CHAPTER 1

The Opening Bell

At 9:30 a.m. (EST) on every business day, a bell at the New York Stock Exchange sounds, and trading on the exchange floor begins. Investors buy and sell stocks like jockeys scrambling for positions at the Kentucky Derby. News flow drives the buying and selling decisions from one day to the next.

When the day's news doesn't deviate too much from expectations, the result is typically orderly and normal market action. However, when unexpected events result in dramatic changes in the expectations, large price moves and fast trading ensue. In other words, the day's news events can result in changes in investor sentiment and result in higher or lower levels of market volatility.

It can seem overwhelming. I remember when I left the trading floors after twenty-one years at the Chicago Board Options Exchange (CBOE). My focus shifted from a small number of instruments to a huge universe of different opportunities. I started trading in markets that were unknown to me. The results were horrible. Over time, I realized that it was better to keep a laserlike focus on markets that I understood and believed in. It is simply impossible to track the moves of every different market, much less trade them all effectively.

Moreover, the importance of news events will also vary from one investor to the next. A large pension fund taking positions in a widely held stock like Apple (AAPL) or General Electric (GE) for a longer-term portfolio isn't likely to react to a news report the same way as a stock trader buying and selling stocks for short-term profits. A retiree has a different set of goals than a recent college graduate.

An options market maker on the CBOE is using equity options differently than a financial adviser selling options in an attempt to generate income for a customer's portfolio.

Although we all have different goals and objectives, the millions of participants in the financial markets digest the day's news, and the results move asset prices as the information becomes available. This is not only true of U.S. markets, but of financial instruments around the globe.

My focus in this book is primarily on U.S. Exchange listed equities, options, and equity futures markets that are open during the regular hours of 9:30 a.m. to 4:00 p.m., Monday through Friday, but there are many investments that trade beyond that. In 1985, regular trading hours were expanded beyond these hours. Premarket trading now begins at 4:00 a.m., and the after-hours session runs from 4:00 to 8:00 p.m.

Options, meanwhile, trade on thirteen different exchanges from 9:30 a.m. to 4:00 p.m. currently, and those hours may soon be expanded. Trading hours for futures and futures options vary by product, but more popular instruments like S&P 500 futures now trade nearly around the clock beginning Sunday at 6:00 p.m. and continuing through Friday evening. So when you come home at 2:00 a.m. after a few drinks at a neighborhood party, you can trade S&P 500 futures from your online brokerage account. However, that is not really recommended!

The expansion of trading hours and growth in financial markets is being driven by the exchanges to satisfy investor demand for new investment products and opportunities. At the same time, technology has created better efficiency and linked global markets. News flow travels fast and often results in sudden market moves that ripple from one economy to the next.

Yet, while today's faster and more complex market sometimes seems daunting to investors, the principles of investing have not changed. With a bit of time and effort, the fundamentals are easy to understand. So let's begin.

Probabilities

"How do I get started?"

I hear that question a lot. Many people understand the importance of investing and building wealth but don't know where to turn. Interest rates have been historically low for quite some time, and traditional banking instruments like money markets and savings accounts are not offering much in the way of yields. So what choices exist when seeking returns on one's hard-earned money?

Before I dive into specific instruments, let me introduce the probability concept. There are a myriad of different opportunities available to investors today, and all of them have varying probabilities of success. We can never predict the future with certainty, and so investments decisions are based on expectations about probable outcomes. We might say, based on our expectations, that an outcome is likely, is probable, or has a good chance.

Just like risk and reward, probability and strategy selection are two sides of the same coin. You have no doubt heard the expression, "high risk, high reward." It refers to the fact that investments that offer the highest rewards typically have the greatest risk. Playing the lottery is an example of an extreme high-risk, high-reward endeavor. There is a very high rate of failure, but a winning ticket would mean a big payoff. On the other hand, burying your life's savings in the backyard is probably a low-risk, low-reward scenario (although risks increase if you bury everything near the family dog's bone stash).

In trading options, and remember, options are simply pricing probabilities, a strategy that has a very high probability of success and a low probability of loss is likely to have smaller potential for profit. On the other hand, a strategy with a small probability of profit should generate a larger potential profit when successful.

In later chapters, we will explore simple probability concepts and ways to compute probabilities for various options strategies. The important point to take home for now is that various investments or strategies are more than just good or bad ideas. Each strategy has a quantifiable probability of success.

Getting Started

What investments have the greatest probability of helping you attain your goals? There's no one single right answer, because every individual and institution is different. It's like asking, what's the best car to buy? It really depends on what you're using it for.

The first step to finding appropriate investments is to outline longer-term goals and objectives. Obviously, we all want to build more wealth, but unless we outline a concise plan, we are unlikely to set money aside each month or invest on a regular basis to achieve our objectives. The best investment choices often depend on a person's age, ambitions, and investment time horizon. For instance, as you will see in later chapters, some options contracts exist for a mere week, while others have lives that span many years. What is your investing time horizon, and how much are you putting away each paycheck?

Five Steps in the Investment Process

1. Set longer-term goals and objectives.
2. Develop a trading plan.
3. Identify investment opportunities.
4. Execute (open) trades.
5. Monitor, adjust, and exit open positions.

After the decision to invest has been made, the next step is to develop a plan. How will you try to reach your goals? Can you trade actively during the trading day, or will your investments be made only once per week or per month? Are you investing for five days, five years or fifty years? How much risk are you willing to take? What financial instruments—stocks, futures, bonds, options, commodities—will take part of the trading plan?

Developing a relationship with a brokerage firm is a key part of the trading plan. A brokerage (or broker-dealer) like my firm, holds customer funds and places buy and sell orders as instructed by you, the client. The first step is to open an account and submit any trading approval request forms. For example, investing in options requires applying for options trading approval from your broker.

While many investors focus on brokerage commissions and fees, there are a number of other things to consider besides price. The primary thing to consider is service. For example, does the firm have people that can answer my questions and help me when needed? Make sure they can help you pursue your trading goals. As you read through the chapters of this book, you will likely find the investments and strategies that match your longer-term goals and trading plan.

Research

Believing in your trading plan and your investment choices will lower your stress levels during times of increasing market volatility.

Research is often a key to maintaining that conviction and also to finding attractive investment opportunities. In addition, it often makes sense to research companies or investments that you already know and love.

For example, let's say you own a pizza restaurant and a salesperson from The Pizza Sauce Company stops by your shop with samples of his newest sauce. You like the taste, and the price is $0.10 per can below your current supplier. You agree to sample a few cases and discover your customers love it. Your pies have never tasted better. Mama mia!

Convinced that The Pizza Sauce Company will soon gain substantial market share from its pizza sauce competitors, you check with your broker for any research available on the company. You discover that the stock is trading under the symbol PZZA. Two analysts currently cover the stock, and both agree that the company has a clean balance sheet, and shares are attractive at current levels, according to the research. Both analysts have a twelve-month price target of $26 per share.

At $20 per share, you note on the daily stock chart that the stock hasn't moved much during the past six months, but you believe that is likely to change once it becomes clear that the company is gaining market share over competitors. Your trading plan states that you do not invest more than 5 percent of your $200,000 portfolio, or more than $10,000, on one position. Instead, you place on order on your broker's platform to buy 250 shares of PZZA, for an investment of $5,000, or 2.5 percent of your portfolio.

Fast-forward one year, and as you had anticipated, The Pizza Sauce Company is outperforming its competitors, and the share price has increased to $25. You still hold 250 shares, now worth a total of $6,250, for an unrealized gain of $1,250.

However, a few weeks later, Pepperoni & Mozzarella Inc. says its cheese sales are falling short of previous expectations, and its stock drops 20 percent. The steep decline triggers a ripple effect that is felt across nearly every pizza company, as investors interpret the news as sign that pie sales are falling across the board.

Shares of The Pizza Sauce Company fall back to $22. However, your research continues to indicate that PZZA has strong fundamentals and is still gaining market share. Rather than sell hastily based on the headlines related to Pepperoni & Mozzarella, you are more likely to maintain your conviction in PZZA and possibly even buy more shares on the pullback. And that's exactly what you decide to do.

You place an order electronically to buy another 250 shares of The Pizza Sauce Company for $22 per share. You now own, and you are long, 500 shares at an average cost of $21 per share, for a total investment of $10,500. Assuming you earned 2 percent on the other assets in your account during the past year, the portfolio is now worth $204,150, or $193,650 plus the $10,500 of PZZA.

Long versus Short

- Going *long* is taking a new position as a buyer. If you are long a stock, you want the stock to increase in price so you can sell it at a profit.
- Going *short* is initiating an opening position as a seller. If you are short a stock, you want the stock price to fall so you can buy it back at a lower price. The mechanics of selling stock short are covered in detail in Chapter 3.

Your analysis was correct. Four months later, shares of The Pizza Sauce Company have recovered some losses and now trade for $25. You own 500 shares at a cost basis of $21, and the position is now worth $12,500 for an unrealized profit of $2,000. The total portfolio is now worth $207,700, or $195,200 and $12,500 of PZZA shares.

The stock position now accounts for 6 percent of your portfolio and exceeds the 5 percent threshold dictated by your trading plan. You sell 100 shares at $25 a share and reduce the position in The Pizza Sauce Company to 400 shares. The adjustment leaves you long 400 shares worth $25, or $10,000. You have booked $400 in realized taxable profits and have $1,600 of unrealized gains.

Indeed, as you will see in later chapters, sometimes the best investment opportunities happen when the news headlines seem the worst. At the end of the day, there is no substitute for timely, thoughtful research. Once you have a trading plan and have determined what instruments you will use to pursue your goals, find a broker who offers the type of research that will help you make informed decisions and keep you focused on the bigger picture when short-term events cause momentary setbacks. Research when combined with probability is a powerful combination.

Data

It wasn't that long ago when, outside the trading desks and the professional investment community, most investors relied on printed newspapers to see price changes to their stock positions. Periodicals like *The Wall Street Journal* and *Investor's Business Daily* provided tables of stocks listed alphabetically, and the prices represented the closing prices from the day before.

> ### Five Components of a Stock Quote
>
> - Open: The first price of the trading day.
> - Last: The most recent price.
> - High: The highest price of the trading day.
> - Low: The lowest price of the day.
> - Close: The final price of the trading day. It will be the same as the last price at the end of the trading day.

Wow, a lot has changed since that time! Many websites readily offer free delayed intraday prices. Brokerage firms typically offer free real-time quotes to their customers as well. Offerings might include a symbol quote box where you can type in a ticker symbol or tables that include lists of multiple symbols along with relevant information, including last, high, and low prices.

Figure 1-1 is a snapshot of what I watch on the thinkorswim platform each day. It includes indexes like the Dow Jones Industrial Average, the S&P 500, and the NASDAQ Composite, as well as some widely held names like Apple (AAPL), Netflix (NFLX), and General Electric (GE). I also watch some of the action in the futures markets, especially the S&P 500 Futures (/ES), and the US 30 year Treasury Bond Futures (ZB), as well as the Euro/US dollar (EUR/USD) currency pair.

I can also see the price quote for any stock by using the Quick Quote tool. First, identify the ticker symbol of the company you're researching. It's simply an abbreviation to uniquely identify a publicly traded instrument like a stock, index, or fund. For example, the ticker for General Electric is straightforward. It's GE. However, sometimes the ticker is less intuitive and requires a symbol lookup. This is easy to do using most brokerage platforms.

Watchlist default

Symbol	Last	Net Chng	High	Low
DJX	178.01	+.03	178.37	177.99
SPX	2090.24	+.13	2093.81	2090.24
/ES[Z5]	2088.25	-1.75	2095.00	2082.25
COMP	5130.8099	+3.2853	5141.3561	5130.7537
VIX	15.73	+.61	15.73	15.52
EUR/USD	1.05799	-.00153	1.05951	1.05636
AAPL	118.35	+.54	118.399	117.75
NFLX	126.11	+.67	126.60	125.61
GE	30.35	-.01	30.40	30.30

Figure 1-1 My Watch List

Quick Quote Main@thinkorswim [build 1880.15]

Quick Quote

Symbol	Last	Net Chng	Bid	Ask
MSFT	54.48	+.55	54.47	54.48

Figure 1-2 Quick Quotes

After the ticker symbol is identified, enter it into the Quick Quote box (Figure 1-2) to see the latest stock prices and the change for the day. In this case, the stock is Microsoft, and the ticker is MSFT. The stock is up $0.55 for the day and last traded at $54.48 per share.

The default setting for Quick Quotes on the thinkorswim platform also includes two other important pieces of information—the bid price and the ask price. The bid price is currently the best bid price by a buyer. If an investor wants to sell in the current market, he can expect to receive $54.47 per share. On the other hand, a buyer pays the asking price or $54.48 per share.

Bid versus Ask

Bid and ask reflects the current quotes to buy or sell a stock, option, or futures contract. The bid reflects a willingness to buy, and therefore a seller can expect to receive the bid price at the time of sale. The ask, or offering price, is a level that a seller or sellers are willing to receive for the security. A buyer typically pays the asking price.

Bids and asks are constantly changing, and there is no guarantee that you can buy or sell at the quoted prices. In addition, less actively traded names can see fairly large differences between bids and asks, which is also called the *bid-ask spread*. In later chapters we explore the mechanics of order entry and explore bids, asks, and bid-ask spreads in more detail. For now, the point to take away is that the last price is not necessarily an indication of the current market price to buy or sell. Bids and asks provide the latest market prices available to sellers and buyers.

Charts

A stock chart is simply a graph that shows price changes over time. In this book, I use two types. The first is a chart that shows the price of the underlying instrument, like stock, future, or index, over a period of time. The second is a payoff chart, or risk graph, and shows the potential risks and rewards of an options strategy. It is covered in more detail in later chapters. For now, let's discuss the basics of stock charting.

The simplest chart type is a line chart. For instance, it's easy to plot a line chart in a spreadsheet using data like date and price. Figure 1-3 shows a daily chart of hypothetical oil prices over twelve months. The line connects the twelve points where price and date intersect on the graph. It starts at $50 per barrel in January and ends at $53 in December.

Traders plot charts for instruments like stocks, interest rates, or commodities to see trends over time. Obviously, few create the charts

Date	Oil Prices
January	$50
February	$48
March	$51
April	$54
May	$55
June	$53
July	$52
August	$50
September	$48
October	$50
November	$51
December	$53

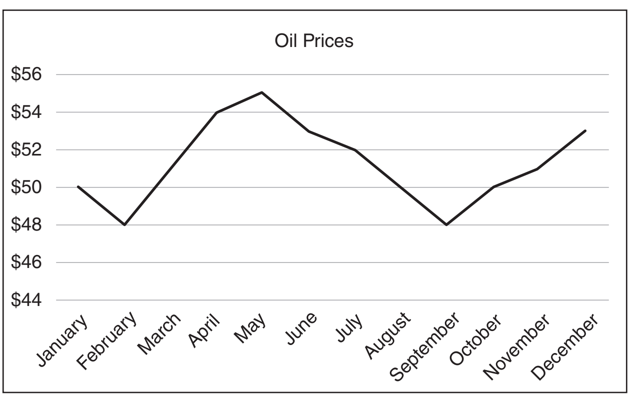

Figure 1-3 Line Chart of Monthly Oil Prices

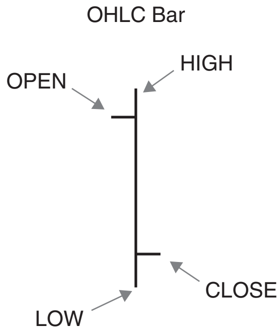

Figure 1-4 OHLC Bar

by hand or in spreadsheets. Charts are readily available on financial websites like StockCharts.com or Google Finance and also through online brokerage firms.

A second, more widely used chart is the open-high-low-close, or OHLC, chart. While the line chart is plotted using just the closing price, an OHLC chart includes bars that contain four pieces of price information.

Figure 1-4 shows an individual bar of an open-high-low-close chart. The small horizontal lines are the opening and closing prices. In this example, the stock opened at one price and closed at a lower price. The length of the vertical line represents the trading range of the day, because the top of the bar is the highest price and the bottom is the lowest.

Like the price chart, the horizontal axis (or bottom) of the OHLC chart represents time, such as days, weeks, or months. The vertical axis (or side) indicates price per unit, such as shares or contracts. Figure 1-5 shows an OHLC chart for a three-month period ended 11/30/2015. The time frame is plotted across the horizontal axis, and the change in price is depicted along the vertical axis.

Notice that the OHLC bars are not all the same length. Longer ones suggest greater distances between highs and lows, and therefore increasing volatility in the security. Shorter ones suggest narrow trading, smaller daily moves, and periods of lower volatility or narrow trading ranges.

The time frame of an OHLC chart can be changed to weekly or monthly. If so, each bar represents the change over one week or one month. Short-term traders sometimes watch intraday bar charts at five-, ten-, or fifteen-minute intervals. Most of the examples throughout this book use daily OHLC charts.

Figure 1-5 Daily Chart of S&P 500 Index (8/31/2015–11/30/2015)

More advanced charting tools are covered in Appendix B. If you have no previous experience with charting, take some time to learn how to identify areas of support and resistance with indicators like trend lines and moving averages. In addition, because the focus of later chapters is on options strategies, volatility studies are also useful. Those are covered in Appendix B as well.

Commissions and Fees

Brokerage firms vary in what they charge their customers. The costs associated with traditional brokerage activities like executing buy and sell orders have been somewhat commoditized, and costs are significantly lower today than they were twenty years ago. The growth of discount and online brokerages is a big reason.

But costs are relative to service. That is, brokerage services can range from very personal to simply taking orders online. Costs typically relate to service level and tools being offered. In short, you can expect to pay higher costs at some firms relative to others, and in an ideal world, the higher costs reflect the value being added.

At the end of the day, the investor's trading plan is a determining factor in broker selection. Are you trading once per month or five times per day? Some firms offer lower rates to active traders, and some charge more for broker-assisted trades.

Also, what types of investments are you buying and selling? Some firms offer certain products that others do not. In fact, futures are regulated under a different umbrella and require different account approvals compared to equities and equity options accounts.

Pattern Day Trader?

Certain rules apply to investors who trade frequently. A pattern day trader is defined as someone who buys and sells a security in the same trading day (intraday) and does it four or more times during a rolling five-business-day period. In order to pattern day trade, the investor must maintain a minimum of $25,000 in a margin account.

Lastly, what kind of technology does the firm offer? Not long ago, charting software, quotes, and live news were expensive. Some firms still charge for these services, and some don't. Other firms also offer premium subscriptions to newsletters, research, and other analytics. Lastly, the costs of trading vary by firm as well. Some of the fees active traders are likely to encounter include:

- **Stock trading costs.** Brokerage firms typically charge a commission to execute stock trades. Some charge a flat commission per trade, some a commission per share, and some a combination of flat plus per share. The rates vary quite a bit across the industry, and many firms will charge more for broker-assisted trades or phone trades compared to online orders.
- **Options trading costs.** The commission and/or fees on options trades vary from one firm to the next. Some firms charge a flat fee or commission plus a per-contract fee. Others might charge only a flat commission or only a per-contract charge. Some offer a combination of both and let the customer decide.
- **Futures trading costs.** As you progress in your trading, you may want to consider using futures to help hedge your portfolio. Similar to stocks and options, these costs may vary.

Virtual Trading Platforms

Over the years, brokerage firms have developed platforms to help individual investors better understand financial markets and how to buy or sell investment securities. The idea is not new, but the technology is. Virtual platforms offer an advanced way to paper trade, which simply means to write down and track your ideas on paper rather than implementing them with real money in the live market. Paper trading makes a lot of sense when attempting to learn new strategies and ideas.

In essence, a virtual trading platform lets you test-drive ideas without risking a dime. The goal is to help you develop an understanding of various financial instruments and the process of investing, which will help you build confidence as a trader.

Keep in mind that successful virtual trading during one period does not guarantee successful investing of actual funds during a later period, as market conditions are always changing. Backtesting is great for learning but has its limits. As you have probably heard many times, past performance is not an indicator of future results.

Many of the examples throughout this book are pulled from TD Ameritrade's paperMoney® virtual trading platform, and therefore, the bells and whistles will be duly highlighted in later chapters.

Summary

The first step in the process is to establish longer-term goals and objectives. Develop a trading plan that considers how much time you have available to trade, your risk tolerance, and the types of investments that might best help you to achieve your longer-term goals. Find a broker who offers the research and tools that meet your objectives. Identify potential trading ideas and test them on paper. Once new positions are opened, monitor, adjust, and exit them accordingly.

There has never been a better time to take a proactive approach to investing. Technology has resulted in better efficiency in financial markets and has substantially reduced trading costs. Research, data, and charts are readily available at little or no cost. Confidence in your plan, strategy selection, and risk management are important elements to long-term success. A virtual trading platform can help by offering a realistic tool to practice trading before going live.

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