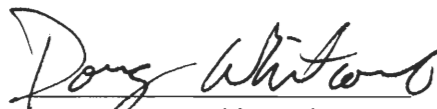



Stock Market Simulation
An Interactive Qualifying Project Report:
Submitted to the faculty
of the
Worcester Polytechnic Institute
in partial fulfillment of the requirements for
the Degree of Bachelor of Science

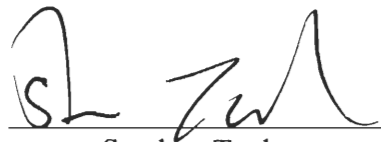
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Abstract

A 6-week stock market investment simulation was conducted using tools and information available in the Internet to examine the effects of different trading and investing strategies. By performing real-time trading, we gained valuable hands-on experience with the stock market. In addition, the information obtained in this study will help us to become better stock market investors in the future.

Chapter 1: Introduction

1.1 Goals and General Plan

The goals of our project are to make money through investing in the stock market and to gain first hand knowledge through a real-time 6-week investment simulation. Each group member will start off with a total of \$100,000 cash. Each participant will choose his own investing and trading strategies and will choose up to three stocks to trade depending on our individual trading method. At the completion, results will be analyzed, trading and investing strategies compared, and conclusions drawn. At the completion of this study, strategies will be analyzed to see which were the most successful during various market fluctuations.

1.2 History of the Stock Market

The first trades did not take place in a building or on a street or even in a well-known area. The first trades happened long before Wall Street was around. They took place in the homes and backyards of common citizens. They did not trade money or slips of paper. People traded time and work for things that they needed. In exchange for milk or eggs, a farmer would be given manual labor until the goods were "paid" off. This went on for many years until money was brought into the picture. The first exchanges were located in Europe. Belgium was the first to create a trading market in 1531, Amsterdam soon followed with their own in the early 1600's. As time progressed, many more exchanges were evident

around Europe, many of which started as outdoor exchanges like the New York Stock Exchange.

In 1792 Wall Street was the location for the first Stock Market. Wall Street originally received its name from a large wall that was erected by the Dutch in order to keep intruders from attacking the city. The wall was later taken down, but the street that ran along was still there hence the name, Wall Street. Before trading took place on this street, Wall Street was a center of commerce. There were many warehouses of fur, coffee and teas, Wall Street's central location kept it close to other businesses such as tanneries, slaughterhouses, and other shops. The trading started of relatively small and simple compared to today's standard. Wealthy businessmen would stand on the street corners and sell lottery tickets, bonds, and shares of newly forming banks, and the only way someone could advertise was by word-of-mouth advertising.

The first organized stock exchange took place under a Buttonwood tree in Castle Garden, later named Battery Park. It was there that 24 merchants signed an agreement of rules, regulations, and fees that would be applied to this exchange. The original name, The Stock Exchange Office, was a place for only the most exclusive of the financial community in New York. Many name changes took place over the course of the years, but in 1863 the board finally decided with the name the New York Stock Exchange. The location was then moved to its' present day location at the corner of Wall and Broad street.

Over the years the exchange had many competitors. One of its most famous ones was the Curbstone Exchange. This exchange did its business outside, rain or shine, and used the "open outcry method". This method is simple;

people shout out prices and other people yell back if they will buy or not. The Curbstone Exchange operated with some reliance on the NYSE. Based on prices set earlier in the day by the NYSE, the members of the Curbstone Exchange would gather outside and buy and sell using numbers from the NYSE. One of the main differences in the beginning of the two exchanges were the size of the trades. The NYSE set a minimum of 100 shares, while the Curbstone Exchange would deal with as little as a single share. After more than 100 years of doing business on the streets, the Curbstone Exchange took its business inside. They purchased a lot at Trinity Park where they erected a large modern building and renamed themselves to the New York Curb Exchange. It was not until 1953 that they took on the name American Stock Exchange.

The stock market today is mainly comprised of computers. The breakdown of the network that makes up the stock market is pretty simple on the surface. There are 300,000 computers linked together by a network that forms the market. From those 300,000 computers, another 26 million are connected to them by banks, small businesses, and large corporations. This linking of computers allows for online banking and for network transactions to take place. From those 26 million computers, over 300 million are networked to that system from which people connect and disconnect from the financial market daily.

Through out the history of the market there have been many ups and downs, which are expected. But there are a few that stand out over time. The first one is the most recent of the few. It occurred in late 2000. The NASDAQ had been trading at an increasing rate since the beginning of March of that year. However, when September came around things started to change. The market

began declining at a serious rate. On September 1, the NASDAQ was trading at about 4234.33 points. By January 2nd the NASDAQ had dropped to 2291.86 points.

There were four main reasons for the major decline in the NASDAQ. Corporate corruption was used to inflated profits and to hide the major debts that the companies were in. Stocks were overvalued which caused major companies to trade at a value that was too high especially considering that most of the companies were not going to see major profits for many years to come. The internet brought a new wave of daytraders and investors into the mix of things. With this new technology people were able to access the market. This in turn caused inexperienced people to flood the gates. Finally, there were many conflicts of interest by research firms. The investment bankers were controlling research firms. The company was often rated higher than it was. After this occurred the company would file for chapter 11 bankruptcy.

The second crash was the one of 1987. This occurred in the Dow Jones. On August 25, the Dow recorded a record high of 2722.44 points, but after this it became unsteady. The weekly turbulence of the Dow caused it to crash on October 19th. It had dropped 36.7% since August 25. The market lost half a trillion dollars in wealth.

There were three causes for this crash. The market had no liquidity to it. The market was not able to handle the vast volume of sell orders that were taking place. And Investors all seemed to want to sell at the same time, which no one could explain. Stocks were again overvalued. P/E ratios were historically high, but this does not always trigger a crash. Lastly, computer trading and derivative

securities were to blame. Investing companies used computers to order large stock amounts when certain trends happened. This contributed to the market's inability to handle the large sell orders taking place.

Finally the most famous crash of them all, the crash of 1929. It occurred on Black Thursday, October 29. The Dow dropped 11.5% that day, bringing the total 39.6% down from the all-time high set back in September of the same year. Analysts estimated the market to loss roughly 14 billion dollars of wealth.

The crash of 1929 had three main causes. The first, which has been a cause in the other two, was again that stocks were overvalued. Even though the Industrial Revolution was taking place, people were buying stocks at a price that was greatly inflated. The second major cause to the crash of 1929 was margin buying. Margin buying accounted for about 5% of the market, this was not enough to bring the market down. The rapid opening of multiple banks dramatically effected the stability of each bank. There were very few federal regulations for opening a bank. This caused banks to lend and spend more then they could over. Soon banks were closing at a rate of 2 per day.

The market has had somewhat of a troubled past. But things have changed and many more regulations have been put into place to increase the stability of the market. No matter what has been done and what will be done, there is no way to prevent a crash. In a way they kind of need to happen to keep everything in check.

1.3 NYSE vs. NASDAQ

The NYSE is the New York Stock Exchange. This is the exchange in which the largest companies in the world chose to trade. Traders meet face to face on the floor of Wall Street to trade stocks. Orders come in through brokerage firms that are members of the exchange and flow down to floor. Brokers who go to a specific spot on the floor where the stock is traded. At this place on the floor, known as the trading post, there is a specific person known as the “specialist” whose job is to match buyers and sellers. Prices are determined using an auction method: the current price is the highest amount any buyer is willing to pay, and the lowest price is the price at which someone is willing to sell. Once a trade has been made, the details are sent back to the brokerage firm, who then notifies the investor who placed the order. Although there is human contact in this process, with the increase in technology over the years, computers have taken a big role in trading on the NYSE.

The NASDAQ exchange is considered an over the counter market. It is the most popular of these kinds of markets. These markets have no central location or floor brokers whatsoever. Trading is done through a computer and telecommunications network of dealers. The NASDAQ was once a second tier market; however, with the new technology and growth of communication via computer in the 1990's, it has become a very big competitor to the NYSE.

1.4 How to invest

There are a few ways in which a person can invest in the stock market. It is important that an individual should research each way and make their choice according to what suits them best. One way to invest in the market is to use online brokerage firms. Anyone can use this form and it is relatively easy to understand. All the person has to do is go to one of these sites, sign up for an account, choose which stock is desired to trade, and select the amount of money willing to invest. Investors are allowed to buy and sell whenever they want. There is a drawback however. Using a site like this leaves an investor with no professional help or guidance. When dealing with personal money the comfort of knowing a professional may be valuable. This method can also be very time consuming and should not be implemented unless adequate time can be put forth by the investor.

Another way to invest money in the stock market is to go through a broker. The broker and investor can decide together what is the best way for the investor to achieve his financial goals. This is a safe way to manage money in the market, especially if time is an issue. A broker fee is charged when the guidance of a broker is used so it would be beneficial to the investor to research potential brokers in advance.

1.5 Risks and payoffs of investing

The stock market is like a giant worldwide casino. Some people strike it rich in casinos while others lose their savings. There is a tremendous amount of risk

involved when investing in the stock market. Sure, there are charts and trends that can “predict” what the market will do. But, those charts and trends are not always accurate predictors of the market. There is no surefire way to predict what will happen to the market and at what time. Every stock that is bought and every trade that is made has risk attached. There are however, people who make a living off of the stock market. If the market is played just right there can be huge payoffs. Investing in the right company or stock can be very profitable in the long run.

The trick to stock market success is to try to decrease the risk of investments. Investors need to try not to lose all of their money at once. When money is invested in many different parts of the market, the risk of losing the total investment decreases. This is called diversification. When money is in many different stocks there is a greater chance that when one of the stocks may be going down which could lead to increases in other stocks.

Chapter 2: Doug's Investing Strategy

2.1 Stock Market background

When buying stock one is essentially buying part of a company. With the purchase of a stock in a certain company, one becomes the owner of a percentage of that company. Each purchased stock bought entitles the trader to a share in the company's earnings. There are two types of stock, common and preferred. Common stocks represent ownership in a company and a claim on a portion of profits. Investors get one vote per share to elect the board members, who oversee the major decisions made by management. Common stocks often yield higher returns in the long run than most other investments. Preferred stock represents some degree of ownership in a company but usually does not come with the same voting rights. With preferred shares investors are usually guaranteed a fixed dividend forever. This is different than common stock, which has variable dividends that are never guaranteed. Another advantage is that in the event of liquidation preferred shareholders are paid off before the common shareholder. Preferred stock may also be callable. This means that the company has the option to purchase the shares from shareholders at anytime for any reason. Most of the time the company purchases the stocks for a premium.

Stocks are traded on exchanges, which is where buyers and sellers agree on prices. Exchanges link buyers and sellers in order to facilitate trading and lower the risk of investment. Exchanges lower the risks of investment by making it easier to find buyers of stock or sellers of stock.

2.2 Buying Stocks and Backgrounds

In this chapter a stock market simulation will take place. I will be performing trades using some long term trading methods along with some short term trading methods. The goals that I have set include learning more about the stock market, as written above, and earning money-making trades. I am starting off by buying 1000 shares of six different stocks. As the simulation progresses I will buy and sell stocks as I see fit.

The most common method of buying stocks is to use a brokerage. Brokerages can give expert opinions and help novice traders to develop and organize a portfolio. In this simulation I will act as my own brokerage. I will choose stocks to purchase based on facts and judgments.

The stocks that I have chosen to follow are Dell, Disney, Bank of America, Bison Instruments, Maxim pharmaceuticals incorporated, and Sony Corporation. The symbol for Dell is dell, dis for Disney, bac for bank of America, bsoi.ob for Bison Instruments, and maxm for Maxim Pharmaceuticals, and sne for Sony Corporation.

I chose these stocks for different reasons. I chose Dell because they are a very popular computer company out of Round Rock Texas and is traded on the NASDAQ exchange. They have recently come out with a new product. The Dell digital jukebox is a new MP3 player. MP3 players are fairly new technology and there are not too many brands on the market. The Dell MP3 player was rated very well by the CNET review and is claimed to be a good competitor to the other leading MP3 players. The current price of the Dell stock is \$35.24 a share.

Disney is a company that always has new products coming out and is traded on the NYSE. Disney invents characters and new movies all the time. It is a very popular company with children. This summer Disney alone is producing 5 movies. Disney movies are often very popular for children and families. With the summer coming up I thought it would be a good time to buy Disney stock since young children will be out of school and eager to see these up and coming Disney movies. Also, with the popularity of any of these movies Disney could make dolls, action figures and other products to make more profits. The current price of a share of the Disney Corporation is \$23.47.

The stock of Bank of America has been going up since 1998. It has gone up from \$60.50 to \$83.13 a share on the NYSE. The Bank of America is an incredibly large bank that serves clients in all 50 states and the District of Columbia. The Bank of America is also a national bank. They have offices in 31 countries and serves clients in 150 different countries. I feel that this stock is a very safe investment.

Bison Instruments is a newer company that I have heard about from other investors. It is a small company out of Minnesota. Its stock right now is 32 cents a share. I chose this stock because it has potential to be a very lucrative investment. I am able to buy many shares for the cheap price and can gain more money as the stock rises with more shares.

“Maxim Pharmaceuticals is a biomedical drug company in San Diego, California. The following is a company description from business.com. Maxim Pharmaceuticals, Inc. The Group's principal activities are to develop and offer drug candidates for life-threatening cancers, hepatitis C and other chronic liver diseases. The Group's leading drug candidate is Ceplene TM designed to prevent or reverse damage associated with oxidative stress, thereby protecting immune cells and other critical cells

and tissue. Clinical trials of Ceplene have been conducted for advanced metastatic melanoma, acute myelogenous leukemia, renal cell carcinoma and hepatitis C. The Group has also developed and is employing a proprietary high-throughput screening system to identify compounds that modulate programmed cell death, or apoptosis. The Group research, clinical trials and other product development activities through a combination of efforts by our internal personnel and collaborative programs with universities and other clinical research sites, contract research organizations and other similar service providers and persons.”

The price of stocks for Maxim Pharmaceuticals is \$8.35 a share.

Sony is another very big and popular company out of Japan. Sony is one of the leading audio-visual companies in the world. Sony has many new products such as high definition televisions, digital DVD camcorders, and computers. Sony recently unveiled a new palm computer in Japan. It is a tiny wireless pen PC. The fully functioning computer is billed as the smallest in the world. It is pen operated and has no keyboard. This is the first of its kind. I expect that this product as well as all the other Sony products will be very popular and make the company large profits. The price of a share in Sony is \$35.84.

I will start the simulation with 1000 shares of each stock mentioned above. I will trade and buy stocks as I deem necessary through out the simulation. For the most part I will be using long term trading techniques, which involves less trading and more waiting through small declines and inclines in price. The object is to wait until selling the stock you own produces maximum profit. Long term trading is easier for the novice trader because it does not involve keeping track of my stocks constantly and trading many stocks often for small gains. Long term trading allows the shareholder to hold on to a stock that they believe will go up. They may hold on to a stock as it drops, hoping to see it rise again. My goal of

long term trading is for the stocks I have chosen to rise in price by the end of the simulation.

2.3 Results of Trading

After purchasing my stocks on Monday May 31st, each has fluctuated from the price that I bought them at. For instance, in the first 3 weeks of trading, The Dell stock price has changed many times daily. I first bought the stock at a price of \$35.24 a share. On the 18th of June the stock currently closed at \$34.81 a share. This shows a loss in money, however, with long term trading tactics, I hope to see the price of this stock rise before I sell it. Also, the market fluctuates rapidly, and the price of this stock has gone up before it went down. The highest price that this stock has reached is \$36.01. As I stuck with the stock hoping to see it rise again, it did. As of the 25th of June the stock closed at \$36.02 a share. The opening and closing prices of this stock can be seen in Table 2.1 below. The price changes over the last week of trading can be seen in Figure 2.1. Sticking with this stock even after suffering a loss worked out as I made \$0.78 per share I purchased. 1000 shares purchased means that I have made \$780 with this stock.

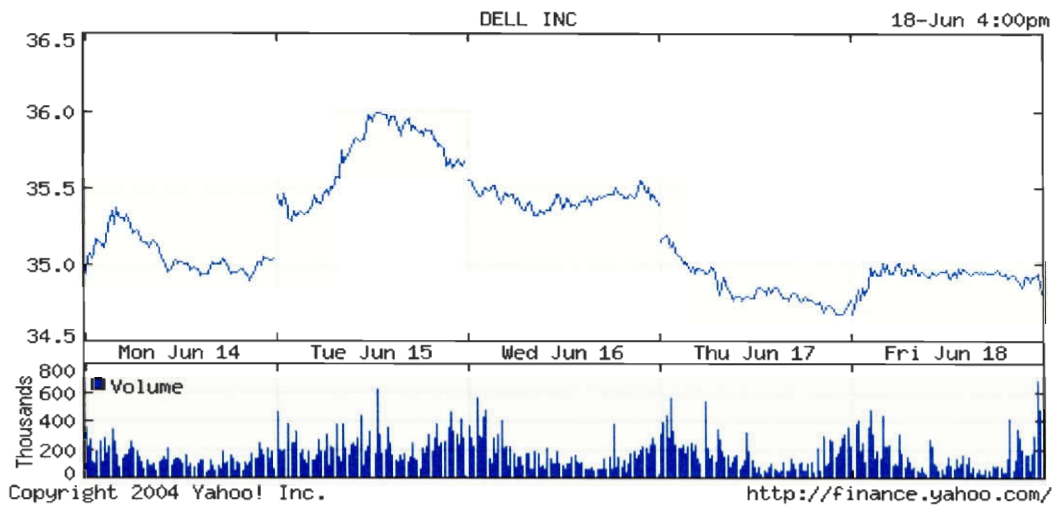


Figure 2.1: Dell stock 6/14/04-6/18/04

As one can clearly see in figure 2.2, the Dell stock dropped greatly between 2000 and 2001. The stock has been on the rebound since. With new products, ideas and marketing campaigns, the company has been slowly recovering from their drop in 2000. Since that drop new marketing ideas and sales such as fully equipped computers as low as \$450 has helped to bring their stock back up. Dell has been known for providing cheap and easy to use computers to appeal to all customers. This is one reason I originally chose this stock. Judging by the progress shown in Table 2.1 below, and the new products that Dell is producing, I believe that the stock will continue to rise.

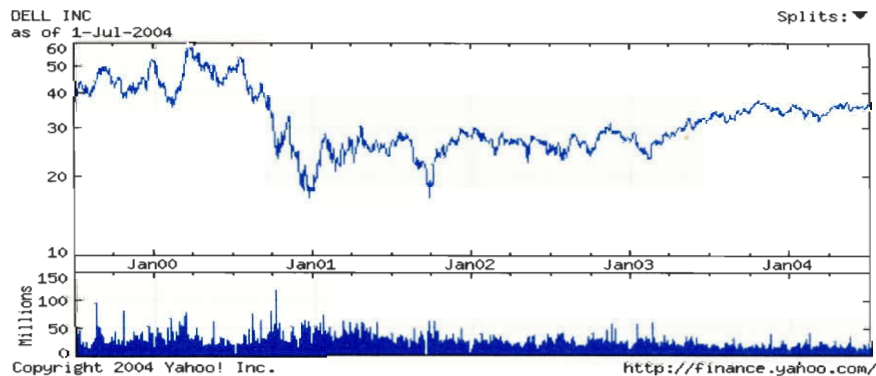


Figure 2.2: Dell stock 2000-2004

Date	Open	High	Low	Close	Volume	Adj Close*
1-Jul-04	35.80	35.95	35.09	35.54	14,732,200	35.54
30-Jun-04	35.61	36.00	35.35	35.82	14,563,300	35.82
29-Jun-04	35.11	35.76	35.08	35.65	12,548,400	35.65
28-Jun-04	35.58	35.71	35.11	35.31	12,132,200	35.31
25-Jun-04	34.91	36.04	34.85	36.02	23,194,900	36.02
24-Jun-04	35.18	35.27	34.82	34.92	10,931,400	34.92
23-Jun-04	35.00	35.30	34.76	35.23	13,302,700	35.23
22-Jun-04	34.54	35.06	34.45	35.05	12,743,800	35.05
21-Jun-04	35.12	35.26	34.56	34.62	13,243,900	34.62
18-Jun-04	34.66	35.10	34.56	34.81	19,336,500	34.81
17-Jun-04	35.25	35.29	34.64	34.76	14,080,100	34.76
16-Jun-04	35.55	35.64	35.30	35.39	13,382,400	35.39
15-Jun-04	35.38	36.01	35.26	35.68	20,527,600	35.68
14-Jun-04	35.01	35.40	34.90	35.05	11,716,400	35.05
10-Jun-04	34.99	35.24	34.96	35.10	7,937,100	35.10
9-Jun-04	35.10	35.22	34.80	34.87	8,808,400	34.87
8-Jun-04	35.10	35.38	34.95	35.35	9,853,300	35.35
7-Jun-04	35.04	35.26	34.83	35.26	15,115,400	35.26
4-Jun-04	35.45	35.55	34.96	35.00	12,239,800	35.00
3-Jun-04	35.55	35.65	35.16	35.20	13,300,200	35.20
2-Jun-04	35.26	35.88	34.96	35.67	15,350,900	35.67
1-Jun-04	35.11	35.43	34.93	35.21	10,364,900	35.21
28-May-04	35.27	35.36	34.92	35.24	11,009,800	35.24
27-May-04	35.45	35.55	34.76	35.13	14,599,100	35.13
26-May-04	35.23	35.46	35.04	35.34	12,533,800	35.34
25-May-04	34.33	35.50	34.27	35.33	16,036,000	35.33

Table 2.1: Dell daily stock progress

The next stock that I have been keeping track of is Disney. The price of one share in the Walt Disney Corporation, as of the 25th of June is \$25.18. I bought the stock when it was at \$23.47. The price changes in this stock over the last week of trading can be seen in Figure 2.3. Table 2.2 contains the opening and closing prices over the trading period. This shows a substantial gain of money. I expect this stock to continue to rise for a while as Disney releases more movies

this summer. At this point I have made \$1.71 of profit on each stock that I purchased. 1,000 shares at \$1.71 a share translates into \$1,710 of profit

Date	Open	High	Low	Close	Volume	Adj Close*
1-Jul-04	25.34	25.50	25.11	25.28	5,999,400	25.28
30-Jun-04	25.50	25.60	25.34	25.49	6,167,400	25.49
29-Jun-04	25.25	25.57	25.16	25.49	5,231,400	25.49
28-Jun-04	25.19	25.57	25.13	25.24	5,359,500	25.24
25-Jun-04	25.20	25.42	25.09	25.18	7,687,700	25.18
24-Jun-04	24.70	25.43	24.56	25.34	17,692,400	25.34
23-Jun-04	24.81	24.95	24.30	24.65	8,355,100	24.65
22-Jun-04	24.77	24.95	24.75	24.92	6,669,100	24.92
21-Jun-04	24.90	25.01	24.77	24.95	6,280,400	24.95
18-Jun-04	24.87	25.02	24.73	25.02	7,229,400	25.02
17-Jun-04	24.77	25.00	24.70	24.86	4,830,200	24.86
16-Jun-04	24.65	24.94	24.56	24.87	6,071,800	24.87
15-Jun-04	24.72	24.90	24.58	24.70	6,056,100	24.70
14-Jun-04	24.55	24.79	24.53	24.72	7,287,100	24.72
10-Jun-04	24.52	24.85	24.51	24.72	5,527,100	24.72
9-Jun-04	24.60	24.87	24.47	24.58	7,154,800	24.58
8-Jun-04	24.45	24.61	24.33	24.60	5,886,600	24.60
7-Jun-04	24.25	24.52	23.98	24.40	6,489,800	24.40
4-Jun-04	24.15	24.38	24.01	24.06	4,849,200	24.06
3-Jun-04	24.25	24.52	23.96	23.97	6,421,600	23.97
2-Jun-04	23.95	24.45	23.38	24.42	8,635,300	24.42
1-Jun-04	23.80	23.94	23.43	23.84	7,237,100	23.84
28-May-04	23.80	23.87	23.47	23.47	3,827,600	23.47
27-May-04	23.85	23.93	23.61	23.71	5,726,500	23.71
26-May-04	23.66	23.85	23.53	23.66	5,397,000	23.66
25-May-04	23.20	23.75	23.03	23.75	5,332,200	23.75

• Table 2.2: Disney daily stock progress

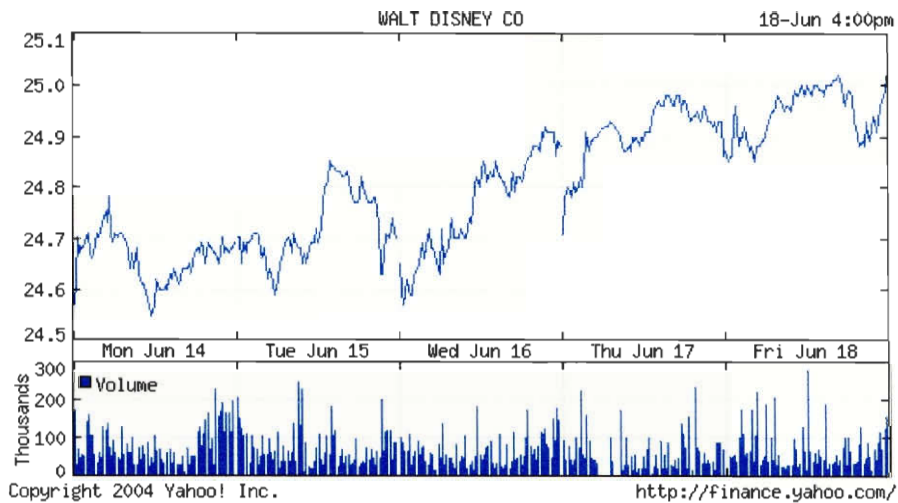


Figure 2.3: Disney stock 6/14/04-6/18/04

The Disney stock has been rebounding for a couple of years now. As shown in figure 2.4, the stock began to drop in 2000. After such declines in stock prices, many large companies such as Walt Disney Corporation rebound over the next couple months or years. Buying this stock while rising was a good move but it would have been more lucrative if the stock had been purchased just after its decline in 2002. The Disney stock may drop again but I feel that it will not anytime in the very near future.

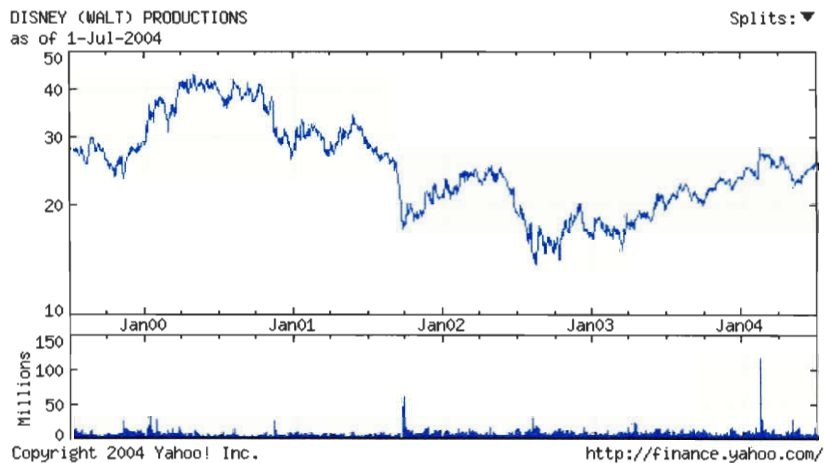


Figure 2.4: Disney stock 2000-20004

The next stock that I have been following is Bank of America. This stock was fluctuated very much over the time I have been following it. I purchased 1000 shares of the stock at \$83.04 a share. The opening and closing prices of this stock can be seen in table 2.3 below. As of the 25th of June the stock closed at \$84.00 a share. This means that I have made \$0.96 on each share and a total of \$960 on this stock. However, if I had sold the stock a couple days earlier it would have been more lucrative. On the 21st of June the stock closed at \$84.94. This means that I could have made \$1.90 a share and a total of \$1900. This shows how the market can change so rapidly. The last week of trading is shown in figure 2.5.

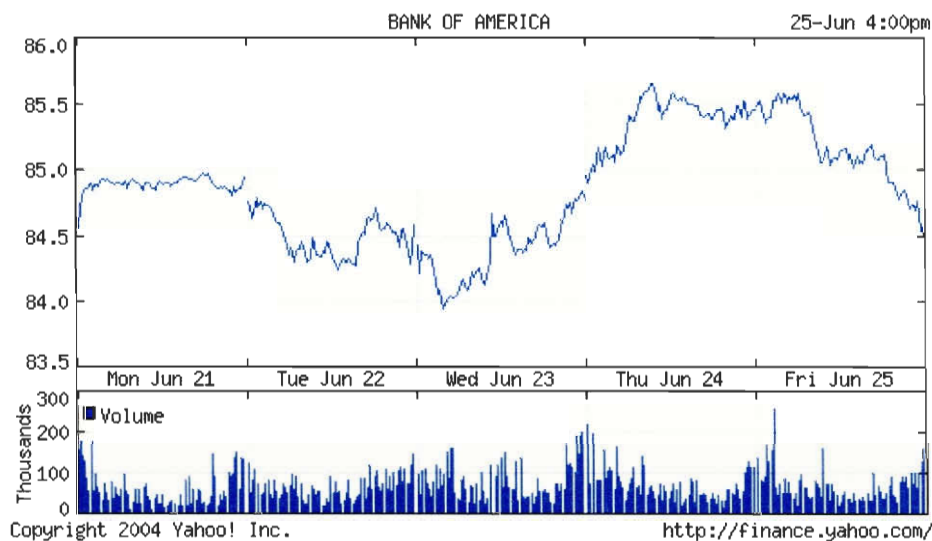


Figure 2.5: Bank of America stock 6/21/04-6/25/04

Date	Open	High	Low	Close	Volume	Adj Close*	
1-Jul-04	84.63	85.00	83.70	83.98	4,398,200	83.98	
30-Jun-04	84.58	85.19	83.88	84.62	5,099,400	84.62	
29-Jun-04	84.46	84.88	84.35	84.57	3,714,200	84.57	
28-Jun-04	84.85	85.21	84.25	84.72	5,680,800	84.72	
25-Jun-04	85.45	85.66	84.00	84.00	8,020,400	84.00	
24-Jun-04	84.95	85.68	84.86	85.44	6,861,500	85.44	
23-Jun-04	84.35	84.86	83.91	84.77	8,161,400	84.77	
22-Jun-04	84.77	84.88	84.21	84.52	6,161,000	84.52	
21-Jun-04	84.51	84.98	84.51	84.94	5,033,800	84.94	
18-Jun-04	83.81	84.63	83.75	84.51	4,806,500	84.51	
17-Jun-04	83.65	84.05	83.49	83.67	4,439,300	83.67	
16-Jun-04	84.25	84.51	83.92	83.93	5,677,600	83.93	
15-Jun-04	83.20	84.45	83.16	84.23	7,350,600	84.23	
14-Jun-04	83.70	84.07	82.55	82.55	5,424,700	82.55	
10-Jun-04	83.51	84.24	83.12	84.21	3,738,800	84.21	
9-Jun-04	83.90	84.21	83.52	83.55	3,632,200	83.55	
8-Jun-04	84.15	84.40	83.76	84.15	5,760,300	84.15	
7-Jun-04	83.74	84.69	83.73	84.63	5,673,700	84.63	
4-Jun-04	83.25	83.78	83.15	83.60	4,948,800	83.60	
3-Jun-04	83.05	83.32	82.75	83.03	4,462,900	83.03	
2-Jun-04	83.54	83.54	82.15	83.13	5,230,600	83.13	
2-Jun-04			\$ 0.80 Cash Dividend				
1-Jun-04	82.80	83.09	82.46	83.04	5,841,700	82.24	
28-May-04	82.61	83.35	82.53	83.13	5,147,000	82.33	
27-May-04	83.00	83.13	81.85	82.61	7,029,000	81.81	
26-May-04	82.11	82.94	82.11	82.94	7,193,100	82.14	
25-May-04	81.22	82.45	81.05	82.44	6,614,700	81.65	

Table 2.3: Bank of America daily stock progress

The Bank of America Stock has been on a steady rise as figure 2.6 shows. Buying this stock while on the rise turned out to be a good idea. It continued to rise through the simulation.

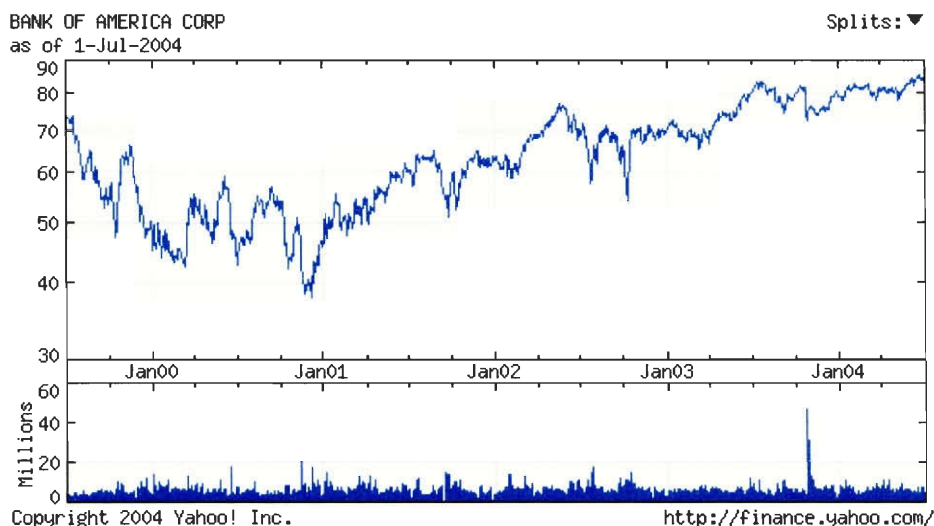


Figure 2.6: Bank of America stock 2000-2004

The next Stock that I purchased was in Bison Instruments. This is a newer company and one in which I took the most risk investing in. It is a much smaller company than those in which I had invested before. By purchasing shares in this company, I helped to get the company “off its feet” so to say. I purchased this stock at 32 cents a share. Through the time in which I tracked this stock it has not changed. It had remained at 32 cents a share since I bought it, which means that I have not lost or made any money on it. When dealing with the stock market, a stock purchased that does not create profit is not always considered a failure. It could only be a failure if the stock loses money. With more time to watch this stock it may have risen and made profits. The recent progress of this stock can be seen in figure 2.7.

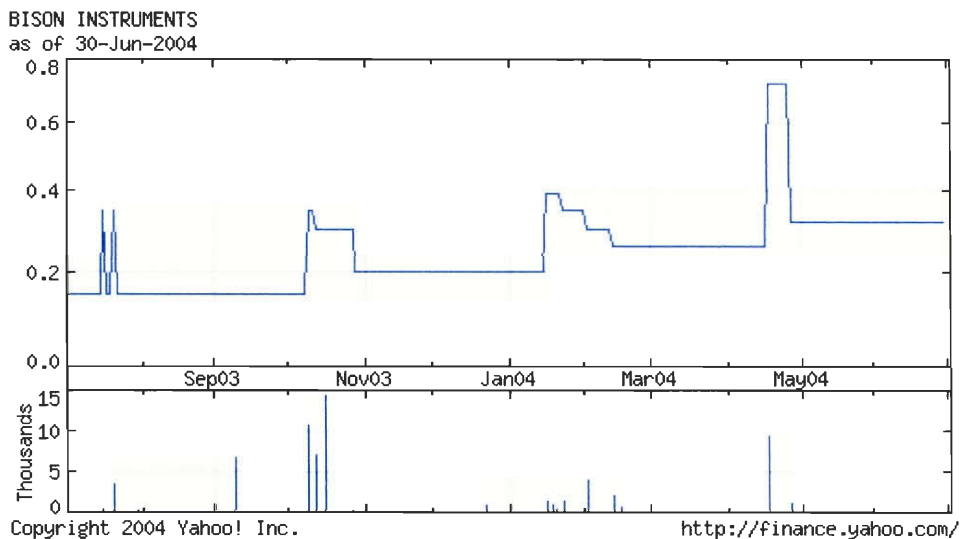


Figure 2.7: Bison Instruments stock 9/03-5/04

The Bison Instruments Inc. stock has been fluctuating very rapidly over the last five years, as seen in figure 2.8. It has made some substantial gains, however, if held on to too long this stock would most likely result in a loss. A stock like this is more suited to a short-term trader, who can monitor their stock many times daily. I was lucky to purchase the stock during a period of little fluctuation. Although these drops look significant, one should keep in mind that this stock is very inexpensive. What may look like a drastic decline in price of the stock may only translate into a small, yet significant loss.

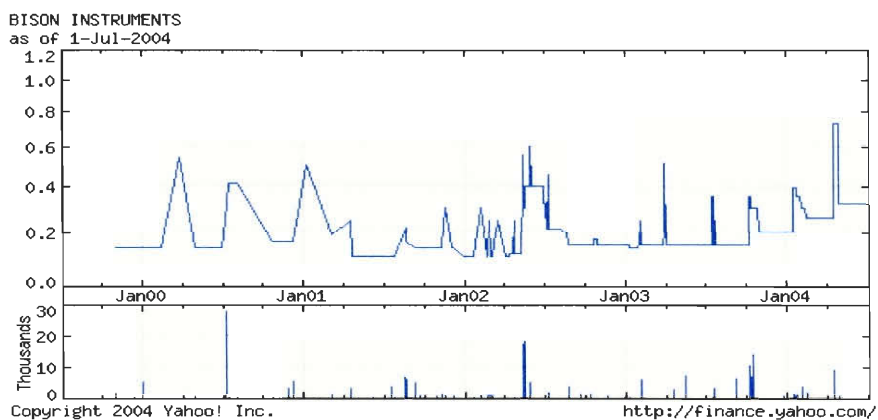


Figure 2.8: Bison Instruments stock 2000-2004

Another stock that I have followed is Maxim Pharmaceuticals Inc. I originally bought this stock for \$8.35 a share. This, like Bison Instruments is also a newer company, not yet proven on the stock market. After the period in which I watched this stock, it has risen fairly steadily. As of the 22nd of June the stock closed at \$9.04 a share, this can be seen in table 2.5 along with the opening and closing prices over the trading period. The fluctuation of prices over the last week of trading can be seen in figure 2.9. That is a profit of \$0.69 a share. That profit applied to 1000 shares is \$690. This is a very nice profit for such a young stock. If I were to continue this simulation, this stock would have certainly be kept as I see no reason that it would begin to decline in the near future.

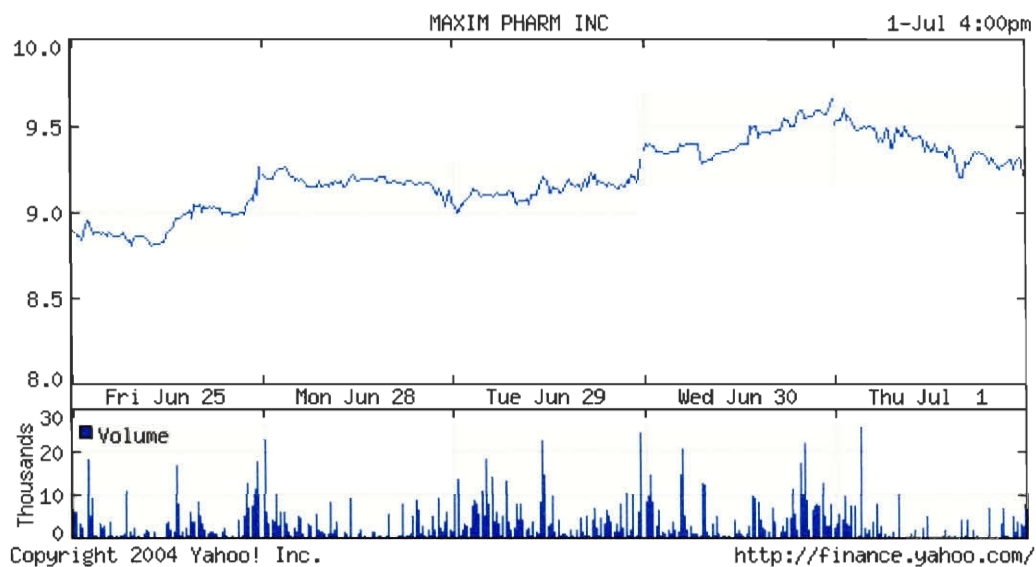


Figure 2.9: Maxim Pharmaceuticals stock 6/25/04-7/1/04

Date	Open	High	Low	Close	Volume	Adj Close*
1-Jul-04	9.50	9.60	9.19	9.22	182,400	9.22
30-Jun-04	9.39	9.65	9.25	9.65	420,500	9.65
29-Jun-04	9.20	9.34	8.97	9.30	428,700	9.30
28-Jun-04	9.23	9.28	9.03	9.06	226,500	9.06
25-Jun-04	8.95	9.26	8.42	9.26	1,650,400	9.26
24-Jun-04	8.95	9.01	8.84	8.94	145,000	8.94
23-Jun-04	9.02	9.05	8.82	8.95	294,800	8.95
22-Jun-04	8.75	9.09	8.74	9.04	174,700	9.04
21-Jun-04	9.01	9.10	8.72	8.81	106,800	8.81
18-Jun-04	8.99	8.99	8.76	8.85	98,100	8.85
17-Jun-04	9.00	9.04	8.87	8.88	240,000	8.88
16-Jun-04	8.69	9.07	8.58	9.00	261,100	9.00
15-Jun-04	8.54	8.70	8.48	8.70	127,200	8.70
14-Jun-04	8.49	8.64	8.38	8.63	168,200	8.63
10-Jun-04	8.56	8.57	8.32	8.57	180,500	8.57
9-Jun-04	8.55	8.71	8.35	8.50	408,000	8.50
8-Jun-04	8.97	8.97	8.56	8.64	545,000	8.64
7-Jun-04	8.80	8.97	8.46	8.95	649,400	8.95
4-Jun-04	8.79	8.79	8.25	8.35	604,400	8.35
3-Jun-04	8.72	8.72	8.25	8.32	406,500	8.32
2-Jun-04	8.81	8.88	8.60	8.66	226,300	8.66
1-Jun-04	8.85	9.07	8.61	8.75	282,300	8.75
28-May-04	9.05	9.05	8.83	8.91	88,600	8.91
27-May-04	9.05	9.09	8.71	8.86	267,200	8.86
26-May-04	9.11	9.21	8.86	8.89	286,100	8.89
25-May-04	9.20	9.21	9.00	9.08	662,400	9.08

Table 2.4: Maxim Pharmaceuticals daily stock progress

This stock has also been on a steady increase for a while now. This stock dropped drastically in 2001, seen by the graph in figure 2.10. Since then the stock has began to rebound, if held on to long enough, there is no reason, that we saw, that would impede this stock from rising to where it once was, around \$80 a share in 2000.

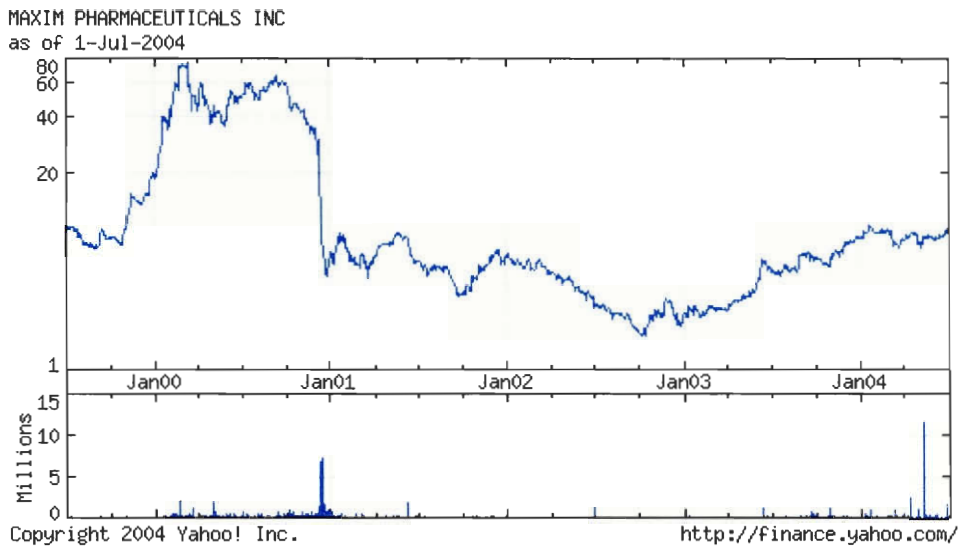


Figure 2.10: Maxim Pharmaceuticals stock 2000-2004

The final stock that I watched in this simulation is the most prominent company that I decided to invest in, Sony Corporation. At the time that I bought this stock I was \$35.84 a share. As of June 28th, the stock in Sony rose to \$37.81 a share at close. That translates to a \$1.97 profit per share. With 1000 shares purchased, that shows a profit of \$1,970. This is a large gain in the market in a relatively short period of time. I think that this stock will continue to rise with the surge of new technology that the Sony Corporation is known for producing. As shown in the chart below the stock has since risen to above \$38.00 a share since the simulation has ended. The opening and closing prices of this stock can be seen in table 2.5. The fluctuation of this stock over the last week of trading is shown in figure 2.11.

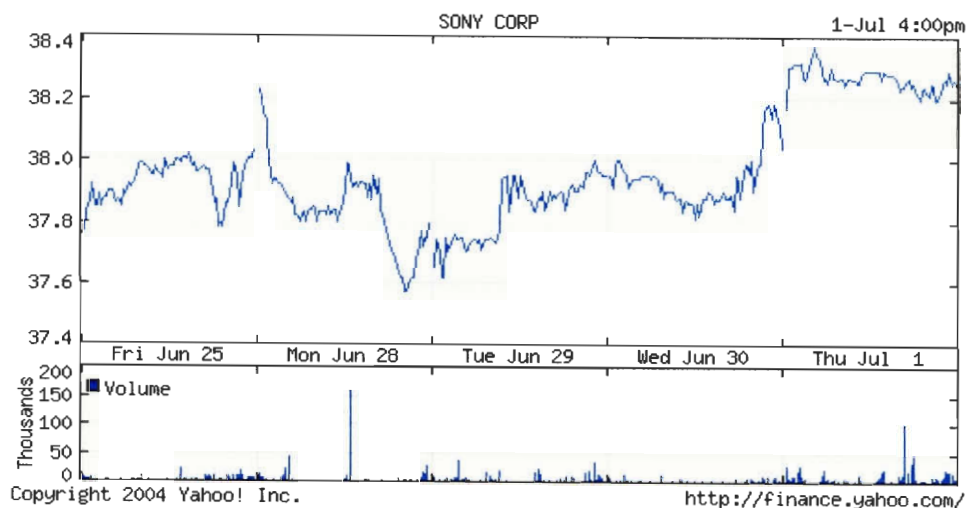


Figure 2.11: Sony stock 6/25/04-7/1/04

Date	Open	High	Low	Close	Volume	Adj Close*
1-Jul-04	38.04	38.39	38.04	38.26	756,400	38.26
30-Jun-04	37.95	38.24	37.81	38.05	274,800	38.05
29-Jun-04	37.60	38.00	37.58	37.96	440,900	37.96
28-Jun-04	38.23	38.29	37.56	37.81	328,700	37.81
25-Jun-04	37.76	38.09	37.70	38.03	354,900	38.03
24-Jun-04	37.62	37.94	37.55	37.76	404,200	37.76
23-Jun-04	37.16	37.65	36.63	37.60	327,900	37.60
22-Jun-04	36.97	37.31	36.97	37.20	183,100	37.20
21-Jun-04	37.01	37.26	36.88	36.90	271,300	36.90
18-Jun-04	36.65	36.80	36.55	36.75	254,900	36.75
17-Jun-04	37.03	37.29	36.91	37.10	282,600	37.10
16-Jun-04	37.35	37.49	37.10	37.28	306,900	37.28
15-Jun-04	36.57	37.38	36.57	37.10	430,900	37.10
14-Jun-04	36.20	36.24	35.80	36.05	375,200	36.05
10-Jun-04	37.19	37.41	37.17	37.26	426,700	37.26
9-Jun-04	37.20	37.20	36.49	36.58	359,500	36.58
8-Jun-04	37.10	37.32	36.83	37.14	205,200	37.14
7-Jun-04	36.80	37.30	36.67	37.26	599,900	37.26
4-Jun-04	35.70	36.11	35.61	35.84	271,300	35.84
3-Jun-04	35.60	36.10	35.36	35.53	510,900	35.53
2-Jun-04	36.18	36.39	35.89	36.38	407,000	36.38
1-Jun-04	36.66	36.78	36.21	36.65	191,700	36.65
28-May-04	36.61	37.19	36.45	36.87	396,200	36.87
27-May-04	36.31	36.70	36.31	36.36	488,800	36.36
26-May-04	35.53	35.97	35.52	35.75	298,300	35.75
25-May-04	34.67	35.64	34.65	35.53	368,800	35.53

Table 2.5: Sony Corporation daily stock progress

The Sony stock has been declining since 2000 up to 2003, which can be read by the graph in figure 2.12. I purchased the stock at the beginning of the company's rebound. If this stock stays steady, I would expect an incredibly large profit. This stock may continue to rise to \$150 a share or more with time.

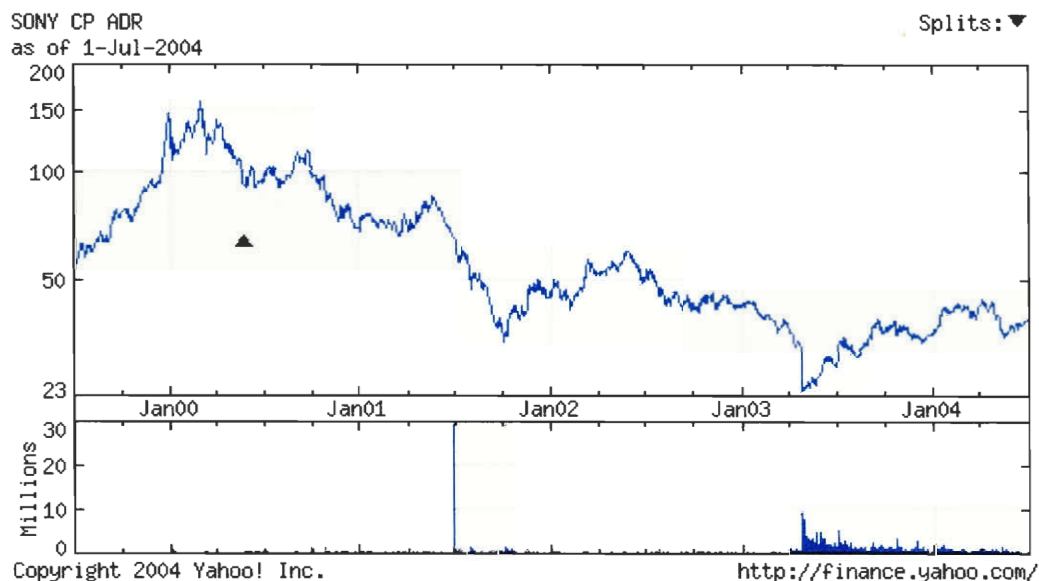


Figure 2.12: Sony stock 2000-2004

2.4 Final Results

As a final result, no money was lost using the long term trading methods. We were fortunate to chose the correct stocks and not lose money on any of them. This is partially due to the stock research that was done. Each company was looked into thoroughly before purchasing stock in it. In the end of the simulation, using long term trading techniques, we made exactly \$7,050. This was below our goal of \$10,000, however it is a substantial gain and we do not consider it a failure. If the simulation would have been longer we believe that these stocks would have continued to rise and eventually earning us our \$10,000

goal and more. As for the rest of our goals, we think they have been met. We have gained very much knowledge about the stock market, and hopefully can now apply that knowledge to make real trades and real money. We found long term trading to be very easy for the novice trader, if he or she researches the stocks purchased.

Chapter 3: Big Dipper Method

3.1 Strategies and goals

The goals of this section follow the same as the goals of the whole project. First, make money using this trading strategy and understand the market. And second, develop an understanding of the concept of this trading strategy so to analyze it and compare to others to see what one works better or more efficiently in the market today.

The name of this trading style is called The Big Dipper Method. I first select the stocks that I want to further examine before the purchases were made. Then I examined the company reports to get a better understand of each company. From there I narrowed down my search and applied The Big Dipper Method to it. To apply this method you examine the chart of the company over a period of time. When examining the charts you look for where the company has dropped and then recovered. You examine how long the drop occurred for and how long it took the company to recover. Then you look at where the company sits at that present time. You look to see if it is on a fall or if it is rising again. The method suggests that you buy when the stock is just starting to recover or when you feel that the company is at the end of its fall. From here you select a time period in which you would like to keep the stock. Whether that period is a day or 2 weeks or 2 months, when it reaches that time deadline you sell the company no matter how it is doing. Once you sell you then pick up more stocks or just end there. This spreadsheet shows how I set it up. It shows the company name along with the ticker number. From there I showed when I purchased the stock so I

<u>Company</u>	<u>Ticker number</u>	<u>Date of Purchase</u>	<u>Purchase Price</u>
Barr Labs	BRL	5/18/2004	\$ 44.15
Carramerica Realty Corp.	CRE	5/18/2004	\$ 27.40
Amerada Hess	AHC	5/18/2004	\$ 73.00
Canadian Natural Resources	CNQ	6/1/2004	\$ 27.20
Orix Corp.	IX	6/2/2004	\$ 52.65
	<u>Number of Shares</u>	<u>\$100,000</u>	<u>Price to Sell</u>
	250.00	\$11,037.50	46.25
	500.00	\$13,700.00	29.75
	1,000.00	\$73,000.00	79.25
	250.00	\$6,800.00	30.25
	300.00	\$15,795.00	58.00
	<u>Date to Sell</u>	<u>Date Sold</u>	<u>Price Sold</u>
	5/28/2004	5/28/2004	\$ 43.62
	6/1/2004	6/1/2004	\$ 29.33
	6/25/2004	6/25/2004	\$ 77.25
	6/25/2004	6/25/2004	\$ 30.31
	6/25/2004	6/25/2004	\$ 56.58

Table 3.1: Table set up for The Big Dipper method

did not lose track of when the stock was purchased. The next three columns show the price I purchased at, along with the number of shares and how much it cost to buy all of those shares. I set it up like that to make sure I did not spend more than I had. From here I selected the sell dates and the sell prices for each stock. Following those columns are the actual dates that I sold them and at what prices I sold them at. This set-up was pretty simple and easy for me to follow and I did not have any problems with it.

3.2 Trading with the method

Through the first two weeks trading has been slow. I have not made a lot of transactions because the method I have does not really operate like that. I

started off with three companies and I planned on not having more than that at a time. I sold off one of my companies on Friday May 28, because that was the cut off date that I had set for that company, but did not come out on top with that company. However, another one of my companies I sold on Tuesday June 1, the reason for selling this company was because they were above what I had bought them at and it was getting close to the sell date I had set for the company. Below shows the chart of what the open and close prices were for the stocks that I have sold off this week.

	Monday		Tuesday		Wednesday	
	open	close	open	close	open	close
BRL	\$ -	\$ -	\$ 44.15	\$ 44.53	\$ 45.03	\$ 44.66
CRE	\$ -	\$ -	\$ 27.40	\$ 28.00	\$ 27.65	\$ 27.10
BRL	\$ 43.17	\$ 43.20	\$ 43.30	\$ 44.12	\$ 43.85	\$ 43.22
CRE	\$ 27.65	\$ 26.85	\$ 27.85	\$ 28.48	\$ 28.58	\$ 28.92
	Thursday		Friday			
	open	close	open	close		
BRL	\$ 44.62	\$ 44.00	\$ 43.85	\$ 43.17		
CRE	\$ 27.20	\$ 27.40	\$ 27.45	\$ 27.50		
BRL	\$ 43.42	\$ 43.34	\$ 43.37	\$ 43.62		
CRE	\$ 29.30	\$ 29.07	\$ 29.15	\$ 29.32		

Table 3.2: Open and close prices for Bell Labs and CarrAmerica

I've decided to stay with one company in particular, Amererada Hess. The sell date I have chosen for this company is at the end of the simulation, June 25th. The reason for choosing such a long period for this company is because of the issue with gas and energy prices. I figure since the prices in gas are increasing at a high rate and that this company is in the oil and natural gas industry, they will eventually come out on top.

I purchased Canadian Natural Resources on Tuesday, June 1st for \$27.20. I followed the same type of method as I did with Amerada Hess when choosing this company. The company started off slow this week and did not gain in any market value, it actually fell a little less than a point. On Wednesday, June 2nd I

invested in Orix Corp. I decided to experiment with another section of the market with this company. The Orix Corp. falls in the financial section of the market. I purchased it at \$52.65. After the first week, this company appeared to be making steady increases. After less than a week of having this company, it has already gained a little less than a point. With both new purchases, I've decided to stay with them until the end of the simulation. My other company, Amerada Hess, has not done well at all. For the past three weeks it has done nothing but fall. However, I picked a date to sell of June 25th, so I must stick with that decision and hope it pays off.

I'm into my fourth week of trading and things are not looking too good for two out of my three companies. Both of my oil and natural gas companies are down. I think this might have something to do with what is happening in the Middle East. Since most people believe that all of our oil and gas comes from over there, they might be afraid to invest in these types of companies causing the value of them to decrease. My one company that is doing well, Orix Corp., has really been on the move. It grew more than two points this week. I feel that this might also be linked to the crisis in the Middle East. Since the Orix Corp. deals with different types of insurances, people might be purchasing much more insurance in preparing for the worst. With all of these fluctuations taking place this week and with what has happened in the news, it has showed me that current events influence the market in many ways.

The last two weeks have come and gone and I have sold off the last of my stocks as I stated previously on June 25th. In the fifth week, things started to make a recovery for me and get me back to where I haven't lost money. The two

companies that were declining at a steady rate, turned around this week.

Canadian Natural Resources Company gained back what it had lost when I first purchased it, and then it increased some by the end of the week. However, my other oil and natural gas company gained everything back and then more. Things have really turned around for Amerada Hess. At the beginning of the week it was at 70.07 and when the market closed on Friday it was at 74.27. This swing as bestowed my confidence back in the company and I felt good about this one going into the last week. As usual the Orix Corp. held steady and increased up to 57.14, which is a little less than three points in five days. The sixth week brought steady increases. All of my stocks gained this week. There was one little kink in the steady increase, and that was on Thursday. For some reason all of my stocks took a little hit on that day. Amerada Hess took the biggest hit of the three that day, losing about a point. Even on Friday things dropped a little bit, but not too much. After six weeks of trading, I finally sold all of my stocks and escaped the market on the up side, gaining a little more than \$7000.00. The last three weeks of open and closing prices are below in table 3.3. Where the ticker numbered start over again represents a new week. It shows how the stocks picked up late and gained a lot towards the end.

		Monday		Tuesday		Wednesday	
		open	close	open	close	open	close
CNQ	\$	26.26	\$ 26.67	\$ 26.78	\$ 26.50	\$ 26.60	\$ 26.25
IX	\$	54.31	\$ 55.10	\$ 55.30	\$ 55.80	\$ 55.70	\$ 55.16
AHC	\$	70.35	\$ 72.12	\$ 72.30	\$ 71.21	\$ 70.55	\$ 69.71
CNQ	\$	27.18	\$ 26.96	\$ 27.50	\$ 28.21	\$ 28.02	\$ 28.30
IX	\$	54.60	\$ 54.95	\$ 55.37	\$ 55.87	\$ 56.30	\$ 56.50
AHC	\$	70.39	\$ 69.57	\$ 70.07	\$ 70.39	\$ 70.40	\$ 71.35
CNQ	\$	29.22	\$ 29.38	\$ 29.65	\$ 29.52	\$ 29.81	\$ 29.95
IX	\$	57.50	\$ 57.50	\$ 57.70	\$ 57.50	\$ 56.10	\$ 56.20
AHC	\$	74.47	\$ 74.33	\$ 74.34	\$ 75.73	\$ 75.93	\$ 78.78
		Thursday		Friday			
		open	close	open	close		
CNQ	\$	26.45	\$ 27.18	Market Closed			
IX	\$	56.30	\$ 56.50	Market Closed			
AHC	\$	69.96	\$ 71.00	Market Closed			
CNQ	\$	28.53	\$ 28.53	\$ 28.63	\$ 28.83		
IX	\$	56.80	\$ 57.50	\$ 57.00	\$ 57.14		
AHC	\$	71.91	\$ 74.15	\$ 74.18	\$ 74.27		
CNQ	\$	30.42	\$ 30.15	\$ 30.16	\$ 30.31		
IX	\$	56.15	\$ 55.90	\$ 56.60	\$ 56.58		
AHC	\$	78.62	\$ 77.51	\$ 77.51	\$ 77.25		

Chart 3.3: Open and close prices for Canadian Natural Resources, Orix Corp., and Amerada Hess

3.3 Stocks Chosen

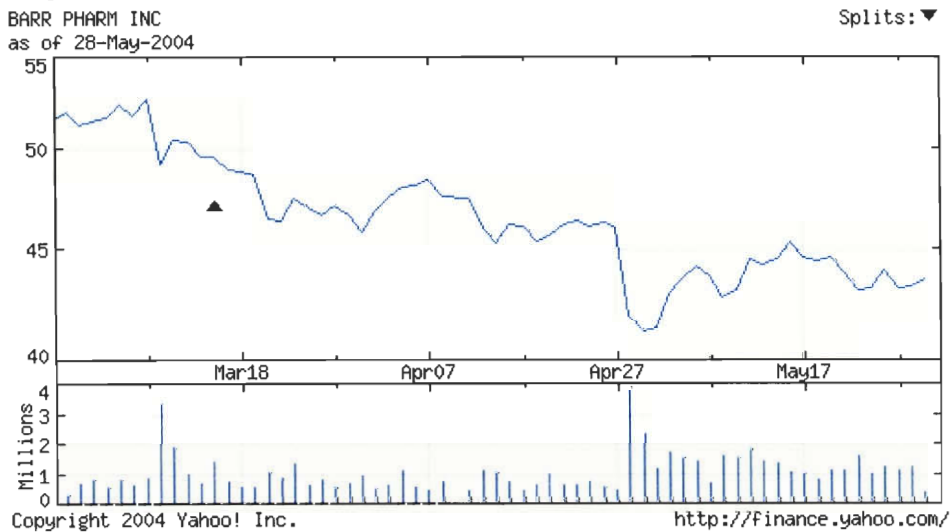


Figure 3.1 Barr Pharmaceutical's 3-month price changes

One of the markets that I looked into when using this method was the healthcare section of the market. This part of the market includes companies that produce new and improved medicines for use to help people's health issues. This market has been growing for a long time now. Barr Laboratories is a company within this section of the market. It is responsible for producing new pharmaceutical drugs to the public. Over the years it has been in the market, this company has been up and down. What turned me to this particular company was where it was at in its downfall. It has been dropping for a long time now and is due to make some recovery. After looking at where it was at I decided to pick it in accordance with the method I am using.



Figure 3.2: CarrAmerica Realty 3-month price changes

CarrAmerica Realty was another company I chose. It belongs to the realty part of the market. This market deals with companies that operate in the selling and buying of properties. CarrAmerica specializes in the accusations of office buildings in urban areas. They have many large-scale office buildings on the west coast. These office buildings are in excess of 200,000 square feet and over

15 stories high. Once they purchase these buildings, they then rent out the spaces to companies that need a large amount of office space and need to be in an important location like Los Angeles or Washington DC or New York City. The value of the company depends a lot on the workplace economy. If the unemployment rate is down, then this company will not do so well because they do not have people to fill the office spaces. The unemployment rate has been increasing over the past years. However, it is starting to recover. CarrAmerica has been decreasing because of this, but since the unemployment rate is going down the company should begin to go back up. So that is why I choose this company.

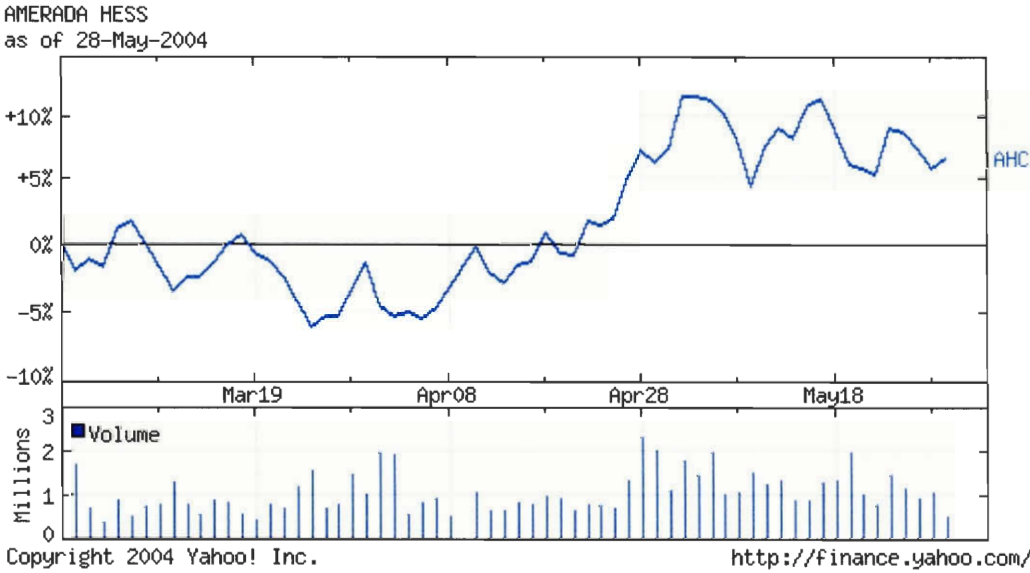


Figure 3.3: Amerada Hess's 3-month prices changes

Amerada Hess is a company that deals in oil and natural gas. They are an energy company. Over the past years they have been responsible for pumping up crude oil and refining it for sales to places that need energy. Over the past 2 years they have begun switching their money from pumping and refining, to field development. What that means is that they are putting less time into pumping up

what oil they have already found, and putting more time and money into looking for more oil and other natural energy sources. They have locations all over the world, from the North Sea to the Gulf of Mexico to Indonesia. The company has been on a downfall for a period of time now because they have not been able to locate new more plentiful sources of energies. With this new interest and in opening up their field and finding new locations to extract from, along with the increase in gas prices and depend for gas, this company should start to show an increase in their value in the market.

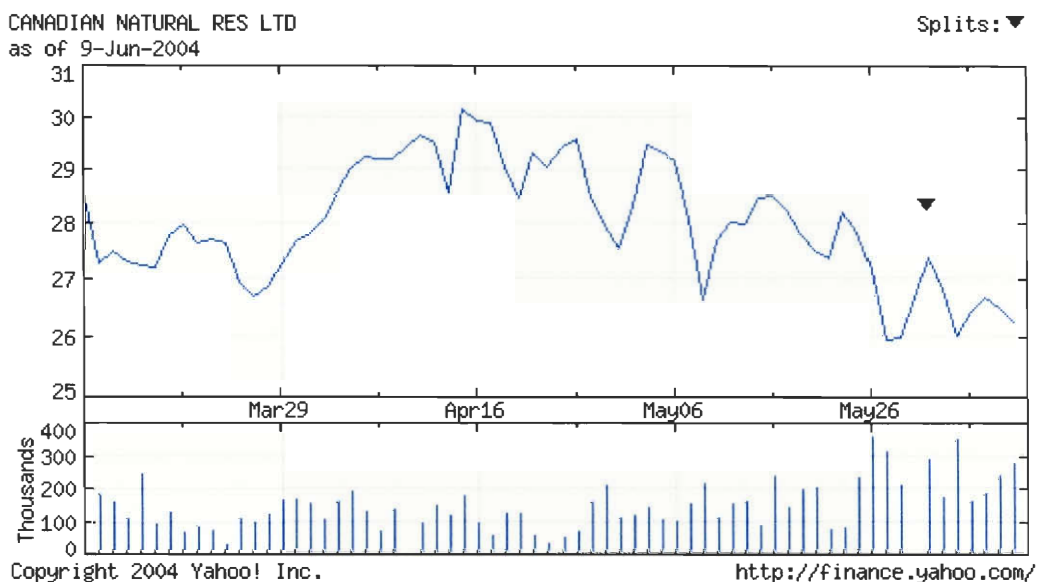


Figure 3.4: Canadian Natural Resources' 3-month price change

Canadian Natural Resources Limited is an oil and gas company. They are based out of Canada and operate mainly in the Western part of Canada, but they also have locations in the United Kingdom and off the coast of West Africa. They engage in the acquisition, exploration, development, production, marketing, and sales of natural resources. I chose this company because it was an energy company. Since my other energy company was doing well I decided to put a little

more money into that section of the market. With fuel prices still climbing and the onset of summer, the amount of energy needed should increase which will help me to make money.

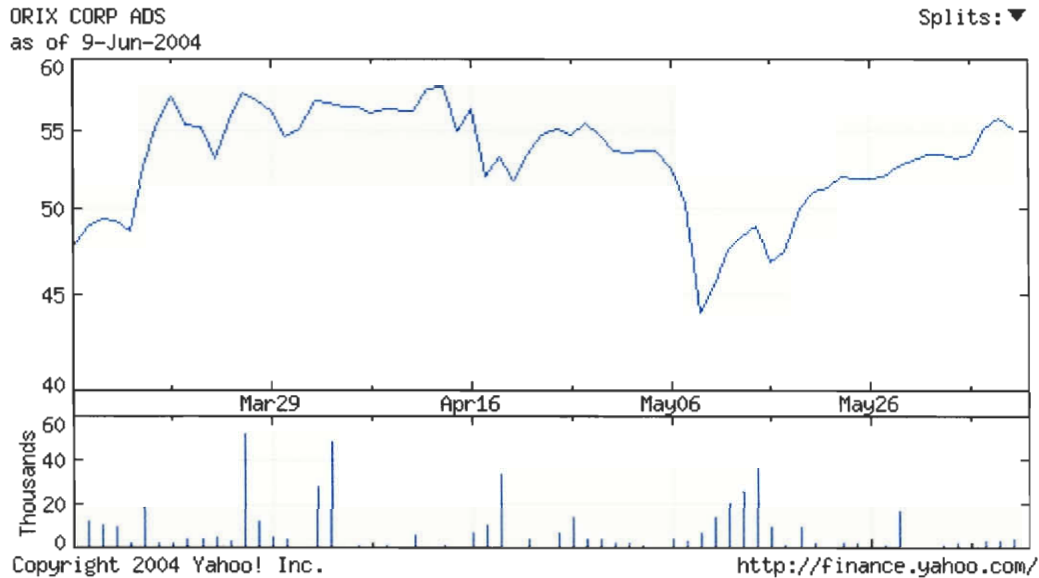


Figure 3.5: Orix Corporation's 3-month price changes

The Orix Corporation is a different from my other stocks. This business is a financial one. It primarily deals with insurance for corporations. It also provides lending and leasing to other companies. As I looked at this stock I took a little different approach to it. Instead of looking for where the company had a big drop and appeared to be at the bottom, I looked for where it had a drop and was increasing. I wanted to experiment with the strategy and see if this would pay off better at the end. Another reason I picked it was because I did not want to overload my stocks with just one portion of the market. I wanted to have different

types of stock. I wanted this so incase one section was doing bad, hopefully the other section could make up for it.

3.4 Results

After 6 weeks of trading I have sold all my stocks and have stepped away from the stock market. The total amount of money that I made was \$7,039.00. This is a 7.04% profit. However I did not gain money on all of my stocks. I lost money on the Barr Labs stocks. When I first bought the stock it began to go up in price. But this increase in price only lasted for a day, then from there is continued down until I sold it after two weeks. After two weeks of trading with this stock, I ended up losing \$132.50, which is not that much compared to the \$100,00.00 that I started out with.

After the first week of trading, the stock really plummeted to its lowest point on day 5. However going into the second week I had hopes of the stock

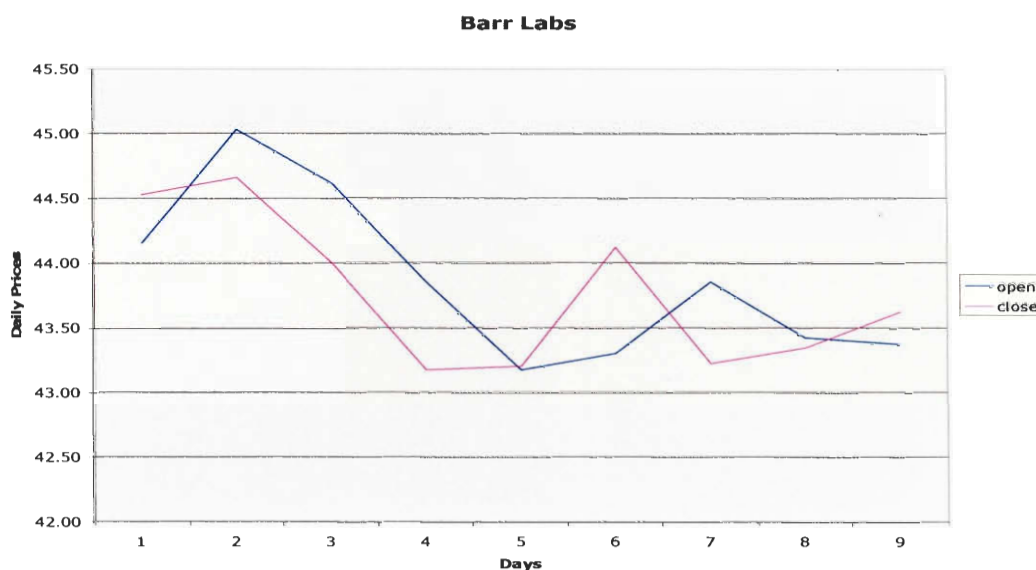


Figure 3.6: The price changes of the stimulation of Barr Labs

recovering and at least getting me back to even where I originally bought it. But, after a quick increase, the stock lost value and ended up going back down.

My smallest gain came from “Canadian Natural Resources.” This stock gained me a total of \$777.50. I originally bought 250 shares at 27.20 for a total of \$6800.00. This gave me a profit of 11.43%. The stock dipped for a few days after I bought it but steadily gained money after that. After the 8th day, the stock gained every day until the day before I sold it. I kept this stock for a longer period then the one it replaced because of the gains it was making through the time

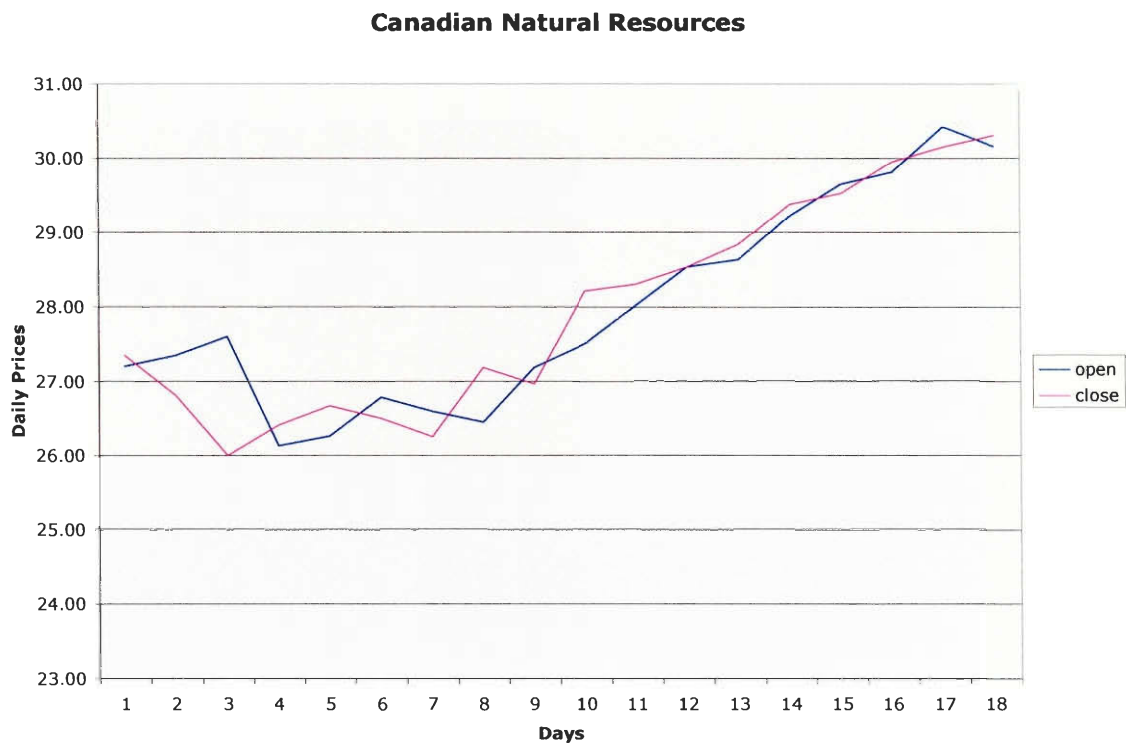


Figure 3.7: The price changes of the stimulation of Canadian Natural Resources

“CarrAmerica Realty Corp.” had a profit of 7.04%. This stock added \$965.00 to my earnings. I spent \$13700.00 on this company. For this price I received 500 shares. Each day this stock seemed to be ready to make rebounds because of its high opening price after a bad day before. It took this over a week to gain money. For the first week it was up and down and staying near the price I bought it at which was 27.40. After the 5th day the stock took off and gained almost 2 points in 4 days. After two weeks I sold the stock at 29.33 resulting in a gain.

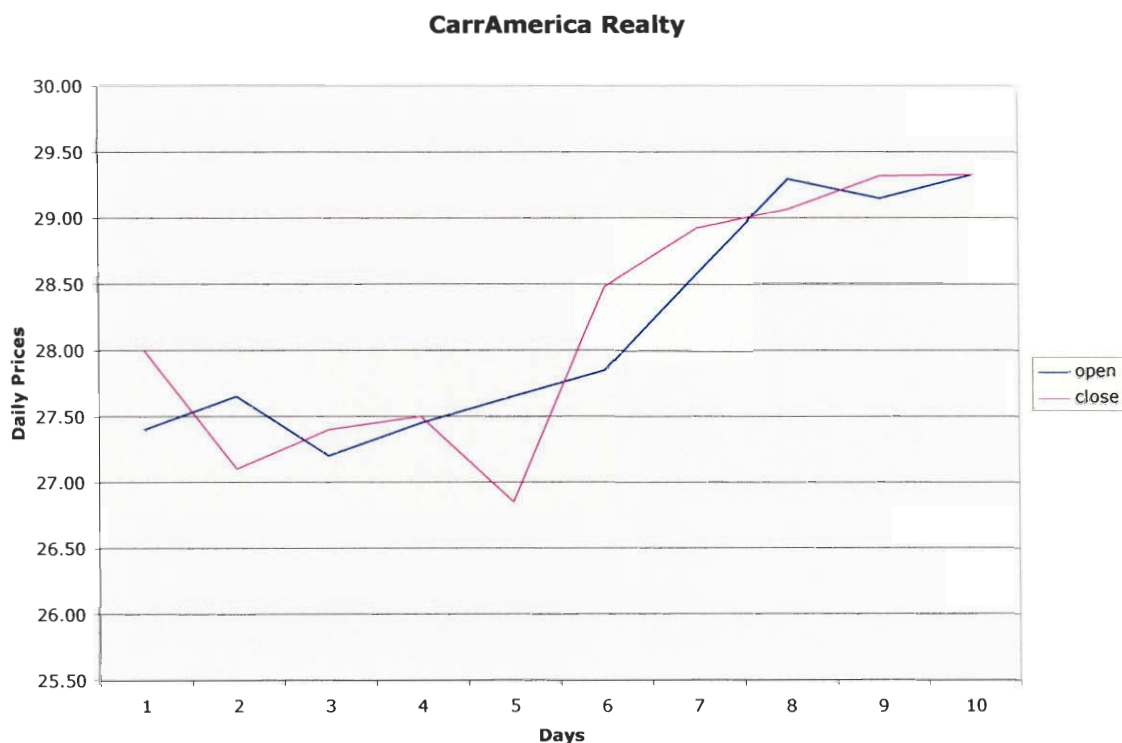


Figure 3.8: The price changes of the stimulation of CarrAmerica Realty

The “Orix Corporation” is a stock that was in a different area than all the rest of my stocks, yet it gained a lot in the period I had it. I originally purchased the 300 shares at 52.65 and after 3 weeks I sold it at 56.58. This is an increase

of 3.93 points. This increase of nearly 4 points yielded \$1179.00, which is a 7.46% profit. This company showed only a slight hit after the first week. However, after that it kept increasing until two days before I sold it. Here it took a little drop but increased some more before I sold.

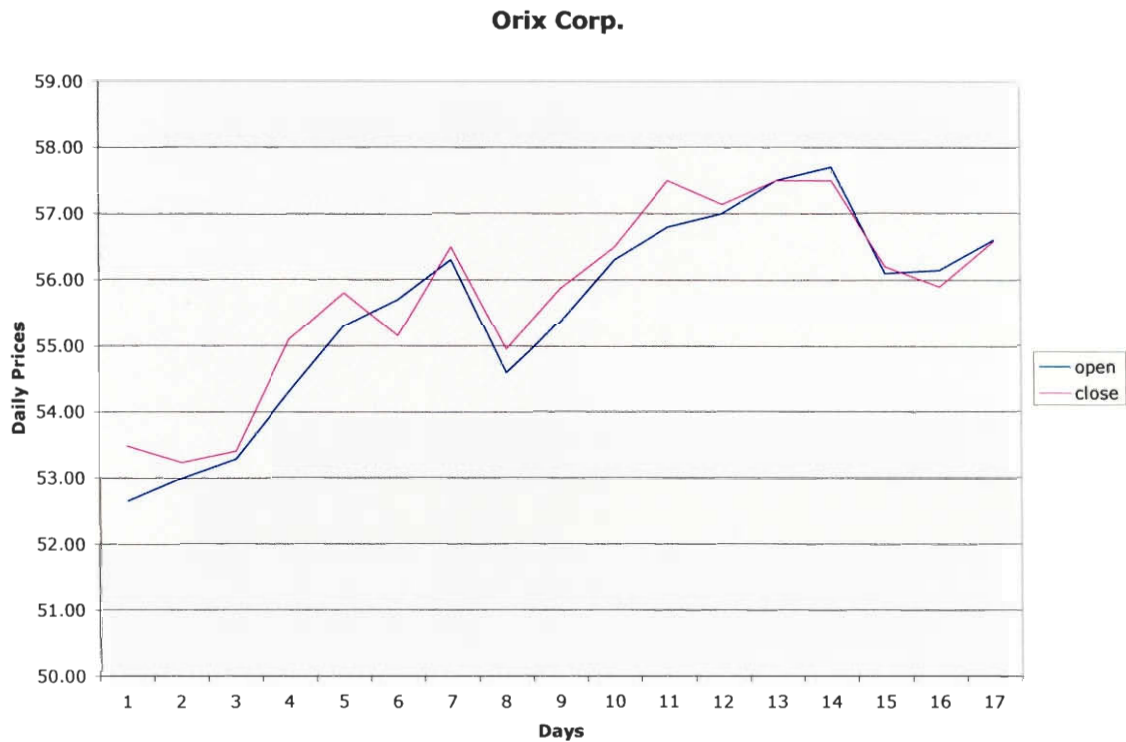


Figure 3.9: The price changes of the stimulation of Orix Corp.

Finally is the company that allowed me to gain the most money, “Amerada Hess.” I kept this company for the duration of the simulation. I originally bought the stock at 73.00 and at the end of it I sold it at 77.25. The stock was not steady at all. It preformed a series of drops and recoveries over the first 4 weeks I had the stock. But as the last two weeks came, the stock increased up until two days before I sold it. I kept 1000 shares of the stock for the 6 weeks. After selling, I made a profit of %5.82, which was \$4250.00. The percentage was the lowest,

but it had the most money gained for me. I believe this was due to the large amount of the stock I purchased.

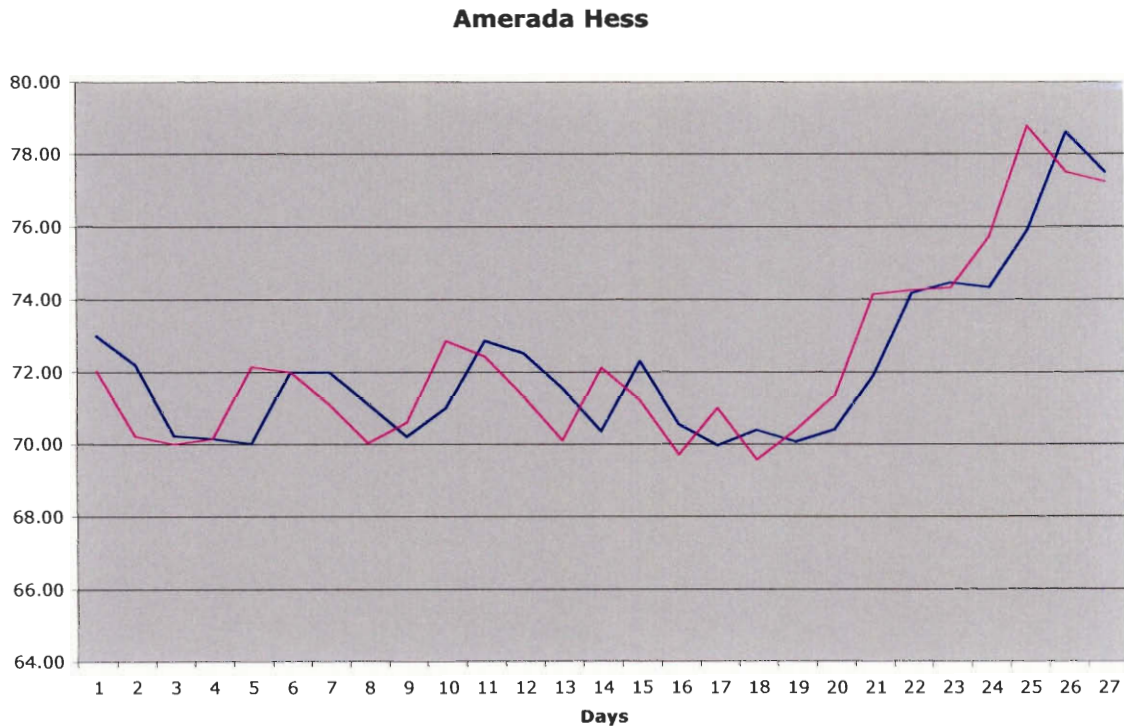


Figure 3.10: The price changes of the stimulation of Amerada Hess

3.5 Conclusion

When looking at our 6-week simulation and analyzing the results, I look at two things. The first thing I look at include the goals that were set from the beginning. One of the main goals of this section and this project was to make money. When trading was completed, I ended up earning a total of \$7039.00. The strategy I used, The Big Dipper Method, was a simple strategy to use. It required a little investigating about the stock I was interested in. Once I

researched them and picked which ones I preferred, I planned out how long I was going to keep it and at what price I wanted to sell at. When examining the stocks and their recent history, I found a big key that helped me to make money. The key was to find the stocks that were just beginning their rise after a significant drop. The one stock that I lost money on, "Barr Labs," I bought it when it was still decreasing because I believed it was going to turn around based on its previous history. However, the stock did not make a full recovery. It increased a little at one point, but it quickly turned back and kept decreasing. The stocks that I made the most money on, were stocks that I bought just as they made their turn around. "Orix Corp." I bought about a week after its low point. After researching the stock and examining the history of its prices, I decided to buy the stock because it appeared to have made a turn around. The stock grew the whole time I had it. There was only one day where it had a minor drop, but it quickly recovered its losses the next day. This simple key is not always going to work every time. But I believe that it is more likely that the stock will gain me money if I catch it right on its turn-a-around point and invest into the company then.

The second thing I looked at is what I gained from this experience. Before I started this simulation I did not know much about the market. I knew very simple things about the market, like that there were shares of companies and that people buy and trade with them some how. At the end I have learned that there is much more to the market than when I previously stated. With some simple searches on the Internet, I quickly found a variety of investment strategies, and I also found that there are many area and way to invest in the market. It is simply not limited to shares in companies. Another piece of knowledge I gained was that

the market does not just revolve around the company in which you are invested into, but it also is closely linked to the world and the issues at hand. With the conflict in the Middle East, I noticed that in a time of crisis where money from our country could be directed towards efforts over seas, the market tends to go down. I've learned that when an issue like this is arising that it would be best not buy, but sell your shares before and then when the market makes a drop, you should buy back in hopes to sell once they have increased again. This new understanding of how the market functions as a whole will help me in the future with investing and making money in the market.

Chapter 4: Shorting the Market

4.1 Explanation

One of the methods in which investors use to make money in the market is called "shorting". To pull this procedure off, one must sell stocks that they don't own with an intention of buying them back at a lower price. These stocks must be borrowed from a broker. Although this method seems to be very profitable, there is a huge risk involved. The stock that you sold may not go down and this means that you will have lost a lot of money. Shorting the market should only be used when you are certain the market is going to go down.

As I was researching a stock to short, I came across a story in my local newspaper that talked about a company that felt like the increased popularity of low-carb diets was hurting their business. Krispy Kreme Doughnuts is expecting a loss in sales this year due to a couple of factors. Here is part of the story from my local newspaper, The Lowell Sun:

"Since going public four years ago, Krispy Kreme has been a standout on Wall Street, where its stock price climbed in lockstep with soaring profits. That changed abruptly on May 7, when shares plunged nearly 30 percent after Krispy Kreme warned that profits are expected to fall 10 percent this year.

"Company executives blamed the popularity of low-carb diets like Atkins and South Beach for driving down sales of its deep-fried, high-carb treats. But analysts say there's more than just a diet trend to blame for the hole-in-the-middle feeling plaguing Krispy Kreme investors.

"One problem may be the fact that the novelty of Krispy Kreme particularly its signature glazed donut is wearing off. J.P. Morgan analyst John Ivankoe cited "waning fad appeal" as one of the company's problems in a letter to clients last week. He said Krispy Kreme's increased reliance on sales in grocery stores and

other retail outlets, which makes the doughnuts more available and therefore less unique, was also hurting business.

The company, which operates more than 360 stores, may also have grown too fast.

"The low-carb fad is certainly having an impact but there are a number of other things, such as its rapid store expansion and the (low) productivity in its new stores," said John Glass of CIBC World Markets. "The silver lining is that the company agreed to slow down growth and close down some of its underperforming stores."

"Krispy Kreme said it will shut stores in Charlotte, Atlanta and Winston-Salem that are smaller than its usual "factory" stores, where the doughnuts are made on-site and sold hot out of the oven

"Krispy Kreme CEO Scott Livengood said that until recently, the low-carb trend had "little discernible effect on our business." Now, he said, "it's impossible to predict if low-carb is a passing fad or will have a lasting impact."

"Last week, company spokeswoman Amy Hughes said of the low-carb trend, "We are not using it as a blanket excuse for everything."

"Competition from the more ubiquitous Dunkin' Donuts may also be a problem for Krispy Kreme. Dunkin' Donuts, which touts the quality of its coffee in its advertising, sells a more diverse line of breakfast foods than Krispy Kreme, with bagels, muffins and breakfast sandwiches in addition to its own doughnuts.

"Randolph, Mass.-based Dunkin' Donuts said it hasn't seen any low-carb effect on sales at its 4,000 stores in 39 states.

"Some marketing specialists question whether there are really enough low-carb consumers to hurt companies like Krispy Kreme in the long term. Harry Balzer, vice president of NPD Group, a Port Washington, N.Y., consumer research firm, said only about 6 percent to 7 percent of Americans are on a low-carb diet."

Regardless of exactly why Krispy Kreme is losing sales, I decided that this would be a good stock to short the market with. It is obviously on its way down and ready to be used to make some money. After reading this article on Monday May 17, I decided to sell 1000 shares of KKD at 20.68 a share. My plan for this stock is to track it until I see a good opportunity to buy it back and make some money. I'm looking for it to go down to 15. Already from Monday it is down

about one point; it ended at 19.63 on Friday the 21st of May. If the stock drops down to 15 and I buy it back I will have made a \$5,000 profit. I would consider that a successful trade for shorting the market.

4.2 Trades

In my second week of shorting the market I have encountered a problem. At the end of the first week the stock I chose, Krispy Kreme, closed at 19.63. This seemed to be promising since it had gone down since the beginning of the first week. However, at the close of the second week on May 28, 2004 Krispy Kreme (KKD) closed at 21.47. As one can see, the stock has gone up almost two points since the first week. This proves to be devastating for my purpose.

I am now going to keep a close eye on KKD and if I do not start to see it going down I might have to sell and focus on a new stock. I am going to be researching a potential replacement for KKD in the next week. For me to make money by shorting the market I need to find a stock that I know will go down. This will be challenging, but it has to be done in order to make a profit.

I spent just over \$20,000 of the \$100,000 we said we were going to start with. I was thinking of shorting a couple of smaller stocks hoping to make some of the money back if I lose money in the KKD stock. Hopefully it will not come to this and I can find a stock in which I can make a big profit.

This week KKD pretty much stayed the same and closed at 21.34 on June 4th. It's down very little since last weeks closing. However, to try and fix my

problem of the stock going up I have decided to keep shorting it. On June 1st I saw KKD at its highest and shorted another 1000 shares at 21.86 per share.

I have spent \$40,000 of the \$100,000 so far and if KKD keeps climbing in the next couple of weeks I will continue to short it. This means that when it does eventually go down I will have made profit on at least two shorts. I feel that with the summer almost in full swing, people will not be eating donuts as often. Most people try and keep in shape for the summer and donuts would not contribute to the cause of losing weight.

I am keeping a close eye on KKD everyday and right now it seems to be hanging around the same price lately. One thing I need to look out for is when it eventually does go down, I need to make sure I do not wait too long to buy them back. If the price goes down and I do not buy then the price could go back up and I could be right back where I started.

The price of Krispy Kreme did not vary away from last week's closing price much at all. Therefore, I decided not to short more shares this week. It would be a lost cause to short the market again this week. I would just be throwing away money. Hopefully next week the price changes one way or the other.

This week has showed me that things are not going to happen overnight. Making money in the stock market is a long process and one has to have the patience to wait it out. This especially goes for shorting the market. The stock may not do what you expected or hoped it would do right away. However, I am not discouraged just yet, I do believe that things will change in my favor. All I can do is wait and observe the market. When the right time comes I'll strike and get paid off.

4.3 Results and Conclusions

I have been shorting the market for about five weeks and it is now time to buy back the stocks I shorted. I sold 2000 shares of Krispy Kreme stock on two different dates. I first sold 1000 shares of KKD at 20.68 per share. Next, I sold 1000 shares at 21.86. I closely watched the market waiting to make my move in hopes of making money of my shorts.

KKD had its ups and downs, but there were not any drastic changes in the price. On June 25th KKD closed the day at 20.10 per share. This is where I decided to buy back the stock. I ended up making \$580 off of my first shorting transaction and \$1,760 off of the second. \$2,350 is the profit I ended up making while shorting the market. I am really happy with the results because this was my first time ever dealing with the stock market and shorting.

This stock market simulation was a very good learning experience. Shorting over a short period of time made it difficult to make a lot of money. I think that a longer period of time would be more profitable to someone. A stock price fluctuates more during a full year than five weeks. I feel that any profit, regardless of the amount, is a success. I enjoyed working with the stock market and it was a good preparation for when I'm older and want to invest in the stock market.

4.4 Overall Analysis

Coming into this stock market simulation, I seemed to think that it would be relatively easy to make money. Then when I got introduced into the concept of shorting the market, I thought to myself that if I could just find a stock that was going to go down I could profit from the market. However, having little experience with the stock market, I underestimated the time and patience that needs to go into dealing with the market. Shorting can either be really profitable or money can be easily lost. With Krispy Kreme I thought I had found the perfect stock to short, because their own company was predicting a decrease in sales this summer. The price that I wanted KKD to drop to was a little unrealistic for the amount of time the simulation was running. I found that KKD is still on the down swing, which means that if I was still shorting it I could still be making money. Thus, proving the point that time and patience are key elements to making money in the stock market.

If you take a look at the chart (Figure 4.1) I have down below you can see that at the beginning of May KKD was really high. That would have been a great time for me to start shorting Krispy Kreme. One can see that a drastic decline happens throughout early to middle May. After that huge drop is about where I started the project and decided to sell some stock. From there on KKD doesn't go up or down very much for the remainder of June. Looking back on the chart I can see where I should have tried to make my money back, but at the time I was hoping for the price to drop more and more.

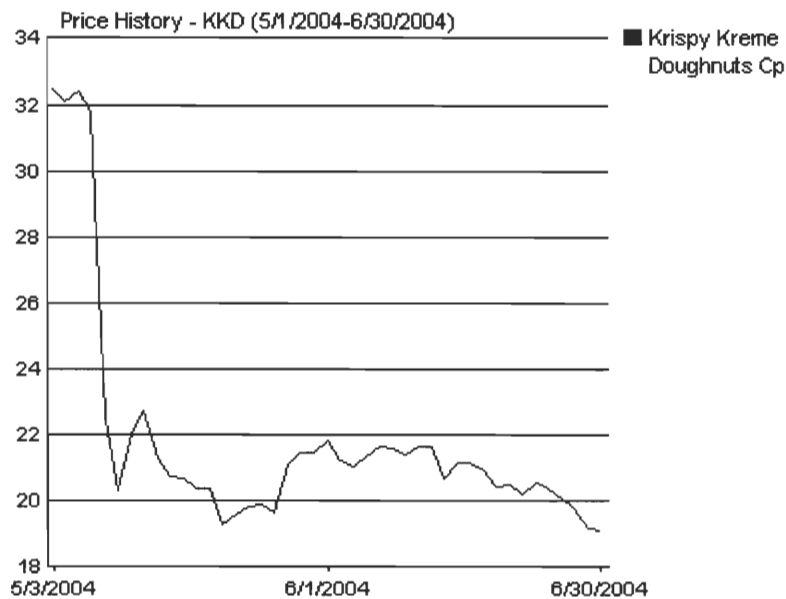


Figure 4.1: Price History

The whole reasoning behind my decision to short Krispy Kreme was an article I had read in my local newspaper predicting a decrease in business due to the low-carb diet trend. In the little time I spent shorting I didn't see too much of a drop in price and certainly didn't see the cut they were predicting due to diets. However, I did find this article on MSN.com following up on the low-carb diet effect on KKD:

“NEW YORK, June 30 (Reuters) - U.S. sales of packaged doughnuts have continued to slide since Krispy Kreme Doughnuts Inc. ([KKD](#)) warned last month that the low-carb craze had taken a bite out of business.

“Doughnut sales volume industrywide fell 2.3 percent in the 12 weeks ended June 13 from a year earlier, worse than the 1.8 percent drop in the 12 weeks ended May 16, according to market research firm Information Resources Inc., or IRI.

“The data tracks sales at grocery stores, drugstores, and mass merchandisers -- but excludes sales at Krispy Kreme stores or at the world's biggest retailer, Wal-Mart Stores Inc. ([WMT](#)).

“Early last month, Krispy Kreme slashed its profit forecast for the year by 10 percent, blaming the rapid proliferation of packaged foods aimed at

consumers following low-carb diets for weakening doughnut sales, particularly in supermarkets.

“Low-carbohydrate diets such as the popular Atkins and South Beach diets eschew starchy foods like pastry, bread and pasta in favor of proteins like meat, fish and cheese.

“At the time, Krispy Kreme executives cited IRI data showing a 0.4 percent drop in U.S. doughnut sales volume for the 12 weeks ended April 18. In the previous 12 weeks, it had risen 7.4 percent.

“Despite industry sales trends that continue to weaken, Krispy Kreme's volumes were up in the most recent period, rising 18.4 percent from a year earlier. The company has cited the expansion of its packaged doughnut business to new retail customers for the consistent rise in its volumes, but has added that the costs associated with those additional accounts have hampered profit margins.

“To compete effectively with innovative products being introduced by some of the big packaged food makers, Krispy Kreme said it will introduce several new incarnations of its signature doughnuts later this year, including a sugar-free doughnut, doughnut holes and mini-doughnut rings.

“But the Winston-Salem, North Carolina, company is also trying to minimize its reliance on doughnut sales with the launch of a new line of frozen drinks at its retail stores and its own brand of coffee beans to be sold in supermarkets.

“Krispy Kreme's share price has slid 40 percent since the company's May 7 warning, and analysts have said they expect more bad news from the company this year.

“Still, Legg Mason restaurant analyst Glenn Guard said earlier this week in a note to clients that much of the negative news has already been factored into the stock, adding that now could be a good time for investors to buy.

“Krispy Kreme shares were down 20 cents, or 1 percent, at \$18.99 in afternoon trade Wednesday on the New York Stock Exchange. REUTERS”

Krispy Kreme is still falling and I only wish that I was shorting the stock in real life, so I could make some real money. But it was important to deal with a simulation like this project to get me ready for investing when I'm a little older.

Now I have a good idea of how things work and can be smart with my money in the future.

In closing, I would like say that this educational experience was fun and helpful at the same time. I succeeded in what I set out to do, which was to make money by shorting the market. Given a longer period of time to work with I could have made even more money, or I could have lost money and not profited at all. This project was an overall success and I am pleased with the results.

Chapter 5: Conclusion

5.1 Did we meet our goals?

The goals we established at the beginning of the simulation were simple; to make money and to obtain a better understanding of how the market works. The first goal was to make money and after the 6 weeks of trading we have done that. Our total amount of profit is \$16,439.00, the breakdown can be seen in table 5.1. This amount comes from each of our strategies in investing. As you can see the biggest contributors to the net profit were the two methods that dealt mostly with the trading of stocks. But it was not only about which method produced the biggest gains, but rather just if you could make money off of the method.

Method	Net Results
Doug's Method	\$ 7,050.00
Big Dipper	\$ 7,039.00
Shorting	\$ 2,350.00
	\$ 16,439.00

Table 5.1: Project Profits

The second goal was at the end of the simulation have better understanding of how the market functions. We all came into this project with limited knowledge of how what it took to make money in the market. At first we were not really sure where to begin. But after doing a little individual research we were all able to jump right in. Once our feet were wet, things seemed to become much easier. It was through this helplessness that we were able to gain the most knowledge. If we had someone kind of walking us through it, we wouldn't have been able to gain as much knowledge as we did. If we had that person helping

us, we would have just fell back on them to answer our questions and help us through what we did not know how to do. Instead we forced ourselves to find the answers and create ways through problems that we had. This independence helped us to obtain a much better understanding of how to make money in the market.

5.2 Compare and contrast methods

There were three different methods used. The first method was one that was developed by an individual in our group. We wanted him to go out on his own and see if he could make money on his own and to see if he could make as much with his on method as we could with two methods already created and proven. He used a long term trading style where he purchased stocks and waited them out until the end in hopes that when he sold them they would be higher then when he bought them. His method breaks down to purchasing a stock, waiting out the small declines and inclines and selling once it finally makes a steady increase.

The Big Dipper method was one that was researched on the Internet by a group member. This method is neither a short term nor a long term trading method. When you purchase a stock you set goals for the stock. These goals are when you are going to sell it. You set a price goal, when the company reaches a certain price you sell it. The other goal you set is how long your going to keep it, you choose a certain amount of days or weeks your going to keep the stock and when it reaches that point you sell it. You sell the stock at whatever goal arises

first. If it reaches its selling goal within the first day or two you sell it, if your goal for how long your going to keep it is two weeks and the stock hasn't reached the price you were hoping for you still sell it. At first this method was a little hard to get started because of choosing the price and length goals, but once you understand those, this method proved to be profitable.

The third method that was used was a method known as shorting the market. Out of all three this one is probably the most difficult to understand for the beginner. When the market is on a downfall, you short the market. What that means is that you sell shares of a company that is falling. You don't have to own the shares to sell them, you just sell them and you owe the market a certain number of shares. Once the stock reaches a price where it is lower than what you sold it at, you buy back that number of shares so to owe the market zero shares. You can do the same when the market is on the rise. You would buy shares at a low price and when it reaches a higher point you sell back that number of shares. This method isn't really about trading shares and having a certain amount in a company, it is more about owing the market no shares. It is a little hard to understand at first, but once you start working with it, the method becomes easier to understand and use in a profitable way.

The first two methods are similar but not quite the same. The second method is more structured than the first method. With Doug's method you are handcuffed to selling after having the stock for a long time and it does not really account for what could happen in the middle when you could be making the most money. With the Big Dipper method, it leaves you two outs. It has a spot to get out when your stock reaches a price where you will gain a certain percentage

and it has a spot where it will stop you for have a stock for to long, which could help you in cutting your loses if the stock doesn't do as you planned. They are similar in the fact that they depend on a length of time for owning the stock and that you want the stock to increase before you sell it, but that is about it. Shorting the market is nothing like the first two methods. There is no way to compare other then it is used to make money. This method works best when the market is on a decline. The other two methods work very little to gain you money when prices are falling. In fact, they are both helpless without an increase in value. This points out that it is important to have two different methods or plans when investing in the market. When prices are on the rise you want a method that benefits heavily on a rise so you can make the most money. But you have to be aware that the market could make a sudden turn and had down just as fast as it went up. If we were to make an investing plan now, once this simulation was completed, we would include a way to make money when the market is on the rise and a way to make money when the market is decreasing. Looking at all three methods has shown us that we have to be prepared the best we can for a decrease as well as an increase. When the market is rising one could use the Big Dipper method to make money. But when the market took a turn and began to drop. You could begin to short the market and still make money as things fall. Using these two methods in effective way could prove to be a very profitable way to make money from the stock market.

5.3 Summary of experience

With the completion of this project, we have gained a better understanding of what it takes to make money in the stock market. We now know that you need to have a plan when going into the market. You have to be prepared to deal with the market increasing as well as it taking a turn and dropping. Without this simulation we would not have learned this until we invested our real money. This simulation will save us money in the future because we will not have to lose money in order to figure out that you need to have an investing plan. This experience has better prepared us for life in the real world investing our real money. Overall this experience helped us with the stock market but also helped us in working better as a team to complete our project and obtain our goals that we set in the beginning.

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