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Stock Market Simulation

Brendan Patrick Devereaux
Worcester Polytechnic Institute

Brian H. Conner
Worcester Polytechnic Institute

Gregory J. Parks
Worcester Polytechnic Institute

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Stock Market Simulation

An Interactive Qualifying Project Report:

Submitted to the faculty

of the

Worcester Polytechnic Institute

in partial fulfillment of the requirements for

the Degree of Bachelor of Science

by

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Brian Conner

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Brendan Devereaux

_____

Gregory Parks

August 14, 2006

Approved by:

_____

Professor Dalin Tang

Project Advisor

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Acknowledgments

We would like to thank Professor Dalin Tang, Department of Mathematical Sciences at the Worcester Polytechnic Institute, and all of our friends who lent a hand to help us complete this project.

Abstract

A stock market simulation was performed over a seven-week period in order to gain knowledge of the stock market. We researched stocks and tested the effects of different investing strategies. Upon completion we summarized our results and provided our final thoughts.

1. Introduction

1.1 Goals and Scope of the Project

Our goal for this project is to examine different investment strategies and utilize them to make a profit over the course of seven weeks. Each group member will use a different trading strategy and start with $250,000 to be invested in companies of their choosing. Each of us will choose only up to 6 stocks to focus on at any given time depending on which strategy is being used, with no more than 10 stocks to be traded during the trading period. At the end of the seven week period each strategy will be compared and based on the results we will come to a conclusion as to which method was the most rewarding over this time period.

1.2 History of the Stock Market

When the words "stock market" are heard by the common public a lot of questions are formed. Is the stock market a place? Or is it an abstract idea? What are stocks anyway? Most of the general public is totally in the dark about what the stock market is physically as well as why it is so important to the economy today. Here is a little information on where the stock market came from and how it works.

The act of trading has been around for centuries, though of course the first trades were not of stocks. Trading was built around necessity. For example, if one farmer had chickens and another had cows it is a very simple and natural thing to perceive that the two men would trade eggs for milk and vice versa so each farmer can have both. Trading did not originate in one common place but on the doorsteps of two men. They would work out a deal and make the trade. In come cases a man might offer his services

through labor in order to obtain goods necessary to him. It is easily seen how straightforward this is. However, as money became entered into the equation this process of trading would become far more complex than just one good for another.

The first supposed acts of trading on credit were in Cairo by Islamic and Jewish merchants in the 11th century. It is believed that these merchants invented methods for credits and payments as well as set up trading associations. The first physical building and thus the first actual stock market was in Belgium in the late 13th century. Commodity traders gathered inside to trade openly together and they eventually became known as the "Brugse Buerse" [1]. This idea of openly trading in one common place became popular in neighboring countries.

The Dutch were the first people to use the term stock when they began forming joint-stock companies which let shareholders invest in a company and earn a share of its profits without actually having to take part in the actual business physically just monetarily. In 1602, the Dutch East India Company issued the first shares on the Amsterdam Stock Exchange and became the first company to issue stocks and bonds [1]. This began the first institute of continuous trading, much as we know it today.

Trading in America began in March, 1792. Twenty four of New York City's most powerful merchants met secretly at Corre's Hotel in order to devise a way to protect and put order to the business of securities. A couple months later these men signed a deal called the Buttonwood Agreement which brought the men to trade securities only amongst themselves, set trading fees, as well as not participate in the sales or trades of other businesses. These twenty four men founded what came to eventually be called the New York Stock Exchange located on 11 Wall St. The name Wall St. originated once

again from the Dutch as they built a wall around them to protect themselves from Indians and other dangers [7]. It was a great commercial area due to the fact it was between the East River and Hudson River. Trading on Wall St. was fairly simple, based entirely on word-of-mouth advertising as men sold bonds and shares on the street corner [1].

As the years went on this original exchange had many competitors. One of its biggest rivalries was the Curbstone Exchange. This exchange was always held outdoors regardless of the weather. The method was simple; people shout out prices and other people yell back if they want to buy or not. The Curbstone Exchange operated with some reliance on the NYSE because the Curbstone Exchange traded based on prices set earlier in the day by the NYSE. One of the main differences in the beginning of the two exchanges was the size of the trades. The NYSE set a minimum of 100 shares to be traded. The Curbstone Exchange would deal with as little as a single share. After more then 100 years of doing business outside, the Curbstone Exchange took its business inside when they purchased a lot at Trinity Park where they erected a large modern building and renamed themselves to the New York Curb Exchange. It was not until 1953 that they took on the name American Stock Exchange [1].

The New York Stock Exchange is the largest stock market in the world based on dollar amount and second largest by number of companies. Its global capital is over $21 trillion [7]. The stocks are traded via an auction format on the trading floor. A member of the NYSE shouts prices of different stocks and buyers congregate around the "auctioneer".

The stock market is an extremely important institution. It stabilizes the economy of the country and allows for a good barometer of how well or how poorly the economy

is doing. Also, it is indispensable to companies as it helps them raise money and therefore expand and produce more.

> *With each passing year, the noise level in the stock market rises. Television commentators, financial writers, analysts, and market strategists are all over talking each other to get investors' attention. At the same time, individual investors, immersed in chat rooms and message boards, are exchanging questionable and often misleading tips. Yet, despite all this available information, investors find it increasingly difficult to profit. Stock prices skyrocket with little reason, then plummet just as quickly, and people who have turned to investing for their children's education and their own retirement become frightened. Sometimes there appears to be no rhyme or reason to the market, only folly* [1].*

Warren Buffet

This quote is from Warren Buffet who took $100 and turned it into billions through investing in the market. This quote illustrates the nature of investing in the market today. Even though there is a wealth of information available to investors, it is still difficult to tell just which stocks will rise and which will not.

There are numerous causes for a decline in the market. One of the most prominent however is corruption. When a large company falls into debt it does not want to disclose that information to the public and its investors, because if it does then the company will not continue to bring in money from those investors which may help pull it out of debt. This results in what is called a stock market bubble, where the stated value

of a share is greater than the actual worth of the share. The prices then continue to rise, encouraging more investing,

The market as we know it today moves quicker than ever because of the vast network of computers that connects millions of brokers and traders, and the wealth of information that is available to any prospective investors. This however has formed a rift between the traditional market such as the NYSE and others completely electronic markets. In the future this traditional market with "auctioneers" may fall by the wayside being replaced by automated markets such as many overseas markets.

1.3 Investment Strategies

The first strategy is Brian's strategy which, is long term trading. It is a very simple and straightforward strategy. When engaging in such a method, investors will pick a stock to purchase and then sit and watch the growth or decline of their stock for an extended period of time (to be determined by the investor).

The second strategy is Greg's which, is the "Big Dipper" method using this method, investors try to locate stock that are at the bottom of a steady decline or one's that have just started to rise in value after a decline. This method relies on the following of trends and it will only succeed if history repeats itself [7].

The third strategy was Brendan's which, is known as "shorting" the market. This strategy is foreign to novice investors and is expected to involve high risk and high reward. Simply, shorting is to sell a stock to the market at a certain price. At this point, an investor will hope that the stocks value declines. When the decline is satisfactory to the investor, they will buy back the stock at the new and discounted price.

1.4 Risk and Rewards

The risk of the stock market is very high especially for those getting involved for the first time. It is most definitely not something to invest your money in casually because it can become paralyzing to someone's savings. There is a lot of money to be gained and lost. Another risk is the chance of investing becoming an addiction. The stock market is a gamble and some people will love the feeling whether it's the highs or the lows.

The rewards can also be great. Many people use the stock market to supplement their normal income while there are some individuals whose life depends on their fortune in the stock market. Obviously those who are more deeply involved have the great risks but stand to obtain the biggest rewards.

Our three methods all have different levels of risk and rewards. Long term trading has less risk and less rewards in comparison with the other two. This is because someone will invest their money in something and stick with it for a significant period of time. Most people involved in this sort of trading look for "safe" stocks or "blue-chip" stocks. Using that method someone will most likely not lose all their money (barring an extreme crash) and will at least collect things such as dividends. The "Big Dipper" is risky because you rely on the past in making your decisions and are hoping to isolate markets that have definite patterns for a long stretch of time. However, rewards can be great. Some companies stocks are shown to be very cyclical and if you can catch one at its low point and it continues its pattern you will be in to turn a great profit (as long as you then know when to unload it). Lastly, there is the method of shorting the market. This is the

most risky method but, can have vast rewards. It is risky because you are hoping for a stock to decline and your loss possibility is infinite. If you invest $1000 using long term trading you stand to lose no more than that amount. However, if you short the same amount of money you can easily lose twice or three times that amount without ever making another move.

2. Long Term Trading

2.1 Strategies and Goals

"There have been innumerable recommendations about how to make the stock market easier and safer for the casual, non-professional investor. However, in order to minimize the risks of financial market imbalances, it is important that there be a well thought-out legislative, regulatory, and supervisory infrastructure that functions properly, smoothly, and honestly" [2].

As said above, the stock market is a dangerous monster that is tough to tame. Due to its unknown fluctuations, I have decided the best way to invest my money is to make long term investments over the entire period of predetermined trading. By doing this I will take the short term jumps of my stocks with little ecstasy as well as taking the small hits to my company with little pain. By doing this I will be reducing my chances of making wrong decisions in my rookie trading experience and losing out on profit in the long run. Strategically this seems like the best way to turn a profit and after studying the market and researching my investments; I foresee a profitable experience and outcome with my fictional money.

My goals, as stated above, are to turn a profit with my money while gaining valuable experience in the stock market. Furthermore, we, as a team, plan to compare strategies and approaches in order to combine our knowledge preparing us even better for future trading.

2.2 Stocks Chosen

Here are the 6 stocks I plan to hold and observe over the predetermined trading period:

Date	Symbol	Buy Sell	Original Price	Holding Shares	Net Cost/ Proceeds	Total Cash	Market value
5/29	PTEN	Buy	$28.85	1,244	$35889.40		
5/29	BA	Buy	$83.50	500	$41750		
5/29	WMT	Buy	$49.65	1,000	$49650		
5/29	PFE	Buy	$24.00	1,000	$24000		
5/29	AIG	Buy	$61.47	1,000	$61470		
5/29	DELL	Buy	$24.81	1,500	$37215		
Totals						$25.60	$249974.40

Table 2.1 Opening Chart for Beginning Purchase [2].

With these 6 stocks, I would expect to be able to make a profit over the full 7 weeks of trading, holding each stock until the end barring any unseen dramatic abnormalities in the stock market. I feel comfortable with these stocks because they are all very unique from one another, spreading my money into different fields and industries. I have a stock from the oil industry, the commercial aircraft and equipment industry, a retail store, a drug manufacturer, a financial group, and an electronics manufacturer. With this diversity, it is unlikely that all of these stocks in there respective areas to decline. For example, if I bought all oil companies and all of a sudden a major oil catastrophe occurred, all of my oil stocks would crash and I would lose a lot of money. This really cannot happen with the diversification I have chosen.

AIG is a company that, through subsidiaries, deals with a wide range of insurance throughout the Untied States and the world. They deal with everything from life insurance to retirement insurance. Their financial endeavors provide companies with equipment leasing, capital markets transactions, consumer finance and insurance premium financing. The big news with them recently is that they have been approved to begin group insurance business in China. I hope that this puts the stock on the rise.

Dell is an electronics company that sells a wide variety of computer systems and services throughout the world. It is a well established company and due to the technological level of the world I felt it was a safe stick to buy. This coupled with the fact that the stock has recently hit a 6 month low and has begun to climb again makes me feel that this stock will make me some money over the next two months.

Pfizer is the world's largest research based pharmaceutical company. For this reason I decided to buy this stock. It is certainly not a very expensive stock and due to its steadiness over the past year I am hoping that it releases a new product to make the price of the stock jump. If not, I probably will not make a lot of money with this stock, but it seemed like a fair trade off of risk and reward. The world is always looking for new medicines, so the largest research company of medicines is a good long term stock to hold.

Wal-Mart is a retail store that strives to have the lowest prices. Wal-Mart is a one stop shopping experience where they combine a drug and clothing store together, with Super Wal-Mart's even adding a grocery section. They have stores in all 50 states. SAM'S Club is an asset that sells things in bulk to save money. They have international interests in South America, Europe, and Asia. With the gigantic Kmart-Sears merger recently, I believe more people will switch to Wal-Mart while the merger gets untangled and sorted out. While the Kmart-Sears company is in disarray, Wal-Mart will continue to thrive in today's market.

The Boeing Company produces a wide variety of military aircraft, space and communications equipment, and commercial aircraft. There has been news of them expanding their international business into India, which I believe will be very profitable

to their business. Having such a diverse as well as enormous business with many different governments in addition to their commercial sales, I believe they are a very safe stock to have.

Patterson UTI energy is an oil and natural gas drilling and exploration company. Every summer gas prices rise and with continued exploration of North America this Untied States based company looked like a very promising stock to buy. As more oil comes from North America and less from the Middle East, oil companies like Patterson UTI energy is seeing profits. Thus, I decided to buy this stock and really hoping that it makes a strong move in the next two months.

Fig. 2.1 12 month stock value chart for Patterson-UTI Energy Inc. [2].

Fig 2.2 12 month stock value chart for Boeing Co. [2].

Fig 2.3 12 month stock value chart for Wal-Mart Stores Inc. [2].

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Fig 2.4 12 month stock value chart for Pfizer Inc. [2].
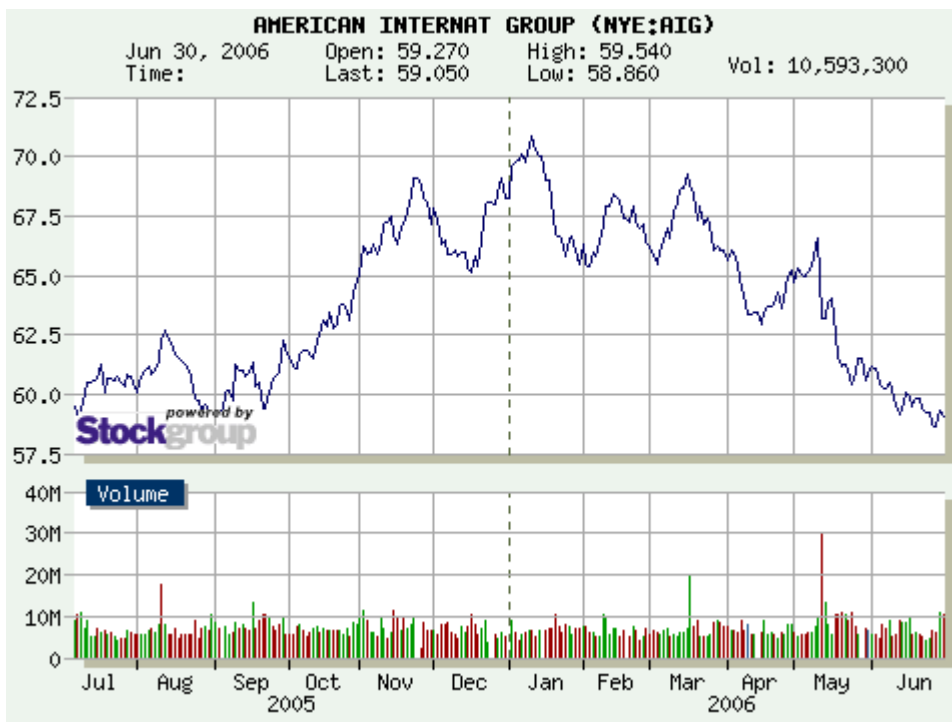
Fig. 2.5 12 month stock value chart for American International Group [2].

Fig 2.6 12 month stock value chart for Dell Inc. [2].

2.3 Observing the Stocks

As previously stated, my style of trading is to hold on to a set array of stocks for the duration of the trading period unless an abnormal aberration in the stock or stock market forces me to do otherwise. During the last week to ten days I will very carefully watch my stocks in order to maximize my profit or cut my loss, thus making or saving me money, which is one of the overall goals of the simulation. In this section I will update weekly on the status of my stocks, my profit and/or losses, and briefly comment on the weekly findings.

Week 1

Date	Symbol	Original Price	Price	Holding Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Market value
6/4	PTEN	$28.85	$31.32	1,244	$38,962.08	$3,072.68		
6/4	BA	$83.50	$83.80	500	$41,900	$150.00		
6/4	WMT	$49.65	$47.83	1,000	$47,830	-$1,820.00		
6/4	PFE	$24.00	$24.19	1,000	$24,190	$190.00		
6/4	AIG	$61.47	$61.11	1,000	$61,110	-$360.00		
6/4	DELL	$24.81	$25.96	1,500	$38,940	$1,725.00		
Totals							$25.60	$252,957.68 ($2,957.69)

Table 2.2 End of First Week of Observation [2].

After the first week I am really happy with 2 of my stocks that profited well, indifferent about 3 of them that did not change much, and upset about Wal-Mart which dropped a fair amount. Overall however, I made 2957.68 which is 1.2% of my starting money. As planned I will continue to hold these stocks, hoping Wal-Mart makes a comeback and the other 5 stay true or rise.

Week 2

Date	Symbol	Original Price	Price	Holding Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Market value
6/10	PTEN	$28.85	$27.72	1,244	$34,483.68	-$1,405.72		
6/10	BA	$83.50	$80.50	500	$40,250	-$1,500.00		
6/10	WMT	$49.65	$47.13	1,000	$47,130	-$2,520.00		
6/10	PFE	$24.00	$23.53	1,000	$23,530	-$470.00		
6/10	AIG	$61.47	$60.21	1,000	$60,210	-$1,260.00		
6/10	DELL	$24.81	$25.26	1,500	$37,890	$675.00		
Totals							$25.60	$243,519.28 (-6480.72)

Table 2.3 End of Second Week of Observation [2].

Week 2 was a very rough week for every single one of my stocks. Overall my stocks dropped and I lost 2.4% of my original $250,000 showing an overall drop of 3.6% and over $9000 in proceeds. My assumption, due to the diversity of my portfolio, is that the stock market's overall volume and net worth dropped this past week. This is the only way to explain all 6 of my stocks dropping quite drastically in a one week period. Since we still have 5 weeks of trading to go, I do believe that all of my stocks could rebound to a profitable price. The long term trading method allows me to look past this week and into the month ahead. Now that I see how quickly stocks can fall, I can only presume the same can happen for stocks rising.

Week 3

Date	Symbol	Original Price	Price	Holding Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Market value
6/17	PTEN	$28.85	$28.05	1,244	$34894.20	- $995.20		
6/17	BA	$83.50	$85.54	500	$42,770	$1020		
6/17	WMT	$49.65	$48.31	1,000	$48,310	-$1340		
6/17	PFE	$24.00	$23.43	1,000	$23,430	-$570		
6/17	AIG	$61.47	$59.87	1,000	$59,870	-$1,600		
6/17	DELL	$24.81	$24.12	1,500	$36,180	-$1035		
Totals							$25.60	$245,454.20 (-4520.20)

Table 2.4 End of Third Week of Observation [2].

As the stock market goes, you have to take the positives where you can find them. As I approach the halfway mark of this trading period, my overall loss is $4520.20, which is 1.81% of my starting bankroll. However, the positive here is that I gained nearly $2000 from where my stocks were last week. This is what I was truly hoping for because of the absolutely dreadful trading week last week where the stock market fell 80 points. As stocks are always rising and falling, it was a great past week for shorting the market. However, with my trading method set as a long term business, last week did not scare me and this week gave me some hope. As the next four weeks approach, I have not seen any real reason to stop short and sell any of my stocks due to new knowledge put forth about any of them. I will continue to watch for new information on the 6 stocks I hold to try and maximize my profit after the next four weeks; however for now I will just continue to hope that my gains of this week will continue to grow to an overall profit.

Week 4

Date	Symbol	Original Price	Price	Holding Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Market value
6/24	PTEN	$28.85	$27.31	1,244	$33,973.64	-$1915.76		
6/24	BA	$83.50	$83.90	500	$41,950	$200		
6/24	WMT	$49.65	$47.94	1,000	$47,940	-$1710		
6/24	PFE	$24.00	$22.69	1,000	$22,690	-$1310		
6/24	AIG	$61.47	$59.26	1,000	$59,260	-$2210		
6/24	DELL	$24.81	$23.72	1,500	$35,580	-$1635		
Totals							$25.60	$241,393.64 (-8580.76)

Table 2.5 End of Fourth Week of Observation [2].

With only three weeks left of trading, I am beginning to worry about the chances of making an overall profit. I am currently down 3.43% from the starting bankroll of $250,000. Every single one of my stocks has fallen this week as a result of another bad week for the stock market. Hopefully the stock market will rise over the next three weeks as a whole in addition to each of my stocks rising for individual reasons. After next week I will look closer at my stocks and maybe decide to sell before the full seven weeks are up in order to make or save as much money as possible. If I was not time constrained, I may look to hold these stocks for a lot longer than seven weeks, but due to the scope and plan of the project seven weeks is all I have. As we cross the half way point, I really hope that each of these stocks make a turn for the better.

Week 5

Date	Symbol	Original Price	Price	Holding Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Market value
7/1	PTEN	$28.85	$28.31	1,244	$35,217.64	-$671.76		
7/1	BA	$83.50	$81.91	500	$40,955	-$795		
7/1	WMT	$49.65	$48.17	1,000	$48,170	-$1480		
7/1	PFE	$24.00	$23.47	1,000	$23,470	-$530		
7/1	AIG	$61.47	$59.05	1,000	$59,050	-$2420		
7/1	DELL	$24.81	$24.46	1,500	$36,690	-$525		
Totals							$25.60	$243,552.64 (-6421.76)

Table 2.6 End of Fifth Week of Observation [2].

Once again I am currently at an overall loss from my original $250,000. This could have easily been foreseen from the pattern of my stocks as well as from the fact that it would have been extremely unlikely to make over $8500 in one week. I did make back over $2000 to cut my overall loss from 3.43% to 2.57%. If my stocks can rise similarly as a whole in the market over the next two weeks I could turn a small profit if the steady incline is coupled with one or two of my stocks making a solid move individually. This would be an ideal situation for me; however I do not foresee a profit by the end of this simulation. One thing I will begin to on Thursday of this upcoming week is to closely watch the fluctuations of my stocks to try and save myself as much money as possible by selling at the best instant. I have squatted on these six stocks for long enough; it is time to try and use some monetary savvy to make this simulation as successful as possible. If not by the end of this week then definitely the beginning of next week several small trades will occur with some of my stocks.

Week 6

Date	Symbol	buy / Sell	Original Price	Price	Holding Shares	Net Cost/ Proceeds	Profit / Loss	Total Cash	Market value
7/8	PTEN	n/a	$28.85	$26.34	1,244	$32,766.96	-$3122.44		
7/8	BA	n/a	$83.50	$79.99	500	$39,995	-$1755		
7/8	WMT	n/a	$49.65	$46.00	1,000	$46,000	-$3650		
7/6	PFE	Sell	$24.00	$23.68	0	0	-$320		
7/8	AIG	n/a	$61.47	$58.97	1,000	$58,970	-$2500		
7/8	DELL	n/a	$24.81	$23.87	1,500	$35,805	-$1410		
Total								$23705.60	$213,536.96 (-12757.44)

Table 2.7 End of Sixth Week of Observation [2].

At the end of week 6 I am in the worst position financially over the entire six weeks of observing. The stock I was most worried about was Wal-Mart, so I was planning on selling it early in the week if it reached anywhere in the $48 mark. On the fifth day of week 5 the Wal-Mart stock passed $48.50. I should have sold then, unless the last week proves very profitable for this stock.
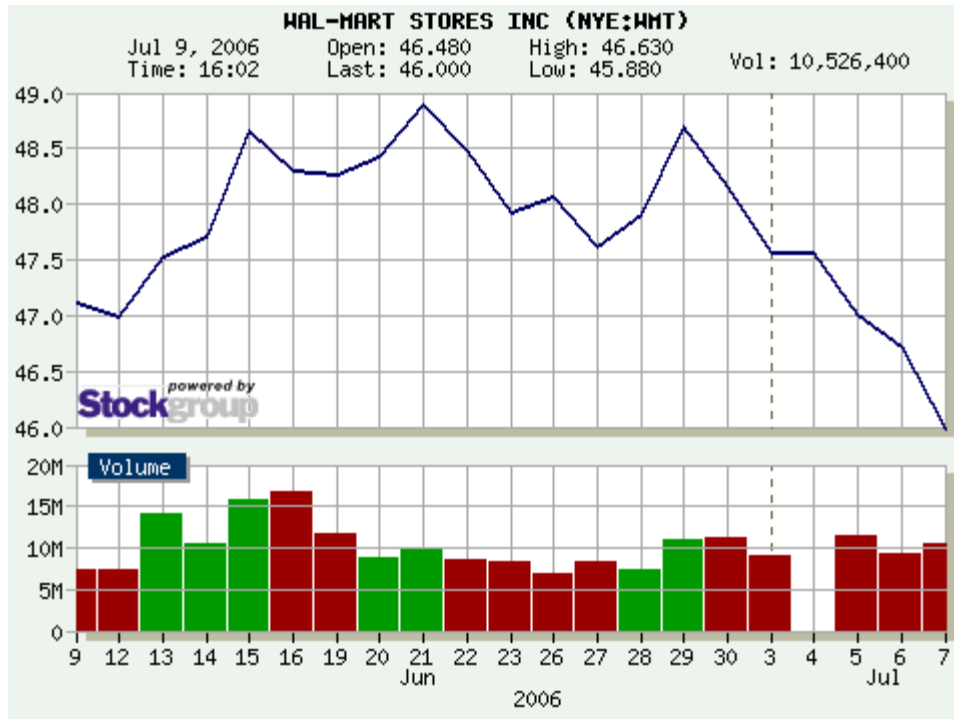
Fig 2.7 One month stock chart for Wal-Mart Stores Inc. [2].

At the beginning of week 6 I decided to hold on to Boeing Co., American International
Group, and Dell Inc. until at least partially through the last week. Each of these stocks
has been fairly sporadic moving up and down each week. I want to see how each of these
three stocks moves during the last week. I was not sure if I wanted to sell Patterson-UTI
Energy Co. this week or wait for the last week. It has been profitable some weeks and a
huge disappointment others. My decision was easily made when this stock decreased
each day this week. Hopefully it will rebound next week and not continue to fall. My
last stock is Pfizer Inc. I decided to sell this stock on July 6 because it seemed to have
reached a plateau. Not wanting to see it decline again, I quickly sold it to minimize my
loss at $320. I feel as if this was the correct decision based on the fact that Pfizer Inc has
been fairly level the entire trading period, but never really turning a profit. I think Pfizer
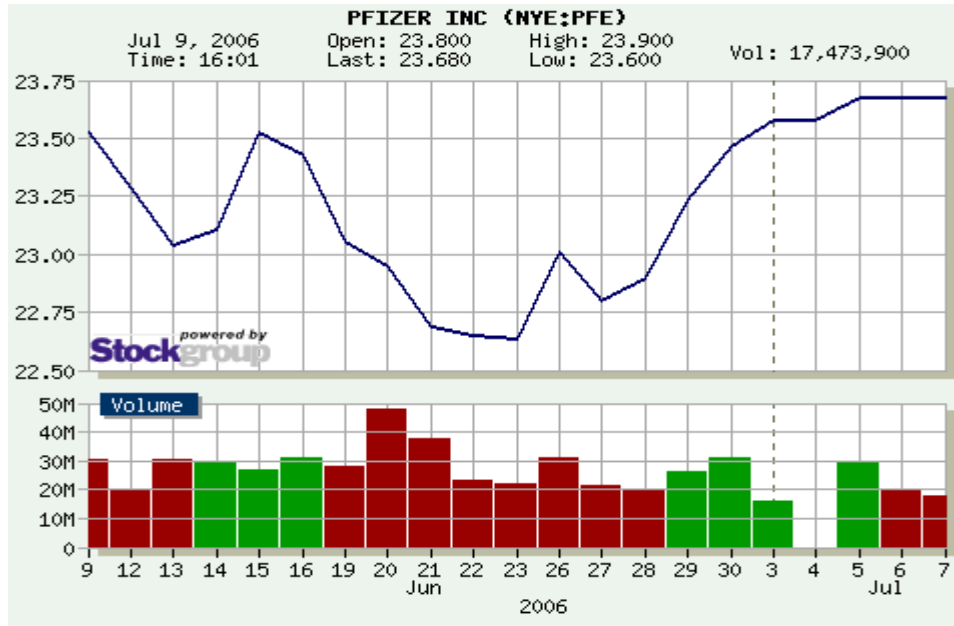will decline again next week therefore I sold all of it off.

Fig 2.8 One month stock chart for Pfizer Inc. [2].

In conclusion, this week was not a profitable one for me. I am currently down $12,757.44, which is 5.1% of my original $250,000. By the end of next week, the simulation will be over and I will sell off any remaining stocks I possess for a final cash assessment.

2.4 Final Trading and Results

Week 7

Date	Symbol	buy/ Sell	Original Price	Sell Price	Holding Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Market Value
7/12	PTEN	Sell	$28.85	$25.78	0	$32,070.32	-$3819.08		
7/12	BA	Sell	$83.50	$80.92	0	$40,460	-$1290		
7/11	WMT	Sell	$49.65	$46.13	0	$46,130	-$3520		
7/6	PFE	n/a	$24.00	$23.68	0	0	-$320		
7/11	AIG	Sell	$61.47	$59.46	0	$59,460	-$2010		
7/11	DELL	Sell	$24.81	$23.42	0	$35,130	-$2085		
Total								$236,955.92 ($13,044.08	0

Table 2.8 End of Last Week of Observation [2].

Week 7 is the last week of trading for this simulation. This means by the end of this week I will no longer keep any of my stocks and will sell them all back to the market for whatever profit or loss available to me. Unfortunately, with all of my stocks still falling in the market, my overall experience financially was negative, losing $13,044.08 of my original $250,000. This is an overall loss of 5.22%. Over this seven week period my stocks gradually fell and I never really had much of an opportunity for a profit. Coming into this week with the experience of the previous six weeks, I decided to play with my last five remaining stocks. Starting with the closing value on Monday, I decided to sell each stock on the day it experienced a decrease. Since almost every week my stocks have decreased in overall value, I figured it was best to use this method to cut my losses at a minimum for the simulation. I already sold off all of my Pfizer stocks, so let us look at Patterson UTI Energy.
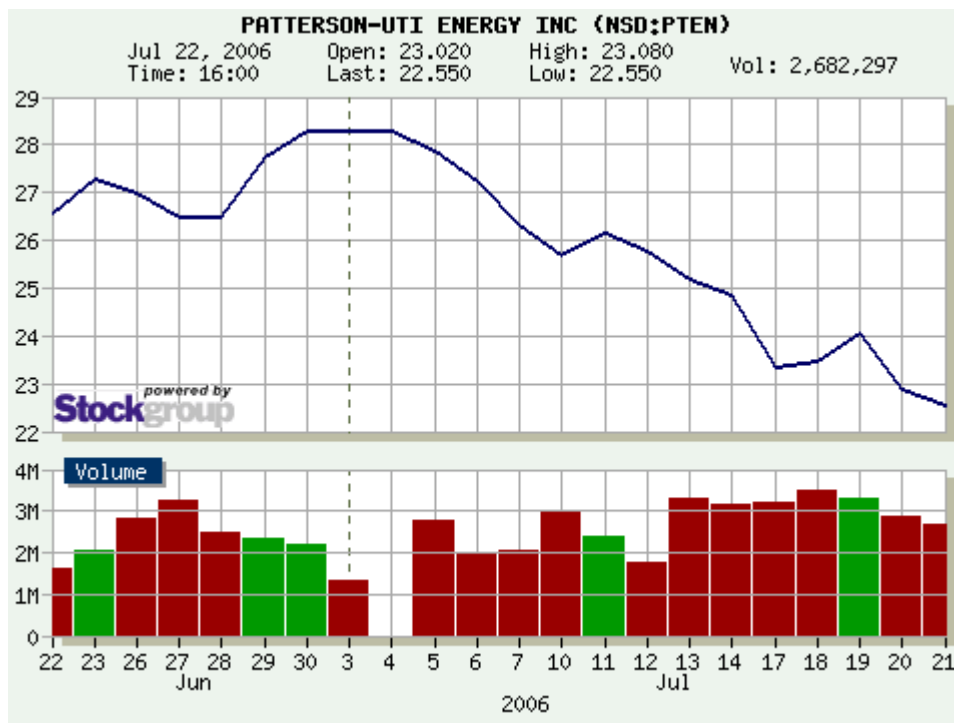

Figure 2.9 One month stock chart for Patterson UTI Energy Inc. [2].

Patterson UTI Energy was one of the initial money makers for me. However a steep and steady decline has caused this stock to be quite the headache. Turning out to be the stock I lost the most money with, I truly wish my presumption that summer's rising oil costs would increase stock value came true. However, a small increase on Monday followed by a decrease on Tuesday forced me to sell based on my plan.
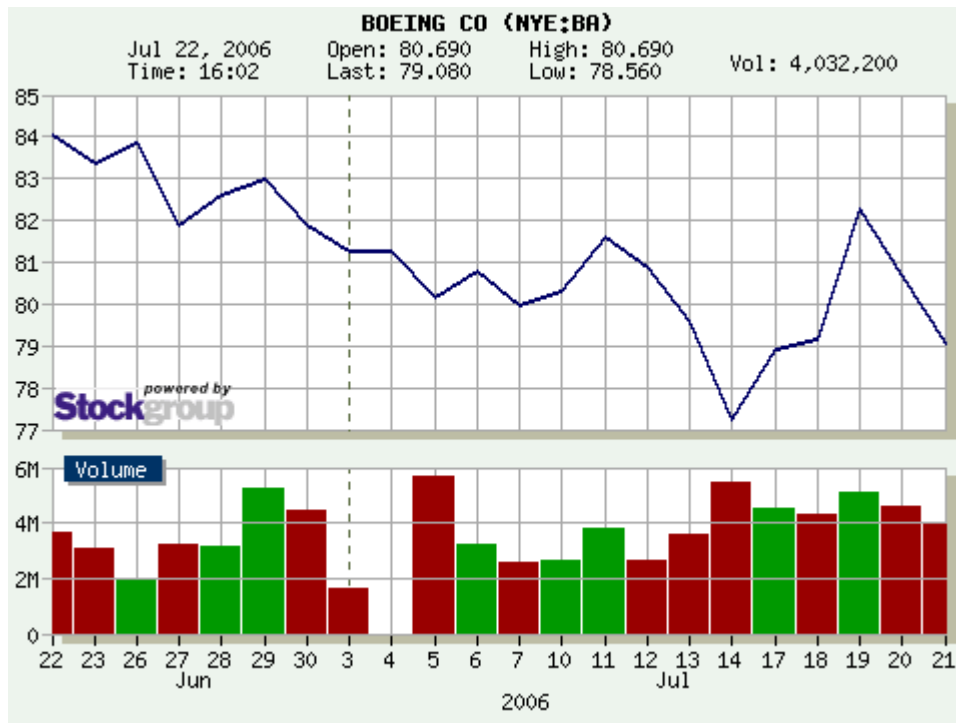
Figure 2.10 One month stock chart for Boeing Co. [2].

As all of my stocks decreased over the seven week period so goes it for Boeing Co. Never once did this stock ever really take off except from week 2 to week 3 where it spiked approximately $5.00 per share. However, due to my trading strategy, I decided to hold on to the stock for longer to see if the stock could rise even higher. Unfortunately from there is steadily spiraled downward to a loss of $1290.
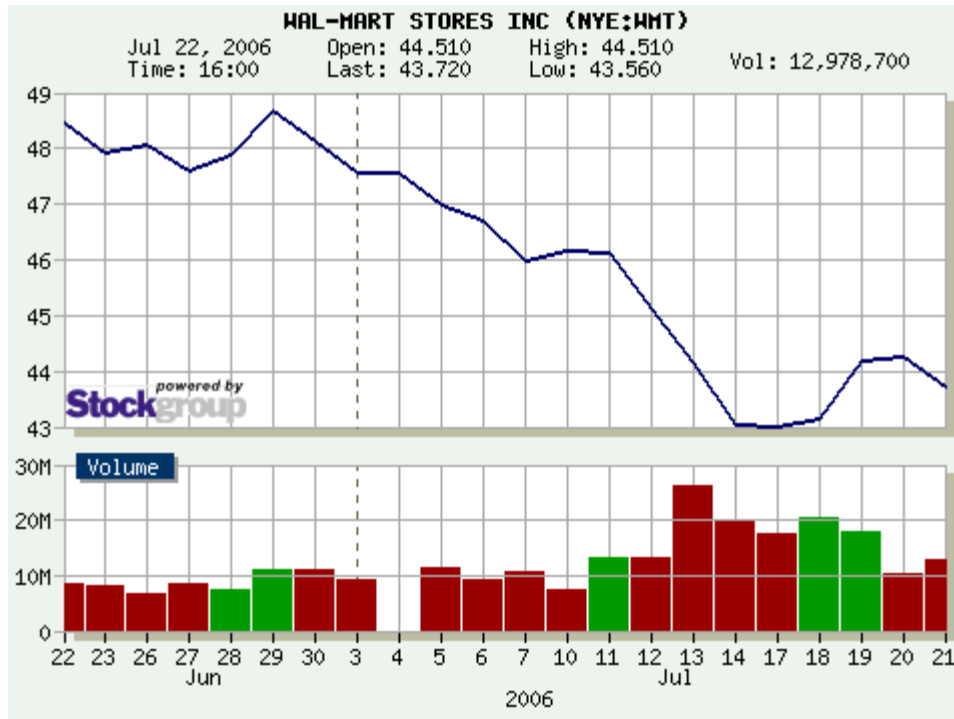
Figure 2.11 One month stock chart for Wal-Mart Stores Inc. [2].

Wal-Mart Stores Inc. was truly a devastating stock for me. As I was hoping America's favorite one stop shopping mall would be a success during the summer of a difficult merger of Sears Co. and K-Mart Stores Inc. it turned out to flounder in an open opportunity. The merger seems to have gotten the best of Wal-Mart, which was a surprise to me on such short notice. However, another failed stock was on my hands on Monday, so when it began to fall I quickly sold all 1000 of my shares for a loss of over $3000.
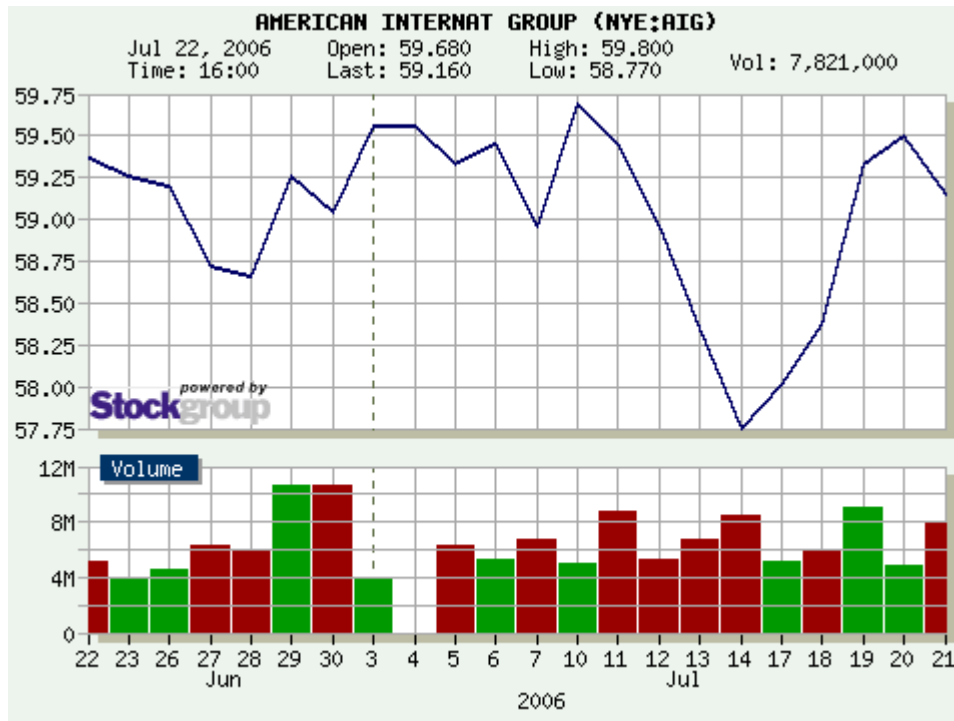
Figure 2.12 One month stock chart for American Internat Group [2].

AIG hovered helplessly in the mid to low $59 range for most of the month before the sell date. The second it made a small decrease after a rise on Monday I sold off the entirety of my shares. This turned out to save me quite of bit of money for regardless of the loss; I still would have lost a lot more if I held onto this stock until the end of the week as AIG lost a lot of value during the seventh and final week. Another disappointing stock for me as they all were, AIG lost me $2010.
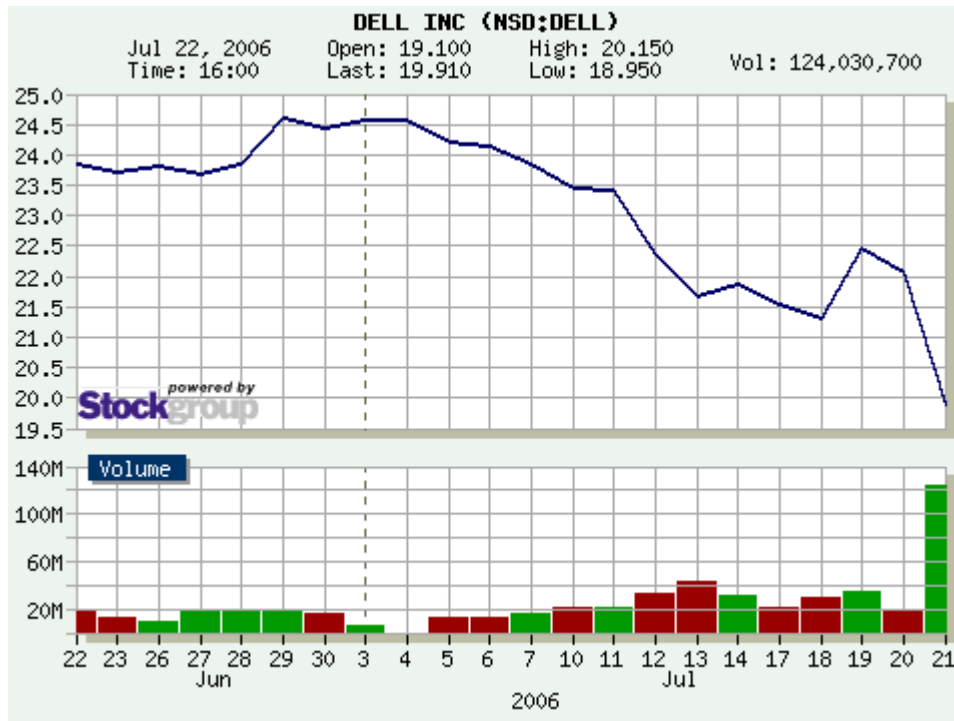
Figure 2.13 One month stock chart for Dell Inc. [2].

My final stock was Dell Inc. This stock over the seven weeks had ups and downs each week and was not steady at all. However, it ended up just like my five other stocks; at a loss. After being steadily down the past two weeks I was hoping it had reached a low and would rise back to where I at least had bought it originally. The last week was a tell-tale sign of doom for after a tiny increase in value Monday, it dropped dramatically Tuesday and Wednesday. However, sticking to my final week's strategy, I sold it the first day of loss during the final week and cut my losses on Tuesday. A leader of most electronic markets, Dell Inc. did not satisfy my expectations of a good company to invest in, losing me a cool $2085.

My final results as shown above are quite disappointing. I could not turn a profit on any of my stocks and lost quite a substantial amount of money. Besides the fact that my individual stocks decreased in value, the market on a whole has been down during the

simulation period. This would have made it very difficult with my trading method to make money regardless of the stocks I had chosen. This would have been a great period to short the market for it seems as if all stocks have been falling over the past four or five weeks. Unfortunately my goal of making money was completely unsuccessful. However I was able to learn many valuable things about stock trading. First, it is very important to look at the trends of the market as a whole rather than looking at the trends of individual stocks when looking to make a purchase or short. If the market is down, then there is a good chance most of the stocks are going to go down. Next, I learned it is very important to hold a portfolio diverse enough to withstand a dramatic fall in one area of the market. This will help keep your monetary position balanced and help you keep out of bankruptcy. Finally I learned that though it may be good to have a specific investment strategy, this strategy must be able to adapt to the ever changing market. As my stocks went down each week it may have been wise to alter my long term plans and short the market to take advantage of falling stock prices. There is no one set way to attack the market, but if the time is taken the stock market can be a good source of profit.

3. The "Big Dipper" Method

3.1 Strategies and Goals

In order to gain a breadth of understanding for the stock market and how to approach trading, each group member is utilizing a different strategy. The goal for each is to turn a profit at the conclusion of the simulation and to be able to compare the advantages and disadvantages of the strategies.

The method I will be analyzing is called the Big Dipper Method. When using this strategy, you need to find a stock that is on a downward slide, or dip, in the market. Because stocks tend to recover rather than continue to slide, you can make a profit by buying the stock at the dip and then holding it for a period of time then selling it. Generally you set a date or price that you will sell the stock at before you purchase it and sell the stock at that time regardless of whether or not it has recovered. This will help to avoid holding the stock for too long hoping to see it begin to recover when it may just continue to drop.

In order to purchase a stock that will likely recover, you should examine the trends for that particular stock over the months leading up to when you are going to purchase it. In general, the stock should show a series of dips and recoveries and if this trend is present then this method would be good to apply to it [6].

3.2 Choosing Stocks to Purchase

To start I will purchase three stocks with the amount of money spent on the shares of each totaling $250,000. The companies that I have chosen are oil and gas based companies and foreign car companies because I anticipate a sharp increase in gas prices

over the coming months and I want to see how that will affect the companies' stock prices. The three companies I will start with are Exxon Mobil Corporation (XOM), Toyota Motor Corporation (TOYOF), and Honda Motor Company LTD (HMC). Each of these companies is tied to oil and gas. Toyota and Honda is two car manufacturers that are leading the hybrid push, which I think should result in a surge in each of these stock prices as gas prices increase. Also, each of the companies is just coming out of a dip in their stock prices, an optimal time to apply the big dipper method. The charts below illustrate this.

Figure 3.1 Exxon Share Value June 2005-2006 [3].

Figure 3.2 Toyota Share Value June 2005-2006 [3].

Figure 3.3 Honda Share Value June 2005-2006 [3].

3.3 Trading With the Method

Below is a table that I will use to track the progress of these stocks over the next two weeks. I have set two weeks as the time that I will sell them regardless of profit or loss.

Symbol	Company	Date of Purchase	Purchase Price	Amount of Shares	Cost	Anticipated Date of Sale
XOM	Exxon Mobil	29-May	$61.58	1500	$92,370	12-Jun
TOYOF	Toyota Motor Corporation	29-May	$55	1500	$82,500	12-Jun
HMC	Honda Motor Corporation	29-May	$33.56	2200	$73,832	12-Jun
					$248,702	

Table 3.1 – Beginning of Week 1 [3].

Symbol	5/26	5/30	5/31	6/1	6/2	Profit/Loss Per Share	Net Gain/Loss
XOM	$61.58	$60.20	$60.91	$61.11	$61.65	$0.07	$105.00
TOYOF	$55.00	$55.00	$53.60	$52.90	$54.90	($0.10)	($150.00)
HMC	$33.56	$32.90	$33.03	$33.44	$33.66	$0.10	$220.00
							$175.00

Table 3.2 - Week 1 [3].

After a short week of trading due to the holiday, two of the stocks I have chosen have increased in value while one decreased. If I were to have sold these stocks at the conclusion of week one I would have yielded a profit of $175.00. Yet, I had set 2 weeks as the amount of time that I will hold these stocks so I must stick with it and hope the stocks continue to rise. Each of the stocks took a hit in the beginning of the week and spent the remainder of the week rebounding from that. I am hopeful that this rebound will continue so as my first set of stocks will turn a profit.

Date	Symbol	Price	Shares	Net Cost/ Proceeds	Profit/Loss	Total Cash	Total Asset
06/12	XOM	$58.80	1500	$88,200	-$4,170.00		
06/12	TOYOF	$50.50	1500	$75,750	-$6,750.00		$232,370.00 (-$17,630)
06/12	HMC	$30.51	2200	$67,122	-$6,710.00		

Table 3.3 Week 2 Results [3].

Week 2 saw significant losses for each of my stocks. The market as a whole took a large hit this past week dropping 80 points from the beginning of the week (Chart Below). Just as the long term stocks were unable to yield a profit, my stocks did much the same. This week was a good one to have shorted stocks as a large amount of share prices dropped significantly. Hopefully my next three stocks will put me back into the black.

Figure 3.4 - NASDAQ Composite [6].

The three stocks I will purchase tomorrow are Halliburton Co. (HAL), Dell Computers (DELL), and Verizon Communications (VZ). After the losses I suffered through the first two weeks of this simulation, I am only left with $232,370.00. This is a two week loss of over

seventeen thousand dollars, or 7.05% of my original investment. I will invest what assets I have left in these three stocks and hope to regain some of my losses.

Date	Date of Sale	Symbol	buy/ Sell	Price	Shares	Net Cost/ Proceeds
06/12/06	6/26/06	HAL	Buy	$72.61	1500	$108,915
06/12/06	6/26/06	DELL	Buy	$25.26	3000	$75,780
06/12/06	6/26/06	VZ	Buy	$31.50	1500	$47,250

Table 3.4 – Start of Week 3 [3].

Halliburton is a company that is based all facets of oil production from drilling to manufacturing. The stock is currently rebounding from a small dip in the stock price and I am hoping that I am getting in at the right time.

Verizon Communications is a company that is based in telephone communication, both wireless and home phone services. But the company also provides cable and internet services across the country. They have become one of the most popular wireless service providers in the nation and are quickly becoming a prominent cable internet provider.

Dell Computers provides affordable yet highly functional personal computers. I believe that the summer months are a good time to invest in this type of company because purchases should be peaking during this time with kids graduating from high school and preparing for college. Having a personal computer is becoming a necessity for incoming freshmen.

Date	Date of Sale	Symbol	Price 6/16	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Asset
06/12	6/26	HAL	$74.43	1500	$111,645	$2,730		
06/12	6/26	DELL	$24.12	3000	$72,360	-$3,420		$234,113 (-$15,887)
06/12	6/26	VZ	$32.54	1500	$48,810	$1,560		
Totals				6000	$232,815	$870	$1,298	

Table 3.5 Week 3 Results [3].

Week number three was mildly successful. Two of my stocks increased in price as I had hoped yet the one I had invested the heaviest in dropped. This resulted in only a minimal gain, only 0.348% of my original investment. In order to make a profit by the end of this simulation I cannot continue to make such small gains after the significant losses I suffered earlier this month.

Week 4 was yet another disastrous one for me. Only one of the three stocks I was holding made a gain, and that gain was minimal. As table 3.5 shows below, my total asset continues to fall; at this point I have lost 7.9% of my investment. With three weeks remaining, I have my work cut out for me if I want to turn a profit by the end of this simulation.

Date	Symbol	Price 6/26	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Asset
06/26	HAL	$71.77	1500	$107,655	-$1,260		
06/26	DELL	$23.72	3000	$71,160	-$4,620		$230,228 (-$19,772)
06/26	VZ	$32.83	1500	$49,245	$1,995		
Totals			6000	$232,815	-$3,885	$1,298	

Table 3.6 – Week 4 Results [3].

On Monday the 26th, I will be purchasing three new stocks with the remaining assets I have. The companies that I have chosen to invest in are Penwest Pharmaceuticals (PPCO), Sirius Satellite Radio (SIRI), and Microsoft Corporation (MSFT).

I chose Penwest and Microsoft because I wanted to change my strategy for choosing companies a bit. Not only are these companies coming off dips in their stock prices, as this investing strategy requires, but Penwest has just released a new drug, and Microsoft is on the verge of releasing a new operating system for personal computers. Both of these occurrences should cause the respective stock prices to jump. Sirius Satellite Radio was chosen because I think that satellite radio will only continue to grow in popularity as it has done since its beginning. It is easy to use, affordable, and many of the features are exciting to prospective customers. For example, better signal, no commercials, and no censorship.

Date	Symbol	Price 6/26	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Asset
06/26	SIRI	$4.47	4300	$19,221			
06/26	PPCO	$22.01	6000	$132,060			
06/26	MSFT	$22.50	3500	$78,750			$230,228
Totals			13,800	$230,031		$197	(-$19,772)

Table 3.7 – Start of Week 5 [3].

Date	Symbol	Price 6/30	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Asset
06/26	SIRI	$4.75	4300	$20,425	$1,204		
06/26	PPCO	$21.83	6000	$130,980	-$1,080		
06/26	MSFT	$23.30	3500	$81,550	$2,800		$233,152
Totals			13,800	$230,031	$2,924	$197	(-$16,848)

Table 3.8 – Week 5 [3].

In week five, two of my stocks increased in price while one dropped from their prices of the start of the week at the closing of the market. And once again, the stock that dropped in price was the one I had invested most heavily in. This diminishes the overall profit that I would have made if I sold these stocks on Friday. However, I am holding on to all three for another week. Microsoft made a significant gain of $0.80 at week's end which helped me to decrease the amount of total asset I have lost by a whole percentage point.

Date	Symbol	Price 7/9	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Asset
07/9	SIRI	$4.41	4300	$18,963	-$258		
07/9	PPCO	$21.21	6000	$127,260	-$3,720		
07/9	MSFT	$23.30	3500	$81,550	$2,800		$227,970
Totals			13,800	$227,773	-$1,178	$197	(-$22,030)

Table 3.9 Week 6 [3].

Week 6 was yet another week that saw losses for my stocks. Microsoft held steady at weeks end at $23.30, right where it began the week. The other two companies I had invested in, Sirius Satellite Radio and Penwest Pharmaceuticals saw losses of $0.34 and $0.62 per share, respectively. After 6 weeks of trading, it seems as though this trading method is not all that effective. However, the market has been dropping as a whole throughout the duration of this simulation, which makes it difficult to turn a profit using this method. During times like this, methods like shorting the market (Chapter 4) seem to be much more profitable.

Date	Symbol	Price 7/10	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Asset
07/10	ORCL	$14.78	9500	$140,410			
07/10	F	$6.73	6300	$42,399			
07/10	EMC	$11.18	4030	$45,055.40			
Totals				$227,864		$105.60	$227,970

Table 3.10 Start of Week 7 [3].

With this being the last week of trading for our simulation I will only be holding these stocks for that amount of time. This could prove to be good for me as it seems that the trend for my stocks has been to rise in the first week, but then drop off in the second week that I hold them. With the method I am using, I must hold these stocks for the specified time; otherwise I could have sold some of my shares to make a profit.

The companies that I have chosen for this week are Oracle Corporation, Ford Motor Company, and EMC Corporation. Oracle Corporation is an information technology company. They specialize in data sharing platforms for businesses, making information easily obtained and shared across the globe. Ford Motor Company is a domestic car company that is making a strong push towards environmentally safe and fuel efficient automobiles. I believe that companies that are making this effort will see an increase in sales as gasoline prices continue to rise and are at the moment over $3.00 a gallon. EMC Corporation is another information systems company. This company prides itself on helping companies easily manage large amounts of information while at the same time keeping all of that information secure.

Date	Symbol	Price 7/14	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Asset
07/14	ORCL	$14.29	9500	$135,755.00	-$4,655		
07/14	F	$6.38	6300	$40,194.00	-$2,205		
07/14	EMC	$9.44	4030	$38,043.20	-$7,012		
Totals				$213,992.20	-$13,872.20	$105.60	$214,027.8

Table 3.11 End of Week 7 [3].

The last week of trading was the second worst week for me. Despite only holding these stocks for one week, I suffered come of my worst losses of the simulation. Oracle Corporation dropped $0.49, Ford Motors fell $0.35, and EMC Corporation fell $1.74. For the week, I lost $13,872.20, which is about 5.5% of my initial investment. As has been the case throughout this simulation, the market as a whole continued to fall.

At the conclusion of this simulation I lost $35,972.20, an average weekly loss of over five thousand dollars. Needless to say, those are not numbers that you would like to see after investing so heavily. There were weeks that I did make a profit, such as weeks 1, 3, and 5. However, using this method, you must hold you stocks for a specified period of time. So, even if I was in the black after the first week of holding the stock, I still had to hold on to it for another week. And this second week is generally where I suffered my losses. I have not been able to ascertain a reason for this. I thought that maybe if I chose stocks based on the criteria I set forth earlier and only held them for one week (week 7) that it may yield a profit. But still, the results for week 7 were terrible. Below is a chart showing my total asset as it fluctuated weekly.
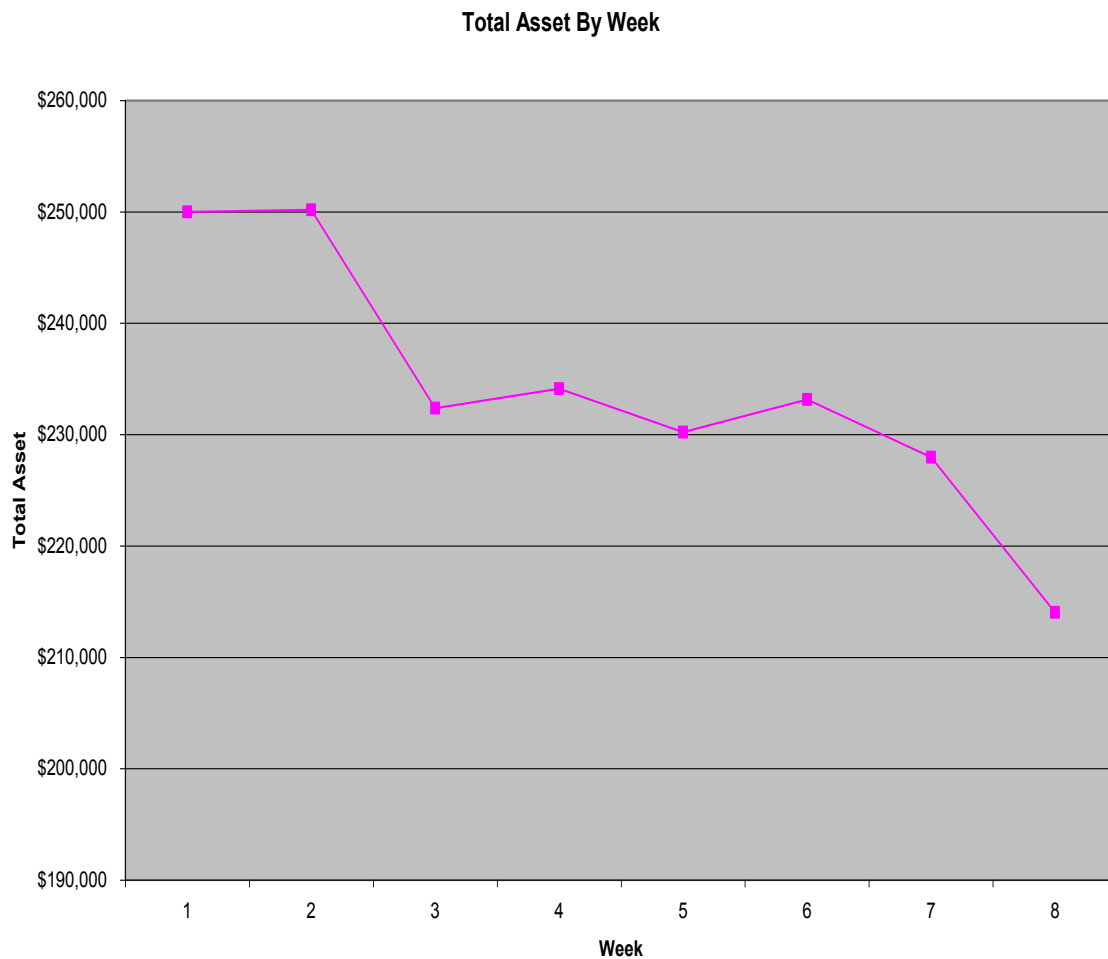
Total Asset By Week

Figure 3.5 Total Assets by Week

3.4 Trading Results

At the conclusion of the simulation I lost a large amount of money. It seemed as though every time I picked a company to invest in using the criteria for this method that the stock would rise only a small amount then would drop sharply. It was difficult to watch my stocks drop helplessly as I knew I had to hold onto them for the specified amount of time.

Figure 3.6 below shows the NASDAQ Composite over the past three months. This simulation began on May 29th and ended on July 14th. It is easy to see that over that time period the market was in a pretty steady decline, dropping almost 200 points over that time period.
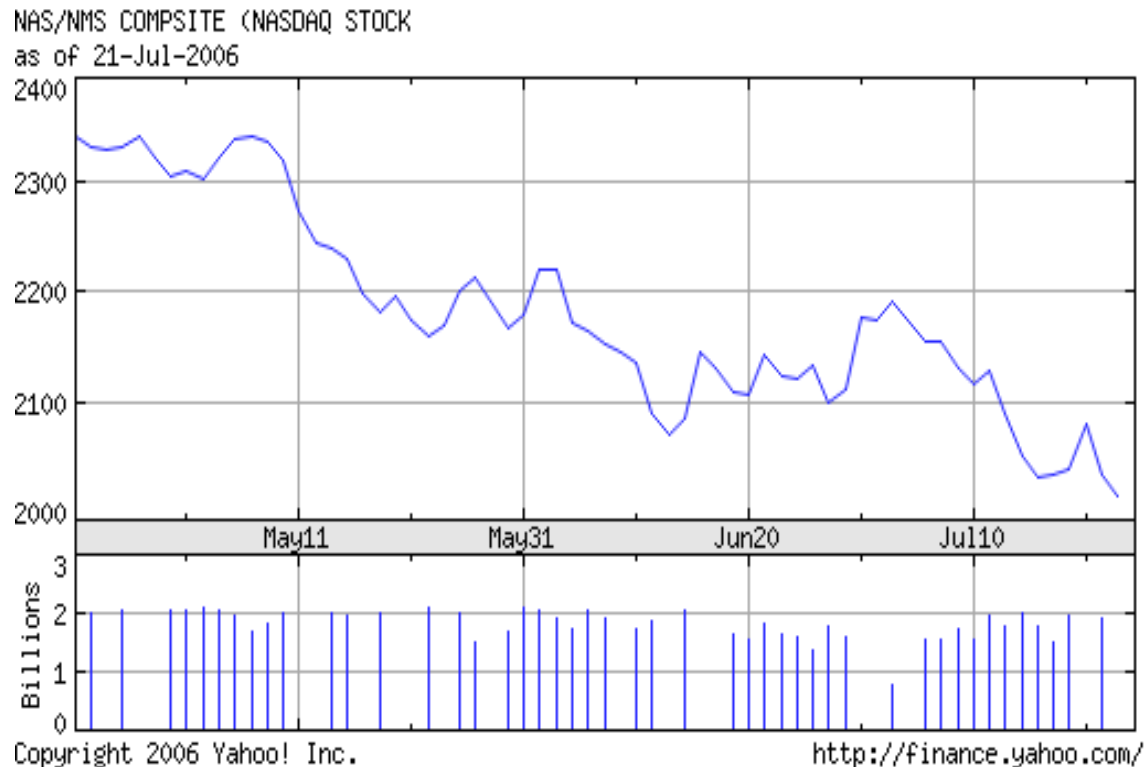

Figure 3.6 NASDAQ Composite [6].

As for me, I ended up losing 14.39% of my original $250,000 investment. The companies that I had invested in were mainly technology, oil, or information related. With gas prices continuing to rise over the course of this summer, I had anticipated the car companies that are manufacturing fuel efficient and hybrid cars would be making large profits. However, this was not the case at least not for the period that I had held their stock for. This was the same case for the information and technology companies. I

felt that with Microsoft getting set to unveil a new platform that other companies would be profiting from that, setting up databases for companies all over the globe.

At the beginning of this simulation, I had set a few goals. One of these goals was to make money; obviously this goal was not met. Another goal was to learn about the market and the method I was using. I feel like I researched the stocks I was going to purchase well and that they were at the right point for me to buy using the Big Dipper Method. Each time, the stock was at what appeared to be the end of a dip in price, or just beginning to rise from that dip. Yet each time I purchased a stock it would increase in price as I had hoped, then drop which was unexpected.

One thing I have learned about the market is that can be dangerous. Even though I understood what I was setting out to do, and did my research before choosing what companies to invest in, I still ended up losing more that thirty-five thousand dollars. It is very comparable to gambling. You do your research and invest just as you would research and place a bet, then hope that the end result is the one you were looking for. You must be very careful when investing, especially when you place portions of your income and assets in the market. This is why it is very helpful to use an investment firm that can advise on "safe" investments that are likely to produce a return for you. These same firms can also show you where you can take risks and what companies are good for that.

4. Shorting the Market

4.1 Strategies and Goals

According to the Yahoo Finance Glossary shorting a stock involves "selling a security that the seller does not own but is committed to repurchasing eventually. It is used to capitalize on an expected decline in the security's price." Basically, someone who shorts is borrowing stock from a brokerage firm in hope to buy them later, or "cover" at a lower price. At this point in time they will return the stocks to their rightful owner and make a profit or loss on the difference. One key factor of this method is that a short seller is obligated to buy back the stock regardless of its change in price [6].

To begin shorting stocks you have to open up a margin account. All that really means is that you are investing with borrowed money. As in all other cases with borrowing, an investor will be expected to pay interest on their advance. You will also be subject to the rules and regulations of shorting. You can not short a penny stock and before shorting the last trade must be an up-tick or zero plus-tick [6].

This method is often used as a hedge for those who have a broad portfolio. However, for the casual investor there are enormous risks to shorting and one should only use this method if they are certain of a declining market.

My strategy is going to be to go after companies that are cutting costs or are involved with energy and/or fuel. This is because a company that is cutting their costs is most likely trying to make up for a lack of production/sales. The energy related companies are fairly self-explanatory. Obviously gas prices are through the rough which will lead to declines in air travel, purchasing large vehicles, RV's and motor homes, etc.

My goals in the simulation are to first and foremost gain a knowledge of the stock market and then to grasp a hold of one of its most risky methods. Finally, I hope to short stocks that will soon decline and simulate a significant profit.

4.2 Stocks Chosen

WEEK 1:

For the week starting on Monday May 29, 2006 I decided to start off by shorting three stocks. I figured this would be a good number to start with because I was dealing with a unique and risky method and this number would be handled fairly easily. So, after researching several different areas of the economy and thinking about what fields I thought would go down I picked my three stocks. They were Home Depot (HD), Goodyear Tire and Rubber Co. (GT), and General Motors (GM). I liked Home Depot because with the economy just starting to turn in the last few months the last thing people really have on their minds is home improvement. With all other expenses piling up, home owners usually will put off house repairs unless they are absolutely necessary. Then I liked General Motors and Goodyear for the same reasons. America was built by big business and American's today have a zest for power and status symbols. That is why I felt that an American car company would go down because gas prices are high and people are looking for the most durable and fuel efficient cars possible. If car sales go down, then so will tire sales. That is what leads me to Goodyear. Although they produce more than just tires, it is their main product and I figured that this would be enough to force the price of the stock down.

With these stocks I do not have a date or numbers at which I plan on buying back the shares. I have, however, decided to hold on to them for the first two weeks to become more accustomed to the process (unless one stock seems to shoot up and I feel the need to unload it to curb my losses).

WEEK 2:

During this past week there is not much for me to report as far as stocks chosen because as I said last week I would hold these stocks for the duration of the week. However, as the week progressed I decided to buy back two of my stocks. Those are General Motors and Goodyear. I chose to buy these back because towards the end of the week they began to rise and at that time I had made a significant profit. General Motors yielded a profit of $4,350 because I sold 2500 shares for $27.09 and bought them back for $25.35. Goodyear yielded a profit of $2950 because I bought 2500 shares for $12.99 and bought them back for $11.81. As I look into the beginning of next week I hope to acquire two more stocks that will take the place of the two I have just gotten rid of.

WEEK 3:

This week I chose to hold on to only Home Depot and not to short any other stocks. This is because I wanted to watch a few companies over the week and then maybe short them on Monday. Two companies I watched were Pulte Homes and Toll Brothers. These are both construction companies which is a declining area in the American economy. Both of these stocks went up and down throughout the week but, the general trend was downward.

WEEK 4:

This week after looking into the fields of construction and large motor vehicles I decided to purchase stock in Toll Brothers Inc. (TOL). This company is a construction company specializing in luxury homes and condominiums. Oftentimes they like to take empty locations and refurbish them into luxury communities. Their stock opened the beginning of the week at $26.53/ share. I feel that this company will continue on the decline because of the declining real estate market in America. This economic development does not tailor well to the services of home contractors. Therefore, I have decided to sell 4500 shares for a total cost of $119,385.

WEEK 5:

During the past week I decided to again have all of my money invested by purchasing a third stock and retaining the ones that I had from last week. The new stock I bought was in KB Homes which like Toll Brothers is a large construction company based in the United States. In the last year they built over 37,000 housing units. The price that I shorted the stock for on June 26 was $47.12 per share. This is considered an expensive stock and I could only afford 895 shares which cost me $42,172.40. This means that I now will have most all of my money invested. My other two stocks (Toll Brothers and Home Depot) have continued to go down and I see no real reason to get rid of them. Although I could turn profit now (especially on Home Depot) I feel like it is worth the risk to see if these stocks will reach even lower prices. I feel this way because the way the market has been going in real estate, construction, and home improvement I feel like

there is no way I can lose money on these stocks (figuratively speaking). They have sunk to levels where I feel as if I will be able to monitor them closely and react to any rise in price before they approach the prices at which I originally sold them.

WEEK 6:

This week I did nothing but observe the stocks that I had previously shorted. I did no trading because I either was happy with the progress of my stocks or feel the stocks will move in a positive direction during the last week of the simulation. I feel as if I am at a good position as far as my investments go because I feel that the stocks I have invested in are not too volatile and also I have all my money invested (practically).

WEEK 7:

For the second straight week I decided to sit and observe the stocks that I had previously shorted. I feel that throughout the simulation I was very active in pursuing new investments. However, these three stocks were ones that I felt would still decline and I saw no reason to tamper with a good thing. This was proven to be correct because I had my most profitable week during the last week of the simulation.

4.3 Trading with the Method

As I previously stated, I was not planning to move these stocks unless something drastic happened during the week so, I will just provide the data that displays my stocks activity throughout the first week of our simulation.

Date	Symbol	Price 5/29	Shares	Net Cost/ Proceeds	Profit/Loss	Total Cash	Total Asset
29-May-06	HD	38.26	2500	95,650	650		
29-May-06	GT	12.99	2500	32,475	1025		
29-May-06	GM	27.09	2500	67,725	1500		
							253,175
Total						54,150	**(+3175)**

Table 4.1 Stocks shorted week one [5].
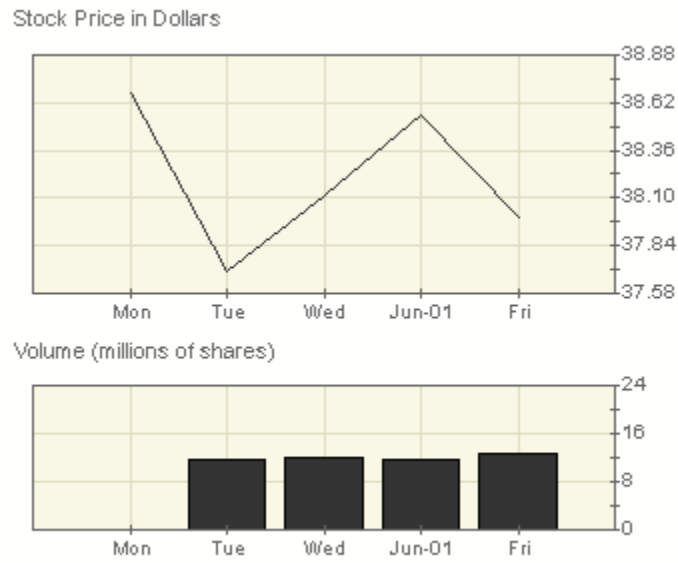
Figure 4.1 Home Depot weekly stock performances [5].

Stock Price in Dollars

Volume (millions of shares)
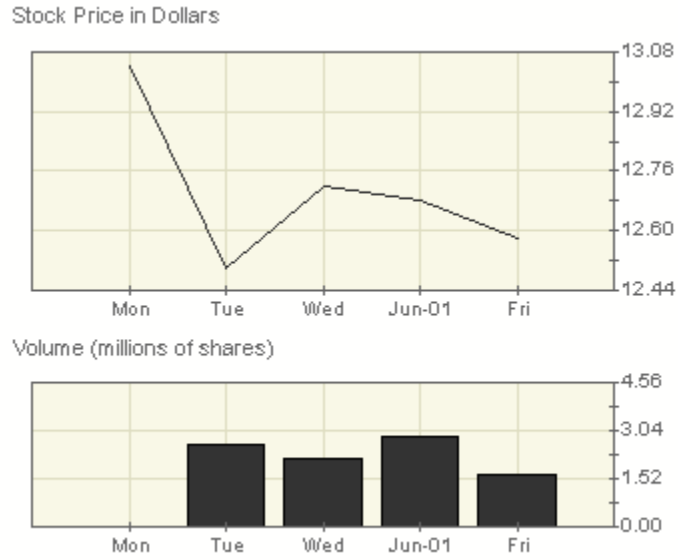
Figure 4.2 Goodyear weekly stock performances [5].
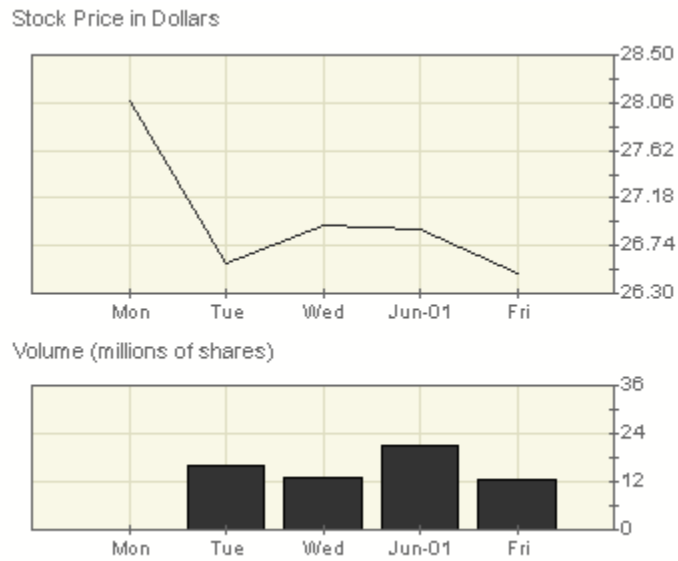
Stock Price in Dollars

Volume (millions of shares)

Figure 4.3 GM weekly stock performance [5].

Through a second week I decided to buy back two of my stocks because I am worried that they will once again rise towards the original price at which I bought them. Presently I am going to look at construction companies and motor home and RV companies. I feel that these are two fields that could see significant drops in the coming weeks. Overall I feel this method has been a success to this point because I have made over $7,000 and could make more if I decided to get rid of my Home Depot stock.

Date	Symbol	Price 5/29	Shares	Net Cost/ Proceeds	Profit/Loss	Total Cash	Total Asset
06/12/06	HD	$38.26	2500	$95,650	---------------		
06/12/06	GM	$27.09	2500	$67,725	$4350		
06/12/06	GT	$12.99	2500	$32,475	$2950		
Total						$161,650	260,575 (+10,575)

Table 4.2 Stock shorted week 2 [5].

In my third week I did no trading just held on to the Home Depot stock. I also plan to hold it for at least a few more days. The price this week went up and down opening at $36.95 and closing on Friday June 16 at $36.91. So, this was a slower week for me than the previous two but, it is always better when some type of profit is made.

Date	Symbol	Price 5/29	Shares	Net Cost/ Proceeds	Profit/Loss	Total Cash	Total Asset
06/19/06	HD	$38.26	2500	$95,650	-------	161,650	261,575 (+10,675)

Table 4.3 Stocks shorted week 3 [5].

In the fourth week of trading I had bought a new stock with Toll Brothers and I wrestled with the prospect off buying back my Home Depot stock but, I like that it continues to go down and I still feel confident that it will not approach the original price I

paid for it for a long time still. So for Week 4 my only move was to short the Toll Brothers stock. Next week I will be looking to add one possibly two more stocks to my portfolio.

Date	Symbol	Price 5/29	Shares	Net Cost/ Proceeds	Profit/Loss	Total Cash	Total Asset
06/26/06	HD	$38.26	2500	$95,650	4625		
Date	Symbol	Price 6/19	Shares	Net Cost/ Proceeds	Profit/Loss		
06/26/06	TOL	$26.53	4500	$119,385.	405		
						42,265	262,330 (+12,330)

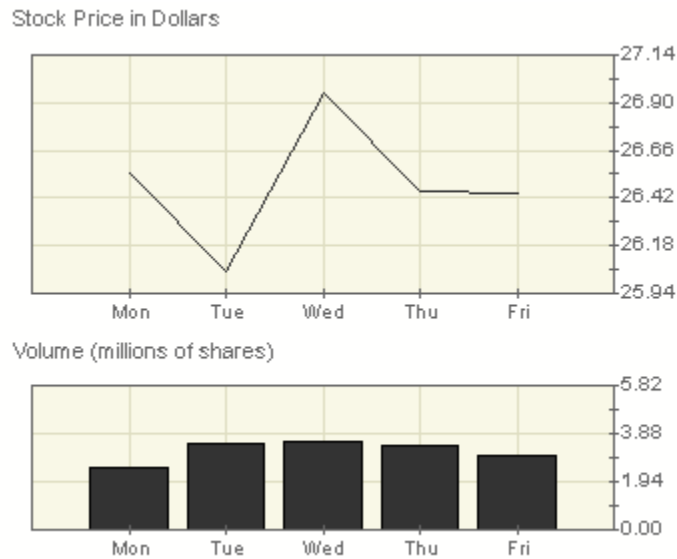Table 4.4 Stocks shorted week 4 [5].

Figure 4.4 Toll weekly stock performances [5].

Last week I said that I would be looking at the RV and Motor Home industry to short stocks in. However, I decided to go with another construction company. My original

thought was that I should diversify my stocks by industry. But then I started thinking that

my main goal was to make money and even if that meant owning ten stocks in the same

industry that is what I would have to do. My only "trades" this week was my shorting of

KB Homes. Otherwise I was just holding this week and continuing to watch the decline

of the stocks that I had previously shorted. This past week I made $1136.65 in profit on

my KB Homes short. I made $1550 on my Home Depot short. Then I made $3915 on my

Toll Brothers short. Overall my weekly profit was $6601.65.

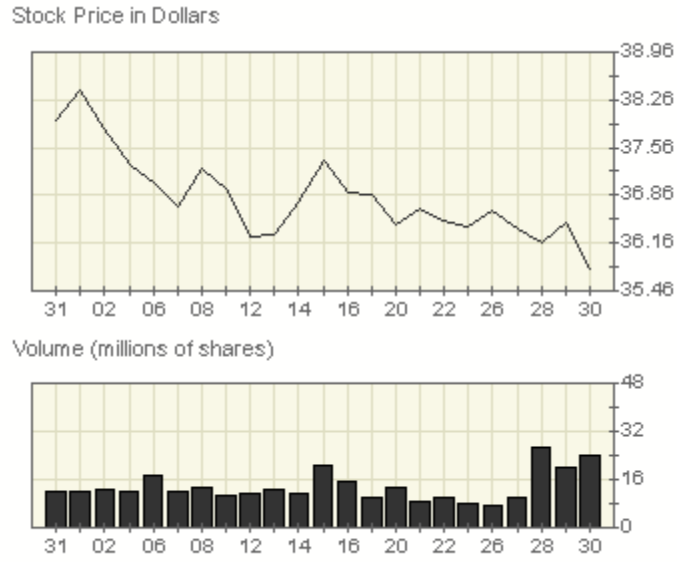| Date	Symbol	Price 5/29	Shares	Net Cost/ Proceeds	Profit/Loss	Total Cash	Total Asset
07/02/06	HD	$38.26	2500	$95,650	$6175	$92.60	$268,931.65 **(+18,931.65)**
Date	Symbol	Price 6/19	Shares	Net Cost/ Proceeds	Profit/Loss		
07/02/06	TOL	$26.53	4500	$119,385.	$4320		
Date	Symbol	Price 6/26	Shares	Net Cost/ Proceeds	Profit/Loss		
07/02/06	KBH	$47.12	895	$42,172.40	$1136.65		

Table 4.5 Stocks shorted week 5 [5].

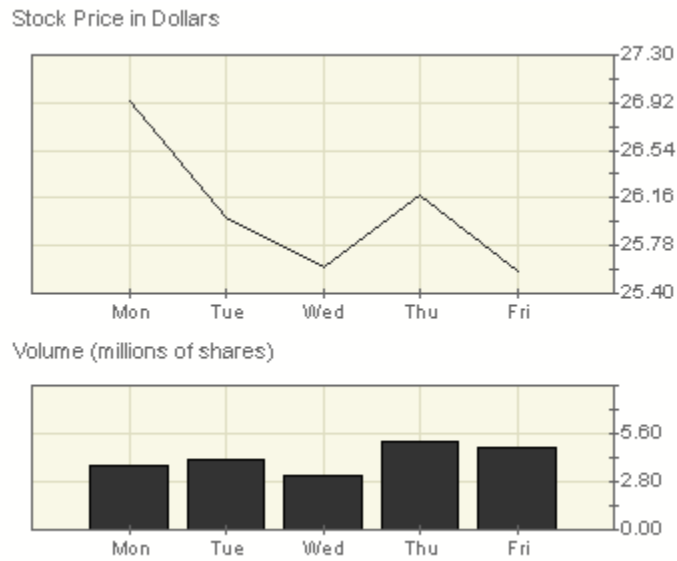Figure 4.5 Home Depot weekly stock performances [5].

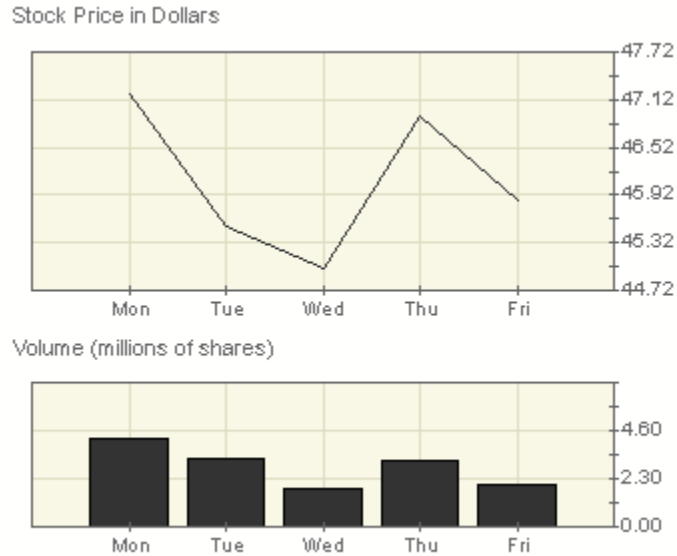Figure 4.6 Toll Weekly stock performances [5].

Figure 4.7 KB Homes weekly stock performance [5].

As you can see through the charts all of these stocks continue to decline. I am very positive about the KB Homes stock because the price is declining and so is the volume of shares which means people are losing confidence in this company. My other two stocks have rising or somewhat constant volume which could be a cause for concern and might be something for me to monitor with each passing day. If I neglect these details it could come back to haunt me and my "wallet".

At this point and time in the simulation I would have to rate my investments and the strategy used to be extremely effective. Off of investments of roughly 250,000 dollars I have returned over 18,000 dollars in a five week period. That is a return of 7.2% for a very short period. This is an incredible return to get. If it kept up at this rate I would have a yearly return around 70%. Hopefully my moves will pay off and I can continue to make money on all my investments until the simulation is complete.

Date	Symbol	Price 5/29	Shares	Net Cost/ Proceeds	Profit/Loss	Total Cash	Total Asset
07/09/0.6	HD	$38.26	2500	$95,650	$7225		
Date	Symbol	Price 6/19	Shares	Net Cost/ Proceeds	Profit/Loss		
07/09/06	TOL	$26.53	4500	$119,385.	$3195		
Date	Symbol	Price 6/26	Shares	Net Cost/ Proceeds	Profit/Loss		
07/09/06	KBH	$47.12	895	$42,172.40	$861.65		
						$92.60	$268,581.65 **(+18,581.65)**

Table 4.6 Stocks shorted week 6 [5].

This week of observing was rather lackluster. Both of my construction and real estate stocks went up and I took a loss on both of them. However, as it has done every week since I shorted it, Home Depot fell again.

Home Depot opened the week at $35.79 and would close at $35.37. Toll Brothers opened the week at $25.57 and closed the week at $25.82. Meanwhile, K.B. Homes opened the week at $45.65 and would close on Friday at $45.76.

Overall I incurred a loss of $350. Normally this would be bad but, I feel like I have lost nothing at all. My first five weeks all saw substantial gains and $350 is not a significant amount to lose in a week when investing a quarter million dollars. I hope to end the simulation with more success and end up making a good amount of money for the ending of the simulation.
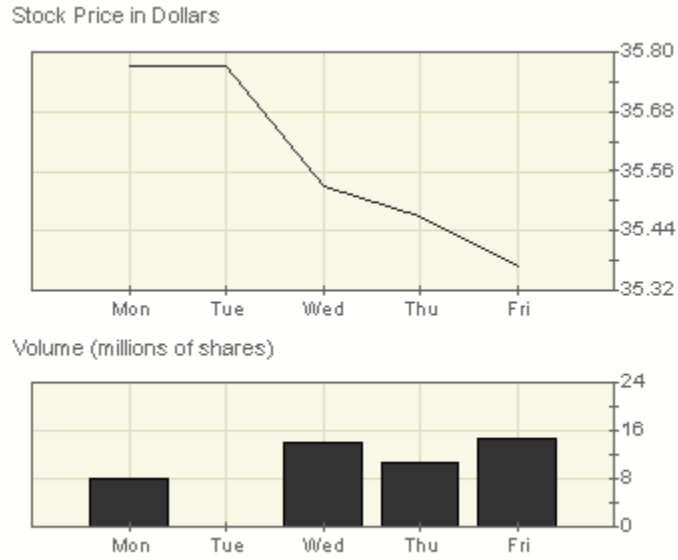
Figure 4.8 Home Depot weekly performances [5].
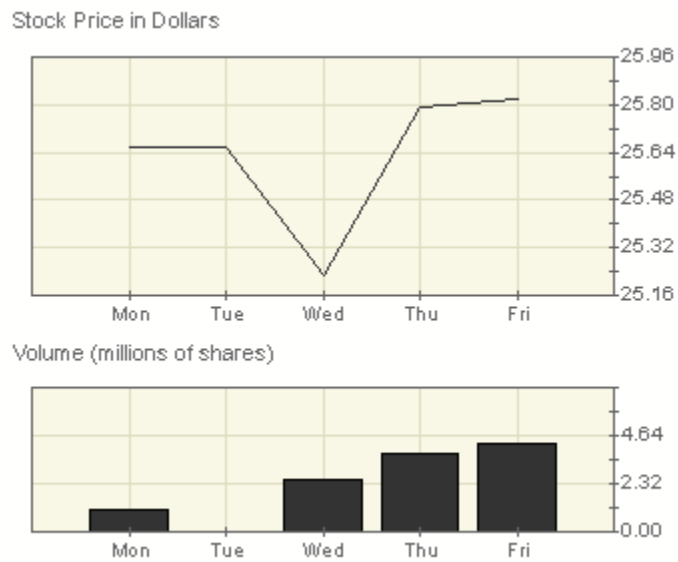
Figure 4.9 Toll Brothers stock performance [5].

Figure 4.10 KBH stock performances [5].

I feel like my trading is pretty much complete unless something really catches my eyes in the middle of the week. I only have one week left and I still like what lies ahead for the three stocks I am currently still shorting.

Date	Symbol	Price 5/29	Shares	Net Cost/ Proceeds	Profit/Loss	Total Cash	Total Asset
07/16/06	HD	$38.26	2500	$95,650	$11,125	$92.60	$268,581.65 (+37,509)
Date	Symbol	Price 6/19	Shares	Net Cost/ Proceeds	Profit/Loss		
07/16/06	TOL	$26.53	4500	$119,385.	$12,915		
Date	Symbol	Price 6/26	Shares	Net Cost/ Proceeds	Profit/Loss		
07/16/06	KBH	$47.12	895	$42,172.40	$6169		

Table 4.7 Stock shorted week 7 [5].

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The last week of the simulation proved to be the best week of any by far. At the end of the week (7/14/06) I "bought" back all my stocks and turned a profit of $18,927.35 for that week alone. This is more of a gain than I saw in the previous five weeks combines. Home Depot, which was a great short that I kept throughout the entire process opened the week at $35.40 and closed at $33.84 for a loss of $1.56/share and a profit of $3900 for the week. Toll Brothers opened the week at $25.86 and closed at $23.70 for a loss of $2.16/share and a profit of $9720. KB Homes was the big winner of the week opening at $45.85 and closing at $39.92 for a loss of $5.93/share and a profit of $5307.35 for the week. This week was extraordinary and I do not think I could have asked for a better ending to the simulation from a results stand point.

4.4 Results

My method of shorting the market is considered by commoners and experts to be a very risky method of investing in the stock market but, it is also known as a method that can be extremely profitable when the market is not doing so well (either as a whole or in specific realms of the economy).

I started with $250,000 to invest in the market and for most of the simulation I had all of that money invested in one place or another. At the end of the simulation I have $287,509 for an increase of $37,509. This equates to a 15% return during the seven week time period in which I followed the market. This is a great success for such a short period of time. At that rate (based on a 52 week year) this would return roughly 111% annually.

My main focus for my shorts was things like home improvement, real estate, and construction. This is because the real estate market is poor right now and those who want

to sell are having problems and those who want to buy feel they might be over-paying. Therefore, houses will not be built as much, fewer supplies are needed, and one would then assume that stocks in those areas would decline. Fortunately for me I was able to isolate companies and corporations that the market had lost confidence in.

The following charts are from nasdaq.com and show the opening and closing prices for each day that I shorted each of the five stocks throughout the entire simulation.

HOME DEPOT

Date	Open	High	Low	Close/Last	Volume
07/14/2006	33.960	34.370	33.620	33.840	16,324,400
07/13/2006	33.500	34.080	33.250	34.070	20,904,500
07/12/2006	34.260	34.440	33.570	33.610	25,644,400
07/11/2006	34.900	34.930	33.890	34.380	21,508,600
07/10/2006	35.400	35.570	34.860	35.000	12,949,000
07/07/2006	35.510	35.700	35.280	35.370	14,575,700
07/06/2006	35.450	35.730	35.400	35.470	10,732,600
07/05/2006	35.780	35.780	35.390	35.530	13,999,600
07/03/2006	35.860	35.980	35.700	35.770	7,944,800
06/30/2006	36.460	36.500	35.630	35.790	24,057,400
06/29/2006	36.200	36.560	35.850	36.460	20,206,500
06/28/2006	36.270	36.450	36.000	36.160	26,953,900
06/27/2006	36.550	36.710	36.300	36.370	10,032,900
06/26/2006	36.260	36.800	36.250	36.640	7,495,100
06/23/2006	36.350	38.800	36.330	36.410	8,121,800
06/22/2006	36.940	36.950	36.360	36.480	10,054,400
06/21/2006	36.320	36.870	36.320	36.660	8,614,100
06/20/2006	36.710	36.800	36.240	36.420	13,113,500
06/19/2006	36.910	37.230	36.780	36.860	9,868,600
06/16/2006	37.300	37.680	36.860	36.910	15,053,800
06/15/2006	37.030	37.500	36.680	37.370	20,366,900
06/14/2006	36.130	36.810	36.120	36.750	11,091,600
06/13/2006	36.100	36.900	36.040	36.290	12,506,200
06/12/2006	36.900	36.960	36.200	36.260	11,108,500
06/09/2006	37.100	37.390	36.760	36.950	10,768,100
06/08/2006	36.570	37.400	36.530	37.250	13,226,800
06/07/2006	36.950	37.380	36.650	36.710	11,668,800
06/06/2006	37.570	37.640	36.600	37.060	17,388,000
06/05/2006	37.750	38.100	37.440	37.460	11,632,100
06/02/2006	38.410	38.750	37.800	38.000	12,508,100
06/01/2006	37.950	38.610	37.900	38.550	11,639,800
05/31/2006	37.770	38.140	37.610	38.120	12,051,700
05/30/2006	38.260	38.350	37.700	37.700	11,519,100

Table 4.8 Home Depot 5/30-7/14 [6].

GOODYEAR TIRE

Date	Open	High	Low	Close/Last	Volume
06/12/2006	11.780	11.890	11.600	11.630	1,913,400
06/09/2006	11.880	12.030	11.720	11.810	1,519,800
06/08/2006	12.010	12.050	11.570	11.890	2,530,100
06/07/2006	12.060	12.290	11.760	12.050	3,487,800
06/06/2006	12.150	12.240	11.700	11.880	3,673,200
06/05/2006	12.520	12.540	12.030	12.140	2,966,200
06/02/2006	12.530	12.630	12.500	12.580	1,657,600
06/01/2006	12.750	12.760	12.480	12.680	2,821,000
05/31/2006	12.540	12.820	12.520	12.720	2,132,100
05/30/2006	12.990	13.000	12.470	12.500	2,598,300

Table 4.9 Goodyear Tire 5/30-6/12 [6].

GENERAL MOTORS

Date	Open	High	Low	Close/Last	Volume
06/12/2006	26.040	26.350	25.720	25.780	12,961,100
06/09/2006	25.100	25.380	24.910	25.350	5,854,200
06/08/2006	25.130	25.330	24.520	24.830	11,560,000
06/07/2006	25.490	25.540	24.900	24.990	9,296,800
06/06/2006	26.050	26.400	25.000	25.250	14,592,000
06/05/2006	26.120	26.470	25.570	26.050	10,947,800
06/02/2006	27.000	27.100	26.130	26.490	12,458,000
06/01/2006	27.090	27.340	26.510	26.900	20,832,000
05/31/2006	26.630	27.200	26.420	26.930	12,925,500
05/30/2006	27.360	27.360	26.380	26.570	16,008,400

Table 4.10 General Motors 5/30-6/12 [6].

TOLL BROTHERS INC.

Date	Open	High	Low	Close/Last	Volume
07/14/2006	23.750	24.160	23.660	23.700	6,100,700
07/13/2006	24.420	25.000	24.260	24.550	3,009,800
07/12/2006	25.550	25.760	24.610	24.670	2,471,100
07/11/2006	25.700	25.700	25.250	25.600	2,614,900
07/10/2006	25.860	26.080	25.530	25.780	1,600,700
07/07/2006	25.830	26.580	25.660	25.820	4,299,600
07/06/2006	25.140	25.880	25.110	25.790	3,746,900
07/05/2006	25.450	25.450	24.930	25.230	2,494,300
07/03/2006	25.810	25.810	25.260	25.660	1,067,600
06/30/2006	26.300	26.370	25.400	25.570	4,788,300
06/29/2006	25.670	26.240	25.100	26.180	5,172,200
06/28/2006	26.000	26.070	25.350	25.600	3,119,100
06/27/2006	26.900	27.000	25.930	26.000	4,087,100
06/26/2006	26.660	27.500	26.320	26.940	3,720,100

Table 4.11 Toll Brothers 6/26-7/14 [6].

KB HOMES

Date	Open	High	Low	Close/Last	Volume
07/14/2006	40.500	40.590	39.290	39.920	3,698,800
07/13/2006	42.360	43.000	41.560	41.670	1,978,300
07/12/2006	43.930	44.330	42.270	42.400	2,276,200
07/11/2006	44.510	44.660	43.450	44.000	2,212,500
07/10/2006	45.850	46.250	45.100	45.120	1,379,900
07/07/2006	45.800	46.870	45.570	45.760	2,311,500
07/06/2006	45.300	46.520	45.240	46.000	1,730,000
07/05/2006	45.900	45.950	45.040	45.370	2,283,900
07/03/2006	46.140	46.610	45.710	46.260	1,375,000

Table 4.12 KB Homes 7/03-7/14 [6].

5. Conclusion

5.1 Results

There were several goals established at the beginning of our simulation. First we wanted to turn a profit with our theoretical $250,000 per person. This would be an ideal situation because even though it was not real money turning a profit would give us confidence in our stock market skills. Our second goal was to learn about the stock market. We not only wanted to learn the background of our stock market, but also the types of trading, styles of trading, and tricks of the trade that could potentially help us with our own live trades later on with our real money. This second goal turned out to be a lot easier and more profitable for Greg and Brian due to the fact that the market was in a steady decline during the simulation period. Though grand financial gains would have pleasing the knowledge of the stock definitely is what made this simulation profitable for all.

Our first goal was to make money in the stock market over the seven week trading period. For Brian and Greg the stock market's decline over these seven weeks made it extremely difficult to turn a profit due their trading methods. Brendan's method of shorting the market was definitely the best choice because it takes a huge advantage of a declining market. The overall gains/losses are

	Profit/Loss
Brian	$13,044.08
Greg	$35,972.20
Brendan	$37,509.00
Total	$11,507.28

Table 5.1 Overall Profit/Loss

Unfortunately as shown our overall loss was $11,507.28 based on a starting bankroll of $750,000. This was a disappointment to our group but the individual profits/losses are easily explained. First the falling market made it very difficult for trading by buying stocks low and selling high to turn a profit. These were the trading methods of Brian and Greg. The falling market did however allow Brendan's method of selling high then buying low, also known as shorting the market, to prosper. Looking further, Brian and Greg both lost money, but Brian lost significantly less. This is explained because of Brian's method of trading. He traded over the long term which got him involved in fewer stocks. This allowed him to hold on stronger through the dip in the stock market that occurred over the simulation period. Greg continually traded stocks through the big dipper method and unfortunately he lost money with a larger number of stocks. Since the market was down as a whole, it was better to be involved in a lower amount of stocks because most of stocks were following.

One way of describing our results is to compare it with the S & P 500 index over the given time period. A description of the S & P index is as follows:

> Widely regarded as the best single gauge of the U.S. equities market, this world-renowned index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. Although the S&P 500 focuses on the large-cap segment of the market, with over 80% coverage of U.S. equities, it is also an ideal proxy for the total market.

> The S&P 500 is part of a series of U.S. Indices that can be used as building blocks for portfolio construction. With more than $1 trillion in

indexed assets, the S&P U.S. indices have earned a reputation for being not only leading market indicators, but also investable portfolios designed for cost efficient replication, or the creation of index-linked products.

The S&P 500 is maintained by the S&P Index Committee, whose members include Standard and Poor's economists and index analysts. Committee oversight gives investors the benefit of Standard and Poor's depth of experience, research and analytic capabilities. The Committee establishes Index Committee Policy used to maintain the indices in an independent and objective manner.

The history of the S&P 500 dates back to 1923, when Standard and Poor's introduced an index covering 233 companies. The index, as it is known today, was introduced in 1957 when it was expanded to include 500 companies [4].

Our overall loss of over $11,000 was 1.467% of our original $750,000. The S & P index over the period was in a decline of .51% on the total overall market [8]. Since the overall market was down one half of a percent and we lost almost a percent and a half on our individual stocks our overall results is not bad. With the entire market down over the time period our loss is very acceptable.

Desc	GICS®[1]	NC[2]	Adj MktCap[3,4]	Level[5]	Daily	MTD	QTD	YTD
S&P 500		500	11,673,460	1,285.71	1.23%	1.23%	(0.70%)	3.00%

Table 5.2 Index Comparisons for S & P on June 1, 2006 [8].

Desc	GICS®1	NC2	Adj MktCap3,4	Level5	Daily	MTD	QTD	YTD
S&P 500		500	11,577,939	1,279.36	(0.07%)	0.21%	0.72%	2.49%

Table 5.3 Index Comparisons for S & P 500 on Aug.1, 2006 [8].

5.2 Which Strategy Worked Best?

Each one of us used a different trading strategy in order to be able to compare them with one another. During the period that we were trading the market was in a decline as stated earlier. This led to difficulties in producing profits using the Big Dipper Method and Long Term Trading. The most profitable and therefore best strategy was Shorting the Market. This is because this particular method relies on the price of a stock dropping resulting in a profit for the investor.

The Long Term trading method resulted in a 5.22% loss of the original $250,000 investment; and the Big Dipper method resulted in a 14.39% loss. The only strategy that was profitable was Shorting the Market, which had a 15.01% gain on the original investment.

Looking past the fact that the market was down during the simulation, each investment strategy has its pros and cons. Long term investing keeps your portfolio at an even keel, but it is a slow process for money making. The Big Dipper strategy can make

a lot of money fast, but the problem is that it is impossible to continue to guess which stocks are going to rise. You can be smart but eventually one of your stocks is not going to rise as you expect. Shorting the market works brilliantly when the market is falling but horribly when the market as a whole is profitable. To be a great investor you must be able to adapt to the market as it changes to continue to be profitable.

5.3 Summary

Upon the completion of our project, we have learned a lot about the market and how to make money with the market. There is a lot of work that goes into investing and without this effort it is not worth your time and money wasted. You do not just get lucky with the stock market. Research is necessary to be able to choose which stocks to buy and a flexible and unique investment strategy must be developed. Each one of your stocks must be taken care of like a child in order to be certain it will grow properly and turn you a profit rather than lose lots of your money. In addition to this we worked well together to complete our goals. This project has taught us and prepared us better for our future in the stock market. The knowledge gained here will give us an advantage on later trades when real money is involved.

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