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Stock Market Simulation

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Abstract

Simulation tools and information available on the internet were used to conduct a 5-week stock market simulation with four different trading strategies: swing, technical, position and day trading. Trading results were analyzed and compared to find out the differences of the trading methods and determine the most profitable one. This project was helpful for the team members to have a better knowledge of the stock market and gain valuable trading experiences to become more competent and more confident investors in the future.

Table of Contents

Abstract	ii
Table of Contents	iii
List of Figures	ix
List of Tables	xii
1 Introduction.....	1
1.1 Goal.....	1
1.2 History of the Stock Market	1
1.3 Global Financial Crisis in 2008	2
1.4 NYSE VS. NASDAQ	3
1.5 How to Invest.....	4
2 Trading Method.....	6
2.1 Swing Trading	6
2.1.1 Goal and Approach	6
2.1.2 Comparison with Other Trading Methods	7
2.1.3 Conclusion	7
2.2 Technical Trading	7
2.2.1 Introduction.....	7
2.2.2 3 Important Assumptions.....	8
2.2.3 John Murphy’s Ten Laws of Technical Trading	9
2.2.4 Conclusion	10
2.3 Position Trading.....	10
2.4 Day Trading	11
3 Company Stock Selections	13
3.1 Swing Trading	13

3.1.1	GoGo.....	13
3.1.2	EMES (Emerge Energy Services LP).....	14
3.1.3	BSPM (Biostar Pharmaceuticals, Inc.).....	15
3.2	Technical Trading.....	16
3.2.1	Alphabet Inc. (GOOG).....	16
3.2.2	Delta Air Lines, Inc. (DAL).....	17
3.2.3	Bank of American (BAC).....	17
3.3	Position Trading.....	18
3.3.1	Oracle Corporation (ORCL).....	18
3.3.2	Coca-Cola Company (KO).....	18
3.4	Day Trading.....	19
3.4.1	Goals for the simulation.....	19
3.4.2	Stocks Chosen.....	19
4	Simulation 1 : Swing Trading.....	21
4.1	Week 1.....	21
4.1.1	EMES.....	21
4.1.2	BSPM.....	22
4.1.3	Transaction Table.....	23
4.2	Week 2.....	23
4.2.1	BSPM.....	23
4.2.2	EMES.....	24
4.2.3	Conclusion.....	26
4.3	Week 3.....	26
4.3.1	BSPM.....	26
4.3.2	EMES.....	27

4.3.3	Conclusion	29
4.4	Week 4	29
4.4.1	BSPM	29
4.4.2	EMES	31
4.4.3	Conclusion	32
4.5	Week 5	32
4.5.1	BSPM	32
4.5.2	EMES	33
4.5.3	Conclusion	34
5	Simulation 2 : Technical Trading	35
5.1	Week 1	35
5.1.1	GOOG	35
5.1.2	BAC	36
5.1.3	DAL	37
5.1.4	Conclusion	38
5.2	Week 2	38
5.2.1	GOOG	38
5.2.2	BAC	40
5.2.3	DAL	41
5.2.4	Conclusion	43
5.3	Week 3	44
5.3.1	GOOG	44
5.3.2	BAC	45
5.3.3	DAL	47
5.3.4	Conclusion	48

5.4	Week 4.....	49
5.4.1	GOOG.....	49
5.4.2	BAC	50
5.4.3	DAL.....	51
5.4.4	Conclusion.....	52
5.5	Week 5.....	53
5.5.1	GOOG.....	53
5.5.2	BAC	54
5.5.3	DAL.....	55
5.5.4	Conclusion.....	58
6	Simulation 3 : Position Trading	59
6.1	Week 1.....	59
6.1.1	ORCL.....	59
6.1.2	KO.....	60
6.1.3	Conclusion.....	61
6.2	Week 2.....	61
6.2.1	ORCL.....	61
6.2.2	KO.....	62
6.2.3	Conclusion.....	63
6.3	Week 3.....	63
6.3.1	ORCL.....	64
6.3.2	KO.....	64
6.3.3	Conclusion.....	65
6.4	Week 4.....	65
6.4.1	ORCL.....	66

6.4.2	KO.....	67
6.4.3	Conclusion.....	68
6.5	Week 5.....	68
6.5.1	ORCL.....	69
6.5.2	KO.....	69
6.5.3	Conclusion.....	70
7	Simulation 4 : Day Trading.....	71
7.1	Week 1.....	71
7.1.1	AAPL.....	71
7.1.2	F.....	72
7.1.3	Conclusion.....	73
7.2	Week 2.....	73
7.2.1	GPS.....	73
7.2.2	VMW.....	75
7.2.3	Conclusion.....	77
7.3	Week 3.....	77
7.3.1	VMW.....	78
7.3.2	GPS.....	79
7.3.3	Conclusion.....	80
7.4	Week 4.....	81
7.4.1	VMW.....	81
7.4.2	GPS.....	82
7.4.3	Conclusion.....	83
7.5	Week 5.....	84
7.5.1	GPS.....	84

7.5.2	VMW	85
7.5.3	Conclusion	86
8	Analysis.....	87
8.1	Simulation 1 : Swing Trading.....	87
8.2	Simulation 2 : Technical Trading	91
8.3	Simulation 3 : Position Trading	93
8.4	Simulation 4 : Day Trading	94
9	Conclusion	96
	Reference	97
	Appendix.....	100

List of Figures

<i>Figure 3.1.1 Stock Overview of GoGo Inc.</i>	14
<i>Figure 3.1.2 Stock Overview of EMES</i>	15
<i>Figure 3.1.3 Stock Overview of BSPM</i>	16
<i>Figure 4.1.1 EMES for Week 1</i>	21
<i>Figure 4.1.2 BSPM for Week 1</i>	22
<i>Figure 4.2.1 BSPM for Week 2</i>	24
<i>Figure 4.2.2 EMES for Week 2</i>	25
<i>Figure 4.3.1 BSPM for Week 3</i>	27
<i>Figure 4.3.2 EMES for Week 3</i>	28
<i>Figure 4.4.1 BSPM for Week 4</i>	30
<i>Figure 4.4.2 EMES for Week 4</i>	31
<i>Figure 4.5.1 BSPM for Week 5</i>	33
<i>Figure 4.5.2 EMES for Week 5</i>	34
<i>Figure 5.1.1 GOOG for May 5 - June 6</i>	36
<i>Figure 5.1.2 BAC for May 5 – June 6</i>	36
<i>Figure 5.1.3 DAL for May 5 - June 6</i>	37
<i>Figure 5.2.1 GOOG for May 8 - June 9</i>	39
<i>Figure 5.2.2 GOOG for May 16 - June 17</i>	40
<i>Figure 5.2.3 BAC for May 7 - June 8</i>	40
<i>Figure 5.2.4 BAC for May 14 - June 15</i>	41
<i>Figure 5.2.5 DAL for May 9 to June 10</i>	42
<i>Figure 5.2.6 DAL for May 15 - June 16</i>	42
<i>Figure 5.3.1 GOOG for May 22 - June 23</i>	44

<i>Figure 5.3.2 GOOG for May 23 - June 24</i>	45
<i>Figure 5.3.3 BAC for May 22 - June 23</i>	46
<i>Figure 5.3.4 BAC for May 23 - June 24</i>	46
<i>Figure 5.3.5 DAL for May 21 - June 22</i>	47
<i>Figure 5.3.6 DAL for May 23 - June 24</i>	48
<i>Figure 5.4.1 GOOG for June 2 - July 1</i>	50
<i>Figure 5.4.2 BAC for June 1 - June 30</i>	50
<i>Figure 5.4.3 BAC for June 2 - July 1</i>	51
<i>Figure 5.4.4 DAL for June 2 - July 1</i>	52
<i>Figure 5.5.1 GOOG for June 9 - July 8</i>	54
<i>Figure 5.5.2 BAC for June 6 - July 5</i>	54
<i>Figure 5.5.3 BAC for June 9 - July 8</i>	55
<i>Figure 5.5.4 DAL for June 6 - July 5</i>	56
<i>Figure 5.5.5 DAL for June 7 - July 6</i>	57
<i>Figure 5.5.6 DAL for June 9 - July 8</i>	57
<i>Figure 6.1.1 ORCL for Week 1</i>	60
<i>Figure 6.1.2 KO for Week 1</i>	60
<i>Figure 6.2.1 ORCL for Week 2</i>	62
<i>Figure 6.2.2 KO for Week 2</i>	63
<i>Figure 6.3.1 ORCL for Week 3</i>	64
<i>Figure 6.3.2 KO for Week 3</i>	65
<i>Figure 6.4.1 ORCL for Week 4</i>	67
<i>Figure 6.4.2 KO for Week 4</i>	68
<i>Figure 6.5.1 ORCL for Week 5</i>	69
<i>Figure 6.5.2 KO for Week 5</i>	70

<i>Figure 7.1.1 Apple Inc. for Week 1</i>	72
<i>Figure 7.1.2 Ford Motor Co. for Week 1</i>	72
<i>Figure 7.2.1 GPS for Week 2</i>	74
<i>Figure 7.2.2 GPS for May 16 - June 17</i>	75
<i>Figure 7.2.3 VMW for Week 2</i>	76
<i>Figure 7.2.4 VMW for May 16 - June 17</i>	76
<i>Figure 7.3.1 VMW for Week 3</i>	78
<i>Figure 7.3.2 GPS for Week 3</i>	79
<i>Figure 7.4.1 VWM for Week 4</i>	81
<i>Figure 7.4.2 GPS for Week 4</i>	82
<i>Figure 7.5.1 GPS for Week 5</i>	84
<i>Figure 7.5.2 VMW for Week 5</i>	85
<i>Figure 8.1.1 Two candidate stocks (1)</i>	87
<i>Figure 8.1.2 Two candidate stocks (2)</i>	88
<i>Figure 8.1.3 Perfect choice</i>	88
<i>Figure 8.1.4 Placing the buy stop</i>	89
<i>Figure 8.1.5 Exiting half the position</i>	89
<i>Figure 8.1.6 Closing half the position</i>	90
<i>Figure 8.1.7 Conclusion of this example</i>	90

List of Tables

<i>Table 4.1.1 Transactions for Week 1 of Swing Trading Method</i>	23
<i>Table 4.2.1 Transactions for Week 2 of Swing Trading Method</i>	26
<i>Table 4.3.1 Transactions for Week 2 of Swing Trading Method</i>	29
<i>Table 4.4.1 Transactions for Week 4 of Swing Trading Method</i>	32
<i>Table 4.5.1 Transactions for Week 5 of Swing Trading Method</i>	34
<i>Table 5.1.1 Transactions for Week 1 of Technical Trading Method</i>	38
<i>Table 5.2.1 Transactions for Week 2 of Technical Trading Method</i>	43
<i>Table 5.3.1 Transactions of Week 3 for Technical Trading Method</i>	48
<i>Table 5.4.1 Transactions of Week 4 for Technical Trading Method</i>	52
<i>Table 5.5.1 Transactions of Week 5 for Technical Trading Method</i>	58
<i>Table 6.1.1 Transactions for Week 1 of Position Trading Method</i>	61
<i>Table 6.2.1 Transactions for Week 2 of Position Trading Method</i>	63
<i>Table 6.3.1 Transactions of Week 3 for Position Trading Method</i>	65
<i>Table 6.4.1 Transactions of Week 4 for Position Trading Method</i>	68
<i>Table 6.5.1 Transactions of Week 5 for Position Trading Method</i>	70
<i>Table 7.1.1 Transactions of Week 1 of Day Trading Method</i>	73
<i>Table 7.2.1 Transactions of Week 1 of Day Trading Method</i>	77
<i>Table 7.3.1 Transactions of Week 3 for Day Trading Method</i>	80
<i>Table 7.4.1 Transactions of Week 4 for Day Trading Method</i>	83
<i>Table 7.5.1 Transactions of Week 5 for Day Trading Method</i>	86
<i>Table 11.1.1 Overall Transactions of Swing Trading Method</i>	100
<i>Table 12.1.1 Overall Transactions of Technical Trading Method</i>	101
<i>Table 13.1.1 Overall Transactions of Position Trading Method</i>	102
<i>Table 14.1.1 Overall Transactions of Day Trading Method</i>	105

1 Introduction

In this chapter, we will introduce our goal of this MQP and some background reaches about the current US stock market to give the readers brief understandings about the recent situations in the US stock market.

1.1 Goal

The objective of this project is for us to learn some basic knowledge about stock market and trading strategies, conduct stock market simulations so that we could become competent in stock market and have better understanding about current stock market climate. From this project we hope to acquire a solid understanding of the trading strategies and skills when investing in the market so that by the time we invest in real life, we can have a comprehensive understanding of how to become a competent investor. Our plan for the project is as follows: We will spend the first two weeks doing background research on the basis of the stock market, including its history, different types of trading methods, selected company profiles and performances. During this time, we also need to compare and find out a tool that will provide us with a better interpretation of the market. And then, the five-week simulation using selected stocks with different trading methods will take place. Four of us will simulate the stock with different trading methods at the same time for better comparison between selected methods. For each simulation, \$500,000 will be used as the investment money pool. During the last three weeks, we will analysis all our data from the simulation and conclude our findings and learning through this IQP.

1.2 History of the Stock Market

“A stock market, equity market or share market is the aggregation of buyers and sellers (a loose network of economic transactions, not a physical facility or discrete entity) of stocks (also

called shares); these may include securities listed on a stock exchange as well as those only traded privately”-----by Wikipedia, briefly speaking, stock market is a place where people can trade stocks or bonds with each other. The first stock exchange was in 1531 in Antwerp. Brokers and moneylenders gather there to make deals in government business or personal debt issues. The first joint stock companies was formed by the East India companies during the ages of extremely risky sea voyages. In order to avoid the risk from pirates, weather and poor navigation, ship owners would seek for investors who would support the ship and crew and in return for percentages of the profit from the voyage. The world’s largest stock exchange is the New York Stock Exchange (NYSE) which was founded in May 17, 1792.It has a nickname as “The Big Board” for its huge market capitalization with listed companies at US\$19.69 trillion as of May 2015 [21].

1.3 Global Financial Crisis in 2008

The key thing in 2008 global financial crisis is the mortgages, which can be simply explained as the houses. Normally, the mortgage lenders will give out the prime mortgages requiring a certain amount of down payment to people with good credit or steady jobs, who will be able to pay back the loan and the interest. Once the home owners are not able to or stop paying the loan, meaning they “default” the loan, the lenders can take the houses away from the home owner [5]. Therefore, those mortgages are always given AAA ratings – “The Best of The Best” by the rating agencies and are considered as good investments. Starting from the 2007, things got changed. The banks borrowed lot of money to buy those mortgages from the lenders and got nice payments every month by the home owners. The banks created collateralized debt obligation, called as CDO, generally into three levels – safe, okay and risky. The investors could buy those with their need because the riskier, the higher the profit rate would be. As more and

more houses were sold, the price of houses rose more rapidly. Therefore, even if the home owners defaulted the loans, the banks and the investors would get the valuable houses and sell them for good profit, so that they started asking the lenders for more mortgages – safe investments. But the lenders could not find any more responsible people with good credit, so they started to give out mortgages without a down payment even to people with lower or bad credit to fulfill all the needs [10]. Because those people did not have steady incomes, as time passed by, more and more of them defaulted the mortgages and went away. As a result, the pricing of the housing market went down quickly. Even people with good credit stopped paying the mortgages because the value of those houses became lower than the mortgages. At that time, the banks and the investors hold those useless houses like bombs and could not sell them to any one anymore. Because of those bubbles – the houses created by the mortgages, in the money pool, a lot of banks in the Wall Street, like Lehman Brothers, who normally borrowed money from all around the world, went bankrupt. The 2008 global financial crisis happened and terrified the global market. The American banks were labeled as cheap credit and dangerous. The stocks of the companies all around the world were affected and the price went down rapidly. The public was anxious and the governments were all scorched and working on policies to rescue the economy.

1.4 NYSE VS. NASDAQ

Whenever the topic about stock market is talked, the first and second thing that come to mind are the name of New York Stock Exchange (NYSE) and NASDAQ Stock Market. However, as the largest and second-largest exchange in the world by market capitalization, these two stock markets have several main differences in the way of trade. Knowing alternations

between these two stock markets can help us make wiser choices when doing our investment [26].

First of all, the place where transaction happens is different in these two stock markets. For NYSE, all of the trades take place will be appeared on the board located on the first floor of the building in New York City, which means you can view directly through the screen or TV to check the transaction you interested in. For each stock there is a specialist who supervises all the trade of NYSE in their fields [8]. As it mentioned in “The NYSE and NASDAQ: How They Work”, which is edited by a staff of Investopedia, all the trade occur in a physical place. For NASDAQ, on the other hand, can be rather called a communication network between thousands of computers. Though it does has an office located in a floor of the Market Site tower in New York City’s Times Square, all of its trade is electronic [26]. In conclusion NASDAQ is a highly electronic stock market compared with NYSE.

From the list of trade and company appears on the two markets, we can easily found that there are more lists for household kind in NYSE like Coca-Cola, Wal-Mart, Citicorp, and General Electric, while NASDAQ has more about the tech side such as Microsoft, Cisco, Intel, Oracle and Sun Microsystems. These may partially reflect some essence of the different transaction way in NYSE and NASDAQ.

1.5 How to Invest

We all can invest any market in multiple ways, but let’s start with some basic steps when investing in the stock market.

First of all, before investing any stock, it’s very important to understand various types of investments. Then, after knowing those types of investments, it would be better to invest in a

broadly diversified portfolio of low-cost ETFs (exchange traded funds) and index funds. At the same time, it is also important for the new investor to remember that always participate in the market instead of beating the market. Also, if you want to try to invest in the stock, set aside a small percentage of your portfolio and be ready to lose all of that. You can't just always win without losing anything. Another tip would be looking into Motif investing if you want to mitigate the risk even further. When you are investing Motif, of course you can't invest blindly, you want to decide what types of investment you would like to do. In other words, when select motifs to buy with your play money, always go with industries and subjects you understand [20].

There are also some golden rules when investing like always avoiding the herd mentality and never trying to time the market. It's also a good idea to follow a disciplined investment approach.

We will learn more about how to invest during the progress of this project.

2 Trading Method

In this chapter, we will introduce four different trading methods that we could probably use for daily trading in current stock market as an excellent investor - swing trading, technical trading, position trading and day trading. Under each trading method, we do present basic information and important assumptions or rules about that trading method, also include the reason for choosing that trading method.

2.1 Swing Trading

2.1.1 Goal and Approach

The goal of Swing Trading is to identify the overall trend and then capture gains with swing trading within that trend [22].

Swing trading has been described as a kind of fundamental trading in which positions are held for longer than a single day. This is because most fundamentalists are actually swing traders since changes in corporate fundamentals generally require several days or even a week to cause sufficient price movement that renders a reasonable profit. The duration this trading method costs would be two to six days, sometimes even two weeks or longer [23].

Also, this trading method has its drawbacks. Risks in swing trading are commensurate with market speculation in general. Risk of loss in swing trading typically increases in a trading range, or sideways price movement, as compared to a bull market or bear market that is clearly moving in a specific direction [12].

2.1.2 Comparison with Other Trading Methods

Swing trading lasts normally a few weeks whereas day trading positions last less than one day. And technical Analysis is often used to help traders take advantage of the current trend in a security and hopefully become better Swing Traders. Day Trading and Swing Trading involve specific risks and commission costs different and higher than the typical investment strategies [22].

2.1.3 Conclusion

Swing trading is actually one of the best trading styles for the beginning trader to get his or her feet wet, but it still offers significant profit potential for intermediate and advanced traders. Swing traders receive sufficient feedback on their trades after a couple of days to keep them motivated, but their long and short positions of several days are of the duration that does not lead to distraction. By contrast, trend trading offers greater profit potential if a trader is able to catch a major market trend of weeks or months, but few are the traders with sufficient discipline to hold a position for that period of time without getting distracted. On the other hand, trading dozens of stocks per day (day trading) may just prove too great a white-knuckle ride for some, making swing trading the perfect medium between the extremes.

2.2 Technical Trading

2.2.1 Introduction

In general, there are two types of trading method used by stock trader: fundamental analysis and technical analysis. Those two trading method are quick the opposite of each other: the fundamental analysis is always trying to focus on the behavior or emotion of the company itself, like supply and demand factors causing the fluctuation of the stock price, while the

technical analysis is more interested in studying the trend of the stock price itself, more like a statistic analysis [4].

2.2.2 3 Important Assumptions

The technical analysis is a statistical analysis based on past market activity data to evaluate securities. It will not always be accurate but will always fit the general trend of the stocks. To analyze stocks by this method, types of charts or technical indicators and oscillators or both are used.

1) The Market Discounts Everything

Although the technical analysis is regardless of any fundamental factors to the company stocks, it assumes that “at any given time, a stock's price reflects everything that has or could affect the company - including fundamental factors” [13]. In the other word, the technical analysts believe that the company’s fundamentals are priced into the stock so that there is no need to consider these factors separately.

2) Price Moves in Trends

In technical analysis, as long as the trend is discovered through the technical analysis, the movements of the stock price are assumed to be more likely to follow the trend than to against it.

3) History Tends to Repeat Itself

The trend of the stocks is believed to appear repeatedly. It means that when facing the similar situation of the stock market, the participants are believed to react the same all the time [13].

2.2.3 John Murphy's Ten Laws of Technical Trading

1) Map the Trends

Always studying the long-term charts would be the first to begin in the technical analysis. Having the overall map of the long-term stock will provide the traders with more visibility and a better long-term emotion of the stock price.

2) Spot the Trend and Go With It

There are three types of trend sizes: long-term, intermediate-term and short-term. First, determine the size of the stock and always follow the trend. "Buy dips if the trend is up. Sell rallies if the trend is down" [14].

3) Find the Low and High of It

The maximum profit will be made when the buy and sell are happening at the support levels - the low and high.

4) Know How Far to Backtrack

Calculating the percentage retracements helps traders to have a better sense of when to buy and sell.

5) Draw the Line

"Up trend lines are drawn along two successive lows. Down trend lines are drawn along two successive peaks" [14]. Normally, the price will repeatedly touch back the trend lines.

6) Follow that Average

The traders would catch the objective buy and sell signals through the moving averages.

7) Learn the Turns

Oscillators help to warn the traders about the overbought and oversold markets. The two common scales are the Relative Strength Index (RSI) and the Stochastic Oscillator. A healthy stock market would have a rating from 30 to 70 with RSI and a rating from 20 to 80 with the Stochastic Oscillator.

8) Know the Warning Signs

The Moving Average Convergence Divergence (MACD) indicator works with the oscillators together to warn the traders about overbought and oversold markets.

9) Trend or Not a Trend

The Average Directional Movement Index (ADX) line provides the traders with the information about the trading style and the selection of a suitable indicators to use.

10) Know the Confirming Signs

The volume of the stock is always an important scale to be considered in the market. The increase or decrease of the volume notices the traders about what is happening in the market generally [14].

2.2.4 Conclusion

It is pretty hard to state which analysis is much better because these two types of trading method all have their pros and cons. Therefore, in the daily life, I believe, most of the stock traders are applying both trading methods on the buy and sell of the stocks to get a more comprehensive overview and more precise predict of the stock, which has been introduced a little in the first assumption.

2.3 Position Trading

In financial trading, a position is a binding commitment to buy or sell a given amount of financial instrument to buy or sell a given amount of financial instruments, such as securities,

currencies or commodities, for a given price. Also, it is used in the context of finance for the amount of securities or commodities held by a person, firm, or institution, and for the ownership status of a person's or institution's investments [19].

Position trading is a long term style of trading where trades are held for anywhere from several days to several months. This style of trading is the style of trading that most long term investors fit into, but many of them do not utilize positions trading to its full potential. Position trading uses long timeframe charts, including daily, weekly, and monthly charts. Chart based position trading really only includes one type of trade [17].

Position trading is probably the most common trading styles, as it includes the general public buying and holding onto stocks, regardless of the market's direction. Position trading is also performed using fundamental information, such as earnings reports and other financial news [18].

2.4 Day Trading

“Day trading is speculation in securities, specifically buying and selling financial instruments within the same trading day. Strictly, day trading is trading only within a day, such that all positions are closed before the market closes for the trading day” [6].

This trading method is getting quite popular in today's stock market. One of its advantages is the short duration, once the day traders have less opportunities to make profit in one trading day, they can quit the current trading only with a low risk of the fluctuating market. The fluctuation of the market price which is affected by many factors produces a great uncertainty, which leads to the difficulty of market prediction in a long term. As a contrast, the prediction of the market in a short term is more precisely with respect to the long term prediction

due to the limited factors that can affect the price, also the market fluctuation in a short term is mainly affected by the behaviors of the traders. In order to make profits in day trading, there are couple rules play the key roles. Firstly, day trader needs to set up a daily mission or a quantity of profit as a goal. The number of times of making profit is better than a one-time huge profit. Secondly, day trader cannot only rely on the market prediction, but also need to be patient to wait for the chance and learn as much experience as possible. Thirdly, it is more likely to make profit if the trader uses an appropriate method. It is important for a trader to remain flexible and adjust their techniques to match changing market conditions. It can help reduce the risk and mistakes. There are several basic strategies that the day traders need to learn in attempt to make profit. Trend following, which is an investment strategy based on technical analysis, is a reliable method in analysis the current direction and make the decision of buying or selling. Contrarian investing is a market timing strategy used in all trading time-frames. It assumes that financial instruments which have been rising steadily will reverse and start to fall, and vice versa. There are also some transaction details that cannot be neglected. It is wise to predict the market fluctuation (it is unlikely to achieve profit in a less fluctuation market) and estimate the potential profit. The traders should focus on choosing the right time to cut in the market and set up an exit strategy [6].

3 Company Stock Selections

In this chapter, the company stock selections will be presented. Three different company stocks will be selected for each trading method. In order to have better simulation comparisons and analysis after five weeks' trading, no overlapping on the chosen company stocks will be ensured. In the following subchapters, the selected company stocks will be introduced with its basic company information and reasons for selections. The readers will get to know a lot of well known companies, also some small companies for later simulations with different trading methods.

3.1 Swing Trading

3.1.1 GoGo

Swing trading method is easy to find lots of promising stocks and has a very high winning percentage. The first stock I chosen for my simulation here is GOGO from GOGO Inc. based on the swing trading method. The reason why I chose this stock is listed as follows:

Basic Filters:

1. Average Daily Volume Over 100K
2. Signal: Unusual Volume
3. Price Over \$1

Technical Reason:

1. Prices broke out a few months long base on HIGH volume
2. Prices then consolidate or correct in price to the 20 period moving average

Figure 3.1.1 shows the price overview of GoGo Inc. for one year.



Figure 3.1.1 Stock Overview of GoGo Inc.

3.1.2 EMES (Emerge Energy Services LP)

Emerge Energy Services LP acquires, owns, operates, and develops a portfolio of energy service assets in the United States. The company operates in two segments, Sand and Fuel. The Sand segment is involved in the production and sale of various grades of industrial sand primarily used in the extraction of oil and natural gas, as well as in the production of building products and foundry materials. The Fuel segment operates two terminals and two transmix processing facilities located in the Dallas-Fort Worth, Texas area, as well as in Birmingham, Alabama. This segment also engages in the sale of wholesale petroleum products; provision of third-party terminating services; blending of renewable fuels into petroleum products; manufacture of biodiesel; and provision of reclamation services, such as tank cleaning services, as well as other complementary products and services. Emerge Energy Services GP, LLC operates as a general partner of the company. Emerge Energy Services LP was founded in 2012 and is based in Southlake, Texas. Figure 3.1.2 is the stock overview of EMES.



Figure 3.1.2 Stock Overview of EMES

3.1.3 BSPM (Biostar Pharmaceuticals, Inc.)

Biostar Pharmaceuticals, Inc. develops, manufactures, and markets over-the-counter (OTC) and prescription pharmaceutical products for various diseases and conditions in the People's Republic of China. The company principally offers XinAo Xing Oleanolic Acid capsule, an OTC medicine for chronic hepatitis B. Its product line also includes 12 other OTC products and 17 prescription-based pharmaceuticals. The company's OTC products also comprise Ganwang compound paracetamol and amantadine hydrochloride capsule for the relief of common cold, runny nose, sore throat, headache, and fever; Tianqi Dysmenorrhea capsule, a traditional Chinese medicine used for pain and other symptoms associated with menstruation; Deafness Tongqiao pills for hepatobiliaryHuosheng, head swelling, deafness and tinnitus, ear pus, dry stool, and urine-yellow; Wenweishu capsules for the treatment of chronic gastritis and pain of epigastric cold; Zhitongtougou ointment for treating joint pain, swelling, tenderness, or dysfunction; and ChuzhangZehaifu tablets for cataract. Its prescription pharmaceutical products include Danshen granules; Taohuasan pediatric medicines; Jingang tablets; Danxiang Rhinitis

tablets; Yanlixiao capsules; Piracetam tablets; Huangyangning tablets; Hyperthyroidism capsules; Fosfomycin Calcium capsules; Qianlietong capsules; Yituo Erythromycin particles; Danshen tablets; Hernia belt; Tangning capsule; Yizi capsule; Shengjing Capsule; Aoxing Ointment; MuxiangShunqi pills; Sifangwei capsules; and Aspirin Enteric-coated tablets. The company also operates a Website that serves as Internet-based China Hepatitis Internet hospital, which offers HBV patients with information on HBV and treatment options, as well as methods to purchase HBV medicines. Biostar Pharmaceuticals, Inc. sells its products through distributors and a network of sales people in approximately 28 provinces. The company was incorporated in 2007 and is headquartered in Xianyang, the People’s Republic of China. The following figure shown, Figure 3.1.3, is the stock overview of BSPM.



Figure 3.1.3 Stock Overview of BSPM

3.2 Technical Trading

3.2.1 Alphabet Inc. (GOOG)

The name of Alphabet Inc. may not be familiar to most of the people. However, almost everyone would know the name of its subsidiary - Google. Google is an American multinational

technology company, which is very famous for its search engine named as “Google Search”. Google covers not only the area of searching engine, but also online advertising, cloud computing, software, electronic devices, video website (YouTube) and so on. It has been built in every person’s daily life. The company makes most of the profit from the online ads and has special serving software to give the users a list of advertisements they will be interested in. Nowadays, Google are more focusing on developing fancy technologies, like Google glasses, to profit from other areas instead of mostly from ads [11].

3.2.2 Delta Air Lines, Inc. (DAL)

Delta Air Lines, Inc. with its major company operating in Atlanta, Georgia is a major American airline company and the oldest airline among those still operating from now and then. Over 5400 flights, including domestic and international network, will be operated daily by Delta and its collaborating airline companies all around the world. It is also one of the four founding members of the Sky Team airline alliance, which is famous worldwide [7].

3.2.3 Bank of American (BAC)

Bank of American, known as BOA, is a major American multinational bank company, which provides different types of financial services [2]. Majority of its customers are individual consumers, market businesses, institutional investors, large corporations and governments worldwide. It provides the costumers with services like debit and credit cards, property managements, risk managements, foreign currency exchanging and so on [1].

3.3 Position Trading

3.3.1 Oracle Corporation (ORCL)

Oracle Corporation is an American multinational computer technology corporation, headquartered in Redwood City, California. The company primarily specializes in developing and marketing database software and technology, cloud engineered systems and enterprise products—particularly its own brands of database management systems. In 2011 Oracle was the second-largest software maker by revenue, after Microsoft [15].

The company also develops and builds tools for database development and systems of middle-tier software, enterprise resource planning (ERP) software, customer relationship management (CRM) software and supply chain management (SCM) software.

Larry Ellison, a co-founder of Oracle, served as Oracle's CEO from its founding until September 18, 2014, when it was announced that he would be stepping down, with Mark Hurd and SafraCatz to become CEOs. Ellison became executive chairman and CTO. He also previously served as chairman until his replacement by Jeff Henley in 2004, before becoming executive chairman in 2014. On August 22, 2008, the Associated Press ranked Ellison as the top-paid chief executive in the world [16].

3.3.2 Coca-Cola Company (KO)

The Coca-Cola Company is an American historical multinational beverage corporation and manufacturer, retailer, and marketer of nonalcoholic beverage concentrates and syrups, which is headquartered in Atlanta, Georgia. The company is best known for its flagship product Coca-Cola, invented in 1886 by pharmacist John Stith Pemberton in Columbus, Georgia. The Coca-Cola formula and brand was bought in 1889 by Asa Griggs Candler (December 30, 1851 –

March 12, 1929), who incorporated The Coca-Cola Company in 1892. The company operates a franchised distribution system dating from 1889 where The Coca-Cola Company only produces syrup concentrate which is then sold to various bottlers throughout the world who hold an exclusive territory. The Coca-Cola Company owns its anchor bottler in North America, Coca-Cola Refreshments [24].

Its stock is listed on the NYSE (NYSE: KO) and is part of DJIA; S&P 500 index; the Russell 1000 Index; and the Russell 1000 Growth Stock Index. As of 2015, its chairman and its CEO is Muhtar Kent.

3.4 Day Trading

3.4.1 Goals for the simulation

The fundamental goal of the day trading method is to make profit obviously. In order to make this simulation to be successful, I will set up a ten percent profit as a goal. During the simulation process, I will try to avoid risky operation and reduce the unnecessary loss. At the very end of the project, I should learn about how to use the right way to invest and be able to use day trading method in the real stock market which is also a helpful skill in later life.

In the following weeks, I will track the stock market for couple days in every week, while seeking for opportunities to make buying and selling. I will also record each trade along with its profit and loss. Through weeks of simulation, I will make the final summary base on the record.

3.4.2 Stocks Chosen

I will choose Apple Inc. as one of my stocks to trade. Apple is one of most valuable brand in the world, with a considerable number of loyal customers which provides a great support for the development of the Apple technology in the long term, those loyal customers will

prefer to buy the new iPhone when they need to update their cell phones. The other new Apple products will also enjoy a high popularity among the customers. This evidence provides me reasons to track the Apple Inc. stock. I will choose Ford Motor Co as one of the stock to trade, Ford Motor Co has an outperformance with respect to its peers in the last years, and it has relatively high profit margins while operating with median asset turns. With the EcoBoost engine technology, Ford Motor Co is getting more advantages in competing with other motor technology companies [9].

The Gap, Inc. is also under my consideration [25].

4 Simulation 1 : Swing Trading

In the following five weeks, I will use the swing trading method introduced previously to simulate trading of two stocks which are GOGO and BSPM. Since swing trading is a method which helps to find promising stocks, it usually takes quite a long term to get significant profit. Because of the time limitation of this project, the profit wouldn't be as significant as long-term trading, but it will make profit.

4.1 Week 1

I will spend the first week investing two of all the three stocks I chose and this will be a good start in my following five weeks of simulation.

4.1.1 EMES

From Figure 4.1.1, we can tell from the graph that this stock has formed a base over a period of a few months, then the price broke out of a few months long base on high volume and then consolidate or correct in price to the 20 period moving averages.



Figure 4.1.1EMES for Week 1

I would place my buy stop at above the high of 2nd June, then my buy come the next day and then I would be in at 5.06. I'm looking for a minimum gain of 20%, if and when I get 20%, I would exit half of my position.

4.1.2 BSPM

Figure 4.1.2 shows the price chart of BSPM for week one.

This is the same case as EMES, the price has formed a long period base for a few months and then price broke out on high volume and then consolidate or correct in price to the 20 period moving average.



Figure 4.1.2 BSPM for Week 1

I would place my buy stop at above the high of 7nd June, then my buy come the next day and then I would be in at 1.37. I'm looking for a minimum gain of 20%, if and when I get 20%, I would exit half of my position.

4.1.3 Transaction Table

Table 4.1.1 shows all the transactions for week 1 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/02/2016						\$500,000	
06/11/2016	EMES	\$5.06	45000	(\$227,700)		\$272,300	
06/11/2016	BSPM	\$1.37	180000	(\$246,600)		\$25,700	

Table 4.1.1 Transactions for Week 1 of Swing Trading Method

4.2 Week 2

This week, I kept focusing on two stocks which I chose in the first week. One of them is BSPM and the other one is EMES. According to swing trading method, these are two very promising stocks. I bought 180000 shares of BSPM with 1.37 per share on 11th June and this cost me 246600. I also bought 45000 shares of EMES with 5.06 per share. This week, my simulation would be observing BSPM and EMES and make the right decision to gain maximum profit.

4.2.1 BSPM

Here is the daily chart of BSPM from 13th June to 17th June, Figure 4.2.1, and this is also the trading period of this week. On 13th June, open price is 3.86 per share and close price is 3.76 per share. Although the price dropped a little bit compared to 9th June, price per share also rise dramatically compared with the price I bought them on 8th June. Then price keep rising on the following four days. On 14th June, the open price and close price are respectively 3.86 per share and 4.84 per share. On 15th June, the open price and close price are respectively 4.8 per share and 5.154 per share. On 16th June, the open price and close price are respectively 5.05 per share and 5.47 per share. On 17th June, the open price and close price are respectively 5.65 per share and

5.77 per share. The trend of BSPM is exactly what I am expecting so I decide to keep trading in the following week. Since I already spent 246600 on this stock, I decide not to buy any more shares.



Figure 4.2.1 BSPM for Week 2

The reason I'm not selling any share of BSPM is that according to the swing trading method, I should wait another couple of days to let the price rise and sell it at the gain of 50%.

4.2.2 EMES

I started paying attention to EMES a little bit longer than BSPM and it is also a very promising stock. I bought 45000 shares of EMES on 3rd June, 2016 and since then I have been observing. The following analysis starts from 3rd June to 17th June. According to Figure 4.2.2, this stock shows a dramatic rising from 3rd June to 10th June but dropped a little bit on 13th June and 14th June. But after these two days dropping, the price started to rise again. I bought 45000 shares of EMES on 3rd June, which cost me 227700 and the price rose to high of 10th June, which

is 10.6. This is almost two times the price of the original price. And then price drooped to the lowest of 4th June, which is 8.86. Price again rises to the highest of 13th June which is nearly 12. I have to say I have so much confidence in EMES and I decide to continue observe instead of selling any of my shares of EMES.



Figure 4.2.2 EMES for Week 2

The reason why I am not selling any of my share is that I believe EMES will keep rising in the following few days but not that long, at least not like BSPM, which I believe will keep rising for at least few weeks.

4.2.3 Conclusion

Table 4.2.1 shows all the transactions for week 2 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
06/12/2016						\$25,700	
06/17/2016	EMES	\$11.25	45000	\$0		\$25,700	
06/17/2016	BSPM	\$5.77	180000	\$0		\$25,700	

Table 4.2.1 Transactions for Week 2 of Swing Trading Method

4.3 Week 3

This week, I will keep trading two promising stocks I chose three weeks ago and these two stocks are BSPM and EMES. I kept observing these two stocks in the past two weeks without selling any shares after I bought any of them but this week some big fluctuation happens so I decided not to keep that much shares in hand. The only problem is that it usually takes a long time to gain maximum profit using swing trading. Although this is one drawback of swing trading in short-term trading using this method, but I will definitely still win but not that much comparing with long-term trading. Here goes my analysis of these two stocks in this week.

4.3.1 BSPM

BSPM kept rising in the past three weeks according to Figure 4.3.1. I bought 180000 shares of BSPM on 8th June with the price of 1.37 per share and rose to 5.77 per share on 17th June. However, price started to drop in this week. According to swing trading, I should still observe to get maximum profit, however in short-term, I decide to sell some of my shares just in case price keep dropping. High price on Monday is 6.02 per share then price drops to high price of 3.99 on Thursday. Then on Friday, price rose again and this is one if the reason why I don't

sell all of my shares on Monday, this is also the reason why I will sell half of my shares on Monday at 5 per share and keep the other half because I believe BSPM will rise again in the following few weeks. And the fact is that, as I mentioned above, price rose again on Friday, which proves my decision that kept the other half of my share is right.



Figure 4.3.1 BSPM for Week 3

The graph from 20th June to 24th June shows that price kept dropping from Monday to Friday however rise back on Friday. This makes me sell half of my shares on Friday at the price of 5 per share and I am going to put the money into EMES which I think is a more steady rising stock.

4.3.2 EMES

According to Figure 4.3.2, EMES kept rising in the following three weeks and according to swing trading method, this is a very promising stock so that I can put money in this stock without much concern. As I mentioned in the analysis about BSPM, I sold half of my shares of BSPM on Monday and I decided to put that money into EMES. I gained approximately 500000

after selling half of my shares in BSPM and I will buy 48000 shares of EMES at the price of 10.3 on Monday to gain maximum profit. As I expected on Monday, EMES kept rising in this whole week and I expect it to keep rising in the following week. The high price on Monday is 10.5 and the high price on Friday is 13.8, which is significant rising compared with the price I bought it on 3rd June with the price of 5.06 per share.



Figure 4.3.2 EMES for Week 3

The graph from 20th June to 24th June tells me that this is a very promising stock and it will definitely kept rising for weeks. This makes swing trading method a very useful and persuasive trading method. As stated in swing trading method, we can tell if a stock is a promising stock by the following: if this stock has formed a long base for at least a few months; if the stock burst out in a high volume after this base.

4.3.3 Conclusion

Table 4.3.1 shows all the transactions for week 3 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/17/2016						\$25,700	
06/20/2016	BSPM	\$6.00	90000	\$540,000	\$416,700	\$565,700	\$416,700
06/20/2016	EMES	\$10.50	50000	(\$525,000)		\$40,700	\$416,700
06/24/2016	EMES	\$13.00	95000	\$0		\$40,700	\$416,700
06/24/2016	BSPM	\$5.50	90000	\$0		\$40,700	\$416,700

Table 4.3.1 Transactions for Week 2 of Swing Trading Method

4.4 Week 4

This is already the fourth week of this project, and I will keep trading two promising stock, which are BSPM and EMES, I chose in the first week. Last week, I made a decision to sell half of my BSPM shares because BSPM dropped a lot on Monday. The reason why I just sold half of BSPM shares is that I believe this promising would rise back in the following week and, as I expected, BSPM rose back this week. As for EMES, I kept all the shares and I bought fifty thousands more shares because I believe EMES would kept rising. EMES dropped a little bit on Monday but rose back on the following four days so my basic idea is to keep all my EMES shares and keep observe. Here goes my analysis of these two stocks in this week.

4.4.1 BSPM

Last week, BSPM dropped dramatically so that I sold half of my shares for safety concern. Although price drooped on first four days of last week, price rise back a lot on Friday. The reason I kept the other half is that I believe BSPM would rise back or at least keep steady in

the following week and it turns out to be right. During this week, price kept steady in general, although there are some subtle fluctuations during this week. After the rising of last Friday, price rose back on Monday, Tuesday, and Wednesday, and then dropped a little bit on Thursday and Friday, which I thought won't be a big deal. The last price on last Friday is 4.27 and the last price on this Friday is 4.25 and this data shows that during this week, price has become steady after the dropping of last week. The highest price of this week happens on Wednesday, which is 5.13 per share.

From Figure 4.4.1, we know that price kept rising on Monday, Tuesday, and Wednesday, then dropped a little bit on Thursday and Friday. The last price on Monday is 4.26, which is almost the same price as 4.25 per share on Friday. In general, price keeps steady during this week and I decide to reserve all my shares in the next week.



Figure 4.4.1 BSPM for Week 4

4.4.2 EMES

As for EMES, this is a very promising stock and facts have proved my thought to be right. In the past four weeks, EMES kept rising though there was small fluctuation during this week. The past trend tells me I can still put my money in EMES and I have faith in this stock. On this Monday, price dropped a little bit but I think it's a very normal thing. On Tuesday, Wednesday, Thursday, and Friday, price kept steady around 11.5 per share. And I'm going to keep all my shares of EMES because I'm looking forward for it to keep rising in the next week.

Figure 4.4.2 shows that EMES is rising all the time except this Monday. But price became steady again in other days of the week.



Figure 4.4.2 EMES for Week 4

4.4.3 Conclusion

Table 4.4.1 shows all the transactions for week 4 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/24/2016						\$40,700	\$416,700
07/01/2016	EMES	\$11.74	95000	\$0		\$40,700	\$416,700
07/01/2016	BSPM	\$4.25	90000	\$0		\$40,700	\$416,700

Table 4.4.1 Transactions for Week 4 of Swing Trading Method

4.5 Week 5

This is already the last week of my simulation, and during the last four weeks I have already made great progress by using swing trading method to pick EMES and BSPM. Since it's the last week of the simulation, I have to sell all my shares to gain maximum profit. And I already mentioned that swing trading would be perfect during long term trading like at least few months, however five weeks already gave me large profit. This week I will summarize all the five weeks' simulation.

4.5.1 BSPM

This is already the last week of my simulation, and during the last four weeks I have already made great progress by using swing trading method to pick EMES and BSPM. Since it's the last week of the simulation, I have to sell all my shares to gain maximum profit. And I already mentioned that swing trading would be perfect during long term trading like at least few months, however five weeks already gave me large profit. This week I will summarize all the five weeks' simulation.



Figure 4.5.1 BSPM for Week 5

During these five weeks, the highest price happened on Friday of the second week, and at that day the highest price was 6.59. Although I sold all my shares at the price of 5.1, it's already a large profit comparing with the price 1.37 I bought them in at the first week.

4.5.2 EMES

During this week, EMES kept steady during this week. On Tuesday and Wednesday, price dropped a little bit but I decide to observe in the following two days because I have large shares of EMES in my pocket. On Thursday, price rose back a little bit. And then on Friday, price began to drop a little bit and in order to gain maximum profit, and I decide to sell all my shares at the price of 11.80 before price dropped too much.



Figure 4.5.2 EMES for Week 5

During these five weeks, the highest price happened on Friday of the third week. However EMES is a very promising stock and didn't drop during these five weeks. At last I sold all my shares at the price of 11.8 comparing with 5.06 per share I bought in the first week.

4.5.3 Conclusion

Table 4.5.1 shows all the transactions for week 5 and the cash and the profit state.

Date	Symbol	Price	Share	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
07/01/2016						\$40,700	\$416,700
07/08/2016	EMES	\$11.8	95000	\$1,121,000	\$368,300	\$1,161,700	\$785,000
07/08/2016	BSPM	\$5.10	90000	\$459,000	\$335,700	\$1,620,700	\$1,120,700

Table 4.5.1 Transactions for Week 5 of Swing Trading Method

5 Simulation 2 : Technical Trading

For the following five weeks, the stock simulation will run based on all the information introduced in the Chapter 2.2 about technical trading. Also, the final goal of this simulation is to earn at least 10% of the initial money pool, \$500,000. The major data, which should be paid more attention to is the price of the company stocks in past weeks or months, even years. Based on the old price, we will learn about the trend of the stock better.

5.1 Week 1

To have a more compressive analysis, I decided to spend the first week starting the investment on all three stocks to see how the fluctuations would vary for each of the selected companies. This action would help me in the future weeks of the simulation because of combining the past data and recent week data to analysis for a more precise trend. In the other hand, with the first week experience of trading in the market for all three stocks, I would be more confident and experienced in the future trading actions.

5.1.1 GOOG

In the Figure 5.5.1, it shows the price fluctuation in the past month of GOOG. Currently the stock price is slowly decreasing and would almost touches to the bottom at the price of \$716.55 per share on May 6. It should be safe to invest on this stock now. Because of the pretty high price per share, I do not have enough money to invest a lot on this. It would be too risky to invest only on one stock. Finally, I decided to get 200 share on this one.



Figure 5.1.1 GOOG for May 5 - June 6

5.1.2 BAC

From Figure 5.1.2, I could learn that right now the stock has a little price changing up and down, but in general the price is slowly decreasing. I believe the stock will continue going down for a few days, therefore, I would put a big amount of money on this one. After consideration, I bought 200 share of BAC at the price of \$14.52 per share.



Figure 5.1.2 BAC for May 5 – June 6

5.1.3 DAL

The Figure 5.1.3 shows the chart of the changing of the DAL stock price. The previous peak point is at \$43.51 per share and recently it drops to \$41.28 per share. If we look at previous lowest point at May 12, which is \$41.07 per share, I have reasons to believe that May 6 or May 7 has already gone to another minimum point and the price will pump up in two or three days. Therefore, right now is a good time to invest on this stock and I bought 4000 shares at the price of \$41.28 per share.



Figure 5.1.3 DAL for May 5 - June 6

5.1.4 Conclusion

Table 5.1.1 shows all the transactions for week 1 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/05/2016						\$500,000	
06/06/2016	GOOG	\$716.55	200	(\$143,310)		\$356,690	
06/06/2016	BAC	\$14.52	200	(\$2,904)		\$353,786	
06/06/2016	DAL	\$41.28	4000	(\$165,120)		\$188,666	

Table 5.1.1 Transactions for Week 1 of Technical Trading Method

In Week 1, I spent \$311,334 out of the money pool, \$500,000 to see the price changing in a week in order to be more familiar with the fluctuation and be a more confident investor in the future. I believe that I would profit in at least on GOOG and DAL in this week and may would loss on BAC in the first three days. I will wait and have my next transaction on early this weekend.

5.2 Week 2

In this week, I am going to analyze the price trend of all the stocks in last week and combine this with all the old data like in the past one month to get the most precise analysis of the trend of all the three company stocks.

5.2.1 GOOG

I bought 200 shares on GOOG on June 6 with the volume of 1.57 M. From Figure 5.2.1, I could learn that on June 8, the volume reaches up to 1.58 M but it decreased rapidly to 988.9 K on June 9. According to the volume change from June 6 to June 9, I decided to sell the stock on

June 9 because as the volume decreased so rapidly, the price of the stock will soon decrease and have a down trend. I would sell the GOOG stock at the price of \$728.57 per share on June 9 and wait for the next local minimum point the purchase the stock again to make profit. In the future, I am not going to invest a lot of money on this stock because this stock has a too high starting price per share, even it is increasing rapidly, it is still hard to make a good percentage of profit.



Figure 5.2.1 GOOG for May 8 - June 9

According to Figure 5.2.2, the price of the stock did not change a lot from June 10 to June 15 due to the volume. The volume of the stock from June 10 to June 15 almost stayed the same, which meant that without seeking for other clues about the company like news, I could make my speculation that the price of stock would not have a lot fluctuation from June 10 to June 15. Also, as I could learn from Figure 5.2.2, on June 17 the stock decreased to \$691.72 per share but with a giant increasing volume of 3.4 M. According to this, I would purchase 300 share of GOOG stock at the price of \$691.72 per share on June 17.



Figure 5.2.2 GOOG for May 16 - June 17

5.2.2 BAC

According to the analysis in the last week, I predicted that the price of the stock would continue to go down in general. Also, according to Figure 5.2.3, on June 8, the price of the stock increased a bit comparing with that in June 7, but the volume decreased to 58.29M comparing with the volume of 80.95 M on June 6. In order to control the loss in minimum, I decided to sell all 200 shares of this stock on June 8 at the price of \$14.43 per share. Because of believing in that the stock would still decrease, I will wait and see on BAC.



Figure 5.2.3 BAC for May 7 - June 8

From Figure 5.2.4, I could tell that the price of the stock has a minimum point on June 14. One June 14, this stock had a pretty high volume of 85.38 M and after the increase in price on June 15, the volume of this stock reaches up to 100.66 M. Therefore, I believe that the stock will still climb up in the next few days. I make the decision to purchase 7000 shares on BAC on June 15 at the price of \$13.43 per share.



Figure 5.2.4 BAC for May 14 - June 15

5.2.3 DAL

I bought 4000 shares on DAL for the price of \$14.52 per share on June 6 and I used to believe that it will continue increasing for a while. However, according to Figure 5.2.5, on June 9, while the price was increasing to \$42.4 per share, the volume had a rapid decrease from 13.62 M on June 8 to 7.62 M on June 9. Therefore, I consider that there will have a giant decrease on price on June 10. I decide to sell all 4000 shares on this stock on June 9 at the price of \$42.4 per share.



Figure 5.2.5 DAL for May 9 to June 10

From Figure 5.2.6, I notice that the price should pump up real quick because the volume of the stock is increasing from June 13 to June 16. Therefore, I decide to purchase 4500 shares on DAL on June 16 at the price of \$38.02 per share.



Figure 5.2.6 DAL for May 15 - June 16

5.2.4 Conclusion

Table 5.2.1 shows all the transactions for week 2 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/06/2016						\$188,666	
06/08/2016	BAC	\$14.43	200	\$2,886	(\$18)	\$191,552	(\$18)
06/09/2016	GOOG	\$728.57	200	\$145,714	\$2,404	\$337,266	\$2,386
06/09/2016	DAL	\$42.4	4000	\$169,600	\$4,480	\$506,866	\$6,866
06/15/2016	BAC	\$13.43	7000	(\$94,010)		\$412,856	\$6,866
06/16/2016	DAL	\$38.02	4500	(\$171,090)		\$241,766	\$6,866
06/17/2016	GOOG	\$691.72	300	(\$207,516)		\$34,250	\$6,866

Table 5.2.1 Transactions for Week 2 of Technical Trading Method

In Week 2, I spent \$472,616 out of the money pool, \$500,000 to invest and earn profit during next week. After two weeks' transactions, the total profit is \$6,866 and the earnings ratio is about 1.3732%. Also, after looking at the first two weeks' transactions and profit earned, I decide to focus on DAL and BAC because of their much lower price per share comparing with the price of GOOG. Even when the price of GOOG is increasing, the earnings is too little because due to the limited money, the really high price caused the small amount of shares I could buy. Also, the percentage increase in price of GOOG won't be big also because of the high price per share. Therefore, in the future, to make a better profit, it would be a good idea to focus on investing on DAL and BAC. Next time, I will try to analyze the trend with more general information combining with the recent data analysis to reach a better prediction.

5.3 Week 3

5.3.1 GOOG

From Figure 5.3.1, I learn that on June 17, the volume increased to a local maximum, 3.4 million, while the price dropped to \$691.72 per share. After June 17, the price is slowly increasing but the volume is decreasing also. On June 23, the stock has a great rising on price. According to its increasing volume, the price should still increase but not for too long. Therefore, to be safe to make profit, I decided to sell all the 300 shares on June 23 for \$701.87 per share.



Figure 5.3.1 GOOG for May 22 - June 23

According to Figure 5.3.2, on June 24, the stock volume almost doubled in its size but the price dropped a lot to \$675.22 per share. By position method, I link the previous two local minimum together and find a line. The June 24's price of \$675.22 per share roughly touches the line. Therefore, according to the position approach and the doubled volume, I have a strong believe that the price would have another local minimum on June 24 and reach up on next

Monday. In conclusion, I decided to buy 100 shares of GOOG stock on June 24 for the price of \$675.22 per share.



Figure 5.3.2 GOOG for May 23 - June 24

5.3.2 BAC

The Figure 5.3.3 shows that before June 22, the stock is slowly increasing with a little change in volume. So, I kept holding the stock and hoped it would continue increasing slowly in the next few day. On June 23, the price suddenly increased to \$14.04 per share but the volume did not change a lot. Therefore, I believe that it will soon decrease in next few days so that I sell all 7000 shares bought on June 15 for the price of \$14.04 per share on June 23.



Figure 5.3.3 BAC for May 22 - June 23

What happened to GOOG also happened to BAC. According to Figure 5.3.4, the price dropped to \$13 per share but the volume size almost tripled from 82.49 million to 228.99 million. Also, by looking at the figure, the stock is reaching on a new trend. But the price should increase during next week. Therefore, I decided to buy 15000 shares on BAC on June 24 for the price of \$13 per share.



Figure 5.3.4 BAC for May 23 - June 24

5.3.3 DAL

By looking at Figure 5.3.5, from June 16 to June 21, the DAL stock price is continuously increasing. On June 21, the volume increased a little bit. Therefore, I think the price would still increase a little bit on June 22. However, the price decreased a little bit but the volume size dropped from 12 million to 7.03 million. Hence, I decided to sell all the stock on June 22 for the price of \$38.55 per share because the price will keep going down during next few days.



Figure 5.3.5 DAL for May 21 - June 22

Regarding to Figure 5.3.6, I could learn that the great drop in price and the crazy increase in volume also happened to DAL. The price decreased from \$38.31 per share to \$35.18 per share while the volume increases from 10.96 million to 25.24 million. Therefore, I would buy 6000 shares of DAL on June 24 for the price of \$35.18 per share.



Figure 5.3.6 DAL for May 23 - June 24

5.3.4 Conclusion

Table 5.3.1 shows all the transactions for week 3 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
06/17/2016						\$34,250	
06/22/2016	DAL	\$38.55	4500	\$173,475	\$2,385	\$207,725	\$9,251
06/23/2016	GOOG	\$701.87	300	\$210,561	\$3,045	\$418,286	\$12,296
06/23/2016	BAC	\$14.03	7000	\$98,210	\$4,200	\$516,496	\$16,496
06/24/2016	BAC	\$13.00	15000	(\$195,000)		\$321,496	\$16,496
06/24/2016	DAL	\$35.18	6000	(\$211,080)		\$110,416	\$16,496
06/24/2016	GOOG	\$675.22	100	(\$67,522)		\$42,894	\$16,496

Table 5.3.1 Transactions of Week 3 for Technical Trading Method

In this week, Week 3, I spent \$473,602 out of \$500,000 money pool. Also, by three weeks' trading, I earned \$16,496 and the earning ratio reached to about 3.3% for the first three weeks. Comparing with 1.3732% for the first two weeks, this week is earning more because the

first two weeks' practice has me learnt a lot about the fluctuations of all three stocks. As I become more and more familiar with the stock market, I will better predictions on the trend of the stock price and will have better ideas on how to invest money on the three stocks to have the greatest profit. Also, an interesting fact about the three stocks this week is that all the stock price tended to go up before June 24 and all had a great drop on June 24. I consider that the abnormal behavior of all three stocks is caused by the voting in British about whether the country should retreat from EU. But I believe that all three stocks will pump back quickly in next week, therefore, I invest almost all the money on the three stocks. Because BAC has the lowest price per share and is most likely to have the greatest pay back, I invest \$195,000 on BAC. Like I said in week 2 about the high price per share of GOOG, I did not put a lot on GOOG although GOOG would also give me a good payback. I will continue focusing on DAL and BAC in next two weeks.

5.4 Week 4

5.4.1 GOOG

According to Figure 5.4.1, GOOG's price was increasing at a very constant rate during this week while its volume was also decreasing at a constant rate. By looking at the old data and trend of GOOG in the past month, I consider that GOOG will still increase in early next week and is going to go down probably on Wednesday. Therefore, to ensure a safe investment, I decided to sell all 100 shares of GOOG on July 1 for price of \$699.21 per share. I will keep track on GOOG in the following weeks to see how the fluctuation changes.



Figure 5.4.1 GOOG for June 2 - July 1

5.4.2 BAC

According to Figure 5.4.2, the price of BAC dropped again on June 27. Because I believed that the price would go up in a few days, I decided to increase the investment on BAC. I bought 3000 shares of BAC on June 27 at the price of \$12.24 per share. And BAC was increasing dramatically from June 28 to June 29 and increased just a little bit on June 30. Therefore, I think that June 30 would be a good time to sell all 18000 shares of BAC at the price of \$13.27 per share for a safe investment.

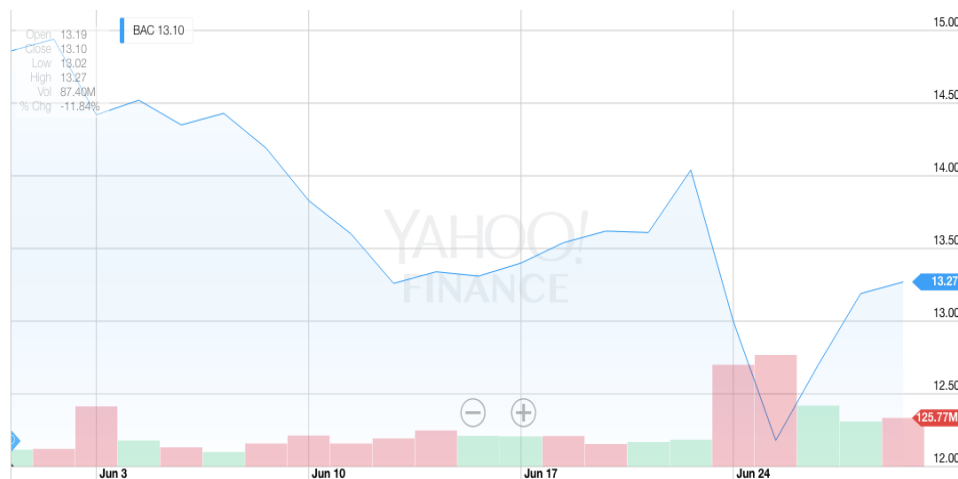


Figure 5.4.2 BAC for June 1 - June 30

Figure 5.4.3 shows a little drop on BAC on July 1. By looking at the trend of BAC in the past month, I believe that BAC will continue decrease in next few business days. Therefore, I decided to only buy 3000 shares of BAC on July 1 at the price of \$13.10 per share. I will pay close attention on BAC in the following business days to find a moment for a great investment on BAC.

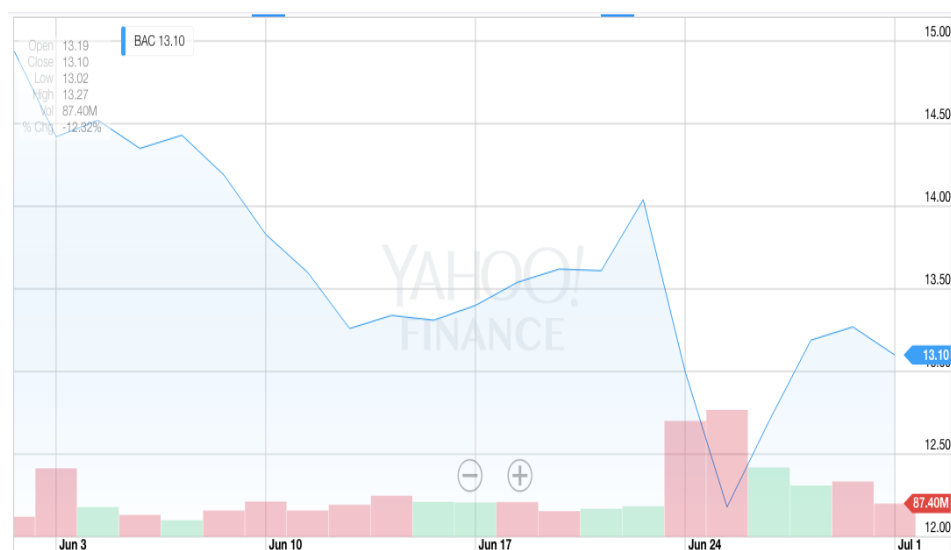


Figure 5.4.3 BAC for June 2 - July 1

5.4.3 DAL

From Figure 5.4.4, I could learn that DAL was increasing a lot on June 28 and June 29 and slowed down starting from June 30. I consider that DAL would probably decrease in the next week, therefore, I decided to sell 5000 shares of DAL on July 1 at the price of \$36.77 per share.



Figure 5.4.4 DAL for June 2 - July 1

5.4.4 Conclusion

Table 5.4.1 shows all the transactions for week 4 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/24/2016						\$42,894	\$16,496
06/27/2016	BAC	\$12.24	3000	(\$36,720)		\$6,174	\$16,496
06/30/2016	BAC	\$13.27	18000	\$238,860	\$7,140	\$245,034	\$23,636
07/01/2016	BAC	\$13.10	3000	(\$39,300)		\$205,734	\$23,636
07/01/2016	GOOG	\$699.21	100	\$69,921	\$2,399	\$275,655	\$26,035
07/01/2016	DAL	\$36.77	6000	\$220,620	\$9,540	\$496,275	\$35,575

Table 5.4.1 Transactions of Week 4 for Technical Trading Method

During this week, I sold almost all the stocks for profiting and made a huge profit. Because of the big drop on the price of all three stocks at the end of last week, I was able to make a great earning this week when the price pumped up to the normal price line. After four

weeks' trading, I earned \$33,985 with the beginning money pool of \$500,000 and the earning ratio reached up to 7.115% for the four weeks' trading. I am pretty comfortable with this achievement during these four weeks. In the next week, also the final week of all the simulation, in order to have a good end on trading, I will focus on price analysis instead of benefitting on the stocks to ensure safe investments. Also, according to trends of the stocks, I consider that there would be a decrease on the price next week. Therefore, next week would be a good time to end the simulation without earning a lot.

5.5 Week 5

This week, Week 5, is the final week of simulation on the US stock market by using technical trading method. During this week, I did a lot analysis on pricing and was much more careful with the buying and selling in order to have a great end of this simulation. The main purpose for this week is to find a good time to sell all the stocks for a end and safe investment would be extremely important to be ensured. Because GOOG will not provide much profit, I focused on the other two stocks, BAC and DAL.

5.5.1 GOOG

According to Figure 5.5.1, the stock price has a little bit fluctuation since July 5, which shows that the stock is slowly increasing during this week. Because not only this week is the final week for stock market simulation but also the earnings for GOOG will not be much due to the high price of GOOG. I thought that it would be a good idea to invest the money on the other two stocks, BAC and DAL, for safe and maximum investment.



Figure 5.5.1 GOOG for June 9 - July 8

5.5.2 BAC

From Figure 5.5.2, it shows a big drop on BAC on July 5. The volume of BAC on July 5 increased to 98.25 million. As my prediction made last week, the price of BAC will soon rise up. It would a good time to put more investment on this stock. Therefore, I decided to buy 7000 shares of BAC on July 5 for the price of \$12.74 per share.



Figure 5.5.2 BAC for June 6 - July 5

According to Figure 5.5.3, there is indeed a big rising in price during this week. The stock ends at \$13.17 per share for this week. Because I had to sell all the stocks during the final week of simulation, I sold all 10000 shares of BAC on July 8 for the price of \$13.17 per share. Otherwise, I would keep holding all the shares for one more business day because the increasing rate was speeding up these days instead of slowing down. I did believe that it would continue increasing for at least one more business day.



Figure 5.5.3 BAC for June 9 - July 8

5.5.3 DAL

Figure 5.5.4 matches the prediction made in week 4. By studying the trend of the stock, I believed that the stock price would continue decreasing for the next day. Therefore, I decided to keep looking at the stock without buying any share of DAL in order to make the greatest profit.



Figure 5.5.4 DAL for June 6 - July 5

According to Figure 5.5.5, it shows just a little decrease on price of DAL on July 6. The volume of the stock increased from 14.24 million to 14.54 million on July 6. Due to the small changes in both price and the volume, I believed that July 6's price of DAL should be one local minimum. Therefore, I decided to buy 11000 shares of DAL on July 6 for the price of \$35.58 per share. I considered that there would be a increase on price for the next few days. And I would keep a close look at any changes on DAL's price and volume in the next few days in order to seek a great time to sell all the shares of DAL for good profit.



Figure 5.5.5 DAL for June 7 - July 6

From Figure 5.5.6, I was able to learn that the stock price was continuing rising for July 7 and July 8. Looking at the trend of DAL, I thought that DAL would keep increasing for the next few business days. Due to the final week of simulation, I decided to sell all 11000 shares of DAL on July 8 for the price of \$35.58 per share. Otherwise, I would keep holding all shares till July 11 for the greatest profit.



Figure 5.5.6 DAL for June 9 - July 8

5.5.4 Conclusion

Table 5.4.1 shows all the transactions for week 4 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
07/01/2016						\$496,275	\$35,575
07/05/2016	BAC	\$12.74	7000	(\$89,180)		\$407,095	\$35,575
07/06/2016	DAL	\$35.58	11000	(\$391,380)		\$15,715	\$35,575
07/08/2016	BAC	\$13.17	10000	\$131,700	\$3,220	\$147,415	\$38,795
07/08/2016	DAL	\$37.37	11000	\$411,070	\$19,690	\$558,485	\$58,485

Table 5.5.1 Transactions of Week 5 for Technical Trading Method

During this week, I focused on trading BAC and DAL because investing on GOOG would not bring a big amount of profit due to its high price per share. As the readers could tell, the earning ratio for this week increased again. The total earning ration for the five weeks equals 11.697%. It could be considered as a pretty good achievement for the five weeks' simulation. During this week, the price fluctuations of all three stocks were not surprising and all matched the prediction I made in last week. As I could tell, I was becoming a more and more confident investor during the five weeks. I hope that I could apply the trading method and what I learnt during the five weeks' simulation to the future real world trading experiences.

6 Simulation 3 : Position Trading

For the following weeks, I will simulate the process of trading the stock of Oracle Corporation (ORCL) as a position trader. As I introduced in the previous part before, what a position trader focus on is not the short term fluctuation of this certain stock. Compared to this, I would believe that the long-term investment will smooth these out. Consequently, I would tend to observe the fluctuation of this stock during a relatively long period. However, every investment has its risk and disadvantages, my goal in this simulation is to minimize the loss or maximize the return.

6.1 Week 1

6.1.1 ORCL

The figure below, Figure 6.1.1, is the chart of fluctuation of the ORCL stock. During this period the highest point is \$39.72 per share on Jun 7, Tuesday, which lowers to \$38.74 on the latest day. From this chart we can make a conclusion that this stock has experienced a drop. As a position trader, I will not be panic to come out of this stock if I really invest this stock because this decrease is under control. I would have this stock observed for more times as I this simulation goes on.



Figure 6.1.1 ORCL for Week 1

6.1.2 KO

The figure below, Figure 6.1.2, shows the change of Coca-Cola Company (KO) stock. The peak point during this period is \$46.05 per share, which the lowest one is \$45.12 per share on Jun 4. From figure we can easily found there is a trend of ascending in this stock. However, for long-term concern, one week's change cannot represent the overall trend of this stock. How stock is when I sell still needs observation.



Figure 6.1.2 KO for Week 1

6.1.3 Conclusion

Table 6.1.1 shows all the transactions for week 1 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
06/03/2016						\$500,000	
06/04/2016	ORCL	\$38.74	5000	(\$193,700)		\$306,300	
06/04/2016	KO	\$45.12	5000	(\$225,600)		\$80,700	

Table 6.1.1 Transactions for Week 1 of Position Trading Method

6.2 Week 2

This is the report of the simulation of stock after two weeks. In this part I am supposed to analyze the change of stock ORCL and KO.

6.2.1 ORCL

Here is the chart of the ORCL this week, Figure 6.2.1. It starts from Jun 11 and ends in Jun 17. In this week the highest and lowest point of the price per share are 39.89 and 39.13. As a position trader those fluctuation are not bold but it appears a trend of rise compared to the trend last week. As consequence, I would tend to hold this stock for longer time because from the first two weeks I expected a longer rise in the future.



Figure 6.2.1 ORCL for Week 2

6.2.2 KO

Figure below, Figure 6.2.2, is the chart of stock KO from June 11 to June 17. It is the observation of the second week of this stock. From the chart we can find it shows a shape of wave in the consecutive days but generally it experienced a deception. The highest and lowest point of price per share this week was 45.7 and 44.2. At the very first day of this week it shows a trend of decrease but I decided to make longer observation of this stock. In the rest of week it shows a fluctuation but the price experienced little change compared to the start of the simulation. When I bought this stock the price was 45.12 per share. At the end of this week it was 44.79 per share. Due to the rising of ORCL, the lost in KO which is nearly about 1 point can be regardless but sell or not this stock is still under consideration. For the next weeks I will keep observed the fluctuation of this week more tightly.



Figure 6.2.2 KO for Week 2

6.2.3 Conclusion

Table 6.2.1 shows all the transactions for week 2 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
06/12/2016						\$80,700	
06/17/2016	ORCL	\$39.68	5000	\$0		\$80,700	
06/17/2016	KO	\$44.79	5000	\$0		\$80,700	

Table 6.2.1 Transactions for Week 2 of Position Trading Method

6.3 Week 3

Before the coming of Friday this week, which is the third week of the simulation, I sold all of my two stocks. Though I might be more patient about my stocks, the upcoming UK's EU referendum might play an important role in the stock market. Till the end of this Thursday, my profits in my stocks were positive. But after this big event the stock market may experience drastic change. In other word, it may have a sheer increase or decrease when the outcome is

announced. Personally I am conserved in this problem. In this simulation the most important thing for us is to keep the principal. At this point my stocks have profit at least. If this event cause big decrease in the stock market, I might experience a remarkable lose in the principal, which is hard to earn back from the profit of further management of stocks.

6.3.1 ORCL

From the screenshot above from Yahoo Finance, it is obvious that the outcome of EU referendum also brought big fluctuation to the ORCL. The stock of Oracle Corporation, basically have \$41.00 per share for the highest and \$39.10 per share for the lowest point of the week. Similarly it experienced a drastic decrease of \$1.8 per share in several hours on Friday. That is the just right after the all of the UK's EU referendum over. This is the fluctuation of ORCL from Jun 18 to Jun 24, which is the third week of this simulation.



Figure 6.3.1 ORCL for Week 3

6.3.2 KO

According to Figure 6.3.1, which is from the chart in the website of Yahoo Finance, after I sell the stock on Thursday, Jun 23, the stock experienced a drastic change. On this day, the

price per share decreased from \$45.21 per share to \$43.76 per share. Which is obviously a catastrophe for buyer. Fortunately I had sold two of stocks before this event to avoid loss in profit. In general, this week the highest and lowest point are \$45.22 per share and \$43.76 per share. It experienced a decrease of \$1.45 per share in several hours.



Figure 6.3.2 KO for Week 3

6.3.3 Conclusion

Table 6.3.1 shows all the transactions for week 3 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
06/20/2016						\$80,700	
06/23/2016	ORCL	\$41.00	5000	\$205,000	\$11,300	\$285,700	\$11,300
06/23/2016	KO	\$45.21	5000	\$226,050	\$450	\$511,750	\$11,750

Table 6.3.1 Transactions of Week 3 for Position Trading Method

6.4 Week 4

This is the fourth week since our simulation of stock market which started on Jun 4. Last week nearly all of the stock experienced massive fluctuation due to the EU referendum. Despite

of this, what may rise after the dramatic descent is the rebound of most stocks. Through the observation and analysis these weeks, I am positive about the stocks I chose at the very beginning. Since the 31th 2016 Rio Olympic Game will be held in August, the Coca-Cola Company, one of the sponsor, experienced symmetrical and sustainable increase as the Olympics approaches. On the other hand, the Oracle Company showed great stability before the referendum's result came out. Generally these above convince me select these two stocks again and make profits from them.

6.4.1 ORCL

From Figure 6.4.1, which is a screen shot I take from Yahoo Finance. Basically it reveals the trends of Oracle Corporation's stocks from Jun 25 to Jul 1. This week the highest and lowest point are respectively \$38.23 per share and \$41.24 per share. I bought 2,000 share on Jun 27, which was \$38.79 per share. It ended with \$40.88 per share at the end of these consecutive seven days. It is obvious that this chart reflect a rise after the descent last week, and a relatively smoothly development after that. It is reasonable that this trend will go on in the further days. As consequence of this, I will tend to hold this stock in the upcoming weeks.



Figure 6.4.1 ORCL for Week 4

6.4.2 KO

Figure 6.4.2 is the screen shot of interactive chart of Coca-Cola Company's stock over this week. The source of the figure is Yahoo Finance website. It revealed the trend of KO from Jun 27 to Jul 1. From this shot we can find it experienced similar patterns of change compared to Oracle Corporation's. What can be found on this chart are the highest and lowest point: \$43.39 per share and \$45.54 per share. At the beginning of this week I bought this stock which is \$43.64 per share. At the very end of this week, it ended with \$45.13 per share. Due to the similar pattern of stocks, I tend to hold this stock for further investment.



Figure 6.4.2 KO for Week 4

6.4.3 Conclusion

Table 6.4.1 shows all the transactions for week 4 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/24/2016						\$511,750	\$11,750
06/27/2016	ORCL	\$38.79	5000	(\$193,950)		\$317,800	\$11,750
06/27/2016	KO	\$43.64	5000	(\$218,200)		\$99,600	\$11,750

Table 6.4.1 Transactions of Week 4 for Position Trading Method

6.5 Week 5

This is the fifth week that we simulate the stock market through virtual investment. In general after the strike of referendum the stock market seemed to be in a stable condition. At the same time as the presence of upcoming 2016 Olympics, there is a rising trend appeared in my two stocks.

6.5.1 ORCL

Here is the screen shot of Oracle Corporation's stock from this week, shown in Figure 6.5.1. This chart starts from Jul 5 Tuesday and ends in Jul 8 Friday. From the figure above what can be found is that this stock till the end of this week got a increase from \$40.11 per share to \$40.60 per share. The trend of this stock, in general, is tend to go smoothly with fluctuations. From Yahoo Finance we can get the highest and lowest point this week through this interactive chart which are \$41.13 per share and \$40.04 per share. The tendency of this stock I predict is to be in a stable condition with negligible fluctuation.



Figure 6.5.1 ORCL for Week 5

6.5.2 KO

Figure 6.5.2, which is captured from Yahoo Finance, reflect the change of Coca-Cola Company's stock during this week. From this figure it is obvious that there were fluctuations throughout this week. Despite of this, the stock, compared to the beginning of this week, seemed not to be influenced by the fluctuation very much. It started with \$44.88 per share on Jul 5

Tuesday, and ended with \$45.38 per share on Jul 8 Friday. The highest and lowest point in this week are respectively \$44.88 per share and \$45.65 per share. For position trader, this stock is reliable for holding in a relatively long period.



Figure 6.5.2 KO for Week 5

6.5.3 Conclusion

Table 6.5.1 shows all the transactions for week 5 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
07/01/2016						\$99,600	\$11,750
07/08/2016	ORCL	\$40.86	5000	\$204,300	\$10,350	\$303,900	\$22,100
07/08/2016	KO	\$45.38	5000	\$226,900	\$8,700	\$530,800	\$30,800

Table 6.5.1 Transactions of Week 5 for Position Trading Method

7 Simulation 4 : Day Trading

In the following five weeks, I will use day trading to precede this simulation. As I have mentioned before, this strategy has a lower risk and less prediction requirement comparing with other methods. However, there are still some disadvantages that may cause inconvenient in the simulation. My goal is to maximize the profit meanwhile reduce the loss as much as possible. I will focus on the daily price change and try to make profit from the price difference between the buying price and selling price.

7.1 Week 1

7.1.1 AAPL

June 6 is the first day of simulation. From figure 7.1.1, the open price of Apple Inc. is 97.92, which is 12 cents higher than the previous close price, as the price fluctuation of last week is around 97.5 to 99.8 and no trend of decreasing. So I bought 200 shares at the open price as 97.92. In the next two and a half hour, the price had an increasing of 1 percent. I estimated it is about to the highest point of the day so I sold the 200 shares at 98.97 and make a profit of 210. On June 7, the open price is \$98.98 per share, and I bought 100 shares at \$99.63 per share. The price didn't break 100 and kept going down in the rest of the day, so I sold it at 99.43 and lost 20.



Figure 7.1.1 Apple Inc. for Week 1

7.1.2 F

The price of the Ford Motor Co. shows a rising trend from June 6 to June 8, it might be influenced by the policy adjustment of the company management in Asia. I bought 1000 shares at 13.23 on June 7 and sold at 13.34, which produced me a profit of 110. At June 9, I bought another 1000 shares at the open price of 13.18. Due to the downtrend from Wednesday noon, I sold the 1000 shares at 13.26 and earned 80.



Figure 7.1.2 Ford Motor Co. for Week 1

7.1.3 Conclusion

Table 7.1.1 shows all the transactions for week 1 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
06/05/2016						\$500,000	
06/06/2016	AAPL	\$97.92	200	(\$19,584)		\$480,416	
06/06/2016	AAPL	\$98.97	200	\$19,794	\$210	\$500,210	\$210
06/07/2016	AAPL	\$99.63	100	(\$9,963)		\$490,247	\$210
06/07/2016	F	\$13.23	1000	(\$13,230)		\$477,017	\$210
06/07/2016	GPS	\$19.15	1500	(\$28,725)		\$448,292	\$210
06/07/2016	AAPL	\$99.43	100	\$9,943	(\$20)	\$458,235	\$190
06/07/2016	F	\$13.34	1000	\$13,340	\$110	\$471,575	\$300
06/07/2016	GPS	\$19.51	1500	\$29,265	\$540	\$500,840	\$840
06/09/2016	F	\$13.18	1000	(\$13,180)		\$487,660	\$840
06/09/2016	GPS	\$19.09	1500	(\$28,635)		\$459,025	\$840
06/09/2016	F	\$13.26	1000	\$13,260	\$80	\$472,285	\$920
06/09/2016	GPS	\$19.31	1500	\$28,965	\$330	\$501,250	\$1,250

Table 7.1.1 Transactions of Week 1 of Day Trading Method

7.2 Week 2

7.2.1 GPS

According to the graph of The Gap Inc. (GPS), Figure 7.2.1, it shows a rising trend in the last five days. It experienced a short downward trend on Tuesday morning (from 9:30 am to 11:10 am) then following a continuously rising until Wednesday 11:15 am. During this short

period, the price began to rise from \$18.71 per share to \$19.75 which increased 5.56%. After the first peak, it came to a second downward trend that last for twenty three hours. From Thursday 10:35 am to Friday 10:40 am, it increased from \$18.96 to \$20.38 with a rate of growth of 7.5%.

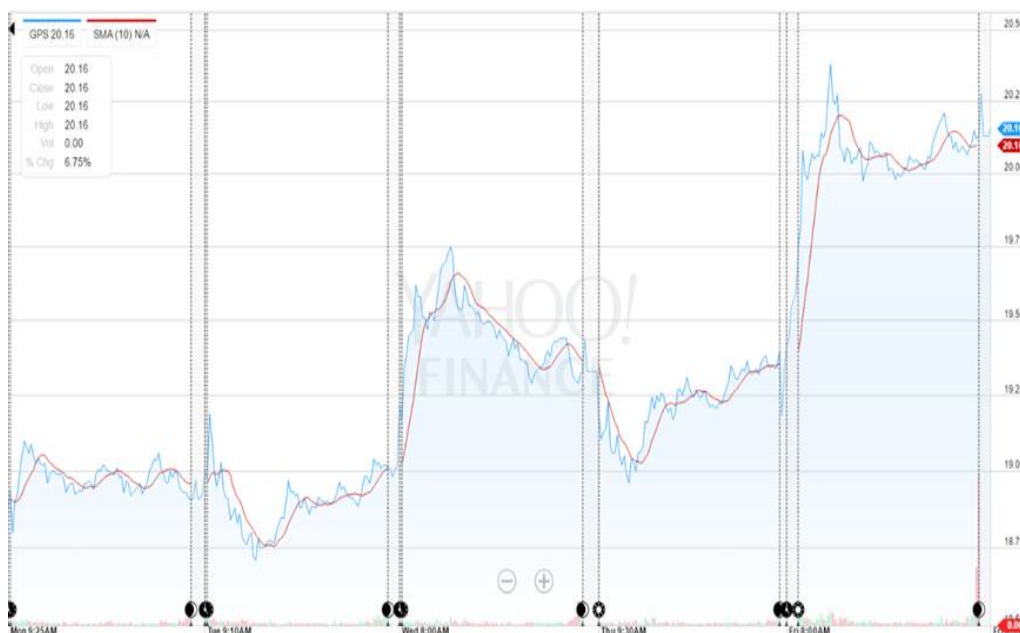


Figure 7.2.1 GPS for Week 2

With day trading method, on June 13, I purchased 5000 shares at \$18.9 and sold at \$19.04. Because the whole market was stable and little fluctuation happened, I gained \$700 on the first day. On June 14, GPS began at \$19.19 per share and fell to \$18.72 at 11:10 am, I bought 8000 shares at \$18.75 and estimated the price will be back to \$19 at the end of the day; it went back to \$18.97 at 12:25 pm then fell again. In order to avoid loss, I exited at \$18.91 and make a profit of 1280. On June 15, GPS started at \$19.17 and the moving averages continue to show a positive trend, I bought 8000 shares at \$19.18. The rising trend ended at \$19.75 that was the highest point of the day, I kept watch for another 75 minutes and realized that the downward trend would properly last for couple hours. I decided to trade the 8000 shares at \$19.51 yet gained \$2640. Due to the negative trend on Wednesday, I didn't make any trade on Thursday.

Financial advisor David Kolpak released an article on June 17 said that investors who bet on this cheap stock need a hefty dose of patience and not only watch for the normal earnings report but also make sure the talented company newcomers actually stick around.

From the graph of The Gap Inc. in last month, Figure 7.2.2, the moving averages continue to show a positive trend since midmonth.



Figure 7.2.2 GPS for May 16 - June 17

7.2.2 VMW

VMware, Inc. is an American company that provides cloud and virtualization software and services that as a great investment potential. I began to focus on this stock since last week. The positive moving average trend provides reasonable reasons to make an investment. However, the overall trend of VMW in the past five days shows a negative trend, I gained \$700 and \$1100 on June 13 and June 15. On June 14, the price fell from \$62.98 to \$61.23 (9:45 am to 11:45 am). I bought 5000 shares at \$61.74 and expected it could rebound to \$62. I estimated the price would keep fall so I exited at \$ 61.34 that resulted a loss of \$2000.



Figure 7.2.3 VMW for Week 2



Figure 7.2.4 VMW for May 16 - June 17

7.2.3 Conclusion

Table 7.2.1 shows all the transactions for week 2 and the cash and the profit state.

Date	Symbol	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
06/05/2016						\$501,250	\$1,250
06/13/2016	GPS	\$18.9	5000	(\$94,500)		\$406,750	\$1,250
06/13/2016	VMW	\$62.9	5000	(\$314,500)		\$92,250	\$1,250
06/13/2016	GPS	\$19.04	5000	\$95,200	\$700	\$187,450	\$1,950
06/13/2016	VMW	\$63.23	5000	\$316,150	\$1,650	\$503,600	\$3,600
06/14/2016	GPS	\$18.75	8000	(\$150,000)		\$353,600	\$3,600
06/14/2016	VMW	\$61.74	5000	(\$308,700)		\$44,900	\$3,600
06/14/2016	GPS	\$18.91	8000	\$151,280	\$1,280	\$196,180	\$4,880
06/14/2016	VMW	\$61.34	5000	\$306,700	(\$2,000)	\$502,880	\$2,880
06/15/2016	GPS	\$19.18	8000	(\$153,440)		\$349,440	\$2,880
06/15/2016	VMW	\$61.92	5000	(\$309,600)		\$39,840	\$2,880
06/15/2016	GPS	\$19.51	8000	\$156,080	\$2,640	\$195,920	\$5520
06/15/2016	VMW	\$62.14	5000	\$310,700	\$1,100	\$506,620	\$6,620
06/17/2016	GPS	\$19.74	8000	(\$157,920)		\$348,700	\$6,620
06/17/2016	GPS	\$20.10	8000	\$160,800	\$2,880	\$509,500	\$9,500

Table 7.2.1 Transactions of Week 1 of Day Trading Method

7.3 Week 3

The two stocks (GPS and VMW) made a profit of \$8250 in last week. Thus, I would keep on the trading of these two stocks in this week. By looking back on the overall trend of these two stocks, there would still exist the chance to make profit.

7.3.1 VMW

Figure 7.3.1 shows the graph of VMW of this week. The whole trend of VMW in this week is stable from Monday to Thursday. The fluctuations occurs between the end of the previous day and the beginning of the following day. In order to make profit, I need to wait the moment when it arrives the low point in a day and grab the chance when it goes into upward trend, this regularity becomes a key point during the trading. On June 20, I entered at the open price as usual. I bought 5000 shares of VMW for \$60.98 per share. In the following one and a half hour, the price increased 0.951% which was \$61.56 at 11:05 am. I would sold it at one percent increasing as planned. But in the next one hour, the price dropped \$0.41 per share which is 0.672%.



Figure 7.3.1 VMW for Week 3

I decided to sold the 5000 shares at \$61.26 that made a profit of \$1400. From the graph, it shows the downward trend lasts until the end of day. On June 21, I bought 5000 shares at the open price. The price raised rapid from 9:30 am to 10:10 am then following a rapidly drop. I assumed another temporally upward trend would occur. I sold at \$61.08 and gained \$650. On June 22, the open price is \$61.06 per share and the highest price is \$61.26 per share that only has

a 0.34% increasing while only lasts for a short time. On June 23, due to the loss of GPS, I decided to invest only VMW and bought 6500 shares at \$60.86. The rising trend was stable for the whole day and no evidence of rapid fell. I sold it at \$61.99 which is a 1.85% increasing. I gained \$7345 that was the most profitable investment so far. June 24, Britain voted to leave the E.U that created negative affection on the market. I decided not to make any investment on this day.

7.3.2 GPS

Figure 7.3.2 shows the graph of GPS in this week. It is more fluctuated comparing with that of the VMW. According to the graph, the end price of last Friday is \$20.13 per share, and the open price of June 20 is \$20.45 which is increased by 1.15%. The highest price of the day is \$21.05 with a 2.9% increasing. From the opening of June 21 to 11:15 am of June 22, the price experiences a stable upward trend. On Thursday, the fluctuation is getting gentle that both the open price and end price are at the same level. However, the investment of GPS in this way is not successful relatively. Due to the wrong prediction, I miss the appropriate time to exit that leads to the loss of \$1180.



Figure 7.3.2 GPS for Week 3

7.3.3 Conclusion

Table 7.3.1 shows all the transactions for week 3 and the cash and the profit state.

Date	Symbol	Price	Share	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
06/19/2016						\$509,500	\$9,500
06/20/2016	VMW	\$60.98	5000	(\$304,900)		\$204,600	\$9,500
06/20/2016	GPS	\$20.72	5000	(\$103,600)		\$101,000	\$9,500
06/20/2016	GPS	\$20.86	5000	\$104,300	\$700	\$205,300	\$10,200
06/20/2016	VMW	\$61.26	5000	\$306,300	\$1,400	\$511,600	\$11,600
06/21/2016	GPS	\$20.66	6000	(\$123,960)		\$387,640	\$11,600
06/21/2016	VMW	\$60.95	5000	(\$304,750)		\$82,890	\$11,600
06/21/2016	GPS	\$20.48	6000	\$122,880	(\$1,080)	\$205,770	\$10,520
06/21/2016	VMW	\$61.08	5000	\$305,400	\$650	\$511,170	\$11,170
06/22/2016	GPS	\$20.70	5000	(\$103,500)		\$407,670	\$11,170
06/22/2016	VMW	\$61.06	5000	(\$305,300)		\$102,370	\$11,170
06/22/2016	GPS	\$20.68	5000	\$103,400	(\$100)	\$205,770	\$11,070
06/22/2016	VMW	\$61.10	5000	\$305,500	\$200	\$511,270	\$11,270
06/23/2016	VMW	\$60.86	6500	(\$395,590)		\$115,680	\$11,270
06/23/2016	VMW	\$61.99	6500	\$402,935	\$7,345	\$518,615	\$18,615

Table 7.3.1 Transactions of Week 3 for Day Trading Method

7.4 Week 4

7.4.1 VMW

Figure 7.4.1 indicates the graph of VMW for this week. Affected by the downtrend of Last Friday, the open price of June 27 dropped by \$0.64 per share. In the following two hours, the price didn't show much signs of rising. I estimated the downtrend would last until the end of the day that I decided not to make any investment on that day. On June 28, the open price increased \$0.99 per share with respect to the end price of June 27.



Figure 7.4.1 VWM for Week 4

I assumed this a signal of the beginning of a rising trend. So I bought 5000 shares at \$55.80. On June 29, I bought 5000 shares at \$56.97. However, there were barely price fluctuations that didn't provide appropriate time to sell. I sold the 5000 shares at \$56.80 that was a loss of \$850. On June 30, I bought 5000 shares at the open price, then the price experienced a short downtrend, during the next couple hours, the price was still under \$57.11. In order to avoid

the loss, I exit the market at \$56.74 per share that made me loss \$1850. On July 1, I entered at \$57.37 with 5000 shares and exited at \$57.82 that made me earned \$2250.

7.4.2 GPS

Figure 7.4.2 shows the graph of GPS in this week. On June 27, I bought 5000 shares at \$20.4. However, the whole market was effect by the downward trend from last Friday. I learned that it was not wise to make any investment so I sold the 5000 shares at \$19.92 that was a loss of \$2400. On June 28, the open price increased 0.7% with respect to that of the end price of June 27. So I bought 5000 shares at \$20.23 and sold at \$ 20.51. I earned \$1400 from this trade. In the next three days. I made a profit of \$2950.



Figure 7.4.2 GPS for Week 4

7.4.3 Conclusion

Table 7.4.1 shows all the transactions for week 4 and the cash and the profit state.

Date	Symbol	Price	Share	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/26/2016						\$518,615	\$18,615
06/27/2016	GPS	\$20.40	5000	(\$102,000)		\$416,615	\$18,615
06/27/2016	GPS	\$19.92	5000	\$99,600	(\$2,400)	\$516,215	\$16,215
06/28/2016	GPS	\$20.23	5000	(\$101,150)		\$415,065	\$16,215
06/28/2016	VMW	\$55.80	5000	(\$279,000)		\$136,065	\$16,215
06/28/2016	GPS	\$20.51	5000	\$102,550	\$1,400	\$238,615	\$17,615
06/28/2016	VMW	\$56.08	5000	\$280,400	\$1,400	\$519,015	\$19,015
06/29/2016	GPS	\$20.96	5000	(\$104,800)		\$414,215	\$19,015
06/29/2016	VMW	\$56.97	5000	(\$284,850)		\$129,365	\$19,015
06/29/2016	GPS	\$21.02	5000	\$105,100	\$300	\$234,465	\$19,315
06/29/2016	VMW	\$56.80	5000	\$284,000	(\$850)	\$518,465	\$18,465
06/30/2016	GPS	\$21.09	5000	(\$105,450)		\$413,015	\$18,465
06/30/2016	VMW	\$57.11	5000	(\$285,550)		\$127,465	\$18,465
06/30/2016	GPS	\$21.14	5000	\$105,700	\$250	\$233,165	\$18,715
06/30/2016	VMW	\$56.74	5000	\$283,700	(\$1,850)	\$516,865	\$16,865
07/01/2016	GPS	\$20.92	5000	(\$104,600)		\$412,265	\$16,865
07/01/2016	VMW	\$57.37	5000	(\$286,850)		\$125,415	\$16,865
07/01/2016	GPS	\$21.4	5000	\$107,000	\$2,400	\$232,414	\$19,265
07/01/2016	VMW	\$57.82	5000	\$289,100	\$2,250	\$521,514	\$21,514

Table 7.4.1 Transactions of Week 4 for Day Trading Method

7.5 Week 5

This is the last week of simulation. Depending on the experience from the past weeks, I will keep making investment on GPS (The Gap Inc.) and VMW.

7.5.1 GPS

Figure 7.5.1 shows the chart of GPS (The Gap Inc.) from July 5 to July 8. Based on the simulations of the past weeks, I learned that this stock usually experiences a low price at the first day of the week, then following a constant upward trend that possibly last until the end of week. On July 5, the open price was \$21.35 per share and it dropped to \$ 20.84 per share in the following three hours. I couldn't estimate when the lowest point would appear, so I didn't make any trade on July 5 and decided to wait.



Figure 7.5.1 GPS for Week 5

On July 6, I entered the market at \$21.17 with 6000 shares. I believed the price would keep rising. The price increased at a constant rate for the whole day. I sold the 6000 shares at \$21.83 that made me earn \$3,960. The market was quite stable at July 7 so there was no profit or

loss happened. The greatest price fluctuation happened between the end of July 7 and the open of July 8. The open price of July 8 was \$22.78 per share which is \$1.15 higher than the close price of July 7. Because I already missed the best time to enter the market, I decided to wait for the next low price point. I bought 6000 shares at \$22.75 and sold them at \$22.80. During the three trading days, I made a profit of \$ 4,240.

7.5.2 VMW

According to Figure 7.5.2, similarly, the downward trend showed up at the first day of the week. I didn't make any investment on July 5. On July 6, the open price was at a low point which is \$ 56.56 per share.



Figure 7.5.2 VMW for Week 5

It was a great chance to enter the market, so I bought 6000 shares at the open price. Two peak point appeared at 9:55 am and 11:15 am. The rising trend began to slow down after the second peak. I exited the market at \$57.20. From the red line in the graph, I learned that the average rising trend came to a temporarily stop at two hours after the open of July 7. The greatest price fluctuation appeared between the end of July 7 and the open of July 8. The open price of

July 8 was \$58.85 per share which is \$0.92 higher than the close price of July 7. I entered at \$58.69 which is a relatively low point. Before the close of the market, the price experienced a slightly rising. Totally, I made a profit of \$7,920 through the trading of VMW in the last week.

7.5.3 Conclusion

Table 7.5.1 shows all the transactions for week 5 and the cash and the profit state.

Date	Symbol	Price	Share	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
07/01/2016						\$521,514	\$21,514
07/06/2016	GPS	\$21.17	6000	(\$127,020)		\$394,494	\$21,514
07/06/2016	VMW	\$56.56	6000	(\$339,360)		\$55,134	\$21,514
07/06/2016	GPS	\$21.83	6000	\$130,980	\$3,960	\$186,114	\$25,474
07/06/2016	VMW	\$57.20	6000	\$343,200	\$3,840	\$529,314	\$29,314
07/07/2016	GPS	\$21.67	6000	(\$130,020)		\$399,294	\$29,314
07/07/2016	VMW	\$57.68	6000	(\$346,080)		\$53,214	\$29,314
07/07/2016	GPS	\$21.7	6000	\$130,200	(\$20)	\$183,414	\$29,294
07/07/2016	VMW	\$57.84	6000	\$347,040	\$960	\$530,454	\$30,254
07/08/2016	GPS	\$22.75	6000	(\$136,500)		\$393,954	\$30,254
07/08/2016	VMW	\$58.69	6000	(\$352,140)		\$41,814	\$30,254
07/08/2016	GPS	\$22.80	6000	\$136,800	\$300	\$178,614	\$30,554
07/08/2016	VMW	\$59.21	6000	\$355,260	\$3,120	\$533,874	\$33,674

Table 7.5.1 Transactions of Week 5 for Day Trading Method

8 Analysis

After five weeks' simulation, we did the analysis part based on the simulation result from different trading method. We analyzed the trend of selected company stocks in the past five weeks and concluded for the reason why we could make the profit. By studying the trend during the simulation weeks, we could find better timing for greater investment based on better overall analysis. In this chapter, we will introduction the analysis we made for each trading method.

8.1 Simulation 1 : Swing Trading

During this five weeks' simulation using swing trading method, I have gained huge profit. Now, I'm going to summarize some common swing trading method strategy.

First of all, we are looking for stocks with unusual volume and we can treat this as a signal, also we should be looking for stocks that have formed a base over a period of at least few months such as the two candidate stocks below:



Figure 8.1.1 Two candidate stocks (1)



Figure 8.1.2 Two candidate stocks (2)

And then comes the two most important principles when we are looking for perfect choices:

1. Price broke out a few months long base on HIGH volume
2. Price then consolidates or correct in price to 20 period moving average

And here is the perfect choice:



Figure 8.1.3 Perfect choice

Here is the buy, once you enter the position, set your stop loss just below the entry bar:



Figure 8.1.4 Placing the buy stop

Now we are looking for a minimum gain of 20%, if and when we get a 20% percent gain, we exit half of our position:



Figure 8.1.5 Exiting half the position

Now we closed half of our position, we want to move or stop up and protect our profits:



Figure 8.1.6 Closing half the position

In this example we got lucky and got another big rally to close out the position for a huge 60% gain:



Figure 8.1.7 Conclusion of this example

This is basically how we would use swing trading method, but due to the time constraint we can't follow the rules above strictly but in general this is how swing trading would work.

8.2 Simulation 2 : Technical Trading

During the five weeks' simulation, I earned \$58,485 by using the initial money pool of \$500,000. Measuring the profit in the way of earning ratio would be a more direct way of analyzing the trading method's profit percentage. The earning ratio of the five weeks' simulation is about 11.7%. The result shows that the profit percentage does match the goal of this simulation, which is to earn more than 10% of the initial money pool, \$500,000. Therefore, technical trading method could be considered as a fine trading method to use to invest in the current US stock market. However, there are some errors which may cause some deviations to the result of the entire simulation process. One is that we did make the commission to be \$0 because it would not only be much easier to keep the record of all the buys and sells, but also be more convenient to keep track of the all the buys and sells. However, this assumption of the simulation would be less realistic in real world situation. The other one is that we made the assumption that we would always be able to buy and sell the stocks at the price as we simulated. However, actually, we have to wait for doing the buy and sell.

During the first week of simulation, I bought some shares on all the three stocks to see the trend and fluctuation of the stocks. And in the next two week, I got to know better about the trend of the three stocks and could make better prediction about the stock price. Although we could see some of the trading did not ensure the maximum profit, all the trading ended making some kind of profit by keeping the safe investment in mind. And after the first three weeks' simulation, I made all real precise guess about the price stock at the end of each week. Being a more and more confident investor would improve greatly in making better profit from the investment.

Initially, I chose three stocks, which have a large gap on the stock price between each of them. I did so to help learn about which stock price would be more profitable in the investment of the current US stock market. Then, a great theory learnt from the early investment is about GOOG. After two weeks' trading, GOOG always maintain at really high price, about \$700 per share. Therefore, even though the rising of GOOG stock might be about \$10 per share, which is could be considered as a great rise compared with the other two company stocks, \$10 per share were still a small amount of money of the \$700 per share. Also, in order to invest in GOOG, majority of the money pool would be occupied, which reduced the money, that could be used for the other two stocks. This would cause a really bad earning percentage. Therefore, in the last three week, I invested a lot or stopped buying GOOG stock. And the simulation result proved that the earning ratio could be greatly improved by focusing more on the DAL and BAC stocks. Those cheap stocks would have more potential to rise in the future stock market.

Also, the news event would influence a lot on the stock price. During the simulation weeks, UK was organizing a vote about whether UK would drop out EU. Because UK is one of the developed countries in the world and has a lot influence in the worldwide economy. The voting result also effected on the US stock price. To not make deficit in the stock market, I sold out all the stock I had. In fact, the stock price did drop a lot during that week. Because of considering that the stock price would pump up and back to the normal price line, I tried to invest almost all the money to buy the stocks at the lowest price and hoped for a real good pay back after a few days. I did make a lot money from this worldwide news event. Therefore, it would be really important to always keep a eye on the global and national news when investing the company stocks.

8.3 Simulation 3 : Position Trading

Our simulation of stock market came to an end after five weeks of analysis and diagnosis. In my case, the method I used for this simulation is position trading. As a position trader, one should be less concerned about the fluctuation within short period. Instead, he or she is supposed to capture the major tendency of market for a further investment which can last for months or even years.

The stock I chose for this project are the Oracle Corporation and Coca-Cola Company. In the field of entrepreneurship, these two enterprises are well-known for making their products succeed in the recent decades, and their reputation is definitely one of the main reasons I picked these two companies for the stock market simulation. The Coca-Cola Company, as one of the main sponsor for the upcoming 2016 Olympics, has great influence on the economic market. Due to the impact of event happens in the next months, it is optimistic to expect a outstanding development on this stock. The Oracle Corporation, is one of the largest software maker by revenue. It has a sponsorship with Golden State Warriors, a team with franchise in the league of National Basketball Association. In the recent years, due to the great manipulation of team's management, the Warriors rose sharply with one of the greatest shooter in the league and obtain championship to the Bay Area. As the team prevailing in all of America, the profit from Oracle Arena continues to increase.

During these five weeks, something unexpected happened, UK's EU referendum. Due the impact of this event, approximately all of the stock market all over the world was influenced. To be conservative, selling the stock before the outcome of this vote would be safer. That is why I sold all of my stock as I had earned profit from the previous investment.

Finally, I would like to conclude that this simulation has achieved its purpose. From this project I have get the experience of stock investment and learned thinking in a economic way.

8.4 Simulation 4 : Day Trading

As the five-week simulation comes to the end, I made profit of \$33,674 in total by day trading method. The result shows that I didn't satisfied the goal, which is a ten percent profit. Also, the simulation was proceeded under an ideal situation that made all the stocks could be sold through the trades. In this case, I failed to achieve the goal. However, the final and the most important goal was to get a better understanding of how the stock market works and how to use the day trading method. I did achieve this goal by learning from the market changing and making investments. As the first time to deal with the stock market, it was a great learning process for me.

Looking back on the simulation process, I focused on several potential stocks for a week before choosing which ones to make investment. I made researches on the companies that could have the capabilities of maintaining good profits. However, the actually trading process could be more unpredictable. I used to enter the market at the open price, due to the trading method I use, I had to watch the price changing and finished the trade in a short time. I feel that I was not decisive enough when deciding when to sell. However, in some cases, I expected the price could still rise and held on to a stock too long that missed good opportunity to exit on top. Sometimes I neglected to check the price of my stock, then I could miss a great time to buy or sell the stocks for there could be big jumps happened in minutes. This was a major mistake that prevent me making benefits from the price jumps. I feel that if I could be more aggressive in terms of the selling the stock when the price was up, I could have made more money.

When all the simulations were done, with the previous knowledge of the day trading method, I can certainly tell the advantages and disadvantages of this method. When using the day trading method, you don't need to rely on the market prediction too much, if you can't make profit in a short time you can exit the market only with a low risk. However, in order to achieve profit, you have to be patient and pay attention to the price fluctuation which is a tedious process. I appreciate what I have learned from this simulation that provides valuable experience in future real market trading.

9 Conclusion

By the five weeks' simulation, different profit were made by using different trading method. Except swing trading method, the other three trading method made pretty much the same profit by investing on the current US stock market. The earning ratios of the three trading method are all around 10% while the earning ratio of swing trading method is 224.14%, which is really amazing and great number for the profit percentage. The main reason that caused 224.14% of earning ratio is because the company stocks were chosen for the swing trading method. BSPM and EMES stock prices were almost triple in the first three simulation weeks. The two companies were recently starting companies, which had a lot more potentials on the stock price and more unstable stock price than other well developed companies. As we could see from the transaction table for swing trading method, majority of the 224.14% profit was made in the first two weeks. In the last three weeks, the stock prices of BSPM and EMES were stabilized.

UK's voting about retreating from EU has worldwide influence on the economy. The US stock market was also affected. Everyone of us did sell almost all the stocks for the goal of safe investment. And indeed, the stock prices all had a great drop during that time period. The influence of this great event would never be a long-term effect. Therefore, the decreasing in the stock prices proved a good time for investment. Always paying close attention to the global and national news would prevent the investor from losing and help to find the time for great investment.

The overall transactions details of all four trading methods are shown in the appendix list.

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Appendix

Appendix A : Overall Transactions of Swing Trading Method

Date	Symbol	Price	Share	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/02/2016						\$500,000	
06/11/2016	EMES	\$5.06	45000	(\$227,700)		\$272,300	
06/11/2016	BSPM	\$1.37	180000	(\$246,600)		\$25,700	
06/17/2016	EMES	\$11.25	45000	\$0		\$25,700	
06/17/2016	BSPM	\$5.77	180000	\$0		\$25,700	
06/20/2016	BSPM	\$6.00	90000	\$540,000	\$416,700	\$565,700	\$416,700
06/20/2016	EMES	\$10.50	50000	(\$525,000)		\$40,700	\$416,700
06/24/2016	EMES	\$13.00	95000	\$0		\$40,700	\$416,700
06/24/2016	BSPM	\$5.50	90000	\$0		\$40,700	\$416,700
07/01/2016	EMES	\$11.74	95000	\$0		\$40,700	\$416,700
07/01/2016	BSPM	\$4.25	90000	\$0		\$40,700	\$416,700
07/08/2016	EMES	\$11.8	95000	\$1,121,000	\$368,300	\$1,161,700	\$785,000
07/08/2016	BSPM	\$5.10	90000	\$459,000	\$335,700	\$1,620,700	\$1,120,700

Table 8.4.1 Overall Transactions of Swing Trading Method

Appendix B : Overall Transactions of Technical Trading Method

Date	Symbol	Price	Share	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/05/2016						\$500,000	
06/06/2016	GOOG	\$716.55	200	(\$143,310)		\$356,690	
06/06/2016	BAC	\$14.52	200	(\$2,904)		\$353,786	
06/06/2016	DAL	\$41.28	4000	(\$165,120)		\$188,666	
06/08/2016	BAC	\$14.43	200	\$2,886	(\$18)	\$191,552	(\$18)
06/09/2016	GOOG	\$728.57	200	\$145,714	\$2,404	\$337,266	\$2,386
06/09/2016	DAL	\$42.4	4000	\$169,600	\$4,480	\$506,866	\$6,866
06/15/2016	BAC	\$13.43	7000	(\$94,010)		\$412,856	\$6,866
06/16/2016	DAL	\$38.02	4500	(\$171,090)		\$241,766	\$6,866
06/17/2016	GOOG	\$691.72	300	(\$207,516)		\$34,250	\$6,866
06/22/2016	DAL	\$38.55	4500	\$173,475	\$2,385	\$207,725	\$9,251
06/23/2016	GOOG	\$701.87	300	\$210,561	\$3,045	\$418,286	\$12,296
06/23/2016	BAC	\$14.03	7000	\$98,210	\$4,200	\$516,496	\$16,496
06/24/2016	BAC	\$13.00	15000	(\$195,000)		\$321,496	\$16,496
06/24/2016	DAL	\$35.18	6000	(\$211,080)		\$110,416	\$16,496
06/24/2016	GOOG	\$675.22	100	(\$67,522)		\$42,894	\$16,496
06/27/2016	BAC	\$12.24	3000	(\$36,720)		\$6,174	\$16,496
06/30/2016	BAC	\$13.27	18000	\$238,860	\$7,140	\$245,034	\$23,636
07/01/2016	BAC	\$13.10	3000	(\$39,300)		\$205,734	\$23,636
07/01/2016	GOOG	\$699.21	100	\$69,921	\$2,399	\$275,655	\$26,035
07/01/2016	DAL	\$36.77	6000	\$220,620	\$9,540	\$496,275	\$35,575
07/05/2016	BAC	\$12.74	7000	(\$89,180)		\$407,095	\$35,575
07/06/2016	DAL	\$35.58	11000	(\$391,380)		\$15,715	\$35,575
07/08/2016	BAC	\$13.17	10000	\$131,700	\$3,220	\$147,415	\$38,795
07/08/2016	DAL	\$37.37	11000	\$411,070	\$19,690	\$558,485	\$58,485

Table 8.4.2 Overall Transactions of Technical Trading Method

Appendix C : Overall Transactions of Position Trading Method

Date	Symbol	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/03/2016						\$500,000	
06/04/2016	ORCL	\$38.74	5000	(\$193,700)		\$306,300	
06/04/2016	KO	\$45.12	5000	(\$225,600)		\$80,700	
06/17/2016	ORCL	\$39.68	5000	\$0		\$80,700	
06/17/2016	KO	\$44.79	5000	\$0		\$80,700	
06/23/2016	ORCL	\$41.00	5000	\$205,000	\$11,300	\$285,700	\$11,300
06/23/2016	KO	\$45.21	5000	\$226,050	\$450	\$511,750	\$11,750
06/27/2016	ORCL	\$38.79	5000	(\$193,950)		\$317,800	\$11,750
06/27/2016	KO	\$43.64	5000	(\$218,200)		\$99,600	\$11,750
07/08/2016	ORCL	\$40.86	5000	\$204,300	\$10,350	\$303,900	\$22,100
07/08/2016	KO	\$45.38	5000	\$226,900	\$8,700	\$530,800	\$30,800

Table 8.4.3 Overall Transactions of Position Trading Method

Appendix D : Overall Transactions of Day Trading Method

Date	Symbol	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
06/05/2016						\$500,000	
06/06/2016	AAPL	\$97.92	200	(\$19,584)		\$480,416	
06/06/2016	AAPL	\$98.97	200	\$19,794	\$210	\$500,210	\$210
06/07/2016	AAPL	\$99.63	100	(\$9,963)		\$490,247	\$210
06/07/2016	F	\$13.23	1000	(\$13,230)		\$477,017	\$210
06/07/2016	GPS	\$19.15	1500	(\$28,725)		\$448,292	\$210
06/07/2016	AAPL	\$99.43	100	\$9,943	(\$20)	\$458,235	\$190
06/07/2016	F	\$13.34	1000	\$13,340	\$110	\$471,575	\$300
06/07/2016	GPS	\$19.51	1500	\$29,265	\$540	\$500,840	\$840
06/09/2016	F	\$13.18	1000	(\$13,180)		\$487,660	\$840
06/09/2016	GPS	\$19.09	1500	(\$28,635)		\$459,025	\$840
06/09/2016	F	\$13.26	1000	\$13,260	\$80	\$472,285	\$920
06/09/2016	GPS	\$19.31	1500	\$28,965	\$330	\$501,250	\$1,250
06/13/2016	GPS	\$18.9	5000	(\$94,500)		\$406,750	\$1,250
06/13/2016	VMW	\$62.9	5000	(\$314,500)		\$92,250	\$1,250
06/13/2016	GPS	\$19.04	5000	\$95,200	\$700	\$187,450	\$1,950
06/13/2016	VMW	\$63.23	5000	\$316,150	\$1,650	\$503,600	\$3,600
06/14/2016	GPS	\$18.75	8000	(\$150,000)		\$353,600	\$3,600
06/14/2016	VMW	\$61.74	5000	(\$308,700)		\$44,900	\$3,600
06/14/2016	GPS	\$18.91	8000	\$151,280	\$1,280	\$196,180	\$4,880
06/14/2016	VMW	\$61.34	5000	\$306,700	(\$2,000)	\$502,880	\$2,880
06/15/2016	GPS	\$19.18	8000	(\$153,440)		\$349,440	\$2,880
06/15/2016	VMW	\$61.92	5000	(\$309,600)		\$39,840	\$2,880
06/15/2016	GPS	\$19.51	8000	\$156,080	\$2,640	\$195,920	\$5520
06/15/2016	VMW	\$62.14	5000	\$310,700	\$1,100	\$506,620	\$6,620
06/17/2016	GPS	\$19.74	8000	(\$157,920)		\$348,700	\$6,620

06/17/2016	GPS	\$20.10	8000	\$160,800	\$2,880	\$509,500	\$9,500
06/20/2016	VMW	\$60.98	5000	(\$304,900)		\$204,600	\$9,500
06/20/2016	GPS	\$20.72	5000	(\$103,600)		\$101,000	\$9,500
06/20/2016	GPS	\$20.86	5000	\$104,300	\$700	\$205,300	\$10,200
06/20/2016	VMW	\$61.26	5000	\$306,300	\$1,400	\$511,600	\$11,600
06/21/2016	GPS	\$20.66	6000	(\$123,960)		\$387,640	\$11,600
06/21/2016	VMW	\$60.95	5000	(\$304,750)		\$82,890	\$11,600
06/21/2016	GPS	\$20.48	6000	\$122,880	(\$1,080)	\$205,770	\$10,520
06/21/2016	VMW	\$61.08	5000	\$305,400	\$650	\$511,170	\$11,170
06/22/2016	GPS	\$20.70	5000	(\$103,500)		\$407,670	\$11,170
06/22/2016	VMW	\$61.06	5000	(\$305,300)		\$102,370	\$11,170
06/22/2016	GPS	\$20.68	5000	\$103,400	(\$100)	\$205,770	\$11,070
06/22/2016	VMW	\$61.10	5000	\$305,500	\$200	\$511,270	\$11,270
06/23/2016	VMW	\$60.86	6500	(\$395,590)		\$115,680	\$11,270
06/23/2016	VMW	\$61.99	6500	\$402,935	\$7,345	\$518,615	\$18,615
06/27/2016	GPS	\$20.40	5000	(\$102,000)		\$416,615	\$18,615
06/27/2016	GPS	\$19.92	5000	\$99,600	(\$2,400)	\$516,215	\$16,215
06/28/2016	GPS	\$20.23	5000	(\$101,150)		\$415,065	\$16,215
06/28/2016	VMW	\$55.80	5000	(\$279,000)		\$136,065	\$16,215
06/28/2016	GPS	\$20.51	5000	\$102,550	\$1,400	\$238,615	\$17,615
06/28/2016	VMW	\$56.08	5000	\$280,400	\$1,400	\$519,015	\$19,015
06/29/2016	GPS	\$20.96	5000	(\$104,800)		\$414,215	\$19,015
06/29/2016	VMW	\$56.97	5000	(\$284,850)		\$129,365	\$19,015
06/29/2016	GPS	\$21.02	5000	\$105,100	\$300	\$234,465	\$19,315
06/29/2016	VMW	\$56.80	5000	\$284,000	(\$850)	\$518,465	\$18,465
06/30/2016	GPS	\$21.09	5000	(\$105,450)		\$413,015	\$18,465
06/30/2016	VMW	\$57.11	5000	(\$285,550)		\$127,465	\$18,465
06/30/2016	GPS	\$21.14	5000	\$105,700	\$250	\$233,165	\$18,715
06/30/2016	VMW	\$56.74	5000	\$283,700	(\$1,850)	\$516,865	\$16,865

07/01/2016	GPS	\$20.92	5000	(\$104,600)		\$412,265	\$16,865
07/01/2016	VMW	\$57.37	5000	(\$286,850)		\$125,415	\$16,865
07/01/2016	GPS	\$21.4	5000	\$107,000	\$2,400	\$232,414	\$19,265
07/01/2016	VMW	\$57.82	5000	\$289,100	\$2,250	\$521,514	\$21,514
07/06/2016	GPS	\$21.17	6000	(\$127,020)		\$394,494	\$21,514
07/06/2016	VMW	\$56.56	6000	(\$339,360)		\$55,134	\$21,514
07/06/2016	GPS	\$21.83	6000	\$130,980	\$3,960	\$186,114	\$25,474
07/06/2016	VMW	\$57.20	6000	\$343,200	\$3,840	\$529,314	\$29,314
07/07/2016	GPS	\$21.67	6000	(\$130,020)		\$399,294	\$29,314
07/07/2016	VMW	\$57.68	6000	(\$346,080)		\$53,214	\$29,314
07/07/2016	GPS	\$21.7	6000	\$130,200	(\$20)	\$183,414	\$29,294
07/07/2016	VMW	\$57.84	6000	\$347,040	\$960	\$530,454	\$30,254
07/08/2016	GPS	\$22.75	6000	(\$136,500)		\$393,954	\$30,254
07/08/2016	VMW	\$58.69	6000	(\$352,140)		\$41,814	\$30,254
07/08/2016	GPS	\$22.80	6000	\$136,800	\$300	\$178,614	\$30,554
07/08/2016	VMW	\$59.21	6000	\$355,260	\$3,120	\$533,874	\$33,674

Table 8.4.4 Overall Transactions of Day Trading Method