

PART ONE

Learning the Fundamentals

Part One provides the fundamentals necessary to build a solid foundation before you begin trading options. It includes how to get ready to trade, the all-important basics of options, factors that affect an option's price, the *Greeks*, the advantages and disadvantages of buying versus selling options, spread terminology, and more. After learning the fundamentals, you should be ready to move on to other parts of this book and learn the four basic option strategies, advanced spread strategies, how to apply what you have learned to different underlying instruments, and advanced concepts.

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CHAPTER 1

Getting Ready to Trade

The good news is that there are many different ways to make money by trading options. You may be attracted to buying call or put options because you want large gains for a relatively small price, or you may be attracted to selling options because you want consistent returns and the odds on your side. Option buying and selling is sometimes described in a manner that makes you think option trading is simple. The reality is that making money in the financial markets on a consistent basis over a long period of time is not easy. However, it can be accomplished with proper preparation. Probably the best way to maximize your chances of success in the financial markets is to become as knowledgeable as possible so you can make educated decisions.

To get the most out of this book, you should read the Preface to understand how the book is organized. This chapter will cover the reasons why you should trade options, the importance of developing a game plan, risk management, option basics, and key definitions.

WHY TRADE OPTIONS?

Options can be used to manage risk, generate income, take advantage of leverage, and potentially profit under almost any market condition. Options can enable you to *speculate* on whether a stock, *exchange-traded fund (ETF)*, *stock index*, or *futures* will rise, decline, or move sideways within your selected time frame. With options, you can engage in a high- or low-probability trade or a trade with limited or unlimited risk. With options, you have the ability to take advantage of a price decline in a stock (or other instrument) just as easily as a price increase, and even potentially profit from sideways movement. The versatility of options, in combination with leverage, is what distinguishes options from other trading vehicles.

With options, you can generate income from the up, down, and sideways movements of a stock, ETF, index, or futures. The key is to first determine your view of a stock (or market) and time frame and then determine the option strategy that can meet that perspective.

Sometimes the markets go through periods in a trading range that can last for weeks, months, or years. In these periods of consolidation, markets seem to fluctuate sideways and back and forth. Traditional stock and mutual-fund investing is typically not profitable in such an environment and can cost you the opportunity of earning interest on the money (or investing elsewhere) while you are waiting for the markets to move higher. Using options, you can speculate that a stock (or futures) will be stuck in neutral and you can design option strategies to profit from the lack of movement. For example, the S&P 500 index reached the 1,500 level in 2000, declined to below 800, and did not reach 1,500 again until 2007, only to substantially decline again. Even worse, the NASDAQ Composite reached the 5,000 level in 2000, plunged all the way down to nearly the 1,000 level, and has had great difficulty getting back to its old highs. The emerging markets have produced outstanding returns in some years, but they are inconsistent, and there are significant risks involved.

To understand options, you need to think a little outside the box because an option is unlike other investments. Trading options can be a way to diversify your income in a manner that is uncorrelated to other investments. Option strategies come in all shapes and sizes. Option strategies can be used to generate income, manage risk, *speculate*, and *hedge* in rising, declining, and sideways markets. Buying an option can be an attractive strategy because you can have limited risk with high profit potential, whereas *selling (writing)* an option can be attractive because you may have the odds on your side. Many traders are familiar with buying, in which the object is to buy low and sell high. Option selling works contrary to how trading is viewed by many people. The goal of option selling is the same as that of traditional trading but in reverse order: When selling an option, the goal is to sell high and buy low. If you are a novice trader, at first you may be confused about what it means to write (sell) an option because it involves selling first and buying later. Because markets can trend sideways for many years, selling options can provide a unique tool to potentially profit in sideways markets. The fact that option selling can work is demonstrated by the large number of institutional investors and professionals who sell options to enhance returns.

DEVELOPING A GAME PLAN

You may be under the impression that buying an option is the best strategy because you have a defined risk and can quickly make a lot of money; or you may have heard that selling an option is best because you have the odds on your side. So which is it? The answer is that sometimes buying an option is best and, at other times, selling is best,

depending on what you are trying to accomplish and your views of the underlying stock and market.

Many option traders may be attracted to buying options because they are familiar with buying stocks (or other assets, such as a home), and they are attracted to limited risk and the possibility of large profits. Buying a call can be a good place to start when learning how to trade options. However, remember that consistent profits are possible by selling options, without having to pick the home run along the way. One advantage of selling an option is that close is sometimes good enough—in comparison to buying, where you need to be more precise in timing and direction. Ideally, you should develop strategies for both buying and selling options.

Selecting the best underlying instrument is one of the most important trading decisions you will make. In general, I have found that a broad-based index, such as the S&P 500 index, can be a good candidate for option selling: An option sale is a bet against volatility, and an index is typically less volatile than an individual stock. On the other hand, I find that stocks can be a good candidate for buying options because stocks can be very volatile.

Treat Option Trading Like a Business

If you were running a business, you would put together a business plan that encompasses trading strategies and details of how to operate the business and control expenses. The same perspective and focus should be developed when trading options. Developing a plan and working hard are essential to your success. Remember that the definition of luck is “preparation meets opportunity.” The more knowledge you have, the greater your chances of success.

You cannot always play the offensive if you want to win. Playing the defense is important if you want to trade successfully over the long run. As a result, before trading options, you should have an understanding of risks. You should have a thorough understanding of risk management strategies, have access to specialized option software and trading platforms (free or low-cost software are accessible), learn strategies that maximize your probabilities of success and can limit losses, and appreciate the importance of education. You should keep expenses low; maximum interest income credited to your account; and open accounts to trade options on stocks, ETFs, indexes, and futures. You should try to utilize their strengths when trading options. It is important to protect your investment capital. Manage risk by observing the following tips:

- If selling options, establish positions with probabilities of success of at least 75 percent.
- Trade limited-risk strategies.
- Have an exit strategy with defined profit and loss objectives.
- Have the courage to exit a position at a loss to protect capital.
- Use stop losses to automatically exit positions.

- Do not overtrade or feel compelled to be in the market at all times.
- Use *technical analysis* to time when and where to establish positions.
- Trade liquid options.
- Control expenses.
- Keep your losses small.
- Have a plan.
- Do not get greedy.

Create a Plan

Before engaging in any option transaction, you should determine your maximum profit, maximum loss, break-even point, and probabilities of success. You should develop a clear view of the direction, timing, and magnitude of the underlying stock and have strategies readily available to place yourself in a position to maximize your return and limit your losses. Unfortunately, some option positions are doomed from the start because they are poor trades from a risk–reward perspective and have little chance of success.

Before you get started, you should open brokerage accounts to take advantage of margin, and you should understand how option trading can be affected, depending on whether an account is a taxable account versus an individual retirement account (IRA) or a futures account. You should also understand how to maximize interest income and minimize commissions and taxes. You should practice option strategies using a practice (simulated) account until you become proficient at what you plan to trade.

Discipline and decisiveness are factors critical to your success, and you should not allow your emotions to control your investment decisions. To trade successfully, it is important that you develop guidelines on when to buy and when to sell. Buying and selling options, like other investments, can be an emotional roller coaster, if you let it become one. You should trade when you are levelheaded and calm, using a systematic approach determined beforehand.

Establish Goals

Which option strategies are best for you depends in part on the amount of your capital; your risk tolerance; and your confidence in determining the direction, timing, and magnitude of various moves in the marketplace. For example, if you are confident in your ability to predict direction, timing, and magnitude, then you may want to buy a call or put, depending on the direction. If you are uncomfortable with being so precise, you may want to sell options.

An option can, in some cases, be sold for what can appear to be a small premium, but when returns are calculated on an annualized basis, the returns can be outstanding. The object is to repeat the selling cycle monthly or quarterly to enhance returns throughout the year. Because you have the short-term odds on your side, you may be tempted to

generate large profits by selling a large number of options; however, you should resist the urge because it usually means excessive risk. Remember the Wall Street adage: Bulls make money, bears make money, and pigs get slaughtered.

Ideally, you should exit a position with predetermined profit or loss objectives; for instance, if you buy an option, a rule of thumb may be to exit a position if a loss reaches 50 percent of the amount paid to establish a trade. If you sell an option, a guideline may be to close out a position if you have a profit of 70 percent of the maximum possible profit in a position.

One of the main risks that many option buyers and sellers encounter is that they trade too many contracts: thus, when things go wrong, the leverage of options works against them. If, in addition, they engage in low-probability trades, they are setting the stage for financial failure. Overtrading and establishing excessive positions should be avoided. Risk increases where too many options are bought (or sold), as leverage cuts both ways. In the world of options, each option you add affects the mathematical probabilities of the others you already own or have sold to establish a position.

Develop an Edge

The average investor finds it difficult to compete with big mutual funds that spend millions of dollars on research. However, the small investor can have an edge over big funds because he can enter and exit the market as opportunities develop and not be hindered by requirements to be invested at all times. Confidence and discipline are key components of developing your edge, and it is important to remember that always following the crowd can be hazardous to your wealth.

Protect Capital

It is important to protect your investment capital. A popular risk and money management strategy is to let profits run and keep losses small. You simply cannot let your losses run too high. As the old saying goes: An ounce of prevention is worth a pound of cure. If you lose a certain level of capital, it becomes more difficult to ever get back to where you began; for example, if you have \$100,000 in an account and lose \$50,000, you must earn 100 percent to get back to even. As you can see, once you lose a substantial amount of your capital, it will limit how much you can invest going forward, and it may take you completely out of the investment picture if you are not careful. If you do not have the emotional or psychological ability to cut your losses, then you should not trade options.

Probably one of the most difficult aspects of successful trading is deciding when to exit a position. Most of the damage that was done after the stock market bubble burst in 2000 and 2008 was the result of investors who were frozen like a deer in headlights. More important, when wrong, know when to get out and act accordingly. It is best to take proactive action for risk management purposes. In such times, capital preservation should be your main priority.

Use Limited Risk Strategies and Stop Losses

There are numerous option strategy techniques that can reduce the net cost of options purchased and limit the exposure for options written (sold). A *stop loss order* is an order placed with a broker to sell an option when it reaches a certain price. It is designed to limit an investor's loss on an option position. For example, if you purchase an option for \$5, you can have a plan to close the position at a loss if it reaches \$2.50. You should use discipline in adhering to protective stop losses. Your goal in some market conditions is simply to preserve capital.

Utilize a Practice Account

New option traders are understandably nervous about trading options because options are more complicated than stocks. But, the good news is that some firms have developed practice accounts (also called "paper trading" or "simulated trading") so you can buy and sell options without the fear of losing money. In a practice account, some brokerage firms have developed trading platforms that parallel their live trading platforms but with simulated trading, which does not use real money. Therefore, simulated trading enables you to practice trading, as well as track gains and losses, without the risk of loss by using the trading platform of your broker. It can be an effective way to learn the unique features and capabilities of your broker's software (trading platform) so you can efficiently enter and exit option trades. Simulated trading can help you become familiar with the types of option orders that can be entered; using a practice account prior to executing any real trades can help you gain confidence. If simulated trading is not available at your broker, you can trade one option at a time, making sure that the risk is small.

WHAT IS AN OPTION?

There are two types of options: *calls* and *puts*. A call option is a contract that provides the *buyer* (purchaser) the right, but not the obligation, to buy an asset (100 shares, if a stock) at a particular price (called the *strike price* or *exercise price*) within a defined time frame. A put option is a contract that provides the buyer the right, but not the obligation, to sell an asset (100 shares, if a stock) at the strike price within a defined time frame. You can buy or sell a call or put option. A call *seller* is obligated to sell at the strike price within a defined time frame, and a put seller is obligated to buy at the strike price within a defined time frame.

Buy Call: Right to buy 100 shares at strike price

Buy Put: Right to sell 100 shares at strike price

Sell Call: Obligation to sell 100 shares at strike price

Sell Put: Obligation to buy 100 shares at strike price

In general, if you expect an increase in the value of a stock, you buy a call, but if you expect a decrease in a stock, you buy a put. How to profit from option selling will be covered later in this book.

Describing an Option

An option is typically described with the underlying stock (or other instrument) name, followed by the expiration month, strike price, and type of option. A call and a put option are described in the following sections.

Call Option A call option on XYZ stock (a hypothetical stock) expiring in February, with a strike price of 100, is described as the “XYZ February 100 call.” A call option *premium* (what you pay for the option) is priced on a per-share basis, and each option corresponds to 100 shares. As a result, one call option provides the option owner (*holder*) the right to buy 100 shares of a stock. The call option in this example gives the buyer (owner or holder) the right to purchase 100 shares of XYZ stock at \$100 a share (strike price) on or before the *expiration date* (the third Friday in the February expiration month). If the XYZ February 100 call option is priced at \$5, the total premium would be \$500, calculated as \$5 times 100 (shares controlled by one option contract). You would buy a call, in this example, if you believe that the price of the XYZ stock will rise because you have a right to purchase 100 shares at \$100 a share, no matter how high the stock value climbs.

As you can imagine, the value of the option will change in response to the change in stock price. If the XYZ stock price rises, then the call price will also rise, and if the XYZ stock price declines, then the call price will also decline. The value of the call option, however, will not change in lockstep, dollar for dollar with the XYZ stock. As a result, if the XYZ stock immediately rises to \$102, the February 100 call option may rise to approximately \$6, and if the XYZ stock immediately declines to \$98, the February 100 call option may decline to approximately \$4. I will cover these concepts in greater detail throughout this book.

Put Option An XYZ put option expiring in February with a strike price of 100 is described as the “XYZ February 100 put.” Like a call option, a put option premium is priced on a per share basis, and each option on a stock corresponds to 100 shares. One put option provides the owner the right to sell 100 shares of a stock. The put option in this example provides the option buyer the right to sell 100 shares of XYZ stock at \$100 a share (strike price) on or before the third Friday in February, the expiration date. If the XYZ February 100 put option is priced at \$5, the total premium would be \$500, calculated at \$5 times 100. You would buy a put, in this example, if you believe that the price of the XYZ stock will decline because you have a right to sell 100 shares at \$100 a share, no matter how low the XYZ stock value declines. If the stock price declines, then the put price will rise, and if the stock price rises, then the put price will decline.

The value of the put option will not change dollar for dollar with the stock. If the XYZ stock immediately declines to \$98, the February 100 put option may rise to approximately \$6, and if the XYZ stock immediately rises to \$102, the February 100 put option may decline to approximately \$4.

Example Using Real Estate

You may be able to understand better how a call option works from the perspective of an option on real estate. Assume that you are paying rent on a house that is selling for \$100,000, and you want the right (an option) to buy the house at \$100,000 (strike price) within the next six months (expiration date). Instead of buying the house directly for \$100,000, you instead pay \$2,000 (premium) for the right to buy (call option) the house at any time during the lease term of six months. Under this arrangement, you have the right to purchase the house at \$100,000, even if the house value rises substantially. If the house price declines to \$95,000, for instance, you are under no obligation to purchase the house. Assume further that you have the right to sell the option to a third party, who can step into your shoes in the \$100,000 purchase price transaction. If the price of the house rises, you may be able to sell your right (option) for more than \$2,000 or, alternatively, exercise your right to buy the house at the agreed price of \$100,000. For example, if the house price rises to \$110,000 in three months, you may be able to sell the option (to purchase the house) to a third party for \$10,000 (or more), enabling you to gain \$8,000 (or more), and you do not actually have to buy the house. It only makes sense that the longer the time frame of the option, the more expensive the option, ignoring all other factors, because it provides additional time for the option owner to make a decision and for the value to rise. As a result, a 3-month option may have a premium of \$1,000, a 6-month option a premium of \$2,000, a 9-month option a premium of \$3,000, and a 12-month option a premium of \$4,000. If the buyer was able to purchase the house at a price of \$105,000, instead of \$100,000, then he may be willing to pay only \$500 for the option instead of \$2,000.

The current owner of the house is like a call seller because he collects the \$2,000 (premium) on the contract and is obligated to sell the house at the \$100,000 agreed price within the next six months, should the owner of the (call) option exercise his right to buy the house at the agreed price of \$100,000. If the house price declines to \$95,000, the option buyer should not exercise his right to purchase the house at the option price of \$100,000 because he can purchase the house at the then-current market price of \$95,000. In this case, the seller profits by the \$2,000 he collected. The \$2,000 collected represents the maximum profit to the seller. All of this is going on, and the house owner (option seller) may not even know the identity of any third party buying the option. Keep in mind that in this example, the original seller of the option owns the underlying asset (house), but in the options trading world, the option seller commonly does not own the underlying asset (stock). These concepts, and option selling, are covered extensively throughout this book.

Similarity to Equity Options Options on equities work with the same principles; however, in the world of stock options, there is a centralized marketplace for trading options, where intermediaries act as the clearing agents (buyers do not actually meet or know the identity of sellers, and vice versa), with standardized terms and conditions, such as predetermined strike price intervals, at which the underlying asset can be bought or sold and the time frame (expiration dates) at which the options expire. The centralized marketplace for options usually provides sufficient volume so that orders can be filled according to the supply and demand of the market. In the world of options, a seller may not actually own the underlying asset (stock), and buyers and sellers can select the strike price and expiration date that are available to meet their own risk–reward profile, according to standardized option contracts and terms.

The Power of Leverage In our real estate example, notice the leverage that buying the real estate (call) option provides. A \$2,000 payment enables the trader to control a \$100,000 asset and produce an \$8,000 gain if the price of the house increases to \$110,000. The underlying asset rose 10 percent (from \$100,000 to \$110,000), but the option value rose 400 percent (from \$2,000 to \$10,000). It would take \$100,000 of capital (ignoring any loan) to profit from the house appreciation, but it only took \$2,000 to potentially profit using an option. That is the power of leverage and is why options are attractive to many traders. There is no free lunch, however; the option buyer also risks losing the entire \$2,000 paid because the power of leverage cuts both ways.

With a call option, you have the potential to profit, based on the number of points a stock increases in value instead of the percentage increase in the stock price. For example, if you purchase 100 shares of stock, trading at \$100 a share, for \$10,000, the stock price would have to double by rising 100 points for you to make a profit of \$10,000. With 10 call options, however, you can achieve nearly a \$10,000 profit if the stock rises only 10 percent, from \$100 to \$110 (ignoring the premium paid). Likewise, a put option can provide leverage from the decline in the value of a stock. With 10 put options, you can achieve nearly a \$10,000 profit if a stock trading at \$100 declines only 10 percent, from \$100 to \$90 (ignoring the premium paid). Such examples illustrate why options can attract a lot of attention from traders and investors.

An Option Is Like an Insurance Contract

A put option can be compared to insurance, where the difference between the strike price and stock price is like the deductible, the option expiration period is like the insurance coverage period, and the option premium is similar to the premium paid for rights under the insurance contract. For example, if XYZ stock is trading at \$100, the purchase of the XYZ February 95 put for \$2 (\$200) protects you against loss for a decline in the value of the stock below the strike price of 95. The difference between 100 and 95 is like the deductible, the time until the February expiration date is like the insurance coverage period, and the \$2 (\$200) option premium is similar to the insurance premium. If

risk is perceived to be high, a high insurance (and option) premium will be charged; if risk is low, a low insurance (and option) premium will be charged. Insurance companies charge a greater premium for longer-term coverage and a lower deductible (option premiums are similar in that respect). With options, when there is a greater chance of the underlying stock's advancing or declining through the exercise price, risk is perceived to be greater, and the premium is increased.

Like put options, calls can also be compared to insurance, except that movement is in the opposite direction. For example, if XYZ stock is trading at \$100, the price of the XYZ February 105 call may be \$2 (\$200) because you can profit from a rise in the value of the stock above the strike price of 105 (ignoring the premium). The difference between 100 and 105 is like the deductible, the time until the February expiration date is like the insurance coverage period, and the \$2 (\$200) option premium is similar to the insurance premium.

What makes option trading attractive is that you can sell options just as easily as you can buy them. In this analogy, an option seller can take the place of the insurance company.

DEFINING KEY TERMS

Now it is time to understand definitions that will lay the groundwork for trading options. Key terms include *option buyer*, *option seller*, *long*, *short*, *debit*, *credit*, *intrinsic value*, *extrinsic value*, *exercise*, *assignment*, and *break-even point*, among others.

In the previous example regarding real estate, the terms and conditions were entirely negotiated between the buyer and seller, and money was paid by the buyer directly to the seller. However, in the listed equity and futures options markets, contract terms are standardized, the buyer and seller never meet, and payments are made to or received from a third-party intermediary (centralized clearinghouse). The buyer and seller of an option on a listed stock or futures option can choose among available standardized contracts. Orders are handled by option exchanges, which clear the trades and establish the fixed strike prices, expiration dates, and other terms.

Exchange-traded (listed) equity options are standardized contracts that have predetermined terms and conditions, such as standard strike prices, expiration dates, and number of shares controlled. The *premium* is the price at which an option is bought (or sold). The *option buyer* is the person who pays the premium, and the option seller (*writer* or *grantor*) collects the premium.

When you buy an option, you are *long* the option and profit if the option increases in value. When you sell (write) an option, you are *short* the option and profit if the option declines in value. In a long option, the buyer cannot lose more than the premium paid (in addition to commission and other transaction costs, of course). In a short option, the seller (writer) cannot gain more than the premium collected (minus commission and other transaction costs). A person who has bought an option contract is considered to

TABLE 1.1 Rights and Obligations

Option	Right or Obligation
Long call	Right to buy 100 shares at strike price
Long put	Right to sell 100 shares at strike price
Short call	Obligation to sell 100 shares at strike price
Short put	Obligation to buy 100 shares at strike price

be long the option contract. A person who has sold an option contract (that is still open) is considered to be short the option contract.

An option is a *derivative* financial instrument. This means that the price of the option is directly dependent on (i.e., derived from) the value of a stock (or other underlying instrument, e.g., an ETF, index, or stock index futures), in combination with other factors. An option involves the trading of rights or obligations but does not directly transfer property. Derivatives include futures and options.

A long call provides the right to buy and a short call provides the obligation to sell. This may be easier to remember once you realize that a buy of a call provides a right to buy and a sell of a call provides an obligation to sell. However, a put works in the opposite way: A buy of a put provides the right to sell, and a sell of a put provides the obligation to buy. The rights and obligations of long and short calls and puts are summarized in Table 1.1.

Table 1.2 shows how option values change based on movement in the underlying stock.

A premium paid by the buyer is reflected as a *debit* in his account because it results in a subtraction (expense) in the account. A premium collected by the seller is reflected as a *credit* in his account because it results in an addition to the account.

As previously noted, an option is a derivative instrument whose value is linked to (i.e., derived from) an underlying instrument. The *underlying instrument* is the asset from which the option bases its value. An option value can be based on an underlying instrument, such as a stock, index, ETF, or futures. The futures options covered in this book are based on stock indexes and are called *stock index futures*. Throughout this book, the underlying instrument is usually described as *stock*, for simplicity, but the principles are intended to apply equally to an index, ETF, and stock index futures. For ease of discussion, I will use the word *stock* to mean any underlying instrument, such as a stock, index, ETF, or stock index futures.

TABLE 1.2 How Stock Change Affects Option Value

Stock	Call Typically	Put Typically
Rises	Rises	Declines
Declines	Declines	Rises

The *exercise price*, commonly referred to as the *strike price*, is the price at which the stock (underlying instrument) can be bought (in the case of a call) or sold (in the case of a put) by the holder (buyer) of the option. Strike prices are standardized at set intervals, depending on the price of the stock; for example, stocks priced under \$25 per share usually have strike price intervals in increments of 2.50; stocks priced between \$25 and \$200 per share typically have strike price intervals in increments of 5; and stocks trading above \$200 per share typically have strike price intervals in increments of 10. To further illustrate, a stock trading at \$100 a share may have strike prices ranging from 60 to 140 at intervals of 5, so its strike prices are at 60, 65, 70, . . . , 130, 135, 140. For example, if XYZ stock is trading at \$100, you may select from a host of strike prices to purchase a call, such as the May 95 call, May 100 call, or May 105 call.

Many ETF option strike price intervals are, in contrast, at a minimum of one-point interval increments. For example, an ETF trading at \$100 a share may have strike prices ranging from 50 to 150 at intervals of 1, so strike prices are at 50, 51, 52, . . . , 148, 149, 150; and, as another instance, if an ETF is trading at \$100, you may select from a number of strike prices to purchase a call, such as the May 99 call, May 100 call, or May 101 call.

The *expiration date* is the date at which the option terminates. The expiration date for stock options is usually the Saturday immediately after the third Friday of the expiration month. To a trader, however, the significant date is the third Friday of each month. It is on this Friday that equity options last trade and an option may be exercised by its owner. Saturday is reserved at brokerage firms to confirm their customers' option positions and for related paperwork involved with expiration and exercise procedures. For simplicity, in this book, I will refer to the Friday date as the expiration date. If XYZ stock is trading at \$100 in January, for example, you may select from a number of expiration dates to purchase a call such as the January 100 call, February 100 call, or March 100 call. The expiration date of an option can be short term, such as one week, or longer term, such as more than one year. This book usually covers options with an expiration date from 30 to 90 days because they are the most commonly traded.

Option expiration dates are on standardized cycles. An *option cycle* (or expiration cycle) provides the months in which options expire. Equity options generally expire in the current month and immediate subsequent month, in addition to being on an option cycle. The three most common option cycles follow:

- January, April, July, October (January cycle).
- February, May, August, November (February cycle).
- March, June, September, December (March cycle).

For example, assume it is February and a stock is on the January cycle: Options would be open for February, March, April, July, and October, in addition to January of the following year. An option cycle can vary, depending on the type of underlying instrument, so that an equity option may have a different cycle than that of an option on an index or stock index futures.

Options have option cycles that typically extend to nine months, but the option cycle may also include longer-term options, known as *long-term equity anticipation securities (LEAPS)*. LEAPS are longer-dated options that typically have an expiration date of January of each year. LEAPS have all of the rights and obligations of a traditional option but are longer dated, typically up to three years, giving you an extended period of time in which to invest.

Intrinsic and Extrinsic Value

The *intrinsic value* of an option is the amount at which the current price for the underlying stock is above the strike price of a call option or below the strike price of a put option. The remainder of the option premium is *extrinsic value*. For example, assume that a stock is selling at \$100 and that a call option with a strike price of 95 is selling for \$6. The intrinsic value is \$5, and the extrinsic value is \$1. Intrinsic value can be viewed as the minimum price inherent in the value of the option relative to the stock value. Extrinsic value is commonly called *time value*.

In-the-Money *In-the-money* describes an option contract that has intrinsic value. For example, if XYZ stock is trading at \$100, the May 95 call is \$5 in-the-money and the May 105 put is \$5 in-the-money. An option contract, as a general rule, that is in-the-money by at least two strike prices and consists almost entirely of intrinsic value is referred to as *deep-in-the-money*.

The concept of *parity* applies if an option is trading in-the-money. An option is at parity if the option price is equal to the intrinsic value (in-the-money amount). If the option is trading for more than intrinsic value, it is trading above parity; if it is trading at the same amount as intrinsic value, it is selling at parity; and if it is trading at less than intrinsic value, it is trading below parity. For example, assume that XYZ stock is trading at \$100 a share: If the XYZ February 95 call is more than \$5, it is trading above parity; if it is at \$5, it is trading at parity; and, if it is less than \$5, it is trading below parity. Most options trade above parity.

At-the-Money *At-the-money* means that an option's strike price is the same as, or closest to, the current trading price of the underlying stock. For example, if XYZ stock is trading at \$100 per share, the May 100 call and May 100 put are at-the-money. If XYZ stock is trading at \$99 per share, the May 100 call and May 100 put options are still considered at-the-money.

Out-of-the-Money *Out-of-the-money* describes an option that has no intrinsic value and, instead, consists entirely of extrinsic value. For example, if XYZ stock is trading at \$100 per share, the May 105 call and May 95 put are out-of-the-money. In general, an option contract is *far-out-of-the-money* if the strike price is at a level where it is highly unlikely to ever become in-the-money. If a call is in-the-money, a put with the same strike

price must be out-of-the-money. Conversely, if the put is in-the-money, a call at the same strike price must be out-of-the-money.

At-the-money options tend to have the highest liquidity, with the greatest *open interest*. Open interest is the total number of options and/or futures contracts that are not closed or delivered on a particular day. An option has sufficient liquidity if there are sufficient buyers and sellers (volume) to execute an orderly market, without a disruption in price. Open interest is the total number of option contracts that are outstanding and are still open (have not been exercised, closed out, or allowed to expire). A *liquid market* is a market in which selling and buying can be accomplished with minimal effect on price.

Exercise and Assignment

If you are long a call and choose to *exercise*, you buy stock at the strike price; if you are long a put and choose to exercise, you sell stock at the strike price. If the buyer decides to exercise his right under the option contract, the option seller (writer) is *assigned*, requiring him to sell (in the case of a call) or buy (in the case of a put) the underlying stock at the strike price.

An *American-style option* can be exercised by the option holder (buyer) at any time up until the expiration date, whereas a *European-style option* can be exercised only at expiration. Equity options, including ETFs, are generally American-style expirations.

When an option is exercised by the owner, the seller of the option is assigned. An *exercise notice* is a notification by a broker of assignment. *Assignment* is a designation by which the option writer is required (forced) to sell a stock at the specified exercise price if it is a call and buy a stock at the specified exercise price if it is a put. You should keep in mind that most options are not exercised and instead are either offset in the marketplace or expire worthless. Chapter 28 is entirely devoted to covering exercise and assignment.

If you are long a call, you can have the stock *called* away from the call seller. If you are long a put, you can *put* the stock to the put seller by forcing him to buy it. Although anything is possible, it is rare that a stock with extrinsic value is exercised because the holder is better off selling the option rather than exercising it. As an example, assume that XYZ stock is trading at \$100 and you own (are long) a May 95 call valued at \$7: If you exercise the call option, it gives you the right to purchase the stock at \$95, which is \$5 below the stock's current value; however, you can recognize a \$7 value simply by selling the option.

Break-Even Point

When buying or selling an option, a trader should determine in advance the point (or points) where the underlying stock must rise or fall for an option position to *break even*. Assuming you do not have a position in the underlying stock, when buying (or selling) a call, the break-even point is typically where the underlying stock, at the expiration date, equals the strike price plus the premium paid for the option contract. When buying

(or selling) a put, the break-even point is typically where the underlying stock, at the expiration date, equals the strike price minus the premium paid. For example, assume that XYZ stock is trading at \$100 and the price of the XYZ February 105 call is \$2. The buyer or seller, at the expiration date of the call option, has a break-even point at a stock price of \$107 (105 strike price plus \$2 premium paid). If you assume that the XYZ February 95 put is at \$2, the buyer or seller, at the expiration date of the put option, has a break-even point at a stock price of \$93 (95 strike price minus \$2 premium paid).

FINAL THOUGHTS

Probably the greatest advantage of trading options is leverage. Probably the greatest disadvantage of trading options is leverage. The true nature of option trading is the ability to control large sums of assets with small amounts of capital. Leverage is a double-edged sword and could lead to losses as well as gains. Knowledge is the key. Of course, some luck along the way will not hurt either.

We all come to the markets with our own strengths. Some traders are naturally bearish (and that can be an advantage in some cases), whereas others are naturally bullish; some are confident in the long term, whereas others believe in trading short term; some do not like the stress of trading, whereas others seem to thrive on it; some like to follow the markets closely, whereas others do not look at their investments more than once a month (or longer). The key seems to be to find trading strategies that fit your strengths. Each trader has his own unique risk tolerance, personality, and investing style, and you should therefore try to match your risk tolerance and investing style with how you trade options. The good news is that options provide many potential ways to profit.

There is probably an option strategy that can fit your risk profile and help you gain an edge. Which option strategies are best for you depends in part on the amount of capital you have, your risk tolerance, and your confidence level. When trading, you should not trade to the point where you cannot sleep at night. Most of the time you are trading options, you should be trading conservatively, but there are other times when you need to know when to put on a full-court press. This does not mean that you should take excessive risk, but there are times when you should be more heavily invested than others. Of course, there are also times when you should be out of the market entirely. You should never feel compelled to be in the market. Technical analysis can be a valuable tool in determining trends and can place you on a more level playing field with professional traders.

It is best to have a well-diversified portfolio. Trading in your brokerage account should be coordinated with your overall financial situation and should be part of a diversified portfolio; for example, your portfolio of investments should include domestic and international mutual funds, stocks, bonds, and homeownership. After you have determined your portfolio investments and weighed them against your debts, you are in a position to determine how much money you can risk on trading options. Most of all, do not get greedy.

Traditional buy and hold strategies only profit if the investment moves in one direction: higher. Although this works in many instances, many investors and traders are looking to increase their returns and manage risk. Using options wisely can be a way to do just that. As you gain experience in trading options, you should identify strategies that you like best, in view of your risk profile and profit objectives. Not only that, but some strategies may fit your lifestyle better than others, depending on whether you want to trade every day, once a week, or only once in a while. In Chapter 2, I describe key option fundamentals.