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The Stock Market

An Interactive Qualifying Project Report

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of the

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Degree of Bachelor of Science

by

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Craig T. McIntyre

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Professor Joe Zhu, Advisor

## Abstract

Buy and hold and short term strategies are discussed. A simulation was carried out following stocks using each strategy to learn about the stock market and gain experience.

## Acknowledgements

In appreciation to Professor Zhu for his guidance with this project.

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## **Chapter 1: Impact of the Stock Market Simulation**

### **1.1 On John Slatter and Toni Turner**

Before talking about the impact of the project and in essence the stock market on me, I thought I should talk for a moment about the extreme to which the stock market can affect one's life with two examples. John Slatter and Toni Turner are the authors of two of the books that I read in preparation for my IQP and the simulation study that it involved. The strategies that they describe are the ones that I followed in conducting the simulation. Both authors are professional traders, and have made a great deal of money trading stocks, and revealing their techniques through their written works. Essentially, the stock market pervades everything they do. Slatter is not shy about the fact that he and his wife have made millions from the stock market. He also reads others' opinions on different aspects of the market everyday in the paper or from books. Both Slatter and Turner describe the learning curve that they had to endure when they were first starting out as investors in the "wild animal" called the stock market.

### **1.2 Impact on me**

Going into this IQP project, I was more than a novice, I did not know the first thing about the stock market, and my interest in the subject matter sprouted not from the excitement and unpredictability of the market, but from this ignorance. As I began to think about the possibilities of the market, I wondered if I would be a natural, or if picking stocks was just a skill that one either has or does not have. But after reading a good amount on the subject, I understood that trading successes come mainly through hard work, and experience. I was also almost nervous about doing the simulation, even though I was not truly investing in anything. I thought about what it would be like to

write my IQP on a colossal failure. All of the sources I read were clear about the struggles that all traders have early on, and the fact that the market can behave like a casino --the more you invest/trade, the better the chance that you will lose.

In doing this project, I gained a new interest, and laid a solid foundation for future learning about the stock market, and hopefully it will lead to real monetary gains some day.

## **Chapter 2: History of the Stock Market**

The act of trading is almost as old as humankind itself. Trading is part of human nature; one can go back to the time of the cavemen and find that trading has been going on for as long as there have been men walking the earth. It is this natural craving for swapping things of equal value that the NYSE (New York Stock Exchange) and other exchanges are built on. The U.S. financial center, Wall Street, in a way goes back to 1644. An earthen embankment was erected to keep cows from wandering around what is now Manhattan. In 1663, the embankment was fortified by the order of the governor of New York (then called New Amsterdam). The governor was worried that the British would attack by land. The British attacked from the ocean, the settlement was taken, and the wall that had been built burned to the ground. The street adjacent to the wall survived, and got its name: Wall Street. The securities market first began in 1789 in Federal Hall, New York. The government issued notes based on the debts of the new colonies; these securities, as well as bonds, stocks, orders for commodities, and warehouse receipts were sold to the public. In 1791, the first official U.S. stock exchange was formed in Philadelphia. A more informal exchange met under a sycamore tree at 68 Wall Street. In 1842, the American Stock Exchange opened. This exchange was comprised of people who were not wealthy enough to have a seat at the NYSE, but still wanted to trade.

1929 brought one of the darkest times in the country's history, the Crash and following Depression demoralized the nation, and brought about major changes in the way in which the exchanges were run. During the Great Depression, the Securities and Exchange Commission (SEC) was formed to strictly regulate the exchanges. Previous to

the formation of the SEC the exchanges were run less than honestly. In 1971, the National Association of Securities Dealers Automated Quotation was created, and would revolutionize the pace and system of trading. The NASDAQ is now the second largest securities market in the U.S. The NYSE is the largest stock market in the world. It lists more than 3000 companies, representing more than 253 billion shares of stock, valued at 11 trillion dollars. We have come a long way from trading food and pieces of clothing.



## **Chapter 3: Stock Market Strategies**

In my search for stock market strategies, I continually found from the sources I was looking at that there are two basic strategies used by stock market experts, the long-term “buy and hold” strategy, and the short-term strategy based on charting. Two books that are representative of these two schools of thought are: The 100 Best Stocks You Can Buy 2006 and Short-Term Trading by John Slatter and Toni Turner, respectively.

### **3.1 Buy and Hold**

John Slatter’s buy and hold strategy could be very risky if companies without solid financial histories are not chosen. Volatile stocks are very risky to use the buy and hold strategy with. Companies merge, run into financial trouble, and go bankrupt all the time, and if one buys a stock with a rough history, they are opening themselves up to the possibility of losing money more so than a person who only buys stocks with consistent earnings. Slatter requires that a given stock have minimally the following characteristics: (i) A rising trend of earnings, dividends, and book value, (ii) A balance sheet (a financial picture of the company on a specific date) with less debt than other companies in a particular industry, (iii) A Standard and Poor’s rating of B+ or better. Standard and Poor’s is a major provider of financial information, mostly to institutions, but individuals can access some of the information, at a fee, (iv) A price/earnings ratio no higher than average (the price to earnings ratio is calculated by dividing the price by the average annual earnings per share, Slatter doesn’t buy stocks with a P/E ratio of less than 30), (v) A dividend yield that suits your particular needs (dividends are usually paid quarterly and the yield is the ratio of price to the yearly dividend total. Slatter believes that the yield should be a minor factor when choosing a stock, which makes sense, because the

majority of money made in stocks is made by selling.), (vi) “A below-average dividend payout ratio.” This is significant because the more money that the company spends paying its investors and stockholders, the less it has to invest in “new facilities, acquisitions, research, or marketing” (Slatter, 46), therefore hurting the value of the company and therefore the stock. (vii) “A history of earnings and dividends not pockmarked by erratic ups and downs” (Slatter, 46). Company’s return on shareholder’s equity is 15% or higher. The return on equity is an efficiency rating or ratio; it’s the amount of money supplied by investors divided by the book value. In other words, it’s a measure of how efficiently a given company uses its income to better its operations.

Many of the characteristics that Slatter requires are not readily available to an individual such as myself. In fact, much of the information is only attained after paying a fee, which did not make much sense from my perspective, since I was only doing a simulation and would not have an opportunity to recoup any of the money I spent on the information. For these reasons, I relied on the extensive information given by Slatter in his book on the 100 best stocks 2006.

John Slatter takes the “fundamental” approach to analyzing stocks. In other words, he “examines a stock’s management, sales and earnings potentials, research capabilities, new products, competitive strength, balance sheet strength, dividend growth, political developments, and industry conditions” (Slatter, 31). The “opposing” approach is that of the “technician”, who predominantly relies on charts, while factoring in some of the fundamentalists approach. Slatter calls the factors considered by the technician “arcane statistical factors” (such as moving average and relative strength ratings) and “technical jargon”. He argues that chart “cannot” predict stock prices, and that “the

fundamental; approach predominates among professional portfolio managers.” Toni Turner, representing the “technical” view in my research, obviously disagrees with Slatter’s view.

When stock experts talk about “buy and hold” much of the time they mean that a stockholder should keep a stock until they are ready to retire. Technicians like Toni Turner, are more active in the market. Turner likes to say that she holds stocks “from two minutes to two years”. In actuality, Turner is not a technician through-and-through. She sees the value of looking at some of the factors that the fundamental strategy takes into account.

### **3.2 Short Term Strategies**

Turner believes that in general the stock market and specific stocks move in cycles (as many things in life do.) She breaks the machinations of a stock price into four stages: In stage one, there is indecision in the buyer’s minds. Stage two is characterized by greed or optimism that the stock will rise. This pushes the price upwards. Stage three is more indecision, and eventually many of the holders will get impatient and take profits, pushing the price back down (stage four). At this point (most of the time) the stock meets “resistance” which in reality means there are as many people buying as selling. Stage one begins again here. The whole process could take from weeks to months.

Turner also goes into the indicators that she utilizes when choosing a stock. They include volume, moving averages, and relative strength indexes. Turner believes that volume is a very important and strong indicator of future stock price. She explains that low volume indicates “lack of conviction” (Turner, 120) which usually means a decreasing price while strong volume coupled with an uptrend in price is a strong

indication that the stock price will rise. High volume and a downturn in price indicate that the stock will plummet. Moving averages are another strong indicator. The moving average is a collection of the closing prices of a specified number of days divided by that number of days, and then charted over a period of time in that way. Moving averages many times act as “resistance”. If a stock falls, many times it will stop falling once it reaches its 200 day moving average, for example. Turner advises to take into account the general health of the stock market when comparing prices to their moving averages. In a bull market (a term used to describe a market doing well) a stock trading under its 200 day moving average is truly doing poorly; whereas that same stock in a bear market (a down trending market) isn’t doing that poorly, relative to the big picture.

Another piece of advice that Turner gives to her reader’s that I utilized is that when you see a “faster moving average” (a moving average that takes into account less days is considered “faster”) cross over a “slower” moving average, that is a very bullish sign.

The other indicator that I utilized in my simulation is the RSI, or relative strength index, which represents the relative strength of a stock as compared to its own price history. The RSI is ahead of the actual stock it represents, and therefore when it diverges in either direction, that is a sign to the prospective stockholder as what to do. Turner advises to use the RSI as follows: buy when it is below 30 and hooking upwards, and when it is making a “bullish divergence by rising when the stock price is consolidating” (137). Turner highlights a half-dozen other indicators similar to the RSI in that they compare current price to other elements like volume etc. However she recommends that a trader use only one (I chose the RSI) because it could get overwhelming and the

indicators can sometimes differ in their indications. Turner suggests that any stocks that one buys should have the preceding characteristics, and also be at the beginning of a stage two uptrend.

Turner goes through the various types of charts. There are three basic types: line charts (usually used chart stock price), bar charts (often used to represent volume) and candlestick charts, which are the most complicated. Candlestick charts were invented in Japan, and with experience, the complicated patterns can be deciphered by traders. These charts are basically a translation of the line charts that are commonly used. The symbols used in the candlestick charts have been shown to be very strong indicators if they are noticed with the correct context. I decided against using the candlestick charts, because of their complicated nature, and the fact that I had a limited amount of time with which to work.

Something else that illustrates the difference between the fundamental approach and the more technical approach of Turner is the application of “Stop-loss points” by the technicians. Stop-loss points are levels at which the stock should be sold. These are defined after purchasing the stock to limit the risk. A good rule of thumb according to Turner is to divide the goal price of a given stock (the goal is the amount that a trader can realistically expect the stock to make after looking at the charts) by three, and then subtract that number from the beginning price. Many times a “trailing stop-loss” is utilized. This is a stop-loss point which is recalculated each day according to the current price of the stock in relation to the goal price.

As mentioned earlier, Turner does take into account some of the factors considered by the fundamental approach. Turner believes in buying stocks that are

“industry leaders” which are in good financial standing. This limits the amount of risk one undertakes. Turner has a list of industry leaders on her website [toniturner.com](http://toniturner.com) of which I made use.

### **3.3 When to Sell**

Not surprisingly, traders like Turner and Slatter differ not only in their views on when to buy, but also when to sell. Slatter outlines the circumstances that typify a good time to sell as follows:

- An issue of equal or better quality offers the potential for higher returns
- Adverse management change
- Declining profit margins or a deteriorating financial structure
- Direct or indirect competition is affecting the prosperity of the company
- Great dependence on a single product whose cycle is running out
- The company has become cyclical and has low growth rate issues because prosperity is about to succumb to recession (45)

Slatter’s reasons to sell are for the most part the opposite as the reasons to buy a stock. He does believe that if there is potential for more growth with another stock, one should take that opportunity.

Unlike when she buys a stock, Turner’s reasons to sell are based solely on the charting information. If the RSI is above 80 and therefore indicates that the stock is “overbought”, the volume is high and the price is declining or if the price is flat lining and the volume is low, and if the stock appears to be at the end of stage three and into stage four, one should sell. She cautions not to sell as soon as the stock reaches level three because there are times when the stock will bounce off the resistance and reach a new high.

### **3.4 Strategies Applied**

Ultimately I used both major stock market strategies, and anxiously awaited the simulation results.

Strategies Applied: Some examples of how I applied the strategies to choose stocks

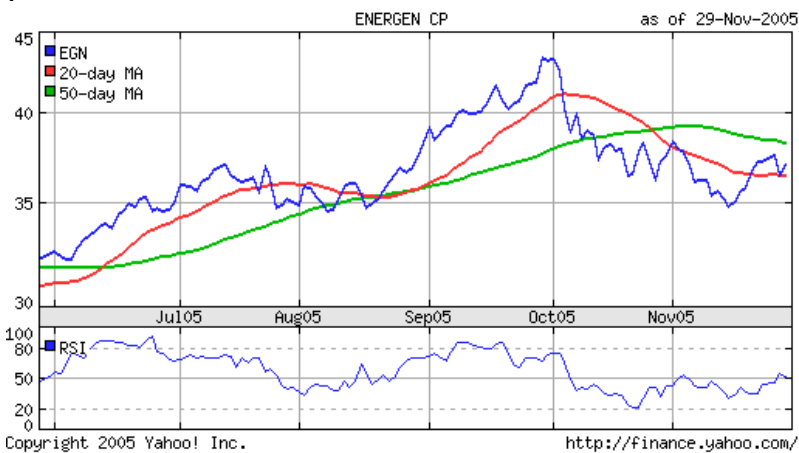
Blue bars: volume

Red line: 20 day MA

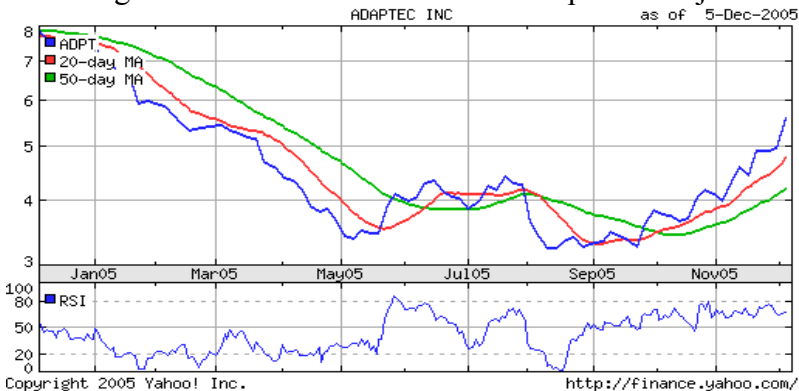
Green line: 50 day MA

Blue Line: stock price

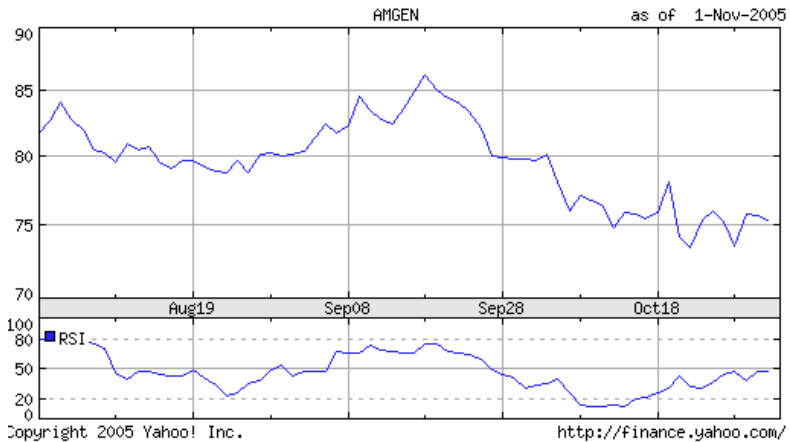
Light blue line: RSI



The RSI (relative strength index) is in a good position, on its way up, the moving averages are not quite where they could be, but they look as though they are intersecting. The thing I liked was the fact that the stock price was just coming out of a trough.



I was a little wary of Adaptec, the RSI indicates almost overbought, but looking at the pattern, it looked as though it would not hit resistance for some time.



Amgen looked very good, the price had hit a trough, and was on its way up, and the RSI which is normally ahead of the price was trending upwards.

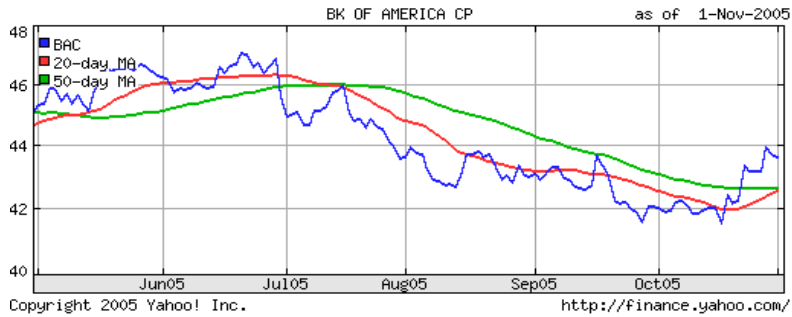


With VeriSign, the moving averages were about to cross 20 day about to cross 50, solid volume, middle of uptrend



Altria had shown consistent growth, and the volume had been increasing as the price increased.





Bank of America Corp was in the middle of an uptrend, with the 20 day moving average crossing the 50 day.



Cisco Systems Inc was at the beginning of the uptrend, and the RSI was trending upwards.

Those were my thoughts when choosing some of the stocks.

## **Chapter 4: Literature Review**

While determining the best method to approach my IQP with, I read several past IQPs on the stock market which used a simulation. The IQP I will highlight here is a group of six that conducted a ten week simulation.

The group had the benefit of splitting into three groups of two each focusing on a stock market strategy and taking a look at its merits and faults. The strategies that the group focused on were position trading, swing trading, and long and short term trading. The group set up the simulation differently than the way I did they had a ten week simulation, and picked two stocks for each strategy. The three mini-groups were allotted ten thousand dollars each to spend on stocks, and all the groups were at least very close to using it all.

The strategies that the group looked at were essentially the same ones that I looked at, we just referred to them as different things, and I did not differentiate from one short term approach to another. I in fact used swing trading (which is defined by the use of technical analysis over a fairly centralized period of time to garner profits) in my simulation, but I merely filed it under the heading “short term strategy”. In reality, swing trading and position trading are one and the same. Position trading is swing trading, but it one may hold onto a given stock for a period of weeks to months rather than just the period of days that swing trading encompasses. The short term and long term strategy were essentially the same as well, which is probably the reason the same mini-group looked at them. These strategies include most of the same things the buy and hold strategy that I simulated included. We both looked at factors such as company history, or whether or not new products were going to be released in the near future.

I found some characteristics of the group's simulation to be curious. Following two stocks for each strategy at the outset seems to be too low of a number to be able to make any substantial conclusions about the strategies in general. The mini-groups that looked at swing trading and position trading did not use any indicators as I did with volume, RSI, and moving averages they went by the stock price patterns, and the company's financial history. With just two stocks each, it would have been difficult to complete a fully "diversified" portfolio, yet it does not seem as though the group was attempting to have a diversified portfolio at all. One of the mini groups chose two tech stocks, a mistake that many investors made in the early part of this decade. If a quarter of your portfolio is in the same sector, an unnecessary amount of risk is created.

Something that I admired about the way the group approached the project is they were cognizant of their lack of experience in the stock market and decided to choose nothing but the most high profile companies; companies akin to Google, Intel, and Wal-Mart, just to name a few. Choosing these stocks, the group as a whole had quite a bit of success. My thought on choosing stocks was that I wanted companies that fit the criteria that the authors set forth. My choices were not necessarily companies that I had heard of before. There were times where I probably showed some favoritism to lower priced stocks, because I felt it was more realistic that I would be buying them. I still feel as though my approach made a lot of sense, but I also see how the group's approach makes just as much sense.

I suppose the group thought that when you're not a professional trader, it's best not to pretend as if you are. Overall, there were some major similarities and several differences between my project and that of the group's that I featured. I was impressed at

how well the group's portfolio did, yet I think that they did not take the full advantage of having six members. They could have looked at more stocks, compared the usefulness of indicators, and experimented with other charting techniques like the candlestick charts.

## Chapter 5: Stock Market Simulation

### 5.1 My Approach

When choosing stocks, I tried to balance several factors: reducing risk, maximizing profits, learning as much as possible from the stock market simulation, while trying to stay true to an effectively diversified portfolio. I chose five stocks from *The 100 Best Stocks You Can Buy 2006*, by John Slatter, who says that his “fundamental approach predominates among professional portfolio managers, although some institutions may also employ a technician” (Slatter, 31). Technicians look at the moving averages of a stock, and use charts to predict the performance of a stock. Slatter believes in looking at a company’s assets, its financial record, and its prospects for new lines of business. Slatter utilizes the tried and tested technique of buy and hold, in which a stockholder buys a stock, and then holds it for a long period of time. The other five stocks I chose were chosen based on the strategy of Toni Turner, who wrote *A Beginner’s Guide to Short-Term Trading*. In the book, she outlines charting techniques for short term trading, perfect for my eight week simulation. Moving averages, volume, indicators such as the RSI and graphs of the recent performance of a given stock are considered.

The original five (Amgen Inc., VeriSign Inc., Altria Group Inc., Bank of America Corp, and Cisco Systems Inc.) that I picked based on Turner’s strategy were chosen because they have a history of being fairly stable stocks and are companies in above average to good financial standing. In other words, the stocks are all industry leaders. Excluding Altria, they were all beginning to come out of a trough in their charts. Altria was a little different; it had been rising at a steady linear rate for a while. After picking the original five, the only thing left to do was to determine when to “sell” the stock, and

follow another one. I set stop-loss points for each stock based on how much I could reasonably anticipate getting from it. This reduced the risk in owning the stocks. If the stock reached the stop loss point, the stock would be sold, and replaced by a different one. Not unlike traders such as Turner, I decided that I would sell a given stock before it hit the stop-loss point if it appeared to have maximized its profits. This time is usually characterized by a rise in price over a period of time, followed by a drop. Turner says that most traders wait for the drop, in order to be sure that they have maximized profits.

I sold Altria after just four days of following it, which probably showed my inexperience with the market. I was slightly weary about following it in the first place, because it did not have the pattern of a wave, which is the most extensively, talked about pattern in Turner's writings. It fell off the linear pattern, so I dropped it. I picked up Bristol-Myers Squib which had the familiar wave pattern, and a history of being stable. The next to go was VeriSign, because it reached its stop-loss point. I replaced it with Energen. Soon after, Cisco was eliminated not for hitting the stop-loss, but for poor performance for several days in a row. The stock I picked up had a similar pattern to that of Altria; Midway Games had seen steady progression over the previous months. Next Chevron Corp replaced Amgen, which had done very well and seemed to have hit its crest. MDU Resources Group Inc. replaced Bristol Myers Squib which never came close to my goal; it went up just .60 while I followed it. The final "acquisition" was ADPT in place of Bank of America. Bank of America had reached my goal, and being a conservative stock, it had little chance to improve much more. Besides its recent pattern, I chose it originally because it was low risk, and brought diversity to my small portfolio. I chose ADPT because with just a couple of weeks to go in the simulation, I wanted to

maximize the amount of money I could make and therefore decided on the “aggressive growth” stock.

The “Buy and hold” choices that I made were all from *The 100 Best Stocks You Can Buy 2006*. Microsoft, Devon Energy, TEVA Pharmaceuticals, FedEx, and Progressive, are all in different markets (pcs, energy, pharmacy, mail distribution, and insurance respectively) which follows the general belief that a diversified portfolio reduces risk. All of the stocks are consistent in their success and strong balance sheets. Each of them are also market leaders.

## **5.2 Stop-Loss Points**

Stop-Loss Points (Risk: Reward should be 3:1)

Amgen- goal: 85

Start: 73.90

Stop-loss: 70.2

VeriSign- goal: 26.00

Start: 23.50

Stop-loss: 22.67

Altria: goal: 79.00

Start: 74.65

Stop-loss: 73.2

Bank of America: goal: 46.00

Start: 44.08

Stop-loss: 43.44

Cisco Systems Inc- goal: 19.75

Start: 17.63

Stop-loss: 16.92

Bristol-Myers Squib- goal: 23.75

Start: 21.30

Stop-loss: 20.48

Energen: goal: 41.00

Start: 35.72

Stop-loss: 33.96

Midway Games: goal: 22.50

Start: 21.37

Stop-loss: 20.24

Montana-Dakota Utilities- goal: 36.10

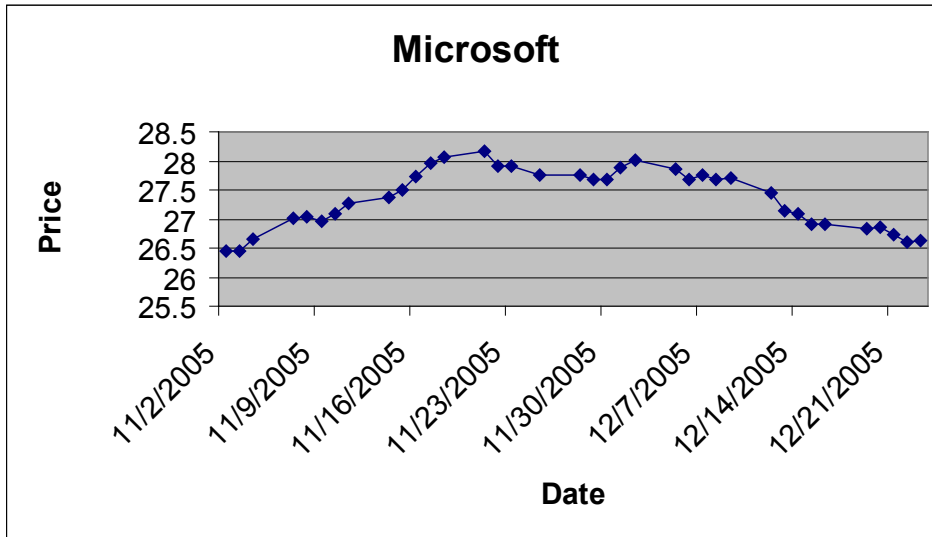
Start: 33.30

Stop-loss: 32.37

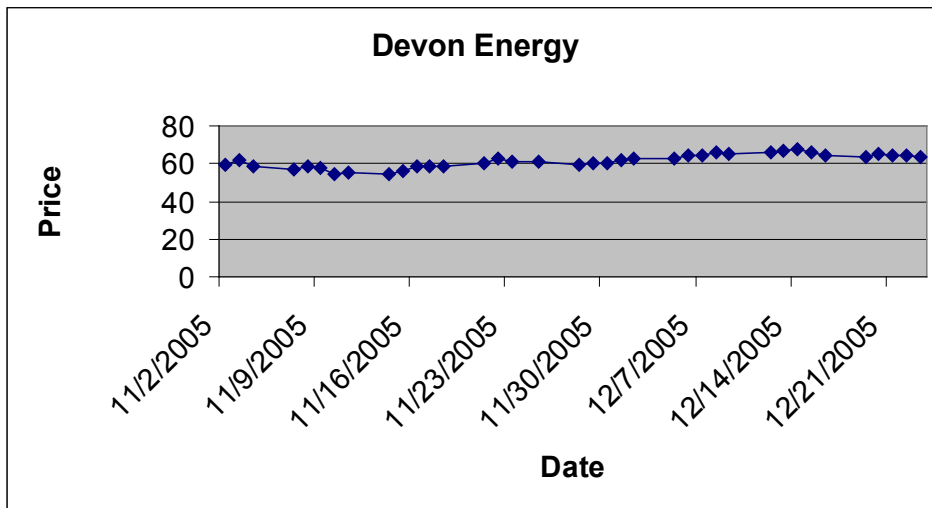
Chevron: goal- 62.00

Start: 57.37  
Stop-loss: 55.83  
Adaptec: goal: 6.50  
Start: 5.38  
Stop-loss: 5.01

### 5.3 Results: Buy and hold

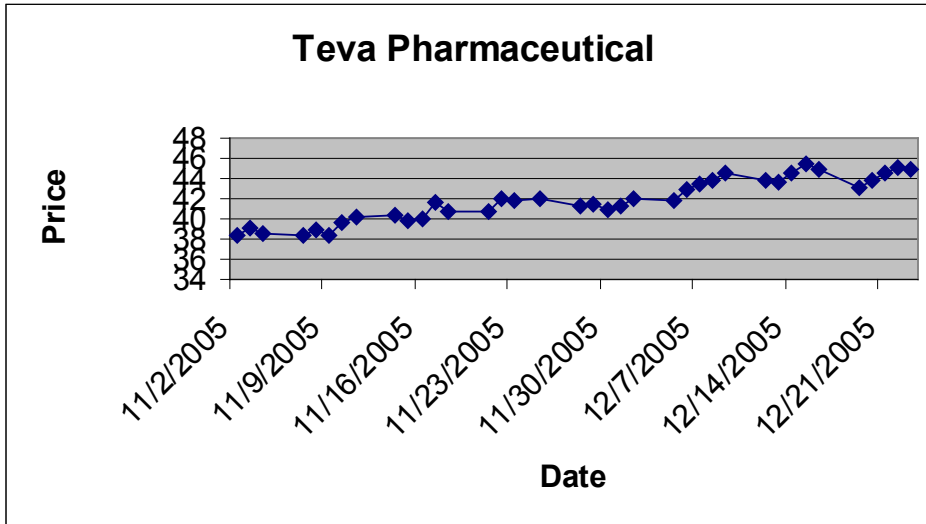


For this particular stock, it would have been beneficial if I was using the short term strategies rather than the buy and hold. I may have sold around the 23<sup>rd</sup> of Nov-28<sup>th</sup> of November, or, in the worst case, I would have sold at some point in the dive the stock took in December.

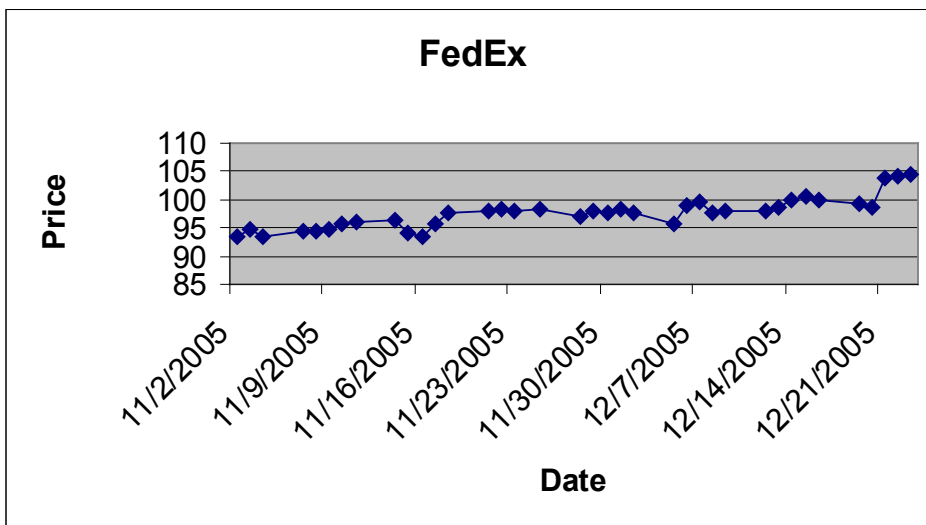




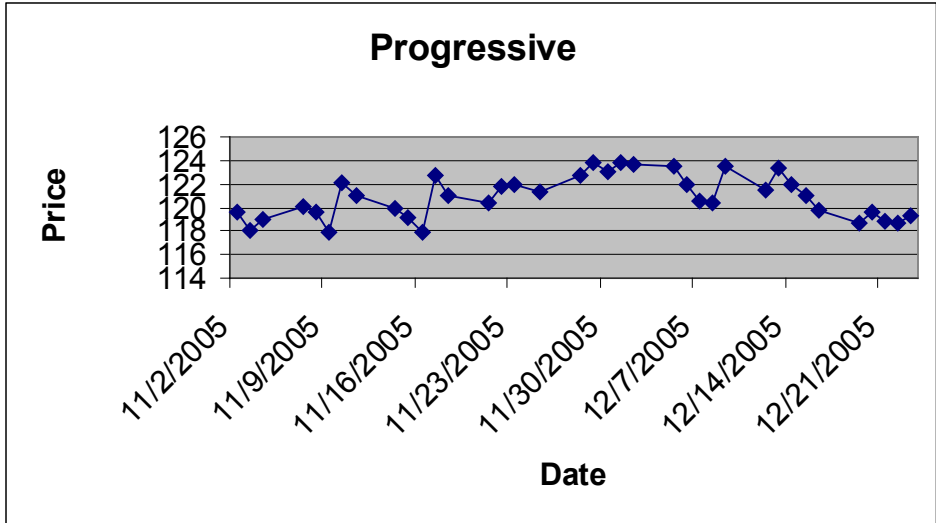
Over the eight weeks, Devon Energy stayed almost completely constant. The strategy used didn't really matter with this stock during the given period.



Teva Pharmaceutical made fairly consistent progress over the eight weeks.

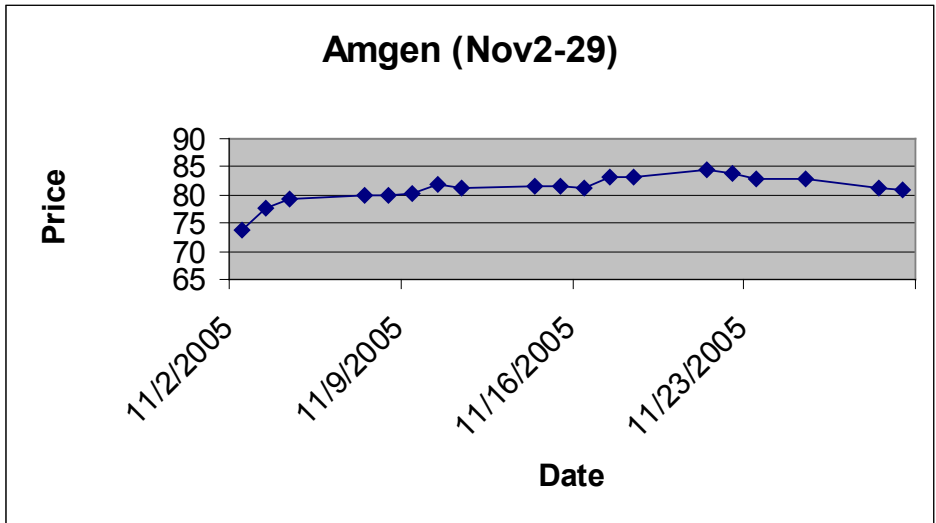


FedEx was moved up in a slightly volatile fashion, but still made significant progress.

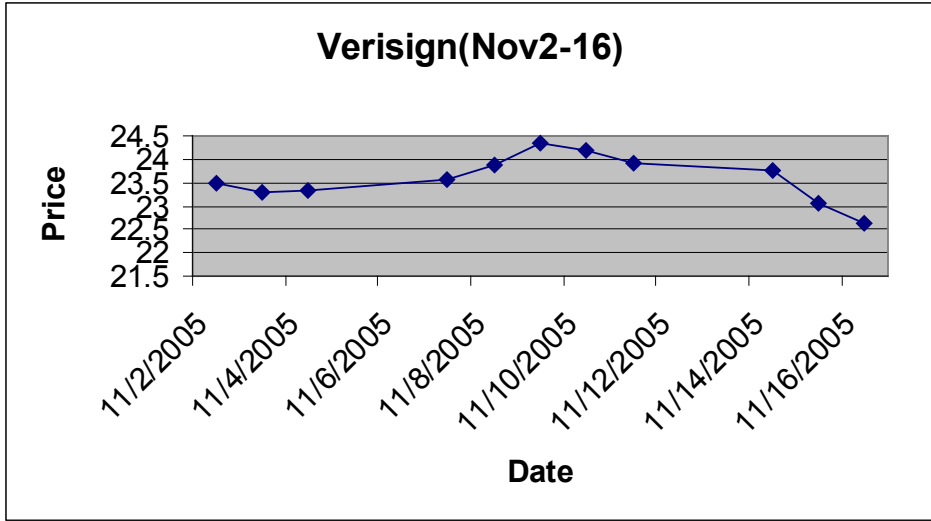


Progressive was a very volatile stock, especially considering the small amount of time the graph represents. Using the short term strategies probably would have been beneficial.

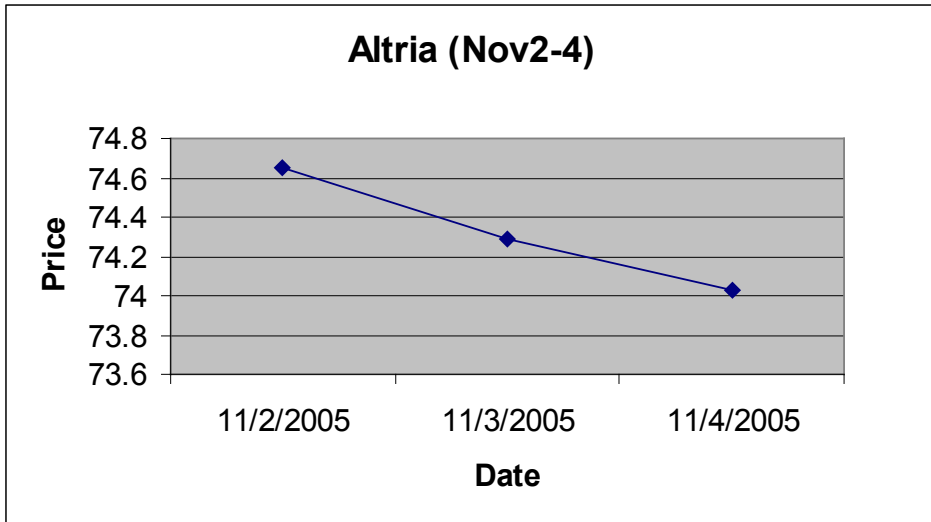
#### 5.4 Short Term Trading stocks:



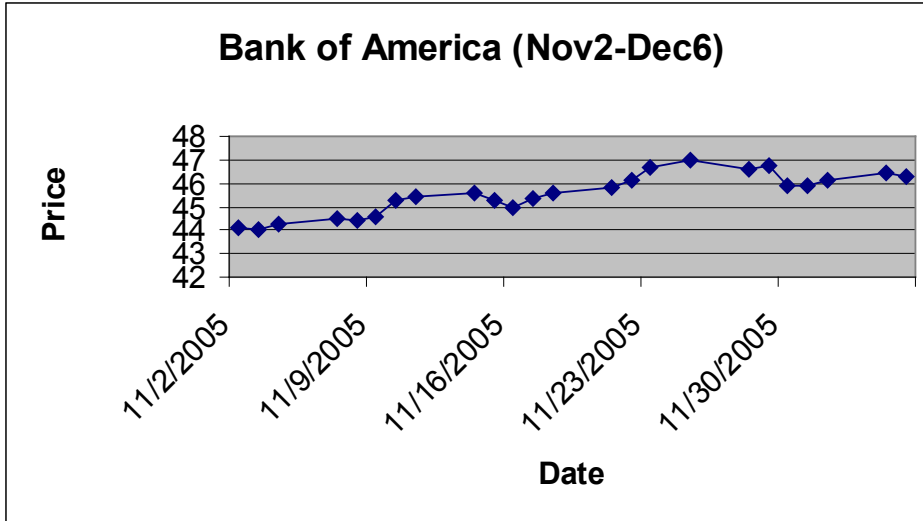
Amgen went up a significant amount right away, and then the increase tapered off until Nov. 24, when it peaked. I waited to see if the stock would bounce off the resistance, but after a few days, it became apparent that it would not.



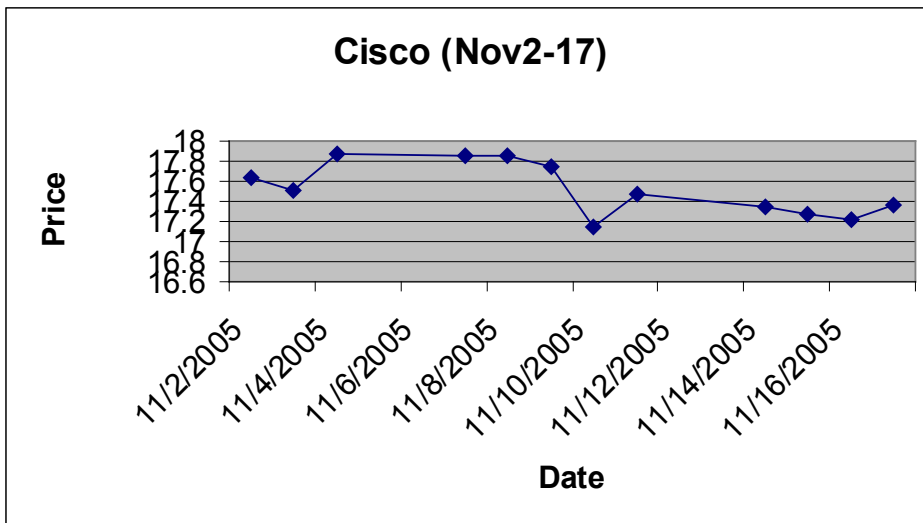
VeriSign reached its stop-loss point of 22.67.



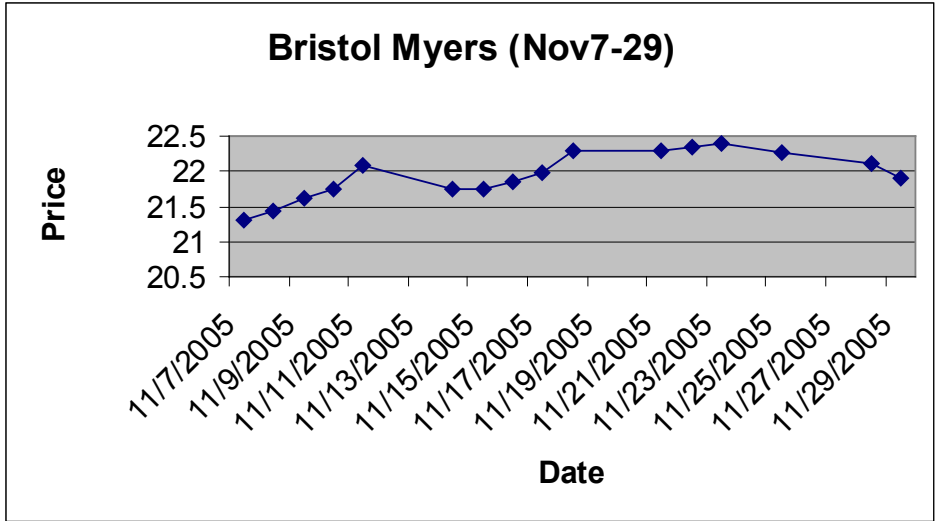
Getting rid of Altria may have shown some immaturity and impatience on my part. It did not come that close to reaching its stop-loss point, I didn't allow it to. After just three days (the first three of the simulation), I sold it.



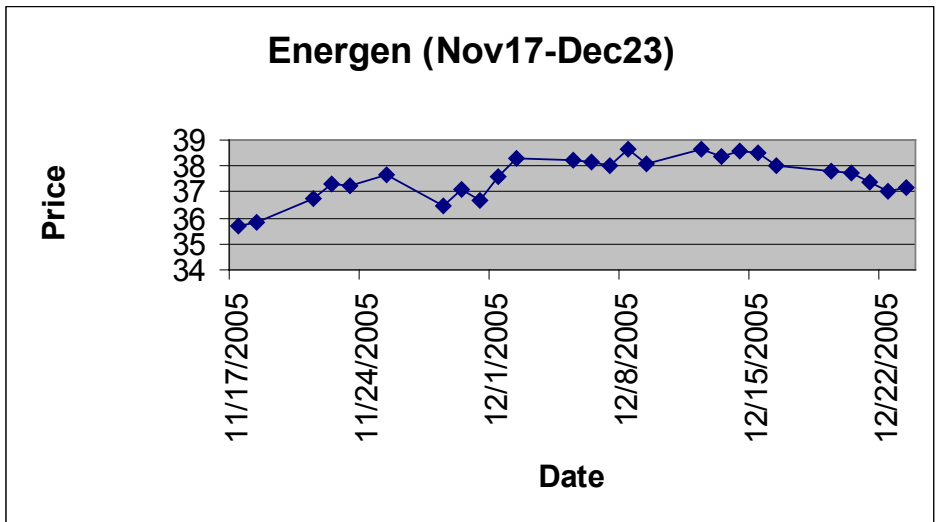
BAC was a conservative choice. Typically banks are steady, and in this case it was steady growth. I sold when I decided to go with a more “dynamic” stock for the last couple weeks to maximize potential profit.



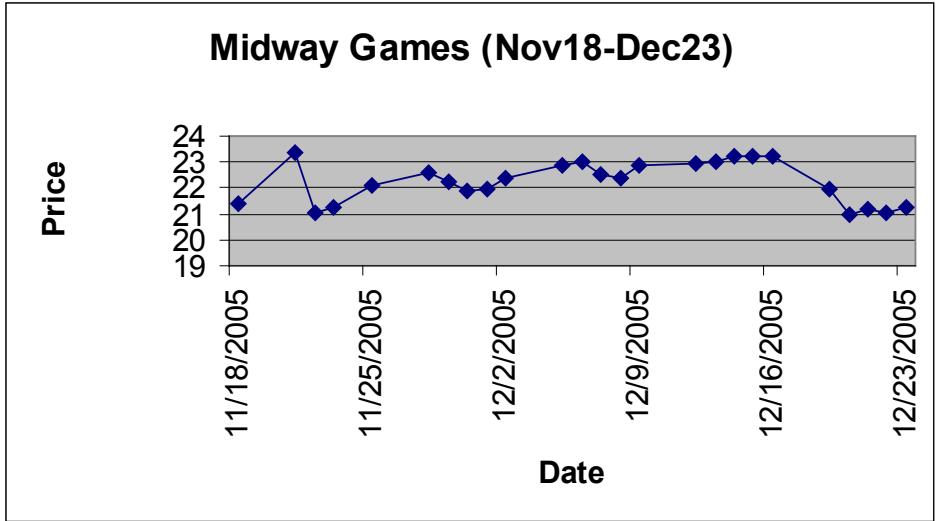
Cisco was unsuccessful, I had decided that I wanted to pick a stock from its sector, but Cisco was a wrong choice.



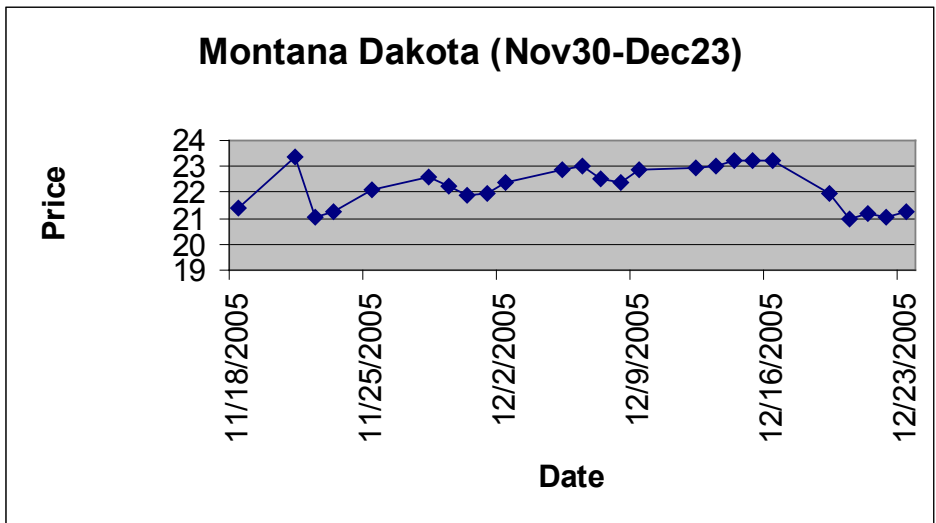
BMY was a solid choice. It went up in a modest amount over the period I had it.



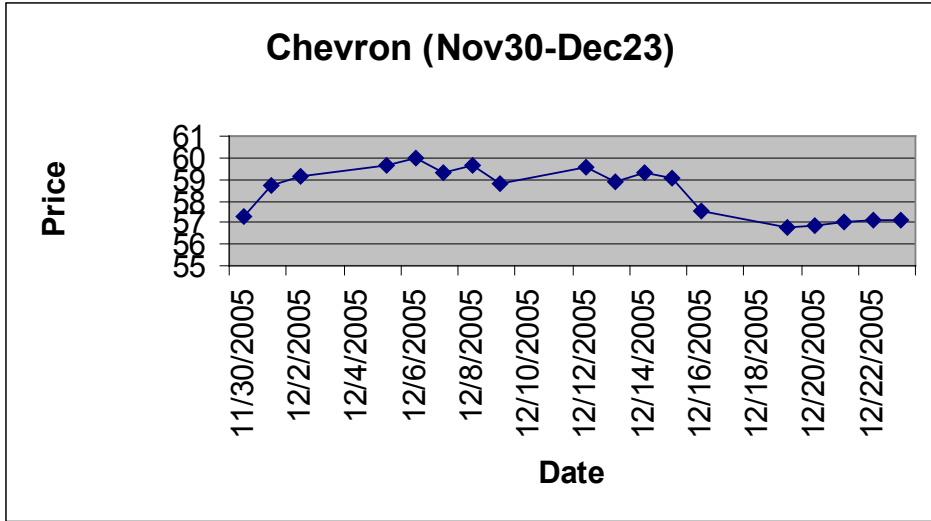
I would have been better served to sell Energen around the 15<sup>th</sup> of December, it fell off after that date. Of course one can never be sure how long a given valley will be, that and the limited amount of time left in the simulation was why I held onto to it even though it was falling.



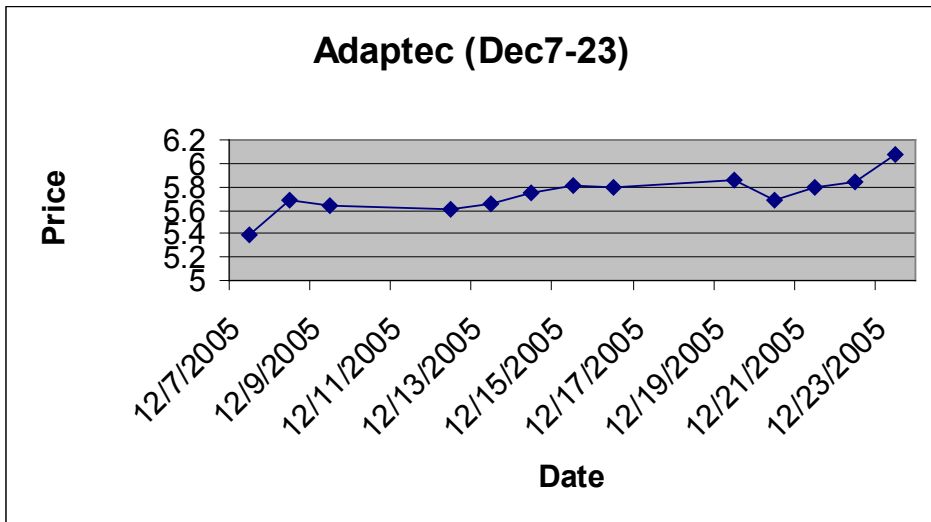
As it turned out, if I had sold Midway after just two days, I would have maximized profit. It declined so rapidly that I did not get the opportunity to sell and switch to another stock in time. It did rebound however.



MDU's case was a little like Energen, it declined right at the end of the simulation when I was reluctant to switch to another stock.



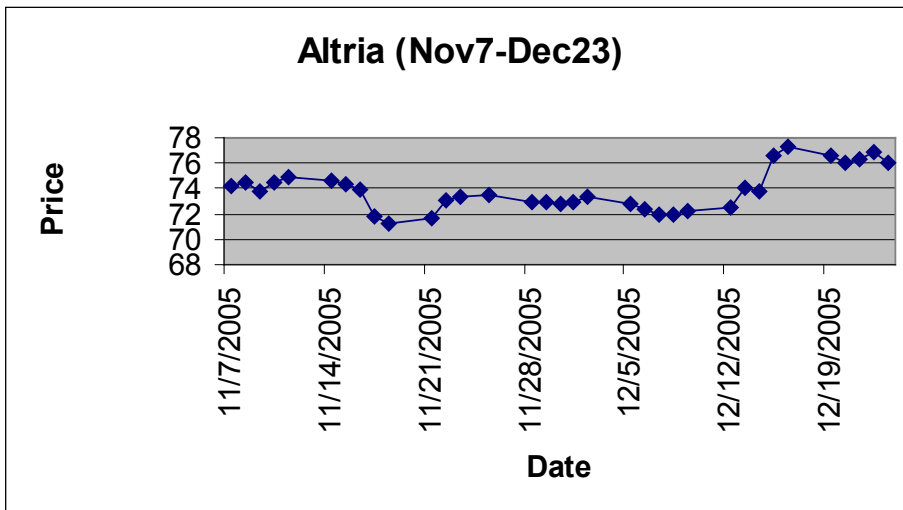
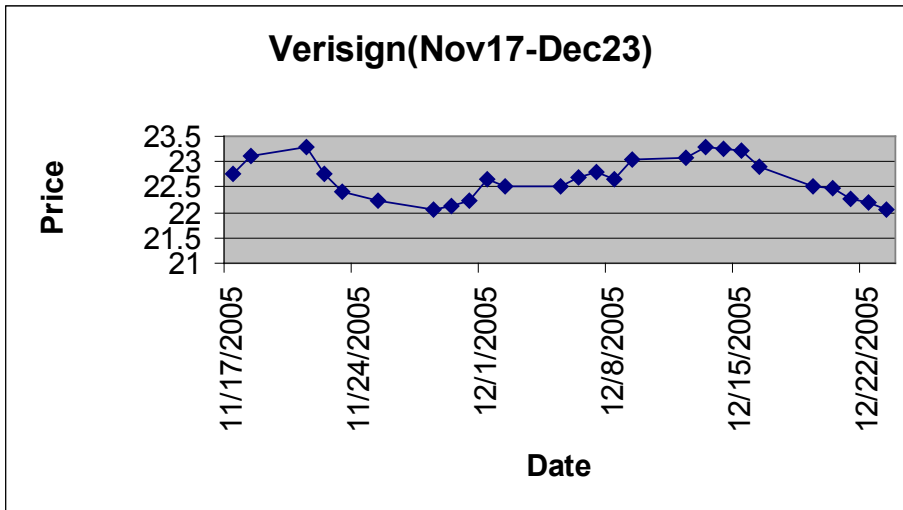
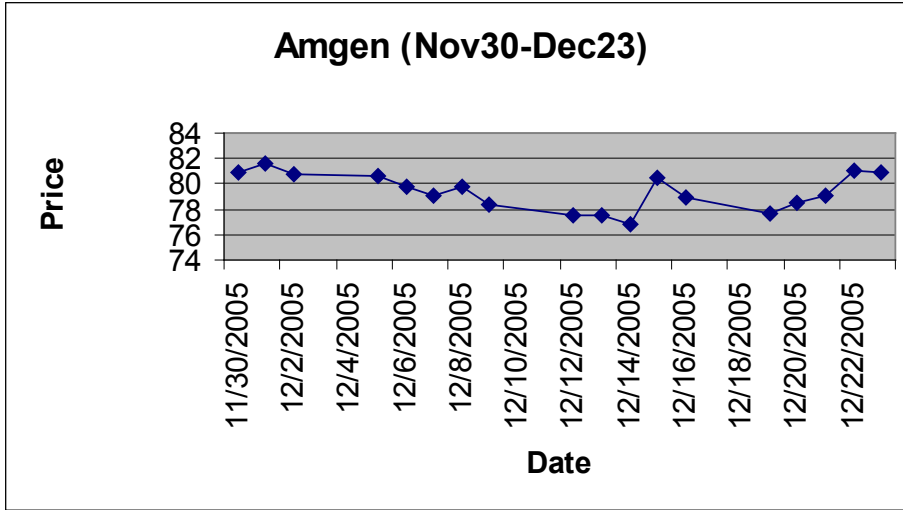
Chevron was a wash, it was fairly static while I watched it.



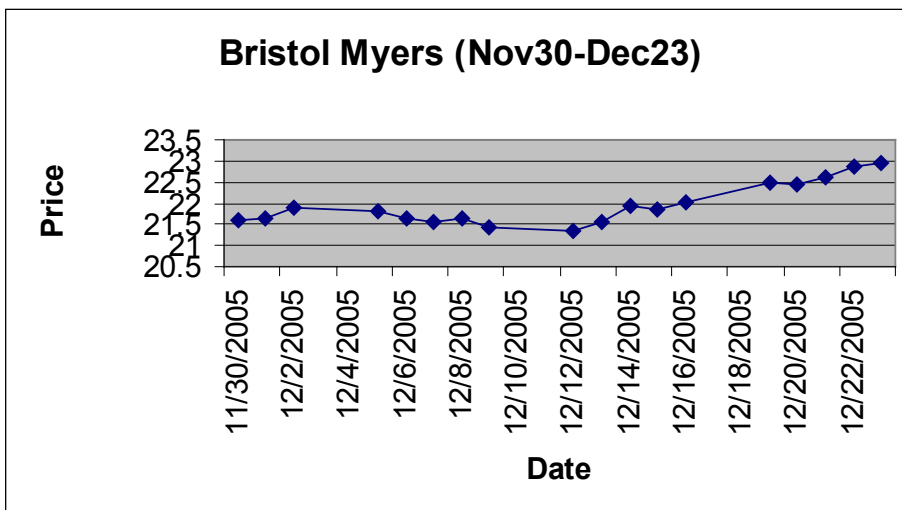
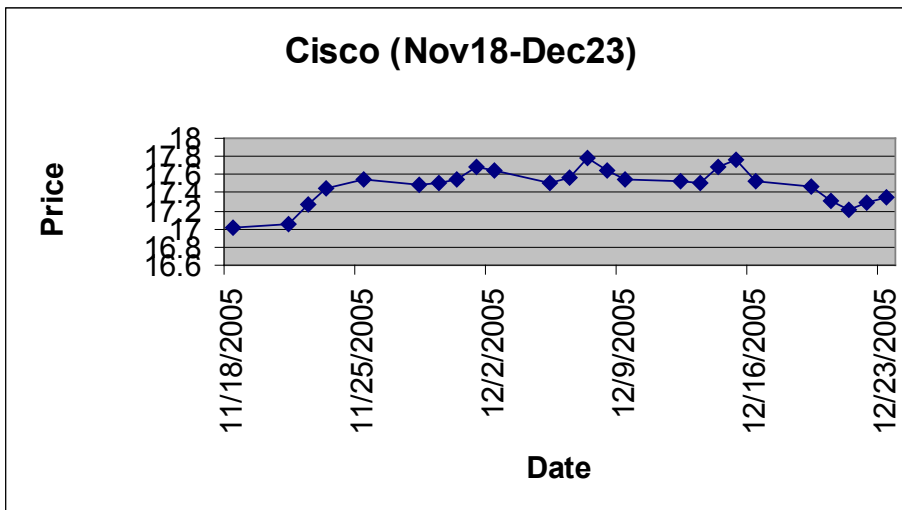
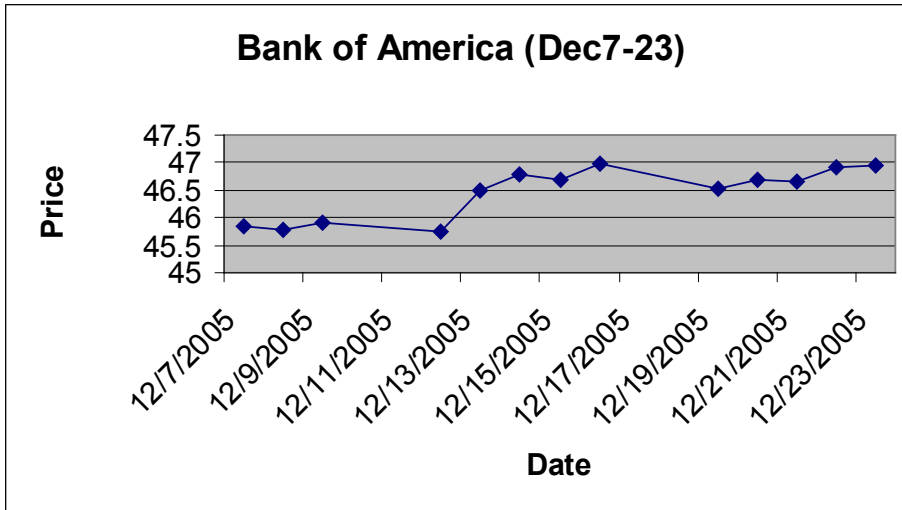
Adaptec was the stock that I really wished I had bought myself. The percent profit was very high, and was still on the rise when the simulation ended.

### 5.5 Results of buy and hold (after I “sold” them)

Below is the stocks results after I sold them until the end of the simulation, BMY did the best out of this group, with a significant jump at the end.







**5.6 Short-Term Trading money made**

**AMGN:** (nov2-29)start-73.90  
End:81.03  
Difference:7.13 (9.65%)  
**VRSN:** (nov2-16)start-23.50  
End:22.63  
Difference:-.87 (-3.70%)  
**MO:**(nov2-4) start-74.65  
End: 74.03  
Difference:-.63 (-.844%)  
**BAC:**(nov2-dec6)start-44.08  
End:46.31  
Difference:2.23 (5.06%)  
**CSCO:** (nov2-17)start-17.63  
End:17.37  
Difference:-.26 (-1.47%)  
**BMJ:** (nov7-29) start- 21.30  
End:21.90  
Difference:.60 (2.82%)  
**EGN:** (nov17-dec23)start-35.72  
End:37.19  
Difference:1.47 (4.12%)  
**MWY:** (nov18-dec23)start:21.37  
End:21.24  
Difference:.13 (.61%)  
**MDU:** (nov30-dec23)start-32.83  
End:33.22  
Difference:.39 (1.19%)  
**CVX:** (nov30-dec23)start-57.31  
End:57.13  
Difference:-.18 (.314)  
**ADPT:** (dec7-dec23)start-5.39  
End:6.08  
Difference:.69 (12.80%)

Overall Short-Term Trading Statistics (based on 50 share packages for each stock)  
Total Money Spent: \$20384.00  
Total Money Made: \$536 (2.63%)

### **5.7 Buy and hold money made**

**MSFT:**start-26.46  
End: 26.64  
Difference:.18 (.680%)  
**DVN:**start-59.75  
End: 63.86  
Difference:4.11 (6.88%)  
**TEVA:**start-38.45  
End: 44.83

Difference:6.38 (16.59%)

**FDX**:start-93.50

End: 104.56

Difference:11.46 (12.26%)

**PGR**:start-119.65

End: 119.27

Difference:-.38 (-.318%)

Overall Buy and Hold Statistics (based on 50 share packages for each stock)

Total Money Spent: \$16890.50

Total Money Made: \$1067.50 (6.32%)

## **Chapter 6: Conclusion**

### **6.1 Problems with the simulation itself**

I decided on doing an eight week simulation for a couple of reasons. First, the time available was limited in the sense that I needed time to read about the market and the strategies being used and I would need time to analyze the data and write about my observations. Second, eight weeks seemed like enough time to get a good handle on which strategies work the best, etc. There are several inherent problems with doing an eight week simulation. It can take many months to years for a trader to get to the point where they are pulling consistent profits from the market, that is, if they are completely engrossed in trading and their preparation. I had just eight weeks, and my goal was to get enough experience till the point where I could be successful when the time comes when I have enough finances to invest in stocks. The other potential issue was that I had other things to focus on like my other classes, whereas a professional day trader has little else but the market to pay attention to. So the issue was not just the time frame, but perhaps the intensity of the eight weeks. Ideally I would have liked to utilize all the indicators besides the RSI, and all the charting techniques, like the doji charts. But there simply was not enough time to learn enough about all of them to use them, and if I had used them all, I would not have had enough of a time frame to collect the data, and I would have been able to collect a week's worth on each perhaps.

### **6.2 How I would alter the simulation if I were to do it again**

After completing the simulation and at points during then simulation, I began thinking about how I would have gone about the experience differently. The answer is

complicated, because of the inherent problem of having limited time with which to work. Taking into account the time limitation, I would not have changed much about the simulation. I would have done two things differently though. I would have chosen stocks in the same price range for both the buy and hold strategy and the short term charting strategy. As it turned out, the buy and hold was more and expensive, but also more successful than the short term strategy. As mentioned, I believe that part of the reason the buy and hold strategy was more effective during the simulation was that I chose more expensive stocks. In general, these stocks are associated with companies that are more proven and successful than some of those that I chose for the short term section of the simulation. I would have had to picked more expensive stocks for the short term, rather than choosing cheaper stocks for the buy and hold, because it is an inherent quality of buy and hold that one must pick a more proven company in very good financial standing because normally one will be holding onto that stock for an extended period of time. This quality exists to a lesser extent with the short term strategy. The other thing I would do is to be more disciplined in my approach. What I mean by this is that I tend to be competitive in everything I do. I think I may have been more focused in doing as well as I could in terms of the success of the stocks I chose, than I was in reaching the ultimate goal, which was to learn as much as I could about the stock market in the time that I had. I believe there is a difference between the two.

One of the things that I did almost subconsciously was I looked for patterns in my successes. Early on I saw that most of my success came from stocks that moved in a parabolic motion, and stocks that I bought just out of the “trough” as Toni Turner says. Looking for patterns and limiting oneself in that way is really human nature in many

things, especially when one is talking about investing one's hard earned dollars in the stock market. Many professionals try to follow these restrictions created through their personal experience with the market. The difference is, I did not invest any money, my goal should not have been to be successful, but rather just learn as much as I could, including following stocks with price patterns with which I was not familiar. At some point during the simulation I realized this, and began paying attention to stocks like Midway Games, which had almost a linear pattern.

### **6.3 Strategies, other observations**

After deciding on utilizing the two strategies explained in The 100 Best Stocks to Buy 2006 and Short Term Trading picking the stocks was not quite as easy as following a set of steps, and then waiting for the results. There were many more decisions to be made, more so in the case of the short term strategy. In 100 Best Stocks... for each of the 100 stocks, John Slatter gives information (P/E ratios, strength ratings from Standard and Poor's, debt as a percentage of capital, etc) one can only access easily if one is paying for an online broker. Slatter also lists "shortcomings to bear in mind", "reasons to buy", and gives a company profile for each stock. He leaves quite a bit to consider, and when one is trying to narrow the list down to just 5 stocks as I was, there is a lot of information to go over. Eventually I decided on the five I thought seemed the most promising for my simulation.

In the case of Turner's book, she does not speak of any specific stocks, just the signals that indicate potential success. This means that with the short term strategy, I did most of the field work, while Slatter did almost all of it for me with his book. When

considering the changes to the simulation that I would make if I were to do it again, I thought about if it would make for a better comparison between the two strategies if I did not go by the information on the stocks in The 100 Best and just applied his strategy and looked for potential choices myself. Then I remembered that most of the information that Slatter uses in picking stocks can only be acquired by paying a fee, whereas most of the information used in the short term strategy is readily available for free. This fundamental difference in the information required is the reason why a “free” simulation would never be a “fair” simulation between the two strategies.

As I reflected on the simulation in general and why the buy and hold strategy was more successful than the short term approach (6.32% to 2.63% increase, see simulation section) I considered the fact that Slatter did a good amount of the work for me and gave me figures I would normally have to pay for, whether or not I used the short term strategy appropriately, or if it simply takes more experience to flourish with that approach. One of the ways that I may not have maximized Turner’s advice is not using the candlestick charts. She says several times in the book that many of the symbols that appear in the candlestick charts are very strong signals to buy, sell, or stay away. The problem is that the symbols are complicated, and are not easy to pick out of the charts. This is because many of the indicators are combinations of symbols, and involved combinations at that. Looking back though, it seems that it may have been worth it to spend the time to practice using the candlestick charts before the actual simulation. If I had had more time at my disposal, I absolutely would have utilized the candlestick charts.

The other way that I might have misused the short term strategy was that I may have been too focused on specific stocks when I should have been comparing them to

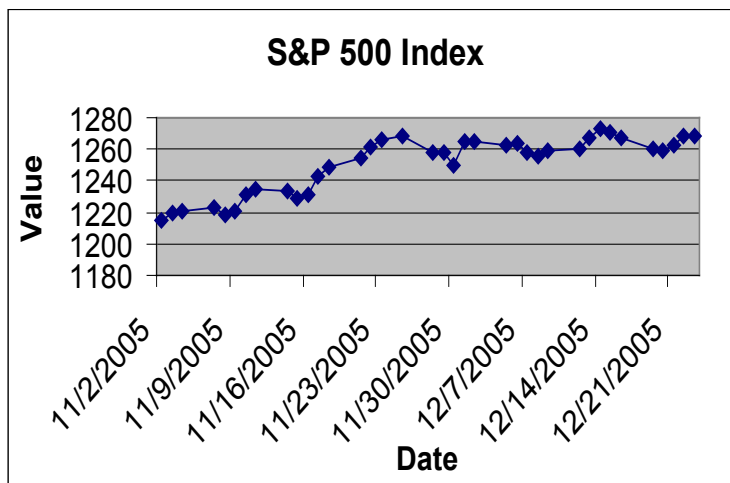
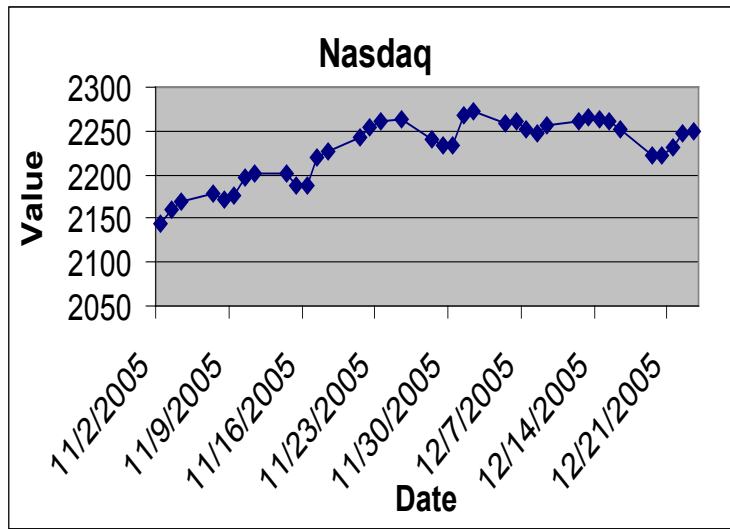
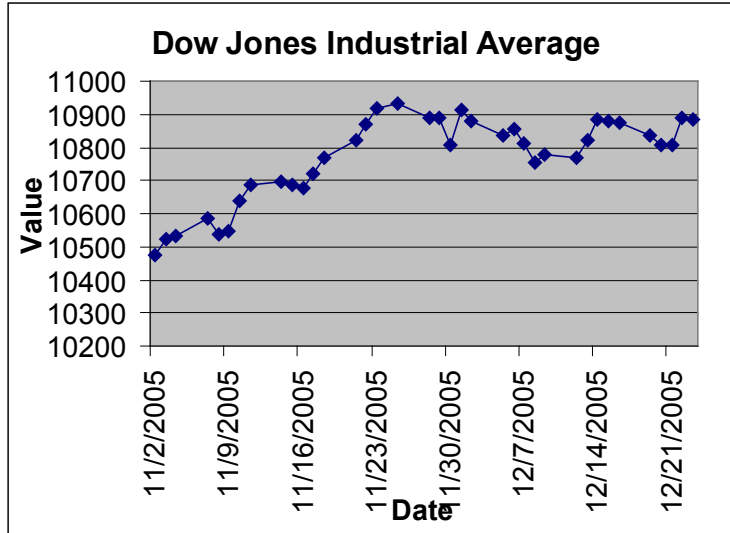
stocks within their own sector. I did do a good bit of this comparison, along with focusing on specific stocks patterns. But I think I could have done more. Most of the comparisons I did were when I was choosing stocks. My approach was to go by sector, and I would go through several of the top companies in a given sector as Turner say to, and stop when I came to a stock with a favorable trend.

One tool that I could have used more was the charts for sectors in general. These charts are available for no fee on the internet. Although I did use them at points, I could have used them more frequently in comparing specific stocks to their counterparts in the same sector. These overall sector charts can also help traders to know when to shy away from a particular sector altogether.

#### **6.4 Health of stock market in general**

For my evaluation of the simulation, it was obvious to compare my success (or lack of it in some cases) to the health of the stock market in general. The following three graphs depict the Dow Jones Industrial Average, NASDAQ, and S&P 500, which are three commonly used indexes used to track the progress of the stock market. As you can see, the market did well during my simulation. The first half was where it made the progress, the second half it didn't make any.





## **6.5 Final Thoughts**

I consider the simulation and entire project itself a success. It was fun, and more importantly, I learned quite a bit in the process about the stock market. Someday when I have enough money to seriously invest in the stock market, with some more research, I can invest with confidence.

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