but given this infinite-return scenario, it's appropriate to break that tradition for the time being and look at what your rate of return, with commissions, would be.

Options Xpress charges $1.50 per options contract, with a minimum fee of $14.95. We'll use their rates for this example.

If you sold 100 NQIB.X contracts for $30 per contract ($0.30 per share), you'd receive $3,000 less $150 ($1.50 per contract * 100 contracts) commission, or $2,850. If the contracts expired worthless and unexercised, you would keep your $2,850 profit, which would have been generated by a $150 investment—that's a 19,000% rate of return, including commissions.

Limited Profit, Unlimited Losses

While a 19,000% return on investment is awfully appealing, it's important to once again reiterate the dangers of writing naked calls.

When you *buy* a call option, your losses are limited to the purchase price of your contracts, plus commissions. Your potential profits, however, are unlimited.

But when you *write* a naked call option, your profit is limited to the premium you receive, less commissions, and *your losses are unlimited*. The 19,000% rate of return looks pretty good, but the most you could have possibly made on that trade is $3,000. If Intel had gone to $100 or $1,000 a share, your losses would have been much, much greater than the $3k you gained.

Your broker will perform a margin call if your paper losses get too great, and you can always close out your position (see below) before things get too far out-of-hand, but if the price of the underlying stock gaps—i.e. the stock makes a sharp move to the upside—you could find yourself in a lot of trouble.

Conversely, when writing covered calls, your losses are limited to *potential* losses. After all, if Intel goes to $1,000 a share and you're forced to sell at $24, you would lose the *potential* of $976

per share, but no *actual* loss would take place unless you paid less than $24 for the shares when you originally purchased them.

Closing Out Your Position

But just as when you're "long" a call option (i.e. you purchase the contract), you can cancel out a "short" position (i.e. when you write the contract—either covered or naked) before expiration.

For example, imagine you have sold 100 contracts of NQIB.X, the Intel series with a $24 strike price and September expiration, and Intel's stock goes from $21.67 to $25 the day you write the option for $0.30 a share. In that case, the value of each contract is likely to go from $30 ($0.30 * 100) to at least $130 ($1.30 * 100) since each share in the contract would now have $1 of *intrinsic value* ($25 share price - $24 strike price) in addition to the $0.30 of *time value* it had before.

Let's imagine that your contracts are not immediately exercised—contracts rarely are prior to expiration. If you worry that Intel could go higher yet, you could ***close out your position*** by buying 100 offsetting contracts. Now you'd have the *obligation* to sell Intel shares at $24, but also the *right* to buy them at $24—your net position would be null, and thus, both contracts would effectively be cancelled.

What would you have lost in this case? Well, you earned $3,000 for selling 100 contracts (worth 10,000 shares) at $0.30 per-share premium. But then you chose to go out in the market and buy 100 contracts at a $1.30 per-share premium to cancel out your position and avoid further losses. Your income was $3,000 and your expenses $13,000—you lost $10,000. But if Intel had climbed further to $30 or $35 later in the month, you could have lost much more.

How Volatility Matters

It's important to understand that when you write an options contract, you are betting *against* volatility. The best way to understand this is to look at two stocks with similar share prices but vastly different options prices.

For example, on July 29, 2008, DirecTV (Ticker: DTV) closed at $26.80 per share. Barclays (Ticker: BCS), the UK banking firm, closed at $26.85 per share. The difference in share price, obviously, was just $0.05.

But now let's take a look at some of DirecTV's option series:

Ticker	Strike	Exp.	Last	Bid	Ask
DTVHD.X	20.00	Aug	5.50	6.70	6.90
DTVHE.X	25.00	Aug	1.85	2.20	2.30
DTVHF.X	30.00	Aug	0.15	0.05	0.15

And now, Barclays:

Ticker	Strike	Exp.	Last	Bid	Ask
BCSHD.X	20.00	Aug	6.50	6.70	7.30
BCSHE.X	25.00	Aug	2.00	2.40	2.90
BCSHF.X	30.00	Aug	0.40	0.25	0.55

The first option on each list has a strike price of $20. Since DirecTV closed at $26.80 and Barclays at $26.85, this means that DTVHD.X and BCSHD.X have *intrinsic value* of $6.80 and $6.85, respectively.

But look at the difference in the ask prices of the two series: The market maker is willing to sell DTVHD.X for $6.90, while he's demanding $7.30 for BCSHD.X. Since we know DTVHD.X has $6.80 in intrinsic value, a $6.90 ask price means it only has $0.10 in time value. Conversely, BCSHD.X has a little more intrinsic value—$6.85—but a *lot* more "time value"—$0.45.

Since both series have the same expiration date, why should the right to buy Barclays at $20 have a much higher per-share premium than the right to buy DirecTV at $20, given that there's only a nickel's difference between their share price?

The answer is *volatility*. Take a look at the five-day performance of the two stocks on the chart below:

Notice that DirecTV, as represented by the blue line, hugs the 0% baseline pretty closely—at least when compared to Barclays, as represented by the red line, which is all over the chart.

Based on past experience, there's a greater chance for Barclays to make a bigger move—one way or the other—than for DirecTV to do the same. Thus, the "time value" of Barclays' options is worth more. This is why many traders prefer the term ***speculative value*** to "time value." After all, if "time" were the only thing being measured, two stocks with near-identical share prices and identical strike prices and expirations should have near-identical premiums, right? Well, not when the underlying stocks have very different histories of volatility.

Beta as a Measure of Volatility

Time for a little stock-market review: A stock's ***beta coefficient*** is a measure of its past volatility. This is an important statistic for options traders to pay attention to since the more volatile a stock, the more expensive its option premiums are likely to be.

In the examples above, DirecTV has a beta of 0.67. This means that for every 10% the broad market has gone up, DirecTV has historically gone up just 6.7%. By contrast, for every 10% the market has gone down, DirecTV has fallen by 6.7%.

A stock with a beta of 1.0 has mirrored the market's performance. Stocks with betas of less than 1 (but greater than 0) have been less volatile than the broad market, and stocks with betas higher than 1 have been more volatile. Barclays, for example, has a beta of 1.2 as of the time of this writing.

There are stocks that have negative betas. This means that they have historically gone up when the market has gone down, and vice versa.

The Advantage of Writing Calls

Most laypeople who don't invest think you can only make money when stocks go up. People with a little more experience know you can also profit during a down market by shorting stocks (or buying *put options*—which we'll look into in the next chapter). But writing calls allows you to make money during a flat or sideways market, too!

One way you can do this is by writing naked calls. Of course, as we've discussed, this can be a dangerous strategy.

Another way is by hunting for options that you think are overpriced, and then selling them while simultaneously buying the underlying stock.

For example, CIT Group (Ticker: CIT) closed at $8.49 per share on July 29, 2008. Let's say you don't expect it to break $12.50 by mid-September, nor do you think it's likely to fall much lower than $8.49. If you're right, you could profit on your hunch by buying 1,000 shares of CIT Group for $8,490 and simultaneously selling ten contracts of CITIV.X ($12.50 strike price, September expiration, $0.30 ask price) for $300.

The above move would reduce the *cost basis* of your CIT Group shares to $8.19, since you paid $8,490 for them but were *paid* $300 for writing the CITIV.X contract—your net expense would be $8,190 ($8,490 - $300) for the 1,000 shares. CIT Group would thus have to fall lower than $8.19 per share in order for you to lose money.

Let's look at a few possible ways this position could play out:

1. ***CIT Group falls to $8 a share***. In this case, the CITIV.X contract you sold expires worthless (the outcome you want) but you have a paper loss of $0.19 per share or $190. If you sell the shares on the market, you will lose $190.
2. ***CIT Group closes on September 19 (the third Friday of the month) at $10 per share***. In this case, the CITIV.X contract expires worthless and you keep the $300 premium. What's more, you can sell the 1,000 shares you bought for $8.49 for $10, making another $1,510. Your rate of return is thus 18.4%. This is a far cry from 19,000%, but much less risky than writing naked calls.
3. ***CIT Group gets a bail-out from the federal government and goes to $20 per share***. In this case, you are forced to sell your shares at the $12.50 strike price but you keep your $300 premium. You "lose" the *potential* of selling the shares at $20, but in reality, you make money on the deal. After all, you got $300 for writing the option and you made another $4.01 per share by selling at $12.50 when you paid $8.49.

Options get a bad rap. As you can see from the many examples detailed in this chapter, options are *not* inherently risky investments—it's all about how you use them. In fact, as we'll learn in the next chapter, you can actually use options as a form of *insurance*. What could be less risky than that?

Important Concepts to Remember

- ***Writing*** an option is the process of selling an options contract that you didn't previously purchase. It can be thought of as "creating" the contract.
- Theoretically, in order for someone to buy an options contract, someone else must first create it. In reality, ***market makers*** buy and sell options contracts from individual investors and try to keep an even balance between buyers and sellers.
- If you write a call-option contract for a stock you own, it's called writing a ***covered call***. If the contract is exercised, you'll be forced to sell your shares at the strike price dictated by the contract.
- If you write a call-option contract for a stock you do *not* own, it's called writing a ***naked call***. If the contract is exercised, you'll be forced to buy shares on the open market and then sell them at the strike price dictated by the contract.
- The advantage of writing naked calls—though they are extraordinarily risky—is that you can make money with no investment whatsoever beyond broker commissions.
- The downside of writing naked calls is that your losses are unlimited, and your gains are limited to the premium you receive.
- You can always ***close out your position*** by buying an offsetting contract on the open market. This way, you don't have to worry that your contract might be exercised.
- The historical and expected volatility of an option's underlying stock greatly affects the option's premiums. The more volatile a stock is expected to be, the greater "time value"—or ***speculative value***—the option series is likely to have.
- The biggest advantage of writing calls is that you can profit in a flat or sideways market.

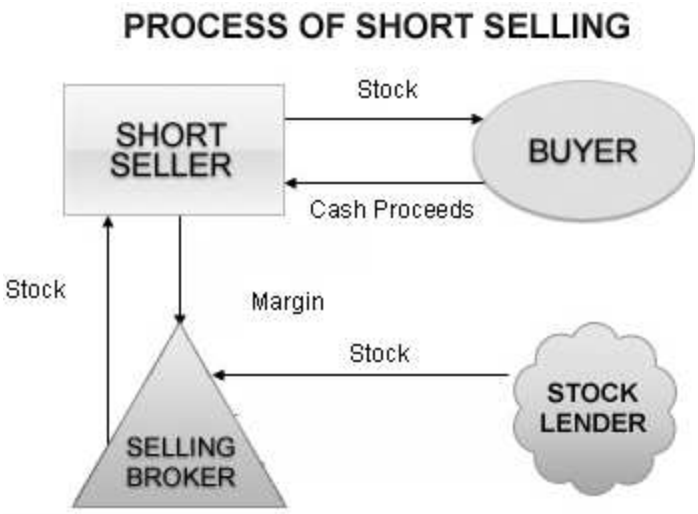
Chapter 3: The Long and Short of Puts

When you buy a call, you're hoping for the price of the underlying stock to go up. When you *write* a call, you're hoping that the price of the underlying stock goes down, stays roughly the same, or in the case of a *covered call*, goes up but not high enough for the contract you sold to be *exercised*.

But even in the case of a naked call, where you can make money if the stock goes down, you don't make *more* the more it goes down. So long as the contract is unexercised, you make your premium and nothing more. But what if you think a stock is going *down*? Is there a way to profit from such a hunch?

A Review of Short Selling

Of course there is! Most novice traders are aware of ***short selling***—the process of selling shares of a stock you do not own. How this works is you borrow shares from a broker, sell them on the open market, and then buy them back at a later date—hopefully at a lower price than you paid. In this way, you can profit by selling high and *then* buying low.



For example, let's say Bank of America is trading at $32 and you think it's overvalued. You put in an order with your broker to sell 100 shares short, and your account would be credited with $3200 in restricted funds (i.e. you couldn't take the money and blow it all on hats until you *covered* your position).

A month later, the stock has gone to $35, and if you ***covered*** your position at that price, you'd be out $3 per share or $300. You'd have to spend $3500 to buy back the shares at $35 each.

But assuming you have at least $300 in your brokerage account, you would not be forced to buy back the Bank of America shares at that time. In fact, you could leave them shorted indefinitely, although you would have to pay interest and dividends on your borrowed shares.

But let's say that eventually, Bank of America drops to $20. At this point, you decide its time to cover and close out your position, so you buy 100 shares at $20 each ($2,000) and return them to the broker. In this case, you borrowed 100 shares and returned 100 shares. The only difference is that when you borrowed them (and sold them) they were worth $35 each, and when you (bought them and) returned them, they were worth $20 each. You pocket the $15 per-share difference.

Short Selling vs. Put Buying

Short selling stocks has nothing to do with options trading, but the review above is necessary since people sometimes confuse *put buying* with *short selling*. In both cases, you profit by a stock's fall. But the mechanism for shorting a stock and buying a put are entirely different.

A put is an options contract that gives the holder the right, but not the obligation, to *sell* a stock at a certain price prior to the contract's expiration. Whereas a call gives the holder the right to *buy*, a put gives the holder the right to *sell*. This can be a bit confusing, so let's take a look at an example.

An Example of Put Buying

Let's say you're certain for some reason that shares of Coca-Cola (Ticker: KO), currently trading at $51.50 (July 31, 2008), are headed nowhere but down. You could short the stock, but there are many reasons why buying puts might make more sense for you. For example, maybe you haven't been approved for shorting, which requires a margin account.

So let's say you decide to buy a put. You look at the September put contracts and here is what you see:

Ticker	Strike	Exp.	Last	Bid	Ask
KOUV.X	42.50	Sep	0.10	0.05	0.10
KOUI.X	45.00	Sep	0.22	0.15	0.25
KOUW.X	47.50	Sep	0.50	0.45	0.50
KOUJ.X	50.00	Sep	1.10	1.05	1.15
KOUX.X	52.50	Sep	2.30	2.20	2.40
KOUK.X	55.00	Sep	4.30	4.00	4.20

Now again, we are looking at the ask prices here, since they represent the per-share premium at which the market maker is willing to sell us a contract.

KOU**V**.X, with the $42.50 strike price, gives you *the right to sell* shares of Coke for $42.50 any time between the present and expiration, which was about six weeks away at the time these quotes were retrieved.

This can be a bit confusing, so let's take our time here: A call gives you the right to buy, and a put the *right to sell*. If you had KOU**V**.X ($42.50 strike price) and the underlying stock, Coke, was trading at $51.50, it would make no sense to exercise the contract. Why would you want to use your put to sell shares of Coke for $42.50, when you could sell them without the use of your put at $51.50?

So let's say you had KOU**K**.X ($55 strike price). By exercising this put, you could sell shares of Coke to a market maker for $55. Since the current share price is $51.50, you could go into the market and buy the shares at that price, and then sell them for $51.50—a $3.50 per-share gain. Or, alternatively, you could simply sell your put contract which would increase in value as the price of the stock went down.

Intrinsic Value and Time/Speculative Value

Let's continue looking at KOU**K**.X ($55 strike price). If Coke is currently trading at $51.50, then KOU**K**.X has $3.50 of per-share intrinsic value. This put is *in-the-money* because its strike price is *higher* than the market price. This is the opposite of calls, but it makes sense if you think about it. After all, calls give you the right to buy shares at a certain price—you want to buy them for *less* than they're currently trading for. Puts, by contrast, give you the right to sell shares at a certain price, and you want to sell them for *more* than they're currently trading for. Having the right to sell shares for less than they're currently worth would be no "right" at all!

So we've established that KOU**K**.X has $3.50 of intrinsic value ($55 strike price - $51.50 market price). The per-share ask price, however, is $4.20. This means the put has $0.70 of time or speculative value.

It would not make sense to buy KOU**K**.X contracts and immediately exercise or sell them, nor would it ever make sense to buy and immediately exercise or sell any option. After all, even though KOU**K**.X gives you the right to sell shares worth $51.50 for $55, it costs you $4.20 per share for this right. If you immediately exercised KOU**K**.X, you would lose $0.70 per share (the time/speculative value).

> Example: You buy 1 KOU**K**.X contract for $420. You then buy 100 shares of Coke for $5,150 ($51.50 * 100 shares). You immediately exercise the put option, before the share price of Coke changes. You thus sell shares of Coke for $5,500 ($55 each), but you still have a net loss of $70. After all, you spent $5,570 ($5,150 + $420) and received just $5,500.

Immediately selling the contract would obviously not make sense, since the bid price (what the market maker is willing to pay for the contract) is lower than the ask price you paid.

So how do you make money with a put?

Answer: By waiting for the underlying stock to go down.

As this happens, your put will increase in intrinsic value even if its time/speculative value decays a bit. For example, if Coke fell to $45 per share on the last day before expiration, the intrinsic value of KOU**K**.X would be $10, even if its time value decayed to $0. Thus, the contract you paid $420 for would be worth $1,000.

Another Example

Let's say you have a hunch that Coke is going *much lower* by September. Consulting the put chart below, you think this hunch is worth spending $100 for 10 KOU**V**.X contracts, with a $42.50 strike price.

Ticker	Strike	Exp.	Last	Bid	Ask
KOUV.X	42.50	Sep	0.10	0.05	0.10
KOUI.X	45.00	Sep	0.22	0.15	0.25
KOUW.X	47.50	Sep	0.50	0.45	0.50
KOUJ.X	50.00	Sep	1.10	1.05	1.15
KOUX.X	52.50	Sep	2.30	2.20	2.40
KOUK.X	55.00	Sep	4.30	4.00	4.20

It should be emphasized that this is a low-probability trade. Chances are, Coke will not decline by 17% per share over the course of the next six weeks, and if it doesn't, your put will expire worthless. But you decide to spend $100 on ten contracts ($0.10 ask price * 100 shares * 10 contracts) and roll the dice.

Let's say that Coke falls to $42 per share on the last day of trading before expiration. At this point, KOU**V**.X's intrinsic value would be $0.50 per share ($42.50 strike price - $42 market price) and its time/speculative value would be essentially worthless. Thus, your total position of ten contracts would be worth $500. You would make $400 profit on an investment of $100—a 400% gain. But if KOU**V**.X had closed at $42.51, your contract would have been expired worthless.

This is an example of a high-leverage, high-risk play that should only be pursued with *risk capital*—money you can absolutely afford to lose.

Not All Is Lost

If you held your contracts from the last example until expiration and the lowest Coke ever got was $42.51, then you'd lose 100% of your investment. However, as Coke's share price steadily declined, the time/speculative value of KOU**V**.X would creep up.

Think about it: If Coke dropped to $45 the day after you purchased your puts, KOU**V**.X would still have $0 intrinsic value (its strike price would still be lower than its share price, and exercising the puts would be pointless), but clearly, if people were willing to pay $0.10 for the right to sell a $51.50 stock at $42.50 six weeks in the future, they'd be willing to pay *more than* $0.10 for that same right applied to a $45 stock. A $45 stock, after all, is much more likely to fall below $42.50 than a $51.50 stock, all other things being equal.

This is why the term "time value" can be misleading. KOU**V**.X has no intrinsic value when Coke is at $51.50 and no intrinsic value when Coke is at $45—but the value of its puts is going to go up as the price of the underlying stock declines, even as time ticks off the clock. Why should the "time value" go up as the time remaining diminishes? What's really going up are the chances that Coke will fall below the strike price. Again that's why some people prefer the term *speculative value* to *time value*.

How to Use Puts as 'Insurance'

In the last chapter, we learned it was a myth, albeit a popular one, that options are inherently risky. Writing covered calls, after all, is one of the most conservative investment activities one can undertake. Buying puts as "insurance" is another way even the most risk-averse of individuals can use options to meet their investment objectives.

Let's say you're an extremely cautious investor who owns 500 shares of Proctor & Gamble (Ticker: PG), which has a current value of $65.48 in this example. You're afraid the stock might

go down, but you're too cautious to sell—after all, what if it goes up? Well, you can buy puts to protect your downside. In this way, you are effectively *insuring* yourself against catastrophic losses.

For example, take a look at these quotes for Proctor & Gamble put series expiring October 18 (quote retrieval date: July 31, 2008).

Ticker	Strike	Exp.	Last	Bid	Ask
PGVK.X	55.00	Oct	0.13	0.10	0.20
PGVY.X	57.50	Oct	0.40	0.25	0.35
PGVL.X	60.00	Oct	0.60	0.55	0.65
PGVZ.X	62.50	Oct	1.05	1.05	1.20
PGVM.X	65.00	Oct	1.95	1.90	2.10
PGVU.X	67.50	Oct	3.10	3.10	3.40
PGVN.X	70.00	Oct	5.08	4.90	5.20
PGVV.X	72.50	Oct	7.30	6.90	7.40
PGVO.X	75.00	Oct	9.80	9.30	9.80
PGVP.X	80.00	Oct	14.60	14.30	14.80

You could buy the right to sell your shares at $55 for $0.20. This way, your losses would be limited to $10.48 per share. If Proctor & Gamble was cut in half from $65.48 to $32.74, instead of losing half of your investment, you'd be out just $10.48 per share—plus the $0.20 "insurance" premium. That might be worth your peace of mind.

Why a Put Can Be Better Than a Stop-Loss

Of course, there's another more widely known form of "insurance" on stocks—the ***stop loss***.

When you place an order to buy shares of a given stock, you can also stipulate a lower price at which you'd like the shares to be automatically sold. This is known as a *stop loss*. For example, say General Electric (Ticker: GE) is trading at $28.57. You could place a market order to buy 100 shares with a $25 stop loss. This would mean that if the stock fell to $25 or below, your broker would automatically sell the shares.

The problem with a stop loss is the possibility of ***gapping***. This occurs when there is a major decline in the price of a stock with no stops in between. For example, if GE slowly declined from $28.57 to $26 over the course of several weeks, and then, amid a broad market crash, opened the next day at $20 per share, your broker would sell your 100 shares at $20, not $25—there would be no takers at $25.

If, instead, you purchased a *put* with a $25 strike price, you would be protected. That's because the put contract would give you the right to sell your shares at $25 no matter how far below $25 they dropped.

Of course, this comes with a price. As of August 7, 2008, GE puts with a $25 strike price had $0.04, $0.22, $0.77, and $0.97 premiums for August, September, December, and January expirations, respectively. But $97 for a put contract with a $25 strike price and January expiration might be worth it to guarantee a sale price of no less than $25 for five months. It depends on your objectives as an investor and the individual particulars of the stock in question.

Using Puts on Restricted Stock

Another reason to buy puts is if for some reason you are *restricted* from selling stock you own for a set period of time. This often happens when CEOs of startups sell out to bigger firms, but it can happen to regular folks, too.

Imagine this: Your grandma leaves you 10,000 shares of AT&T (Ticker: T) in her will, but the stock is held up in probate, or perhaps you receive the stock when you hit a certain birthday. For the purpose of this example, let's say it's July 31, and you're going to officially take ownership of the shares on January 1 of the following year.

Right now, the 10,000 shares would be worth $308,100 ($30.81 per share), but what if something happens in the next five months and the share price is cut in half or worse? What if AT&T goes bankrupt? How bad would it feel to have $308,100 slip out of your hands and end up with nothing?

But even though you don't own the shares, there's something you can do to protect your inheritance: You can buy puts.

Below is a list of put series for AT&T that expire on January 17, about five and a half months from the date used in this example:

Ticker	Strike	Exp.	Last	Bid	Ask
TMC.X	15.00	Jan	0.05	0.05	0.07
TMD.X	20.00	Jan	0.18	0.17	0.20
TME.X	25.00	Jan	0.78	0.75	0.77
TMF.X	30.00	Jan	2.19	2.31	2.35
TMZ.X	32.50	Jan	3.30	3.65	3.70
TMG.X	35.00	Jan	5.07	5.35	5.45
TMU.X	37.50	Jan	7.35	7.40	7.45
TMH.X	40.00	Jan	9.70	9.55	9.70
TMV.X	42.50	Jan	10.20	11.95	12.10
TMI.X	45.00	Jan	12.85	14.35	14.50
TMJ.X	50.00	Jan	18.10	19.25	19.50
TMK.X	55.00	Jan	19.80	24.20	24.30
TML.X	60.00	Jan	28.15	29.15	29.30
TMM.X	65.00	Jan	34.45	34.15	34.40
TMN.X	70.00	Jan	38.75	39.10	39.35

To cover your position of 10,000 shares, you'd need to purchase 100 contracts.

To minimize your losses, you could buy 100 contracts of TM**F**.X, locking in a share price of $30. At the current ask of $2.35, this would cost you $23,500. That's a pretty good chunk of change! However, you might have an easy time getting a loan to cover the expense, so long as you pledge your inheritance as collateral.

If you pursue this strategy, the worst that could happen would be AT&T falling under $30 per share, and once you received your inheritance, you could sell your 10,000 shares at $30 (no matter how far they've dropped). You'd thus receive $300,000, but you'd have spent $23,500 (plus interest if you borrowed the money). Still, at least you'd be able to sleep every night from now until January 1 knowing that this would be the *worst-case* scenario!

A second strategy would be to protect yourself only from catastrophic loss. You could buy 100 contracts of TM**D**.X, locking in a $20 share price, for just $2,000. Or you could buy 100 TM**C**.X contracts, guaranteeing your right to sell at $15 per share, for just $700. Seven hundred dollars might be a small price to pay to ensure your inheritance is not completely wiped out by a severe stock-market crash

Now what if the share price of AT&T goes up before you receive your shares? Well, that would be good news. Even though your puts would expire worthless, you'd want them to. After all, you don't complain when you go a year without using your fire insurance, and that's what buying puts in this case would be—*insurance*!

Married Puts

One final put-buying strategy before we move on to selling puts: ***Married puts***.

Married puts are a lot like buying puts for insurance on shares you already own. The difference is that with married puts, you don't already own the shares—you buy them at the same time you buy the puts.

Some critics say this strategy is foolish. After all, you buy a stock because you think it's going to go up, and you buy puts because you think the stock is going down to down—the two seem to be

mutually exclusive. Well, consider this scenario: A company is a week away from a big earnings announcement. Wall Street has been watching the company carefully, waiting for it to produce big news this quarter. If the news is good, you know the stock will go through the roof. But if the news is anything less than excellent, there's no telling how far shares might fall. You expect the news to be positive, but you want to protect yourself on the downside. This is what married puts are for!

Situations like this happen all the time. A few years ago, when Google (Ticker: Goog) was blowing people away with its earnings each quarter, the speculative value of its calls and puts were very high even a few days before expiration (another good example of why "time value" can be a misleading concept). When Google had good news, shares went soaring. On the rare cases when the news was bad, shares plummeted. One thing you could be sure of was the stock wouldn't stay still.

If you want to buy a stock right before a huge announcement where there is a lot of volatility expected as a result, it makes sense to "marry" your stock purchase with puts. For example: You could buy 100 shares of Google, expecting it to appreciate by 20% off the announcement, but buy one out-of-the-money put contract that would protect you from a 20% loss.

Using married puts is yet another options strategy that is anything but "risky." In fact, it mitigates risk, rather than adding to it.

An Introduction to Writing Puts

So far, we've been talking about buying puts and, to a lesser extent, selling contracts we've already purchased to close out a position. But just as you can "write" a call option, you can "write" puts, too. Writing a put is selling *the right to sell a stock* at a given price prior to expiration.

Confusing, isn't it?

Many students for the Series 7 Stockbroker's exam fail based on their inability to grasp selling puts. It *is* a little difficult to wrap your head around, but it's important for you to understand all four facets of options—buying calls, writing calls, buying puts, and writing puts—in order to be a successful trader.

When you sell a put, you are selling the right to sell a stock. Another way of looking at it is you're *agreeing to buy* the stock at the specified price.

It's helpful to forget about market makers briefly and imagine that options contracts are agreements between two people, buyer and seller. When you buy a put, you buy the right to sell a stock at a given price. But who buys the stock from you if you exercise that right? Answer: The writer of the put contract!

The writer creates the contract out of thin air, and the buyer buys it from him (using the market maker as an intermediary). So if the put buyer chooses to exercise the put, he is allowed to "put" the stock to the put seller.

Remember: There are two sides of every trade. When the call buyer has the right to buy stock, the call writer has the obligation to sell it to him. And when the put buyer has the right to sell stock, the put writer has the obligation to buy it from him. Options buyers have rights; options writers have obligations.

Why Go Short on Puts?

When you buy a financial security—be it a stock, a call, a put, or any other instrument—it's known as going "long." When you sell a financial security that you do not own, it's known as going "short." Thus, when you sell a put contract, you are said to be "shorting" the put.

This is confusing because of the relationship between buying puts and shorting stock, discussed earlier. But when you short a put, you are essentially agreeing to buy a stock at a given price in exchange for a premium.

The primary reason you'd do this should be clear: *To collect the premium*.

For example, take a look at these August puts for Amazon.com (Ticker: AMZN). The prices were retrieved on August 7, 2008, just about a week before expiration, when the stock was trading at $76.95.

Ticker	Strike	Exp.	Last	Bid	Ask
ZQNTL.X	60.00	Aug	0.02	0.02	0.03
ZQNTM.X	65.00	Aug	0.07	0.05	0.07
ZQNTN.X	70.00	Aug	0.30	0.26	0.29
ZQNTO.X	75.00	Aug	1.21	1.19	1.22
ZQNTP.X	80.00	Aug	3.89	3.80	3.95
ZQNTQ.X	85.00	Aug	8.10	8.05	8.20
ZQNTR.X	90.00	Aug	13.20	12.95	13.10

The put series with $60, $65, $70, and $75 strike prices are all "out-of-the-money," meaning they have no intrinsic value because the current share price, $76.95, is higher.

An Example of Put Writing

Let's look at ZQNT**O**.X, with the $75 strike price. You could write these puts for $119 per contract ($1.19 per-share bid price is what the market maker is willing to pay you for writing the contract). You would immediately receive $119 per contract you wrote, and you would be obligated to buy 100 Amazon shares at $75 each for every contract.

If the share price stayed above $75 for the next six days of trading, then the puts would expire worthless (your desired outcome) and you'd keep the $119 per contract. If Amazon shares fell below $75 and the puts were exercised, then you'd have to buy shares at $75, but you'd still keep your $119 premium.

Let's say shares fell from $76.95 to $73.81 before expiration—a 4% drop in just over one week—and you had written one ZQNT**O**.X contract and received $119. Now the put would be

exercised, and you'd have to buy 100 shares for $75, or $7,500 total. You could then immediately sell them for the current share price, $73.81, or $7,381 total. Your loss would be $119 ($7,500 - $7,381), but remember, you received $119 for the premium, so in actuality, you'd break even.

You can probably see now why put writing is attractive. By writing a ZQNT**O**.X contract with a $75 strike price, Amazon could fall from $76.95 to $73.81 and you'd still break even. If it fell by any less than this, you'd make money, and if it rose, you'd make a full $119 on a $0 investment (excluding commissions).

But just as with writing naked calls, writing puts also comes with unlimited risk. If Amazon fell to $10 a share, you'd still be obligated to buy them for $75—incurring a $65 paper loss. Of course, you can mitigate this risk by being smart and cautious, and by employing several advanced techniques that we'll explore later.

Another Put Writing Strategy

Put writing can be an ideal strategy for entering into a stock at a specific price. For example, let's say you want to buy shares of Best Buy (Ticker: BBY), but you don't want to pay more than $35 per share. Perhaps the stock's chart says it's a buy at $35—maybe this is the bottom end of a predictable trading range the stock's been in. But right now, the price is a little over $40. You could put in a limit buy order for $35 and wait until the stock reaches $35 for your order to be executed, but an even better strategy, in most cases, is to write a put.

On August 7, 2008, Best Buy was trading at $40.43. If you were willing to buy 100 shares at $35, you could write a December put contract with a $35 strike price and receive a $730 premium. That's a much better deal than simply waiting for the stock to reach your entry price of $35!

What are some of the possible outcomes of the above scenario?

1. The share price of Best Buy does not fall to $35 or below, and thus your put option goes un-exercised. You keep the $730 premium.
2. The share price of Best Buy falls below $35 and your put option is exercised. You are forced to buy the stock at $35, the price you were willing to pay anyway. You still keep the $730 premium.

Of course, the stock could fall *well below* $35—in which case, you might not like being obligated to pay $35 for it. But if you're confident that $35 is a good entry-point, why not earn some income on your desire to buy the stock, rather than simply waiting for it to come down?

Important Concepts to Remember

- Buying ***puts*** allows you to profit as the underlying stock declines in value.
- In this way, buying puts is similar to short-selling shares of a stock, but the two are not the same.
- When you buy a put, your losses are limited to the amount of premium you pay, and your potential profit is limitless. When you sell a stock short, your losses are unlimited and your maximum profit is the amount you receive for making the sale.
- Buying puts is much less risky than ***short-selling*** stocks, and thus, it is easier to get broker clearance to buy puts.
- As the owner of a put contract, you have the right (but not the obligation) to sell a stock at a given price, before expiration. Your hope is that the stock goes down, so that you can (theoretically) buy shares at the lower market price, and sell them for the higher strike price of your put contract. In reality, you are more likely to simply sell your put contract, which will increase in value as the price of the underlying stock falls.
- Puts can be used as ***insurance*** on shares of stock you already own. By having the right to sell the stock at a certain price, you are protected from bigger losses.
- A put can be better than a ***stop-loss*** since there is no possibility of ***gapping*** with a put.
- Puts are a great way of getting around restrictions placed on selling stock.

- A ***married put*** is when you simultaneously buy a stock and puts on the stock. Thus, you own the stock and you own the right to sell the stock at a certain price. This is a good strategy for entering highly volatile stocks shortly before an earnings announcement or some other event.
- By ***writing a put***, you sell the right *to sell* a stock at a given price—essentially, you *agree to buy* the stock at a given price in exchange for a premium.
- Writing puts can be a great idea if you want to enter a stock at a price lower than the current share price. Instead of placing a ***limit order***, you can write a put, the main difference being you'll receive a premium for writing a put.

Chapter 4: Putting It All Together

You've now been equipped with the basic knowledge you need to understand more advanced options strategies. But before we go on, let's reiterate and underscore the basic concepts of the four types of options positions.

The Four Types of Options Positions

There are four types of options positions you can take. They are:

1. Buying calls (long calls)
2. Writing calls (short calls)
3. Buying puts (long puts)
4. Writing puts (short puts)

Each type of position has its own goal, maximum loss, and maximum gain, as exemplified by the chart below:

	Goal	**Maximum Gain**	**Maximum Loss**
Buying calls	Stock price to go up, thereby increasing the value of the call contract	Unlimited	Premium paid
Writing calls	Contract to expire worthless -- doesn't matter if stock price goes up, down, or stays the same, so long as the expiration price is lower than the strike price	Premium received	Unlimited
Buying puts	Stock price to go down, thereby increasing the value of the put contract	Unlimited	Premium paid
Writing puts	Contract to expire worthless -- doesn't matter if stock price goes up, down, or stays the same, so long as the expiration price is higher than the strike price	Premium received	Unlimited

Call buyers want the stock price to go up; put buyers want the stock price to go down. A mnemonic trick from remembering this is *call up* and *put down*.

The writers of calls and puts do not care so much if the price goes up or down—they just want the contracts to expire worthless. Worthless expiration allows the writers of calls and puts to collect their premiums without having to buy or sell the underlying stocks: It's money for nothing.

Motives

People buy call options because they think the price of the underlying stock is due to go up. Calls are the "simplest" options and the easiest to understand. Maybe this is because the motive behind buying them is so basic.

The reasons people write call options, by contrast, are more varied. They could write covered calls because they want to generate income on shares they own but don't think the stock will appreciate greatly before expiration. Or they could write naked calls because they think the bid-price premium is "too high" given their assessment of the stock's likelihood to reach the strike price before expiration.

People buy put options, sometimes because they think the price of the underlying stock is headed down. But other times, they do so for insurance on a position they already hold, or as part of a married puts strategy to enter a volatile stock prior to an earnings announcement. Thirdly, people can buy puts as a substitute for a stop loss.

And finally, the put seller—the man (or woman) who *sells the right to sell a stock* at a certain price before expiration. What's his motivation? Well, he could be riskily trying to collect premiums that he thinks are "too high," or at least "high enough" to justify his risk. Or he might be willing to enter the stock at the strike price and actually hope the contract gets exercised, thereby giving him an entry point and the premium. In this way, the put writer is using put writing as a substitute for placing a limit order on the stock.

Closing Out Your Positions

It rarely makes sense to actually exercise an option. Instead, most options traders "close out their positions" by buying an offsetting contract. If you buy an option, you can close out your position by selling that same option. If you write an option, you can close out your position by buying that same option—this prevents the option you wrote from being exercised.

Consult the chart below:

Opening Action	Closing Action
Buying a call	Selling the same call
Writing a call	Buying the same call
Buying a put	Selling the same put
Writing a put	Buying the same put

Don't be confused: Buying a put does not offset a call, or vice versa. Calls and puts are entirely different animals, and the opposite of a *long* call is a *short* call, not a long (or short) put.

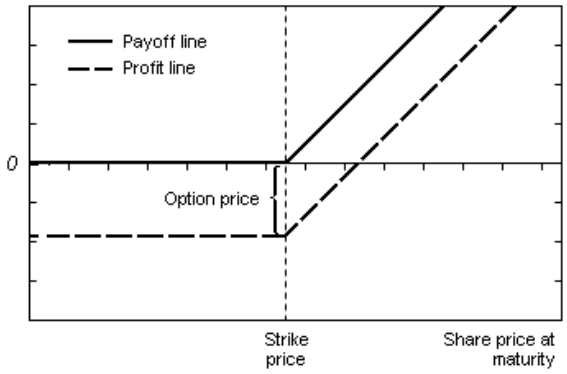
In Conclusion…

Once you understand the four types of options positions a trader can take, and the motivations behind each, options begin to really make sense—and become a lot of fun.

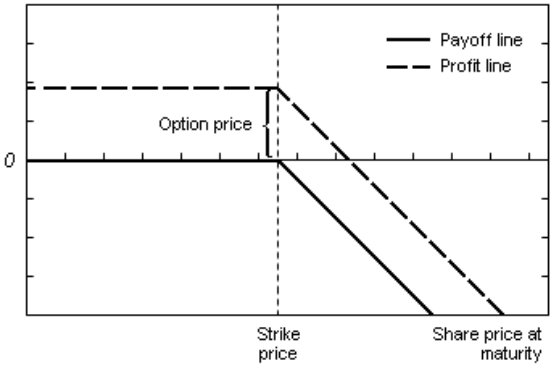
Before going on, make sure you fully understand everything up until this point, with an emphasis on this final chapter. You'll need this basic understanding before you're ready to buy (or sell) your first options in real life. If you *do* understand everything so far, then get ready—you're almost there!

Charts from Wikipedia

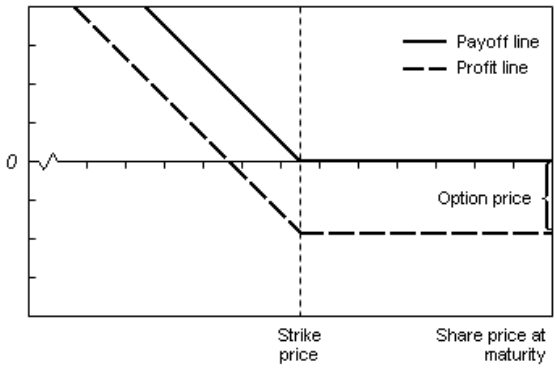
Long Call



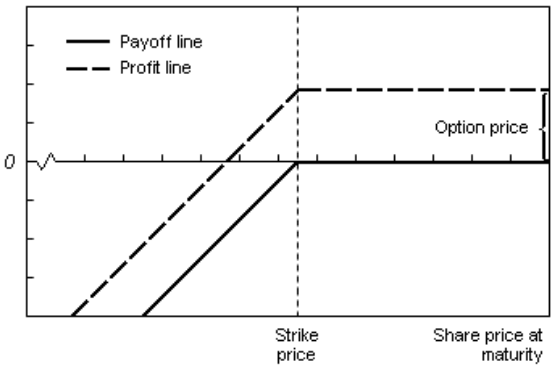
Short Call (Naked)



Long Put



Short Put (Naked)



Chapter 5: Using Collars for Insurance

Now that you have the basics of single-options strategies down, we'll begin looking at the advanced, multi-options strategies that are often the most prudent to employ. But before we dive in, a word on formatting:

Thus far, we've used *real* options quotes with *real* options ticker symbols. This was to demonstrate that options are unique securities, just like their underlying stocks, and that you can retrieve quotes for them using their unique tickers. But now that that's been established, we will begin using "descriptive quotes" for illustrative purposes.

Descriptive Quotes

It's also important you know how to read these types of "quotes," since they are used in many articles you'll read in financial publications and on the Internet. After all, what does QXBHX.X really tell you? Nothing much, unless you're familiar with the series. But **Long EBAY Aug 22.5 Call at 2.54**, the descriptive-quote format, tells you everything you need to know about the same series.

Let's take a look at the elements of a descriptive quote:

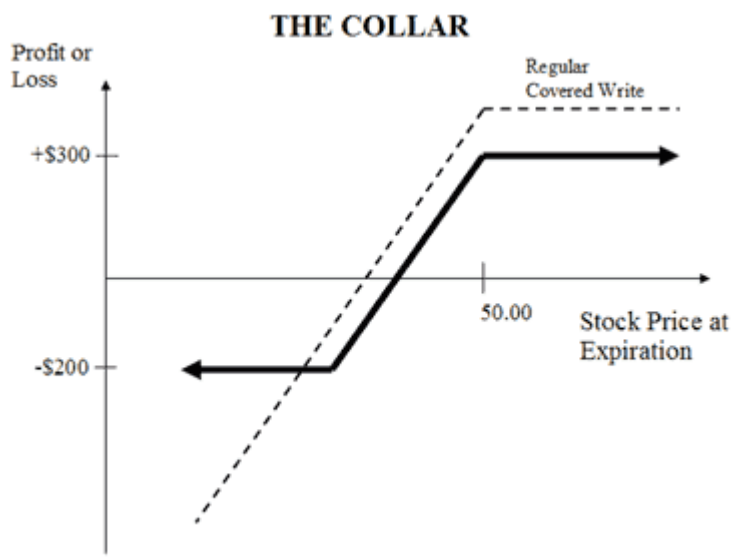
1. **Long**: This means you're "long" the option—you're a buyer, not a writer. The alternative would be "Short."
2. **EBAY**: This is the ticker symbol of the underlying stock.
3. **Aug**: This is the expiration month. If the year isn't given, then the current year is assumed. Remember, all options contracts expire the Saturday following the third Friday of the month.
4. **22.5**: This is the strike price ($22.50).
5. **Call**: This means the option is a call option—the right to buy. The alternative would be "Put."

6. **at 2.54**: This is the per-share premium at which the option has been purchased / can be purchased (depending on the context).

It's important to know that there is such a thing as QXBHX.X, but now that we know that, we can use descriptive quotes so we don't have to keep referring to quote tables.

An Example of a Collar Trade

A ***collar*** is perhaps the most basic of multi-options strategies. It is when you buy a put and sell a call on a stock that you own. The purpose of this strategy is to protect downside risk at little or no expense.



For instance, imagine you own 100 shares of Nike (Ticker: NKE) which is trading at $60 in this example. You are worried about the stock declining, but for whatever reason, you do not want to sell the stock (there are myriad good reasons why this might be the case). So you want to buy a put on your 100 shares to lock in a share price of no less than $50.

Consulting an options quote chart, you find that puts with a $50 strike price and an expiration five months away are selling at $1.50 ($150 per contract of 100).

To buy **Long NKE Jun 50 Put at 1.5**, (assume it's January, and thus June ("Jun") would be five months off) you'd have to part with $150. A collar seeks to mitigate or even eliminate that cost.

Here's how: By consulting the call side of an options quote chart, you see Nike calls with a $75 strike price and June expiration are selling for $1.10. You could sell one of these contracts and receive $110, thus reducing the cost of your "insurance" to just $40 ($150 spent - $110 received).

Your positions would thus be:

1. **Long NKE Jun 50 Put at 1.5**
2. **Short NKE Jun 75 Call at 1.1**

What Happens Next?

What are the possible outcomes of the above scenario?

1. Nike falls to $45, and thus, you could exercise your **Long NKE Jun 50 Put** and sell your shares for $50. You would have protected yourself against $5 per share ($500) worth of losses for a cost of just $40. The call contract you sold would expire worthless, and you'd keep the premium you received.
2. Nike goes to $80, and thus, your **Short NKE Jun 75 Call** would be exercised, forcing you to sell your 100 shares at $75. You'd "lose" the potential of selling them at $80, but assuming you purchased the shares at less than $75, you'd still have made money. Based on the earlier share price of $60, you would have made $15 per share. This $1,500 gain would be lessened by the $40 you spent on the collar, though, and your put would expire worthless.
3. Nike closes somewhere between $50 and $75. Thus, both your long put and short call contracts expire worthless. You're out $40, plus or minus the depreciation/appreciation of the stock price, but your downside has been protected for a small sum.

The Purpose of Collars

As seen above, a collar protects you from major losses at the expense of the potential of larger profits. However, the point of a collar is to minimize or eliminate the out-of-pocket expense associated with using puts for "insurance."

In the above example, you sold a call that reduced your outlay from $150 to $40. But it's also possible to reduce the cost to $0. This is called a ***cashless collar*** or a ***costless collar***. It is even possible to make a small amount on a collar play, perhaps enough to offset commissions.

Potential Tax Savings

Used effectively, collars can also save you money when it comes time for you—or your heirs—to pay the Tax Man. For example, if you bought a stock for $10 fifteen years ago, and it has since gone to $50, you'd be liable for long-term capital gains taxes if you sold it.

What if you thought the stock was going to go lower in the short term and then bounce back up? If you sold it and then re-bought it, you'd lose a lot of your savings in taxes. Instead, you could use a collar strategy to hedge your position without triggering a taxable event.

Even better, at least for your heirs: By never selling the stock, your posthumous beneficiaries will be able to take a "step up in basis." This means that, for tax purposes, the stock will be given a base value of its market price at the time of the inheritance, not the price at which you bought it. This way, if they sell the stock for $55, they'll pay capital-gains taxes on just $5 worth of profit, rather than $45 worth of gains. The Tax Man doesn't like this rule, but your kids and grandchildren will.

Collars as Collateral

You can use stock as collateral for a loan, but depending on the past performance, reliability, and liquidity of the stock in question, a banker may loan you much less than the current market price of your holding. However, if you use a collar to lock in a minimum price point, your lender may be willing to give the stock full credit as collateral. This way, you can hold your stock and gain access to cash at the same time.

Important Concepts to Remember

- **Very Important**: For the remainder of this book, we will be using ***descriptive quotes***. An option with a descriptive quote of **Long NKE Jun 50 Put at 1.5** means that it is a long position (as opposed to "short") on Nike (NKE) shares with a June expiration. The "50" is the strike price, and "Put" tells us you have the right to sell shares at that price. The "1.5" is the per-share premium ($1.50) of the contract.
- A ***collar*** is a two-option strategy designed to protect you against losses on a stock you hold with minimum out-of-pocket expense. By using a collar, however, you do risk loss of upside potential.
- You use a collar by buying a put and selling a call with the same expiration date. This allows you to sell the stock at a higher price if it falls, and you pay for most or all of the put premium with the premium you receive for selling the call. The downside here is that if the stock appreciates above the call's strike price, you'll be forced to sell and lose out on the potential gains.

Chapter 6: All About Spreads

Spreads are another two-option strategy. They differ from collars in that they make sense for traders who don't own the underlying stock. What's more, a spread user buys a call and sells a call (or buys a put and sells a put), rather than buying a put and selling a call, as with a collar.

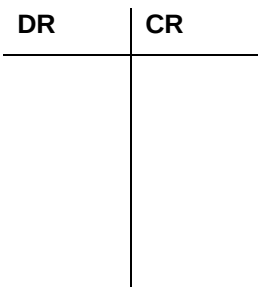
There are many types of spreads. The three major types are ***price spreads***, ***time spreads***, and ***diagonal spreads***. Among price spreads, there are ***debit spreads*** and ***credit spreads***. And there are ***call spreads*** and ***put spreads*** of all varieties.

The thing to keep in mind is that there are "two legs" to each spread. The dominant leg is the position with the higher total premium (i.e. contract premium * contracts). This is the position you are really banking on, while the recessive leg is a position that hedges your bets, or, "subsidizes" the dominant leg.

For example, if you buy a call contract for $550, and sell another one for $250, the $250 contract is the recessive leg, and its principal purpose is to offset the cost of the dominant leg. Thus, instead of spending a total of $550, your cost is reduced to $300, since you receive $250 in premium income for selling the call.

T-Charts

This can be a little confusing to read in straight text, so here we'll introduce the visual aid known as the t-chart.



The left column, “DR,” signifies a “debit” or expenditure. The right column, “CR,” is for “credit” or income. If, for example, you purchased one option contract with a $2.50 per-share premium, and sold another with a $1.20 per-share premium, a t-chart would record the spread like this.

DR	CR
250	120

In this case, you would have spent $250 and received $120—making your net outlay $130 ($120 - $250 = -$130).

Now that we have the t-chart to help us make sense of things, we can begin looking at the various subspecies of spreads. First: debit price spreads.

Debit Price Spreads

A ***price spread*** is a two-option strategy in which both options have the same expiration date but different strikes prices. For example, **Long DD Sep 40 Call at 5.5** and **Short DD Sep 45 Call at 1.7** would be an example of a price spread.

DR	CR
550	170

By taking this position, you would have purchased the right to sell 100 shares of Du Pont (Ticker: DD) at $40 per share, and sold the right to purchase them at $45 per share. You would have paid $550 for your long position and received $170 for your short position. Your net outlay would be $380.

The above is a ***debit spread***, because you paid more for your long position than you received for your short. The goal of a debit spread is for the difference between the two premiums to widen, and for one or both of the contracts to be in-the-money upon expiration. For example, if Du Pont closed at $44.50 per share on expiration day, your **Long DD Sep 40 Call** would be worth $450 ($4.50 intrinsic value per share * 100 shares), and the **Short DD Sep 45 Call** would expire worthless. This would result in a profit of $70, as shown below ($170 -$550 + $450 = $70).

DR	CR
550	170
	450

What if Du Pont went to $50? Then **Long DD Sep 40 Call** would have a value of $1,000, but **Short DD Sep 45 Call** would be worth $500. You'd have to buy a **DD Sep 45 Call** to cancel out your short position, thus costing you $500. You'd still generate a profit of $120, as demonstrated below.

DR	CR
550	170
500	1000

The $550 debit and $170 credit relate to the original purchase (DR) and sale (CR) prices of the options. The $500 debit represents a **Long DD Sep 45 Call at 5** later purchased to offset the **Short DD Sep 45 Call at 1.7** you sold. On this half of the trade, you would have lost money ($170 - $500), but not enough to negate the gains made on the other half ($1,000 - $550). Your net gain is $120.

Credit Price Spreads

A ***credit price spread*** occurs when the cost of your long position is less than the premium you receive for your short position. For example, if you went **Long DD Sep 45 Call at 1.7** and **Short DD Sep 40 Call at 5.5**—the opposite of the above position—you would spend $170 and receive $550, for a net gain of $380. In this case, your goal would be for the premiums of the spreads to *narrow* and expire worthless.

DR	CR
170	550

For example, if Du Pont closed at $39 per share on the third Friday in September, both **DD Sep 45 Call** and **DD Sep 40 Call** would expire worthless, and you'd keep the $380 you made on that initial sale. Your t-chart would still look like this:

DR	CR
170	550

But if Du Pont went to $50, then your long position ($45 strike price) would be worth $500 (that's good) and your short position ($40 strike price) would be worth $1,000 (that's bad). You'd have to buy a **DD Sep 40 Call** for $1,000 to cancel out your position, and even after selling **DD Sep 45 Call** for $500, you'd have a net loss of $120 ($550 + 500 - $170 - $1,000).

DR	CR
170	550
1000	500

Widening and Narrowing

It's important to do a little review here: What is meant by "widening" and "narrowing" of premiums? To understand, let's take a second look at DirecTV. We first looked at that stock's options in Chapter 2, with prices retrieved from July 29, 2008. Below is a chart comparing those call-option premiums with those from August 14, 2008, just one day before expiration.

	7/29/2008 $26.80 share price			8/14/2008 $28.25 share price		
	Prem.	**I.V.**	**T.V.**	**Prem.**	**I.V.**	**T.V.**
DTV Aug 20 Call	6.90	6.80	0.10	8.30	8.25	0.05
DTV Aug 25 Call	2.30	1.80	0.50	3.30	3.25	0.05
DTV Aug 30 Call	0.15	0.00	0.15	0.10	0.00	0.10

From July 29 to August 14, the share price of DirecTV went from $26.80 to $28.25. Thus, the premiums of **DTV Aug 20 Call** and **DTV Aug 25 Call** went up, even as their time values diminished. The chart above shows intrinsic value (I.V.) and time value (T.V.) for illustrative purposes. “Prem.” is the premium, or ask price.

The difference between the Aug 20 Call and Aug 25 Call premiums on 7/29 was $4.60. The difference on 8/14 was $5.00. Thus, the difference between the premiums *widened* as expiration drew near.

It’s important to keep in mind that you do not need to hold an option until the day of expiration. In fact, you can turn around and close out a position on the same day for a handsome profit sometimes. We use expiration day as an example in this guide because time value is unpredictable. In the case of this example, with just one day of trading before expiration, the time value of the **DTV Aug 20 Call** has fallen from $0.10 to $0.05, while the time value of the **DTV Aug 25 Call** has fallen by a much greater amount, from $0.50 to $0.05.

Two More Examples

So in this example, which strategy would have proved profitable? A debit price spread or a credit price spread?

Well, since the premiums *widened* as expiration drew near, we know that a debit spread should have proven to be profitable. Let's see if that's the case:

If you went **Long DTV Aug 20 Call at 6.9** and **Short DTV Aug 25 Call at 2.3**, you would have paid $690 and received $230 on July 29, for a net entry cost of $460. Since you would have a net expense, this would be a *debit spread*. By August 14, your **DTV Aug 20 Call** contract would be worth $830, while your **Short DTV Aug 25 Call** would be worth $325. Closing out the positions would produce the following t-chart.

DR	CR
690	230
325	830

Adding up the credits of $230 and $830, and subtracting the debits of $690 and $325, we find a net gain of $45. The debit spread did prove profitable as the premiums widened.

Now, imagine if you did the deal in reverse. If you had gone long the **DTV Aug 25 Call at 2.3** and short the **DTV Aug 20 Call at 6.9**, you would have had a credit spread, since you'd initially have a "profit" of $460.

DR	CR
230	690

But then, if you held the positions until expiration, your **Long DTV Aug 25 Call** contract would have a value of $325, representing a $95 profit; but your **Short DTV Aug 20 Call** would have a $830 value, representing a $140 loss. In all, you'd be out $45.

DR	CR
230	690
830	325

Time Spreads

Whether debit or credit, price spreads both involve buying one option and selling another, where both options have the same underlying stock and expiration date. A ***time spread*** is different, in that the two options have the *same* strike prices but *different* expirations.

An example of a time spread for the fictional stock ABC would be **Long ABC Sep 60 Call at 3**, **Short ABC Nov 60 Call at 5**.

DR	CR
300	500

Thus, the **Short ABC Nov 60 Call** would be the dominant leg of the strategy, with the **Long ABC Sep 60** position serving as a hedge. An investor would establish this time-spread position if he expected the gap between the two premiums to narrow, presumably as the price of the underlying stock went down.

Alternatively, the premium of the long position can exceed the income received for the short sale. In this case, the goal is for the two premiums to widen with time, presumably as the price of the underlying stock went up. You'd be selling a short-term option and buying a longer-term one. Thus, the ideal scenario would be for the short-term option (the option with the nearer expi-

ration date) to expire worthless, while the long-term option could be sold "in-the-money." This way, you'd use the income from the initial sale of the short-term option to subsidize the purchase of your longer-term option.

Diagonal Spreads

Finally, there are diagonal spreads, which combine the features of both price and time spreads. Thus, they have the same underlying stock but different strike prices *and* different expiration dates.

Again, it's important to note that with all spreads, the purpose of the recessive leg (the one that has the lower premium) is to subsidize or hedge the dominant leg (the one that has the higher premium). Using a diagonal-options strategy just increases the possibilities of offsetting the cost or risk of one position by buying or selling another.

Important Concepts to Remember

- ***Spreads*** are two-options strategies that make sense for traders who don't own the underlying stock in question.
- A ***credit spread*** is one in which you receive more income for the short-sale half of the spread than you pay for the long position. With a ***debit spread***, the opposite is true.
- With a credit spread, you make money if the premiums of the long and short positions ***narrow*** over time and expire worthless.
- With a debit spread, you make money if the premiums of the long and short positions ***widen*** over time and expire in-the-money.
- A ***price spread*** involves long and short positions on the same type of option (call or put) of the same underlying stock, with the same expiration dates but different strike prices.
- A ***time spread*** involves long and short positions on the same type of option (call or put) of the same underlying stock, with the same strike prices but different expiration dates.

- A ***diagonal spread*** involves long and short positions on the same type of option (call or put) of the same underlying stock, with different strike prices *and* different expiration dates.
- The general purpose of any type of spread is to use one half of the position to hedge or subsidize the other half of the position. For example, you might sell a call to reduce the out-of-pocket expense of buying another call, etc.

Chapter 7: Straddles and Combinations

The final pair of two-options strategies are ***straddles*** and ***combinations***. Whereas spreads involved buying and selling the same kind of options (i.e. calls *or* puts), straddles and combinations both involve *either* buying *or* selling a call-put combo. First, let's look at straddles.

Straddles

A straddle is composed of a call and a put with the same strike price and expiration month. Straddles can be either long (when an investor buys a call and a put) or short (when an investor sells a call and a put).

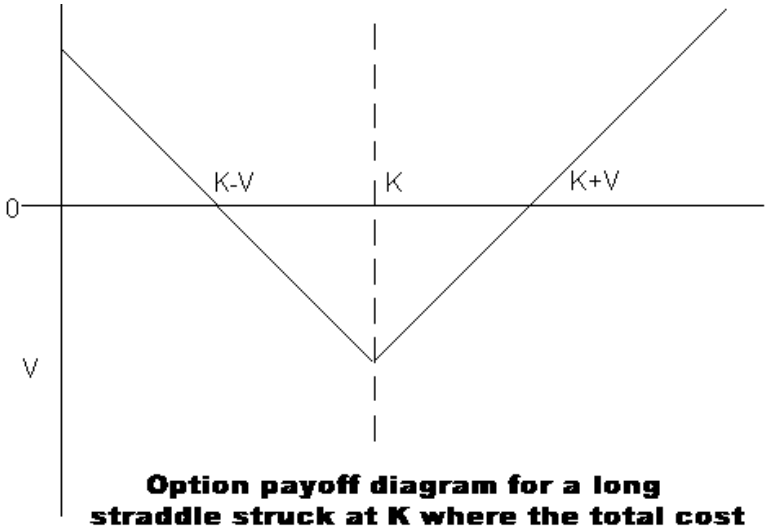
Example: Williams-Sonoma was trading at $17.86 on September 5, 2008. Its September calls and puts (expiring September 20) looked like this on that date:

WSM Sep 15.00 Call at 2.95	**WSM Sep 15.00 Put at 0.10**
WSM Sep 17.50 Call at 0.90	**WSM Sep 17.50 Put at 0.60**
WSM Sep 20.00 Call at 0.10	**WSM Sep 20.00 Put at 2.35**
WSM Sep 25.00 Call at 0.05	**WSM Sep 25.00 Put at 7.40**

An investor could create a ***long straddle*** by buying (long) **WSM Sep 17.50 Call at 0.90** and buying (long) **WSM Sep 17.50 Put at 0.60**. The total spent would be $150 ($90 for the call contract and $60 for the put contract).

As the price of the underlying stock went up, the value of the call would go up—but the value of the put would go down, and vice versa. The goal of a long straddle is *volatility*, for if the move—up *or* down—is big enough, the gains from the winning position can easily outstrip the losses from the losing position. That's because when you're long an options contract, whether a call or put, your potential gains are unlimited while your potential losses are limited to the premium you paid.

Continuing this example, let's say Williams-Sonoma was trading at $25 at 3:58 P.M., September 19. The intrinsic value of the $17.50 Call would be $7.50, and there would be very little time value. You'd be able to sell that contract for $750, netting $660, since you paid $90 for it. But what about the other half of the straddle?



Option payoff diagram for a long straddle struck at K where the total cost of the two constitutent options is V

Well, the value of the $17.50 Put would be $0, which means it would expire worthless. Thus, you'd be out the $60 you spent on it, but this is no big deal, since you made $660 on the other half of the straddle. All told, your net profit would be $600.

Alternatively, you could have made money if the value of the underlying stock tanked, as well. If Williams-Sonoma fell to $10 a share, your call contract would expire worthless, meaning you would have "wasted" the $90 you spent on it. But your put contract would be worth $750, giving you a $690 gain on that half of the straddle, or a net gain of $600. Again, when you enter into a long straddle position, *you're hoping for volatility.*

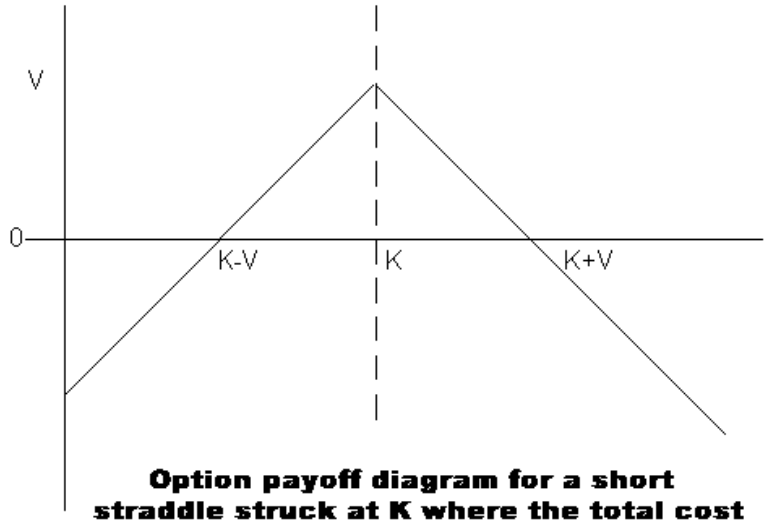
Break-Even on a Long Straddle

In the above example, what would be your break-even point? Well, you would have spent $1.50 per share ($0.90 for the call and $0.60 for the put), so you'd need WSM to move at least $1.51 from the strike price of $17.50—*in either direction*—in order to turn a profit. Thus, if WSM hit $19.01 late September 19, your call contract would be worth $151, giving you a $1 profit on the $90 (call) and $60 (put) you spent. Or, if the stock fell to $15.99, then your put would be worth $151.

Commissions, which we've largely ignored up until this point, factor heavily in break-even points.

Short Straddles

The other way of entering a straddle is on the short side. For example, instead of buying the two contracts in the previous example, you could sell them short. Thus, your straddle would consist of: **Short WSM Sep 17.50 Call at 0.90** and **Short WSM Sep 17.50 Put at 0.60**.



Option payoff diagram for a short straddle struck at K where the total cost of the two constitutent options is V

Whereas the goal of an investor with a long straddle is volatility, the traders who enter a short straddle position are hoping for the *opposite*—relative calm. For just as the long-straddle buyer in the example above needed to see WSM hit $19.01 or fall to $15.99 in order to turn a profit, a short-straddle seller would make money if the stock stayed within the $16-19 range.

Example: You sell a **WSM $17.50 Call at $0.90**, for which you receive $90; and a **WSM $17.50 Put at $0.60**, for which you receive $60. If WSM closes on the third Friday of the month at $18.50, then the $17.50 Call that you sold for $90 for will be worth $100, meaning you'll lose $10; but the $17.50 Put will expire worthless, meaning you keep the $60 you received when you sold it. Thus, you come up with a net gain of $50.

Alternatively, WSM could fall to $16.25, and you'd still make money. That's because the call contract you sold for $90 would expire worthless while the put contract you sold for $60 would be worth $125. Although you'd take a $65 loss on that half of the straddle, it would be more than made up for by the $90 profit on the other half.

The only way you'd lose money is if WSM closed over $19 or under $16. If, for example, the stock went to $25, your put would expire worthless, meaning you'd keep the $60 premium you received. But the call contract would be worth $750, meaning you'd have to go into the open market and pay that price in order to close out your position. Since you only received $150 total ($90 for the call and $60 for the put), your net loss would be $500. Or, if the stock went to $10, your call would expire worthless but your put would be worth $750, producing the same net loss of $500.

With long straddles, your potential profits are limitless while your potential losses are capped at the premiums you paid when you entered the positions. With short straddles, the reverse is true: Your potential profits are limited to the premiums you received when you sold the options on the open market, and your potential losses are limitless.

This, however, does not mean that short straddles should be avoided. Indeed, they are one of the more attractive options strategies available, since they allow you to profit from a market that's neither bullish nor bearish. But shorting any financial instrument has its risks, and when you enter a short-straddle position, you are doubling that risk by placing two short sales at once.

Straddle Calculations

Below is a table that demonstrates the maximum gain, maximum loss, and the point at which you can profit from a long straddle and a short straddle:

Calculation	Long Straddle	Short Straddle
Maximum Gain	Unlimited	Total premiums received
Maximum Loss	Total premiums paid	Unlimited
Profit if…	Stock price > strike price + both per-share premiums OR Stock price < strike price - both per-share premiums	Stock price < strike price + both per-share premiums AND Stock price < strike price - both per-share premiums

Combinations

A combination is composed of a call and a put with different strike prices, expiration dates, or both. Typically, an investor who opts to use a combination instead of a straddle does so because they are cheaper to establish if both options are out-of-the-money. Strategically, combinations work the same as straddles.

Important Concepts to Remember

- There are two types of ***straddles***: Long and short.
- A ***long straddle*** involves buying a call and a put with the same underlying stock, strike price, and expiration date.
- A ***short straddle*** involves selling (short) a call and a put with the same underlying stock, strike price, and expiration date.
- You make money with a long straddle with volatility. You can make money if the price of the underlying stock goes up or down from the strike price by an amount greater than the total premiums paid.
- You make money with a short straddle from *a lack of* volatility. Your hope is for the price of the underlying stock to remain relatively stable, and you make money so long as the stock's price doesn't go up or down from the strike price by an amount greater than the premiums received.
- Short straddles offer you the opportunity to profit from a market that is neither bullish nor bearish.
- A ***combination*** is a two-option strategy involving a call and a put with the same underlying stock, but different strike prices or expiration dates or both. Combinations can either be long or short.

Chapter 8: Accounts, Brokers, and Commissions

Thus far we've learned virtually everything there is to know about options, from long calls to short puts, time spreads to credit price spreads, straddles and combinations, you name it. But in order to put this information into action, you'll need an ***options account*** with a broker. And while we've ignored the ugliest part of trading options—the commissions—until now, we'll take a look at how those pesky fees can cut into your profits.

Having an Options Account

If you have a regular stock-trading account, you may or may not already have clearance to trade options. Typically, you have to request permission by filling out an application and signing a disclaimer saying that you understand the risks inherent in trading options.

Some brokers ask that you have a year or more of stock-trading experience before they'll clear you to play the options market. Why do they care? Because over the years, litigious traders have been able to sue their brokers, claiming they "didn't understand" what they were doing when they were trading options. Thus, brokers have to take steps to defend themselves against law-suits, and while the disclaimer is usually enough, some particularly cautious brokers deny the option-account applications of inexperienced traders. This is not really a big deal, since there are plenty of brokers out there to choose from, and you'll almost definitely be able to find one that's right for you.

Margin Accounts

The above generally deals with going long calls and puts. In these cases, your maximum potential losses are capped at the premiums you pay when you enter the positions. When you go short, however, your potential losses are unlimited. That's why, in order to short calls and puts, you'll need special clearance and a margin account.

A ***margin account*** is a special type of brokerage account that allows you to take out loans against the securities you own. You may be subject to credit-score screening in order to qualify for a margin account, and your trading experience could be of greater relevance to the broker. The risk to the broker, as it pertains to options, is that you will short a call option for which you don't own the underlying stock, and then be unable to afford buying that stock in the open market should the call get exercised. Thus, your broker might require you to have a certain value of holdings in your account to protect against potential losses. The greater your creditworthiness, the less stringent this requirement is likely to be.

However, you may not need a margin account for all short sales on options. Covered calls, for example, entail no risk to the broker, since you own the underlying stock that is to be sold in the event that the contract's exercised.

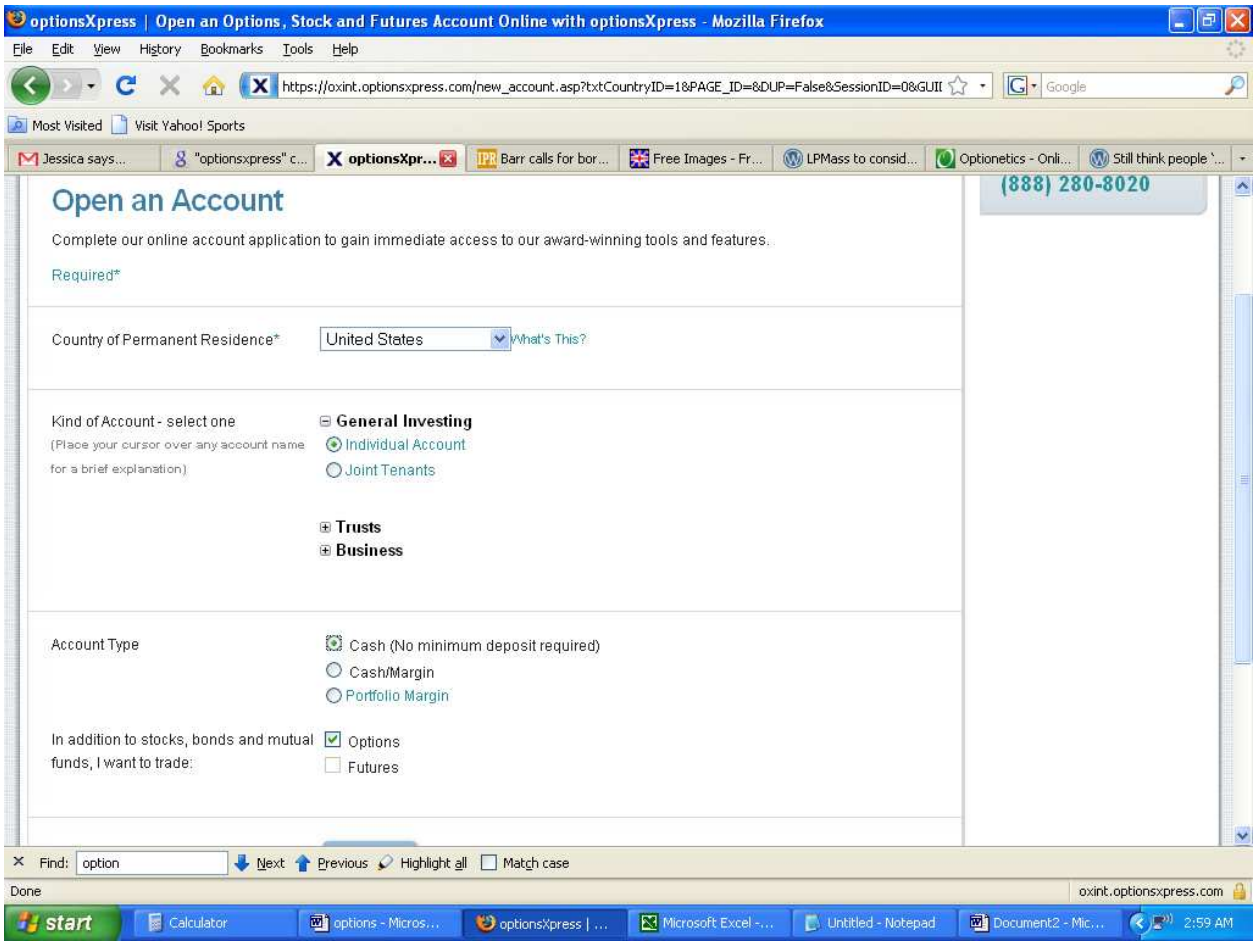
International Investors

If you permanently reside outside the United States, have no fear: there are plenty of brokers who will let you open an options account and trade U.S. options. OptionsXpress, one of the leading options brokers in America, services more than fifty countries on six continents (sorry, Antarcticans). Other brokers service a different assortment of nations. Regardless of where you live, getting an account to trade U.S. options should not pose a problem.

Opening an Account

We'll review brokers later in this chapter, but for now, we'll examine the process of opening an account with OptionsXpress.

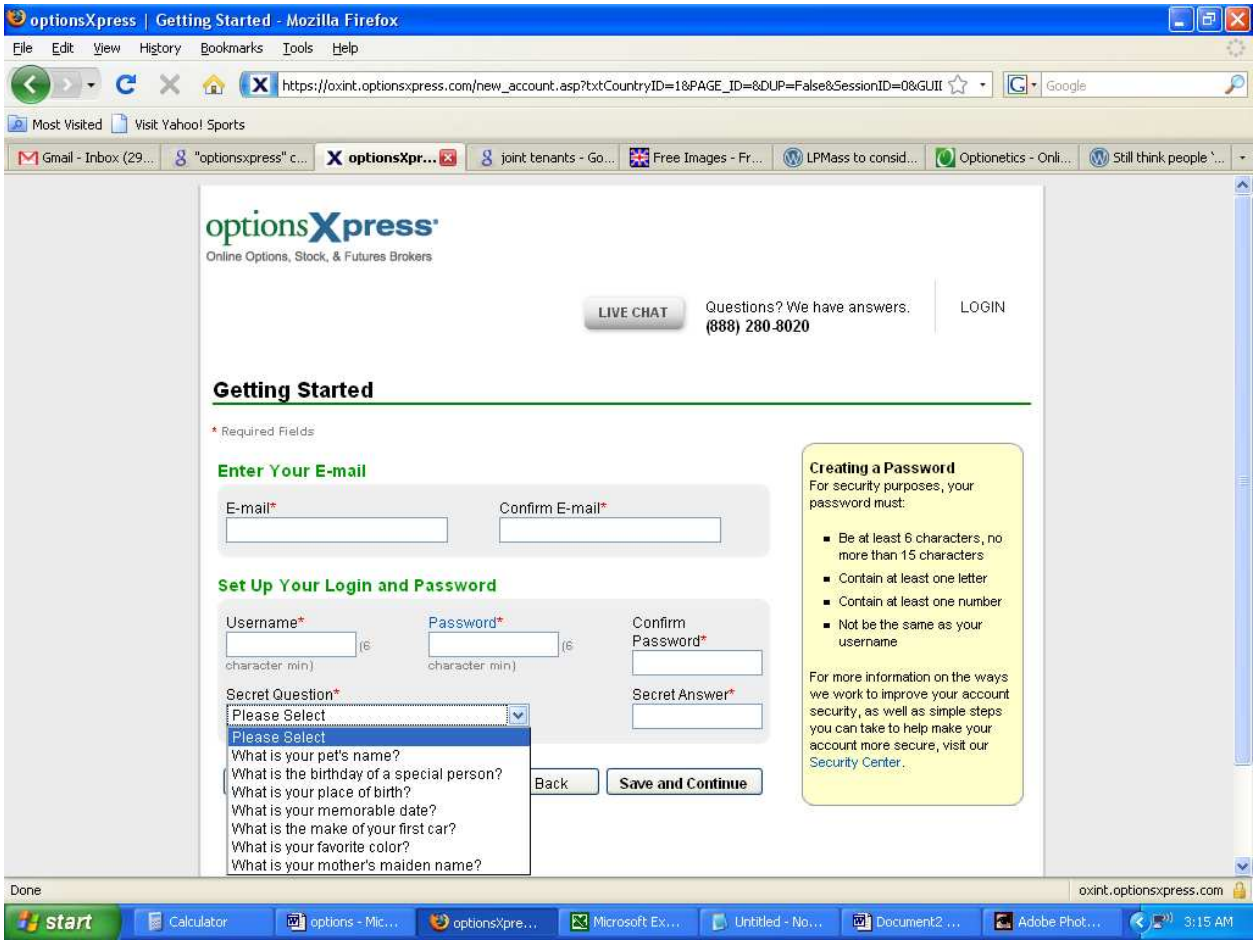
On this first screen below, we're asked for our country of permanent residence, the *kind* and *type* of accounts we want, and what kind of securities we want to be able to trade. The first question (country) is self-explanatory, but the second, third, and fourth require a little explanation.



By "kind" of account, OptionsXpress is asking first if we want a *general investing* account, or a special account for trusts or businesses. Most readers will want a general investing account, for which there are two sub-options: Individual or ***Joint Tenants***. The latter is typically used by married couples, so that when one spouse dies, the other spouse automatically takes possession of the account.

Next, we are faced with choosing the "type" of account we want. The choices are *cash*, *cash/margin*, and *portfolio margin*. A cash account is just a regular account where you pay for all of your stock and options purchases with cash. We examined margin accounts earlier in this chapter. A *portfolio margin* account allows credit-qualified investors to have more leeway, based on the holdings in their accounts.

Finally, we have an option of selecting what kind of securities we want to trade in addition to stocks, bonds, and mutual funds. Being that OptionsXpress specializes in options, "Options" is checked by default, though it is technically possible to open a non-options account with OptionsXpress. You can also choose to trade *futures*, which entails more risk and greater scrutiny of your application.



Screen 2 of the application simply asks you to confirm your e-mail address, and to create an account with a user name and password. In case you forget your password, it asks you to select and give an answer for a "secret question" such as "What's your place of birth?" There are several options for "secret questions."

On Screen 3, you are asked to agree to the terms and conditions of having an account, and on Screen 4, you are provided with an Adobe Acrobat PDF to print, sign, and fax or mail in to Op-

tionsXpress. Finally, on the fifth screen, you're able to fund your account via ACH bank transfer—or you can mail in a check.

Comparing Brokers

Now that we've taken a brief look at the process of opening an options account, let's review the leading online brokers. Below is a chart based on data compiled by Optionetics.com. The *Composite Score* field combines three criteria: site design, user friendly, and options usefulness. *Minimum Acct.* is the minimum opening balance you need to sign up with the given broker. *Option Trade Fee* is the commission they charge per option order—some brokers charge only by the contract, but have a minimum charge. Others charge a flat fee plus a per-contract fee.

Brokers	Composite Score	Minimum Acct.	Option Trade Fee	Per Contract Fee
OptionsXpress	10	None	($14.95 min.)	$1.50
TradeKing	9	None	$4.95	$0.65
OptionsHouse	9	$1,000	$9.95	none
Interactive Brokers	9	$2,000	($1 min.)	<10k =$0.50 >10k =$0.75
E*Trade	8	$1,000	$6.95 to $12.95	$0.75
TD AMERITRADE	8	$2,000	$9.95	$0.75
eOption	8	$2,000	$5	$0.25
Fimatpreferred	9	$5,000	($9.95 min.)	$0.95
Charles Schwab	8	$10,000	$9.95	$0.75
WallStreetE	8	Varies	$25	$2.50
ChoiceTrade	9	None	($5 min.)	=<20 =$0.99 =<21=$0.75

E*Trade charges between $6.95 and $12.95, depending on your account size (bigger is better) and the number of trades you've made in the past quarter (the more you trade, the less they charge). Regardless, E*Trade always charges $0.75 per trade in addition to the flat fee.

Why Pay More?

Looking at the chart above, you may wonder why anyone would choose the high-price brokers like OptionsXpress, Charles Schwab, and WallStreetE. Well, obviously some people do choose to pay the higher commissions for some reason or else these firms would go out of business. Why pay more? The answer is service.

This is not meant to endorse the higher-priced brokers—every trader needs to make the decision for himself (or herself) if the perks of a higher-priced broker outweigh the added costs. But let's take the example of OptionsXpress, which not only ranked highest in this Optionetics.com survey, but routinely ranks #1 among options brokers in *Barron's* annual report, as well.

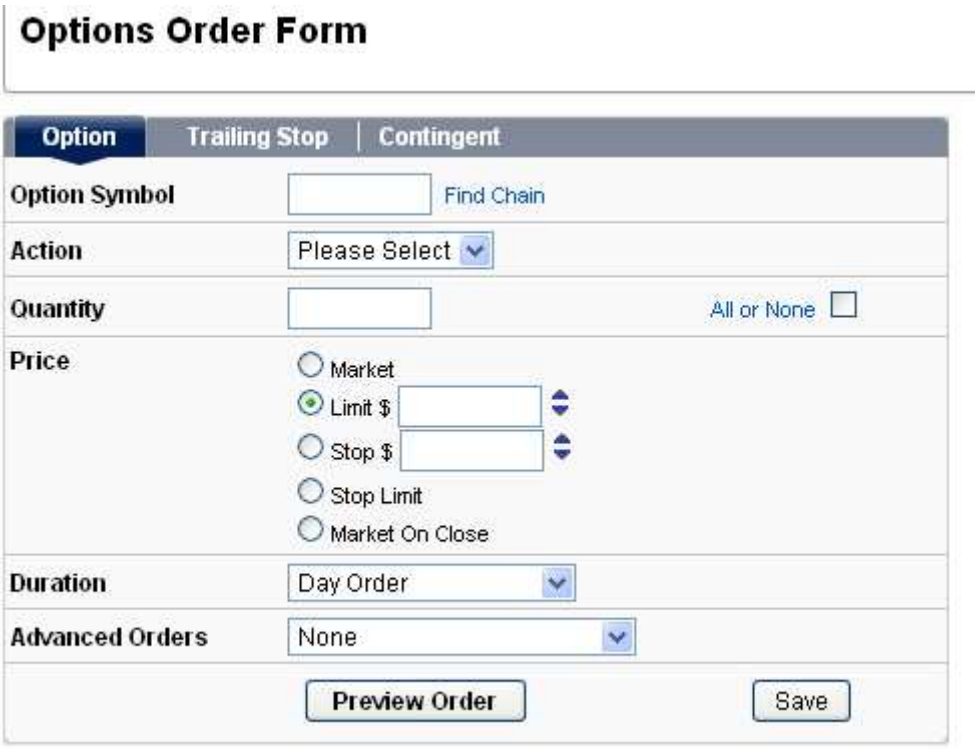
According to Optionetics, the OptionsXpress Web site is "refreshingly simple and powerful, accessible, and in plain English." They say the fact that OptionsXpress focuses specifically on options clearly shows. They also give OptionsXpress high marks for the ease of opening an account, which they say takes less than five minutes online, and say that their customer service is excellent, with live help online, via phone, and e-mail.

OptionsXpress also offers a variety of tools for free, and provides real-time quotes at no extra charge (TD AMERITRADE, for example, does not).

Is OptionsXpress worth the higher cost? That's up to you to decide. But it's not a good idea to automatically disqualify a broker based on higher commission charges.

Entering an Order

Below is an example of OptionsXpress's order form.



Where it asks for the **Option Symbol**, you'll notice there's a link that says *Find Chain*. If you type in a stock's ticker symbol and click the *Find Chain* link, a page will load showing you all of the options for that stock.

Secondly, there is the **Action** field. This is a dropdown menu that includes the following choices:

- ***Buy to Open***: This means you are buying a put or a call for which you don't already have an offsetting short position. This is a "regular" buy.
- ***Buy to Close***: You select this option when you're buying a put or call not to hold, but to close out an existing short position. You do this to "cover" your short.
- ***Sell to Open***: This is a short sale, where you're writing an option and selling it on the open market. The option will either expire worthless (you hope), get exercised, or you'll later *Buy to Close* (above) to close out the position
- ***Sell to Close***: This means you're selling an option that you already own, and thus, closing out the position. This is what you enter to sell an option that you're not shorting.

Next, there is the **Quantity** field. Here, you enter the number of *contracts*—not shares—you want to buy or sell. Remember, of course, that each contract represents 100 shares. If you'd like, you can check the "All or None" box, which means that you only want your order executed if it can be fulfilled in full. For example, you'd select "All or None" if you wanted to sell twenty-five contracts at a certain price, but not just twenty-three.

Fourth, we have the **Price** field. Here you have the following options:

- ***Market***: The trade will be executed promptly at the prevailing market price.
- ***Limit***: The trade will be executed at or below (long) or at or above (short) the selected price.
- ***Stop***: The trade will be executed at the prevailing market price once that market price meets or exceeds the given level.
- ***Stop-Limit***: The trade will be executed at the stop-limit price, once the market price meets or exceeds a given level.
- ***Market at Close***: The trade will be executed within the final thirty to sixty seconds of the trading day.

The fifth field is **Duration**, for which the options are *Day Order* and *Good Til Cancelled*. A Day Order expires at the end of the day, while Good Til Cancelled is… good until cancelled! This is mostly a concern for non-market orders (i.e. limit orders).

And finally, you can give OptionsXpress various **Advanced Orders** that we won't go into but include:

- Trailing Stop
- Contingent Order
- One Triggers Other: Stock
- One Triggers Other: Option
- One Cancels Other
- One Triggers Two

Essentially, all you do is fill out that form, hit submit, and usually within a few seconds, you are the proud owner of call and/or put contracts! Unless of course you sold short, in which case your account is promptly credited with the proceeds.

Examples with Commissions

Now comes the not-so-fun part. How much of your profit potential do commissions consume? Quite a lot if you use a higher-price broker and you make trades consisting of only a few contracts. Let's go back through some of the examples we encountered earlier in this guide, and add in commissions.

In our very first example from Chapter 1, we looked at **Long EBAY Aug 22.50 Call at 2.54** (to be clear: back then we used its non-descriptive ticker symbol of QXBHX.X). In the example, the price of the underlying stock went from $24.78 to $30, allowing the holder to exercise the call for a profit of $496. But if we take commissions into account, and assume transaction fees of $10, then the profit would be reduced by $30—$10 for buying the option, $10 for exercising it and buying the stock, and another $10 for selling the stock at a profit.

In that example, you'd still have $466 in profits, but how often does a stock go from $24.78 to $30 that quickly? Even in this extreme case, commissions ate up over 6% of your profits—but it could have been much worse.

Take a more recent (and complex) example: The debit price spread on Du Pont (Ticker: DD). In this example, you went **Long DD Sep 40 Call at 5.5** and **Short DD Sep 45 Call at 1.7**, as represented in the t-chart below:

DR	CR
550	170

The value of the long call then went to $4.50 per share, while the short call expired worthless. Thus, your net gain, excluding commissions, was $70, as demonstrated below.

DR	CR
550	170
	450

But what about the commissions? Well, if you used OptionsXpress, it would have cost $14.95 to buy the 40 Call, another $14.95 to go short the 45 Call, and a third instance of $14.95 to sell the 40 Call for a profit. All told, that's $44.85, reducing your $70 profit by 64% to $25.15. Ouch!

Of course, the larger your trades, the smaller the bite, percentage-wise, commissions take out of your profits. If you're dealing in terms of 100 or 1,000 or 10,000 contracts at a time, then the commissions may be a pittance. But most options traders start small and must be very wary of the impact commissions can have on their overall rate of return.

Important Concepts to Remember

- You must have an ***options account*** in order to trade options.
- Applicants for options accounts are subject to approval; however, almost everyone should be able to get approved by one broker or another.

- Taking most short positions on options contracts requires a ***margin account***, which is subject to credit-approval
- People from most countries will face no additional problems in opening an options account with a U.S.-based broker.
- The process of opening an options account is fairly easy and straightforward: It only takes around five minutes with OptionsXpress.
- There are dozens of options brokers to choose from. Some charge more than others but offer better services. It's up to you to decide what's more important: Low costs or high-quality service.
- Entering options orders, once you have an account, is a simple, Web-based process.
- Commissions can take a major bite out of your trading profits if you're not careful.

Final Word

We hope you've enjoyed this eBook and found it to be both informative and useful. Trading options is one of the most exciting financial-market activities an individual can engage in, but it doesn't have to be a reckless or speculative venture, as this guide has shown. With the knowledge contained in this manual, you're well on your way to being a fully-informed options trader.