A Practical Introduction to Day Trading

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PREFACE

Many individuals enter financial markets with the objective to earn a profit from capitalizing on price fluctuations. However, many of these new traders lose their money in trading. The reason for this is often because these new traders lack any fundamental understanding of financial markets, they cannot interpret any data, and they have no strategy for trading.

Trading on financial exchanges is really about deploying strategies to systematically generate gains, and managing risks to minimize losses. Indeed, successful traders do have objective strategies which they have proved to be effective in granting them more financial gains than financial loss.

The purpose of this book is to help a potentially uninformed retail trader or inquisitive reader understand more about financial markets, and assist them in the acquisition of the technical skills required to profit from trading. This book is a beginner's guide to trading. It focuses mainly on trades of stocks and currencies on Exchanges. While some of the analysis can be useful for other assets such as futures, commodities, and options, the analysis will not always be relevant for such markets.

The first chapter of this book introduces the reader to some key concepts in the trading industry. The distinction is made between trading and investing. The second chapter introduces the reader to day trading. It informs the reader of the basic information that they need to know before they attempt to trade in any market. The third chapter introduces the reader to Technical Analysis. It informs how to interpret charts, and how to recognize patterns in asset prices. The fourth chapter considers some basic trading strategies which may be used by retail traders. The fifth chapter considers how a retail trader may manage risk. Finally, the sixth chapter concludes with a practical example of a trading strategy.

CHAPTER ONE

GENERAL INTRODUCTION

1.0 Trading

Trading is the practice of buying and selling assets over a short-term period. Assets here refer to any financial security, commodity, or currency that an economic agent purchased. Market participants that practice trading are referred to as traders.

A distinction can be made between a retail trader and an institutional trader. A retail trader refers to a trader that trades independently for themselves. An institutional trader refers to a trader that is employed by a financial institution (for example a commercial bank, investment bank, or hedge fund) and perform trading activities as part of their job description.

Trading is distinct from investing. Investing refers to the practice of purchasing assets with the objective of gradually growing wealth from the asset over a period of time. The market participant may purchase a range of assets[1], and hold the portfolio[2] of assets over a period of time. While the price of the assets in the portfolio may fluctuate over time, the goal of the economic agent is to ride out the short-term price fluctuations and gradually earn a positive return[3] over a period of time. Market participants that engage in the practice of investing are typically referred to as investors.

While investors seek to earn a return, perhaps with a range of 5% to 15%, over a year, traders seek to make such returns over a much shorter time period, ranging from a day to a few weeks. Traders try to take advantage of short-term price fluctuations in assets. When they execute

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[1] Some of these assets may include stocks, bonds, mutual funds, exchange traded funds and other investment instruments.
[2] A portfolio is a group of assets.
[3] The return is the profit from an asset. It is gain (loss) from price increases (decreases) plus the gains from dividends if any are paid.

trades, they try to buy assets and sell them just a few dollars or cents higher. However, the make large profits by trading large volumes of assets with each trade.

Traders can be categorized basis upon their style of trading. The next section will explore different trading styles.

1.1 Trading Styles

In summary, trading styles may be categorized into the following:

- Position trading;
- Swing trading;
- Scalping; and
- Day trading.

Position trading is where the position is held by the economic agent for several weeks to several months. Position traders first try to identify trends[4] in the price of assets. If they expect a bullish trend[5], then they would go long[6] on the asset. If they detect a bearish trend, they may short sell[7] the asset.

Position traders may not necessarily try to forecast the future prices of the asset, rather they try to ride the 'wave' of the trend which has been firmly established, and benefit from the overall movement of a stock in a market. Position traders typically exit a position when the trend breaks.

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[4] Here a trend refers to a sustained movement in the price of an asset.

[5] A bullish trend is an upward trend or upward price movement. The opposite of a bullish trend is a bearish trend. A bearish trend is a downward price movement.

[6] Going long refers to buying an asset.

[7] Short selling refers to where an economic agent has sold an asset that they do not own. In essence, they have borrowed the asset from their broker and sold it. However, eventually the economic agent would have to repurchase the asset, perhaps when it falls to a lower price, and return the asset to their broker. When the economic agent returns the asset to the broker, it is referred as a 'cover'. It is important to note, the US Securities and Exchange Commission adopted a Short Sale Restriction (SSR) rule since February 2010 (US SEC 2016). Once this rule is activated, economic agents can only short sell the asset once the price is going up. This rule was devised in order to prevent crashes from occurring as a consequence of too many economic agents short selling an asset while its price is declining.

Swing trading is where a market participant holds a position for a few days, to a few weeks. Once the trader holds more than few weeks, it is called position trading. Swing trading is slower paced than day trading since the time frame for holding trades is longer. It is very important that a swing trader have a trading strategy, as stocks will be moving up and down, but they will not be always available to constantly monitor the market like a day trader.

Scalping refers to where traders' long (or short) assets, hold them for a few seconds or minutes then close the position. Scalpers try to exploit small moves in price by trading large volumes of the asset over a very short period of time. Scalpers try to take advantage of the volatility[8] in the market.

Day trading refers to the practice of buying and selling assets in the same day. Positions are not held overnight. All positions are closed within the same day. Day traders try to make profits by exploiting the volatility in an asset price in a day. Like scalpers, day traders profit by moving a large volume of stocks. Day traders' trading interval is the active hours of a trading day, whereas scalpers' trading intervals range from a few seconds to a few minutes. When a trader opens and closes their position on an asset from an account, it is referred as a round-trip. Under the Pattern Day Trade Rule, the Financial Industry Regulatory Authority (FINRA) only allows three (3) round-trips within a five (5) rolling day[9] period. This rule only applies to margin accounts[10].[11]

[8] Volatility here refers to the tendency of the price of an asset to fluctuate.

[9] The five rolling days here refer to five consecutive trading days.

[10] Margin accounts are the accounts held by the broker that allows the market participant to trade on credit. For instance, if the trader has deposited $45,000 in the account, if they are trading on margin, the broker may allow the trader to take trades up to $90,000.

[11] According to the FINRA, any account that places four day trades or more, within in a five trading day period is permanently deemed to be a 'pattern day trading' (PDT) account. The FINRA mandates that pattern day trading accounts maintain a minimum daily equity balance of US $25,000. If the account balance falls below US $25,000, traders can only perform closing transactions only until the account balance is increased to US $25,000. The FINRA deems Non-Day Trading Account as any account that has never placed 4 trades within a 5-day period. Non-Day Trading Accounts are required to have an equity balance of at least US $5,000 (Trade Station 2016).

Traders select their trading style based upon: the size of their trading account; their level of experience; the amount of time they are willing to dedicate to trading; and their risk tolerance[12].

1.2 Portfolio Allocation

Portfolio allocation is the process by which the market participant decides which assets should compose the portfolio. Two factors that influence portfolio allocation are the time horizon and risk tolerance. Time horizon refers to the age of the investor/ trader relative to their retirement. Generally, the longer the time horizon of an investor, the more risk their portfolio can bear. This is due to longer time periods provide more time for the investor to recover from losses. For example, assume an investor made a 25% loss in a portfolio this year. If that investor has a long time horizon, then they have several years to recover from such loss.

The risk tolerance refers to how much risk that an investor/ trader is willing to take. Risk here is defined as the likelihood that an investment may earn a return lower than the expected return. However, the greater the returns from an investment deviates from its expected returns, the riskier the investment. In fact, the Risk-Return Tradeoff asserts that the returns from an investment can be increased by taking larger risks. Investors/ traders trying to make profits cannot eliminate all risks. Instead, they should try to find a balance between the desired return from their investment and the associated risks. The risk tolerance of each investor is influenced by their personality as some investors are willing to take more risks, with the goal of earning a profit, than others.

Risk adverse investors with short horizon would prefer portfolios which have a high weight of income stocks[13]. On the other hand, investors with a long horizon may prefer a portfolio with a higher weight of growth

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[12] Risk tolerance refers to how much loss a trader/ investor is willing to risk while trading/ investing.

[13] Income stocks are equities that pay regular dividends. The dividend of income stocks often increases over time (Reilly and Brown 2011).

stocks[14]. Moderate investors with moderate risk tolerance and time horizon may prefer a portfolio with a higher weight of value stocks[15].

1.3 Profit Loss Ratios

Many retail traders may trade ad-hoc, or they may go to forums and inquire about other market participants' trades in order to mirror them. Such traders may fear that they may lose money, subsequently influencing their consistent search for the correct tool which can help them make accurate trades 100% of the time. Retail traders may be searching for the "Holy Grail", the trading secret that would lead to instant profitability. Such search may be unjustified since it is possible for a trader to correct about the market direction only 50% of the time yet still be profitable.

Traders should be mindful of profit to loss ratios. If a retail trader can successfully trade with a profit to loss ratio of at least 2:1 then they can be profitable even if they are only accurate about the direction of the market 50% of the time.

Most traders who are unable to achieve financial success on financial markets do so because they are trading with a profit to loss ratio where the average size of their financial gain is less than the average size of their financial loss. They could have a profit to loss ratio of 1:2 or even worse. Such statistics may be a result of the retail trader holding losses too long, or closing profitable positions too early. Throughout the course of this book, consideration is given to various tools and analytical techniques which could result in the retail trader earning more financial gains than losses.

1.4 Book Objectives

Trading has the potential to general large profits in a very short period of time. However, if an economic agent attempts to trade without first understanding certain fundamentals about trading, they may lose large amounts of money while trading. Moreover, they may incur losses without understanding why.

[14] Growth stocks are equities of companies whose earnings are growing above the average market rate. Growth stocks rarely pay dividends since the companies reinvest their earnings (Reilly and Brown 2011; Levin and Wyzalek 2014).

[15] Value stocks are equities that are trading at a price that is low relative to its fundamentals (Levin and Wyzalek 2014).

The objective of this book is to teach a potential reader, which is lacking prior knowledge of finance, the relevant information about financial exchanges, and how to profit from day trading. This book seeks to provide a roadmap for the trader who desires to learn to trade from a systematic approach rather than based on ad-hoc decisions and emotions.

A study of the guidelines presented herein will help identify and eliminate the causes of failure, such as a poor strategy, incorrect data interpretation, poor risk management, and improper strategy evaluation.

1.5 Outline of Book

While several types of financial instruments are available on stock markets, this book focuses mainly on trading stocks and currencies. Chapter Two of this book will review basic concepts in trading. It addresses issues such as how to open an account, and how to identify stocks to trade.

Chapter Three explores the technical tools used for trading. It reviews market conditions, candlesticks, and chart patterns.

Chapter Four considers a number of strategies which can be used by a trader to earn a profit. This will be supplemented by the strategies which can be used to manage risk in Chapter Five.

Chapter Six probes into the average trading day of the market participant, and presents a general conclusion.

1.6 Summary Insight

This chapter reviewed the basic concepts of trading. First, this chapter makes the distinction between trading and investing. Moreover, it makes the distinction between day trading, scalping, swing trading, and investing. This chapter then outlines the general risk preferences of different economic agents, and their predilection for portfolio allocation.

Chapter Two, the next chapter, investigates the basic fundamentals of day trading.

CHAPTER TWO

DAY TRADING

2.0 Introduction

Many different economic agents enter financial markets, and may trade financial assets with the objective of making a profit. An uninformed but interested economic agent may be unaware of how to begin the process to engage in day trading. This chapter outlines the process in which such economic agent may open an account to engage in day trading. It starts by outlining where assets are traded. Then, it explains the factors that the economic agent should consider before opening an account. This is followed by a review of how the economic agent may identify potential stocks to trade; and an overview of the different analysis techniques that the economic agent may consider.

2.1 Where Assets are Traded

Stocks and other financial securities are traded on exchanges. An exchange is an organized market where securities, commodities, currencies, and derivatives are traded. Exchanges with a physical location are referred to as centralized markets or centralized exchanges. Exchanges that do not have a physical location are referred to as over-the-counter (OTC) markets.

The top centralized exchanges in the world on the basis of market capitalization are the New York Stock Exchange (NYSE), the NASDAQ, the Tokyo Stock Exchange, the London Stock Exchange, and the Shanghai Stock Exchange. Within the Caribbean region, there are smaller centralized exchanges such as the Eastern Caribbean Securities Exchange (ECSE), the Barbados Stock Exchange, the Jamaica Stock Exchange, and the Trinidad and Tobago Stock Exchange (TTSE). The smaller exchanges tend to be less efficient than the exchanges in developed countries.

2.1.1 The Forex Market

The trade of foreign exchange, or forex, is considered as trade in an OTC market. This perception arises is due to the entire market being run electronically, within a network of banks, continuously over a 24-hour period.

The forex market is attractive for trading for a number of reasons. They include: i) the large size of the market; ii) the high market liquidity; iii) low transaction costs; iv) the 24-hour market; and v) low barriers to entry.

The forex market is the largest financial market in the entire world. In fact, the market capitalization of the forex market is approximately US$6 trillion a day (Nag and McGeever 2016), while the market capitalization of the NYSE, the largest exchange, is only US$45 billion a day (NYSE 2017). The forex market is so large that it is difficult for any one market participant to manipulate the market. In contrast, the stocks market is often manipulated by large participants.

The forex market is highly liquid. This is advantageous to traders as it means that they can immediately buy or sell forex at the market price whenever they desire. There will always be someone at the market willing to take the other side of the trade. Thus, a trader will never be stuck in a position for a currency pair.

A currency pair is the exchange rate or quotation for two currencies. For example, the Euro / United States dollar (EUR/USD), the United States dollar / Japan yen (USD/JPY), and the United Kingdom pound / United States dollar (GBP/USD) are currency pairs. It shows how much units of one country's currency is traded for another country's currency. The major, and most actively traded currency pairs are: EUR/USD, USD/CAD, AUD/USD, USD/JPY, GBP/USD, and USD/CHF. Several currency pairs for developing countries are considered minor currency pairs, or exotics.

The high liquidity and competition on the forex market results in low spreads between bid and ask[16]. Such low spreads result in low transaction costs per trade. In fact, for a trading factor of 0.01, some brokers may

[16] The bid price is the price that the market participant offers to purchase the asset. The ask is the price that the holder of an asset requests for the sale of the asset. The retail trader can sell an asset at the bid price, but purchases assets at the ask price.

charge a commission of only US $0.09 (9 cents). In contrast to the trading of stocks, some brokers may charge US$5 per trade.

The forex market is open 24 hours a day as a result of the overlapping of the majour markets. The forex market has four major trading sessions: the Sydney session; the Tokyo session; the London session; and the New York session. Table 2.1 below outlines the time for the majour trading sessions.

Table 2.1: Open and Close times for the Major Trading Sessions

April – October		
Time Zone	**EDT**	**GMT**
Sydney Open Sydney Close	6:00 PM 3:00 AM	10:00 PM 7:00 AM
Tokyo Open Tokyo Close	7:00 PM 4:00 AM	11:00 PM 8:00 AM
London Open London Close	3:00 AM 12:00 PM	7:00 AM 4:00 PM
New York Open New York Close	8:00 AM 5:00 PM	12:00 PM 9:00 PM
October – April		
Sydney Open Sydney Close	4:00 PM 1:00 AM	9:00 PM 6:00 AM
Tokyo Open Tokyo Close	6:00 PM 3:00 AM	11:00 PM 8:00 AM
London Open London Close	3:00 AM 12:00 PM	8:00 AM 5:00 PM
New York Open New York Close	8:00 AM 5:00 PM	1:00 PM 10:00 PM

There are low barriers to entry to trade on the forex market. In fact, a retail trader[17] can open an account to trade forex with as low as US$100. However, for stocks, the minimum account size allowed by brokers is US$500.

[17] A retail trader is a market participant that engages in the practice of trading financial assets. Throughout the course of this book, the terms “retail trader”, and “market participant” will be used interchangeably.

2.2 Day Trading

The objective of the day trader is to make money from small price movements in an asset. For simplicity, consider only stocks.[18] Therefore, the day trader is trying to profit from small movements in the price of stocks. This can be done by trading large volumes of the stock or taking larger positions. These positions may be larger than what some economic agents may feel comfortable investing. However, the risk is managed since the position is held for a short period of time, a few minutes to a few hours, and the trader monitors the prices while holding their position.

To put day trading in context, consider the following example. An economic agent can invest $20,000 in a mutual fund[19] and earn perhaps a 5% return per annum. This works out to be just $1,000. However, a day trader could invest the same $20,000 by purchasing stocks in 1 day. If by the end of the day, when the closed the position they made a profit of 5%, then they would make $1,000 that day. Thus, if the economic agent continues trading the same volume, it is possible to make a profit way in excess of 5% in that year.

A trader can find a stock whose price can move by at least 5% within a day. However, not all stocks in the market will experience such large price movements. In fact, it may be only stocks that a reacting to news that may experience such large price movements. In general, good news about a stock, and the company's profits should cause a positive price movement. Contrastingly, bad news about a stock or a company's profitability should cause a decline in the price of stocks.

To illustrate how stocks respond to news, consider this real-life example. On April 1, 2016, Sky Solar Holdings' stock SKYS had a very good performance. It increased by 88% in 1 day. Upon the examination of news at yahoo finance, it was revealed that Sky Solar Holdings reported

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[18] There are many different types of assets on financial markets. For instance, there are equities, fixed income securities, mutual funds, commodities, forex and derivatives. However, for the purposes of this book, only stocks are considered.

[19] A mutual fund is a portfolio which is managed by a fund manager. Mutual funds are sold directly to consumers. Mutual funds are marked to market daily, allowing their price to change on a daily basis. However, they are relatively safe investments, allowing an economic agent to earn a modest return, while taking minimal risks (Investopedia 2017). Since mutual funds are managed by professionals, and individual with absolutely no knowledge of finance can safely earn a given return.

the news of good profits for 2014 and 2015. They stated, "Q4 2015 total revenue of $12.2 million, up 49% over Q4 2014." (Global News Wire 2016).

A more recent example can be seen by Pokemon Go. Following the release of Pokemon Go, Nintendo's stock price almost doubled. On July 6, 2016, Nintendo's stock (NTDOY) was US $17.63. By July 18, 2016, NTDOY peaked at US $37.37, a 111% increase (Yahoo Finance, 2016). This increase in the stock price was due to traders and investors anticipating Nintendo earning significant profits from its 33% ownership in the Pokemon Company, which controls the merchandising and licensing of the Pokemon franchise, and an estimated 5-10% equity in the game's developer, Niantic (Colgan 2016).

In the week of the 18th to 22nd July 2016, Nintendo announced that Pokemon Go will have only a "limited" effect on its profitability since the game has other equity holders (Charles 2016). Since then the stock price of Nintendo fell from US $37.37 on Monday July 18, 2016 to US $26.75 by Monday July 25, 2016, a 28% decline (Yahoo Finance 2016).

Day traders should look for stocks whose prices can move at least 5% within one day. Given that there are thousands of stocks on stock markets, a day trader should utilize the correct tools on the market.

Some of the tools that can be used include:

- Stock Charts;
- Stock Scanners;
- Stock News; and
- Chat Room (optional).

Stock Charts are charts that display patterns and trends of stock prices. A trader should examine stock charts to determine which stocks should be traded.

Stock Scanners are software that can scan the stock market to find potential stocks of interest. For instance, if a trader is interested in stocks that experienced at least a 5% price movement within the last 10 days, the trader can input such requirements in the scanner and provide only the stocks that meet the trader's criteria.

Stock News provides information on companies. In other words, is a company's stock has experienced a significant change in price, the stock news can be used to determine the reason for the price movement.

Stock Chat rooms are private forums on the internet whereby members may discuss various issues regarding stocks. Members of the chat room may provide tips as to what stocks should be traded, what positions to take, and when to close certain positions.

Each one of the aforementioned tools may cost as much as $100 a month. While some of the services are offered free, the best services usually incur a fee. While such costs may be discouraging to a potential new trade, a trader should consider the act of trading as a professional business. Like many other businesses, there is some operational costs involved in order to maintain operations. However, if these services can assist a trader to make well-informed decisions, and profitable trades then the cost of such information may be justified.

In microeconomics, a firm may incur various costs in its operation. However, it would continue to produce up to the point where its marginal costs[20] equate its marginal revenue[21]. In other words, once its marginal costs of production are less than its marginal revenue, it would produce. The firm would maximize its profit at the particular point where the additional revenue from production just equates the additional cost of producing.

More simply expresses, if a trader incurs these costs to make trades, it is possible for the trade to generate profits that far exceed these costs.

A new trader, with little or no experience in trading, should first practice paper trading before trading with real money. Ameritrade[22], Trade

[20] Marginal cost is the cost of producing one (1) additional unit of output.
[21] Marginal revenue is the revenue from producing and selling one (1) additional unit of output.
[22] Ameritrade paper trading system may be accessed through Investools. This is available via the following link https://toolbox.investools.com/portfolio/paperMoneyLanding.iedu#. If users attempt to download the program directly from Ameritrade, some traders may be blocked as Ameritrade requires users to register but it only allow US citizens or US residents to create accounts.

Station, Sure trader and Market Watch[23] can be used to do this. A new trader can open a demo account in Ameritrade and trade with imaginary money. A new trader should also try to use free services for stock news and charts, and try to develop a working trading strategy before trading with real money. By doing this, the trader can eventually develop strategies with known success rates. It is important to note, most new traders that fail, do so because they have no proven trading strategy. In other words, they are trading based on a guess, and they have no statistics to show the percentage success rate of their trading strategy.

A day trader should look for stocks whose prices can change by at least 5% within a few minutes. The average stock will not experience such large price movements within such a short period of time. Therefore, such stocks are trading at extremes.

2.3 Opening an Account

To commence day trading, a trader must first open an account with a broker. The trader must fill in their name, address, and other personal information with the broker. The fees of brokers vary. Table 2.2 provides a brief summary of the different fees of stockbrokers as of 2016.

Table 2.2: Brokers, their Commission Fees and Minimum Account Sizes in the US

Name	Fee	Minimum account size
Scottrade	US$7 commission per trade	US$2,500 account minimum.
ETRADE	US$9.99 commission per trade	US$500 account minimum.
Fidelity	US7.95 commission per trade	US$2,500 account minimum.
Trade Station	US$4.99 commission per trade	$5,000 Minimum for Non-Day-Trading Account. $30,000 for a Day Trading Account.

[23] Market Watch account is not a real account. It is a demo which starts all players at $50,000 and charges a commission of $7 per trade. It is very easy to create a demo account at Market Watch. It is available at:
http://www.marketwatch.com/game/

Speed trader	US$4.49 commission per trade	
Light Speed	US$4.00 per trade for 250 to 750 trades, plus accounts less than US$15,000 will be charged a US$25 monthly minimum commission fee	US$25,000 is the minimum initial account size.
Sure trader	US$4.95 per trade up to 1000 shares	$500
FX Choice	US $0.09 per 0.01 trading factor	$100

Before selecting a broker, a new trade should consider:

1. All the fees of the broker;
2. The minimum account size required by the broker; and
3. The online platform and the speed in which the broker execute trades.

The trader should consider all fees. These include the commission fees per trade, plus possible hidden fees. For instance, Light Speed charges a fee of US$25 per month if the account size is less than US$15,000. Some brokers charge a fee for inactivity. For example, Sure Trader charges US$50 per quarter if there are less than 15 trades undertaken. Brokers typically charge additional fees for additional services. For instance, Speed Trade charges US$60 for international wire transfers. Some brokers have additional rules regarding transactions. For instance, if a trader uses Sure Trader as their broker, if the trader is using margin on Penny Stocks[24], the account of the trader may be liquidated by Sure Trader.

Consider an example where a retail trader may decide to open a day-trading account with a stockbroker. Assume that the commission per trade is US$5, therefore the commission per round trip is US$10. If the retail trader purchases one share of a stock at US$30 per share, the trader would need a positive price movement of US $10, or a cumulative effect of price movement and dividend payments of US$10 in order to break even. However, a US$10 price change is an approximate 33% change, which is considered large. If the trader desires to earn a profit from a smaller price movement they would need to compensate with volume. In other words, they will need to buy more than 1 share. For example, if the retail trader

[24] Sure Trader refers to a Penny Stock as any stock below $3 (Sure Trader 2016).

bought 5 shares at US$30 each, (resulting in a total of US$150 for the long order), then the trader would only require a positive price movement of US$2 per share in order to break-even.

In the case of forex trading, a retail trader may seek to profit from changes in the price interest points (pips). A pip measures the extent of change incurred in the exchange rate for a currency pair. For example, assume that the EUR/USD moves from 1.2250 to 1.2251. The 0.0001 change in the quotation is one pip. Alternatively expressed, a pip is 1/10,000 of a dollar.

Just like stock trading, there are multiple brokers in the forex market. Some popular brokers include Ameritrade, Ally Invest, ATC Brokers, Forex.com, FX Choice, and Oanda. Table 2.3 provides an overview of the commissions and minimum account size for the aforementioned brokers.

Table 2.3: Brokers, their Commission Fees and Minimum Account Sizes in the US

Online Broker	Commissions	Account minimum
FX Choice	US$0.09 per trading factor of 0.01	$100
OANDA	Both spread markup and commission ($50 per one million units)	$0
Ameritrade	Both spread markup and commission ($1 minimum; $0.10/1,000 units per side), depending on currency.	$0
Forex.com	Spread markup	$50
Ally Invest	Spread markup	$500 ($3,000 recommended to trade full range of products)
ATC Brokers	$1 per 10,000 units, round turn	$3,000

Source: Adapted from O'Shea and Royal (2018)

FX Choice has a relatively cheap and simple commission system. FX Choice charges a commission of US$0.09 per trading factor. Additionally, this commission is only charged when an order is closed. So for a trading factor of 0.05, the commission would be US$0.45, for a trading factor of

0.20 the commission would be US$1.80 and so on. Subsequently, even if the gain per dollar is a few cents, a retail trader can earn a profit from trading forex. Thus, a retail trader that is trading forex can operate a smaller account and be profitable than a retail trader that is trading stocks.

It is noteworthy that the spreads for major currency pairs during normal trading periods on weekdays, (for e.g. at 9:30 am on a Monday) tend to range from 7 pips to 9 pips. Given the cost of commission of US$0.09 per trading factor of 0.01, a retail trader's order would need to be in the correct position by 16 to 18 pips in order to break-even on a trade.

The minimum account size is also important since if a trader does not have the minimum account requirements, they cannot use that broker to trade. For example, Fidelity minimum account size is US$2,500 for the trade of stocks. Whereas for forex trade, FX Choice minimum account size is US$100. Given the small account size mandatory requirement, and the small, yet proportional rate for the charging of commission, it is relatively easier for a retail trader to enter the forex market than the stock market.

An important consideration is the requirements by the FINRA. Recall, FINRA mandates that pattern day trading accounts maintain a minimum equity of US$25,000, while non-pattern day trading accounts maintain a minimum equity of US$25,000. Since most day traders will undertake more than 3 round-trips within 5 consecutive trading days, then they will need to have an account balance in excess of US$25,000 in order to actively trade. However, Sure Trader, a broker based in Nassau, Bahamas, do not enforce the PDT restrictions of the FINRA. Subsequently, a trader with less than $25,000 may actively trade stocks on Sure Trader.

It is important to note the disparity in the financial requirements for trading stocks and trading forex. For example, using a trading factor of 0.01, if there is a positive price movement by 118 pips (US 11.8 cents), a retail trader can generate a profit of US$1. In terms of the risk of that trade, then if there was a movement of 100 pips in the wrong direction the trader would stand to lose US$1.18. However, in the case of stocks, a trader buying 5 shares at US$30 each and hoping for a US$2 price increase would risk US$150 just to break-even.

The online platform of a broker is also a factor to consider for trades. In the United States (US) and most exchanges in developed countries, the broker would provide an online platform that allows a trader to execute trades immediately. However, in exchanges in developing countries, there may be no online platform. This is the case for brokers operating in the TTSE.

The absence of an online platform, offered by brokers in a country, results in inefficiency in the exchange. In order to make a trade, a trader would most likely be required to go physically to the broker, fill out some forms, and exchange cash in order to make an order. Such conditions may result in little price movement in the stock market. In fact, for some stocks, there may be absolutely no trades and no price movement on some days.

Inefficient markets may have wide spreads between the bid and ask. This may be problematic for a trader that desires to liquidate a large proportion of their assets suddenly, as they may be unable to acquire a buyer for their assets. This may result in the trader accepting a lower price than they desire for their assets.

In stock exchanges in developed countries, there are typically Market Makers to facilitate liquidity in the market. Market Markers buy and sell assets, even when no one else is willing to trade the asset. In developing countries, there may not be a Market Maker on the exchange.

It is important to note, all brokers will ask the account holder for the following information to create an account:

- Contact Email address;
- 2 Valid photo IDs (driver's license, national ID, passport);
- Bank account information;
- Employer's address and telephone number; and
- Financial information (annual income, and total net worth).

Some brokers have additional requirements for opening account. For instance, Sure Trader requires:

- Financial and professional references;
- Proof of residency (e.g. a utility bill, or bank statement, etc. no older than 6 months, with the account holder's address); and
- Non-US individuals are required to submit a W-8BEN form, NON-US Entities are required to submit a W-8BEN-E form, and for accounts that will be comprised of both non-US entities and individuals, will be required to submit a W-9 form.

2.4 Important Questions to Consider Before Trading

Before trading in any market, a trader should consider the following questions:

- What types of financial markets are being considered for trading?
- What is the trading strategy?
  - How are stocks selected?
  - What setups and scanners are used?
  - What strategy should be used? e.g. price crossover strategy; or a reversal trading strategy.
  - What are the statistics from paper trading on their strategy?
  - The time of day the trade was executed. What are the results of such trades?
- What is the strategy for managing risk?
  - What is the profit-loss ratio?
  - What is the max loss ever experienced?
  - How frequently are losses made? What is the empirical probability of making losses?

As previously mentioned, stock markets facilitate the trade of stocks, while forex markets facilities the trade of currency pairs. In stock markets, a retail trader needs to analyze and consider the dynamics of the stock market to inform their trades. The trader makes a profit from selling stocks at a price that is both higher than the purchase price of the stock and the cost of the commission to the broker.

In the case of forex markets, a retail trader should focus their analysis on currency pairs and the factors affecting them to inform their trades. The forex market is advantageous and it allows retail traders with small accounts to trade on margin and earn profits from changes in pips. A pip is the smallest measure of change in a currency pair in the forex market. For instance, assume the price of a currency pair moved from US$1.259 to US$1.260. The change in price was US$0.001 or 1 pip.[25] Brokers allow forex traders to place trading factors that are related to pips. A trading factor is analogous to a betting scale to determine how much of a retail trader's capital is risked per trade. For example, at a trading factor of 0.01, a very small percentage of the retail trader's account is risked with the trade. In fact, at a trading factor of 0.01, if a trade is in the correct position for 10 pips it would only result in a profit of 10 cents. However, if the

[25] A pip is also 1/1000 of a dollar.

trading factor was 0.10, a trade is in the correct position for 10 pips would have resulted in a profit of US$1. Likewise, at a trading factor of 1.00, a trade in the correct position of only 10 pips would have resulted in a profit of US$10. It is noteworthy that while increasing the trading factor can increase the payout of each correct trade, it can also increase the loss of incorrect trade. Thus, traders need to mindful of how much capital they are risking with each trading factor if they don't want to quickly diminish their account.

While paper trading, new traders should document their strategies used, the times they were executed, and the profits made. Traders should document the actual ratio of profit to loss. As previously mentioned, an acceptable profit-loss ratio would be a 2:1 ratio or higher. In other words, even if the chosen strategy results in a trader earning a profit 50% of the time, and losing 50% of the time, the strategy would still be acceptable. Moreover, a higher profit to loss ratio implies that a trader can be wrong a lot, yet still make a lot of money.

Retail traders also need to consider how they make decisions based on real time. Markets can move fast, and if a trader is slow in performing analysis, it is possible for them to miss profitable opportunities. Traders should also practice paper trading so they may become familiar with the trading platform of the broker. Experienced traders, can also practice paper trading so they may practice new strategies.

Retail traders also need a strategy to manage their risks and losses. For instance, suppose the market moves in an unexpected unfavorable direction. The trader should have a limit on much loss they are willing to accept before they close the position. For example, if while holding an asset in the long position, the price of the asset declines unexpectedly by 30 cents, then the trader may decide to close the position in order to prevent the loss from growing.

Retail traders need to manage their risk. For example, suppose a trader won 15 consecutive times, however, each time they won, they invested all of their earnings in the next trade. Then, whenever they incur the losing trade, they risk losing all their gains. In such instance, the trader would have a 15/16 (94% success rate), but the one time they lost, they risk losing all their earnings because they failed to properly manage their risks.

Traders should only trade with real money when they have a strategy that has been proven to be profitable.

2.4.1 Types of Orders

While paper trading, the trader will have to make orders for stocks. A trade order is an instruction from a trader/ investor to a broker to enter or exit a position. Trades can be entered in different directions. Long orders refer to orders to purchase an asset. Short orders are orders to sell an asset. The direction of the order issued by the trader depends on their expectations of the market. If they expect the price of an asset to rise, they may issue long orders and they plan to buy the asset and resell at a higher price. If they are holding stocks and anticipate a decline in its price, they may issue a short order. If they anticipate a decline in the stock price but they don't own the stock, they may issue a short order to short sell the stock.

There are different types of orders, they include:

- Market;
- Limit;
- Stop;
- Conditional; and
- Duration.

A market order is an instruction to a broker to long or sell the asset at the market price. For instance, if the trader issues a long market order, then the broker will purchase the asset for the trader at the ask price[26]. Market orders tend to be filled immediately. However, the disadvantage of market orders is that they do not guarantee a price for the order to be filled. There can be slippage in price as market orders are filled. For example, assume a trader issued a market order to short 1,000 shares of a stock that they owned. This order is only filled by the broker finding other traders willing to purchase the stock. The first purchase order might be an order to purchase 500 shares at a price of US$20. Then, there may be a second order to purchase 300 shares at $19 per share. Then there might be a final order to purchase 200 shares at $18 per share. Although all 1,000 shares are sold, the average price the trader received was $19.3 per share.[27]

[26] The ask price is the price the seller is asking for the asset. The ask price is distinct from the bid price. The bid price is the price the buyer is offering to pay for the asset.

[27] ($20 x 500/1000)+(19 x 300/1000)+(18 x 200/1000) = 19.3