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STOCK MARKET SIMULATION

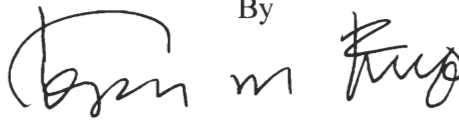
An Interactive Qualifying Project

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By



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Abstract

The purpose of this project is to try to understand some of the major trends of the stock market and take advantage of them by investing in three individual portfolios in a simulated market atmosphere. By using three different strategies and portfolio types we hope to avoid trends that are limited to a single industry and identify trends of the entire market. The overall goal of the group is not only be successful in stock market investment, but also to develop strategies that are applicable in future investments.

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Chapter 1

Introduction

1.1 Introduction

In 1790, merchants and auctioneers started selling stocks and bonds on the side as a means for extra profit. The age-old question of any investor is 'what to buy and sell, and when?' Americans quickly discovered the profitability of trading stocks and bonds and two years later, "twenty-four brokers and auctioneers met under the Buttonwood Tree on Wall Street. They formed an exclusionary trading group that would later be known as the New York Stock Exchange." (McMahon 1) As early as the eighteenth century it was evident that times of war lead to an increase in market activity. With any loss or gain one may make an inspection on the internal and external settings of the market at the time of the market fluctuation. From inspection, one is able to draw conclusions on settings, events and situations that positively, or negatively affect the market.

In order to understand the stock market completely, it is essential for investors to spend a large amount of time researching and actively investing. It is very common for entrepreneurs and investors to not have an immediate sense of the market or its trends. The only remedy to this early inability to predict market changes is experience. In a way, investing in a stock is just like playing defense in basketball. The longer one plays defense against a person the more likely he is to know where they are going to go and how they are going to react. The same can be said for the stock market. The longer one studies a company's stock the better prepared he is for that company's reaction to a

recession, a war, or even a change in seasons. To better understand the stock market one needs to actively research and invest in the market to gain experience and to have an overall understanding of the trends and swings of certain stocks and the market in general.

Trends are not always limited to specified industries. Often, trends can be applicable to the entire market. These types of trends are most relevant and are vital to being successful in the stock market. The comparison between specified^{1.1} and diversified^{1.2} portfolios can help investors and brokers overcome the trends that are visible in individual industries. A diversified portfolio acts as a controlled study to inspect whether or not the trends in the specified portfolio are relevant to the entire market. The major advantage to a diversified portfolio is that when a specific industry is in a recession the losses in their stocks are made up for in other industries. The risk in diversified portfolios comes when the entire market is down and losses are observed across the board. For the most part, losses and gains are spread throughout the market and its industries.

The project will use specified and diversified portfolios to determine accurate trends in the market. The two specified portfolios that we will observe are two that are known for their large scale and unpredictable trends, Technology and Biotechnology. By having a good understanding of the market's most fickle stocks, we are able to understand the stock market and its trends in its most extreme situations.

^{1.1} A specified portfolio is an investment portfolio that includes stocks that are limited to only one industry.

^{1.2} A diversified portfolio is an investment portfolio that includes stocks that are not limited to one industry

1.2 Objectives

Through this IQP we hope to gain knowledge of how the stock market functions. Each group member devised his own strategy for investing. The strategies will be used to simulate certain sectors of the market, one sector per individual. Our goal is to procure valuable insight during our simulation period and learn which strategies work well and which do not. This will be accomplished by observing the trends of the market and the market's sectors. Market trends will help us to better understand the way in which the market behaves. These trends will then be used to make educated decisions on which stocks to purchase or sell. By following the trends, each group member will hopefully be able to show a profit by the end of our simulation period.

1.3 Method and Materials

Each member of the group will start the investment period with two hundred, thousand dollars. Each member uses the money to invest in the stock market and track there losses and, or gains. We believe that time spent doing active selling and buying of stocks will increase our awareness of trends in the stock market. Two hundred, thousand dollars is used to limit the number of stocks that we can buy and sell to a reasonable number. We set the amount of original assets so that we will have enough money to make a reasonable amount of transactions but at the same time avoid altering the volume, which we cannot account for in our simulated trading. Under the same restraints of keeping the volume for the simulated model as close to the actual volume as possible, we limited the number of times that we could buy and sell one companies stock to two times a day. Each group member will have the opportunity to invest and trade in the following Markets: NYSE (New York Stock Exchange), AMEX (American Stock Exchange) and NASDAQ (National Association of Securities Dealers Automated Quotations). Most of the stocks that will be traded and watched are in the New York Stock Exchange. In a real investment setting it is not impossible, but it is unlikely that a brokerage company would invest in company stocks in more than one market.

Different strategies will be used by all three team members, with no discussion of the methods and strategies between members. For most cases investment and transaction decisions will be made on a ‘good news – bad news’ basis. We will buy and sell stocks based on the announcements of the companies we are watching and the merit of those companies and there announcements. All members of the group will be invested at least one companies stocks with a maximum non-invested time of one day. Besides being

restricted to two hundred, thousand dollars there are no restrictions to the number of stocks that we can be invested in. Besides the number of stocks that we are invested in, each group member will be responsible for watching 10 to 12 stocks to determine there trends and to possibly pick an appropriate time to but or short some of those stocks.

The ultimate tested proof of a hypothesis is whether or not we are able to make a profit when we test our theory. It stands to reason that the individual results of the investment period are analogous with the tests results of our hypothesis and the question of whether it is smarter to invest in a diversified, or specified portfolio. The results of the group members will be inspected and reviewed on a daily basis but only reported on a weekly basis. In each weekly summary, graphs, charts, news stories and any other means necessary will be used to report on changes in individual stocks and the stock market as a whole. Each group member is responsible for there own weekly summary. At the end of the investment periods the members of the group will collaborate on what aspects of there strategy worked for them, as well as what trends were noticed that could be used to be profitable in the stock market at a later day.

Chapter 2

Individual Strategy

2.1 Strategy Introduction

Each partner of the group had their own strategy for investing. There was no collaboration between members as to what each other's strategies should be; instead we left that a variable judgment decision should be made by each investor to best fit his specified investment portfolio and the trend aspects of that portfolio.

2.2 Hold Strategy: Definition and Objectives

Holding onto a stock for a long-term period is the most commonly used strategy for investors and entrepreneurs. A large number of investors are those that either buy or receive stocks as a part of their benefit package from the company which they work for. They often just sit on the profits made from those benefits. When an invested stock splits^{2.1} or is bought out, the investor may collect on the profits. The overall idea behind holding stock shares of a company is that regardless of the local trend in price for the company the global trend is at an increase. Figure 5.1 shows the history of Access Pharmaceuticals Incorporated (AKC) for the past month. It appears that the company is in the middle of a downward trend. However, when one compares the graphical history of AKC for the past month with the history of the past year it is evident that the company is in a small downward local trend and overall at a global upward trend.

^{2.1} A stock splitting is the process where a company feels that its stock price has reached a current pinnacle and to encourage further purchase of the stock they cut the price in half or sometimes in thirds and award the investors of the stock two or three times their original shares.

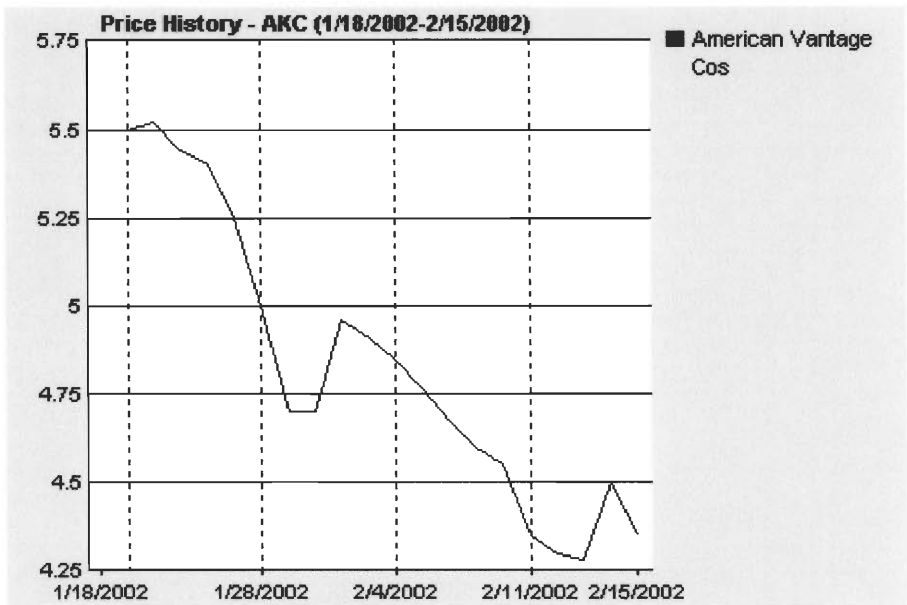


Figure 2.1 (1 – month history of Access Pharmaceuticals Inc. (AKC))

Figure 2.1 shows the company’s downward trend for the past month. It is likely that the local minimum is bottoming out and the company’s stock price will see an increase in price in the next couple of days.

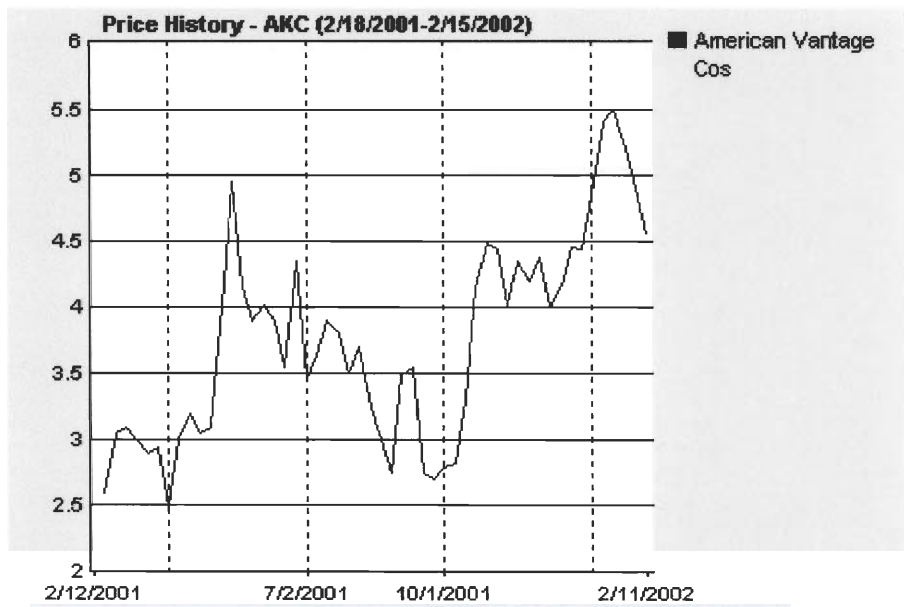


Figure 2.2 (1 – year history of Access Pharmaceuticals (AKC))

The strategy of holding a stock through all market activities is not always a wise decision. Sometimes the long-term investor cannot identify when losses are constant and the company has no chance of recovery. These companies with no future are generally what will ruin the long-term investors investment. A good example of a company that never rebounded was Enron in late November (shown in Figure 2.3). In this instance the company was effected by outside information that the company was economically incompetent. This is unexpected information and can best be described graphically as a spike or a blip. Of course there are positive spikes but a majority of rapid graphical deviance from the standard smooth curve is a downward spike in the graph. Figure 2.3 shows Enron's November downward slide. Figure 2.4 shows a graphical spike at November 26th.

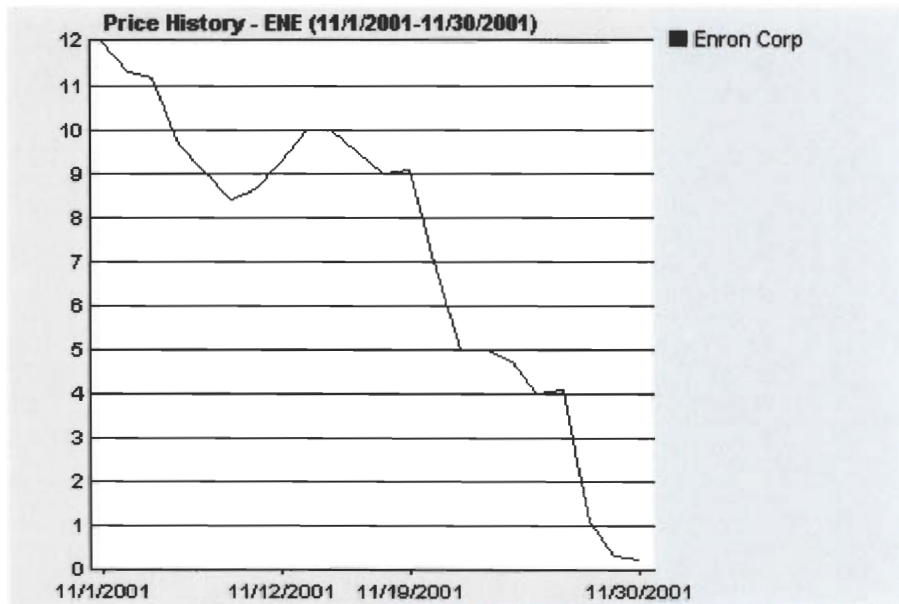


Figure 2.3 (November history of Enron (ENE))

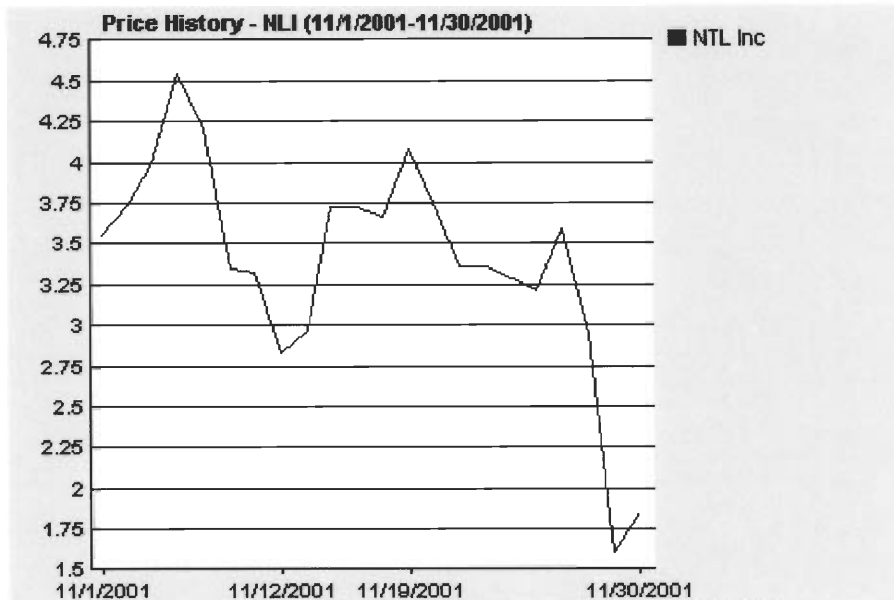


Figure 2.4 (November history of NTL Incorporated (NLI))

The common investor cannot successfully predict when a company's news will positively or negatively affect the stock price. In general a companies stock price will rise as many times as it falls and the investors that sells the minute a stock price decreases does not loose anything, but in a sense they loose what they could have gained and in that they loose peace of mind and investor confidence.

2.3 Day Trader: Variation of a Non-Seasonal and Seasonal Trend Strategy

Before the project was started it was assumed that it would be possible to base transactions on data from previous seasons. By reviewing the past quarters of the last couple of years one assumes that the stock price for a given company is seasonal. To invest based on past performance it was assumed that a statistical theorem would need to be used. Due to the events of September 11th and the war on terrorism, the stock market was too variable to assume one statistical theorem. The aftermath of the September 11th bombing cannot be compared to any other time period in history. Due to the major change in the stock market and consumer confidence, stock transactions could not be

made on a statistic theory basis of the past years even though this can be a valuable technique.

During the early stages of the investment period, the main idea was to make transactions that would better my understanding of the market to develop a solid strategy to use through out the investment period. The information that was most crucial was what would enable someone to make money, for this reason I decided to have the first week to be an experimental period. At first it was assumed that the best way to invest would be to follow the transaction decisions of the majority of the people invested in a company. It was determined very early that the most productive way to invest in the stock market is to do opposite of what the majority investors do. To know and understand this is not a large advantage in buying stocks for the simple reason that most of the people think the same way about making the opposite transition decision to the market in general due to this that type of strategy is unrealistic and that reasoning could go into an infinite loop.

A strategy was hard to come by initially due to my inexperience in working in the stock market. I decided to do some background research on the companies in the technology sector, because that was my assigned industry to invest in. Decisions based on background research are generally sound, but in reading articles published by and about a company it would be easier to understand the interior design of the company and the factors that makes specific companies succeed in the stock market. My original strategy was to on hold on to a companies stock until I gained ten-percent or until I started to lose money. If profits in a companies stock began to decrease and I felt that I could predict effectively when the stock price would decrease I would sell in that instance too. By the end of the second week of two weeks of transactions it was determined that my strategy

was not effective, as my week one and two summaries show. Due to the fact that I was not making money, I felt that I needed to revise my investment strategy to make money. I decided to stop trades for a few days to gain insight on what transactions were not working and what ones were. Due to those days of looking over transactions my strategy was redefined to better fit my industry.

I learned from the mistakes that were made during the first two first weeks of the investment period to create a strategy that would be able to be applicable for my market and time period. Thus, I choose to have one strategy that I would follow for non-holiday weeks and a separate strategy before holiday weeks. For regular weeks, I decided to apply a daily trend. Daily trend is when an investor buys and sells stocks over the course of a day and at the end of the day no equity is held. The only drawback to this strategy is that the time for the transactions is crucial. Article information would be the basis for buying companies stocks. The strategy of selling a stock at ten-percent profits or at the point when the stock price dropped in price would remain the same. From observations in the technology sector, when a stock price reaches its maximum value the price will go down very quickly with no warning. Therefore, the difficult part of this strategy is to estimate this maximum value for the stock. Watching a companies change from day to day as well as having a good understanding for the company and its background is a very effective way to understand where that maximum stock price is headed. Thus, this strategy is mainly based on my feel for the market during investment and is not heavily based on statistical calculations.

2.4 Day Trader: Graphical Analysis Strategy

The strategy of buying and selling stocks on a daily basis is the life and job of the day trader. There are many internet programs and companies that can aid an investor in becoming a day trader and making the number of trades required for a day trader to bring in a profit each day. The main objective of a day trader is to buy stocks in mass numbers and sell at small market increases before the risk of the stock going down. There is little to no time lapse between the two and the strategy of the day trader could not be further from the long-term investor. These two strategies are completely opposite. Unlike the long-term investor the day trader needs to have a good grasp of where the market is and where it is going not only in the distant future but the importantly, the near future. The day trader must be familiar with all aspects of business and must be able to apply that knowledge to the companies in question in split decision situations; right down to the company's internal chemistry and creditability. The day trader must be aware of everything that a company is doing or is involved in.

An excellent way to understand where a company is going is to understand where that company has been. An effective way of seeing where a company has been is to watch the graphical movement for that company over several periods of time. By breaking the views of a companies economical progress for different time periods, one is able to more effectively able to get different snap shots of how that company's stock value will fair against in certain trading environments situations. The more a day trader knows about the effects of news, weather and situations both globally and in the United States, the more effectively they can determine periods where the company will slide or spike as a result of given news. The day trader collects information and news on

companies in the entire market. It is believed by members of the group that the most profitable stock that a day trader can buy and in turn sell, are the companies that are the most volatile. Some companies can and will fluctuate during the course of the day five to ten percent; these are the companies that the day traders strategy takes full advantage of. The price for a certain company will rise and the day trader will sell and then the price will drop to a price as low or lower than the price that the day trader had originally bought it at. Figure 2.5 shows a perfect example of a volatile stock.



Figure 2.5 (5 – day history of Merck (MRK) (example of a volatile stock))

Graphical information that is not beneficial to a day trader is year histories. Sometimes a day trader can get caught up on the promising look of a year or 5-year history graph, but those graphs say nothing about where the company is currently at or currently going. The graphical interpretation of the year and five-year graphs is for the long-term investors benefit only, as figure 2.6 shows.

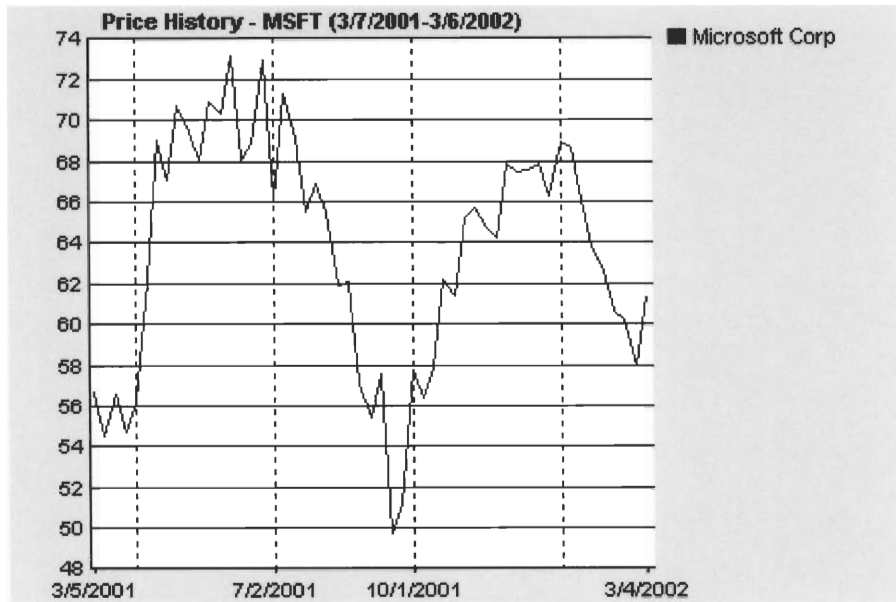


Figure 2.6 (1 – year history of Microsoft (MFST))

Figure 2.6 shows the graphical history for Microsoft over the past year. One would look at this graph and see that the company is currently in a downward trend. Under closer inspection the most recent trend of Microsoft is up and this is a more important detail than the 5 – month slide in price that the company observed before the recent price increase.

The main objective in graphical interpretation is to neglect external and internal information and look at the graphical trends observed in situations similar to the current ones. One may decide to buy a stock on the way down or sell on the way up in hopes that the current trend of the stock will change to benefit the investor. This sort of strategy is very risky for a short-term investor and leaves them open to losses and not fulfilling the appropriate value of the stock. Figure 2.7 shows a stock that drops for one year with no sign of going back up. Ciena (Figure 2.7) is a perfect example of why an investor should not buy a stock on the way down. The main reason why it is unadvisable to buy a stock on the way down is there really is no way to determine when that stock price will go back

up. A more risk free method is to wait for the downward trend to slow down to where the tangent to the graph is horizontal and when the price goes up after that point it will be a safer buy. The point that would be most economically sound to buy on figure 2.7 is the beginning of October.



Figure 2.7 (22 – month history of Ciena (CIEN))

Common questions of investors are: When have I made enough profit to sell? How will I be able to tell when the stock price of my invested company has reached a pinnacle? The answers are simple. One must wait until the upward trend has slowed down and the graph of the stocks value has a tangent line to the graph that is perfectly horizontal, at an upper bound. Figure 2.8 shows an example of that trend.

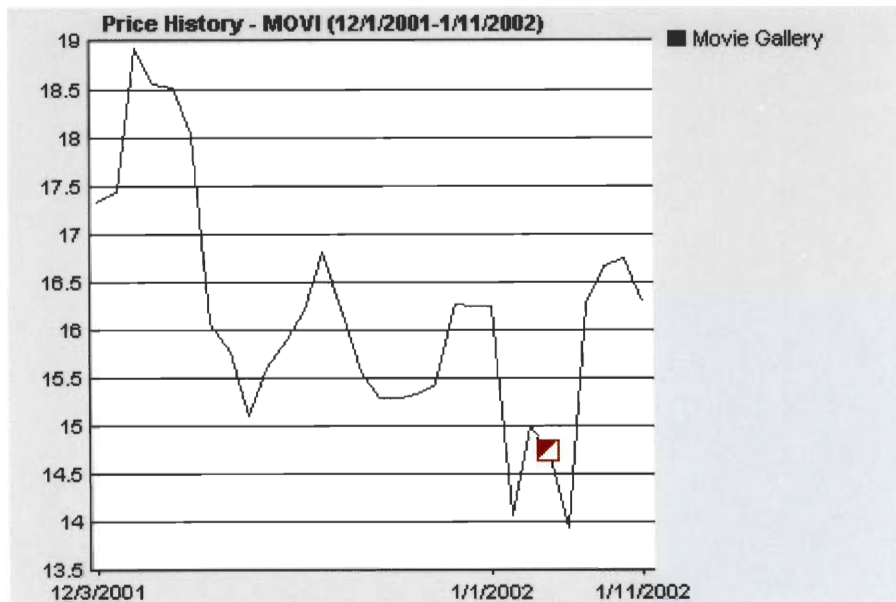


Figure 2.8 (50 – day history of Movie Gallery (MOVI))

One can see that during December 2001 Movie Gallery’s stock value was stagnant. The trend was neither upward or downward, but had been upward before it went stagnant so it was predicted that the stock price would drop next, given enough time, as the graph shows it did.

One final, but important, means of graphical analysis is to watch for what one might call ‘copycat’ trends. We classify copycat trends as graphical repetition of a given trend. The use of watching copycat trends is more beneficial to that of the long-term investor, but taken on a local small scale even the day trader can profit from this inspection. Figure 2.9 displays a good example of a copycat trend. One can see in the figure a hump at the beginning of the graph that is duplicated at a higher pointer later on the graph. This discovery is almost like taking a look at where the stock is going through the recognition of where it has been.

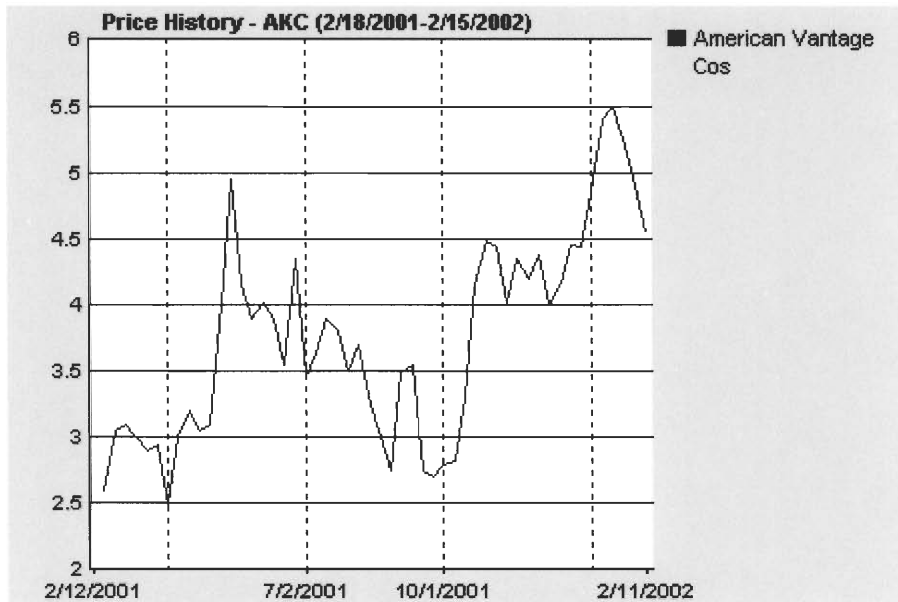


Figure 2.9 (1 – year history of Access Pharmaceuticals (AKC))

The main objective of the day trader is to buy and sell a large number of stocks in a short amount of time. The use of graphical interpretation is a good way for all investors to understand where the market is going. Aided with the information of what the future of a stock price is going to be, one can be very successful in investing in the stock market.

Chapter 3

Simulated Trading: Biotech Industry

3.1 Biotech Introduction

The specified portfolio is a portfolio that has stocks from only one industry. In the 10-weeks prior to this write-up, an investment period was simulated in the market. This chapter summarizes the transactions made in the Biology industry as a portfolio.

3.2 Trading Week 1 (11/12/01 – 11/15/01)

In our first day of trading I purchased shares for four different companies: Merck, Schering-Plough, Pharmacia, and BEI Tech. In the end of the week I had kept Merck and Pharmacia, and sold off the remaining two companies. I then bought shares in CV Therapeutics and Cardiotech. A few of the stocks I bought for the wrong reasons, but the others I did background work and had valid reasons for buying shares in those companies.

3.2.1 Cardiotech

Cardiotech is actually a small local company, based in Woburn, Mass. They only have one product, which is not even on the market yet and is still being researched and tested. This is what Cardiotech's objectives are "CardioTech's research and development efforts are concentrated on the development of CardioPass™ coronary artery bypass grafts. CardioPass™ grafts are used to replace, bypass, or provide a new lining for occluded, damaged, dilated, or severely diseased coronary arteries." (Cardiotech International, 2) Their idea and what they set out to accomplish seemed like a great idea. So I decided to invest in this small company. Figure 3.1 shows that CTE was in an

upward trend at the time I bought my shares and was just peeking and starting to go down.

On November 14, I bought 5000 shares of Cardiotech (CTE) at \$2.30 a piece. On that day Cardiotech announced that they had completed the first phase of the development program to commercialize CardioPass. By the end of the week, Cardiotech shares had risen to \$2.41 a share. Though not much of an increase, it was still a large percentage increase for this small company. Cardiotech was one of my favored stocks, so I decided to stick with it until I saw an otherwise downward trend.

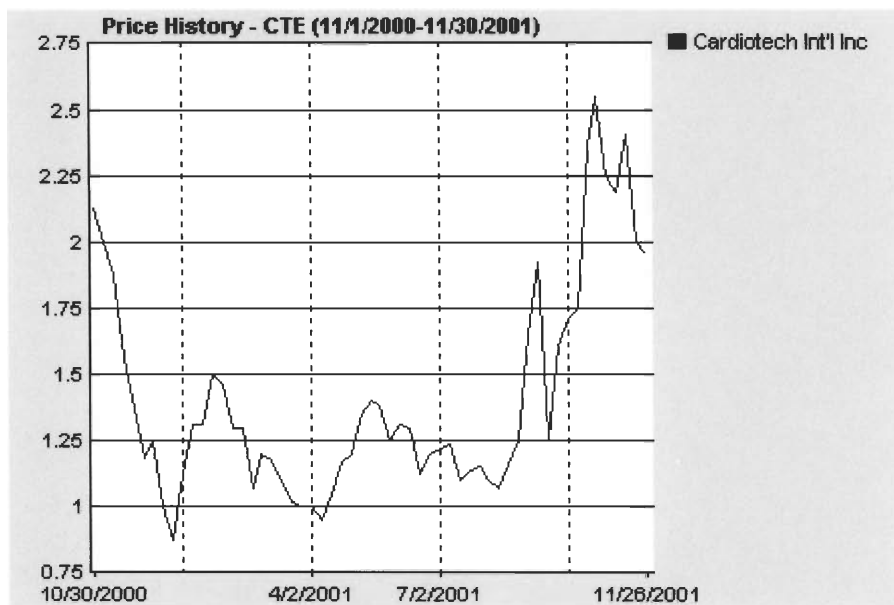


Figure 3.1 (10/30/2000 – 11/26/2001 for Cardiotech (CTE))

3.2.2 CV Therapeutics

CV Therapeutics “is a biopharmaceutical company focused on applying molecular cardiology to the discovery, development and commercialization of novel, small molecule drugs for the treatment of cardiovascular diseases.... CV Therapeutics is currently conducting clinical trials for three of its products.” (CV Therapeutics Inc, 3) I

do not believe that they currently have any products on the market yet, but as was previously stated they have three products in clinical trials.

I first happened to notice this stock on November 14, because on that day CV Therapeutics (CVTX) shares increased an amazing 25%, approximately \$12. As you can see in Figure 3.2 it had a sharp rise at the end of November. So I what I was really doing was jumping on the bandwagon, hoping to make some cash. Later on is when I researched the company and I decided to stick with them, because I thought they had potential and so did investors at this juncture in time. Mostly all investor's tips were telling people that CVTX was a strong buy. The company's shares had risen that day because they had announced positive results on their phase III trial results for their heart drug, Ranolazine.

When I bought CVTX on November 14, I had a little mishap with the website we were using at the time, and I bought it at \$49.63, and then later sold it at \$48.07, when I didn't want to, and I lost money due to this mistake. The next day I had to buy it back because by this time the market was closed on the previous day. By the time I bought it back though the shares were \$52.23, and I only had enough money to buy 524 shares. Share prices had dropped a little to \$51.67. So in the end I lost more then \$1200 because of my little mishap online.

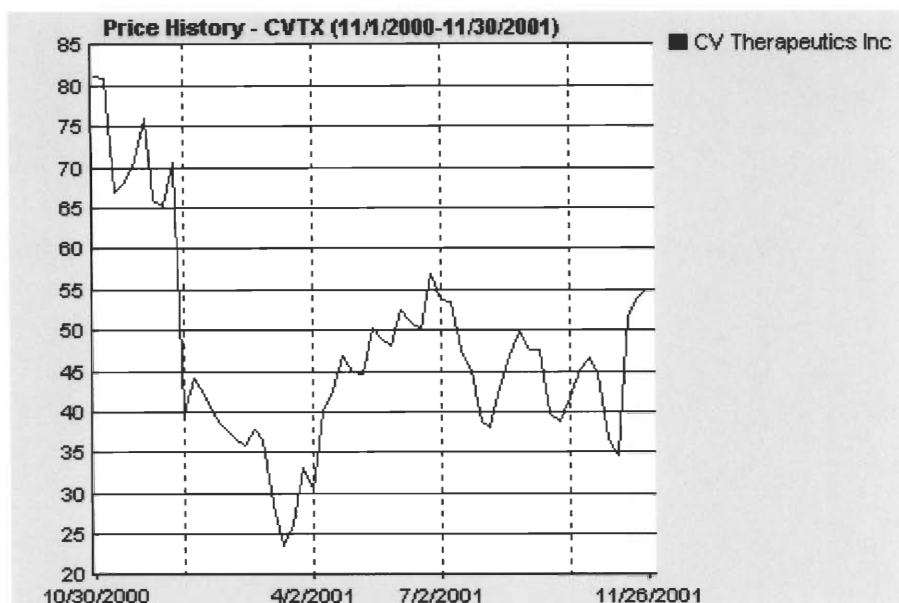


Figure 3.2 (10/30/2000 – 11/26/2001 for CV Therapeutics (CVTX))

3.2.3 Merck

The company that I liked the most was Merck. I decided to invest in Merck, because of their reputation, drug pipeline, and their status in the market. At the time I was considering investing in Merck, the attacks of September 11 and letters containing anthrax were fresh on everyone’s mind. The United States Government was trying to decide what drug company would manufacture their demand for a smallpox vaccine for every citizen. Merck was one such candidate, and from their reputation and large pipeline of drugs, I thought that it was a good investment choice. Some of their more popular drugs include: Propecia, Singulair, Vioxx, and Zocor, to name a few.

Prior to our first day of trading, Merck-Medco opened the world’s largest and most technically advanced pharmacy in Willingboro, New Jersey. “Merck-Medco is the nation’s leading pharmacy benefits manager. An independently managed subsidiary of Merck & Co., Inc. (NYSE: MRK), Merck-Medco serves the needs of more than 65 million people, or nearly one in four Americans. Merck-Medco manages some 450

million prescriptions per year for its clients through its 13 home delivery pharmacies and retail pharmacy networks.” (Merck – Medco, 4) On November 13, 2001, Dennis W. Choi, M.D., Ph.D., a world-renowned neuroscientist, joined the Merck team. At the end of the week Merck-Medco formed an alliance with Oxford Health Plans. The agreement is to last five years, and would provide pharmacy care service to more than 1.5 million members of Oxford Health Plan.

I purchased 600 shares of Merck at \$64.58 a share. Normally a person that wants to invest in a stock should buy low and sell high. In this case, I bought the stock because I believed in the company and I hoped they would do well enough by the end of our simulation to have a significant enough gain in share prices. And as you can see in Figure 3.3 Merck was in a downward trend for most of the year to begin with but I still purchased shares. Since I was not going to be constantly trading, I decided that \$64.58 share was not going to cause too much grief. By the end of week 1, Merck had increased to \$64.90 a share. Merck shares were essential steady throughout this week, with no significant increase or decrease.

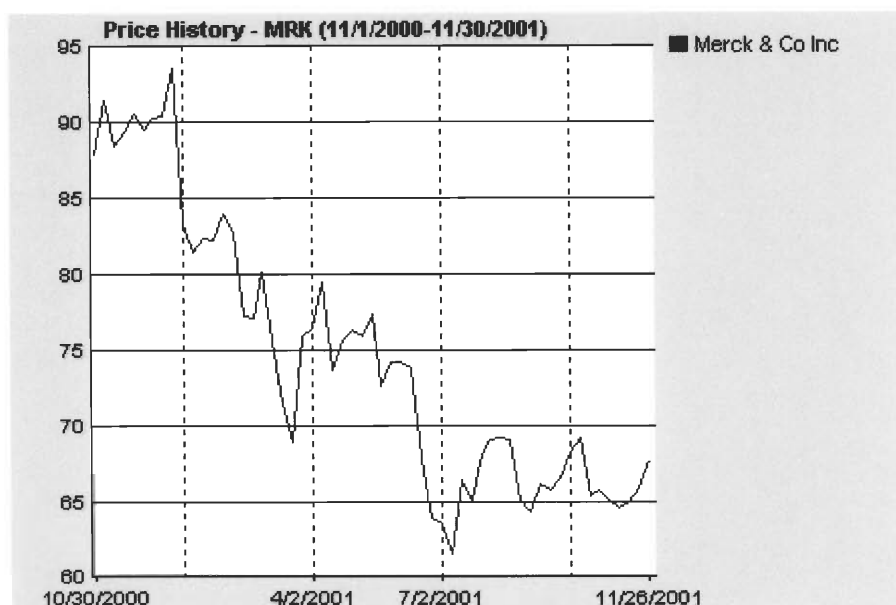


Figure 3.3 (10/30/2000 – 11/26/2001 for Merck (MRK))

3.2.4 Pharmacia

Another of my chosen companies was Pharmacia. Pharmacia is also another large pharmaceutical company. I noticed that there were on an upward trend, see Figure 3.4, starting this week and bought because I thought it would continue. Pharmacia also has an 85% ownership of the Monsanto Company. “Monsanto's unique combination of agricultural products and unparalleled resources in plant biotechnology offers to customers innovative solutions to improve farm productivity and to reduce the costs and risks of farming.” (Pharmacia, 5) A few of Pharmacia’s more well-known consumer drugs are: Celebrex, Ambien, Depo-Provera, and Zyvox. These are the four drugs that I have heard of and seen advertised on television. Pharmacia’s pipeline of drugs and their diversity was the determinate factor that aided me in making the decision to invest in these companies.

The first day of simulation it was found that Celebrex, compared to two other drugs that treated osteoarthritis, was just as effective and safer then the two other drugs. I

then purchased 500 shares of Pharmacia at \$40.50 a share. By the end of the week on November 16, 2001, the stock price had risen 85 cents to \$41.35. The increase in share prices occurred from Thursday to Friday. Although there was no significant news announced that would have caused this.

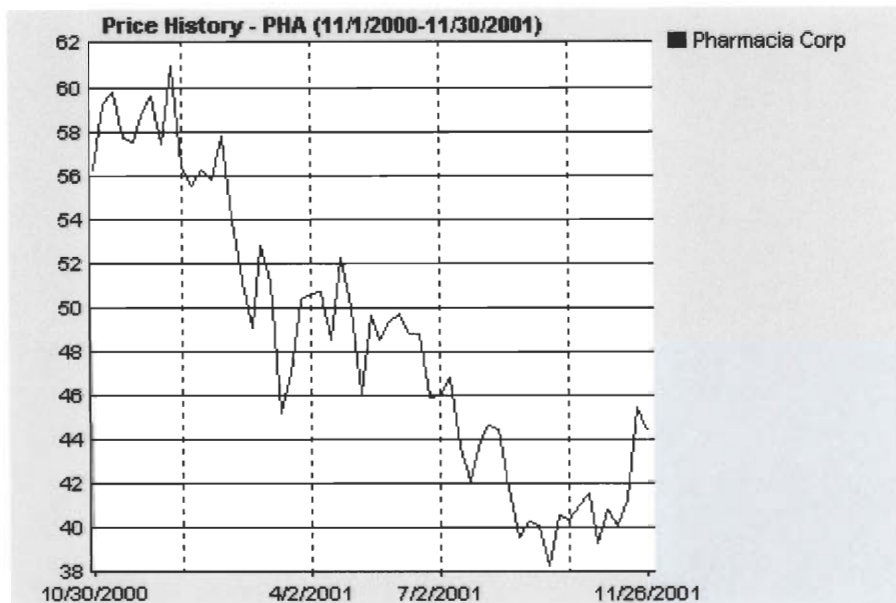


Figure 3.4 (10/30/2000 – 11/26/2001 for Pharmacia (PHA))

3.2.5 Poor Investment Stocks

In this week I also chose two stocks, for the wrong reasons: BEI Technology and Schering-Plough. I held both for a day, from November 13 to November 14. I bought 750 shares at \$35.91 and sold them at 34.78, without really knowing what I was doing. I bought them because the price of their shares was increasing the day I bought them. Schering-Plough had said that they had a significantly advanced treatment to treat hepatitis C, which was why I bought it. I had no previous knowledge of the company or of its products. And then I sold all my shares because the price fell, just a little, and I needed some more money to buy another hot stock. Also on November 13 the IRS reported that Schering-Plough was liable for up to \$195 million in additional taxes for

1990-1992, which was a contributing reason to why I sold all of my Schering-Plough stock. So I decided that to keep the stock would eventually lead to a great decline in my equity.

The second company I had a brief investment in was BEI Tech, essentially because it was inexpensive and on the rise at the time I purchased my stocks. I bought 500 shares at \$16.85 on November 13, and the following day sold all shares at 16.41. I then researched the stock a little bit more before I sold all my shares, and discovered that the revenues for that quarter had fallen from the previous quarter, as a result I sold all shares.

3.2.6 Week 1 Conclusions

I discovered that this first week I had no idea what I was doing. I had no prior experience dealing with the stock market before this. I went in a little blind. I started out with \$100,000 and in the end of the week I was down to a total of \$98,809.56. This was a direct result of bad stock choices and an Internet mishap, for the most part. I chose a few stocks by how they were doing at that moment, if they were going up or going down, rather than researching the company first and then buying, which is what I should have done. Since my strategy was more of a long-term commitment to a stock, researching would have been something I should have done more research before actually buying the stock. Compared to the Biotechnology stock index (BTK), which at the beginning of the week was at 584.350 and by the end of the week the BTK declined slightly to 583.070. This is a -0.2% change in the BTK over the four days that I traded, compared to my total of cash and equity, I had a -1.19% change this week. So comparing the two percentages I

was about -1% off what the BTK was at. Table 3.1 shows my transactions for this week, excluding my mishap with CVTX.

Company	Symbol	Shares	Date Bought	Price Bought	Date Sold	Price Sold	Profit
BEI Tech	BEIQ	500	11/13/2001	16.85	11/14/2001	500	-220.00
Cardiotech	CTE	5000	11/14/2001	2.30	---	---	---
CV Therapeutics	CVTX	524	11/15/2001	52.23	---	---	---
Pharmacia	PHA	500	11/13/2001	40.50	---	---	---
Merck	MRK	600	11/13/2001	64.58	---	---	---
Schering-Plough	SGP	750	11/13/2001	35.91	11/14/2001	34.78	-847.50

<u>Beginning of Week</u>			<u>End of Week</u>		
Cash Total	Equity	Total	Cash Total	Equity	Total
100,000.00	0	100,000.00	69.48	98,740.08	98,809.56

Table 3.1 (Transactions for 11/13/2001-11/16/2001)

3.3 Trading Week 2 (11/16/01 – 11/23/01)

3.3.1 Cardiotech

On Monday November 19, 2001 I decided to sell all 5000 shares of Cardiotech at \$2.34. In all I made a total of 200 dollars from that stock, which is, by comparison, not a significant sum of money from what I began with. There was no news on Monday that gave me a hint that I should sell. It just seemed that the price would drop more, so I sold all of my shares, accordingly. Essentially, that is the only reason why I sold my shares; I just did not think it had any more potential. Looking at Figure 3.5 one can see that CTE stocks continued to drop and I was right in selling at the point that I did.

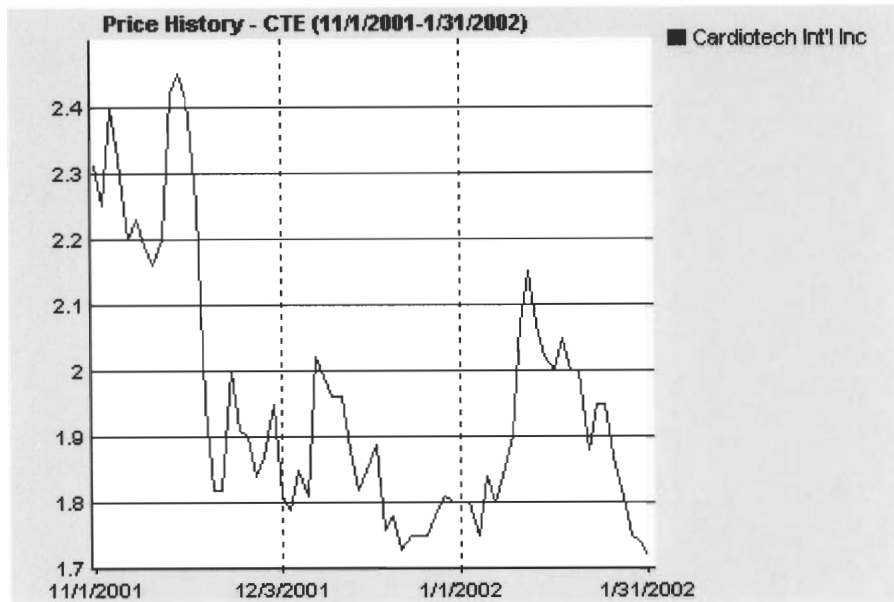


Figure 3.5 (11/1/2001 – 1/31/2002 for Cardiotech (CTE))

3.3.2 CV Therapeutics

CV Therapeutics continued its upward trend for week 2, increasing an additional 3 dollars, approximately. On Monday, their drug CVT-510 was shown in trials to reduce the heart rate in patients and not reduce blood pressure in those patients that had an atrial fibrillation, otherwise known as a flutter. In turn shares rose slightly from \$51.67 on Friday of last week to \$53.95 on Monday. On Wednesday, Morgan Stanley put an alert investment advice calling CV Therapeutics Inc. as a strong buy, on the basis of prospects for its experimental ranolazine heart drug. “Analyst Ian Somaiya set a 12-month price target of \$71, based on expected U.S. revenues of ranolazine, which recently passed a pivotal clinical trial, and CVT-510.” (Reuters, 6) Armed with this information and my observation on how the market responded to CVTX’s last bit of good news, it appears that CVTX was a good stock that should be held on to, especially for an extended period of time. CV Therapeutics is a perfect example of the stock that I was looking to invest in.

3.3.3 Merck

There was not a lot of news during this week for Merck. The big news would come later in the month when it was decided of which pharmaceutical company would be the one to manufacture the United States supply of the smallpox vaccine. A big contract such as this would definitely give a boost to their stock price. I decided to hold on to Merck because I liked the company and I know a handful of their drugs on the market, and Merck-Medco is a successful and well-known pharmacy benefit manager. Merck shares were raised by \$1.03 from the closing price on the Friday of week 1 to the closing price the following Friday of week 2.

3.3.4 Pharmacia

This week information was released on Monday and Wednesday regarding two different drugs that Pharmacia was working on Bextra and developmental sepsis drug. On Monday, the U.S. Food and Drug Administration approved Bextra. Bextra is used for the treatment of osteoarthritis and adult rheumatoid arthritis and in addition, for the treatment of pain related to menstrual cramping. I thought that this information was going to cause a rise in Pharmacia's share price, but it virtually had no change at all on Monday, or on Tuesday. On Wednesday it was released that Pharmacia's failure to develop a sepsis drug would drop the stock. Sepsis is a blood infection that attacks patients after surgery, or patients suffering from pneumonia or cancer. In addition to this bad news, it was also announced that Pharmacia along with four other pharmaceutical companies were involved in a class action lawsuit. The claim being that the companies raised the price of drugs sold to Medicare. In response to both of these negative comments and only one positive piece of news, I was on the verge of selling my shares of Pharmacia. I did not

sell them this week, because oddly enough the stock was essentially unchanged. From the market closing on Friday the 16th to Monday the 19th shares increased from \$41.35 to \$45.20 a share. At the end of week 2, the closing price was \$45.50. I found this unusual because I would have expected the price to fall considering the class action lawsuit and the news about Bextra.

3.3.5 Week 2 Conclusions

At the end of week 2, I have learned a little bit more about the market. I am still confused as to why some stocks would fall and others not at all when unfavorable news is announced. I would have expected Pharmacia's price to fall this week after Wednesday but nothing happened. Perhaps it was because of the Thanksgiving holiday that saved it this week, or perhaps investors did not really give too much thought to either piece of bad news. Honestly I don't really know why, all I know is that it stayed steady.

This week the BTK began at 583.07, which was the closing price on Friday of last week and on this Friday the Biotechnology Index closed at 599.92. The BTK saw a 2.89% increase from last week, with a high of 607.27 on Monday. This was a trend noticed in both Pharmacia and CV Therapeutics, both stocks rose on Monday. On Friday, November 16, my new worth was \$98,809.56 and at closing on the following Friday I was worth \$102,368.72. Compared to the BTK, I had a 3.6% gain in value. So for this week I out did the BTK by 0.8%. This week and last week almost even out. So I am almost neck and neck with the BTK, percentage wise. Table 3.2 shows my transactions for this week.

Company	Symbol	Shares	Date Bought	Price Bought	Date Sold	Price Sold	Profit
Cardiotech	CTE	5000	11/14/2001	2.30	11/19/2001	2.34	200

Beginning of Week

Cash Total	Equity	Total
69.48	98,740.08	98,809.56

End of Week

Cash Total	Equity	Total
11,759.48	90,609.24	102,368.72

Table 3.2 (Transactions for 11/20/2001-11/23/2001)

3.4 Trading Week 3 (11/26/01 – 11/30/01)

3.4.1 CV Therapeutics

On Monday, November 26, I bought 76 more shares of CVTX. The main reason for this was to even out the number of shares I had from 524 to 600 shares, at a price of \$53.84 a piece. Stock prices also rose from \$54.01 on Friday to \$55.60 on Monday. For the remainder of the week CVTX dropped about 2 dollars to \$53.90 on Thursday, and then increased to \$ 55.15 come Friday the 30th. On Tuesday it was announced that the Philadelphia market would begin trading three new options, one of which being CV Therapeutics. No other news was relevant or released during this week to affect CV Therapeutics standing in the market.

3.4.2 Merck

The FDA granted Merck an additional six months of exclusive marketing for their Prinivil drug, which is used to treat hypertension. In response to this news, shares rose from Friday's closing price of \$65.93 to \$67.05 on Monday. On Tuesday Merck declared a quarterly dividend of 35 cents a share for the first quarter of 2002, shares dropped to \$66.59. The US Government made its decision Wednesday on which company would manufacture the government's new supply of the smallpox vaccine. The government decided to go against Merck and two other finalist companies, as the smallpox vaccine

producer, instead going with Acambis PLC and Baxter International Inc., who will work jointly on the vaccine. Shares dropped to \$65.35, which was more than a dollar a quarter loss. The FDA approved the use of Invanz on Thursday, shares, in turn, increased to \$66.85. Invanz is “a new once-a-day injectable antibiotic for the treatment of moderate to severe infections in adults caused by many common gram-positive and gram-negative aerobic and anaerobic bacteria.” (Merck, 7) And lastly, on Friday it was publicized that either Pfizer or Merck could acquire Discovery Partners International, a company that evaluates molecules for development. There was a slight rise to Merck’s share, increasing to \$67.75.

3.4.3 Pharmacia

This week I decided to sell off my shares of Pharmacia. The closing price of Pharmacia Friday was \$45.50 and on Monday it had risen to \$46.40. Pharmacia board members are set to meet with hundreds of Wall Street analysts and investors Wednesday to discuss the company’s operations and future outlook on drugs that are in development. Shares remained steady for the day and closed at \$46.57. At the board meeting Pharmacia announced that it would sell off their remaining stake in Monsanto, which they hold an 85% stake in, during the second half of 2002. Many companies that had previously bought agricultural biotech companies, due to poor business and consumer protest over genetically engineered food, followed this same trend. Shares fell and closed at \$43.95. Thursday there was more bad news for Pharmacia, which is Celltech’s US partner. Expected sales of CPD 870 were to only reach 500-750 million dollars instead of the forecasted 1 billion dollars. Instead of shares falling though, shares increased marginally to \$44.31. Finally on Friday I sold off my shares invested in Pharmacia. I sold at \$44.40

and in total I had a loss of 50 dollars. I would continue to watch this stock and the company's outlook to see if there may be a chance of it turning around and the company's value to increase. Looking at Figure 3.6, it appears that I bought Pharmacia at the right time but was a little late in selling it at its high point, but I still sold it before it fell anymore.

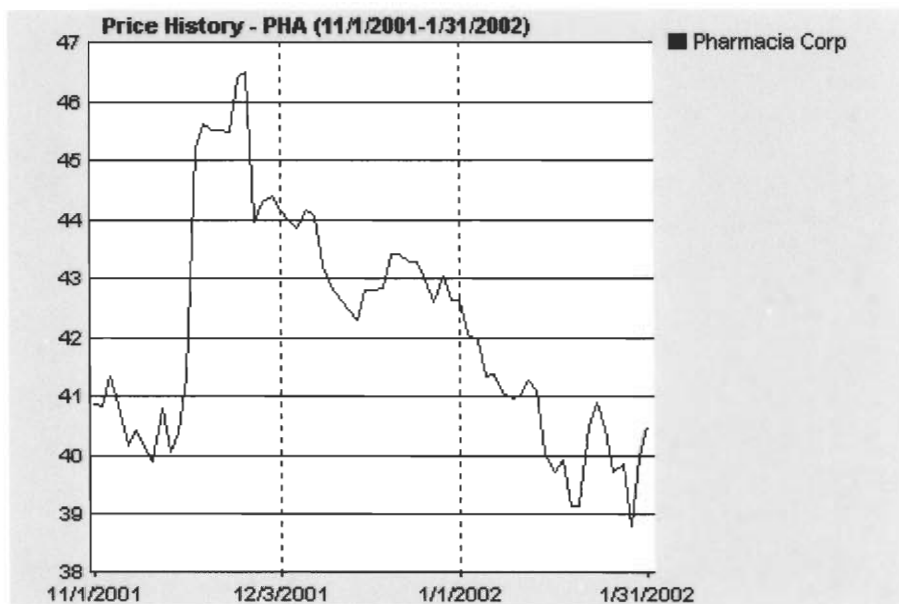


Figure 3.6 (11/1/2001 – 1/31/2002 for Pharmacia (PHA))

3.4.4 Week 3 Conclusions

During this week there was an important announcement on Monday for all biology, biotechnology, and pharmaceutical companies. The big news was that stem-cell researchers were able to clone human embryos. To this industry, that is huge news, and the implications can be great. In turn almost the entire BTK market increased. All of the companies in my portfolio had an increase on Monday, due to good news or not. At close on Monday, the BTK was at 618.00. The BTK has not closed at this price or higher since then.

This week I noticed that mostly any news from the FDA or from a company's board of directors is usually the most empowering kind of news. Market analysts or investors don't have the same kind of impact as these two aforementioned entities have. A big announcement like the ability to clone human embryos by stem-cell researchers can cause the entire market to rise.

From Friday of week 2 to the Friday of week 3, the BTK went from 599.92 to 605.00, respectively. The percentage gained was 0.8% by the BTK. In my case, my total, of cash and equity, went from \$102,368.72 to \$100,051.36. My percentage lost was 2.3%. As one can see, I did not fare to well against the BTK. Table 3.3 shows my transactions for this week.

Company	Symbol	Shares	Date Bought	Price Bought	Date Sold	Price Sold	Profit
CV Therapeutics	CVTX	76	11/26/2001	53.84	---	---	---
Pharmacia	PHA	500	11/13/2001	40.50	11/30/2001	44.40	1950.00

<u>Beginning of Week</u>			<u>End of Week</u>		
Cash Total	Equity	Total	Cash Total	Equity	Total
11,759.48	90,609.24	102,368.72	29,843.20	70,208.16	100,051.36

Table 3.3 (Transactions for 11/26/2001-11/30/2001)

3.5 Trading Week 4 (12/03/01 – 12/07/01)

3.5.1 Cubist Pharmaceuticals

I was first aware of Cubist when I learned that they might have a partnership with Merck. I then proceeded to check out their website. I discovered that Cubist has had an ongoing partnership with Merck since 1996. Since Merck is the third largest drug manufacturer in the world, and has been doing well in the market, I hoped that Cubist would also be a good long-term investment. As you can see in Figure 3.7, Cubist has had

mostly an upward trend since last November and I thought the trend would continue to go up, even though it was flattening out at the time. I purchased 1000 shares of Cubist at \$35.04 a share on Wednesday, December 5, 2001. Also on Wednesday, Cubist received a notice of allowance from the US patent office for exclusive marketing for their investigational antibiotic Cidecin until 2019. That is if they can get Cidecin approved by the FDA, which is in Phase III trials currently. No other news was recorded for Cubist for the rest of the week. Cubist closed at 34.93 on Friday the 7th.

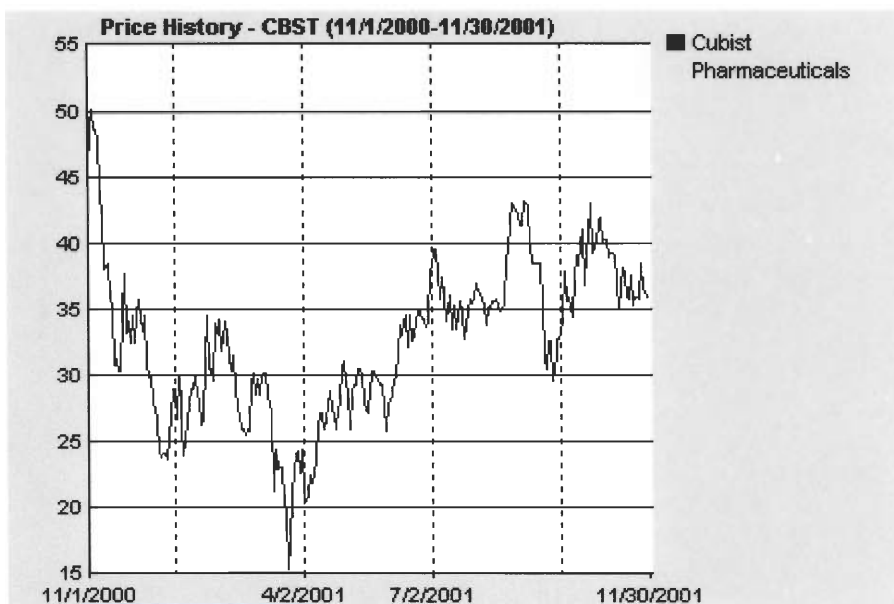


Figure 3.7 (11/1/2000 – 11/30/2001 for Cubist Pharmaceuticals (CBST))

3.5.2 CV Therapeutics

Throughout the week CV Therapeutics continued to offer more and more shares of its stock to the market, priced at \$52.50. On Monday shares were down to \$53.05. On Tuesday the news was that CV Therapeutics would offer an additional 2.5 million shares at the aforementioned price, which would raise a total of \$131.3 million. Shares then closed at \$55.85, almost a gain of 3 dollars. On Thursday, CV Therapeutics announced an additional 375,000 shares of its stock would be offered. This would bring the total

amount of shares being offered to 2,875,000 at a purchase price of \$52.50 per share. Stock price dropped from \$58.34 on Wednesday to \$57.56 on Thursday and then to \$57.34 on Friday.

3.5.3 Immunomedics

I learned of this company by just looking through different drug companies to invest in. Currently they have no drugs on the market as far as I could find. But their LymphoCide drug may be an important product if approved by the FDA. The drug is currently in Phase III trials. If approved I also think that this drug has the potential for great good. The drugs description is as follows: “Naked humanized antibody targeting CD22 receptor in B-cell lymphomas. Primary use is for the treatment of indolent and aggressive NHLs. Every year there are 56,000 newly diagnosed cases and 25,000 deaths.” (Immunomedics, 8) On Thursday I purchased 1000 shares of IMMU at \$23.20. At closing on Friday the price had dropped to \$21.80.

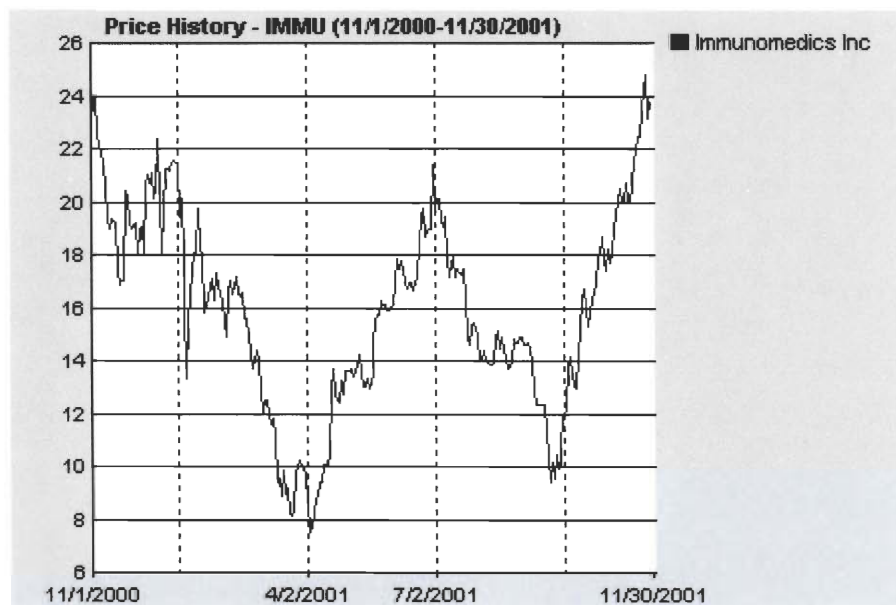


Figure 3.8 (11/1/2000 – 11/30/2001 for Immunomedics (IMMU))

3.5.4 Merck

On Monday, December 3, Merck and Evotec signed an agreement that would supply Merck with needed chemical compounds for the research and development of new drugs. Share prices seemed to rise accordingly from \$67.75 on Friday to \$68.50 on Monday. An agreement to form a partnership with either Cubist and Merck, or Cubist and Pfizer had not been reached yet on Tuesday. Cubist Pharmaceuticals would use either of these companies to help market their new antibiotic. Stocks of Merck fell slightly to \$67.63. Merck announced on Wednesday that they were going to begin limiting the distribution of their antifungal Cancidas injection. This is due to high demand for the product and modifications being applied to Merck's plant. Since shares had been dropping since the previous day and because of this news, I sold half my shares at \$66.24, because I was uncertain of where Merck was heading. Thursday analysts thought that Merck's upcoming annual business meeting, which would be held on Tuesday, might cause a rise in Merck's stocks and share prices. This could happen if any unexpected good news was announced for the company's future plans and earnings. The price of shares was starting to rise so I bought 700 more shares at \$66.40, because I thought that Merck would have good news at their meeting, and stock prices would go up. On Friday the closing price of shares was \$67.00.

3.5.5 Week 4 Conclusions

This week I invested in two new companies, though not as big as say Merck or Pharmacia. Being smaller companies I still think have the potential to increase my portfolio over the long term. It seems that when a company is going to introduce more shares into the market, that this has a positive result with investors. I think before buying

Cubist and Immunomedics, I should have done more research. I also decided that instead of selling all of my shares at once, just sell a portion of my shares that way if share prices do increase I would not have totally missed out on a good opportunity and if they fall I will not lose too much. On Wednesday I also added in another \$100,000 to my portfolio. I gained more faith in the market over the last three weeks, and since there were no more terrorist attacks or anthrax letters, I figured that it was safer to invest then it was before.

From Friday of week 3 to the Friday of week 4 the BTK went from 605.00 to 601.07, respectively. The percentage lost was -0.65% by the BTK. In my case, my total, of cash and equity, went from \$100,051.36 to \$204,448.20. My percentage increase was 4.4%. (When calculating the percentage I took 204,448.20 to be 104,448.20, because I only added in \$100,000, so essentially the percentage is the same.) In this case I did a lot better this week compared to that of the BTK. Table 3.4 shows my transactions for this week, excluding the 300 shares of Merck I sold and the 700 shares of Merck I bought back the following day.

Company	Symbol	Shares	Date Bought	Price Bought	Date Sold	Price Sold
Cubist Pharmaceuticals	CBST	1000	12/5/2001	35.04	---	---
Immunomedics	IMMU	1000	12/6/2001	23.20	---	---

<u>Beginning of Week</u>			<u>End of Week</u>		
Cash Total	Equity	Total	Cash Total	Equity	Total
29,843.20	70,208.16	100,051.36	45,037.20	158,134.00	203,171.20

Table 3.4 (Transactions for 12/3/2001-12/7/2001)

3.6 Trading Week 5 (12/10/01 – 12/14/01)

3.6.1 Cubist Pharmaceutical

Cubist for the most part was mainly unchanged. Shares opened Monday at \$33.50 and closed at \$35.25. On December 12th, Cubist released a Review and Corporate Update to shareholders. During that day shares rose a little over a dollar to close at \$34.40. Other than those reports, there were no other significant news to merit a response regarding Cubist Pharmaceuticals.

3.6.2 CV Therapeutics

During this 5th week, CV Therapeutics did not do as well as previous weeks. Shares dropped a total of \$4.65 by the end of the week from \$57.34 to \$52.69. Its first dip was on Tuesday where shares lost about \$1.70, the next day CVTX closed at \$51.30. The reason for this, I believe, was not due to any bad news from the company or from any other source. The drop seems to occur at the same time Merck dropped in price during the same week. This will be discussed in Merck's section and in the conclusion to the week.

3.6.3 Immunomedics

At the markets opening on Monday, Immunomedics was at \$21.80. During the week, shares varied little and closed at \$20.92 on Friday. Despite a few pieces of news on Monday and Tuesday nothing else was mentioned for IMMU. Monday, it was released that "the company's yttrium-90-radiolabeled anti-CD22 humanized antibody (90Y-epratuzumab), currently in development, can be given repeatedly without any adverse immunological effects." (Immunomedics, 9) This appeared like it would be positive news, but it barely caused a ripple in share prices. Tuesday's Immunomedic's headline

news read as such: “Immunomedics' Cancer Imaging Product Reported To Improve Detection of Breast Cancer Metastases” (Immunomedics, 10) Now this also seems to me that this would be good news and yet, shares did not rise as I would have expected them to, but instead sank a \$1.40.

3.6.4 Merck

This was a rough week for Merck and the market. Merck opened at \$67.00 a share on Monday morning, and by Friday afternoon shares had dropped to \$58.04. On Tuesday the FED cut interest rates for an 11th time in 2001. Also dropping the market was Merck's news that it expects no earnings growth in 2002. Shares dropped \$6.29 in accordance to this news. Also at this meeting Merck said that from 2002 to 2006 that 11 new drugs should be approved and released, some of which could be called breakthrough medicine. In Merck's report they also stated that 2002 would be “a ‘transition year to the new platform of opportunities,’ Merck announced that it will continue its focus on operational efficiency while increasing its spending in research and development in 2002 to \$2.9 billion, a double-digit growth rate over 2001 spending.” (Yahoo, 11) In accordance with everyone selling and share prices falling, I sold 700 shares of Merck, even though I sold them later in the day than I should have. In the aftermath of Tuesday's drop, prices continued to fall another \$2.18 by the Wednesday's end. Most analysts downgraded Merck from a BUY to a HOLD. Merck and Schering-Plough, it was said, might form a merger because they are working on similar drugs, now this may not occur because of the recent events. On Thursday, I bought back 500 shares of Merck because I thought that they would again start to rise. I should have realized that they really would not unless Merck released some good news for investors. The rest of the week shares dropped a

little but nothing significant. The downward trend of Merck during this week can be seen in Figure 3.1, below.

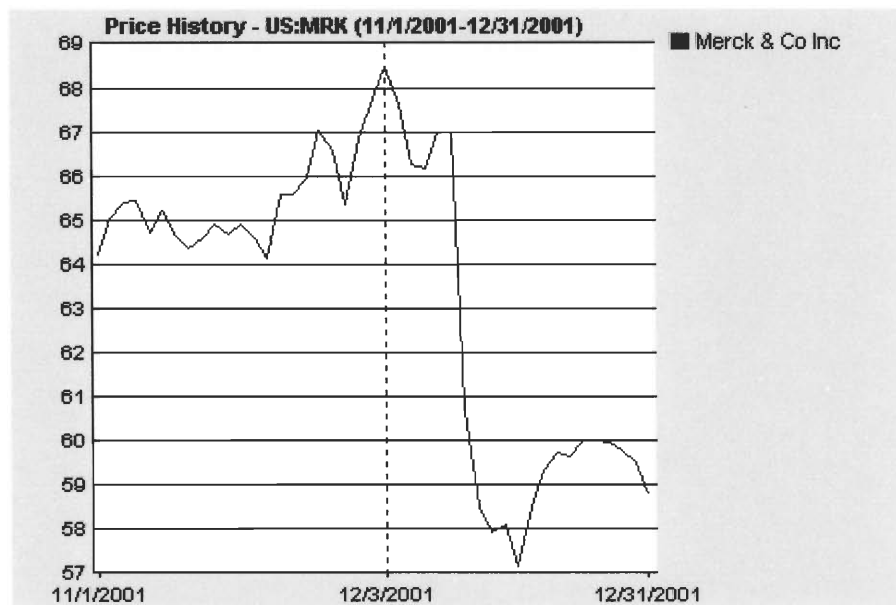


Figure 3.8 (11/1/2001 – 12/31/2001 for Merck (MRK))

3.6.5 Week 5 Conclusions

This was a rough week for the Biotech and Drug Industry. Leading the way was Merck's news of an expected earning-less 2002. As I stated earlier in the CV Therapeutic section, I believe CVTX shares dropped in response to Merck's slight crash. I see no other reason for that occurring. Shareholders started selling off shares of other biotech companies in fear of those also falling. If a large company like Merck could fall then smaller ones could too. This is just my observation and thoughts. No one seemed to notice that Merck announced that they were going to be releasing 11 new drugs in the next 4 years though. It was like they just ignored that and sold because they expected no earning this year. In the long run Merck has a chance a possibly greater gain then currently, after 2002, which as they said was a transition period.

This week I lost about 5% of my equity. This week the BTK went from 601.07, which was the closing last Friday, to 564.59 this Friday. The BTK dropped a -6.46% during Week 5. This is a larger loss than what has been observed since our simulation began. My total went from \$203,171.20, from last Friday, to \$192,963.20 this Friday. In all, that was a -5.02% loss in my total of cash and equity. In the end I actually did 1.4% better than the BTK did.

Company	Symbol	Shares	Date Bought	Price Bought	Date Sold	Price Sold	Profit
Merck	MRK	700	11/13/2001	64.58	12/11/2001	61.00	-3397.80
Merck	MRK	500	12/13/2001	57.96	---	---	---

<u>Beginning of Week</u>			<u>End of Week</u>		
Cash Total	Equity	Total	Cash Total	Equity	Total
45,037.20	158,134.00	203,171.20	58,747.20	134,216.00	192,963.20

Table 3.5 (Transactions for 12/10/2001 – 12/14/01)

3.7 Trading Week 6 (12/17/01 – 12/21/01)

3.7.1 Cubist Pharmaceutical

During this week Cubist Pharmaceutical fluctuated slightly. There was no real news for the week except that Cubist will have more of a presence at the annual Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC). This did not seem to affect shares at all. The trend for the Cubist was in total, stable, for this week, increasing a dollar in all.

3.7.2 CV Therapeutics

CV Therapeutics has had no relevant information for this week. Shares did rise from \$52.69 at opening Monday to \$55.22 at closing Friday, December 21. The average

trend for the week was also steady with no substantial volatility. There was no reason to sell or buy more for the week, just to hold CVTX and see where it goes.

3.7.3 Immunomedics

This week was a dull week for Immunomedics also. This might have been because Christmas was right around the corner, and nobody wants bad news before a major holiday especially Christmas. IMMU was at \$20.92 at close last week and by the end of this week it had risen \$1.52 to top off at \$22.44. I also saw no reason to do anything with this stock except to hang on to it till the future.

3.7.4 Merck

Since Merck shares fell last week, they have stayed on a steady level in the high fifties range. Monday they closed at a low \$57.17 but by Wednesday shares increased to \$59.33 in conjunction with news that was released that Merck and Schering-Plough would expand, worldwide, their cholesterol-management partnership launched last year. Both companies are working on new cholesterol fighting drugs, Merck's current drug, which will be called Zetia, is still in Phase III trials. Shares remained pretty steady for the remainder of the week closing at \$59.63.

3.7.5 Week 6 Conclusions

This week was also very dull week in regards to share prices and company news. I'm not sure if this was because of Christmas or just because it's the end of the year. Either way, nothing really happened and not a lot of data could be extracted regarding this week.

The BTK for this week had opened at 564.59 at the markets closing on Friday the BTK stood at 581.72. This is a gain of 2.9% for the Biotech Index. This week my total

went from \$192, 963.20 to \$198,273.20. I had an overall gain of 2.68%, which is concurrent to that of the BTK for this week. My totals can be seen in Table 3.6, below.

Company	Symbol	Shares	Date Bought	Price Bought	Date Sold	Price Sold	Profit

<u>Beginning of Week</u>			<u>End of Week</u>		
Cash Total	Equity	Total	Cash Total	Equity	Total
58,747.20	134,216.00	192,963.20	58,747.20	139,526.00	198,273.20

Table 3.6 (Transactions for 12/17/2001-12/21/2001)

3.8 Trading Week 7 (12/24/01 – 12/28/01)

3.8.1 Cubist Pharmaceuticals

This week Cubist had some news. The headline for Monday the 24th is “Cubist Pharmaceuticals Announces Exercise of \$40 Million Additional Convertible Subordinated Notes” (Cubist Pharmaceuticals, 12) I do not understand what this means but it seems that Cubist will be making money on the deal. The proceeds will mostly be used to advance their clinical trials for the different drugs that they are currently developing. Shares did not react to this announcement and remained level, increasing slightly to \$37.35 by the week’s end.

3.8.2 CV Therapeutics

Like last week, there was no news regarding CVTX. During the week, stocks dropped from \$55.22 at the beginning of the week to end at \$53.68. This is probably just caused by your normal everyday trading. I’m still holding on to it because investors are saying that CVTX is a strong stock to buy.

3.8.3 Immunomedics

Also this week Immunomedics had no news, and nothing to report. The stock remained very stable for the week, opening at 22.44 and closing at 22.00.

3.8.4 Merck

Lately it appears that analysts and investors have been saying that larger pharmaceutical companies are running out of steam, such as Merck. They are saying that the smaller Biotech companies are doing better, because they have more innovative ideas, and the larger corporate companies are running low on new drugs. The drugs they do have will do them no good, because their patents will run out soon. With this news in mind, I am carefully watching the Merck's shares to see what might happen anytime in the near future. This week stocks opened and closed at about the same amount, and remained almost unchanged. Maybe in the near future I might be selling off my Merck shares, but I'm not sure yet.

3.8.5 Week 7 Conclusions

Most of this week consisted of nothing more than checking how much stocks went up and down. They essentially had the same value when the market closed as when it opened. This might be due to the Christmas holiday, and people were just more laid back than normal. It might also have been because it was the end of the month and the start of the New Year. Whatever the reason the stocks I chose are still doing all right, and so far I think I will stick with them until I see sufficient evidence to sell.

This week the Biotechnology Index increased by about 20 points. When the markets opened on Monday the BTK was at 581.72 and closed at 602.30. This was an increase of about 3.41%. I, on the other hand, lost a small percentage of my total. I went

from \$198,526.00 to \$197,921.20, which is a percentage loss of -0.3%. Comparing the two I didn't do as well as the BTK but I barely had a loss whatsoever. This can be seen in Table 3.7 below.

Company	Symbol	Shares	Date Bought	Price Bought	Date Sold	Price Sold	Profit

<u>Beginning of Week</u>			<u>End of Week</u>		
Cash Total	Equity	Total	Cash Total	Equity	Total
58,747.20	139,526.00	198,273.20	58,747.20	139,174.00	197,921.20

Table 3.7 (Transactions for 12/24/2001-12/28/2001)

3.9 Trading Week 8 (12/31/01 – 01/04/01)

3.9.1 Cubist Pharmaceuticals

There was no important news this week for Cubist Pharmaceuticals. Shares dropped \$1.58 during the week, falling right after New Year's Day. The trend for the week, overall, was slightly downward, and has been since the middle of last week.

3.9.2 CV Therapeutics

CV Therapeutics also did not have any news for the week. I am starting to notice that CVTX is slowly dropping in price this week. The price per share has been on a downward trend since around Christmas. This week the price dropped about \$1.90, and closed at \$50.13, and if it is still continuing to fall by the middle of next week I may sell.

3.9.3 Immunomedics

These last three weeks have been uneventful for Immunomedics. There has been no news from the company about any of their undertakings or interests this week. Shares have dropped from \$20.26 to \$18.55 this week. If share prices continue to fall in this manner next week I will be sure to sell by the beginning of the week.

3.9.4 Merck

Merck dropped less than a dollar from closing last week till the end of this week. Shares remained steady during the week, and closed at \$58.89 on Friday. Investors didn't really seem to react too much to Merck's news this week. On Thursday Merck-Medco became United Airlines pharmacy care provider for all of its 80,000 employees, and stocks were unchanged. Since last week the trend is slowly going down. The overall trend has been downward since, Merck dropped about 8 points 3 weeks ago. I decided to stick with Merck for the remainder of our simulation, mainly because I've owned shares in it, since we began. And in this way it will be the most accurate for the strategy I used.

3.9.5 Week 8 Conclusions

This week it appears that all of my stocks were falling, not by a significant amount, though. I also noticed a lot of activity on Friday for all four of my stocks. The volume numbers were larger that day than most. I noticed that that occurs at the close of mostly all the Fridays in the first week of a month. I am also not sure why these stocks are falling. It might be that all the biotech stocks are falling, because most of my stocks have not had any significant news for about two weeks. It appears to me, that most fluctuations are due to just your average day trading.

This week I lost the largest percent yet for a one-week period. I began at \$197,921.20 and at the end of the week I closed at \$188,867.20. This was a significant loss of -4.57%. The BTK this week opened at 580.58 and closed at 571.40 on Friday, which was a change of -1.58%. Compared to my percentage lost, I did not do very well this week. My totals for the week can be seen in Table 3.8.

Company	Symbol	Shares	Date Bought	Price Bought	Date Sold	Price Sold	Profit
Beginning of Week				End of Week			
Cash Total	Equity	Total		Cash Total	Equity	Total	
58,747.20	139,174.00	197,921.20		58,747.20	130,120.00	188,867.20	

Table 3.8 (Transactions for 12/31/2001-1/4/2002)

3.10 Trading Week 9 (01/07/01 – 01/11/01)

3.10.1 Cubist Pharmaceuticals

Cubist dropped a total of 1 point over the entire week. For the third straight week Cubist Pharmaceuticals has not seen much action in the way of news or in shares. On Monday though, Cubist announced that they were expanding their executive management staff. Also a drug that the company is currently developing, in trials, was shown to be able to be taken orally. Where as this drug, which will treat patients with infections, is currently only available in an intravenous form. This will aid in their development of an oral form of this drug.

3.10.2 CV Therapeutics

CV Therapeutics, again, for this week did not have any new information as to how the company is faring. This week stocks seemed to slip at the weeks opening, dropping a point and a half on Monday, but by Friday the stock closed at \$51.51, which was up from last week. I will hold onto CVTX until next week.

3.10.3 Immunomedics

This week there again was no news on Immunomedics, but share prices continued their downward trend. On Wednesday, January 9, I sold my 1000 shares of Immunomedics at \$17.74 a share. I had hoped that IMMU would eventually go back up

this week but it continued to fall, and I didn't think it would go back up anytime soon. The amount that I either gained or lost from my shares can be found in Table 3.9. In Figure 3.9, the trend can be seen for the period of time which I owned shares in the company, and also to the current date in time.

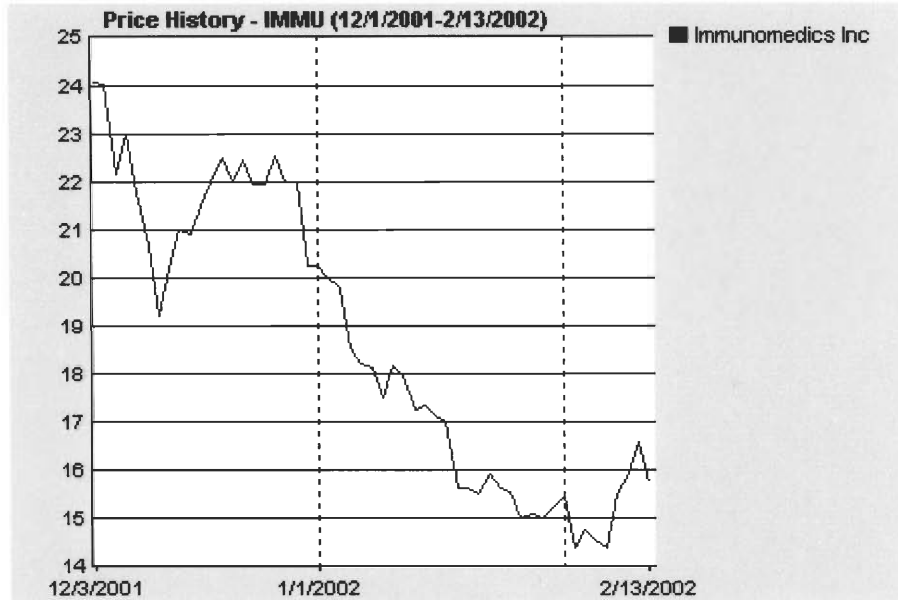


Figure 3.9 (11/1/2001 – 2/13/2002 for Immunomedics (IMMU))

3.10.4 Merck

This week there also was not any significant news for Merck. Shares closed this week at 58.98, which, essentially, is the same place they opened, gaining 10 cents a share in the process. Merck has pretty much stayed steady for a couple of weeks now. It has a slight downward trend, overall, but nothing too drastic.

3.10.5 Week 9 Conclusions

This week my three remaining stocks did not have much of a change. I sold off all my Immunomedics shares due to a downward trend that I did not really pay attention to until it was too late. I realized this week, that I should concentrate more on the Tables displaying the trend lines, rather than just looking at the numbers. Unfortunately I did not

realize this until week 9, which was too late. I did not decide to buy more stocks this week because it would not have fit into the strategy that I was using. Looking at Figure 3.9, it looks like I didn't sell at the right time, but I didn't sell at the wrong time either. I sold at an okay point, before it went any lower. My losses can be seen in the Table below. In the table you will see that I lost a large percent of the money I invested in that company. I definitely should have sold much earlier than I had, unfortunately I did not.

This week I did not lose as much money as I did last week. I went from \$188,867.20 at opening Monday to \$187,799.20 at close on Friday. In total that was a percentage drop of about -0.5%. The BTK on the other hand went from 559.54 at opening to 561.98 at close. The percentage in this case had risen almost 0.5% in the positive direction. All of this can be seen in Table 3.9.

Company	Symbol	Shares	Date Bought	Price Bought	Date Sold	Price Sold	Profit
Immunomedics	IMMU	1000	12/6/2001	23.20	1/9/2002	17.74	-5460.00

<u>Beginning of Week</u>			<u>End of Week</u>		
Cash Total	Equity	Total	Cash Total	Equity	Total
58,747.20	130,120.00	188,867.20	76,477.20	111,322.00	187,799.20

Table 3.9 (Transactions for 1/7/2001-1/11/2002)

3.11 Trading Week 10 (01/14/01 – 01/18/01)

3.11.1 Cubist Pharmaceuticals

This week there was big news with Cubist. Their phase III trial results of their drug, Cidecin were released on Wednesday in the closing hour of the market. Their lead drug failed the main goal of the trial and would set back their marketing for Cidecin by about a year. Cubist has not much else to rely on, because most of their other drugs are not this far in development. By the next morning shares had fallen almost 50%, and was

the NASDAQ's biggest loser. When I noted that Cubist had taken a plunge it was too late. It was already Thursday and I sold at \$16.68 losing about half of my investment. I may have noticed this sooner if they had released the news earlier in the day, or I had checked the market later that night, which I did not do. In all, I lost 52% of my initial investment. The drop can be plainly seen in Figure 3.10.

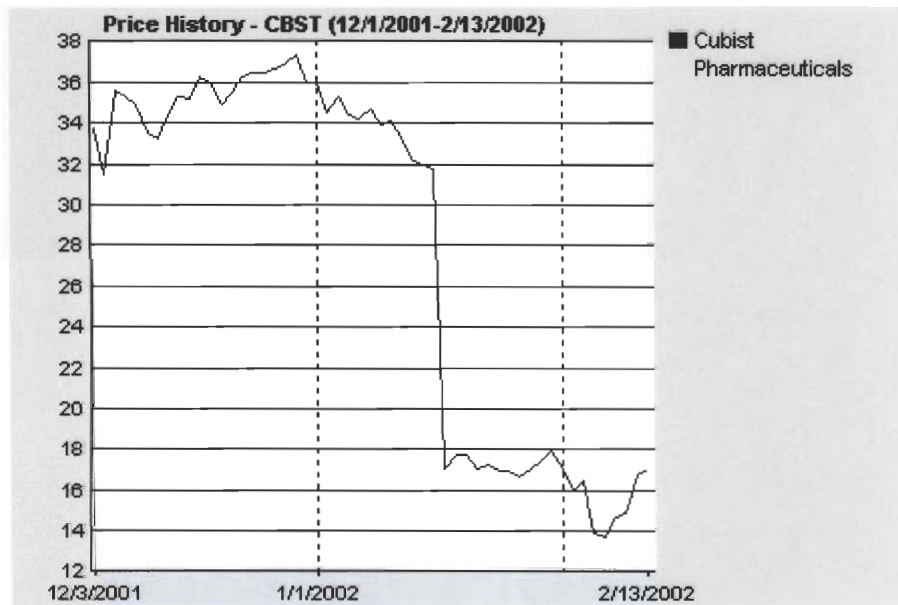


Figure 3.10 (11/1/2001 – 2/13/2002 for Cubist Pharmaceuticals (CBST))

3.11.2 CV Therapeutics

This week CV Therapeutics had the worst week since I purchased my shares. Falling almost 10 points to \$43.50, which was a drop of about -15.5%, by the end of the week. I noticed that shares were still on the downward trend. I sold my CVTX stock at \$45.32 on Friday, before it closed at \$43.50 at the markets close. On Thursday, CV Therapeutics appointed Ken Lee to the Board of Directors. This was the only news at all during the week. Lee has "...been a key advisor to many of the leading U.S. life science companies over the past two decades, and was recently named President of A. M. Pappas & Associates, an international life sciences venture development company." (CV

Therapeutics, 13) Shares fell about 4 points the following day after this news was announced. Which is the only reason I can see currently. The trend line for CV Therapeutics can be seen in Figure 3.11 below.

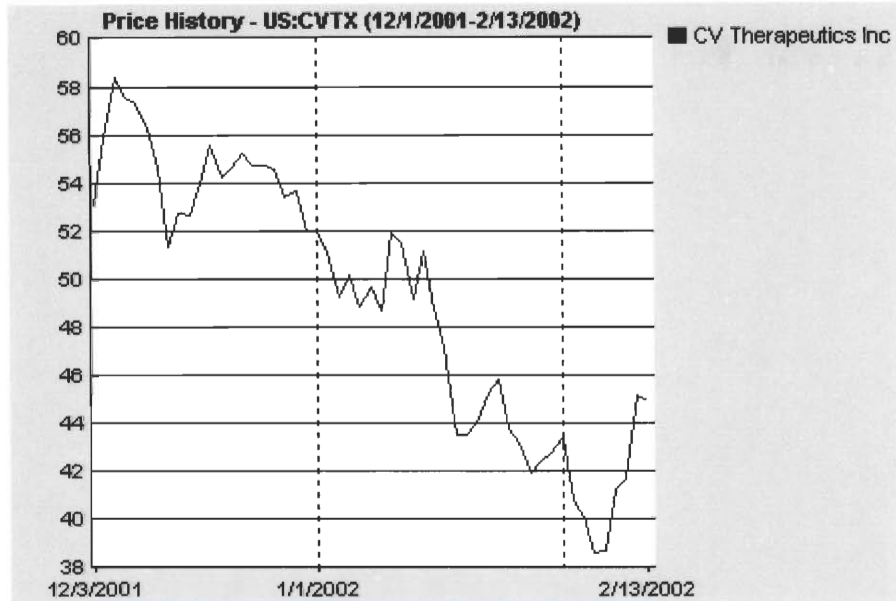


Figure 3.11 (11/1/2001 – 2/13/2002 for CV Therapeutics (CVTX))

3.11.3 Merck

Again for this week, Merck stayed virtually steady, falling 98 cents the entire week, to close at \$58.00. Most of the week contained good news released by Merck, but despite this, stocks did not rise but continued their slow slide. A team working on a new cold virus vaccine discovered that it could control a similar virus to HIV in monkeys. This may later be helpful in the combat against the killer disease, but has no real affect currently. On Friday Merck-Medco was chosen to provide pharmacy care for The Teacher Retirement System of Texas. This would provide more than 140,000 employees with their pharmacy care. Despite this news Merck shares barely flinched. In the end I sold at \$58.00 at close.

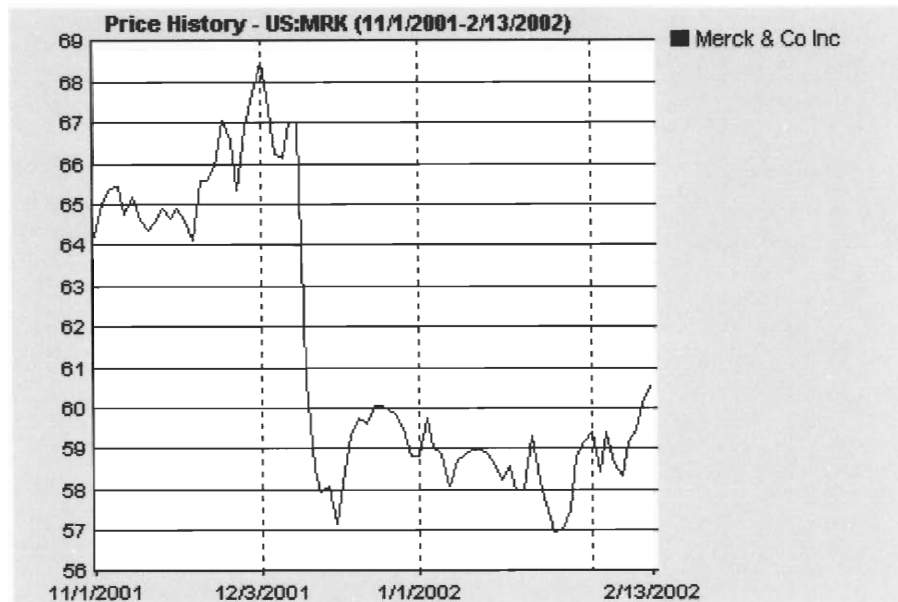


Figure 3.12 (11/1/2001 – 2/13/2002 for Merck (MRK))

3.12 Biotech Conclusions

This was the last week in our simulations. I sold off all my stocks and counted all my money, which proved to be disappointing. I lost 50% of my invested amount in Cubist Pharmaceutical because of their failed Phase III trial of Cidecin. Unfortunately, it is the only drug that they have in such late stage development. Cubist was really a gamble, because if the drug failed stocks would have dropped like they did. If the drug passed it would have had a much better outcome.

CV Therapeutics also dropped a good deal since I purchased it a few weeks back, approximately a 16% drop in value. I do not understand why CVTX would have dropped so much in this last week. Maybe it was just the affect the market had on this particular stock. The Biotech Index did not fare too well this week either. Maybe it was just the entire Biotech sector that had a bad week. Looking at Figure 3.11 you can see that I, at least, sold my shares before it fell any further.

Merck stayed steady pretty much the entire time after its drop in December, staying in the high 50's range. If you look at the Figure 3.12 you can see that it is just starting to go back up this week, at a steep angle. There were times where I probably should have sold all shares, but did not. I stuck with it rather to see where I would come out in the end. All earning and losses can be seen in Table 3.10.

This week I had my greatest loss in my total, mainly caused by Cubists large fall. At the markets opening I had \$187,799.20 and at close on Friday I had \$166,749.20, which turns out to be a -11.2% loss overall. The BTK, for the week, which opened at 561.98 and later closed at 515.95 on Friday, fell about -8.2% this week. Not only did my stocks have a bad week but the BTK also did not do well. Overall I did not do that bad compared to the Biotechnology Index for the week.

Company	Symbol	Shares	Date Bought	Price Bought		
Cubist Pharmaceuticals	CBST	1000	12/5/2001	35.04		
CV Therapeutics	CVTX	524	11/15/2001	52.23		
Merck	MRK	600	11/13/2001	64.58		

<u>Beginning of Week</u>			<u>End of Week</u>		
Cash Total	Equity	Total	Cash Total	Equity	Total
76,477.20	111,322.00	187,799.20	166,749.20	0.00	166,749.20

Company	Symbol	Date Sold	Price Sold	Profit
Cubist Pharmaceuticals	CBST	1/17/2002	16.68	-18,360.00
CV Therapeutics	CVTX	1/18/2002	45.30	-4268.16
Merck	MRK	1/18/2002	58.00	-2336.20

Table 3.10 (Transactions for 1/14/2002-1/18/2002) ^{3.1}

^{3.1} Merck's and CV Therapeutics profits were calculated using a total that I had previously calculated, because I had bought and sold stock of each at different times, so one set-buying price was not applicable here. Please not that the buying price is the price that the stock was original bought at and does not reflect the shown profit if calculated.

Chapter 4

Simulated Trading: Technology Industry

4.1 Technology Industry Introduction

The Technology Industry is one of the more volatile industries in the stock market. In the 10-weeks prior to this write-up an investment period was simulated in the Technology Industry sector of the stock market, this chapter summarizes that 10-week period.

4.2 Trading Week One (11/12/01 – 11/15/01)

4.2.1 Tuesday (11/12/01)

One of the first things I learned during my research was that the timing of my transactions was crucial in determining whether or not I made money; and this required great patience. Unfortunately I learned this the hard way. I bought Compaq Computer Corporation (CPQ) stocks on November 13th 2001. This was the first transaction I had ever made and I started with \$200,000 in cash. I bought the stock because it was going up and I had read an article that was published 2 hours earlier, which explained that Compaq was realizing some new products. As soon as I bought it, the stock value went down (I bought it too late). I couldn't wait for them to go back up (as they did) and I then sold my stocks and lost money in this transaction. In the Figure 4.1, we can see that even if the stocks market went up I still lose money because I bought and sold stocks at the worst possible time. I made the same mistake with stocks from Microsoft Corporation (MSFT). One week later the idea that timing was one of the most important concepts was

reinforced by a second loss worth much more money (which I will discuss in more detail in my week 2 section). This also shows that I shouldn't have followed the flows of the market. Instead, I should have anticipated what should have happened and I should have waited to buy until after the stocks value went down.

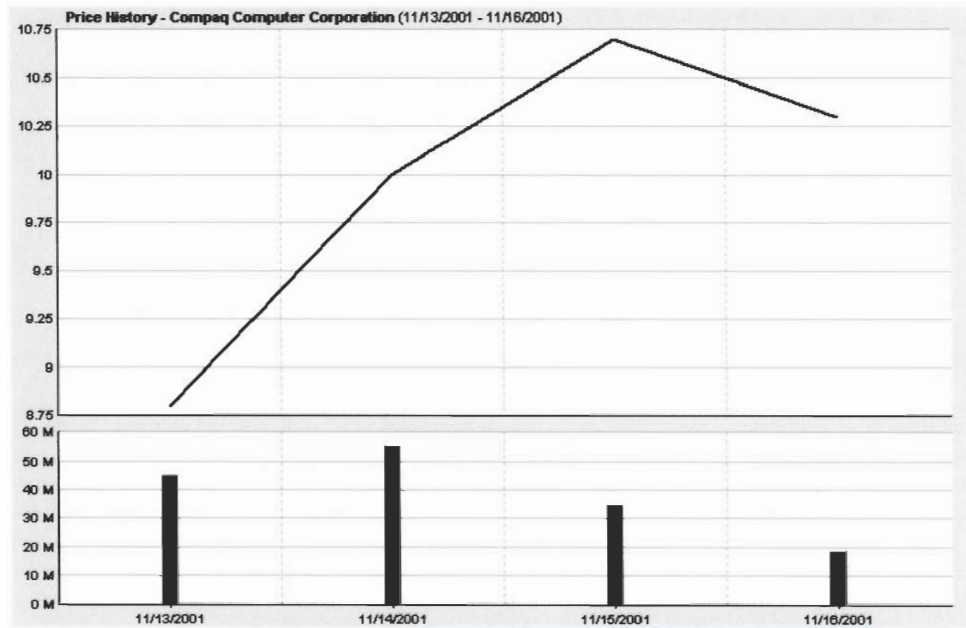


Figure 4.1 (Week 1 History of Compaq Computer Corporation (CPQ))

The figure 4.2 shows that it was the worst time to buy stock from Microsoft since it was going down. But, this graph also shows that it will be soon the best time to buy Microsoft stocks since the stocks price will likely be going under value.

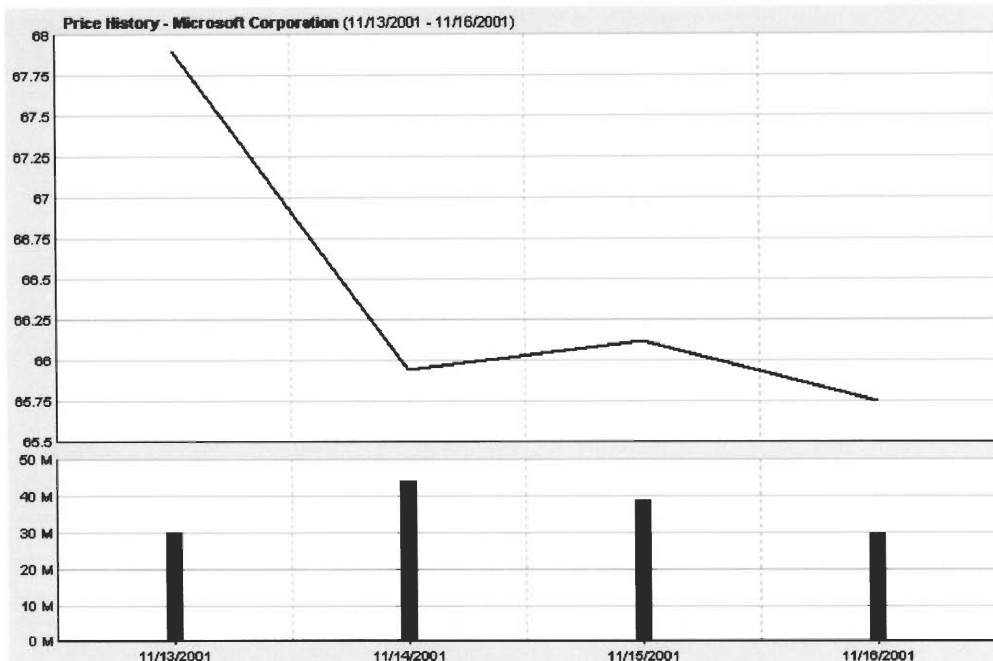


Figure 4.2 (Week 1 History of Microsoft Corporation (MSFT))

Right after I sold the Compaq stocks, I felt that I should buy Best Buy Co. Inc. (BBY) stocks. The only reason I had in buying this stock was because the value for BBY was starting to go up after a big fall. But, in this case, I was too inexperienced to buy stocks for this reason; I should not have bought stock in Best Buy for this reason because it may have dropped down further since it had no reason to go back up (no good news). Even though I was inexperienced in this case I got lucky as the figure 4.3 shows the stock went up to 3.07% when I sold it. At this time, I realized that even though I took considerable risks to get some money, it only returned a marginal increase back of \$1,990. In fact, I discovered within this first week that big and stable companies do not have a huge change (increase or decrease) in their stock value since they tend to be stable companies. Thus, if I lose or make money out of these companies I won't get or lose a lot of money. My summary table that I made shows how right my theory was. When you see companies like Microsoft that get a variation ratio of 10.75% or even Best Buy that got 22.89%

(Variation is the ratio between the lowest and the highest stock values during a 10 week period).



Figure 4.3 (Week 1 History of Best Buy Co Inc. (BBY))

4.2.2 Wednesday (11/13/01)

During my second day I spent my time looking for companies with small stock value, because they are more likely to increase like Mercator Software (MCTR), which I bought during my second day. Fortunately, I bought Mercator Software right at the beginning of my second day because I saw some articles explaining how promising this company was. But, by buying this Mercator Software stock I believe now that I had made another mistake, since by doing so I used all my cash and I remained solely with Equities. Also, during this same day, I saw that my Best Buy equities were going down after having been moving up. Thus, I sold my Best Buy stocks and I made 3.07% off this company instead of getting 4.52% when it was at its peak. The same thing happened to my equity spent in Nokia Corporation (NOK) the same day. I sold my Nokia Corporation equity for

a profit of 1.97% instead of making 3.52% if I had sold it at its peak. In this case, I couldn't maximize my profits due to a problem of timing; since I sold the stock at one of its lowest values, as show the figure 4.4. However, I shouldn't complain since I was able to make money, which was a change for the better after my first day.

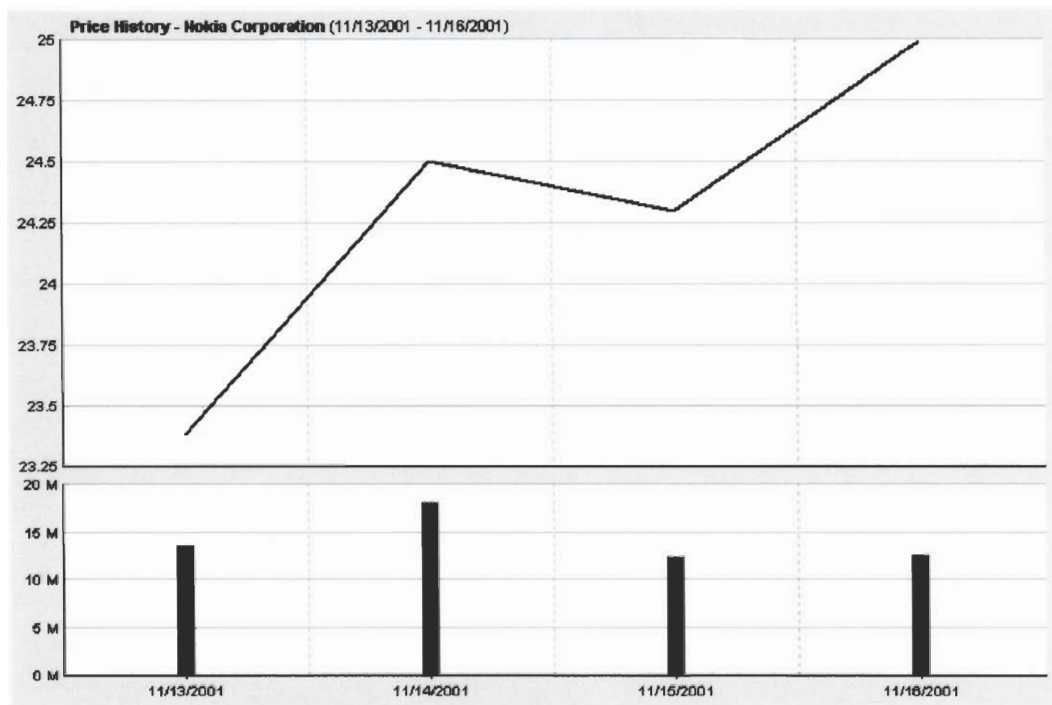


Figure 4.4 (Week 1 History of Nokia Corporation (NOK))

Near the end of my second day, I bought stocks from Amazon.com (AMZN) at two separate times based on a really good article that appeared a few minutes earlier. I also read a good article about Compaq. This article explained that Hewlett Packard Company (HWP) would buy Compaq. In fact, this is good news since Compaq was to be sold, stocks went down. So, this news would most likely increase Compaq's equity. Thus, I decided to sell my Microsoft stocks even if I lost money to buy with that money some Compaq stocks. I knew this was bad, but here I really thought that Compaq's stocks would increase and on the other hand I'm still paying for my mistake by not keeping cash, as I explained earlier.

4.2.3 Thursday (11/14/01)

On the Thursday, I decided to sell my Amazon stocks since they had made a considerable increase since I had bought them. I got 9.92% from my first transaction and 6.66% from my second transaction with Amazon. With this money I decided to buy more stocks of Compaq since they continued to increase. By the end of the day I decided to buy Exide Technologies (EX) stocks that were at a very low value. I had been watching Exide's stocks for a few days and I noticed that this companies stocks were slow during the stock markets opening, they would drop right down within an hour. So, I was expecting to sell my stock in Exide a few minutes after the stock markets opening.

4.2.4 Friday (11/15/01)

During the fourth day, I was surprised to see Exide stock value dropping for the first time during the opening over the past two weeks. But, since I didn't invest much I didn't lose much money either. I then considered this experience to be more like an experiment, to which I saw the result. I probably wasn't the only one who saw this effect from Exide and this could explain why it dropped. The figure 4.5 shows the fluctuations of Exide's stocks over the first week. Table 4.1 shows the overall results for the transactions of the first week of the investment period.

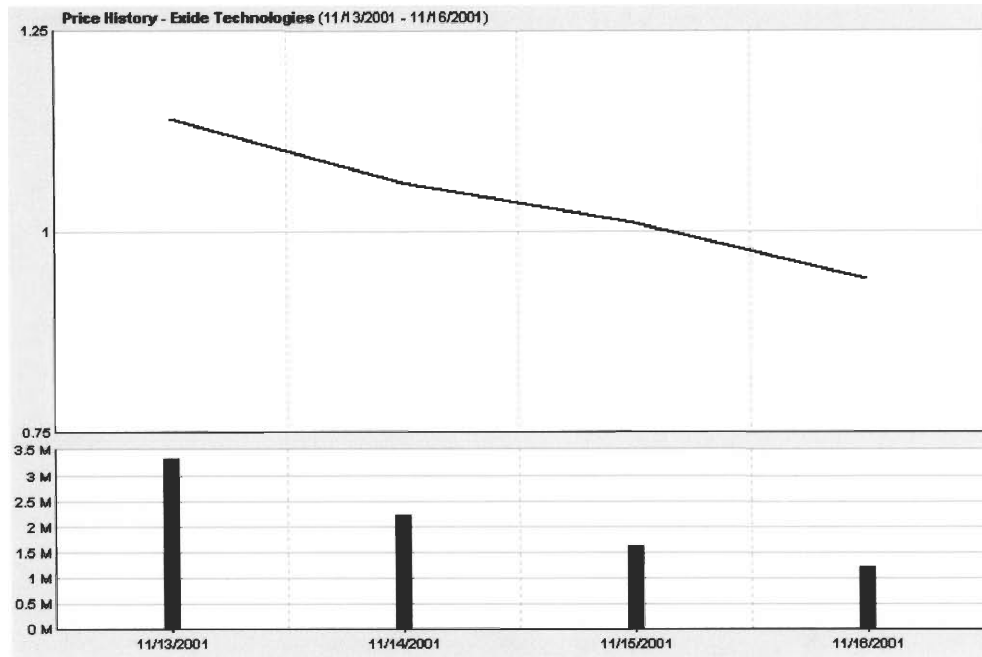


Figure 4.5 (Week 1 History of Exide Technologies (EX))

CASH	EQUITY	TOTAL	Loss/Gain	%
\$350.97	\$203,749.60	\$204,100.57	4,101	2.05%

Table 4.1 (Results for 11/12/01 – 11/15/01)

4.3 Trading Week Two (11/18/01 – 11/23/01)

4.3.1 Monday - Thursday (11/18/01 – 11/20/01)

I was surprised to see the big drop in the stock markets value during the week of thanksgiving brake. As I wondered why it was happening I saw my equities dropping down. The stocks dropped for 3 days, I was holding on to these stocks hoping it would get better. I had set my limit to -10% for my stocks before I would sell. This limit was reached on the 21st of November and I lost 10% on my Compaq stocks that I had believed in, I also lost 5% from Microsoft and 15% from the Sirius Satellite Radio Inc. (SIRI) that I had been testing. This day was the worst day overall that I had and the Figure 4.6, 4.7 and 4.8 respectively shows why I lost so much money, since it shows that I sold at the worst time. As I sold everything from my equity I realized that this drop was most

probably due to the thanksgiving brake. It would then be a seasonal case that I didn't take into account. I was wrong to believe that this wouldn't happen. I decided then to redesign my strategy for buying stocks. I decided from this day to buy stocks in the morning and to sell them by the end of the day. By doing so I moved to the strategy of day trading, and I would base the way I bought stocks from the news that was published before the opening of the stock market. By doing so I hoped to minimize the seasonal effect and to increase my gain. I would of course check past seasons to see what usually happens in special cases (like thanksgiving or Christmas, since Christmas is coming in the calendar). I have also decided to look for some new companies that have an important fluctuation cycle with high frequency during the day. I found out by doing this search that Internet companies are one of the best qualifiers for these characteristics.

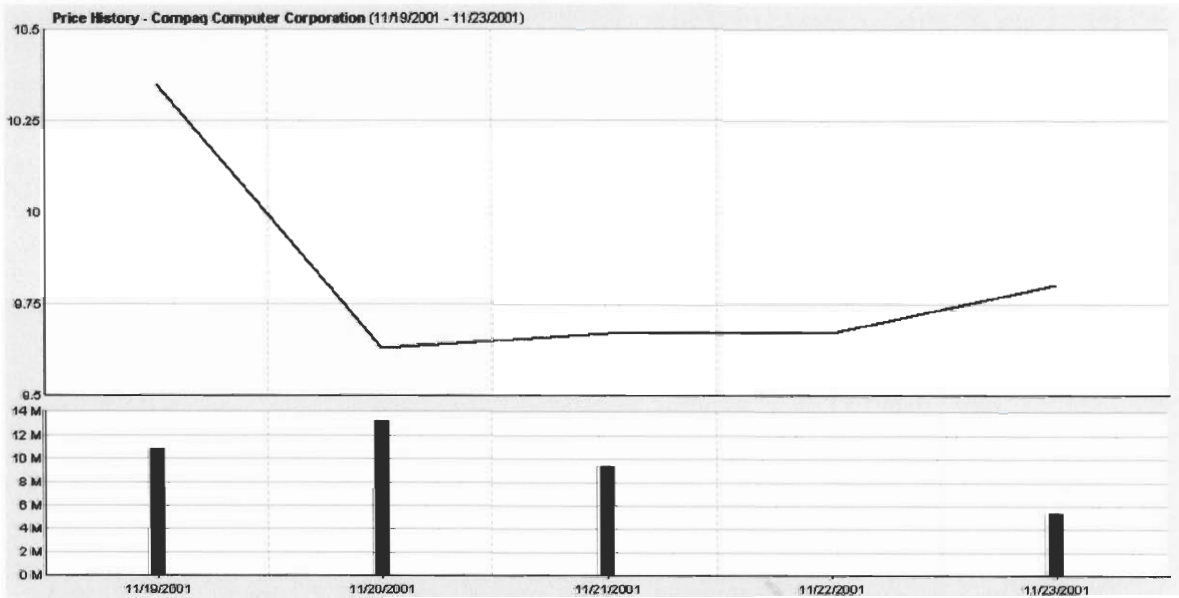


Figure 4.6 (Week 2 History of Compaq Computer Corporation (CPQ))

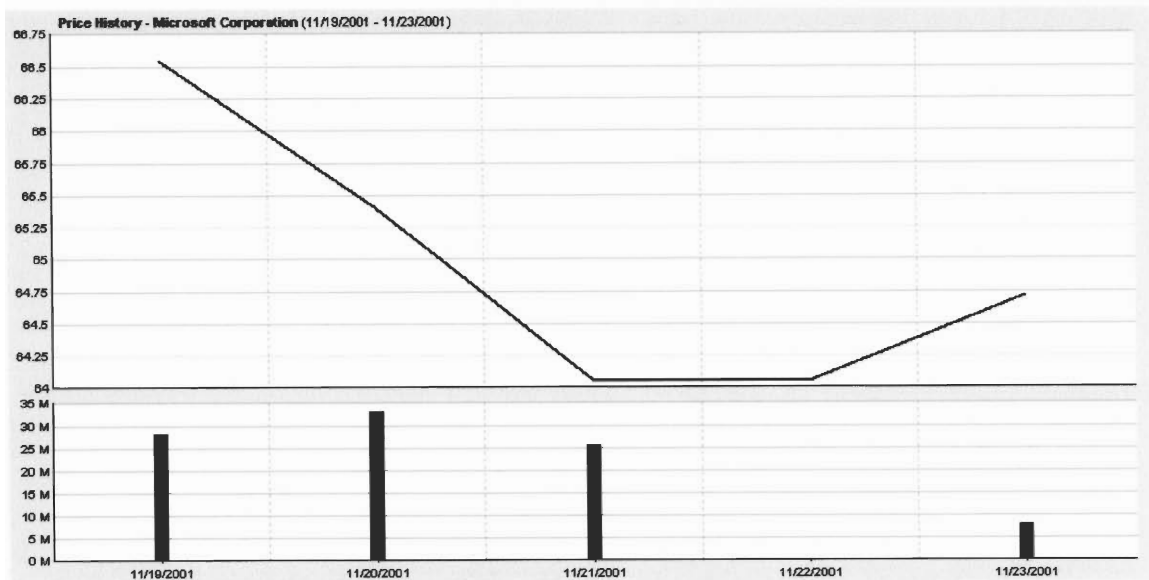


Figure 4.7 (Week 2 History of Microsoft Corporation (MSFT))

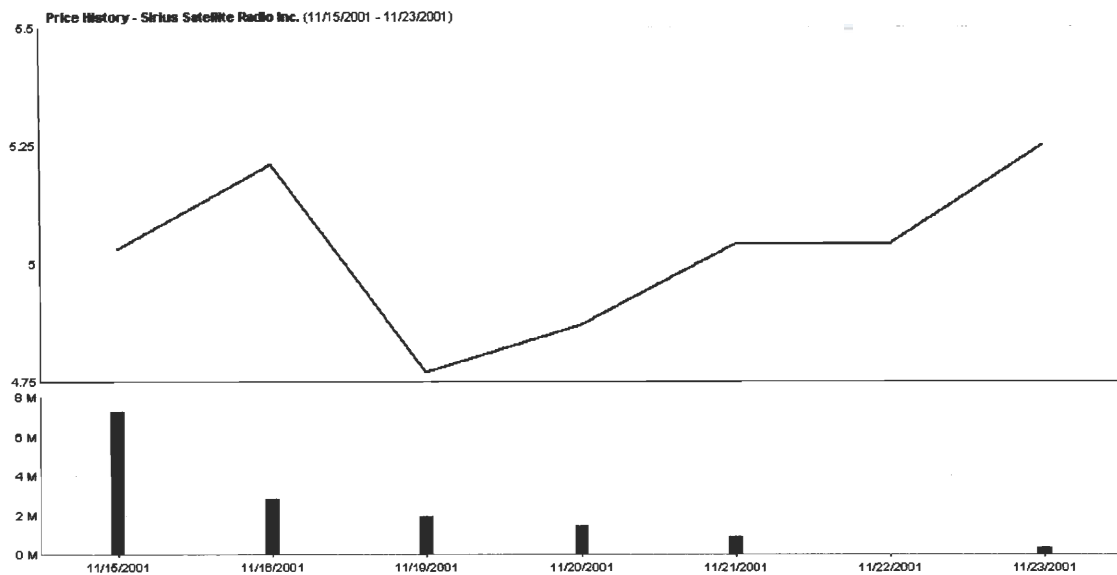


Figure 4.8 (Week 2 History of Sirius Satellite Radio (SIRI))

4.3.2 Friday (11/23/01)

While I was doing this search, I tried to invest in AOL Time Warner (AOL) since it's an Internet company. In this case I'm testing something very important that I had been thinking about concerning daily trading. I'm testing what I would call the "spring effect". The reason I call this the spring effect is for this reason; if you drop a spring from 3 feet,

then the spring will bounce back up to 2 feet then if its properly touching the ground it should bounce back somewhere under 1 feet then it will trail off quickly after, if it doesn't stay on the ground all together. I believed that this effect represents what happens to Internet companies. When I bought the AOL stocks, it went back and forth quickly with a variation ratio of 5%. Thus, I was testing to see if there would be a second bounce of the stocks. As a result I got a gain of 0.49%. The figure 4.9 shows this idea over a few days. This small test partially satisfied me, since it does show a bounce, but in this case it's not a big bounce. From this test I had decided to make another attempt later on since I can't be completely convinced by this one test alone. Table 4.2 summarizes the losses from week 2.

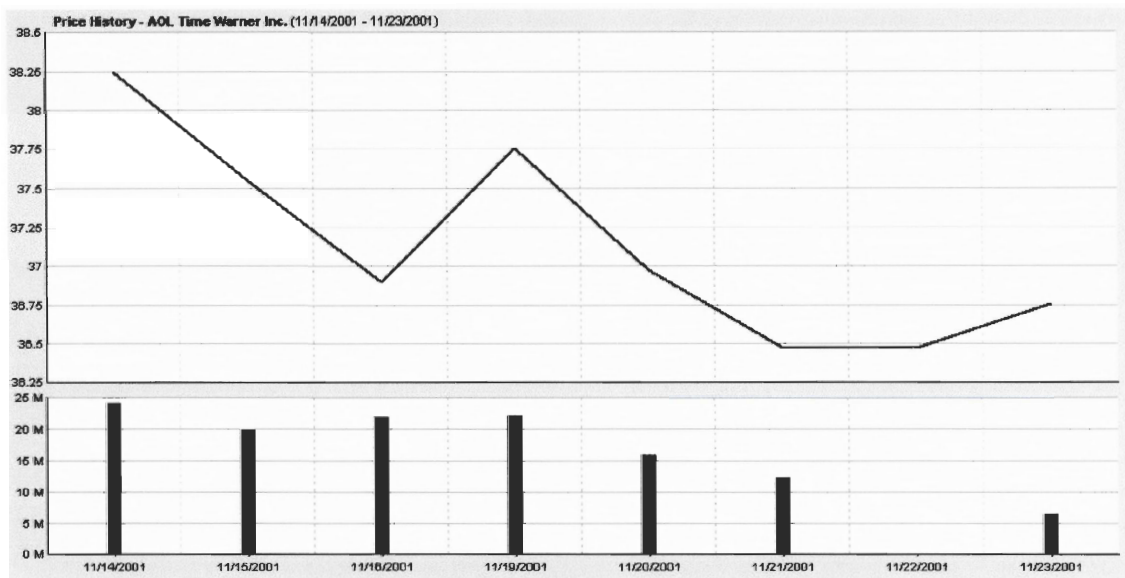


Figure 4.9 (Week 2 History of AOL Time Warner (AOL))

CASH	EQUITY	TOTAL	Loss/Gain	%
\$194,265.92	\$0.00	\$194,265.92	-9,835	-4.82%

Table 4.2 (Results for 11/18/01 – 11/23/01)

4.4 Trading Week Three (11/26/01 – 11/30/01)

I tried my new strategy after a long period of research on November 30 2001, the last day of the third week. On that day in the morning I found an article explaining that a new "IT" invention was going to be exploited by Amazon. This news would most likely

raise the Amazon stock value, since it will make people interested in Amazon. Thus, I decided to buy stocks from this company at a value of \$80,000. At the same time I found another article concerning Sirius Satellite Radio, it detailed the launch area of the satellite radio sector that had been made. This good news from Sirius Satellite Radio had great potential to increase their stock market value; this is why I bought \$60,000 worth of stocks from Sirius Satellite Radio. I remained then with \$50,000 that I could invest, if I need to. After waiting for 2 hours I saw that the slope for Amazon was flattening, so I decide to sell it and I obtained an increase of 3.91%. I then tried the “spring effect” on Amazon at this time, to confirm my theory. I bought stocks after they dropped. This time, I was able to sell back the stocks and gain 1.07%. This test is a good point for my theory but further checks were still needed since I cannot be satisfied from only two test. At the end of the day I sold the Sirius Satellite Radio stocks and gained 3.43% from this investment. Figure 4.10 and 4.11 show the stock fluctuations for Amazon and Sirius Satellite Radio over the third week.

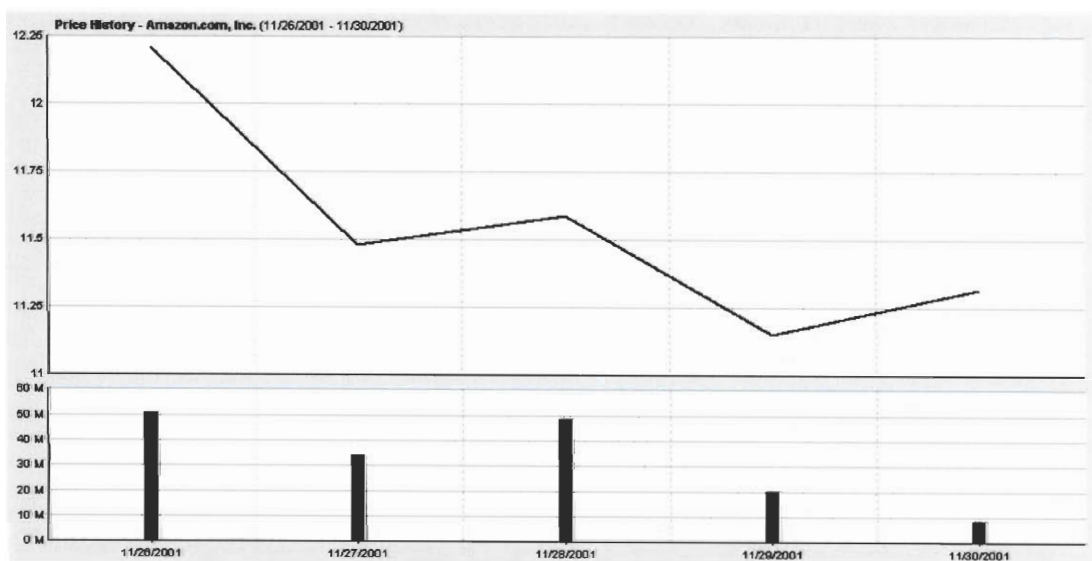


Figure 4.10 (Week 3 History of Amazon.com (AMZN))

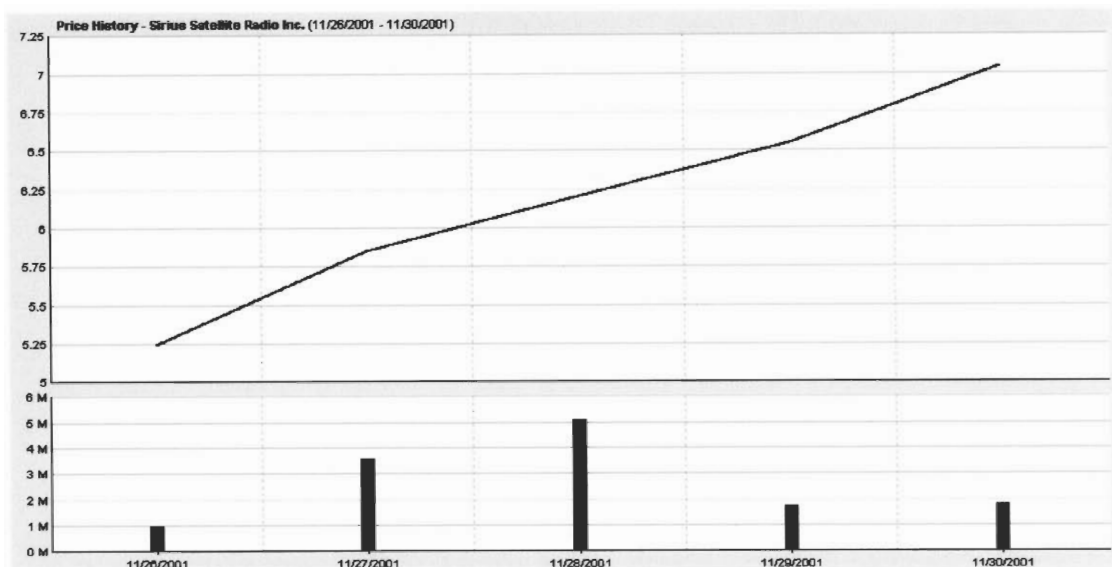


Figure 4.11 (Week 3 History of Sirius Satellite Radio (SIRI))

To conclude this last day of the week, the test of my new strategy of trading was really satisfying since all my transactions gave me a gain and as scheduled I had no equity and more money to invest for the next day or to save if the market was going down. I made about five thousand, six hundred dollars in week 3, as Table 4.3 shows, a much better showing than the week before.

CASH	EQUITY	TOTAL	Loss/Gain	%
\$199,825.54	\$0.00	\$199,825.54	5,560	2.86%

Table 4.3 (Results for 11/26/01 – 11/30/01)

4.5 Trading Week Four (12/03/01 – 12/07/01)

4.5.1 Monday (12/03/01)

On December 3rd, the value of the stocks from the companies that I had been watching were going down, so I didn't invest, since it was a bad day to invest. However, this also meant that it was the perfect time to buy back these stocks, or would be soon, so I had to watch the stock market very closely.

4.5.2 Tuesday (12/04/01)

On December 4th, I found at the opening of the market an article explaining that Mercator (MCTR) will provide HIPPA integration for the American National Insurance Company. I believed this great contract that Mercator obtained would surely increase the value of its shares, so I decided to buy Mercator stocks for \$150,000 and to keep \$50,000. In doing this I'm taking some risks, but I was certain that the stocks of this company would increase after that kind of news. I was correct, and as a result I obtained a gain of 10.17%, which meant I had made \$14,176.00 in just one transaction. The figure 4.12 perfectly shows the effect of this news on Mercator's stocks. Later during the day there is an article about Amazon saying that they bought Egghead.com. From this news I can expect both a drop and an increase of Amazon's stock value. I believed that the stock for AMZN would increase due to this move in the market (see figure 4.15). Thus, because I'm not certain that the stocks would increase I only spent \$80,000 in the stock from Amazon. By the end of the day, my supposition was right since its value increased by 6.16%.

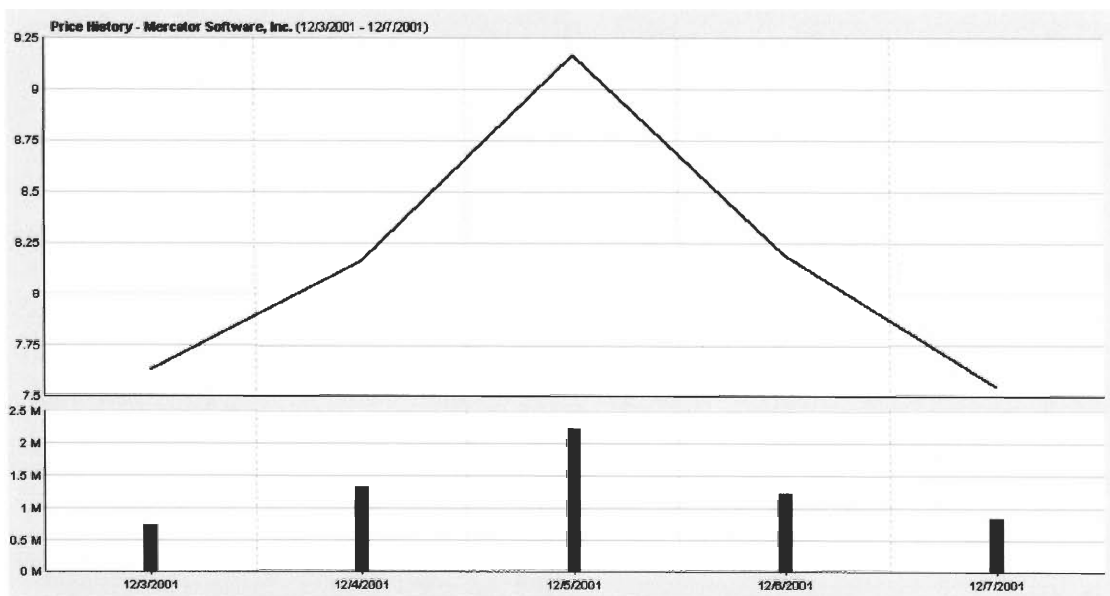


Figure 4.12 (Week 4 History of Mercator Software (MCTR))

4.5.3 Wednesday (12/05/01)

On December 5th, I noticed that a company I had been watching was going down for a few days. And, based on the graph history of this company I was able to see that the graph was like a sinus function. Based on this, BackWeb Technologies (BWEB) stock value should be at its lowest at that time. Thus, I decided to buy some stocks, but due to a good amount of incertitude I decided to spend \$50,000 on this transaction. Based on an article explaining the new actions taken by Gateway (GTW) I bought stock worth \$75,000. I was surprised then how quickly the stock value increased. Indeed, within 30 minutes the stocks got a +7% increase. Since it was a fast increase I decided to sell my stocks because it may drop as quickly. I obtained +7.53% from this investment. Since I got back some money, I decided to spend my money on Mercator, I was expecting a “spring effect” from what happened yesterday, especially since the stocks valued price went down. I invested \$75,000 in their stocks. During that day I missed the proper time to sell stocks for BackWeb Technologies, but I kept the stocks since I had been expecting them to move back up as they usually do for BackWeb Technologies. By the end of the day BackWeb Technologies stock were back up and I could sell them before it dropped down during the last 30 minutes. I sold it back with a gain of 9.37%. I was amazed for Mercator, since the “spring effect” over worked. What I mean is, I got a gain of 12.33% with Mercator when I sold the stocks. This result is greater than the last result, which is why I’m surprised since I wasn’t expecting the second jump to be higher than the first jump.

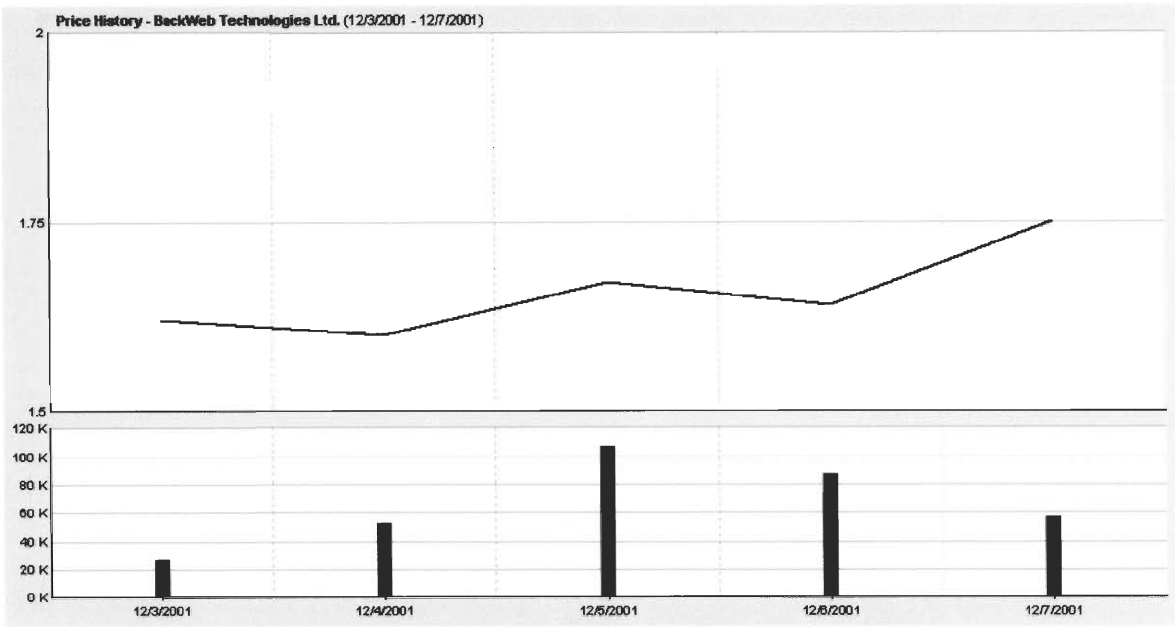


Figure 4.13 (Week 4 History of BackWeb Technologies (BWEB))

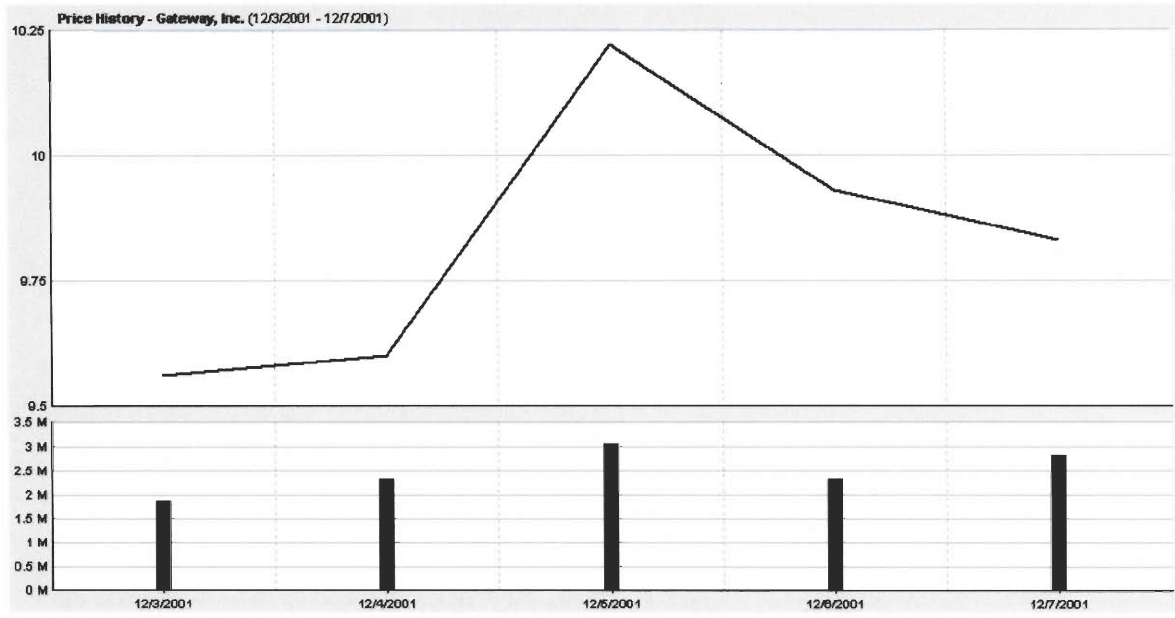


Figure 4.14 (Week 4 History of Gateway (GTW))

4.5.4 Thursday (12/06/01)

On December 6th, I found an article explaining that Amazon was releasing a new alternately designed website. I bought it for \$95,000 worth in stocks. For this case, due to

a problem of bad timing, I almost lost money since I sold my stocks too late. By doing this mistake I got a low gain of 0.17%. Week four was a very productive as Table 4.4 shows.

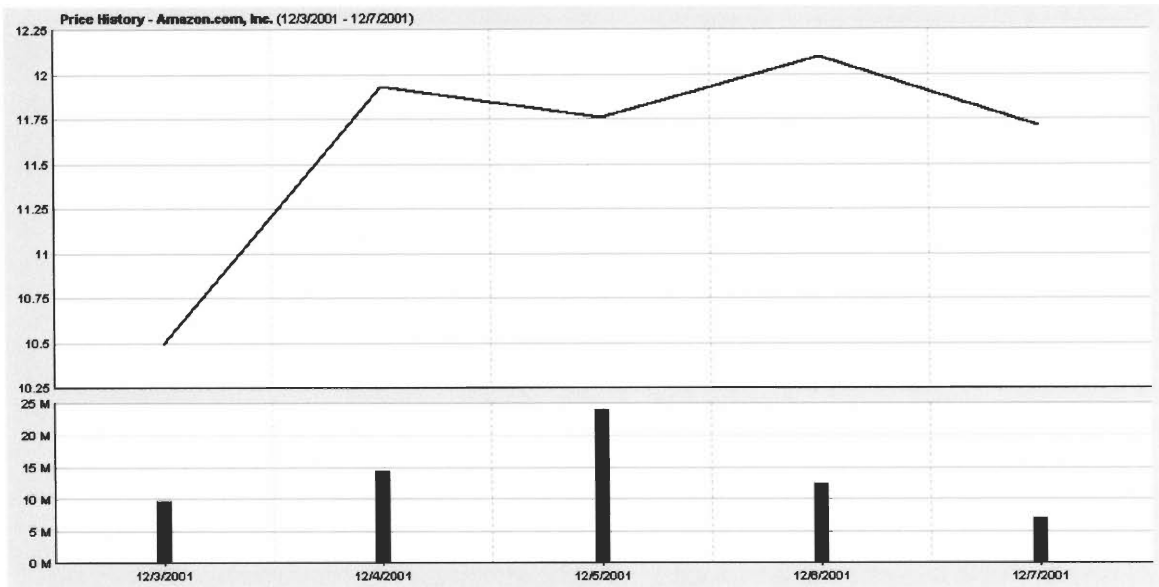


Figure 4.15 (Week 4 History of Amazon.com (AMZN))

CASH	EQUITY	TOTAL	Loss/Gain	%
\$238,553.17	\$0.00	\$238,553.17	38,728	19.38%

Table 4.4 (Results for 2/03/01 – 12/07/01)

4.6 Trading Week Five (12/10/01 – 12/14/01)

4.6.1 Monday (12/10/01)

On December 10th, an article was published to explain how well BackWeb Technologies was doing. With it there were two speeches organized by BackWeb Technologies CEO to explain to shareholders how great they were doing. Due to this news, I was almost 100% sure that their stocks would greatly increase, so I did not feel like I was taking a risk when I invested \$150,000. Over the day, I observed their stocks increase greatly and going back down to even by the end of the day. Thus, the figure 4.16 that represent the fifth week fluctuation of BackWeb Technologies doesn't show this increase. As a result I obtained a gain of 9.70%, which means I made \$14,524.00 on this

transaction and now my total cash is \$253,077.17. It has been 7 business days now since I applied this new strategy and already I have made up for my previous loss and I have a profit of \$53,000. I can be only over satisfied with this result, which is why I tried my best to continue in a similar fashion.

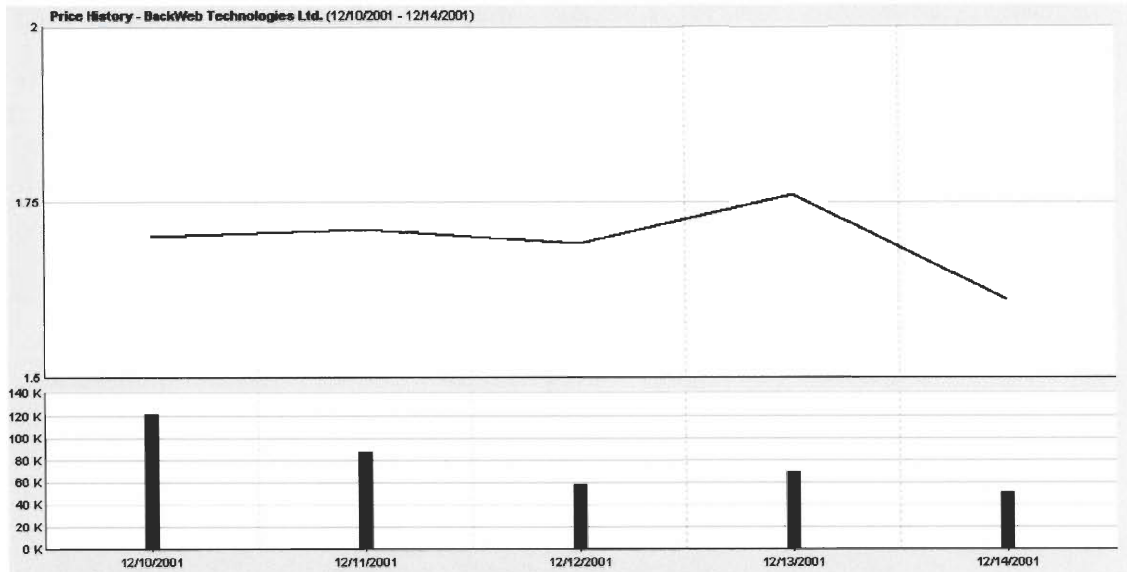


Figure 4.16 (Week 5 History of BackWeb Technologies (BWEB))

4.6.2 Tuesday (12/11/01)

On December 11th, I found an article concerning Mercator explaining that they had been selected by the Defense Logistics Agency to support EDI translation requirements. This large contract was obtained by Mercator and can be only good for their stocks. I bought \$100,000 of their stocks. Since the stocks were going up as I expected I sold my equity because the graph was beginning to flatten out. I got a gain of 4.83% for this transaction. During the day I saw the Mercator stocks going down, I was expecting a “spring effect” but I cannot guaranty it would happen so I did not invest as much as the first time, \$45,000. The stocks value went back up as I expected and I made a profit of 3.62% on this transaction.

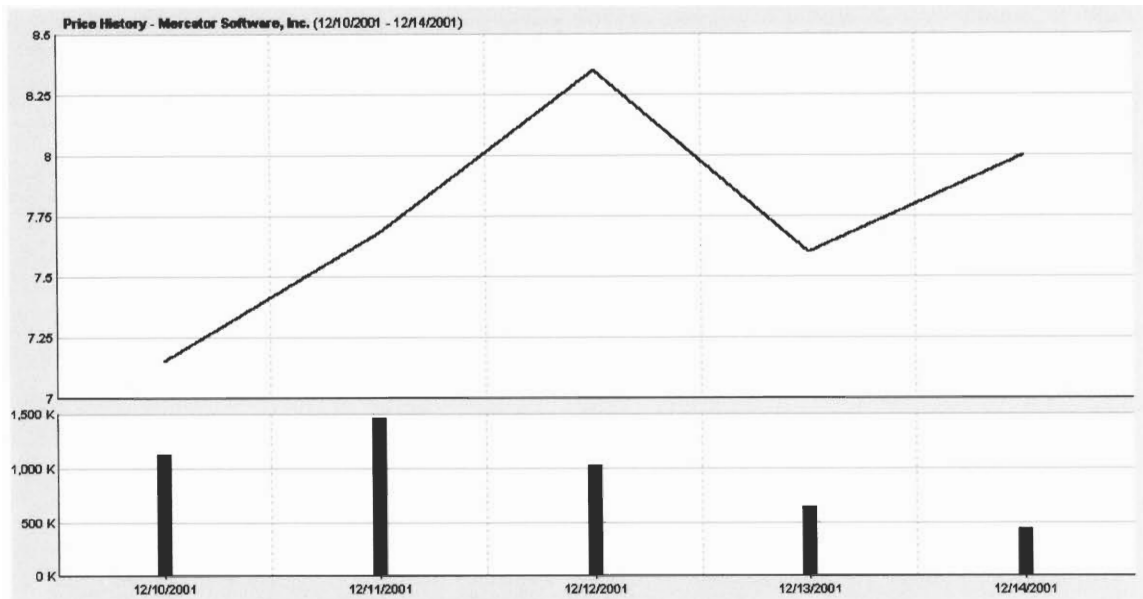


Figure 4.17 (Week 5 History of Mercator Software (MCTR))

4.6.3 Wednesday (12/12/01)

On December 12th, I found another article about Mercator, this time the article explained that “Mercator Raised \$16 Million of Equity and Enhances \$15 Million Credit Facility to Support Growth Strategies” (MSN Money, 14). I can’t think that the stocks will drop with news like this, or if it does I would not understand why at all. To me, there is no risk based on this article so I bought stocks for a value of \$180,000. As I was expecting the stocks value went up and I made a gain of 6.15%. The figure 4.17 perfectly shows the evolution of Mercator’s stocks over the week. At the same time, while I was watching the stocks changes, I saw that BlackWeb Technologies stock value dropped down for no major reason. To me, this looked like the best time to buy stocks from them, since it will probably go back up; I bought for \$60,000 in stocks. Due to bad timing, again I was not able to sell my equity at a good time. I was not paying enough attention to the quick changes that were made for this stock. I sold back my equity and lost 1.82% of my money. As I explained earlier, timing is really crucial in day-to-day trading.

4.6.3 Friday (12/13/01)

On December 14th, I found several articles that advised people to get Sirius Satellite Radio stock because they were a strong buy. I thought these articles would definitely increase the stocks value of Sirius Satellite Radio since people would rush to buy these stocks. So, I bought Sirius Satellite Radio's stocks for a value of \$150,000 before the massive rush from the people; and by doing so I expected to obtain a 10% gain from this investment. In figure 4.18 you can see the increase in Sirius Satellite Radio's stock value. As a result, I sold my stocks when they almost got a 10% increase. I gained 8.91% from this transaction, making \$13,230. I sold Sirius Satellite Radio's stock, which turned out to be a good idea because they soon went down and continued to decrease through out the day. As it went down, a new article was published saying that Sirius Satellite Radio was one of the "U.S. hot stocks of the day". I was thinking that this article will probably switch back up the stock value of Sirius Satellite Radio. What's more, I was expecting the "spring effect" on this stock, so this article just give me another reason to believe that this stock will go back up. I bought Sirius Satellite Radio's stock based on these ideas for a value of \$75,000. Within a few hours I was satisfied to observe that the stock went back up as I was expecting. I was able to gain 7.12% off this second transaction with Sirius Satellite Radio. Near the end of the day see that Silicon Graphics (SGI) stocks were dropping down. In my opinion, this was the perfect time to buy stocks from this company since they were dropping down for a long time already (1 week, see figure 4.19). However, I was not sure about this, so I couldn't afford to bet a considerable amount of money based on my idea. I bought Silicon Graphics stock for a value of

\$29,000 and I sold it back by the end of the day. By the time I sold it the stock value increased by 3.40% based on the time I bought it.

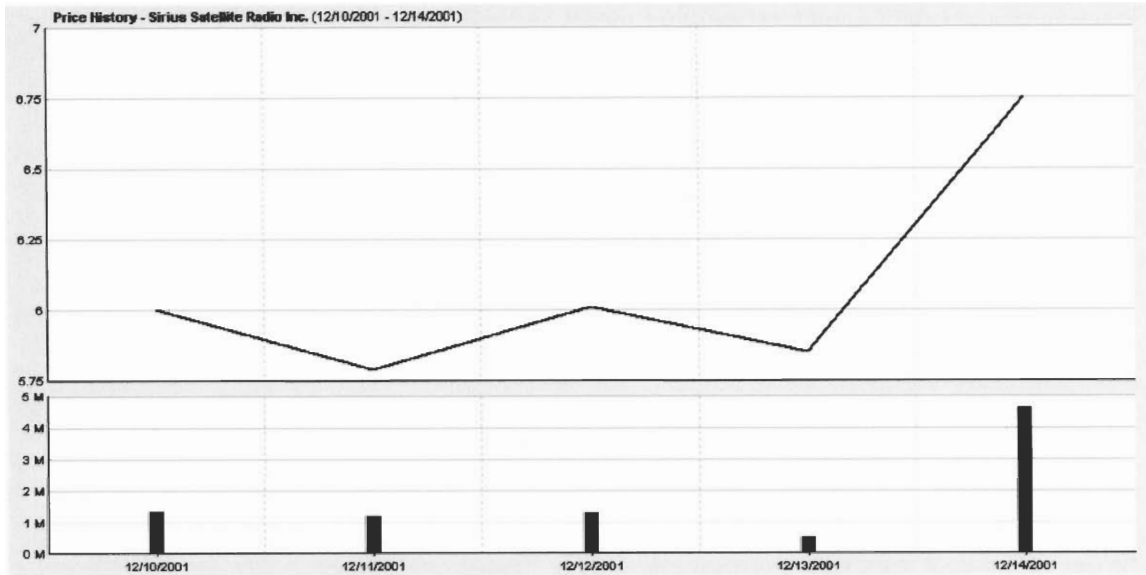


Figure 4.18 (Week 5 History of Sirius Satellite Radio (SIRI))

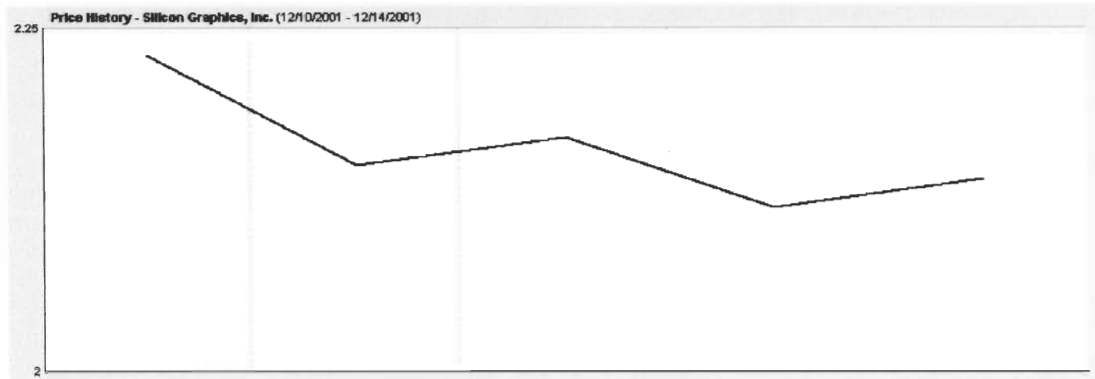


Figure 4.19 (Week 5 Silicon Graphics (SGI))

In the fifth week on the investment period gains were made that were similarly impressive to that of the week before, as Table 4.5 displays.

CASH	EQUITY	TOTAL	Loss/Gain	%
\$289,004.17	\$0.00	\$289,004.17	50,451	21.15%

Table 4.5 (Results of 12/10/01 – 12/14/01)

4.7 Trading Week Six (12/17/01 – 12/21/01)

4.7.1 Monday (12/17/01)

On December 17th, during the early morning, I discovered an article that had been published last Friday night after the close of the market. "Shares of XM, Sirius up on Silicon Graphics Cowen's 'strong buy'" (MSN Money, 15). This was another article published after the closing of the market on Friday. And the same type of article was published again over December 17th. These articles were putting me back into a similar case I had on December 14th with Sirius Satellite Radio. And based on these articles I bought again Sirius Satellite Radio's stock for a value of \$140,000 right at the opening of the market. Within a few hours, the stock was up by 15.10% and the value of this stock was coming close to \$8.50. I wasn't expecting Sirius Satellite Radio's stock to go over this \$8.50 limit, so I sold my stocks at \$8.46. The figure 4.20 shows the Sirius Satellite Radio's stock fluctuations.

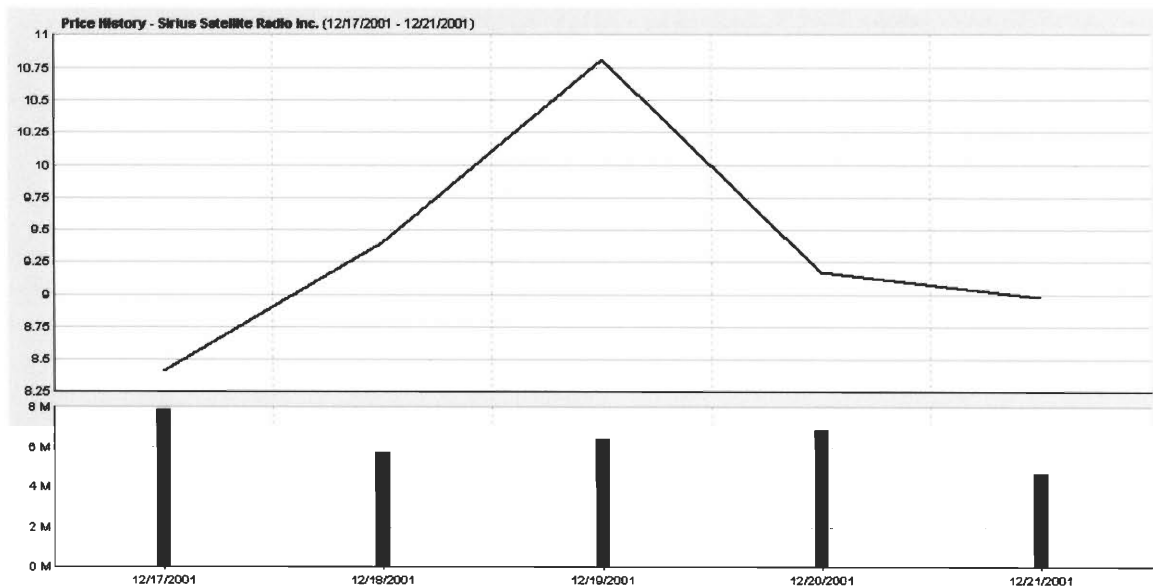


Figure 4.20 (Week 6 History of Sirius Satellite Radio (SIRI))

Before the end of this day, I had noticed that a good article was published for Texas Instruments Incorporated (TXN). This article was published right after the socks dropped down. Thus, I believed it would go back up with this article and I bought stocks. But, at the end of the day I observed that I was wrong since the stock market went down by -0.40%. I do not know why the stock market reacted like this, but in any case I did not lose much money, I only lost \$308.00 for this mistake.

4.7.2 Tuesday (12/18/01)

On December 18th, Mercator announced that M&G, one of the largest retail unit trust managers in the UK and specialists in investment management, had selected Mercator as the integration standard for its UK operations. This news was important news for Mercator since this meant that they obtained a valuable contract. Thus, believing the stock would greatly increase I bought Mercator's stock for a value of \$120,000. A few hours after this article was published, I was surprised to observe that the Stocks didn't increase by much, since it only increased by 1.23%. This surprised me, because I was expecting a greater increase in the stock value since this was really good news for Mercator.

4.7.3 Wednesday (12/19/01)

On December 19th, there were not any good activities or any good news articles on the companies that I was watching. It wasn't a good time to invest during this day. Week 6 had promising gains similar to week 4 and 5 but not as large of a percentage gain.

CASH	EQUITY	TOTAL	Loss/Gain	%
\$326,956.17	\$0.00	\$326,956.17	37,952	13.13%

Table 4.6 (Results for 12/17/01 – 12/21/01)

4.8 Trading Week Seven (12/24/01 – 12/28/01)

4.8.1 Thursday (12/27/01)

On December 27th, Mercator announced it would supply the integration technology and solutions to automate invoice processing in Hanover, a Germany-based Tableer flight company Hapag-Lloyd Flug. I did not see how this news could decrease the stocks value; so in my opinion it was safe to invest based on this news. I invested \$140,000 and I got a gain of 8.41% within 45min. The figure 4.21 shows the increase of the stock value over the week.

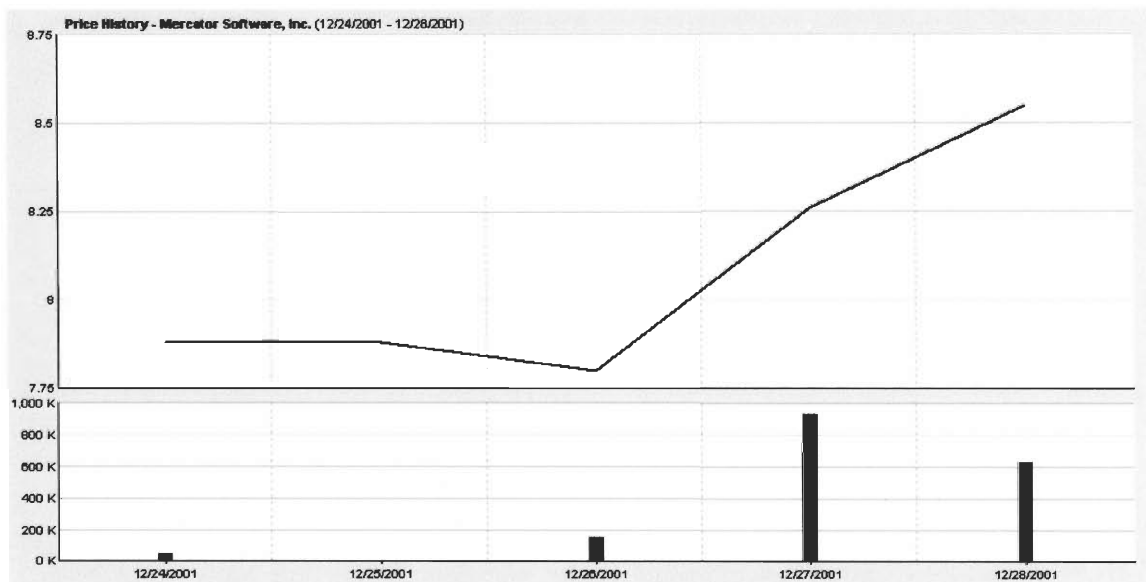


Figure 4.21 (Week 7 History of Mercator Software (MCTR))

During the day, I found an article concerning AOL. This article explained that AOL's worldwide membership surpassed 33 million now. This was good news for AOL, thus I bought AOL's stock for a value of \$100,000 since it would most likely increase. By the end of the day the stocks increased by 2.36% so I sold it to get a gain of \$2,305. The figure 4.22 shows the increase of the AOL's stock value over the week.

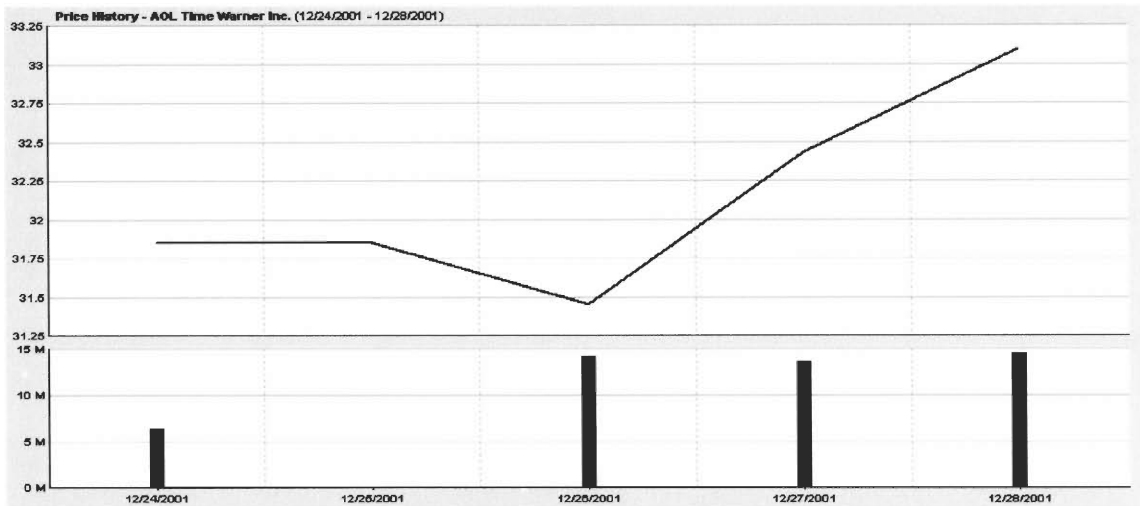


Figure 4.22 (Week 7 History of AOL Time Warner (AOL))

4.8.2 Friday (12/28/01)

On December 28th, I found an article that showed the results made by Amazon during the holidays: "Customers around the World Order over 37.9 Million Items during the Holiday Season from Amazon.com" (MSN Money, 16). Due to this article I decided to buy stocks at a value of \$120,000. After a few hours, I observed that the stocks were increasing, but it wasn't as big as I was expecting it to be, so I decided to sell my stocks to make a profit of 2.71%. The figure 4.23 shows how Amazon increased back after a slight decrease that was in itself caused by an important increase on December 26th. I believe that even with increase in spending in the market that week seven profits were down (Table 4.7) due to the short week.

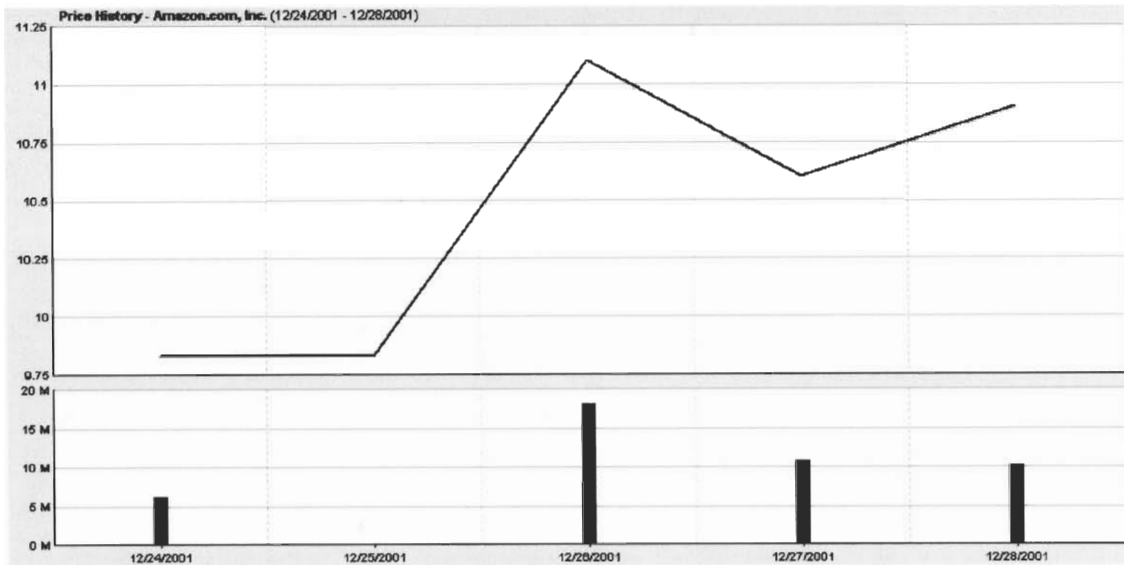


Figure 4.23 (Week 7 History of Amazon.COM (AMZN))

The summary of the seventh week is:

CASH	EQUITY	TOTAL	Loss/Gain	%
\$345,789.17	\$0.00	\$345,789.17	18,833	5.76%

Table 4.7 (Results for 12/24/01 – 12/28/01)

4.9 Trading Week Eight (12/31/01 – 01/04/01)

For this week, I found more than one article that explained that the stocks should greatly increase because of the New Year. Thus, I expected this phenomenon to increase for a few days. After which the stocks and then the stock market should go back down since it would probably go over its real value. One of these articles explained that Amazon, Silicon Graphics and Lucent Technologies Inc. (LU) were the companies to invest in. Trusting these reports and believing that the change over the New Year would bring a great increase to the stock market, I bought Amazon, Silicon Graphics and Lucent Technologies Inc. (LU) stocks on January 2nd, 2002. So, I decided to hold my stocks for a few days and by doing so I changed my strategy temporarily for the few days of the New Year, but I would definitely go back to my original strategy as soon as the phenomenon of

the new user was past. The figure 4.24 shows the evolution of the stocks over this eighth week and it shows that it reaches its peak at the end of the week eight and beginning of the ninth week.



Figure 4.24 (Week 8 History of Amazon.COM (AMZN), Silicon Graphics (SGI) and Lucent Technologies (LU))

I sold back my Amazon and Lucent stocks on January 4th, because I observed that their curve was beginning to flatten. I obtained a gain of 14.45% from the Amazon transactions and 11.83% from Lucent’s stocks. The start of the New Year revived the market and profits were gain made on the large scale as Table 4.8 shows.

CASH	EQUITY	TOTAL	Loss/Gain	%
\$265,635.42	\$163,735.39	\$429,370.81	83,582	24.17%

Table 4.8 (Results for 12/31/01 – 01/04/01)

4.10 Trading Week Nine (01/07/01 – 01/11/01)

4.10.1 Monday (01/07/01)

On January 7th, I sold my Silicon Graphics stock because the curve was starting to become flat. By selling Silicon Graphics I made a profit of 32.48% from my investment, which makes a gain of \$55,000. This is by far the most money I had made off of a

which makes a gain of \$55,000. This is by far the most money I had made off of a transaction (shown in Figure 4.24). This also shows that I was right to change my strategy for a few days since I made so much of a gain out of it. By selling Silicon Graphics stocks, it also meant that I was going back to my normal strategy of daily trading.

4.10.2 Tuesday (01/08/01)

On January 8th, Mercator announced that Mutual of Omaha was deploying Mercator's HIPAA Solution to help meet the deadline for compliance with the Health Insurance Portability and Accountability Act (HIPAA). This news was not extremely good; however it was not bad for Mercator. It is difficult to predict the impact an article like this has on the stock market. But I felt the stocks would slightly increase based on this news. However since I was not certain in this case, I invested only 15% of my cash into Mercator, or \$60,000. I obtained a profit of 2.26% from this transaction and which proved me right. Figure 4.25 shows the slight increase for Mercator during the day of January 8th.



Figure 4.25 (Week 9 History of Mercator Software (MCTR))

During the same day, I noticed that Microsoft did a Preview of the UltimateTV Service Enhancements at Consumer Electronics Show. Even if this news is small news compared

to the gigantic company that is Microsoft, I believed this news would be significant enough to increase the value of their stocks, in my point of view. Thus, I bought Microsoft stocks at \$68.56 and I sold it back by the end of the day at \$69.53 making a profit of 1.41%

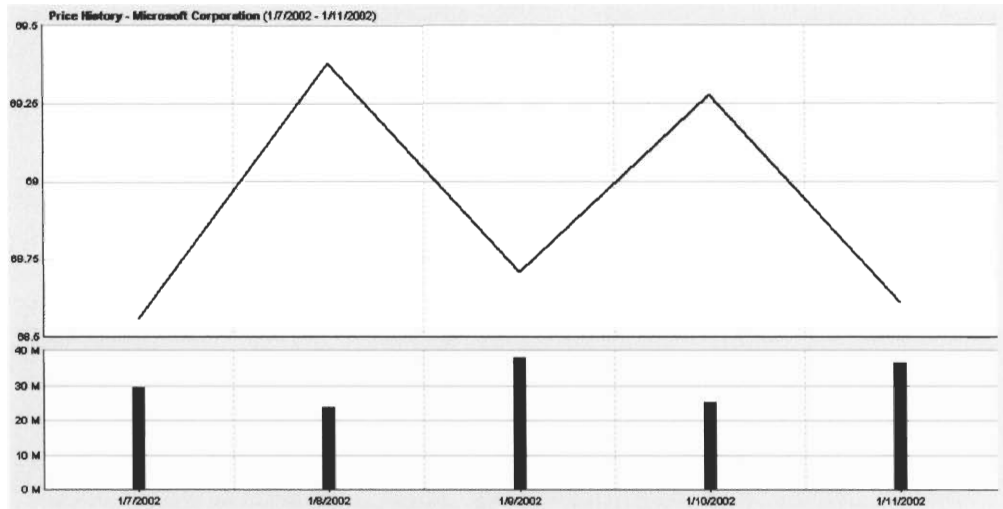


Figure 4.26 (Week 9 History of Microsoft Corporation (MSFT))

4.10.3 Wednesday (01/09/01)

On January 9th, an article was published that said: Hewlett Packard would make a further investment in Aspire to add to its initial investment in January 2001, to increase its stake by seven percent. Hewlett Packard stocks were going down in the days leading up to this article as figure 4.27 shows. This article was for me, a sign that the stocks would go back up. I bought \$150,000 of Hewlett Packard stocks, which is equal to 34.25% of the total cash that I had. From this transaction I got a gain of 4.04%.

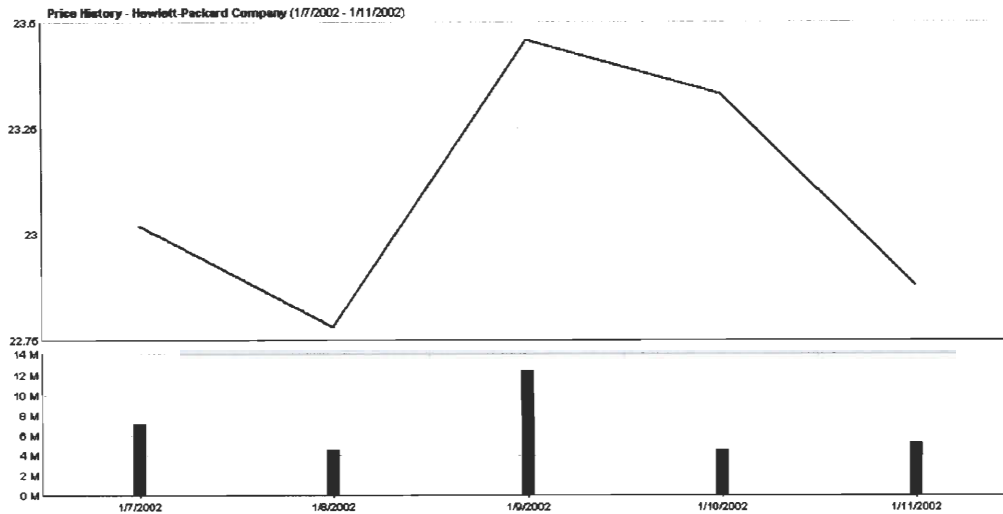


Figure 4.27 (Week 9 History of Hewlett Packard Company (HWP))

The second week of the New Year was not as lucrative as the first as Table 4.9 shows.

CASH	EQUITY	TOTAL	Loss/Gain	%
\$444,661.31	\$0.00	\$444,661.31	15,291	3.56%

Table 4.9 (Results for 01/07/01 – 01/11/01)

4.11 Trading Week 10 (01/14/01 – 01/18/01)

The stocks that I had been watching were all going down. I'd rather wait until the end of the drop to buy stocks. To me this drop is due to the over value of the stocks after January 1st. I do not agree with the analysts that say the over value is coming from the reaction after September 11th. In fact, to me this drop is due to the increase in January due to the change of the New Year. If I'm right then the stocks value should drop back down to the value it was before January. Only time will tell what the correct theory is. Stocks went down all week; it was too dangerous to invest in any stocks, so I didn't do any transactions. Figure 4.28 shows how the main stocks that I was watching did during this week. This was the last week of transactions for this project, but since all the stocks are going down like this, it means the best time to buy the stocks back will be sometime during the beginning of the next week.

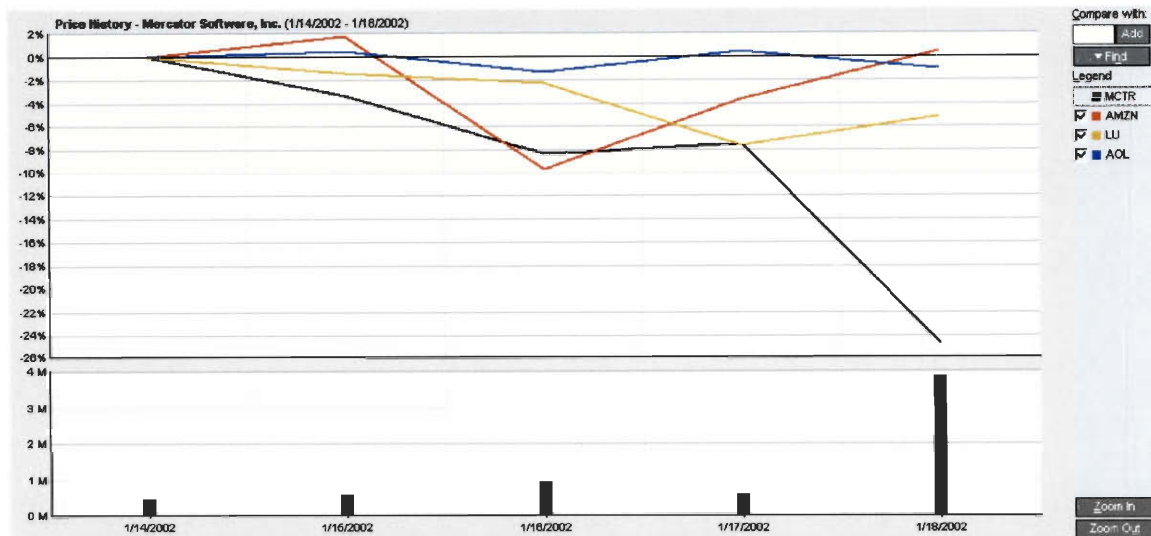


Figure 4.28 (Week 10 History of Amazon.COM (AMZN), Silicon Graphics (SGI) and Lucent Technologies (LU))

Since I didn't have any transactions, the summary table of this week is the same quantity of cash as the last week summary table.

CASH	EQUITY	TOTAL	Loss/Gain	%
\$444,661.31	\$0.00	\$444,661.31	0	0

Table 4.10 (Results for 01/14/01 – 01/18/01)

4.12 Technology Conclusions

As an overall result, I made a profit of 122.33% during these 10 weeks of time constraint. This result is more than satisfying. However, this was based on paper money and I don't believe I would have been taking the same amount of risk in my transactions with real money. The strategy that I developed and the "spring effect" have been proven to be working with my results, nevertheless it is extremely time consuming and I believe it would be very difficult to stay calm while applying my type of strategy if it was done with real money.

The following table shows the summary of all my transactions, it also shows how the companies that I picked during this project did during these 10 weeks.

Company	Open Value	Close Value	Ratio	High	Low	Variation	Nbr of Trans.	Avg Prof for each Trans.	Total Profit
ABIZ	\$0.66	\$0.19	-247.37%	\$0.96	\$0.05	1820.00%	1	0.00%	0.00%
EX	\$1.02	\$0.91	-12.09%	\$1.43	\$0.68	110.29%	1	-10.68%	-10.68%
BWEB	\$1.19	\$1.35	11.85%	\$1.96	\$1.19	64.71%	2	9.54%	19.07%
SGI	\$1.80	\$2.58	30.23%	\$3.09	\$1.80	71.67%	2	17.94%	35.88%
SIRI	\$2.87	\$7.23	60.30%	\$11.63	\$2.87	305.23%	5	3.87%	19.34%
MCTR	\$5.12	\$7.91	35.27%	\$10.04	\$5.46	83.88%	9	6.00%	54.04%
LU	\$6.84	\$6.89	0.73%	\$8.59	\$6.00	43.17%	1	11.83%	11.83%
AMZN	\$7.05	\$9.13	22.78%	\$12.34	\$7.05	75.04%	8	5.63%	45.05%
GTW	\$7.26	\$6.51	-11.52%	\$10.23	\$6.51	57.14%	1	7.53%	7.53%
CPQ	\$8.00	\$11.10	27.93%	\$11.68	\$8.00	46.00%	3	-7.23%	-21.69%
HWP	\$19.30	\$22.42	13.92%	\$23.52	\$19.30	21.87%	1	4.04%	4.04%
NOK	\$22.38	\$21.76	-2.85%	\$26.90	\$21.49	25.17%	1	1.97%	1.97%
TXN	\$31.90	\$26.25	-21.52%	\$31.90	\$26.25	21.52%	1	-0.40%	-0.40%
AOL	\$36.43	\$29.65	-22.87%	\$36.43	\$29.65	22.87%	2	1.43%	2.85%
BBY	\$61.16	\$73.25	16.51%	\$75.16	\$61.16	22.89%	1	3.07%	3.07%
MSFT	\$65.79	\$67.87	3.06%	\$69.55	\$62.80	10.75%	2	-3.26%	-6.51%
	<u>13-Nov-01</u>	<u>16-Jan-02</u>				Total	41	4.03%	165.39%

Table 4.11 (Results for 11/13/01 – 01/16/02)

In this table, the ratio is based on open value and closed value, the variation is based on high and low value and the total profit is based on average profits for each transactions and number of transactions. By using this table 4.11 we can clearly see the advantage of a daily trading strategy by doing a comparison between total profits and ratio. This advantage is shown with company like MCTR or AMZN. It shows that I made more profits from this company than holding to it over 10 weeks. However, it also shows that out off sixteen companies eight had under value results (comparison between total profit and ratio) and CPQ is the best example since I lost money while the ratio shows the company's stock increased.

Chapter 5

Simulated Trading: Diversified Portfolio

5.1 Diversified Portfolio Introduction

The diversified portfolio is a portfolio that has stocks from many different industries. In the 10-weeks prior to this write-up an investment period was simulated in the market. This chapter summarizes the transactions made in the diversified portfolio.

5.2 Trading Week 1 (11/12/01 – 11/15/01)

When starting the IQP investment period it was my intension to invest in stocks that are headed for a potential transition. The stocks that I felt strongly that were undervalued and would make money were: Sonus Networks (SONS), Ciena Corporation (CIEN) and Juniper Networks (JNPR). All three of these companies can be classified as technology stocks. Sonus, Ciena and Juniper were all picked by graphical analysis. The past two year history of Juniper (Figure 5.1) and Ciena (Figure 5.2) are nearly identical making the choice to invest a single one for both.



Figure 5.1 (22-month History of Juniper Networks (JNPR))



Figure 5.2 (22-month history of Ciena (CIEN))

Sonus Networks is new to the market and does not have the history that Ciena and Juniper does have. In the course of the past eighteen months, the company has gone from ninety dollars-per share to 5 dollars per share. The large price range exposes the company's weakness, its volatility. However, I feel that Sonus Networks has dropped enough over the past year that the company has no where to go but up in price.



Figure 5.3 (22-months History of Sonus Networks (SONS))

The graph above shows the rapid losses in stock price over the past year for Sonus Networks (SONS). Not all stocks picked to invest in were discovered through graphical analysis. The decision was made to invest in some stocks that were at the peak of their graphical upward trend, but the positive news of that company and its production lead me to believe that upward trend would continue. General Motors (GM) is a good example of this type of company. General Motors was bought on November 13, 2001. Boeing Motors (BA), Motorola (MOT) and Enron (ENE) were the last three stocks that I bought on November 13, 2001; I viewed all of these stocks as a risk buy. The trends for all three are down and not currently on the way up. However, I feel that the price for these three stocks was low enough that there was little risk in investing in them.

The second day of the investment period was November 14, 2001. I was stressing over changes in the stock prices. The market as a whole was down for most of the morning. I felt if I timed the swing of trends from down to up, I would be able to get some good deals on some more undervalued stocks and at the same time invest the

remainder of my money. The concern of my stocks invested in the day before lead to some of my premature transactions. For example, I have projected Boeing Motors to rise to a price of 60 dollars-per share. However, during the course of the day I observed a strong downward trend and decided to take the gains that I earned from that stock and invest in another company. With losses early from Enron I make a quick decision that Enron's downward trend would continue despite the supposed gas shortage, this decision led me to sell. Figure 5.4 shows this downward trend.



Figure 5.4 (22-month history of Enron (ENE))

Raytheon (RA), Tiffany (TIF) and Art Tech Group were all added to the investment portfolio. With all three stocks I really wasn't sure what to expect. I had studied the history of Tiffany for the past five years and observed that the company had made significant stock price increases in the winter months for 4 out of the past 5 years, as Figure 5.5 shows. I liked the gains that Sonus had for the day before and so I assumed that the strong news of landing a multimillion-dollar contract with the likes of AT &T (T) would trend up. Equinix Incorporated was the final stock that I acted on. During the

course of the day I bought and sold five thousand shares in hopes of making up for the Enron sale loss. Equinix was at a low enough price that I felt comfortable in investing fifty-thousand dollars. My plan was to wait for a 10-percent rise in the stock price and then sell, accumulating a large dividend for a small increase of ten-cents per share.

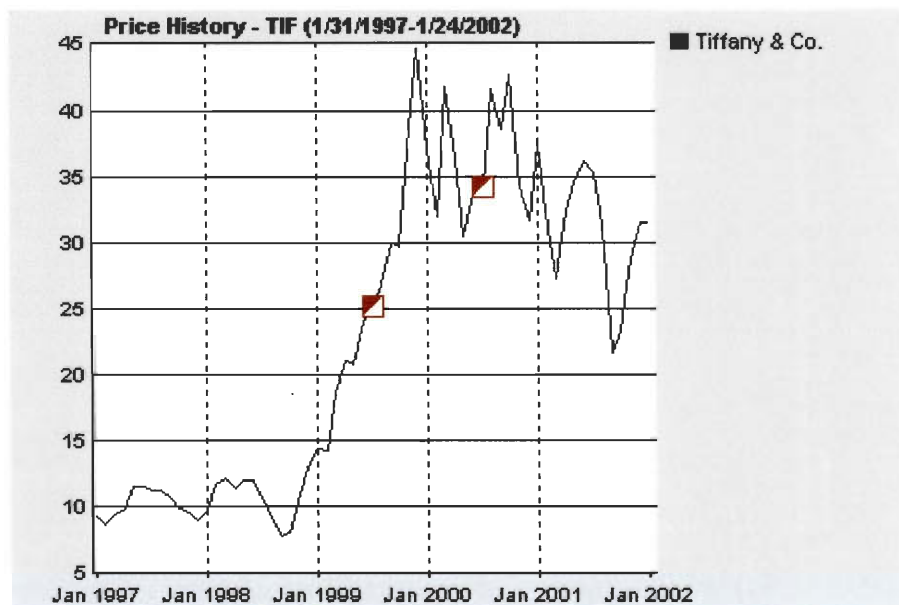


Figure 5.5 (5 year History of Tiffany & Company (TIF))

The third day of transactions I was getting more accustomed to the market and its swings and was able to predict more easily if a stock would go up after a downward trend. For these reasons I reduced the number of transactions and as a result reported gains in equity six-times as large as the two days before. The war on terrorism had large effects on the stock market and my transaction decisions. The first real transaction that was a result of good news for the war on terrorism was the purchase of Starworld Hotels Company (HOT). The news of a possible end to the bloodshed in Afghanistan eliminated in people's mind the possibility of more large-scale terrorist attacks and as a result the Tourist industry displayed gains across the board; Starworld was one of the more positively effected by the news. I bought the stock on November 16, 2001 and sold on the

same day to eliminate my chances of losing equity in the next couple of days due to bad news. The gains to get back where the company was before the September 20th crash alone was enough to make the investment worth while, as Figure 5.6 shows.



Figure 5.6 (1-year History of Starworld Hotels (HOT))

The results of bad news on the economy or an individual company is always reflected in the stock price, but only about half the time that a company reports positive news and, or earnings does that company see the results of that news. A very good example of this is Compaq (CPQ). For nearly 2 months Compaq and Hewlett-Packard (HP) made a very public story of their intended merger. When the merger seemed eminent instead of stock value of the company going up, it went down. I felt that a merger with Hewlett-Packard would give Compaq the momentum they needed to make some strong positive gains in the market; because of this I bought a generous amount of Compaq shares. The following day it became evident that the stock was very volatile, for this reason I sold the stock, but when I saw it going back up I made an impulse decision and bought again. The two final transactions for November 15, 2001 were sales of stocks

bought the day before Motorola and Art Tech Group, both I felt had too much volatility and range in the two days that I held them.

The Friday of the first week on investment I expected very little positive to happen in the market and I decided to sell a number of company shares early in the morning. Raytheon prices had dropped since the moment I first purchased them and when, on Friday they reached the price at which I bought them I was glad to sell and eliminate my chances of losing money with them. Using the same strategy that I bought and sold Equinix shares, I bought Exide Technologies at ninety-cents a share. The following Monday when the stock price rose 10-percent to ninety-nine-cents I sold. Table 5.1 shows the transactions for the first week.

Company	Symbol	shares	date bought	price bought	date sold	price sold	profit
Sonus Networks	SONS	500	11/13/2001	4.63	-	-	-
Juniper Networks	JNPR	100	11/13/2001	24.88	11/16/2001	24.85	50
Ciena	CIEN	500	11/13/2001	19.07	-	-	-
General Motors	GM	100	11/13/2001	43.49	11/14/2001	45.92	243
Boeing Motors	BA	200	11/13/2001	32.95	11/14/2001	33.89	188
Motorola	MOT	500	11/13/2001	17.96	11/15/2001	18.75	395
Enron	ENE	7359	11/13/2001	9.83	11/14/2001	9.8	-221
Raytheon	RTN	2000	11/14/2001	30.8	11/16/2001	30.8	0
Tiffany & Co.	TIF	200	11/14/2001	27.85	-	-	-
Sonus Networks	SONS	1785	11/14/2001	5.18	-	-	-
Equinix	EQIX	50000	11/14/2001	1	11/14/2001	1.03	1500
Art Tech Group	ARTG	2000	11/14/2001	2.88	11/15/2001	2.89	20
Cendant	CD	588	11/15/2001	15.89	11/16/2001	16.01	71
Compaq	CPQ	9230	11/15/2001	9.95	11/16/2001	10.28	3046
Exide Corp.	EX	13212	11/16/2001	0.9	-	-	-
Starworld Hotels	HOT	2288	11/16/2001	26.86	-	-	-
Compaq	CPQ	9749	11/16/2001	10.39	-	-	-

End of Week

Cash Total	Equity	Total
3934	202827	206761

Table 5.1 (Transactions for 11/13/2001 – 11/16/2001)

5.3 Trading Week 2 (11/18/01 – 11/23/01)

In the second week of the investment period I had built up a very good understanding of what stock prices would do during the course of the day. I knew when the best times were to buy and sell during the week and even the best times to buy and sell during the day. This higher understanding of daily and weekly trends would help me to reduce the number of transactions and decrease the amount of personal stress. The price of US Airways dropped about 60-percent after the September 11th attack as Figure 5.7 shows. I believed that the price of the stock would rise to the price that it was before the September 11th attack.



Figure 5.7 (1-year history of US Airways)

After purchasing 1663 shares of US Airways I decided that all stocks that I had in my portfolio were either undervalued, or below the price that I had originally bought. For the next 3 days I just watched the equity in my portfolio grow. However, the Table for the week (Table 5.2) show's that I lost more equity than gained.

The Wednesday before Thanksgiving I wanted to clear up some equity to be able to buy stocks the day after Thanksgiving to get some good deals on stocks that have dropped for the past week. I broke even with Ciena and Sonus. I was glad to sell such fickle companies while I still had gains with their investment. The day after Thanksgiving the stock market seemed pretty slow to respond and looked like it could dip at anytime, for that reason I didn't jump to invest in any stocks and by the end of the day I decided that no stocks were worth investing in at that time, the market was too variable.

Company	Symbol	shares	date bought	price bought	date sold	price sold	profit
Exide Corp.	EX	13212	11/16/2001	0.9	11/19/2001	0.99	1189
US Airways	U	1663	11/19/2001	7.56	-	-	-
Ciena	CIEN	500	11/13/2001	19.07	11/21/2001	19.08	10
Sonus Networks	SONS	500	11/13/2001	4.63	11/21/2001	5.1	235
Sonus Networks	SONS	1785	11/14/2001	5.18	11/21/2001	5.1	-143
End of Week							
Cash Total		Equity		Total			
25635		174539		200174			

Table 5.2 (Transactions for 11/19/2001 – 11/23/2001)

5.4 Trading Week 3 (11/26/01 – 11/30/01)

Starting the third week of investment I felt that I needed some more stocks that would start increasing my equity. I decided to sell some dead weight in my portfolio and edited my beginning strategy and decided to pick more stocks that were stronger in the short term than the long term. One stock that I felt had completely bottomed out (as figure 5.8 shows) and was looked like it would be a good stock to hold on to for two, or three days to gain some ground was SCM Microsystems (SCMM). With an overall upward trend in the NYSE I felt that the technology increases would be enough to carry

even a poor stock to a strong price. I bought SCMM at 15-dollars per share and after a dollar rise decided not to get too greedy and sold. The transactions yielded a 16-hundred dollar net gain.



Figure 5.8 (1 year history of SCM Micro (SCMM))

After the SCMM transactions I was in a research mode and was really looking over the whole spectrum of stocks to get one or two winners that I could build up my equity faster than I had been doing. I felt like I was picking stocks that were going up and down and really in the end not changing at all. I felt that I needed to make some money, so I could more freely invest and take bigger risks and hopefully make more money. I decided that the best way for me to make money was to buy or short a stock if I knew what the future price would be. Enron had been dropping for all of November as figure 5.9 shows. Enron on Monday and Tuesday that week was in the top ten in losses for a stock in the NYSE. The move seemed so obvious, so on Wednesday November 28, 2001 I shorted 75,000 stocks of Enron at three dollars and seventy cents a share. During the course of the day the stock price continuously dropped for the whole day. I decided at 2

PM that I would wait until 10 minutes before the closing bell to buy back the stocks that I had been credited. I used the same strategy for NTL Incorporated the next day. Figure NLI shows the transition for NLI over the day that I shorted and bought back the stock.



Figure 5.9 (11/28 History of Enron (ENE))

I did not study NTL Incorporated as much as Enron, NLI was more of an impulse short. I was trying to follow the same pattern as Enron, but I tried to make the money in that single day instead of watching it for a couple days. NLI had a sharp drop at the beginning of the day and continued for the rest of the day as shown in figure 5.10.

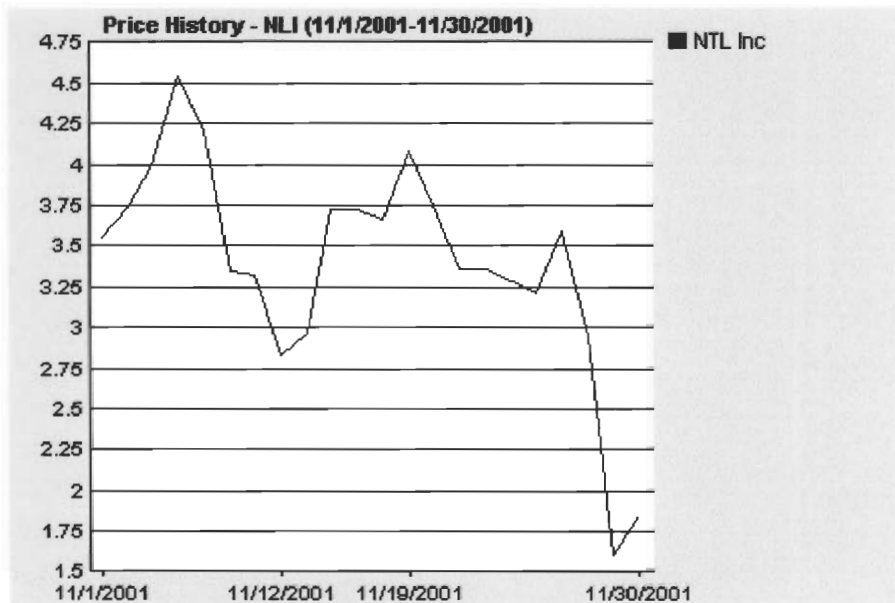


Figure 5.10 (November history of NLT Inc. (NLI))

For the remainder of the week I just rode the Santa Clause rally and saw my equity grow by 20 thousand dollars. I felt safe with 2/3rds of my total assets invested in the market at that current time. I felt that if I sold at that point I would be losing money that I would/could have made. If I bought I could buy a weak stock that could drag down my equity gains for the next two days as Tables 5.3 and 5.4 show.

Transactions

Company	symbol	shares	action	transaction price	closing price	equity	gains
NTL Inc.	NLI	20000	short	2	-	-	-
Starworld Hotels	HOT	2288	hold	-	27.01	61799	618
Compaq	CPQ	9749	hold	-	9.6	93590	5265
US Airways	U	1663	hold	-	6.94	11542	865
NTL Inc.	NLI	20000	buy	1.6	-	-	8000

Closing

Cash	Equity Totals
86117	166931 253304

Table 5.3 (November 29, 2001 transactions)

Transactions

Company	symbol	shares	action	transaction price	closing price	equity	gains
Starworld Hotels	HOT	2288	hold	-	27.14	62096	298
Compaq	CPQ	9749	hold	-	10.15	98952	5362
US Airways	U	1663	hold	-	7.49	12456	915

Closing

Cash	Equity	Totals
86117	173505	258622

Table 5.4 (November 30, 2001 transactions)

Company	Symbol	shares	date bought	price bought	date sold	price sold	profit
SCM Micro	SCMM	1454	11/26/2001	15	11/27/2001	16.12	1236
Tiffany & Co.	TIF	200	11/14/2001	27.85	11/26/2001	28.97	224
Enron	ENE	7500	11/28/2001	(0.6) ^{5.1}	11/28/2001	(3.7)	23250
NTL Inc.	NLI	20000	11/29/2001	(1.6)	11/29/2001	(1.6)	8000

End of Week

Cash Total	Equity	Total
86117	173505	258622

Table 5.5 (November 26, 2001 – November 30,2001 Transactions)

5.5 Trading Week 4 (12/03/01 – 12/07/01)

The company with the biggest fluctuation during the past year and especially the past week was Enron. I had felt comfortable 3 weeks before buying Enron at 9-dollars a share, but now at twenty-five cents a share I was hesitant to invest. My consumer confidence in the company dropped like a rock. However on December 3, 2001 I saw Enron during the course of the morning raise from twenty-five cents a share to twenty-nine cents a share. This was encouraging for me and even though this was a small increase in price, it was still a large percent. I invested in Enron at twenty-nine cents a share and was really not sure how long I could keep that stock in my pocket. Having bought 100,000 shares I knew that having to settle on selling and cutting my losses would

^{5.1} () Means to short a stock.

be disastrous. My original plan was to wait for maybe a 50-100% increase in the stock price and then sell before the price had time to go down. What I actually did was much different. I watched the stock steadily rise for three days with really little fluctuation. The trend at which it went up seemed to be completely straight up and at a large percent increase. Over the course of the week I made six transactions with Enron or their supposed partner Dynegy (DYN). I took a gamble that the news from the December 4, 2001 bankruptcy hearing was going to be favorable to both companies. Though this news and ruling wasn't going to bring the company out of bankruptcy, it could coerce some investors into buying the stock and inflating the value of a worthless stock. The sale of all of the Energy stocks on December 5, 2001 grossed a total of over 65-thousand dollars as Table 5.6 shows.

Transactions							
Company	symbol	shares	action	transaction price	closing price	equity	gains
Eneron	ENE	25000	sell	1.23	-	-	24250
Eneron	ENE	1000	buy	0.96	-	9600	-
Eneron	ENE	85000	sell	1	-	-	53650
Dynegy	DYN	3775	sell	31.4	-	-	15100
Starworld Hotels	HOT	2288	hold	-	29.5	67496	4919
Compaq	CPQ	9749	sell	10.6	-	-	2047
Sonus	SONS	20000	buy	5.2	5.72	114400	10400
US Airways	U	1663	hold	-	7.11	11824	-233

Closing		
Cash	Equity	Totals
178456	193720	372176

Table 5.6 (December 5, 2001 transactions)

December 5th was not only a strong day for gains in money but for gains in equity. Since the start of December the market was showing signs of a strong rally and maybe was at the strongest upward trend since September 20th. The strong signs of what is

known as a Santa Clause rally aided me in the decision to invest 2/3rds of the available assets I had at that time. I felt this was a good finish to the end of the year and a good start to the New Year was evident. Also, that Sonus Networks could rebound this time around. In the end of the last week of December, I felt that there was no reason to jeopardize my gains in the market and I just enjoyed the gains in equity. Gains of over 25-thousand dollars in equity were observed in the combination of the three companies Starworld Hotel, Sonus Networks and US Airways.

Company	Symbol	shares	date bought	price bought	date sold	price sold	profit
Enron	ENE	25000	12/3/2001	0.29	12/5/2001	1.26	24250
Enron	ENE	75000	12/3/2001	0.29	12/5/2001	1	53250
Enron	ENE	10000	12/5/2001	0.96	12/5/2001	1	400
Dynegy	DYN	3775	12/4/2001	27.4	12/5/2001	31.4	15100
Compaq	CPQ	9749	11/16/2001	10.39	12/4/2001	10.6	2047
Sonus Networks	SONS	20000	12/5/2001	5.2	-	-	-

End of Week

Cash Total	Equity	Total
178456	217410	395866

Table 5.7 (December 3, 2001 – December 7,2001 transactions)

5.6 Trading Week 5 (12/10/01 – 12/14/01)

The weeks previous I choose to make transactions that involved a large number of shares and a small profit, which translated into a very sizeable gain. Week five really was the transition from nickel and dime profit stocks to long term slowly investing stocks. I believe that week 5 was a good example of what I would do if I were investing money. The stocks that I would pick to buy with my own money would not be ones with the large potential to climb very fast, but instead the companies that climbed very slowly but always steadily increasing. If a stock has a potential of a fast and strong upward trend

then it is even more likely for a strong hard downward trend too. The faster a companies' stock is able to go up, the faster it is also able to go down.

My 20,000 shares of Sonus had raised a dollar and fifty cents since I had bought the shares. I felt that this increase was reasonable enough and large enough that I was safe to sell. In an earlier week I had waited too long to sell Sonus and by the time I did, most of the value of that stock was less than the value I had wanted to sell at; So to save assets I sold at a minimum loss. I was not going to let this happen to me again. With the holiday season comes two things; the Santa Clause rally and an increase in sales for toys. One company in particular, Activision (ATVI) had seen sales in the past month rise with almost no end in sight. Activision is a maker of video games and video game products. The arrival of the Nintendo Game Cube and the Microsoft X-box is solely accredited to this rise in video game sales. Activision makes video games for the X-box and for the Game Cube. Activision has basically no competition in the video gaming industry. Over the past 3 years Activision's main means of sales were for Playstation 2. Activision is shown in a bit of a lull over the past couple of years and the arrival of the two new gaming systems is just the action to bring their stock price back to life. As the Table shows in figure 5.11 Activision is well on its way to its stock price reaching its appropriate worth value. During the week all other stocks were held, I felt that the Santa Clause rally would carry all of the companies in my portfolio.

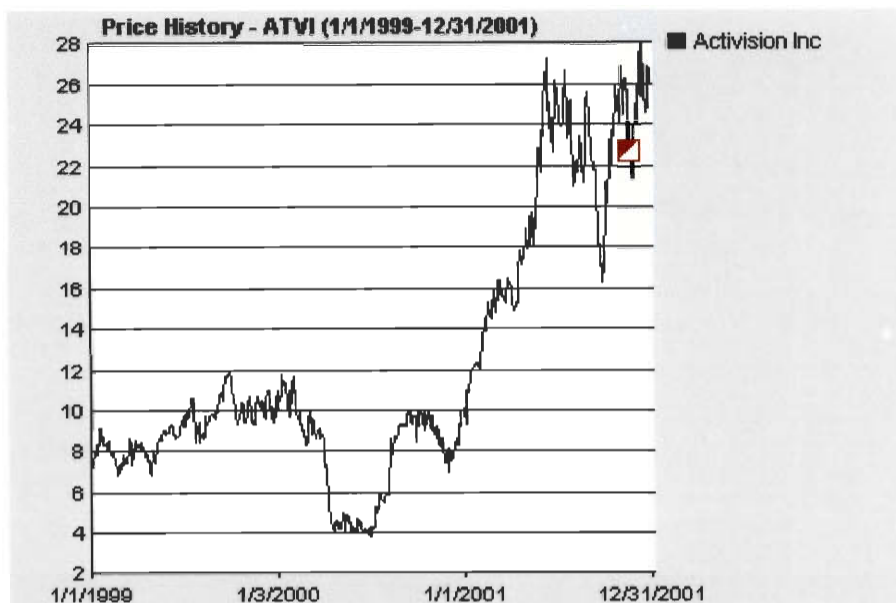


Figure 5.11 (2 year history of Activision (ATVI))

Company	Symbol	shares	date bought	price bought	date sold	price sold	profit
Activision	ATVI	5000	12/10/2001	25.25	-	-	-
Sonus Networks	SONS	20000	12/5/2001	5.2	12/10/2001	6.7	30000
Starworld Hotels	HOT	2288	11/16/2001	26.86	12/10/2001	28.86	4576
Corr. Therapeutics	CORR	5000	12/14/2001	24.2	-	-	-

End of Week

Cash Total	Equity	Total
131238	258028	389266

Table 5.8 (December 6, 2001 – December 10, 2001 transactions)

5.7 Trading Week 6 (12/17/01 – 12/21/01)

Week six was the week before Christmas and I felt that all money needed to be invested to take full advantage of the Christmas rally. I also felt that the market was strong enough to take full risk with my assets. I went with some stocks that had dropped very hard in the recent weeks. Two stocks I bought during the week had been previously shorted, Dynegy and NTL Incorporated. Dynegy prices dropped very hard when Enron, a company that they were associated with went bankrupt. It was observed that the stock

was in the midst of a rebound and that it would continue to rise for the remainder of the year as Figure 5.12 shows. NTL Incorporated is a nickel and dime stock that has fluctuated enough that the purchase and sale of stocks in the course of a day can and will yield a large profit. NLT Inc. is a short term stock and I would not hold the stock for longer than a week, unless the price dropped immediately and then I would wait a day or two for the price to go back up for a respectable gain. Figure 5.13 shows that the stock price has dropped considerably in the last 3-years, the figure also shows that the company has that potential power to be a dominant stock in the market. I felt confident about the purchase of the company especially with its past history of being a dominant leader in the networking. NTL Inc.'s 17-billion dollar debt is the definite reason for their undoing. The company has no reports of recovering from this news and will most likely be seized by the government in the next couple of years. The reasoning for the purchase of the company is to make a quick profit and then dump the unstable stock.

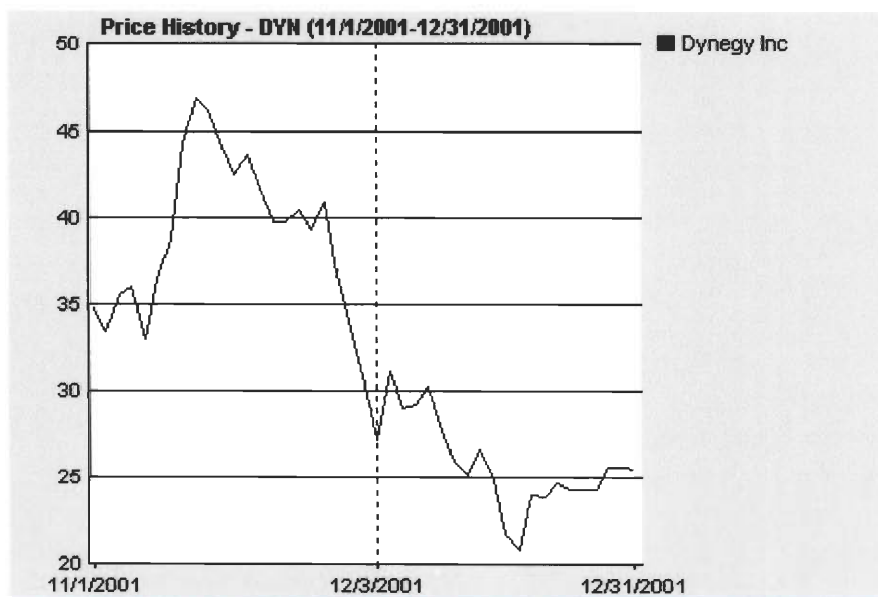


Figure 5.12 (November & December 01' history of Dynegey (DYN))



Figure 5.13 (3 – year history of NTL Inc. (NLI))

Friday December 14th, 2001 five thousand shares of Corr. Therapeutics were bought. On Tuesday December 17th, 2001 it was observed that the biotech market was on a decline I didn't feel comfortable investing in a stock that would not make a profit at the easiest time of the year to make money. Ciena was bought and sold in 24-hours to make a quick profit of over twelve thousand dollars. The bargain of the week however, was the purchase of American Express (AXP) on Thursday, December 20th, 2001. American Express price had been in recession for over a year, but recently had been on a strong upward trend comparable to that of its trend down for a year. The activity of September 11th had obviously affected the stock price and my prediction was the stock would and could increase its price until it at least reached its price of 35-dollars per share from before the September 11th attacks. All of this reasoning and analysis is evident in figure below, figure 5.14



Figure 5.14 (2-year history of American Express (AXP))

Over the course of week six, eight transactions were made, that was the most in two weeks. I saw this as a real vital week to make transactions and purchase company stocks that were going to make profits. Any dead weight stocks during this period would have been a terrible loss of the calendar time and its effects on the market. By not making profits during the time of the Christmas rally I would be missing out on a wonderful opportunity.

Company	Symbol	shares	date bought	price bought	date sold	price sold	profit
Ciena	CIEN	5000	12/17/2001	14.16	12/18/2001	15.47	2800
Dynegy	DYN	2500	12/17/2001	(21.8)	12/17/2001	(24.5)	6750
Corr. Therapeutics	CORR	5000	12/14/2001	24.2	12/18/2001	26.7	12500
Tiffany & Co.	TIF	5000	12/18/2001	28	-	-	-
NTL Inc.	NLI	10000	12/18/2001	0.75	-	-	-
American Express	AXP	3500	12/20/2001	33.8	-	-	-

End of Week

Cash Total	Equity	Total
12238	413295	425533

Table 5.9 (December 17, 2001 – December 21, 2001 transactions)

5.8 Trading Week 7 (12/24/01 – 12/28/01)

Week 7 was an extremely short week; Monday was a half-day for the market. Tuesday was Christmas Eve and as a result the market was closed and so there were really no transactions made during the course of the week, however a net of twenty-six thousand dollars in equity was gained. On Monday, in the morning I decided to invest the remainder of the money accumulated during the term into Boeing Motors. Even though it was no longer the strong stock that I thought it was definitely going to cover some good ground in making a recovery of there stock price. The fact of the matter is that Boeing makes airplanes and after the September 11th attacks the companies stock prices plummeted and have been declining for sometime, due to the lack of confidence in flying and in the stock market in general. The company is far from being in economic trouble now and is definitely not going to go bankrupt anytime soon. However, the company makes airplanes mainly for a country where almost everyone is afraid to fly. In the best-case scenario for the next three years Boeing stocks stay stagnant at about the same price. It is most likely that in the next couple of years that the stock will drop due to lack of business and lack of sales, due to decline in demand for planes. Boeing observed an extremely strong period from February 2000 until September 2001, where the price was very steady. At this time Boeing was the number one maker of Military and civilian aircraft. September 11th dropped the company's stock prices to a point where they haven't been in over two year. From figure 5.15, there is a section of the graph that is a miniature version of the same graphical activity from the strong period (February 2000 to September 2001) that spans from February 1999 to February 2000. That is the type of graphical activity I believe that will be observed by Boeing over the next three to five

years, neglecting any extremely bad or good news. Figure 5.15 shows this activity in detail.



Figure 5.15 (3-year price history of Boeing Motors (BA))

Wednesday December 26, 2001 just like the day after Thanksgiving was an extremely strong day for the market and I saw gains across the board. Table 5.10 shows where the largest equity gains were made in companies that were relevant to the holiday season.

Company	symbol	shares	action	transaction price	closing price	equity	gains
Activision Inc.	ATVI	5000	hold	-	26.84	134200	9950
American Express	AXP	3500	hold	-	34.7	121450	1540
Boeing Motors	BA	318	hold	-	38.6	12275	57
NTL Incorporated	NLI	10000	hold	-	0.82	8200	100
Tiffany & Co.	TIF	5000	hold	-	31.38	156900	4900
US Airways	U	1663	hold	-	5.35	8897	-399

Table 5.10 (December 26, 2001 transactions)

The week overall as well as day-by-day was a strong success even though only one transaction was made that only yielded an additional two hundred twenty dollars in equity at the week's end, small change compared to the large-scale asset investments I

was involved in. Table 5.11 shows the gains the week's final values for total assets, equity and for cash. Notice that the cash value is next to nothing. I felt that even though extremely risky, that it was imperative to have all of my assets invested in stocks at the end of the year, unless the trend of the market changed through the end of the investment period.

Company	Symbol	shares	date bought	price bought	date sold	price sold	profit
Boeing Motors	BA	318	12/24/2001	38.4	-	-	-

End of Week

Cash Total	Equity	Total
27	451422	451449

Table 5.11 (December 24, 2001 – December 28, 2001 transactions)

5.9 Trading Week 8 (12/31/01 – 01/04/01)

The beginning of week seven, I was content to just hold stocks and gain equity on the stocks, I decided to hold the same strategy for week number eight. In week eight I felt that NTL Incorporated peaked to a value that was worthy of my sale, I set my fixed target price at 1.135 \$-per share, or a fifty percent increase in the original price at which I bought the stock. NTL is a very volatile stock and I could not see holding on to a stock for a company that was seventeen billion dollars in debt. The start of a new year means that people have new money to spend and will and as a result of that the market is usually strong in January. I was gaining equity in the stocks that I was invested in and the stocks that I bought through the duration of the week and the past three weeks. Juniper Networks was a stock that I had previously interest in and I felt that the news of their multimillion dollar contract as well as the start to a new year, would accelerate the price of their stock. Finally, the last transaction of the week was that of US Airways (U). I bought US Airways at the beginning of the investment period, but had held the stock

despite having a net loss in equity in the company of a thousand dollars. On Friday January 4th, 2002 I felt that the price of the companies stock was at the highest value that I could foresee it in the next couple of months. I felt like US Airways was the biggest disappointment out of all of the companies that I invested in. I really felt that the company's price had bottomed out and would increase to a price fitting of the company's value. However the September 11th attacks left the company's stock value depleted and the current price now is a display of the current lack of consumer confidence. Figure 5.16 shows the trends of US Airways from the span of a month before September 11th up until the time that the stock was sold, January 2002. It is interesting to note that the company's stock price was at a downward trend before September 11th and the price spiked down hard after September 11th. The fact of the matter is that as early as August of 2001, US Airways prices were dropping steadily.

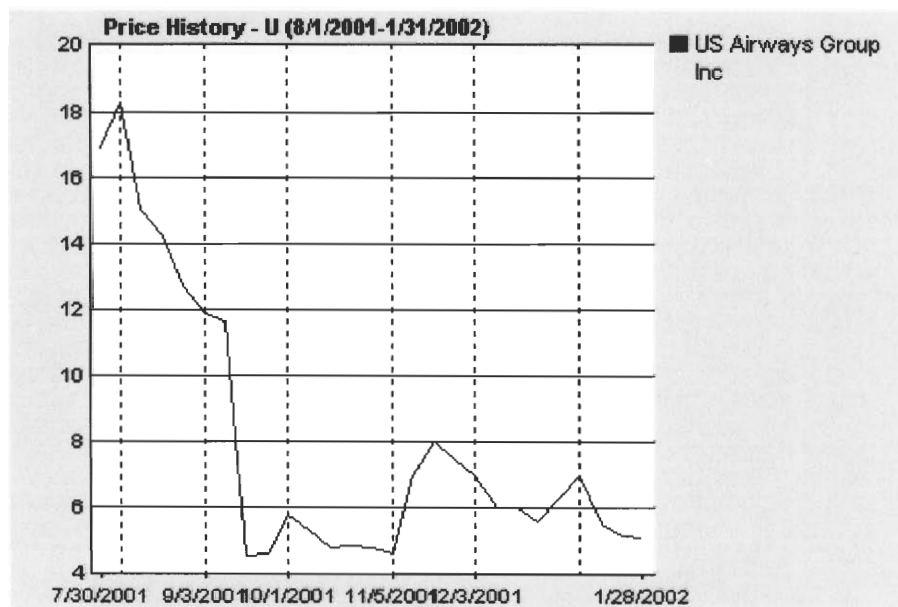


Figure 5.16 (US Airways (U) history August 2001 – January 2002)

Juniper Networks was and is a company that has very rapid and sharp trend graph movement. Figure 5.17 shows that during the course of a couple of days the price spikes up and down in a continuous fashion. The trend for the company had been down, over the past couple of weeks the trend is shifting back up. Even in a day when a company loses ground in the market one can still make a profit in buying and selling that company's stock. Most people would see Juniper as a risk, but I view it as a safe investment for the wise investor.

The most successful way to make money is to find a stock that is at a low point that during the course of the day rises and falls a couple of points and at the end of the day winds up virtually even. Juniper is one of those companies. If a loss is accumulated at first the investor can be confident in the fact that the price and the company will bounce back so that the investor can break even with his original invested amount of money. Over the course of a couple of days the investor begins to understand if his company is a growth company or a dead weight stock.

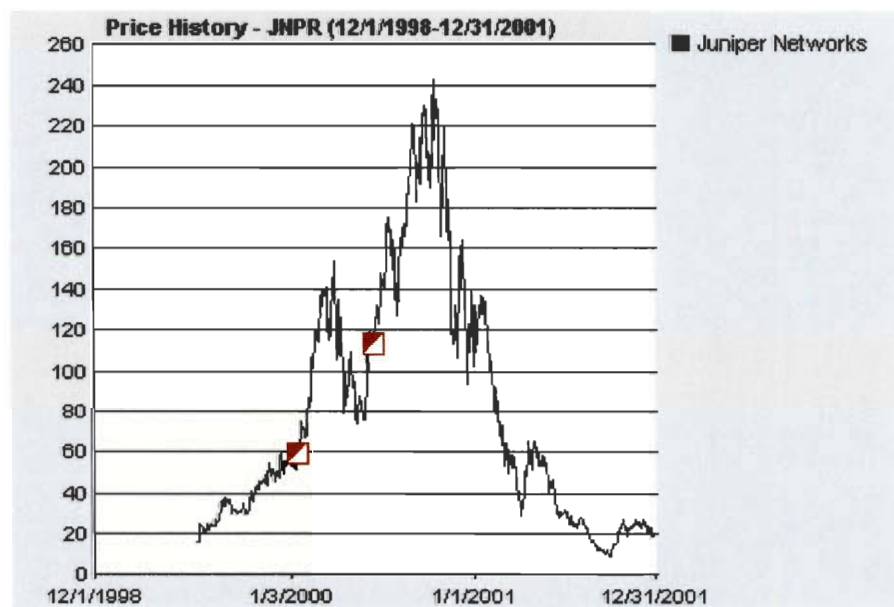


Figure 5.17 (3-year history of Juniper Networks (JNPR))

The net equity gains for the course of the week were comparable to that of the week before. I felt that the time was right to hold stocks and let them appreciate and I believe that the numbers reflected that that strategy was correct and I was correct in thinking that.

Company	Symbol	shares	date bought	price bought	date sold	price sold	profit
NTL Inc.	NLI	10000	12/18/2001	0.75	12/31/2001	1.135	3750
Juniper Networks	JNPR	600	1/2/2002	18.96	-	-	-
US Airways	U	1663	11/19/2001	7.56	1/4/2002	7	-932

End of Week

Cash Total	Equity	Total
11642	454473	466115

Table 5.12 (December 31, 2001 – January 4, 2001 transactions)

5.10 Trading Week 9 (01/07/01 – 01/11/01)

Week nine signified the investment period coming to an end. I believe strongly that some of the stocks that I invested in were going to meet their peak price in week nine instead of week ten and I felt that I needed to sell all stock in the portfolio before the conclusion of the investment period. Unlike the two previous weeks of being actively passive in the market, I was active in week nine and as a result made more of a profit than the pervious two weeks. I made gain of approximately the sum of the two previous weeks equity gains. Pepsi-cola (PEP) stock was added to the portfolio. Over the past two to three months I saw that Pepsi regardless of the market made steady increases in its price, as figure 5.18 shows. I felt that the stock price for Pepsi would continuously rise until the conclusion of the ten weeks.

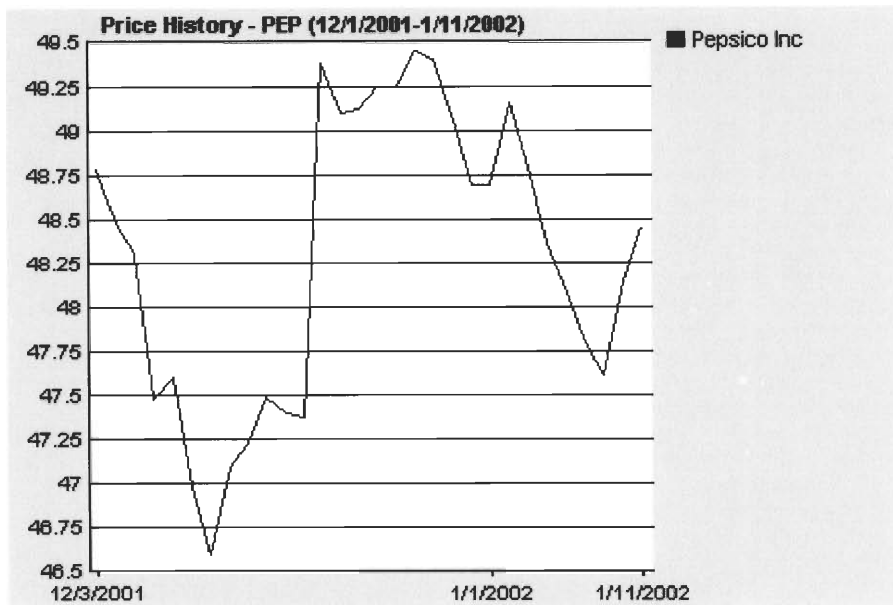


Figure 5.18 (1 – year history of Pepsi (PEP))

On Wednesday January 9th, 2002 Tiffany & Co. reached a 25% profit from which I originally bought it at. Twenty five percent was more than the targeted ten percent in stock price increase, but I felt the trend of the stock price had flattened out since the beginning of the week. Tiffany and company was sold for 35 dollars-per share for a profit of thirty-five, thousand dollars. By far the most successful buy and sell transaction of the investment period. I can attribute the success to good timing as Figure 5.19 shows.

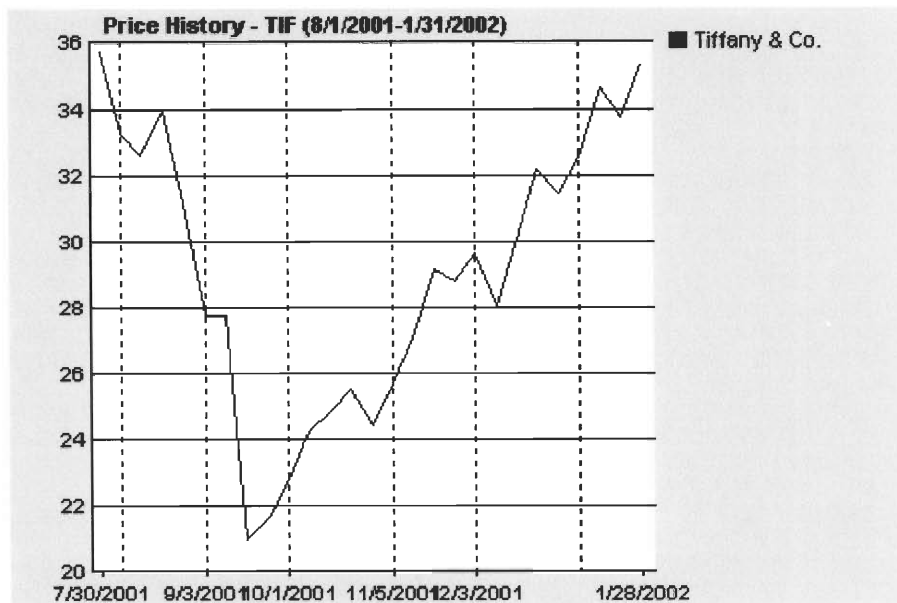


Figure 5.19 (5-month history of Tiffany (TIF))

Tiffany is a strong December, January and February Company as was noted before. The reasoning is simply because that is the best time to buy diamonds. Diamonds are given as presents for Christmas and Valentines Day so the company's profits are at its peak at these times in the year.

Movie Corporation (MOVI) was bought early on Monday and then sold later that week on Thursday. The company posted a good report for profits and as a result the stock price was in the midst of an upward trend and I bought the company before it peaked and decided to shoot for a target price of seventeen dollars per share. The price was reached at which I sold, due to the fact that the company bases its stock price on the interest in the movies in the theatre. The fact of the matter is that December is an extremely strong month for movies in the theatre, but January and February are the two weakest months for the industry as Table 5.19 shows.

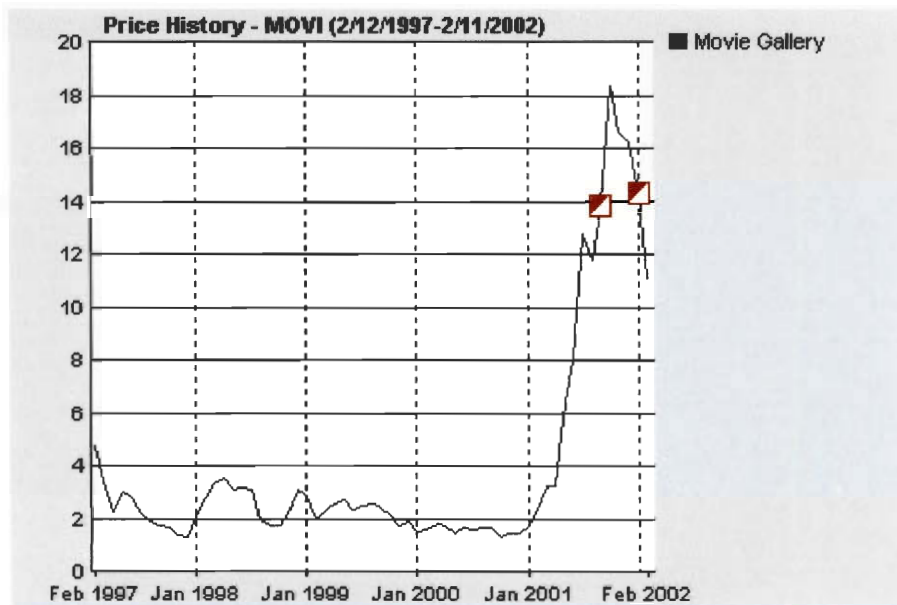


Figure 5.20 (5-year history of Movie Industries (MOVI))

Movie Industries is an up and coming stock that is currently reaching highs that has been unnoticed by the company before. Even with this early emergence the company's trends change due to the season are evident.

Finally, I tried to cash in on Tyco (TYC) and Adelphia Business Solutions (ABIZ) short-term success over the past couple of days. I saw both companies to have a maximum holding time of three days and knew that if I didn't sell them that day that I would in the next week.

Company	Symbol	shares	date bought	price bought	date sold	price sold	profit
Movie Gallary	MOVI	800	1/7/2002	13.95	1/10/2002	17	2440
Tiffany & Co.	TIF	5000	12/18/2001	28	1/9/2002	35	35000
Pepsi-Cola	PEP	3500	1/9/2002	47.7	-	-	-
Juniper Networks	JNPR	600	1/2/2002	18.96	1/10/2002	21	1224
Adelphia Bus. Sol.	ABIZ	133000	1/11/2002	0.2	1/11/2002	0.25	6650
American Express	AXP	3500	12/20/2001	33.8	1/11/2002	37.8	14000
Tyco Int.	TYC	3250	1/11/2002	50.5	-	-	-

End of Week

Cash Total	Equity	Total
28107	466054	494161

Table 5.13 (January 7, 2002 – January 11, 2002 transactions)

5.11 Trading Week 10 (01/14/01 – 01/18/01)

I came into week ten at five hundred, thousand dollar total assets, a hundred and fifty percent asset increase from the original investment value of two hundred, thousand dollars. On Monday January 14, 2002 I bought ten, thousand shares of Interdigital Communications (IDCC), a small market company that I felt had the potential to make a large increase in the next day or two, so that I could sell the stock with a reasonable profit without risk of loosing money before the end of the investment period. The rest of the transactions that were made were sales of stocks. Two of the stocks that I sold on the final day of the investment period I would have held onto for a long term period; one of which, Activision (ATVI) yielded a net loss upon completion of sale. A week later the stock price jumped six-dollars per share over the course of 30 hours. The other stock that I would have held onto for a prolonged period would have been Pepsi-cola. The stocks even though they yielded profits disappointed me because I felt that the profits gained only scratched the surface of what could have been made.

Company	Symbol	shares	date bought	price bought	date sold	price sold	profit
Tyco Int.	TYC	3250	1/11/2002	50.5	1/14/2002	52.4	6175
Interdigital Comm.	IDCC	10000	1/14/2002	9.27	1/17/2002	12.4	4600
Activision	ATVI	5000	12/10/2001	25.25	1/18/2002	25	-1250
Boeing Motors	BA	318	12/24/2001	38.4	1/18/2002	39.4	318
Pepsi-Cola	PEP	3500	1/9/2002	47.7	1/18/2002	49.7	7000

End of Week

Cash Total	Equity	Total
541186	0	541186

Table 5.14 (January 14, 2002 – January 18, 2002 transactions)

5.12 Diversified Portfolio Conclusions

Tracking the growth of the equity and assets of the portfolio, one is able to see from Figure 5.20 that the largest increase in profit was observed during week three and

four. The only week that one might say was an off week or a down week would be the week after this outbreak of profits, week 5. Weeks three and four consisted of me shorting, buying and selling the extremely volatile stock Enron. Enron, upon releasing news of its companies interior collapse that eventually led to its down fall went from Fortune 500's fastest growing stock to a worthless junk stock. At the end of the investment period the stock ticker for Enron (ENE) was de-listed and the stock now is completely worthless. However, this proves my original theory that the most profitable stocks to invest in a short-term market are the ones that are most volatile.

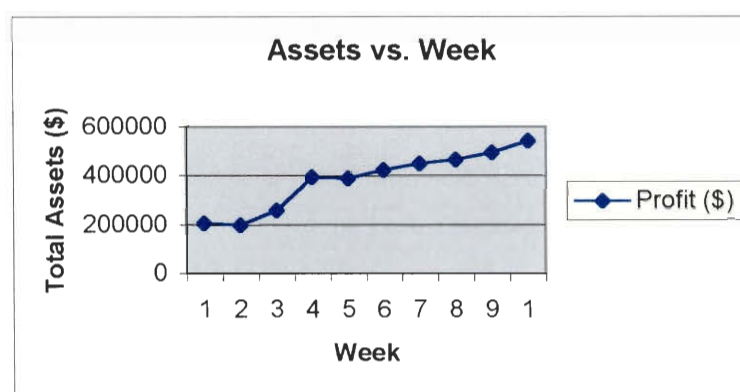


Figure 5.21 (Sum of all assets in Diversified Portfolio broken down by week)

The two least impressive sections, week one and week five are a result of two factors. In week one I was a very hesitant investor. I would not hold on to the stocks if the price fluctuated even just a little bit. I was very impatient and felt at that time that if the stock did not go up soon after I bought it that the stock price would not rise. This is far from the truth, and with any stock you have fluctuation up and down from day to day and week to week, but if the investor is patient and watches the big picture of where the stock price is headed then he is able to make profits in his transactions. The slack in profits for week 5 can be considered due to the large profits of the two weeks before. I

made a lot of money and felt that I was not going to take any chances; I was going to hold onto the money I had made. Figure 5.21 shows the percentage gained for the length of the investment period. The total percent gains for the investment period were at heights near 200%.

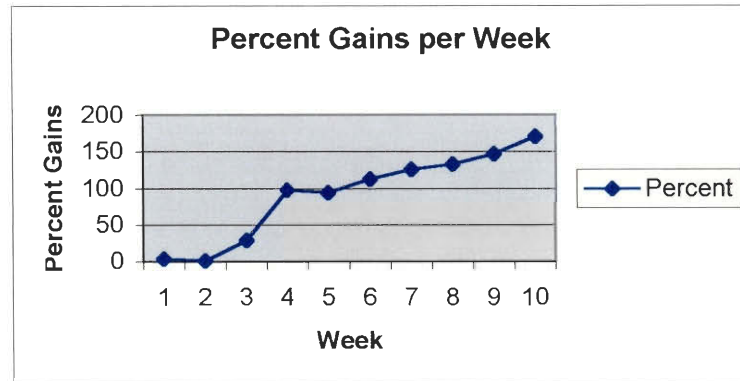


Figure 5.22 (Percent gain in Diversified Portfolio over the project duration)

The project supported the question of what kind of stocks are more profitable in the short term market, but the real question is what stocks were most profitable to invest in and why? Buying and selling Tiffany & Co. was one of the most profitable investments. I feel that the stock showed a strong quarter due to the season and the demand for the company's product during the season. Tiffany is a consistent stock with good gains in the winter and early months of the year. Tiffany can be categorized as a market dependent seasonal stock. A stock that is dependent on the market depends on that for the economy to be strong, is always at economic risk. Companies that are dependent on the market retail goods and services that are not staples^{5.2}. Enron is a retailer of a staple product however; the company's mismanagement of funds destroyed the company and its stock value. Pepsi (PEP) is another example of a consumer staple retailer. Over the short period of nine days that I held the company I made a profit of seven, thousand dollars. I feel

^{5.2} A staple is a good that is necessary for survival.

strongly that regardless of the markets activity that the company will observe gains until either the company experiences bad news, or a company can challenge them in the Sports drink industry. Pepsi-cola makes a majority of its profits in Gatorade and other sports drinks products.

There are four main stages that can be observed in the investment period. The first stage was the nervous and unconfident beginning stages of investing in the market. The second stage was from the start of week two until the beginning of week five. In this period I made a considerable amount of money buying, selling and shorting stocks that were very volatile. At this time I invested in a large amount of stocks for a short amount of time and recorded large profits. The third stage was from the end of week five until the beginning of week eight. During this period I invested in stocks that were much more stable than the ones that I had invested in, in the past. In the stocks that I choose, I consider good long-term stocks. My plan at the time was to hold onto the stocks that I had accumulated in my portfolio and collect equity on them. The final and fourth stage was to find the right time to buy all stocks in the last two weeks of the investment period. I did a considerable amount of trend analysis over these last two weeks to fully understand where the stock prices were going to go in the near future so I could best prepare for selling them at the best price.

Chapter 6

Investment Conclusions

6.1 Investment Conclusions Introduction

The main purpose of studying and simulating trade in the stock market is to gain an understanding of not only how to gain money but why it happens. Why does one strategy work over another? Why is one type of investment portfolio more profitable than another? These are the questions that the simulated environment investor must consider to be successful in real stock market trading. This chapter looks at the previous questions and attempts to answer them.

6.2 Comparison of Investment Periods

The three investment portfolios that were considered in this project were two diversified portfolios dealing in the biotech and technology industry and one diversified portfolio. Historically the biotech and technology industry have been very volatile from week to week, even from day to day. It was hypothesized that these two industries would most effectively aid in understanding the intense highs and lows of the stock market.

Gains in the biotech portfolio were fluctuant for the first 4 weeks, as Figure 6.1 shows. The investor hovered around the original total asset value for weeks one through four and then during the course of week five, over thirteen thousand dollars was lost. This could possibly be understood as an inability to read where the stock market is going to go. However, since the investor was operating with a hold strategy there was no choice but to take the losses and wait for a better investment day. One could be happy in going a month invested in a company and not losing any money, but when the investor does not

make any money as well he is being set up for that invested stock to drop in price. The longer a company or industry goes without consistent and substantial gains in the stock market, the greater chance that consumer confidence will drop on that company and as a result the stock price will drop. The biotech industry was hurt very badly by the news of Merck's projected profits for the year 2002. The news that Merck, one of the biggest companies in biotech industry would see no profits in the up coming year can be credited with not only ruining consumer confidence in there own stock but in the biotech industry as a whole. This instant lack of confidence in the biotech industry is a prime example of volatility in the biotech market. Certainly one could have seen this dip in stock price coming by looking at how stagnant the mean profits had been for the months before for the invested company, despite the high peak in the industries profits, shown in figure 6.2.

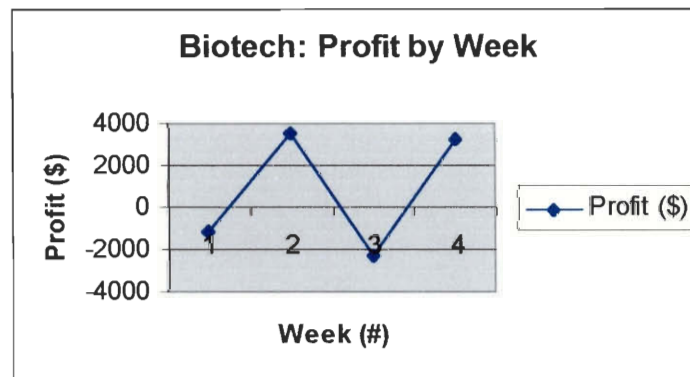


Figure 6.1 (Biotech Profit for first four weeks)

In the weeks to follow, the biotech industry did not rebound. Instead confidence continued to drop because of bad news from other biotech companies. This lack of confidence in investing in biotech companies got to a point that by the tenth week of the investment period, the confidence was lacking in the industry and no longer in just individual companies. The stock market in general was put under strain to make up the ground lost in the biotech industry, by becoming more profitable in other industries. At

the time of the Merck announcement and the loss of confidence in the biotech industry the remained of the stock remains market was doing very well and was reaching highs in profits that had not been meet in months. It can be concluded from this data and the past history of dominant biotech companies that the trend of the biotech industry observes variation in graphical trend similar to the stock market, only on a larger scale as figures 6.2 and 6.3 show.

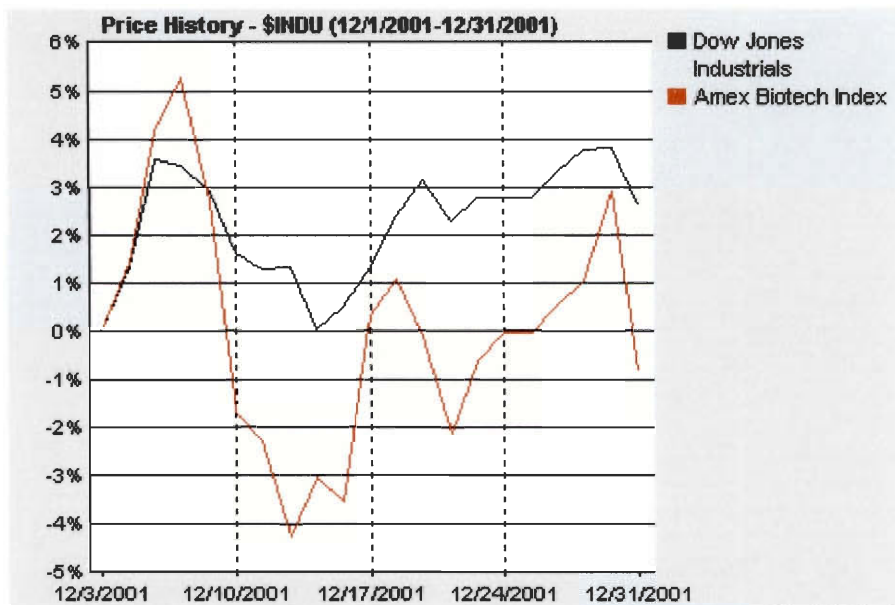


Figure 6.2 (Comparison of the history of Dow Jones Industrials (DOW) and the Biotech Index (BTK) for the month of December)

Even though the biotech industry recovered in the weeks after the devastating announcement from Merck, that recovery was not observed in the simulated trading environment. Losses continued for the duration of the investment period for the biotech industry portfolio as table 6.1 shows.

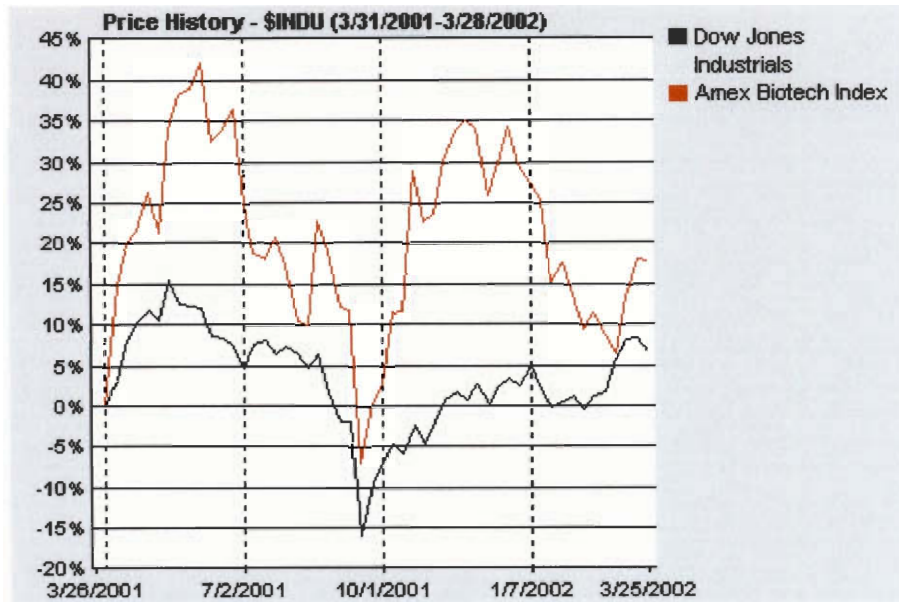


Figure 6.3 (Comparison of the history of Dow Jones Industrials (DOW) and the Biotech Index (BTK) for the past year)

Biotech

Week #	Profit (\$)
1	-1190.44
2	3559.16
3	-2317.36
4	3210.84
5	-13328.84
6	5310
7	-352
8	-9054
9	-1068
10	-21050

Table 6.1 (Profits per Week Breakdown for Biotech Portfolio)

The Biotech investment period can be viewed both as, containing faulted investments and as a success in understanding the market. Poor investment decisions are magnified when the investor's strategy is so hold onto there stock. Mistakes that are made in the market in general are not as crucial as those made in the Biotech industry due to increased variance in the biotech industry. The best possible solution for the biotech

trader is to adapt his trading strategy to short-term investment decision to reduce the risk of large-scale losses. By staying more versatile in the market the investor is able to reduce losses and sometimes even eliminate losses.

The technology industry is more volatile than the biotech industry for the sole reason that we are in an era of technology and that is what drives our economy, and as a result drives our stock market. The technology industry, much like a diversified portfolio, is very spread out through different ventures and products in the United States and the throughout the world. The technology industry covers the following; Internet, chips^{6.1}, cable, computers, networking, satellite, software, tech retail, telecommunications and wireless devices. (CNN Money, 19) If one specific technology index is down it could affect all aspects of the technology sector. However, since the industry is so well spread out through goods and services that many people today consider staple the market will remain strong for most trading environments.

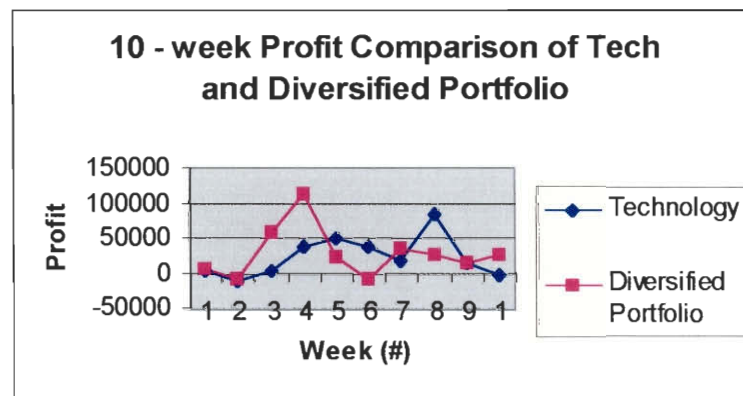


Figure 6.4 (10 – Week Comparison of Technology and Diversified Portfolio Profits)

Figure 6.4 shows the difference between invested industries for the duration of the time periods invested in. The diversified portfolio has an obvious early edge that the Technology industry makes up for early later in the investment period. The best way to

^{6.1} Digital Processing Chips.

explain this is that the quick rise in profits for the diversified portfolio created more money and as a result more chances were taken investing. The technology portfolio had a jump in profits at week eight; similar to that of the diversified portfolio's spike in profits during week four and the same downward trend is noted after that spike in both instances. The volatility of the technology market makes the day trader strategy a very lucrative investment strategy. However, it is hypothesized that in the next couple of years, technology companies will become more effective in long term investments due to their strong presence in the current market and the world. It is evident over the past ten years that technology is growing everyday and is not going away. For this reason it is possible to foresee companies like Target and Amazon to become like General Electric in the mid-nineties, and be a dominant leader in the retail of multiple products. Companies that are diverse in the market are generally a safe bet. One is able to reduce the risk of investment but investing in multiple areas, products and services in the market.

Figure 6.5 shows the profits gained per week for the three investment portfolios. One might say that since the Biotech profits are almost completely linear and nearly horizontal that it could be used as a means of comparison for the Technology and diversified portfolios. It was an original belief that the biotech industry would have an opposing trend to the diversified portfolio and stock market in general, but figure 6.2 and 6.3 display that that is not true.

6.3 Conclusions

It once was and still is possible for a single company to control an entire industry. The need for the goods and services provided by an industry gauges how successful a company in that industry will be. The days of monopolies and single company industrial

control are no longer. Companies in an industry have increased the productivity of their products and services to ensure customer approval and an edge in the market and industry. There are no two companies' today that offer the same products and services at the same prices. All enterprises have become individualized and specialized to be able to stand out in the market and be a more dominant leader. Investment decisions are made on the capabilities of a company and the possibility for that company to be a leader in a sector or an industry or some venture of the stock market.

When a company diversifies the goods and services that it retails it is making an attempt to reduce the risk associated in business. The demand on a company to supply will always fluctuated based on external factors that cannot be controlled. The confidence to which an investor buys stock in a company is directly related to the demand and profitability of a company. Simply put, if a company cannot make money then they cannot pay their shareholders. No one will lend money to someone when they know they have limited chance of getting it back and for the same reason no one will invest in a company that has not chance of returning your investment.

The diversification of a portfolio is based on same idea as a diversified company. Reduce the risk of loss by spreading throughout different aspects of the market. When one sector is down another one is up to account for the loss. When investing in only one industry you open your self up to greater risk of failure. In a specified industry companies in the industry are compete against each other. When one has money invested in companies that are competing against one another one will generally end up coming up breaking even, or acquiring losses in your investment. The specified portfolio might not take full advantage of a boom in a specific industry but are less likely to loose all of their

money on the decline of a sole industry. A diversified portfolio is like betting on both boxers in a boxing match, one will lose and one will win, but you will always win.

The most effective way to reduce the chances of losing money is to reduce the risk of investment. The most effective ways to reduce the risk of investment are to research and prepare. An investor needs to research the company that he or she is investing in to make certain that they are not investing in a company without any future. Often investors jump to make decisions on the first piece of good or bad news that they hear about a company. The educated investor knows however, that anyone can and will give advice and one needs to sort through the acquired information fully understand what people are actually saying about a company. It is very common for investors to look at the what. What stock is going up? What price will the stock reach? When people start to look at the why they general find justification for their ultimate decision to either buy or not buy stock in a company.

One of the ultimate questions is what strategy is most effective in the market today? Recently the number of day traders has declined to next to none. A lot of investors believe that the position of the day trader has long since passed. So, is the successful investment strategy to hold? The answer is simply, no, in a market as bullish and volatile as our market has been since the days of the September 11th attack, the most effective means of strategy in the month trader. A month trader does not hold onto stocks for a prolonged period of time and does not trade on a daily basis, but is still very active and very aggressive in the market. This versatility between day trader and long-term investor is the least risk strategy in the market today. One does not want to eliminate acceptable risk because when they do that they take a bog chance to not gain profit. The worst risk

that one can take in the stock market is not taking a chance, or taking too much of a chance.

Noticing the little trends in the market is the most effective way to be successful. Little things, like what time of the month, what time of the week and even what time of the day that one buys and sell a stock a crucial to becoming successful in trading in the stock market. In all cases we noticed whenever a large gain was made the next move that the stock price made was to drop off. This was noted in all scale time periods. The time that stock prices are the strongest and consumer purchase is at its peak is in the early stages of the year, week and day. January, Monday and early morning trading are the best for gains. The best time to notice losses are on Tuesday in the late morning/early afternoon in February. So the main conflict in investing is notice when gains are enough and it is time to sell. Some investors decide to invest in a stock after they see the company make large positive gains in the market. This theorized trend states that a period of gains is the worst time to invest in a company.

When a company losses ground in the market a lot of people think, great time to buy. When a stock price goes from eighty to forty dollars a share overnight a lot of people think that the stock price has no where to go but up, this is definitely not true. There are reasons, whether internally known or public knowledge why this certain stock price has plummeted. Until the company can prove to its industry, the stock market and the investors as a whole that they are capable of making gains in there price in the stock market then the company is too much of a risk to invest any money in. Instead of buying a stock during the middle of a downward trend one should buy once the stock price has not only increased once but also decreased after that initial increase and increased again.

This course of graphical actions is the representation of changing from a downward to an upward trend. Buying a stock while it is in the midst of a downward trend is no security for ones money. One can see from a chart of the history of a stock price that the direction in which the value of his or hers money will be going down upon investment and the common individual has no idea of how long that will last decrease in appreciation will last.

The same can be said for sell a stock. Why sell a stock while it is in the midst of an upward trend, when the stock is in most cases has not fully appreciated to the value that it is worth? The most lucrative time to sell is when ones money in a stock has fully appreciated. If the investor is on a tight budget he should sent his projected selling price at a set percent profit. If the investor has a little more room to take risks he should wait to sell until the value of his or her stock has fully appreciated, when the trend of the graph has changed to downward.

The best way to make large profits in stock market investing is to look carefully and understand the small details. Only when risk is minimized and investment confidence is high can an investor be proficient enough to trade actively in the stock market on a regular basis.

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