# STOCK MARKET SIMULATION 

An Interactive Qualifying Project Report:<br>Submitted to the faculty of<br>Worcester Polytechnic Institute<br>In partial fulfillment of the requirements for<br>The Degree of Bachelor of Science

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#### Abstract

Each member of this group selected one stock market trading strategy and then subsequently selected companies to invest in over a period of twelve weeks. Each member of this group started with an initial sum of $\$ 100,000$ which was invested in the stocks they chose. When the twelve weeks came to a completion, this group compared and analyzed each of their selected trading strategies in order to determine which trading strategies are the most successful. This group determined that the most beneficial trading strategy for any possible state of the stock market is the Value Averaging trading strategy.


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## 1 Introduction

### 1.1 Project Goals

Over the course of the IQP we plan to implement and understand several of the most widely used stock market trading techniques during which we plan to identify the more successful techniques out of the techniques we will use.

Each member of our group will have starting funds of $\$ 100,000$ or about $\$ 12,500$ per stock. We plan to use these funds over the course of 12 weeks of trading throughout the time we will be collecting trade related data. We will be trading around a total of 32 stocks which is 8 or more per person.

We will make use of the Google Finance website especially the portfolio feature which allows people to easily track and trade any stock that they choose. This website can be found at the following location:

## http://www.google.com/finance

### 1.2 Review of the Market

Currently the market as a whole has been consistently declining since the beginning of our simulation on September $30^{\text {th }}$. As the American market declined the Worldwide stock market reflected the poor performance. Over the course of our trading period the stock market declined to a 12 year minimum which affected all companies including the technology sector which typically performs well during this time of year (Tomasson, 2009). The overall status of the stock market played a direct role in the success and failures of each of our trading strategies.

### 1.3 Trading Methods

We have selected four trading strategies to simulate during the course of the trading period. The trading strategy selected governs the thought that goes into which stocks are selected as well as when and how many shares are purchased. The strategy also details when each share should be sold in order to result in the greatest profit. The trading strategies we investigated were the Fundamental Trading Strategy, Scalping Trading Strategy, Buy and Hold Trading Strategy, and the Value Averaging Trading Strategy.

### 1.4 Company Selections

Based on the specific trading strategy used to buy and sell stocks we each made a selection of companies that we thought would perform best for our given strategy. These companies ranged from the technology sector all the way to the food sector. We made an attempt to select stocks form a variety of sectors in an attempt to get an even distribution. The companies we selected include: Caterpillar, Arena Resources, Diana Shipping, Rensola, Research in Motion, Deere and Company, Ambac Financial Group, DryShips, CombinatoRx Incorporated, ExxonMobil, Boeing, Southwest Airlines, Amgen, Office Depot, Whole Foods, Best Buy, Nike, Hershey, Wal-Mart, Sony, Allied Waste, Citigroup, Diebold, Hormel Foods, Millipore, General Electric, Pfizer, Raytheon, Google, Microsoft, International Business Machines, Apple, Verizon, Amazon, Cisco, and Intel.

## 2 Fundamental Trading (Evers)

### 2.1 Trading Strategy

Fundamental Trading is a method by which a trader focuses on company-specific events to determine which stock to buy and when to buy it. It is considered to be the classic way of trading and revolves around the theory that no matter what happens in the short term; eventually the price of your investment must follow the economic numbers. Fundamental analysis includes the detailed study of the company, its promoters, its management, its past performance, its industry, financial stability and other company based information. Fundamental Trading uses Economic indicators which are pieces of data from important economic reports. Most economic indicators are published by government agencies or select private groups. Fundamental Trading is a good long term trading method but if done well, it can be a good short method as well.

### 2.2 Companies Selected

### 2.2.1 Caterpillar (CAT)

## Company Profile

Caterpiller is a U.S. based corporation but in addition to its U.S. operations it has a vast network of international facilities and dealers. It is a fortune 500 company and is currently ranked number 50 and in addition to this it is number one in the heavy equipment industry in 2008. It has $\$ 30$ billion in assets with $\$ 44.598$ billion in revenue and $\$ 3.541$ billion net income in 2007. Caterpiller is strong and dedicated to growing. I chose to invest in CAT because it is a well established corporation that has enough international business to carry them through the current
state of the U.S. economy. CAT was trading at 59.89 on $7 / 29 / 08$, which is when I bought my first shares.

## Management

Caterpillar's management philosophy is based on three principles: Integrity, Excellence and Teamwork. "Integrity is the foundation of all we do. It is a constant. Those with whom we work, live and serve can rely on us. We align our actions with our words and deliver what we promise. We build and strengthen our reputation through trust. We do not improperly influence others or let them improperly influence us. We are respectful and behave in an open and honest manner. In short, the reputation of the enterprise reflects the ethical performance of the people who work here. We set and Achieve ambitious goals. The quality of our products and services reflects the power and heritage of Caterpillar - the pride we take in what we do and what we make possible. We are passionate about people, process, product, and service excellence. We are determined to serve our customers through innovation, continuous improvement, an intense focus on customer needs, and a dedication to meet those needs with a sense of urgency. For us, Excellence is not only a value; it is a discipline and a means for making the world a better place. We help each other succeed. We are a team, sharing our unique talents to help those with whom we work, live and serve. The diverse thinking and decision making of our people strengthens our team. We respect and value people with different opinions, experiences and backgrounds. We strive to understand the big picture, then do our part. We know that by working together, we can produce better results than any of us can achieve alone" (Caterpiller, 2009).

### 2.2.2 Rensola (SOL)

## Company Profile

Rensola is a manufacturer of solar wafers. These solar wafers are thin sheets of silicon material. The solar wafers are used in the production of solar panels. Rensola is a publicly traded company on the New York Stock Exchange. Its IPO is 10 million shares offered at $\$ 13$. I invested in Rensola because it is an alternative energy company, which I am hopeful will grow as the desire and need for alternative energy, solar panels in particular, continues to expand. I originally bought the stock at $\$ 9.86$.

## Management

"Committed to technology innovation and with a corporate mission dedicated to developing clean energy, Yuhui remains focused on wafer production, while establishing long term relationship with leading international suppliers and customers" (Rensola, 2008).

### 2.2.3 Arena Resources (ARD)

## Company Profile

Arena Resources is an Oklahoma-based oil and gas exploration, development and production company. They currently have operations in Texas, Kansas and New Mexico. They currently have an impressive number of 55,425,711 barrels of proved reserves. Arena Resources had $\$ 169.29$ million in revenue and a net income of $\$ 63.95$ million in 2007. When I first bought the stock it was listed at $\$ 37.54$.

## Management

"Arena's management understands what is required to build a resource company from the ground up, having successfully done so on more than one occasion. With over 100 years of
combined experience in the oil and gas industry, coupled with new technological advancements, careful geological evaluation and reservoir engineering, Arena has the components in place to build a profitable and successful program" (Arena Resources, 2008).

### 2.2.4 Diana Shipping (DSX)

## Company Profile

Diana Shipping is a global provider of shipping transportation services. They specialize in the transportation of dry bulk cargoes. They first offered public common stock on March 23, 2005 and are currently traded on the New York Stock Exchange. Diana Shipping's IPO is 12.38 million shares offered at $\$ 17$. I originally bought the stock for $\$ 19.21$.

## Management

"Our main objective is to manage and expand our fleet in a manner that will enable us to pay attractive dividends and enhance shareholder value. To accomplish this objective, we intend to pursue highly focused business strategies, including: continuing to operate a high quality fleet; strategically expanding the size of our fleet; pursuing an appropriate balance of short-term and long-term time charters; maintaining a strong balance sheet with low leverage; and maintaining low cost, highly efficient operations. In addition, we intend to capitalize on our reputation for high standards of performance, reliability and safety to establish and maintain relationships with major international charterers and financial institutions" (Diana Shipping, 2008).

### 2.2.5 Research in Motion (RIMM)

## Company Profile

Research in Motion engages in the design, manufacturing, and marketing of wireless solutions for the mobile communications market worldwide. They are a part of the diversified
communication services industry. It's portfolio of products includes the Blackberry wireless platform, the RIM Wireless Handhelds product line, software development tools, and other hardware and software solutions. They are listed on the NASDAQ 100. I believe Research in Motion is a good investment because it has a wide range of products and has the ability to sell to multiple wireless companies. They are considered to be one of the leaders in they're field. I also believe that in the near future they will make great efforts to even themselves with the growing competition. It was listed at $\$ 62.50$ when I first bought it.

## Management

"Research In Motion® (RIM®) is committed to conducting its business in accordance with applicable laws, rules and regulations, industry standards of business ethics, and to full and accurate disclosure in compliance with applicable laws, rules and regulations" (Research In Motion, 2008). Research In Motion's management is focused on doing everything by the book.

### 2.2.6 Deere \& Company (DE)

## Company Profile

Deere and Company is an American corporation based in Moline, Illinois. They are the leading manufacturer of agricultural machinery in the world. They are currently ranked \#98 on the fortune 500 list. Deere and Company now employs 47,000 people in 27 countries. In 2007 they had revenue of $\$ 24.082$ billion. I believe Deere and Company is a good company to invest in because they have a strong international foothold. I also believe that the need to for alternative energy will develop more agricultural operations to meet the need to produce ethanol; Deere and Company will be there to supply the farmers with the machinery they need to operate. Its stock was listed at $\$ 47.76$ when I bought it.

## Management

"John Deere consists of four major business segments (agricultural equipment, commercial \& consumer equipment, construction \& forestry and credit). Those segments, along with the support operations of parts and power systems, are focused on helping customers be more productive as they help to improve the quality of life for people around the world" (Deere and Company, 2008).

### 2.2.7 Ambac Financial Group (ABK)

## Company Profile

Ambac Financial Group is an American holding company whose subsidiaries provide financial guarantee products. They provide financial service to clients in both the public and private sectors around the world. ABK was trading at 2.17 when I bought it. This is very low and I believe it will spike higher when the bailout plan comes into effect.

## Management

Ambac Financial Group’s management philosophy is based on premier values. "People: Our greatest assets are the individuals who serve our constituencies. We demonstrate by our behavior and actions that our people, their skills, development and motivation "make the difference" to give us a competitive edge in the marketplace. Reputation: Ambac maintains an environment where integrity and honesty are fundamental principles of conduct. Our reputation is a franchise that must never be compromised. Excellence: We understand that our success means earning client respect and exceeding client expectations. We strive to achieve excellence in every task. Meritocracy: We seek out and retain the best talent, providing our people with opportunities to grow and share in our success. Innovation: We welcome new insights, new ideas and fresh perspectives - we value strategic thinking and are not afraid of change, recognizing
that continuous innovation is an essential element of success for all companies in all industries. Earnings/Return: Ambac understands that long-term earnings growth and attractive returns on capital are of vital importance to our stockholders and other constituents. Risk Management: We recognize that excellence in managing risk is central to our business and we evidence that commitment through exacting standards and professionalism in all aspects of the risk management process" (Ambac, 2008).

### 2.2.8 DryShips (DRYS)

## Company Profile

DryShips engages in the ownership and operation of dry bulk carries worldwide. DryShips owns and operates a fleet of 46 drybulk carriers comprising 5 Capesize, 31 Panamax, 2 Supramax and 8 new building drybulk vessels. They are part of the shipping industry. Its IPO is 7.1 million shares offered at $\$ 18$. I bought this company at $\$ 33.15$ because it is a good consistent company that should not waver.

## Management

"Our business strategy is focused on building and maintaining enduring relationships with charterers of drybulk carriers and providing reliable seaborne transportation services at competitive cost. We seek to create shareholder value by acquiring and operating second hand drybulk carriers across the size spectrum, including large (Capesize), medium (Panamax) and small (Handymax and Handysize), and employing them in a combination of "spot charter", and "period time charter" contracts and pools" (DryShips, Inc., 2008).

### 2.2.9 CombinatoRx, Inc. (CRXX)

## Company Profile

CombinatoRx, Incorporated is a biopharmaceutical company focused on developing synergistic combinations pharmaceuticals, with a portfolio of product candidates in phase II clinical development. The Company creates product candidates with mechanisms of action striking at the biological complexities of human disease.

## Management

"In any business, long-term success is predicated on trust and respect. In the pharmaceutical business that confidence is perhaps more essential. The only reliable path to trust and respect is absolute integrity in everything we do. At CombinatoRx, company policies and procedures provide structure for our operation, and ensure that we base our decisions on our shareholders' best interests. We are diligent about meeting requirements of the law, and we adhere to rigorous standards of corporate oversight. We hold ourselves and our colleagues to the highest moral and ethical principles. In short, we manage our affairs honestly and ethically, and we are committed to deserving the trust and respect of our shareholders, academic and commercial collaborators, regulators, employees and other business partners" (CombinatoRx, 2008).

### 2.3 Trading

## Caterpillar

CAT has consistently gone down from the first day of trading. When I bought CAT on September $29^{\text {th }}$ it was at 59.89 , it consistently went down until October $10^{\text {th }}$ when it began a 3 day climb from 43.13 back up to 49.89 . Despite still being 10 points behind my initial buy on

October $13^{\text {th }}$ the three day climb had me confident it could recover. However, after October $13^{\text {th }}$ it again dropped dramatically over 14 days, finally reaching a low of 32.78 . At this point I was worried about the future of CAT but, considering that the market as a whole was down a great deal, it gave me some relief. I had been reluctant to do any trading due to the performance of CAT and the overall performance of the market. With the price of the stock so low I had no choice but to ride it out. After hitting the low on October $27^{\text {th }}$ it climbed for eight days back up to 42.25. This is still nowhere near where I originally bought it and again had to choice but to stick it out and hope the market could rebound. However, it again dropped a few points and has been dropping and climbing small amounts from November $4^{\text {th }}$ to November $21^{\text {st }}$. During the end period of the simulation you can see how CAT has made some slight growth until December $15^{\text {th }}$.


Figure 2.1 - Price Chart for Caterpillar 1970 to 2008


Figure 2.2 - Price Chart for Caterpillar September $29^{\text {th }}-$ December 15 ${ }^{\text {th }}$

## Rensola

After buying SOL on September $29^{\text {th }}$ at a price of $\$ 9.89$ it immediately started to grow. However, this increase in price only lasted for 2 days at which point it began a steady decline of $\$ 3.03$ until October $7^{\text {th }}$. After this point it hovered around $\$ 7$, going up and down almost daily until October $20^{\text {th }}$ where it then began another steady decline for a week, bottoming out at 4.49 on October $28^{\text {th }}$. It then had a five day rally up to $\$ 8.82$. After this I was confident it could battle back up to at least what I had originally bought it at. However, it again went into a 5 day drop down to $\$ 5.99$ on November $11^{\text {th }}$. Then on November $12^{\text {th }}$ it dropped $40 \%$ in a single day down to $\$ 3.47$. On November $13^{\text {th }}$ it rallied and increased $\$ 1$, which only lead to a 5 day drop down to the lowest amount this stock has ever seen at $\$ 2.21$. Rensola finished off the simulation very stagnant, maintaining a price of about $\$ 2.20$.


Figure 2.3 - Price Chart for Rensola February 2008 to November 2008


Figure 2.4 - Price Chart for Rensola October $3^{\text {rd }}$ to December $12^{\text {th }}$

## Arena Resources

I bought this stock on September $29^{\text {th }}$ at a price of $\$ 37.54$, after this point it began a 12 day drop down to $\$ 22.68$. After this point it increased and decreased until November $4^{\text {th }}$ never dropping below $\$ 22.28$ and ending at a high of 30.12 . From November $4^{\text {th }}$ to November $21^{\text {st }}$ it has steadily decreased down to a price of $\$ 19.96$, the lowest it has been since 2006. After dipping on December $3^{\text {rd }}$ Arena Resources has begun a steady climb to a final price of $\$ 26.72$ at the end of this simulation.


Figure 2.5 - Price Chart for Arena Resources 2002 to 2008


Figure 2.6 - Price Chart for Arena Resources September $26{ }^{\text {th }}$ to December $12{ }^{\text {th }}$

## Diana Shipping

After purchasing this stock on September $29^{\text {th }}$ it dropped from a price of $\$ 19.21$ to $\$ 14.00$ on October $10^{\text {th }}$. It then continued to increase and decrease periodically always hovering around $\$ 15.00$ until November $5^{\text {th }}$ at which point it began a severe drop until November $24^{\text {th }}$ where it bottomed out at a price of $\$ 7.84$. After reaching a new low of $\$ 7.24$ on December $2^{\text {nd }}$, Diana Shipping has shown very promising increases to a price of almost double the low on December $15^{\text {th }}$.


Figure 2.7 - Price Chart for Diana Shipping 2005 to 2008


Figure 2.8 - Price Chart for Diana Shipping September $\mathbf{2 6}^{\text {th }}$ to December $\mathbf{1 2}^{\text {th }}$

## Research in Motion

I bought stock in RIMM after a severe 2 day drop of $\$ 35.80$. I could not see this stock dropping any lower than what already had dropped so I was hopeful when I purchased it would drive back up. However, after a brief one day rally, it has consistently dropped from September $30^{\text {th }}$ to December $5^{\text {th }}$ down to a price of $\$ 39.49$. Research in Motion has continued its poor stock price maintaining a price of just under $\$ 40$ at the end of the simulation.


Figure 2.9 - Price Chart for Research in Motion 1999 to 2008


Figure 2.10 - Price Chart for Research in Motion September $\mathbf{2 6}^{\text {th }}$ to December $\mathbf{1 2}^{\text {th }}$

On September $29^{\text {th }}$ I bought this stock at a price of 47.76 and it immediately climbed for one day to a price of $\$ 49.50$. After this it began a 27 day drop finally bottoming out at $\$ 29.89$ on October $27^{\text {th }}$. Over the next week it rallied to a price of $\$ 42.54$ on November $4^{\text {th }}$, this was only to be followed by another drop over the next month, hitting a low of $\$ 28.77$ and finally ending at a price of $\$ 31.99$ on November $5^{\text {th }}$. Deere has continued its rollercoaster ride over the remaining weeks of this simulation bouncing from a low of $\$ 28.77$ on November $20^{\text {th }}$ to a high in recent
weeks of $\$ 38.75$. It then dipped slightly but has been able to maintain and show an increase at the very end of the simulation.


Figure 2.11 - Price Chart for Deere \& Company 1978 to 2008


Figure 2.12 - Price Chart for Deere \& Company October $3^{\text {rd }}$ to December $12^{\text {th }}$

## Ambac Financial Group

I bought this stock on September $29^{\text {th }}$ at a price of $\$ 2.17$. It immediately climbed to a price of $\$ 3.49$ on October $1^{\text {st }}$. It then began a nine day drop down to a price of $\$ 1.49$; this drop was immediately followed by an eight day climb again to a price of $\$ 3.49$. After peaking at $\$ 3.49$ it dropped slightly over the next few days to a price of $\$ 2.21$ where it stayed for a few days
before again climbing to a price of $\$ 3.40$ on November $4^{\text {th }}$. It then dropped drastically over the next two days down to a price of $\$ 1.52$ where it has stayed until December $5^{\text {th }}$. Ambac remained at this low price for the duration of the end of this simulation.


Figure 2.13 - Price Chart for Ambac Financial Group 1992 to 2008


Figure 2.14 - Price Chart for Ambac Financial Group September $\mathbf{2 6}^{\text {th }}$ December $\mathbf{1 2}^{\text {th }}$

## DryShips

After purchasing this stock on September $29^{\text {th }}$ at a price of $\$ 33.15$ it has consistently dropped over the next two months down to a price of $\$ 4.75$. During this time there were times where it would increase in price but it was never able to rally more than about $\$ 8.00$. Starting on

December $3^{\text {rd }}$ DryShips has begun a fight back up in price and ended the simulation with a price of $\$ 10.19$ on December $15^{\text {th }}$.


Figure 2.15 - Price Chart for DryShips 2005 to 2008


Figure 2.16 - Price Chart for DryShips September $26^{\text {th }}$ to December $12^{\text {th }}$

## CombinatoRx, Inc.

After dropping to $\$ .70$ from $\$ 3.00$ on October $3^{\text {rd }} I$ bought this stock on October $6^{\text {th }}$. From this point on it climbed slowly to a price of $\$ .75$ on October $20^{\text {th }}$ where I sold it.


Figure 2.17 - Price Chart for CombinatoRx 2006 to 2008


Figure 2.18 - Price Chart for CombinatoRx October $7^{\text {th }}$ to October $20^{\text {th }}$

### 2.4 Analysis

| Date | Symbol | BuylSell | Price | Shares | Net Cost/ Proceeds | Profit/ Loss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 80,000 |  |
| 9/29/2008 | CAT | Buy | 59.89 | 150 | 8993.5 |  | 71,017 |  |
| 9/29/2008 | SOL | Buy | 9.89 | 1000 | 9900 |  | 61,127 |  |
| 9/29/2008 | ARD | Buy | 37.54 | 250 | 9395 |  | 51,742 |  |
| 9/29/2008 | DSX | Buy | 19.21 | 500 | 9615 |  | 42,137 |  |
| 9/29/2008 | RIMM | Buy | 62.5 | 150 | 9385 |  | 32,762 |  |
| 9/29/2008 | DE | Buy | 47.76 | 200 | 9562 |  | 23,210 |  |
| 9/29/2008 | ABK | Buy | 2.17 | 4500 | 9775 |  | 13,445 |  |
| 9/29/2008 | DRYS | Buy | 33.15 | 300 | 9955 |  | 3,500 |  |
| 10/1/2008 | ABK | Sell | 3.38 | 2250 | 2170 | 2722.5 | 11,105 | 2,723 |
| 10/6/2008 | CRXX | Buy | 0.7 | 4000 | 2810 |  | 8,305 |  |
| 10/20/2008 | CRXX | Sell | 0.75 | 4000 | 2990 | 200 | 11,305 | 2,923 |
| 10/20/2008 | ABK | Sell | 3.4 | 1500 | 5090 | 1845 | 16,405 | 4,768 |
| 10/24/2008 | ABK | Buy | 2.41 | 1500 | 3625 |  | 12,790 |  |
| 11/4/2008 | ABK | Sell | 3.4 | 1500 | 5090 | 1665 | 17,890 | 6,433 |
| 11/10/2008 | ABK | Buy | 1.57 | 2000 | 3150 |  | 14,750 |  |
| 12/15/2008 | CAT | Sell | 42.21 | 150 | 6321.5 | -2652 | 21,081 | 3,781 |
| 12/15/2008 | SOL | Sell | 3.18 | 1000 | 3170 | -610 | 24,261 | -2,930 |
| 12/15/2008 | ARD | Sell | 26.72 | 250 | 6670 | -2705 | 30,941 | -5,635 |
| 12/15/2008 | DSX | Sell | 12.66 | 500 | 6320 | -3275 | 37,271 | -8,910 |
| 12/15/2008 | RIMM | Sell | 36.86 | 150 | 5519 | -3846 | 42,800 | -12,756 |
| 12/15/2008 | DE | Sell | 36.36 | 200 | 7262 | -2280 | 50,072 | -15,036 |
| 12/15/2008 | ABK | Sell | 1.3 | 2750 | 3565 | -1372.5 | 53,657 | -16,408 |
| 12/15/2008 | DRYS | Sell | 10.19 | 300 | 3047 | -6888 | 59,629 | -23,296 |

Table 2.1 - Trading Chart for Fundamental Trading Strategy

## Trading Strategy Analysis

Fundamental Trading has many advantages and disadvantages many of which were portrayed through this simulation. Some disadvantages in which had the greatest effect on this simulation were the timing of the trading, the overall market performance and the effect of other people. The advantages of this trading strategy were not as obvious through this simulation but are none the less important, the most important being long term security. Although the
simulation shines a bad light on this strategy, I am confident this strategy will prove itself in the future during better times.

The disadvantages heavily outweighed the advantages of the fundamental trading strategy due in large part to time. This trading strategy is not commonly associated with short-term trading and does not work well with a time limit. The fundamentals of this strategy are built around the integrity of the company and therefore the stock action depends on the company. Although in the short term a company may have its down points, in the long run if it is a good solid company with a strong history, it will ultimately come out ahead. As shown in my simulation there was not enough time to see the companies come out with a gain. However in the future I predict all the companies I have chosen will bounce back and return to levels of the past and beyond. This also has a lot to do with the overall market performance. Despite choosing all strong companies with good histories because the market as a whole was down and on the borderline of a recession you could not see the companies in their true light. If times were even remotely neutral I believe the choosing of strong companies could be the deciding factor in the performance of one's trading. In times when the market is not doing well it is these strong and tested companies who will come out positive. However, due to the extreme nature of current times it is impossible for even the very best companies to show gains. Perhaps a less important factor in the performance of a stock is the effect of powerful people. You can see in my simulation how a person with a great number of stocks in a single company can single handedly control the price of a stock. I believe my simulation of ABK is a perfect example of this and will be explained more later. Due to the extreme nature of present times the Fundamental Trading strategies flaws were highlighted during this simulation.

There are many advantages to choosing this trading strategy, with the long term security of choosing well-built company is the most important. Even during times of economic disaster a good company will have the fortitude to come out of it positive. The tough economic times have shown how lesser companies will not be able to survive these down times. Numerous companies in many different industries have been forced to seek aid, mostly from the government. Choosing a high-quality company allows one to have the confidence needed to trade during tough times. Someone can invest in a strong company during hard times and in the long run know they will come out of it. Although to most people buying stock during low economic times could seem like a bad idea. However, if you follow the fundamental trading strategy and invest in strong companies during these times when the stock price is very low, in the future when the market comes out of this bottom, you have the ability to make substantial gains. By purchasing stock at a very cheap price and selling it years later when the companies reach new highs you can generate a huge profit with a minimal investment.

## Company Analysis

## Caterpillar

I chose CAT because it is a very good company, which in recent years has done very well. It is a very sound company with good financial background and is the leader in its industry. However, like almost every company during these times CAT dropped in price during this simulation due to the lack of spending. With many people out of work and layoffs coming at near record rates the need for construction equipment dropped substantially. If companies do not have the ability to employ people they have no need to purchase new equipment. In the long run this could be of value as the need for employees would drop with new equipment. However, in the short term paying for manual work is cheaper and better for the times as they are now.

Based on the integrity of this company I believe it will make a startling comeback in the near future due to a few reasons. Despite the obvious attraction of a strong company like CAT, with the economic stimulus package and dedication of the government to get our economy back to the top again, I see CAT having record sales and very strong reports in the coming months. With a new president comes a new way to fight the economic problems. The new stimulus package being pushed will open up jobs to repair our crumbling roads, bridges and increase construction work overall. CAT is a leader in construction equipment and the president's new plan will create new contracts for these construction companies who in turn will need to purchase new equipment to keep up with the amount of work needed. Caterpillar is known as a leader in construction equipment and as Caterpillar's financial records begin to grow with profits from their largest source of income investors will begin to reemerge themselves into CAT. With a revitalized market for their product, more investor's will invest in CAT which will lead to even more investors and in turn help CAT to reclaim its rightful stock price. For those who follow the Fundamental Trading strategy and foresee these future events they have the opportunity to buy at a very low price and depending on how long they hold on to this price they have the chance to make a substantial profit.

Due to the timing and length of this simulation these gains cannot be shown. If the new stimulus package had taken effect a short time ago or this simulation had run at a later time I believe I would see a great increase in stock price and depending on the increase a much higher activity in trading. However, due to the timing no trading was done during this simulation as the price immediately dropped when purchased at the beginning of this simulation and it was never able to battle up to my buying price. With my trading strategy I was not going to sell or buy back CAT during these times. My only choice was to hold on and hope the price rose before the
simulation ended. This was not meant to happen and the price was sold at the end of simulation simply to finalize the numbers of this simulation. If given the time I would still have a good deal of stock in CAT and would simply being holding out until the price of CAT rose to its previous highs after the financial turnaround.

## Rensola

Rensola is another company in very much the same situation as Caterpillar. This is a relatively new company but I invested in them because they have looked strong financial and they are emerging as a leading creator of solar panels. With the "green" initiative coming into full bloom now I thought Rensola would take off. However, due to the economic times it has done the opposite and dropped. With companies barely finding the money to stay afloat now and the government amassing a huge deficit there is simply no money to invest in better solar technology. The companies who are currently looking to purchase the solar panels and the solar technology are now more focused on keeping their generating plants running and producing and not looking to upgrade or expand. The smaller scale people looking to power homes and more private projects are having trouble paying mortgages and do not have the extra money to be investing in solar panels. Despite the money saved in the long run with the reduction in energy costs both the companies and everyday people simply do not have the cash to invest in solar technology. This has put Rensola in a deep new low for the duration of the economic crisis.

In the future I see Rensola coming out of this much like Caterpillar. Another aspect of the president's new stimulus package is a revitalized effort into promoting environmentally friendly technology and means of producing "green" energy. In time as the economy turns around the companies and homeowners, with the help of the government through incentives and bonuses, will help to push Rensola sales much higher. As the economic reports start looking up and
investors again begin to find this company the stock price will in turn work upwards. In the future Rensola is another company I see coming out of this economic crisis looking very good. During my simulation Rensola consistently dropped for the first month and a half but then leveled out. I believe investors were scared as the economic crisis got deeper and the governments plan had no focus on anything "green". As investors got out of environmentally friendly technology the stock price plummeted. When the presidential election was over and official I think investors began looking at what he was planning on doing. Upon seeing what he was doing I believe everyone who was still invested in Rensola decided to hold on to their stock and ride it out. As you can see from the simulation, the price leveled out and actually started to rise slightly during the second half and since the end of the simulation has continued to slowly rise. I believe once the stimulus package is in full effect and things turn around a light will once again be shined on "green" technology and Rensola's stock will increase with its successes.

## Arena Resources

I purchased stock in Arena Resources because it is a company which has seen continued growth since it first entered the market. I believed they would continue this growth because they are an American based company and as our country begins to fight our dependence on foreign oil we will need to not only look to alternative energies but to oil and gas within the country. Arena Resources is the perfect company for this, with their expertise in oil and gas exploration they should be on top of a short list of companies in the country who specialize in this. The gas exploration plays an equally important role in the choosing of this company. If we cannot break our need for foreign oil and we cannot find any within our country we need to look to other sources of energy. The gas sector is a growing portion of the energy market which is not nearly
as big as oil. I felt Arena Resources had the company profile to lead a charge into this part of the market.

Despite everything going for them the economic times were especially hard on them. After purchasing their stock it fell dramatically and then continued to slump to less than half its price before the drop. This could be because of a number of reasons but I feel as though their skills are simply not needed during a time of economic crisis. Companies are fighting to make money and use that money to keep their companies going. With no extra money there is an inability to pay for new exploration of oil and gas. Without energy companies looking for new resources, there is no business for the ones who provide this service and an investor will look at this and be forced to dump the company. This drove the stock to dive and until there is more money circulating and companies begin expanding once again Arena Resources is going to have a hard time finding business and thus people willing to buy stock in their company. To go along with this, the drastic drop in the price of oil pushed companies like Arena Resources out of peoples mind. With oil at such a low price there is no need to find oil in the country, if we can get it cheap it does not matter where we get it from. It could be some time into the future before Arena Resources is able to recover from this. If the price of oil remains at this price they may need to focus on the gas portion of their expertise to stay alive.

During my simulation the price of Arena Resources dropped dramatically over a week and a half span and then continued like a rollercoaster going up and down. I had no choice but to hold on to the stock and hope for something to drive it back up, whether it be a rise in the price of oil or perhaps and new bill pushing natural gas or American oil. If nothing of this nature came about I would have been forced to sell the company as its future did not seem bright. I was lucky enough to end my simulation at a high point in the up and downs and if I were able to sell this
stock through an extended simulation I would have looked for a high much like this one. All of the highs during the simulation never made it above $\$ 31$ and I would have sold this stock in the near future looking for a price of anything within a few dollars of this. If I could go back in time I believe I would still have chosen this company as it was impossible to foresee the dramatic drop in price a company growing such as Arena Resources was.

## Diana Shipping

I chose Diana Shipping because this company had seen a very substantial increase in the price of their stock and was proving to be a very competitive company within the shipping industry. During 2007, the price of Diana Shipping's stock increased by over a hundred points and after dropping down to a lower price they maintained from the end of 2007 through 2008 until the beginning of September 2008 where it showed a slight decrease. I did not feel as though this was of any concern as the drop in the price was not out of the ordinary range for the past year. On the contrary I felt I was getting into the stock at a low price and could see substantial gains. However, along with the rest of the market, at the end of September they took a drop of over half this price. After this it was able to maintain a around a consistent price through October and during this time I was reassured I had made a good choice in companies. As the entire market was continuing to drop they were able to, at the very least, maintain and at times looked as though it was going to climb. During this time I felt as though if I just waited a bit more they could come back to my buying price and possibly above it.

I feel as though this has a large part to do with how the industry as a whole was acting. During this time the water transportation industry as a whole was doing better than the S\&P 500 and many other markets. It was following the general path of the markets but was consistently above the charts. As the industry as a whole prospered so did the two companies I had chosen
from this industry. However, at the beginning of November the industry took a dive and dropped dramatically below the market, even as the market itself dropped. Diana Shipping and DryShips show nearly the same charts, both of which correspond to the water transportation industry as a whole. With the industry dropping the stock had no choice but to drop with it.

The other major impact I see on the price of Diana Shipping was a statement they released on November $12^{\text {th }}$, which said they would be suspending dividends. This caused the price to drop dramatically and brought the company to a new low price and as this news began to settle in the price continued to drop for about a week. After this week it leveled out for about two more weeks and then the price began to rise very consistently through the rest of my simulation. If there had been more time I believe the price would have continued to rise. After the bad news had come and gone I believe people realized it was a good time to buy in a good company. Despite the low price and bad news I think people began to understand it wasn't necessarily the companies doing. This was in reaction to the industry and market dropping as a whole. When people began to understand this, they had the chance to buy into a good company at a very low price. Looking at the charts until the present day you can see the price has continued to increase steadily. If my simulation had run until now I would be only a few points away from my buy in price and watching the stock continue to grow.

## Research In Motion Limited

Research In Motion has been a leader in the production of wireless solutions for almost ten years and has been continuously growing and staying ahead of the competition. Like most companies they're stock price did not vary much over the first six years but midway through 2007 it grew tremendously and has stayed at a high price for a year. Over this year the stock dropped by 20 to 30 points but would immediately rebound and rise to an even higher price. I
bought into this stock because it was at what appeared to be a low point, the company and industry as a whole looked very promising and it is an overall good company.

When I bought into this stock the price was at the bottom of what I believed to be the end of a significant drop in price of about 30 points. This drop in price was not completely out of the ordinary for this company. Over the past year it dropped by 20-30 points twice but was always able to come back to an even higher price than what it dropped from. I felt as though this drop in price was at the end, so I invested in the stock hoping to find some big gains. This was all based on the fact that Research In Motion is a good company and has been giving good reports for a long time. I felt as though this was going to be one of my highest yielding stocks and I was excited when after the first day it rose by about 7 points. However, it then immediately began a very slow but steady decline over my entire simulation. In comparison to the other companies I chose, it was not as severe a decline. The price did drop by about $30 \%$ but this was not as severe as my other companies. To go along with this the decline was not as dramatic and there were many times where it appeared as though the stock was making a fight back up, with some entire weeks being a continuous gain. However, it was never able to reach what I had bought it at and with the price showing some very good strength at times, I felt as though if I held onto it, it was only a matter of time before it would rise back up.

I also chose Research In Motion on the basis that the wireless industry was growing very rapidly and they had a chance to get a big chunk of this. With the emergence of the iPhone and the way it was dominating the market, I felt as though other wireless carriers were going to be making some dramatic changes in the phones they have available. These wireless carriers can no longer settle for a simple phone, you must have all of the extras that come along with phones like the iPhone. With the much needed growth and development of new products, Research In

Motion would have a huge influx of business. Research In Motion is a major supplier of Blackberry and with the release of the new Blackberry Storm; they were looking to make a substantial profit. Not only this but if the Blackberry Storm got strong reviews, as the early reports were indicating, Research In Motion would in turn get good reviews and would lead to new contracts and thus more business. This view of the company and where it was heading would be more suitable for a long term approach to investing as these returns could take some time to get into the financial reports. Based on my trading strategy I believe Research In Motion was one of the best companies in the market to choose and if my simulation had lasted longer I firmly believe they will bounce back as the market comes back.

## Deere \& Company

Deere \& Company is the leader in its industry and has been the leader for over 30 years. This was the reason why I initially looked into them. With such a good track record I felt as though they would be a good company to buy into because it is one of the most stable companies in the market. To go along with this they like every company in the market today was at a low point in its price. However, the price of Deere continued to drop after I bought it due to a number of reasons. The most important of these were their fourth quarter earnings and a report which came out about the effect of the recession on farmers. Despite the horrific state of the American economy the rest of the world has not been fully affected yet and a strong point of Deere is their growing market around the world. With the American economy down Deere has lost a great deal of its consumers but with their international business keeping them going they will outlast this recession.

At the beginning of my simulation I bought into Deere when it was at, what I believed, to be the bottom of a severe drop in their stock. After holding the stock for a day I thought I had
chosen wisely as the price rose a few points and was looking good. However, the very next day the stock began a sort of rollercoaster path down. At times it would climb but never lasted for more than a few days and would then, again, start to drop, this continued for the duration of my simulation. I decided to hold onto the stock with the hopes it could come out with some good reports or good news to end the year and one of these climbs it was making back toward the positive could get me back up to my buying price. Overall, the price did not drop a great deal over my simulation; this is perhaps the only positive to come out of it. Given the time Deere is another company I believe will make it through this recession and come out back on top.

In contrast to my hope, Deere came out with a low fourth quarter earnings statement, thus ending the possibility of a turnaround, at least, within the time of my simulation. The timing of this report did not help either. The stock was working its way up a significant increase after it hit its lowest price in years. This caused the stock to again drop and stay down for about a week before finally slowing working its way back up. The reports of Deere were not the only news affecting the price of its stock. During my simulation there was a report on the effect of the recession on farmers and the farming industry. With the economy in shambles, the lives of every American were becoming harder and almost everyone was being very frugal with their money. Farmers were no longer thinking about what kind of new equipment they wanted to purchase but how to keep what they have running for as long and as cheap as possible. This is not a good thing for Deere being the leading manufacturer or farming equipment in the world. This report only pushed Deere farther down farther than the low point it was already at. Before Deere can make any kind of turnaround the American economy will need to return to proper working order. Without money in the hands of consumers it will be impossible for Deere to come back.

Perhaps the only thing keeping Deere from completely crashing is its growing international business. Deere has been growing internationally for some time and despite the state of the American economy, there are still consumers in the world looking to purchase new equipment. Although the world economy is down, it is not in nearly as severe a state as the American economy and if Deere can keep their international sales up they will be able to outlast the American economic crash. With the president's new stimulus plan coming into effect there should be a large growth in the ability for American farmers to purchase new equipment without worrying about going bankrupt. It is only a matter of time before Deere should be able to regain control in America and then the American profit coupled with the continued international sales should bring the number of investors and ultimately the price of their stock back to its original price.

## Ambac Financial Group, Inc.

I decided to buy stock in Ambac because it was a relatively consistent company, especially considering the industry they are in. Despite the inevitable recession lurching towards the American economy, Ambac had only dropped in price slightly and was looking pretty good for a financial company. I purchased Ambac for the same reasons as the majority of my companies but the simulation turned out very different. This was the only company where the price of the stock was rising and dropping dramatically and consistently enough to trade and make a profit if it was carefully watched. The exact reason for the rapid increases and decreases in price is not apparent however, I believe it could be due to a single stock holder with a very high number of shares. During my simulation I was able to make the most money of this stock despite the differences in the performance based on my trading strategy.

Immediately after buying this stock the price rose by about $\$ 1.50$, which for this stock, is an increase of about $75 \%$, over the course of two days. Although my trading strategy is not one in which frequent trading is used on a consistent basis, I felt as though an increase of this magnitude needed to be acted upon. I sold half the stock I had initially invested in, by selling only half the stock I was hoping to stay consistent with my trading strategy, to some degree. If the stock were to continue to rise, if even at a slower rate, I would still have half of my initial investment at the same lowered price. This proved to be the wrong decision as the price dropped and leveled out over the next two weeks to a price almost half of the price I had bought it at, at the beginning of the simulation. If I had sold all of my stock when the price was very high I would have been able to produce a greater profit. I still had half the shares I had initially invested in so I chose not to buy more stock despite the low price. With all of my other stock at a standstill and the market as a whole looking worse every day, I was not certain this stock would be able to come back up to another high price. This again proved to be the wrong decision as the price rose by over double, again in only two days. This time I decided to hold off on selling the stock to see if it would raise more. I decided on this because after the last time I sold, the price was able to plateau for two days before it dropped down again. I was hoping, at the very least if the price did not continue to raise it would plateau again and I would have the chance to sell my shares at nearly the same price. Unfortunately, the price did not go up any more but actually peaked at the exact same price as the last time I sold the stock, I sold another quarter of my initial shares at a slightly lower price than where it peaked but still had a substantial gain. I chose to sell this amount of stock for the same reason as the first time I sold shares.

It was at this point where I began to wonder why the stock had reached the same exact price at its highest peak but was never able to go any higher. The price of the stock at its peak
both times was $\$ 3.49$ and this lead I to believe something was preventing this stock from reaching a price of $\$ 3.50$, however, the reasoning for this was unclear to me. I did some research on the possible causes of this and it was even hinted at on some online forums that there could be a shareholder with a very high number of shares who had enough influence to affect the price of this stock with their buying and selling. It is my believe that whoever had these shares did not want to see the price of Ambac rise above $\$ 3.50$ and was selling all of his shares before it reached this point. Whether or not this is the true reason for this is not as important as it was in giving me a warning sign for future events.

After the peak price it dropped again and this time instead of sitting by, I purchased new shares at a price very close to my initial buy in price after the stock had leveled out there. After about a week of remaining relatively stagnant the price began to rise again. Although the price did not rise nearly as quickly as in the past two times it did rise rather swiftly. I sold the stock a bit early in anticipation of the drop off before $\$ 3.50$ and was lucky I had chosen to sell it a day early because the price again dropped off very dramatically before being able to reach $\$ 3.50$. I again purchased the stock after it had been stagnant at the low price for a day in anticipation of anther dramatic rise in price. This time it proved to be the wrong decision as the price of the stock was stuck at a low level for the remainder of my simulation. When looking back I do not think this was a bad decision, there was no way to know the stock was not ready for another rise and fall and if it had I would have been in very good position to make another good profit.

Although the activity of this stock during my simulation was not what I had expected or was anything like the other companies I had chosen, it proved to be the most profitable choice in companies and was by far the most dynamic. Despite this, I still believe Ambac is a good company and the reasons for choosing this company based on my trading strategy still stand and

I expect this companies price to again rise on a more consistent level after the economy is back on track.

## DryShips Inc.

DryShips is another company within the water transportation industry that I chose to buy stock in. I purchased two companies from this industry because the industry as a whole is relatively protected from the bad performance of a single market. It naturally has a great international business as the majority of its shipping is between countries which are divided by an ocean or a great distance. DryShips is another very good company, who, over the past year and a half has been growing very rapidly over the past year and a half.

I first looked at DryShips because it was a competitor to Diana Shipping and both companies started and have been growing in tandem with each other. After looking into DryShips more I felt they were a strong company who matched the ideals of my trading strategy very well. Although Diana Shipping had a better stock price and didn't have as many erratic ups and downs, I still felt DryShips was a good company to invest in. This way, at the very least, in the long run if one company was to drop off by a great deal the other would be able to pick up the slack and take over the lost business. I felt this way because not only are they in the same industry of water transportation but they are both transporters of dry goods. Therefore, they will likely be competing for contracts and by purchasing stock in both companies I am guaranteed to see the benefits of either company prospering.

When investing in DryShips and this industry I was looking at the fact that the international business is very strong and the life of these companies is based on international business. Therefore, if one economic system were to drop they would still be supported by the
numerous other markets they work in. This proved to be wrong, as the American market began to crash so did the price of these stocks. As the market began to fall I was hoping the positive earnings they were reporting would be enough to keep them at least even and possibly in light of everything else crashing could even push them up. This was not the case and they simply fell with the market despite good reports. As the American economic crisis began to affect the rest of the world it only worsened DryShips situation. They were forced to cancel an order of 4 new ships which only dropped their share price down even farther. Despite all of the bad news I am still confident DryShips will come back, they are a good company within a good industry, as the American economic system is working properly again the rest of the world will follow and they will recover.

## CombinatoRx, Inc.

I first looked into this company because I happened to see them on the list of top losers after of an amazing drop off in the price of their stock over a weekend, dropping to $23 \%$ of their price before the weekend. I was amazed at this so I began to look into the company some more and I found that it was not a bad company and the price drop had no apparent cause. They did not file any bad reports; do anything illegal or anything obvious to promote this drop in price. Later in the day as I came back to see if anything had changed I found a report released detailing top of the line results for a major study they were conducting. I decided to invest a small amount in them with the idea that if they came back from this extreme drop and I would have the chance to make a substantial amount of money and they could not sink any lower. I held onto the stock for two weeks but only saw a slight increase in price. I decided to sell all of my stock in them as it was apparent they were not going to recover from this anytime soon and I did not want to risk
losing everything if they were never able to recover. In all it was not a bad investment as I was able to produce a small profit and nothing bad came from it.

## 3 Scalping (Nicotra)

### 3.1 Trading Strategy

Scalping is a strategy that intends to buy shares and sell them immediately any profit is created. This is a low risk, low reward strategy that can eventually evolve into considerable profits over time. By selling the instant any profit is reached, this virtually eliminates any chance of large or detrimental losses (Investopedia.com, 2009).

There are a few advantages that adhere to traders using the scalping technique. Scalping effectively utilizes capital without high risk per trade. There is a high percentage win rate as they will always make profit once they sell at a higher price. It is the best strategy for those who are impatient people and are not high risk takers.

Along with the advantages, there are always disadvantages. The commission fees will continue to accrue over a period of time causing high commission costs. It requires a lot of time and effort as one would be constantly trading. It can also be stressful at times sitting around waiting for the stock prices to rise in order to make a profit. By using the scalping method, the chances of accruing high profits decrease dramatically.

Scalping has been a debatable practice since the inception of the Investment Advisers Act of 1940, as some have seen it as a method of fraud by investment advisers. Often times the investment advisers would advise their customers to buy a particular stock, and then sell that same stock once they saw an increase in profit. Due to this reasoning, it has been viewed by some that this is a fraudulent indicator. If the adviser was buying, why would he recommend to sell the stock? The larger issue with investment advisers practicing scalping is their indirect ability to alter the prices of the stocks. By advising a large number of people to purchase a
certain stock, the demand for that stock will inevitably rise as the demand increases. The adviser could purchase the stock prior to the recommendation then watch as the price per share increases due to the sharp increase in demand. By doing this the adviser can make a profit from his customers decision to purchase more shares.

This practice can be viewed as a deceiving method in which the unknowing customer can be conned into buying shares to beneficiate the adviser's personal finances. The Investment Advisers Act of 1940 was the last major written law regulating the investment strategies for investment advisers. The act is written rather vaguely and is open for much interpretation. Section 206 of the Investment Advisers Act of 1940 reads as follows:

It shall be unlawful for any investment adviser, by use of the mails or any means or instrumentality of interstate commerce, directly or indirectly-
(1) to employ any device, scheme, or artifice to defraud any client or prospective client;
(2) to engage in any transaction, practice, or course of business which operates as a fraud or deceit upon any client or prospective client; ...
... (4) to engage in any act, practice, or course of business which is fraudulent, deceptive, or manipulative. The Commission shall, for the purposes of this paragraph (4) by rules and regulations define, and prescribe means reasonably designed to prevent, such acts, practices, and courses of business as are fraudulent, deceptive, or manipulative. (Commission, 2008).

### 3.2 Companies Selected

### 3.2.1 ExxonMobil (XOM)

## Company Profile

ExxonMobil is known worldwide as being the world's largest publicly traded integrated petroleum and natural gas company. They operate all over the world and explore and research oil and natural gas on six continents. With increasing trends of the world's energy focusing on green energy and efficiency, ExxonMobil has become more involved in the sale of crude oil and natural gas. Along with this they are a leader in petroleum products. They are a major manufacturer of commodity and specialty petrochemicals and have become more involved in electric power generation facilities. They have a large and extensive research program that try to improve each of their divisions daily while exploring emerging energy sources and technologies.

ExxonMobil has a very large and diverse business plan in which they are currently working in 36 countries throughout the world. As of 2007 ExxonMobil has invested in seven major upstream projects started production. Their main customer's are power companies, industrial users, and distributors in major and developing markets around the world. In 2007, total oil and gas production had a mean of 4.2 million oil-equivalent barrels per day.

This company has many consistently efficient and reliable transportation systems and manufacturing plants. They also have distribution centers providing clean fuel, lubricants, and many other products to customers around the world. Their largest segment of business to business retail is through the industrial, wholesale, aviation, and marine industries. Currently they have almost one million business customers. In 2007 petroleum sales were 7.1 million barrels a day along with 5.6 million through refineries. ExxonMobil is the number one
worldwide supplier of finished lubricants, asphalt, and specialty products. They also operate under the names of Exxon, Mobil, and Esso.

Over 90 percent of chemical capacity is incorporated in businesses in which ExxonMobil is either first or second in worldwide market position. They are a leader in the petrochemical business with participation in 49 facilities around the world. The company is a leader in the production of olefins, the core substance in petrochemicals. Also, they are one of the world leaders in the manufacturing of polypropylene.

Within the past five years ExxonMobil has invested approximately $\$ 3.5$ billion in research and development. This has helped speed along the process of updating new technologies and continues to hold ExxonMobil as one of the worldwide leaders in technological developments (Yahoo! Exxon Mobil, 2009).

## Management

The core of ExxonMobil's management philosophy revolves around discipline said Lee R. Raymond. Being a public company, ExxonMobil sees itself as having four different relationships with that they are intent on maintaining strong. The first of which is their shareholders in which they claim they are committed to enhancing the long term value of their investors. They want their investors and shareholders to be very pleased and rewarded handsomely with great returns. This commitment motivates the management in their company.

The second part of their management philosophy is their relationship with the customers. They are set on trying to satisfy and maintain their commitment to meeting all of their customer's preferences and desires. They are focused on being responsive yet innovative. Their philosophy is offering high quality products and services at competitive prices.

The third installation in ExxonMobil's management mission statement is the value and quality of their work force. They strive to hire the best and the brightest from around the world and are committed to maximizing their potential. There are trying to create the safest work environment possible and enhancing diversification of their employees. The focus of their workforce is to revolve around communication, trust, and fair treatment.

The last focus of their corporation is their commitment to the community. Since, they work in so many different communities around the world it is imperative they are a model citizen in the workplaces. They are completely law-abiding and ethical in all of their works and show respect to the various cultures in the countries they are stationed in around the world. More than anything else they maintain their continuance to operate safely and environmentally responsibly (ExonMobil, 2009).

ExxonMobil has currently extended its agreement with SapuraCrest Petroleum Bhd's tender rig, T-9 for another three years. It will continue to support ExxonMobil's drilling program offshore of Malaysia. The rig began work in 2006 and will now extend through January 2012. The contract was given to SapuraCrest's subsidiary, Petcon and is worth $\$ 152$ million (EnergyCurrent, 2008).

### 3.2.2 Boeing (BA)

## Company Profile

Boeing has long been the world leader in aerospace technologies. Boeing is known for being diverse and its ability to control dual sectors. It is currently the second world leader in commercial airlines as well as the \#2 leader in defense contractor for the United States and other allied companies. In terms of their commercial airlines, they are known well for their 787, 767, 747, and the future of the 737 Dreamliner. With their Integrated Defense Systems they boast the

F/A-18 Hornet, the F-15 Eagle, the C=17 Globemaster III transport, and the AH-64D Apache helicopter. They also have significant control with satellites and space missiles. They also have created the International Space Station and the Space Shuttle with the number one defense contractor Lockheed Martin (Yahoo! Boeing, 2009).

## Management

Boeing is starting to have a cut throat approach in terms of their dealings with their workers and customers. They want to cut extensive labor costs and are not budging in terms of the worker's strike. It is currently outsourcing its labor costs away from the Seattle based area to other places throughout the world and in South Carolina. Jim McNerney does not want to fall into the same pit that the American auto companies have fallen into by having too much costs associated with their labor. So far, so good with McNerney's policy as they have created their largest profit in 2008 with $\$ 4.1$ billion. Although, their profits are great and they are crushing their rival, Airbus, their stocks continue to drop. However, this is due largely to the rising gas prices. With the price of oil and gas on the decline, it can be expected to see Boeing's stock rise in the future (Grenon, 2009).

Boeing may have a huge opportunity for increased sales on the rise when the United States Air Force will reward a huge contract to build 179 refueling planes. The competition will be delayed until the new presidential administration takes over in the future. The outlook is positive for Boeing and they firmly believe they can win this defense contract which would generate incredible amounts of revenue as the initial cost for the U.S. Air Force could be as much as $\$ 35$ billion and as much as $\$ 100$ billion over the course of the project. The company who wins the battle will have the ability to develop approximately 40,000 jobs in the southern states and create incredible revenue for their company (LaMotta, 2008).

### 3.2.3 Southwest Airlines (LUV)

## Company Profile

Southwest Airlines is a passenger airline that works from a scheduled transportation format within the United States. Since December of 2007, Southwest has had a partnership with Boeing by using its 737 model for 520 of its airliners. It is headquartered in Dallas, Texas and provides flights to 64 cities in 32 States. Unknown to many people is Southwest's stake in the credit industry as it sells credit to partners, ranging from credit card companies, hotels, and car rental agencies. The company was founded in 1967 (Yahoo! Southwest Airlines, 2009).

## Management

During September of 2008 there are plans in place to add a new technology to Southwest Airlines already customer friendly service. They plan on partnering with GuestLogix to implement a Mobile Store, where passengers on the plane can purchase various plane items through credit or debit card purchases, thus eliminating the hassle with cash and change. The goal is to help the customer's and hopefully boost revenue as Southwest's 100 million annual passengers are now more likely to purchase items on the plane because they do not need to deal with the hassle of cash (Fox Business, 2009).

Southwest Airlines has been blowing away the competition as they have been arguably the most successful airliner over the last few decades. They have had great yearly and quarterly profits and are continuously growing. Southwest Airlines acknowledges though that the current state of the economy and the rising cost of gas may cause rocky times for Southwest in the upcoming future. However, their management acknowledges they feel their company is as strong as ever. Southwest has continuously been a model for how to run a successful airline business. They have maintained a solid balance sheet and have ample money in reserve. Peter

Cohan, who runs a consulting firm, acknowledges that Southwest is the model airline company. They run on a business model of low fares and efficient flying, utilizing smaller airports and one model type of plane. Using one model plane lessens training and maintenance costs (Walsh, 2008).

### 3.2.4 Amgen (AMGN)

## Company Profile

Amgen is known as being one of the largest biotechnological companies and is doing everything in its power to become bigger and completely control the industry. They work on a wide variety of ailments including cancer, kidney disease, inflammatory disorders, and metabolic diseases. Two specific drugs, Epogen and Aranesp, represent one-third of their overall sales. Amgen's third leading drug, Enbrel, helps treat rheumatoid arthritis problems and again is a leader in the medicinal industry. They have great partnerships with such companies as HoffmanLa Roche and the Japanese company Kirin. Amgen's primary market is wholesale distributors in North American and Europe (Yahoo! Finance Amgen, 2009).

## Management

Over the past few months Amgen is increasingly putting are large portion of their hopes and dreams for the future of their company on a new medicine geared towards women with osteoporosis. After a clinical trial, the bone drug for women was shown to reduce the risk of spinal fractures in women with osteoporosis by 68 percent. The drug has also shown signs it can reduce the risk of hip fractures by 40 percent and all other fractures by 20 percent. The drugs official name as of now is Denosumab.

With health concerns towards one of its largest manufactured drugs, anemia, Amgen was in desperation of a new drug to boost its company. Denosumab may be the answer as Amgen already rose six percent since news of the drug's effectiveness was released to the public. Amgen is trying to take a stronghold position in the multi-billion dollar bone density treatment market with this new drug. There was a minor setback as 4.3 percent of the patients had serious infections during their time on the drug as opposed to 3.4 on the placebo, but this is not statistically significant to warrant any concern. Analysts deemed the industry for strictly osteoporosis is worth $\$ 1$ billion all on its own. Currently, Denosumab is the second drug of choice for insurers because of its high costs. However, with continued research and development into this product, there is no doubt Denosumab can be a major player in the fight against osteoporosis (Pollack, 2008).

In addition to the development of Denosumab, Amgen has received approval from the United States Food and Drug Administration to sell their new platelet booster product in high volumes. The drug is known as Nplate and treats adults with chronic Immune Thrombocytopenic Purpura or ITP for short. This is an autoimmune disorder shown by a low platelet count in the blood of the individual which can inversely lead to serious internal and external bleeding. Currently there are approximately 140,000 potential customers for this drug in the United States and Europe. Scientists and analysts expect this new drug to have a blockbuster effect on Amgen's sales and future. Bull market investors note that Amgen dominates their market as they offer four out of the top ten biologics in the world and their costcutting efforts are beginning to prove fruitful to the whole company (Lipton, 2008).

### 3.2.5 Office Depot (ODP)

## Company Profile

Office Depot Inc. is an international supplier of office products and services. The merchandise and products sold at Office Depot include general office supplies, computer supplies, business machines and related supplies. They also sell office furniture from such brand names as Office Depot, Niceday, Foray, Ativa, Break Escapes, Worklife, and Christopher Lowell. The services provided include graphic design, printing, reproduction, mailing, shipping, and other various services through their design, print, and ship centers. Office Depot has a wide range of methods for selling and distributing their merchandise and services including direct mail catalogs, contract sales force, internet sites, and retail stores. They also do their business through some company-owned operations, joint ventures, licensing and franchise agreements, and alliances. Office Depots is known as a reseller of other companies manufactured merchandise such as, ink, toner, paper, computers, and many other technology and office products. The company began in 1986 and its international corporate headquarters is in Delray Beach, Florida. As of 2008 there were approximately 1,600 stores worldwide (Yahoo! Office Depot, 2009).

## Management

With the recent downturn in the United States economy, Office Depot is shifting its focus elsewhere by trying to expand its overseas market in Europe. They are most noticeably moving to Sweden where they have acquired the formerly known company AGE Kontor \& Data AB. Sweden is one of the few larger markets in Europe in which Office Depot does not currently have a stake. The move will add 13 more retail locations to its already expanding international business (Emling, 2009).

In August of 2008 Office Depot made an alliance with Netbizz Office Supplies, based out of Singapore. The move will expand Office Depot's international holdings in Asia by supplying many potential corporate customers in Singapore. Netbizz also offers other services that Office Depot does not, such as air conditioning services and car leasing. Previous to Office Depot's alliance with Netbizz, Netbizz had acquired KC Prints \& Trade Zone, thus further expanding its business. This seems like a strong business move on Office Depot's part (South Florida Business Journal, 2008).

### 3.2.6 Whole Foods (WFMI)

## Company Profile

Whole Foods Market, Inc. is a national supermarket retailer that focuses its sales on natural and organic food items. The items offered are common with many standard supermarkets including seafood, grocery, meat and poultry, bakery, prepared foods, coffee and tea, nutritional supplements, and vitamins. They also offer other products such as books, floral, pet products, and household products. Unlike many supermarkets, particularly in the Northeast, they offer specialty items including beer and wine. As of September 2008, Whole Foods operated 275 stores in three countries, with 264 in the United States, six in Canada, and five in the United Kingdom. The company's corporate headquarters is located in Austin, Texas and the company was founded in 1978 (Yahoo! Whole Foods, 2009).

## Management

With the struggling economy many investors are shying away from Whole Foods Market, while prior to this year Whole Foods was a great force on Wall St. This has driven the stock price for their company down. However, this company is worth much more than the current price indicates which ultimately means Whole Foods Market can expect a rise in its stock prices
in the coming future. Recently, Whole Foods had acquired Wild Oats, one of its chief competitors and even Wal-Mart has battled Whole Foods for supermarket supremacy. Whole Foods Market is the Coca-Cola of organic foods, which essentially means they own the market. Since the economy is on the downward, many investors do not see the potential in this company. However, the majority of Whole Foods' customers are very loyal to the brand and view it as a lifestyle necessity. Also, what needs to be taken into consideration is the rising prices of standard supermarket foods which will make the Whole Foods product more attractive and worthwhile to potential customers (Gad, 2008).

Whole Foods Markets is pushing the envelope and competition for many local organic and health food stores around the country. A specific example is the expansion taking place in Honolulu, Hawaii. Whole Foods plans to build a new store in the state's capital and will surely knock out the competition of all the local organic food stores. Studies from the continental United States indicates that local supermarkets and food stores can expect anywhere from a five to ten percent drop in sales whenever a new Whole Foods Market is constructed in the community. Two local small organic supermarket owners in the city are preparing for a $15 \%$ drop in sells when the new supermarket comes to town. The small businesses hope to stay afloat by relying on the loyalty of their customers and the personal approach that they can offer, which Whole Foods cannot (Magin, 2008).

### 3.2.7 Best Buy (BBY)

## Company Profile

BestBuy Co., Inc. is a specialty retailer specifically for consumer electronics, home office products, entertainment software, appliances and all subsequent services throughout North America and China. The line of video products ranges from televisions, digital cameras and
camcorder, DVD and Blu-ray players. The audio merchandise includes MP3 players, navigation products, home and car audio, and satellite radio. The home-office department sells personal desktop computers, laptops, monitors, hard drives, networking accessories, and various types of software. The interactive entertainment is comprised of video games, computer software, DVD and Blu-ray movies, and audio CDs. BestBuy even provides kitchen appliances, plumbing fixtures, air conditioners, small electronics, and various house ware items. They also have a mobile telecommunications department for some of the largest international providers. Their services are known for being top of the line with extended warranty packages, computer and product repair services, as well as home theater, car audio, and appliance installation for little or no cost. It operates under various aliases and partnerships such as Five Star, Future Shop, Geek Squad, Magnolia Audio Video, Pacific Sales Kitchen and Bath Centers, and Speakeasy. The numbers speak for itself as there are 923 stores in the United States, 51 in Canada and one in China. The subsidiaries include 19 Pacific Sales stores, 13 Magnolia Audio Video stores, 9 BestBuy Mobile locations, 7 Geek Squad stores, 131 Future Shop stores, and 160 Five Star stores. The company was founded in 1966 as Sound of Music, Inc. in Richfield, Minnesota. In 1983 they formerly changed their name to BestBuy Co., Inc (Yahoo! Best Buy, 2009).

## Management

BestBuy management has cut a deal with Apple to allow for their new top of the line iPhone to be sold in all BestBuy Mobile stores nationwide, excluding those in which AT\&T does not have service reaching. The deal will most likely help out both companies as BestBuy Mobile is one of the nation's leading mobile telecommunications distributors and the iPhone is one of the most hyped electronic products to hit the market in recent times. BestBuy has been trying to maneuver the ability to retail the new iPhone for over a year as it is trying to expand its hold on
the smartphone industry. They already sell BlackBerries, Palms, and the Samsung Instinct, which are all some of iPhone's largest competitors. Apple was initially reluctant to jump on this deal due to this fact, as potential customers could contrast and compare the various smartphones, perhaps lessening the chance of an iPhone purchase had they gone to an Apple or AT\&T store where there is not as much competition. The growth relationship between BestBuy and Apple has been slow, yet progressive as they first began with the iPod in 2002 and began selling Mac computers in 2006.

Since 2006 when BestBuy had a joint venture with Britain’s CarPhone Warehouse there has been a 10 -fold increase, year after year, in high-end multimedia phone purchases. They purchased half a share of the company which has a total of 2,400 outlets in nine European countries (Elmer-Dewitt, 2008).

Recently, BestBuy has agreed to buy the former internet peer-to-peer giant, Napster, for $\$ 121$ million in an attempt to move music sales online to compensate for the ever decreasing CD sales. Currently, Napster has 700,000 subscribers, about half of the market for digital-music subscription services. The market for 2007 accounted for $\$ 240$ million in music sales. It has been looking for ways to expand its business in order to crush the already depleting Circuit City and Radio Shack. With the purchase of Napster the plan is to also include movies and television shows available for purchase sometime in the future, thus being more expansive than the already popular iTunes (Bloomberg, 2008).

### 3.2.8 Nike (NKE)

## Company Profile

Nike is known throughout the world as the number one shoemaker and athletic apparel manufacturer. It is known for its dominance, particularly with basketball, but also makes products for baseball, cheerleading, golf, volleyball, soccer, hiking, tennis, and football. They also own rights to Cole Haan dress and casual shoes as well as the Jordan Brand. Aside from selling in various athletic and shoe stores around the world they also operate their own outlet store known as NIKETOWN, Nike factory outlets, and Nike Women shops. Its dominance has expanded to 180 countries worldwide. Nike is the outfitter for thousands of athletic teams ranging from amateur, high school, college, and to the professional level (Yahoo! Nike, 2009).

## Management

Over the past year Nike has made a considerable effort to market its products for the 2008 Beijing Summer Olympics. Many people may mistake that Nike is a global icon and not just one that is present in the United States. The 2008 Summer Olympics is a prime example of their display of dominance in the sporting apparel industry. The host country, China, with over one billion residents is an incredible market for any company to have a market. Of the 28 Chinese sports federations that took part in this year's Olympics, Nike sponsored 22 of them. They also grabbed some of the individual heroes such as Liu Xiang, the track star. The Olympics have contributed significantly to the China's sports market boom and Nike is dominating the competition. This dominance has attracted countless Chinese consumers as there is no doubt sells will rise in the future. China is currently the second largest market only to the United States and it is also Nike's fastest-growing market as it is $33 \%$ larger than the closest competitor, Adidas (Tianyu, 2008).

Although Nike stock prices have fallen like the majority of the market, their sales have blown away expert's predictions as their revenue grew $17 \%$ to $\$ 5.4$ billion, far succeeding estimates of $\$ 5.19$ billion. Its first quarter revenue grew $8 \%$ in the United States while growing 19\% in Europe. Future orders for footwear and athletic apparel is 10\% higher than the previous year. However, despite Nike's great success, their market price has dropped due to the lagging economy (The Street, 2008).

### 3.2.9 Hershey

## Company Profile

The Hershey Company is involved with the manufacturing, selling and distributing various types of chocolate products, candy products, drinks and drink mixers. The chocolate products are Hershey's most recognizable product and these include chocolate bars, dark chocolate, and chocolate drink mixes. Many people do not know Hershey has its name on many snack products as well, such as granola bars, snack mixes, cookies, and nut products. The company sells its products through wholesale distributors, grocery stores, drug stores, vending companies, convenience stores, and concessionaries. Hershey's market reach includes North America, Brazil, and parts of Asia. The company has a joint venture with Godrej Beverages and Food, Ltd. which provides malted drinks to the Indian people. Hershey was founded in 1894 in Hershey, Pennsylvania and is still the main headquarters today (Yahoo! Hershey, 2009).

## Management

Hershey's $3{ }^{\text {rd }}$ quarter profits doubled during 2008 showing promise for the nation's second largest candy maker. In the three months running through September, their earning doubled to $\$ 124.5$, or 54 cents a share, on revenue of $\$ 1.49$ billion. Sales rose $6.4 \%$ during this
period as well. CEO, David J. West claims the majority of the sales came through their new products including Bliss and Starbucks Chocolate. He also said the Halloween sales are showing a lot of promise this year. Hershey also reaffirmed their 2008 sales projections of increases of three to four percent (Levy, 2008).

### 3.2.10 Wal-Mart

## Company Profile

Wal-Mart is an international retail store that sells general merchandise, including apparel, domestics, fabrics and notions, stationery and books, shoes, house wares, hardware, electronics, home furnishings, small appliances, automotive accessories, horticulture and accessories, sporting goods, toys, pet food and pet accessories, cellular phones and cellular service plan contracts, cameras and supplies, health and beauty aids, pharmaceuticals, jewelry, and opticals; and grocery merchandise, financial services and products, and photo processing services through supercenters, discount stores, and neighborhood markets in the United States, as well as through walmart.com. The Sam's Club segment of Wal-Mart offers many of the same products in bulk format to paying members of the store. Wal-Mart is currently one of the largest merchandise retail stores worldwide with 971 discount stores, 2,447 supercenters, 132 neighborhood markets, and 591 Sam's Clubs in the United States alone. There are also thousands more stores throughout the world. The company was founded in 1945 as a general store in Bentonville, Arkansas and is still the headquarters to this day (Yahoo! Wal-Mart, 2009).

## Management

With the second quarter profits up $17 \%$, the outlook for Wal-Mart looks good despite the United States economic woes. Wal-Mart earned $\$ 3.45$ billion over the second quarter compared to $\$ 2.95$ billion the year before. President and CEO Lee Scott sees the economic downturn as a
great investment opportunity for Wal-Mart as many consumers will turn to the massive retailer because of their lowering prices. Overall, Wal-Mart is far out performing many of its competitors in this tight economic time. However, with the cost of goods increasing the mega retailer may need to boost their prices. The growth is evident and Wal-Mart seems like a great investment (D'Innocenzio, 20088).

Despite the recent economic downturn, Wal-Mart seems to be poised as one of the best investment choices. They had strong third quarter numbers and remain optimistic about the fourth quarter with the upcoming holiday season. Recently Wal-Mart has shown very little change in their stock market prices while many other S\&P 500 companies continuously slip (Mnyandu, 2008).

### 3.2.11 Sony Corporation

## Company Profile

The Sony Corporation engages in the development, design, manufacture, and sale of electronic equipment, instruments, and devices for consumer and industrial markets in Japan, the United States, Europe, and internationally. The products range from audio and video equipment, liquid crystal display televisions, personal computers, monitors, semiconductors, components, mobile phones, CDs, DVDs, and Blu-ray Discs. It is also well known for the development of the PlayStation video game console franchise. The company also involves themselves in the production and sales of video game products, audio CDs and other merchandise, as well as video merchandise too. The Sony Corporation was founded in 1946 in Tokyo, Japan and was formerly known as Tokyo Tsushin Kogyo Kabushiki Kaisha (Yahoo! Sony, 2009).

## Management

Beginning November 28, 2008 the Sony Xperia X1 will be available to authorized retailers in the United States. Since its debut in April, smartphone fans have been looking forward to the Windows Mobile-powered handset. It has a stylish design with a large 3-inch touch screen and a slide-out full QWERTY keyboard. The Xperia X1 will utilize Windows Mobile 6.1 Professional, the X1 features a unique panel interface that gives users one-touch access to games, applications, and Web features. The X1 could make a good handset for mobile professionals as it's capable of receiving push corporate e-mails and calendars, and will rival the Palm Pilot and Blackberry. Customers can also use the integrated Wi-Fi for Web browsing or hop on a 3G network for mobile internet services. A mobile Office suite is loaded onto the phone so users can view and edit Word, Excel, PowerPoint, and other Office files. The smartphone has built-in GPS that can use the cellular data networks for location-based searches and navigation. Sony's smartphone shows promise as a multimedia player, as it can play various formats of audio and video. There's also a built-in radio player, a 3.2-megapixel camera with video capabilities, Bluetooth version 2.0, and picture-editing software (Perez, 2008).

Another one of Sony's new products is the HD Radio Tuner. It is receiving rave reviews as it is able to pick up local AM and FM stations, as well as HD stations. The tuners provide high quality sound with commercial free music or talk shows. According to experts, this tuner measures better than just about any radio tuner ever made. One of these experts, Brian Beezly was quoted as saying "The performance of the Sony XDR-F1HD on stereo FM is spectacular and unprecedented." The units is small, compact, and efficient complete with a remote. As far as the sound is concerned, it is not the overall best, but for the amount of money paid it crushes
the competition. The price is also one of the best selling points about the product as it sells for less than $\$ 100$ at most retail outlets and over the Internet (Krakow, 2008).

### 3.3 Trading

## ExxonMobil

Over the past five years, ExxonMobil has shown continuous improvement. At the time of purchase, Exxon Mobil was on the lower end for their company in comparison to their usual prices. I believed this was a great time to buy. The reasons are evident that ExxonMobil is the worldwide leader in energy. The diversification of their projects and the extensive amounts of money they invested into research showed me they are a corporation moving in the right direction.

With energy being such a large focus of the world's problems and ExxonMobil being the leader in this industry I saw no reason for me to not invest into their corporation.

Using the scalping strategy, I sat and waited for the first sign of profit. On November 26, the stock price rose to $\$ 80.89$, up from $\$ 77.66$ when it was initially purchased in September. The total profit after commission was $\$ 303$. The first graph indicates ExxonMobil’s growth over the last five years while the second one displays the growth from the time the stock was purchased to the time it was sold.


Figure 3.1 - Price Chart for ExxonMobil 2004 to 2008


Figure 3.2 - Price Chart for ExxonMobil September 2008 to November 2008

| Date | Symbol | BuylSell | Price | Shares | Net Cost/ <br> Proceeds | Profit/ <br> Loss |
| :---: | :--- | :--- | :--- | ---: | ---: | :--- |
| $9 / 30 / 2008$ | XOM | Buy | $\$ 77.66$ | 100.00 | $\$ 7,776.00$ |  |
| $11 / 26 / 2008$ | XOM | Sell | $\$ 80.89$ | 100.00 | $\$ 8,079.00$ | $\$ 303.00$ |

Table 3.1 - ExxonMobil Trading Table

## Boeing

By buying stock shares in Boeing, it may go against conventional wisdom to invest in the airline industry. However, I believe the future will be good for the airline industry, particularly Boeing. With the $9 / 11$ flight scare beginning to fade and gas prices dropping daily the need for new and more commercial airliners will increase. With Boeing being a leader in the industry their profits will see a rise in the future.

The other factor is the air defense industry that Boeing supports. World tension is never a good thing unless one is a defense contractor. In the case of Boeing this is one of the few exceptions. The United States is increasingly becoming a target for possible attacks by various countries and militant groups. Due to this and their alliance with Israel, the need to bolster the missile defense system is a must. The upcoming Presidential election will undoubtedly have a huge impact on the defense industry for the future. Depending upon whether a Democrat or Republican is elected into office will have a large scale impact on defense spending.

140 shares of Boeing were bought on September 30, 2008 at $\$ 57.36$ a share for a total of $\$ 8,039$. Throughout the trading cycle, Boeing did not reach a high enough profit to warrant the selling of it based upon the scalping method. As of January 2, 2009 Boeing was down to $\$ 45.25$ a share and the shares were valued at $\$ 6,335$.

The first figure shows Boeing's stock change over the previous five years to the purchase. The second figure illustrates Boeing's change over the trading period.


Figure 3.3 - Price Chart for Boeing 2004 to 2008


Figure 3.4 - Price Chart for Boeing October 2008 to December 2008

| Date | Symbol | Buy/Sell/Hold | Price | Shares | Net Cost/ <br> Proceeds | Profit/ <br> Loss |
| :--- | :--- | :--- | :--- | ---: | ---: | :--- |
| $9 / 30 / 2008$ | BA | Buy | $\$ 57.35$ | 140.00 | $\$ 8,039.00$ |  |
| $1 / 2 / 2009$ | BA | Hold | $\$ 45.25$ | 140.00 | $\$ 6,335.00$ | $\$ 1,704.00$ |

Table 3.2 - Boeing Trading Table

## Southwest Airlines

Much like Boeing, Southwest Airlines was selected based mainly upon the future possibility of the airline industry booming. The post $9 / 11$ airline scare is gradually on the decline to go along with sagging gas prices which will lead into more air travel. Southwest Airlines is one of the leaders in the airline industry and will most likely remain there in the coming future. They are also one of the cheapest, thus they will attract all the customers who are bothered by the economy.

The lagging economy may deter many possible flight customers away from purchasing airline tickets. This is most likely true for non-business oriented flights for people interested in vacations or personal time. There is no doubt, however, that the remainder of the business world needs to continue as they have in order to maintain their levels of revenue. Sales trips, business opportunities, working locations, seminars, meetings, are all various demands that national businesses face on a daily schedule. Flight is necessary for many of these activities to occur. Flight also trumps driving as time costs these companies money and flying is the quickest means to get from one destination to another.

Southwest Airlines will attract many of these business professionals because of the cheap and efficient business model they are identified by. Many of these companies cannot afford first class flights for their workers anymore and as a result are looking to the most economical means to their travels. Southwest is the answer and should continue to be in the future.

550 shares of Southwest Airlines were purchased on September 30, 2008 at $\$ 14.51$ a share for a total of $\$ 7,990$. Since the purchase, the stock has plummeted and reached $\$ 8.97$ a share on January 2, 2009. Had the stock been sold on this date they would have been worth
$\$ 4933.50$ and losses would have been $\$ 3056.5$. The first chart shows Southwest over the previous five years and the second displays it during the trading simulation period.


Figure 3.5 - Price Chart for Southwest Airlines 2004 to 2009


Figure 3.6 - Price Chart for Southwest Airlines October 2008 to December 2008

| Date | Symbol | Buy/Sell/Hold | Price | Shares | Net Cost/ <br> Proceeds | Profit/ <br> Loss |
| :--- | :--- | :--- | ---: | ---: | ---: | :--- |
| $9 / 30 / 2008$ | LUV | Buy | $\$ 14.51$ | 550.00 | $\$ 7,990.50$ |  |
| $1 / 2 / 2009$ | LUV | Hold | $\$ 8.97$ | 550.00 | $\$ 4,933.50$ | $\$ 3,057.00$ |

Table 3.3 - Southwest Airlines Trading Table

## Amgen

Amgen clearly appears to be a company poised for large future gains as the introduction of Nplate to the market and the apparent success of Benosumab add to the already dominate pharmaceutical company. Investors are recommending this company based upon these two drugs and they realized the multi-billion dollar industry that Amgen commands. With the initial test success of Benosumab, Amgen already had risen six percent in one day.

Amgen was at $\$ 59.27$ a share on September 30, 2008. 130 shares were purchased for a total price of $\$ 7,715$. The shares were sold again on November 3, 2008 at $\$ 61.56$ a share for a gross of $\$ 7,992.15$ and a profit of $\$ 277.05$. The first chart displays Amgen's growth over the previous five years and the second displays it within the trading period.


Figure 3.7 - Price Chart for Amgen 2004 to 2009


Figure 3.8 - Price Chart for Amgen September 30, 2008 to November 3, 2008

| Date | Symbol | Buy/Sell/Hold | Price | Shares | Net Cost/ <br> Proceeds | Profit/ <br> Loss |
| :--- | :--- | :--- | ---: | ---: | ---: | :--- |
| $9 / 30 / 2008$ | AMGN | Buy | $\$ 59.27$ | 130.00 | $\$ 7,715.10$ |  |
| $11 / 3 / 2008$ | AMGN | Sell | $\$ 61.56$ | 130.00 | $\$ 7,992.15$ | $\$ 277.05$ |

Table 3.4 - Amgen Trading Table

## Office Depot

With the poor economy, many offices and companies were reluctant to purchase new office supplies or furniture. Though they may be reluctant, a large portion of Office Depot's merchandise and services are a necessity to any company with an office environment. The small office products, such as paper, pens, markers, tape, etc. will always be in cycle as these continuously need to be replaced regardless of the state of the economy. Their more expensive product also will be purchased for the same reasons. Updating software, computers, and networking is an advantage to any company and Office Depot is a prime retailer for the respective equipment and technology necessities.

Office Depot has displayed their strength by continuously expanding their operation to other countries and markets despite the lagging economy. This shows the economy has not hit them as hard and that they have enough assets and business opportunities to open more stores around the world.

1,380 shares of Office Depot stock were purchased on September 30, 2008 at $\$ 5.82$ a share for a total of $\$ 8,041.60$. Since that time, Office Depot dropped to $\$ 2.98$ a share as of January 2, 2009. The stocks' purchased value dropped to \$4,112.40. The first figure displays Office Depot over the previous five years. The second is the company during the trading period.


Figure 3.9 - Price Chart for Office Depot, 2004-2009


Figure 3.10 - Price Chart for Office Depot September 29, 2008 to January 2, 2009

| Date | Symbol | Buy/Sell/Hold | Price | Shares | Net Cost/ <br> Proceeds | Profit/ <br> Loss |
| :--- | :--- | :--- | ---: | ---: | ---: | :--- |
| $9 / 30 / 2008$ | ODP | Buy | $\$ 5.82$ | 1380.00 | $\$ 8,041.60$ |  |
| $1 / 2 / 2008$ | ODP | Hold | $\$ 3.50$ | 1380.00 | $\$ 4,820.00$ | $3,221.60$ |

Table 3.5 - Office Depot Trading Table

## Whole Foods

As mentioned earlier, Whole Foods Market may not initially appear to be an attractive purchase for investors with the current state of the market. This is due to the luxury type of approach that Whole Foods Market offers instead of the necessity that many other supermarkets such as Stop \& Shop and Shaw's can offer. However, many of Whole Foods Market's customers are loyal to the brand and actually do view the food presented to them at this store as a necessity. Also, the organic section in many of the larger scale commercial supermarkets have overall higher prices as compared to the prices at Whole Foods Markets. With the purchase of Wild Oats, Whole Foods has essentially knocked out all competition in the natural and organic
supermarket industry. Without competition, Whole Foods should have a monopoly on their industry.

On September 30, 2008400 shares of Whole Foods Market stock was purchased for a total of $\$ 8,022.00$ at $\$ 20.03$ a share. Throughout the trading period the stock never rose high enough to sell and make a profit. On January 2, 2009 the shares closed at $\$ 9.89$ a share for a total of $\$ 3,956$ for 400 shares.


Figure 3.11 - Price Chart for Whole Foods 2004 to 2008


Figure 3.12 - Price Chart for Whole Foods September 30, 2008 to January 2, 2009

| Date | Symbol | Buy/Sell/Hold | Price | Shares | Net Cost/ <br> Proceeds | Profit/ <br> Loss |
| :--- | :--- | :--- | ---: | ---: | ---: | :--- |
| $9 / 30 / 2008$ | WFMI | Buy | $\$ 20.03$ | 400.00 | $\$ 8,022.00$ |  |
| $1 / 2 / 2008$ | WFMI | Hold | $\$ 9.89$ | 400.00 | $\$ 3,946.00$ | $4,076.00$ |

Table 3.6 - Whole Foods Markets Trading Table

## Best Buy

Best Buy is poised to make a giant leap and completely dominate the electronics market. With CircuitCity all but done, and RadioShack on the decline, the competition posed against Best Buy does not pose a threat. The only competition facing Best Buy is through large scale retail stores such as Wal-Mart, however these stores do not specialize in electronics. The deal with iPod via Apple and the other deal with Napster is a sign of what direction Best Buy wants to move towards and it's a direction that is ready for tremendous growth.

220 shares of Best Buy stock were purchased on September 30, 2008 at $\$ 37.50$ a share for $\$ 8,260$. Throughout the trading period, the stock failed to rise to a profitable level and closed
at $\$ 29.02$ for $\$ 6,384.40$. The first chart indicates Best Buy’s stock over the previous five years while the second one is Best Buy during the trading period.


Figure 3.13 - Price Chart for Best Buy 2004 to 2008


Figure 3.14 - Price Chart for Best Buy September 30, 2008 to January 2, 2009

| Date | Symbol | Buy/Sell/Hold | Price | Shares | Net Cost/ <br> Proceeds | Profit/ <br> Loss |
| :--- | :--- | :--- | :--- | ---: | ---: | :--- |
| $9 / 30 / 2008$ | BBY | Buy | $\$ 37.50$ | 220.00 | $\$ 8,260.00$ |  |
| $1 / 2 / 2008$ | BBY | Hold | $\$ 29.02$ | 220.00 | $\$ 6,374.40$ | $1,885.60$ |

Table 3.7 - Best Buy Trading Table

## Nike

Nike is very comparable to Best Buy from a market standpoint. They are far and away the largest competitor in their industry and have blown away and will continue to blow away the competition that faces them. The Olympics will without a doubt help them in the upcoming months with their sales as well as the holiday season. Expanding to their stake in the Chinese market is definitely a great decision and will pay off for them in the future since China is already the world's second largest market and is one of the fastest growing ones in the world.

The revenue numbers for Nike from recent period are a great indication of where the company is heading. Exceeding experts’ estimations is a tremendous achievement for a first quarter, especially with the dwindling economy. With increasing revenue the value of Nike is sure to rise.

120 shares of Nike were bought on September 30, 2008 at $\$ 66.90$ a share for a total of $\$ 8,038$. Throughout the trading period the value never rose to profitable levels and dropped to \$53.06 a share on January 2, 2009. Had the shares been sold then the total value would have been $\$ 6,367.20$. The first chart displays Nike over the previous five years and the second shows Nike during the trading period.


Figure 3.15 - Price Chart for Nike 2004 to 2008


Figure 3.16 - Nike September 30, 2008 - January 2, 2009

| Date | Symbol | Buy/Sell/Hold | Price | Shares | Net Cost/ <br> Proceeds | Profit/ <br> Loss |
| :--- | :--- | :--- | :--- | ---: | ---: | :--- |
| $9 / 30 / 2008$ | NKE | Buy | $\$ 66.90$ | 120.00 | $\$ 8,038.00$ |  |
| $1 / 2 / 2008$ | NKE | Hold | $\$ 53.06$ | 120.00 | $\$ 6,357.20$ | $1,680.80$ |

Table 3.8 - Nike Trading Table

## Hershey

Hershey seems like a perfect fit for the scalping strategy at the time of purchase. Candy companies always have a rise in sales during the Halloween season and Hershey should be no different and profits from the purchase of this stock will surely amount.

230 Hershey shares were bought on October 23, 2008 at $\$ 35.48$ a share for a total of $\$ 8,170.40$. The shares were sold eleven days later on November 3, 2008 at $\$ 37.77$ a share and came to $\$ 8,677.10$ for a profit of $\$ 506.70$. The first chart is Hershey's stock performance over the past five years and the second is the stock during the trading period.


Figure 3.17 - Hershey 2004 to 2009


Figure 3.18 - Hershey October 23, 2008 - November 3, 2008

| Date | Symbol | Buy/Sell/Hold | Price | Shares | Net Cost/ <br> Proceeds | Profit/ <br> Loss |
| :--- | :--- | :--- | :--- | ---: | ---: | :--- |
| $10 / 23 / 2008$ | HSY | Buy | $\$ 35.48$ | 230.00 | $\$ 8,170.40$ |  |
| $11 / 3 / 2008$ | HSY | Sell | $\$ 37.77$ | 230.00 | $\$ 8,677.10$ | $\$ 506.70$ |

Table 3.9 - Hershey Trading Table

## Wal-Mart

Wal-Mart seems like a very logical choice for an investment during this economic downtime. The holiday season is coming upon consumers, and though many of them may cut back on their spending, there is still the necessity to buy merchandise at this time. Due to WalMart's well known low prices and cheap merchandise it is only inevitable that sales should be expected to rise this upcoming season. Their track record has been very strong recently and most likely will continue to be in the future.

On November 24, 200890 shares of Wal-Mart stock were purchased at $\$ 52.77$ a share for a total of $\$ 4,759.30$. The shares rose throughout the holiday season until January 2, 2009
when they hit $\$ 57.18$ a share and they were sold for a total of $\$ 5,136.20$ and a profit of $\$ 376.90$. The first chart shows Wal-Mart for the previous five years leading up to the purchase and the second shows Wal-Mart stock during the trading period.


Figure 3.19 - Wal-Mart 2004 to 2008


Figure 3.20 - Wal-Mart November $24^{\text {th }} 2008$ to January $2^{\text {nd }} 2009$

| Date | Symbol | Buy/Sell/Hold | Price | Shares | Net Cost/ <br> Proceeds | Profit/ <br> Loss |
| :--- | :--- | :--- | ---: | ---: | ---: | :--- |
| $11 / 24 / 2008$ | WMT | Buy | $\$ 52.77$ | 90.00 | $\$ 4,759.30$ |  |
| $1 / 2 / 2009$ | WMT | Sell | $\$ 57.18$ | 90.00 | $\$ 5,136.20$ | $\$ 376.90$ |

Table 3.10 - Wal-Mart Trading Table

## Sony

With the introduction of their new line of smartphones for the United States and the holiday season on the horizon, Sony seemed like a logical purchase for a stock option during late November. The holiday season is a good time for many commercial businesses and Sony should be no different. Sony may not be the best bet for a long term investment, but using the scalping method Sony is a great company to invest in to make a quick buck.

250 shares of Sony were purchased at $\$ 20.94$ a share for a total of $\$ 5,245.00$. The shares rose to $\$ 21.90$ a share on January 2, 2009 and were sold for a total of $\$ 5,465.00$ and a profit of $\$ 220.00$ was made. The first chart is Sony's performance over the previous five years while the second is Sony's performance over the trading period


Figure 3.21 - Sony 2004 to 2008


Figure 3.22 - Sony November $24^{\text {th }} 2008$ to January $2^{\text {nd }} 2009$

| Date | Symbol | Buy/Sell/Hold | Price | Shares | Net Cost/ <br> Proceeds | Profit/ <br> Loss |
| :--- | :--- | :--- | :--- | ---: | ---: | :--- |
| $11 / 24 / 2008$ | SNE | Buy | $\$ 20.94$ | 250.00 | $\$ 5,245.00$ |  |
| $1 / 2 / 2009$ | SNE | Sell | $\$ 21.90$ | 250.00 | $\$ 5,465.00$ | $\$ 220.00$ |

Table 3.11 - Sony Trading Table

### 3.4 Analysis

## Trading Strategy

Scalping is a trading strategy that requires constant monitoring in as the person doing the trading needs to be ready to sell their stock on a moment's notice in order to receive a profit. This type of strategy is reserved for professionals and salaried day traders. The average person does not have the time or resources to effectively make trades while utilizing the scalping method. People who would like to use the scalping method need to readily be on their toes and be able to jump and sell a stock once profits are reached.

The positive associated with the scalping method is the low risk aspect to it. Selling a stock on the first sign of profit will ensure the trader a return on his or her investment. However, the trader still needs to make a wise decision in the stock that is purchased for if the stock continuously falls then no profit will ever be accumulated and the trader is left with a large loss. This was definitely the case in this simulation as the majority of the holding fell right from the beginning and never reached levels of profitability. Regardless of the trading method, the person making the purchases needs to make wise decisions or else they are bound to lose money trading on the market.

The downfall to the scalping method is the probability that the trader is bound to make more money if they sit on their investment for a longer period of time. Over the entire history of Dow Jones Industrial Average the general numbers have risen over time. Even with the deteriorating economy, history has proven the prices in the market will inevitably rise and profits can be accumulated. For example, twenty years ago in January of 1989 the Dow Jones was at 2322. Now in the Present 2009 the Dow Jones has grown to 9034 on January 2, 2009. The economy as a whole is definitely down from the times in 2007, but in comparison to twenty years it is definitely a large increase. Therefore, if one were to buy and hold their shares in a company over a long period of time instead of selling at the first sign of profit, then the trader stands to make a much larger profit.

The scalping method is not intended for a novice stock trader and would be a tough trading strategy to recommend to anyone who is not a stock broker. To truly utilize the scalping method, one would have to be a professional trader as they would need to watch the rise and fall of each share throughout the entire day. It is a great method for anyone to make a quick little cash, but cannot be a serious investment for long term traders. In order for the scalping method
to work, the stock has to show continuous growth over a recent time period as to avoid the possibility of a loss which is strictly against the guidelines for scalping.

Each of the trades that were made will be analyzed and the positives and negatives about the shares will be displayed.

| Date | Symbol | BuylSell | Price | Shares | Net Cost <br> Proceeds | Profit/ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $9 / 30 / 2008$ | XOM | Buy | $\$ 77.66$ | 100.00 | $\$ 7,776.00$ |  | $\$ 72,224.00$ |  |
| $9 / 30 / 2008$ | BA | Buy | $\$ 57.35$ | 140.00 | $\$ 8,039.00$ |  | $\$ 64,185.00$ |  |
| $9 / 30 / 2008$ | LUV | Buy | $\$ 14.51$ | 550.00 | $\$ 7,990.50$ |  | $\$ 56,194.50$ |  |
| $9 / 30 / 2008$ | AMGN | Buy | $\$ 59.27$ | 130.00 | $\$ 7,715.10$ |  | $\$ 48,479.40$ |  |
| $9 / 30 / 2008$ | ODP | Buy | $\$ 5.82$ | 1380.00 | $\$ 8,041.60$ |  | $\$ 40,437.80$ |  |
| $9 / 30 / 2008$ | WFMI | Buy | $\$ 20.03$ | 400.00 | $\$ 8,022.00$ |  | $\$ 32,415.80$ |  |
| $9 / 30 / 2008$ | BBY | Buy | $\$ 37.50$ | 220.00 | $\$ 8,260.00$ |  | $\$ 24,155.80$ |  |
| $9 / 30 / 2008$ | NKE | Buy | $\$ 66.90$ | 120.00 | $\$ 8,038.00$ |  | $\$ 16,117.80$ |  |
| $10 / 23 / 2008$ | HSY | Buy | $\$ 35.48$ | 230.00 | $\$ 8,170.40$ |  | $\$ 7,947.40$ |  |
| $11 / 3 / 2008$ | HSY | Sell | $\$ 37.77$ | 230.00 | $\$ 8,677.10$ | $\$ 506.70$ | $\$ 9,183.80$ | $\$ 506.70$ |
| $11 / 3 / 2008$ | AMGN | Sell | $\$ 61.56$ | 130.00 | $\$ 7,992.15$ | $\$ 277.05$ | $\$ 17,453.00$ | $\$ 783.75$ |
| $11 / 24 / 2008$ | WMT | Buy | $\$ 52.77$ | 90.00 | $\$ 4,759.30$ |  | $\$ 12,693.70$ |  |
| $11 / 24 / 2008$ | SNE | Buy | $\$ 20.94$ | 250.00 | $\$ 5,245.00$ |  |  |  |
| $11 / 26 / 2008$ | XOM | Sell | $\$ 80.89$ | 100.00 | $\$ 8,079.00$ | $\$ 303.00$ | $\$ 21,075.70$ | $\$ 1,086.75$ |
| $1 / 2 / 2009$ | WMT | Sell | $\$ 57.18$ | 90.00 | $\$ 5,136.20$ | $\$ 376.90$ | $\$ 26,588.80$ | $\$ 1,463.65$ |
| $1 / 2 / 2009$ | SNE | Sell | $\$ 21.90$ | 250.00 | $\$ 5,465.00$ | $\$ 220.00$ | $\$ 32,273.80$ | $\$ 1,683.65$ |

Table 3.12 - Trading Chart for Scalping Trading Strategy (\$10 commission included for each trade)

## ExxonMobil

Based upon the scalping trading strategy, the ExxonMobil purchase was a fairly wise choice. Although a profit of $\$ 300$ was made during this period it may have not been a wise choice due to the falling gas prices at the time which would inevitably lead to lesser profits. Had this been a long term investment then it would have been a great choice as gas and energy production and financing seems to be a huge wave in the future. The investment was successful however and added to the overall profit that was made during the trading period. Using the scalping method the profits were small and could have been much larger if the investments were sat upon.

## Boeing Airlines

Boeing Airlines was one of the worst purchases made during the trading period. Had the stocks been sold on January 2, 2009 with the rest of the shares then the losses would have accumulated to $\$ 1,704$. This is an incredibly high number in comparison to the single profits that were made on other various companies. The airline industry has not been high on investor's recommendations recently and this is clear evidence as to why they are not. The purchase was an awful decision regardless of what trading strategy was being used and the outlook is not good for both the short term and long term. The negatives about the airline industry were overlooked and the positives of why Boeing may possibly be successful in the future were too focused upon. Had the purchase been unbiased, then Boeing would have never been purchased. Due to the losses accumulated, purchasing stock shares in Boeing or any airline industry cannot be recommended.

## Southwest Airlines

Southwest Airlines stock performance over the trading period is very comparable to that of Boeing Airlines in that they both dropped significantly. Much like Boeing, Southwest was not largely recommended by investing gurus, nor was the majority of the airline industry. Southwest was originally viewed as a possible investment because it seemed like one of the Airline carriers was going to have a stronghold on the industry and Southwest seemed like the only viable candidate. With their low costs and customer friendly service, Southwest Airlines seemed like the only airliner that could come away from this economic downturn with a positive. Had the Southwest shares been sold on January 2, 2009 a total of $\$ 3,057$ would have been lost, dropping the value of the 550 shares to 8.97 a share for a total of $\$ 4,933.50$. Due to the virtual collapse of Southwest Airlines during this time, a recommendation to purchase shares in this company or any airline company is strongly discouraged.

## Amgen

For using the scalping method the Amgen purchase and selling was deemed a success. A profit of $\$ 207.50$ was made after purchasing the shares for $\$ 7,715.10$ on September 30, 2008 and selling them on November 3, 2008 for $\$ 7992.15$. The profits are marginal considering the initial investment, but the objective of the scalping strategy is to try and secure profits as soon as they occur. Thus, this will lead to smaller and less significant profits. Amgen seems like an ideal company to trade with under the scalping strategy as soon as word of one of their hot new products hits the market, the price per share tends to rise rapidly, leading to quick and easy profits. As far as making a long term purchase for Amgen shares, much more research would be needed before the purchase. One would have to ensure the company is heading in the right direction and investing their research and development into the right kind of medication and
pharmaceutical uses. Due to this, Amgen would be a great company to invest into if the investor was utilizing the scalping method. As mentioned before, once one of their products hits the market, the value of the company tends to shoot up quickly leading to quick and easy money. In order to make a recommendation for a long term investment much more research into the company would have to be done.

## Office Depot

Office Depot was a poor purchase for the trading period. The poor economy hurt Office Depot's sales dramatically during the period but cannot take the sole blame for their poor performance. Although many companies and industries overall took a large blow during this down economic period, there were still companies that managed to do better than Office Depot. For example, Staples who is Office Depot's largest chief competition saw their shares go to 18.79 on January 2, 2009 as opposed to Office Depot’s which dropped to 3.50 a share on the same date. The assumption that Office Depot shares could be bought low and sold high did not apply to this situation as the company took a large downfall. This company was a poor purchase and the numbers display this clearly.

## Whole Foods Market

Whole Foods Markets was a large disappointment for the trading period. The majority of the collapse of Whole Foods during this period can be blamed on the lagging economy. The economic losses faced during this period were large and as a result, many consumers cut back on the amount and types of purchases they were making. Many people other than the extreme loyal customers believe Whole Foods Markets to be a luxury not a necessity and thus did not want to spend large sums of money for high quality foods. This is completely understandable and although the economy was lagging, no one expected it to fall as much as it did throughout the
end of 2008. Whole Foods Markets ended up being a poor investment, but was not due to poor management or production, but rather the lagging economy which was detrimental to stores such as Whole Foods Markets.

## Best Buy

The Best Buy purchase was a disappointment as the shares fell during the trading period. Again much like Whole Foods Markets, the economic woes were the largest culprit to blame for the fall of each respective company. The company is in good standing and currently dominates its industry. However, people during this time were not inclined to buy luxury electronics such as Blu-ray players, computers, and home entertainment systems. Had this been a normal economic period it would only be inevitable that Best Buy would have continued to grow particularly during the fourth quarter when consumer purchases are high due to the holiday seasons. As far as a long term investment, Best Buy will inevitably climb out of this hole the economy has put it in and continue its success in the electronic industry. The management seems to be on track by securing major deals with some of the world's largest and greatest suppliers and is the continued leader in their industry.

## Nike

Nike is very comparable to Best Buy in this regard since they are the unquestioned leaders in their industry yet had an economic downturn due to the lagging economy as many of their products are considered a luxury and not a necessity. Nike received heavy losses on the market, but they were on par with the rest of the Dow Jones. Had the economy been normal or growing during this period than it would have been expected that Nike would continue to expand and grow. They dominated the Olympics in terms of sponsorships and are now dominating the same aspect of the NBA as LeBron James and Kobe Bryant are battling for the MVP while
wearing Nike clothing. These are indications the company is strong and is just another victim of the depleting economy. Nike seemed like a logical scalping strategy purchase with the holiday season fast approaching and Nike being a large consumer company. This company is also a great long term purchase as they seem to be well ahead of the field in terms of their ability to control the athletic apparel industry.

## Hershey

The Hershey investment was a success based on using the scalping strategy. The shares were purchased just previous to Halloween in hopes that sales would be through the roof for the upcoming week and the price per share would follow. The shares did not jump through the roof as had hoped, but they did increase enough for there to be a profitable margin. Through a period of eleven days the price per share for Hershey rose from $\$ 35.48$ to $\$ 37.77$ creating a profit of $\$ 506.70$, thus being the most profitable investment during the trading period. As far as being considered for a long term investment Hershey would not be a great recommendation as they have increased prices in recent months, and have been struggling as of overall. The scalping method works perfectly with a company such as Hershey during this time as their product will be a hot purchase and the shares are sure to rise during a time period when candy products are in high demand.

## Wal-Mart

In terms of percentage of profit, Wal-Mart was the most successful company. The mega consumer retailer made a $7.9 \%$ profit from November 24, 2008 to January 2, 2009 which are great numbers for such a small amount of time and with the state of the economy. The assumptions and predictions that many consumers would turn to Wal-Mart's cheap prices during the holiday season seem to be true as they shares jumped considerably in just over a month's
time. The scalping strategy was also successful with Wal-Mart and the long term prospects facing the company seem to be strong as well.

## Sony

Sony was a profitable company during the trading period as the price per share rose from \$20.94 to \$21.90 a share from the time of November 24, 2008 to January 2, 2009. The scalping method was very applicable to this company much like it was to Hershey during the Halloween period. It was inevitable for Sony's sales to see a rise during the holiday period as consumers tend to purchase higher volumes of electronics in particular Sony's Playstation 3 gaming platform as well as many of their televisions and computers. The introduction of their new smartphone probably did not have as great of an impact due to the extremely high price. For the long term Sony may or may not be a wise investment. They have shown some promise with some of their products, but do not dominate the industry the way Wal-Mart, Best Buy, and Nike do.

## Personal Analysis

Initially upon starting the stock market simulation a variety of various companies were selected. The idea behind this was to observe how these different companies in different industries grew or shrunk during the coming months. Had this been actually money, I highly doubt $\$ 8,000$ would have been invested into such companies as Southwest Airlines and Office Depot. The reason for this was a curiosity to watch how that much money changed.

Throughout the trading period I learned more about myself in regards to my trading approach. Despite what many investor insiders were saying about various stock prospects I trusted my own intuition and knowledge about a company then the opinion of others when
purchasing a stock. I choose companies I was familiar with because I understood what their objectives were and I have had first hand experiences with their respective stores or businesses. Hence this is why many commercial consumer companies were selected for I had an understanding and firsthand experience with them. I understand why it is that Wal-Mart, Best Buy and Nike and why I think they will continue to be successful. I learned my lesson from these mistakes as I saw my assets dwindle throughout the trading period. Southwest Airlines seemed like a logical pick to me because of the cheap airfare and fees in a time when the economy is falling. I could not have been more wrong in this thought. I applied this same thought process with both Best Buy and Nike and again had losses, although I believe the overall economy is to blame more rather than my own personal lack of judgment. In order to evaluate my stocks’ performance over the trading period there needs to be a comparison of each one of the stocks to the overall Dow Jones Industrial Average. For the shares that were not sold during the trading period, the values as of January 2, 2009 will be used. The following is the comparison table.

| Ticker <br> Symbol | Percent +/- |
| :--- | ---: |
| WMT | 7.9 |
| HSY | 6.2 |
| SNE | 4.2 |
| XOM | 3.9 |
| AMGN | 3.6 |
| AVERAGE | $\mathbf{- 1 5 . 3}$ |
| .DJI | $\mathbf{- 1 6 . 7}$ |
| NKE | -20.8 |
| BA | -21.2 |
| BBY | -22.7 |
| LUV | -38.3 |
| ODP | -39.9 |
| WFMI | -50.7 |

Table 3.13 - Comparison of Scalping Strategy to Dow Jones

As can be clearly noted, five of the stocks outperformed the Dow Jones Industrial Average and six did not. However, on average, my stocks did outperform the Dow Jones Industrial Average by almost 1.5 percent.

With regards to the scalping strategy, I have come to realize that it essentially will work as well as the overall market is doing. On the days in which I sold my shares, the overall market was having a stronger than normal day. The market also hindered my trading strategy as it continued to fall and not allow for any profits. By not having any profits I was disallowed to make any trades barring the scalping principal. Over the course of the trading period I noticed myself understanding the method of scalping and how it could be used more effectively. Scalping is used best around a time when a certain company will expect a quick rise on the stock market. I applied this thought to Hershey around the Halloween holiday as well as with WalMart and Sony during the Christmas period. All three of these later investments proved to be successful as profits were made on all three of them. I have come to realize the economy strictly needs to dictate the purchases made while utilizing the scalping method.

## $4 \quad$ Buy and Hold Strategy (Pichette)

### 4.1 Trading Strategy

The buy and hold strategy is based on a strategy that in the long run relies the markets giving a good rate of return. Since this is for the long run this means that you go through time of volatility and decline. This is a strategy that lets you know that market timing doesn't work well with short term trading. This is a great way to ride out the markets short-term fluctuations. So if you decide to use market timing it is better to buy and hold. In the long run stocks tend to do well.

One of the strong arguments for this strategy is the efficient market hypothesis. If each security that you invest in is valued pretty well at all times then there is really no reason to trade them. Some people take this strategy to the real extreme. They believe that unless you need the money then you should never sell a security. Other investors have only based their buy and hold strategy on cost-based grounds without even considering the efficient market hypothesis. The costs of the brokerage fee and the bid/offer spread are incurred in all of their transactions. Buy and hold has the fewest transactions so that cuts down on the fees. Warren Buffet is a great example of a buy and hold believer that doesn't take into consideration the efficient market hypothesis.

In reality the perfect investment strategy wouldn't be a cheap, risk free, or easy. The goal would be to make you a millionaire in about a week with no taxes. So far that combination hasn't been discovered yet. This strategy, in the real world, is the best that is known so far. In the long run the ultimate buy and hold strategy will produce higher returns in investments that most people have. This strategy does so at a lower risk. With minimal transaction costs us as
investors don't have to be glued to investment letters or find someone that knows the economy inside and out.

### 4.2 Companies Selected

### 4.2.1 Allied Waste (AW)

## Company Profile

Allied Waste is a solid waste collection business that is headquartered in Phoenix Arizona. Allied waste also owns and manages recycling facilities and landfills. It has served over 10 million residential, commercial, and industrial customers. They are currently serving in 128 major markets across 37 states as well as Puerto Rico. After purchasing Browing-Ferris Industries in 1999 Allied Waste became the second largest non-hazardous solid waste management company. Allied Waste was purchases in 1008 by a smaller competitor, Republic Services for $\$ 6.1$ billion dollar

## Management

Allied Waste Industries' operation consists of 4 different services.

## Collection Services

Allied Waste's collection services has a network of almost 300 collection companies that provides collection services to about 8 million customers around the U.S. They also serve residential customers under individual household subscriptions and municipal contracts. Industrial and commercial customers are also served nationwide providing them with nonhazardous solid waste disposal services. They are committed to providing excellent service to all of their customers. This is accomplished by investing in equipment, technology and training
programs that maximize their operational excellence. They also ensure safety to all of their customers, employers, and environment.

## Transfer Services

Allied Waste's transfer service has 161 transfer stations that are all fundamental to their current vertically integrated operations. Each of which improve their efficiency in collecting and transporting solid waste to recycling facilities and sanitary landfills.

## Disposal Services

Allied Waste's disposal services currently have 161 active landfills around the country. The average remaining life time of the landfills is about 30 years. Allied Waste's landfill experts utilize state-of-the art methods to maintain their landfills while protecting the environment. Allied Waste provides custom consulting services for handling and disposing special nonhazardous wastes.

## Recycling Services

There are 53 recycling facilities that offer waste handling, collection services, and educational programs. Allied Waste recycles more than 1.7 million tons of recyclable commodities a year.

### 4.2.2 Citigroup (C)

## Company Profile

Citigroup is a major American financial service. Citigroup was formed by the merger of Citicorp and Travelers Group in October of 1998. Citigroup currently employs around 358,000 employees around the world. It holds over 200 million customer accounts in more than 100 companies. As of 2008 Citigroup is in world's largest bank by revenues. Citigroup's stock has
been a part of the Dow Jones Industrial Average since 1997. In September of 2008 Citigroup announced that they would take the banking operations of Wachovia Securities.

## Management

Citigroup is compromised of four major business groups. They are global wealth management, global cards, institutional clients group, and consumer banking. There are three different divisions in the global consumer group. Citi Cards is the largest issuer of credit cards around the world. They are also responsible for $40 \%$ of the GCG profits. They also have a 3,800 point ATM network throughout 45 countries. CitiFinancial is the consumer financial division. This division account for around $20 \%$ of the GCG profits. Homeowner loans and personal loans are offered in 20 different countries around the world. In the U.S. and Canada there are over 2,100 branches. Citibank is the third largest retail bank in the United States and has branches throughout the world.

Global Wealth Management is divided into two. These two subdivisions are Citi Private Bank, Citi investment Research, and Citi Smith Barney. The Citi Private Bank provides banking services to private institutions, law firms, and high net worth individuals. They also offer alternative choices and traditional investment products to all their customers and are assigned a private banker to deal with their own portfolio. Citi Smith Barney is the global wealth management unit around the world with over 800 offices. They represent $\$ 1.562$ trillion in client assets. Citi Investment Research is their equities research unit and is compromised of 390 research analyst throughout 22 countries. They represent $90 \%$ of the market capitalization and their research covers 3,100 companies.

In October of 2007 Citi announced they would form two new institutional client groups. Citi Markets and Banking is divided into two different primary businesses which are Global Capital Markets and Banking and Global Transaction services. CMB provides commercialbanking and services and investment-banking services. GTS offers trade finance, cashmanagement, and securities services to financial institutions and corporations worldwide. CMB is also responsible for $32 \%$ of Citigroup's annual revenues. The Citi Alternative Investments is an investment platform that takes care of assets across five different classes. These classes are hedge funds, structured products, private equity, real estate, and managed futures. CAI holds about $\$ 59.2$ billion under capital management. They also contribute about $7 \%$ of Citigroups income.

### 4.2.3 Diebold (DBD)

## Company Profile

Diebold is a security systems corporation that is a primary in the sale, manufacture, installation, and service of self-service transactions systems. Common systems that we use today are ATM's and voting machines. Diebold was founded in 1859 and began manufacturing safes and vaults for banks. In early 2008 United Technologies made a bid of $\$ 2.63$ billion dollars to buy Diebold. The bid was later rejected as to low.

## Management

Their primary customers are banks and financial institutions, government agencies, and many different retail outlets. They have one of the largest service staff that has more than 4,500 employees in 600 different locations around the world. The sales and service organization is one of the largest in its industry. They are more comprehensively trained in the sales and service force. The sales and service organization for North America sells Diebold products and services
more than one vendor products to the United States and Canadian financial and commercial market segments. This organization is comprised of Diebold sales and service representatives and manufacturing representatives, that all sell exclusively Diebold products. The international sales and service organization distributes Diebold products and services through wholly-owned subsidiaries as well as majority-owned joint ventures in every major country through Europe, the Middle East, Africa, Latin America, and in the Asia-Pacific region.

Diebold tells their customers that they won't rest until everyone has access to everything that is important. Diebold’s self-service and security technologies let people to conduct transactions effortlessly wherever you go. Diebold has ATM’s, check-cashing machines, access control systems, and a bunch of other self-service systems. They also make it easier to run a business. They allow businesses to outsource a lot of non-core but highly essential operations. They do offer a complete range of premier services and support like everything from traditional hardware maintenance to total network optimization.

### 4.2.4 Hormel Food (HRL)

## Company Profile

Hormel Foods is a large food company that is based in Minnesota. The company was founded by George Hormel in 1891. They are prestigiously known for their mass production of SPAM. There are many brands that Hormel sells under which include Carapelli, Dinty Moore, Farmer John, Jennie-O, and Stagg. Recently there have been allegations of animal rights abuse raised by anonymous sources. In 2008 PETA sent members to work undercover in a pig factory farm in Iowa which supplies Hormel.

## Management

Hormel has a specific goal in mind when it comes to their consumers.
"Building upon our heritage of innovation and quality, together we will elevate the everyday experience by making Hormel Foods the favorite part of any eating occasion" (Hormel Foods, 2009).

Their way represents a vision for their future as they continue to grow their heritage and to bring in more food to the table that satisfies their customers, employees, investors, and communities in which they operate. As a leading branded food company they market a well balanced portfolio of highly differentiated quality products. They connect with their employees by creating a working environment where careers are fostered and where people make a difference with their integrity. By doing things their way the principles that they have had help them grow into the company they are now can guide their daily actions to support four key areas; their people, their processes, their product, and their performance. These principles are heritage, integrity, innovation, and philanthropy.

## Heritage

Hormel foods has enjoyed a loud and long tradition of putting more on the table for their employees, consumers, and investors. This has been for more than 116 years. The stewards of the future identify and strive to put in practices that start protecting the natural resources and the environment.

## Integrity

Hormel always takes the high road and follows through on commitments. They also act in an ethical, honest, and responsible manner.

## Innovation

Their motto is "we originate, not imitate." With this they will be discipline to focus their practical curiosity on delivering real benefits for their consumers, customers, and their company.

### 4.2.5 Milipore (MIL)

## Company Profile

Milipore can be found listed among the S\&P 500 Biosciences company. They are the leader in the Life Sciences industry and currently employ more than 6,000 employees in 47 countries worldwide. Milipore is an international business that is organized into the Biosciences division. They are known widely for their micrometer pore-size filters and tests. In 2006 Milipore's revenues grew 27\% to 1.26 billion dollars. More than 90percent of Milipore's revenues come from consumable products and services.

## Management

Millipore has 4 different life sciences areas that they cover with their products to try to make the world a better place.

## Life Sciences

They understand the complexity of Life Science research and can support us in our most difficult challenges in cell biology, stem cell biology, protein research, and cell signaling. They provide innovative products for the isolation and purification of biomolecules and the analysis of
their form and function. The offerings that they suggest are adhesion, antibodies, biomarkers, cell culture, cell Structure, clinical diagnostics \& infectious disease, epigenetics, general \& sterile filtration, genomics, immunoassays \& multiplexing, metabolic disease \& metabolism, and neuroscience.

## Drug Discovery and Development

Millipore's profiling services, multiplex and traditional immunoassays, and clinical lab contract services help you prioritize drug candidates as well as screen any biomarkers at the same time. They also conduct research and clinical studies. Their offerings include drug discovery, target profiling and multiplexing.

## Lab Filtration

They have a long history of enabling efficient sample preparation within the life sciences. Because of the unsurpassed quality and consistency of results their products provide a lot of researchers specify and standardize their sample preparation methods. Their solutions tackle the following application areas: environmental monitoring and analysis, filtration of aqueous and organic solutions, fuel, hydraulic fluids and machined parts, general and sterile filtration.

## Lab Water

Millipore's experts focus on lab water concerns so that the common man can focus on his/hers research. They recommend the Millipore system that that best meets or exceeds the demand of your lab and application. Their laboratory water solutions balance water quality with volume and distribution requirements and include water purification products and services for ultrapure water and pure water over clinical lab activities.

### 4.2.6 General Electric (GE)

## Company Profile

GE is the world's sixth largest company as of 2008. It is has the fourth most recognized brand in the world with it being worth almost $\$ 49$ billion. In 1890 Edison organized his various businesses into the Edison General Electric Company. Through most of the 1960's GE was one of the eight major computer companies. In 2007 their revenue was $\$ 172,738$ billion dollars. Subsidiaries of GE include GE energy infrastructure, GE Technology Infrastructure, GE Capital, and NBC Universal. In 1986 GE required RCA which was primarily for the NBC television network.

## Management

General electric's products and services are very wide spread. Their appliances division is one of the largest manufacturers of appliances in the world. Their aviation division is the world's leading provider in aviation services as well as the leading producer of jet engines. The consumer electronics division of GE has a goal of making their consumers lives easier in every room with the best technology they have. Electrical distribution is where GE provides a large assortment of integrated systems and equipment to ensure safe and reliable power delivery. They manage power in a variety of industrial commercial and residential applications. GE provides and services energy to more than 120 countries in the world and with their different kinds of technology they can deliver significant environmental benefits and deliver solid productivity returns. Their finance division is split up into two sides business and finance. Their business commercial finance serves customers in up to 35 countries by providing operating leases, commercial insurance, loans, financing programs, and equipment leasing to help global business grow. Their consumer side is GE Money and is the leading provider in offering credit,
mortgages, credit services, and more. Healthcare at GE is shaping a new age of patient care with their medical technologies and services. They help clinicians around the world see new ways to help their patients live fuller lives with their medical imaging, information technologies, diagnostics, and drug discovery. GE has been providing light for the world for 128 years. They now provide a wide range of innovative products for all markets. Their media \& entertainment division is led by NBC Universal which is in development, production and marketing of entertainment, news and information worldwide. The oil \& gas division provides global technology-based products and complete services to the oil \& gas industry. GE leads the rail industry in supplying railroads to the world while pioneering locomotive and railroad management that are economically and ecology sound. GE security has operations in more than 30 countries. They help protect assets, people, and communities while focused on safety and lifestyle enhancements. GE has been the leading global provider of wastewater treatment, water treatment, and efficient process, systems solutions for over 100 years.
"The reach of GE's businesses is reflected in our expansive line of products and services that span many industries and customers worldwide. GE businesses all share one important trait: each harnesses the power of imagination to make life better for our customers and consumers all around the world" (General Electric, 2009).

### 4.2.7 Pfizer (PFE)

## Company Profile

Pfizer was founded in 1840 and is a major pharmaceutical Company that is ranks number one in the world in sales. Pfizer found immediate success with the production of citric acid in the 1880's. During World War II they were known for their production of penicillin and were known as "the miracle drug". They are based in New York which being headquartered in

Connecticut. Pfizer's number one selling drug is Lipitor along with other well known drugs like Lyrica, Diflucan, Zithromax, Viagra, and Celebrex. In April of 2004 Pfizer’s shares were made a component of the Dow Jones Industrial Average. They were also one of 53 entities that contributed the maximum of $\$ 250,000$ to the second inauguration of George W. Bush. Pfizer also boasts the industry's largest pharmaceutical R\&D organization, Pfizer Global research and Development.

## Management

Pfizer pharmaceuticals believes that by only keeping their core values at the center of what they do they can go ahead and improve the health for people around the world. They can create continued value for people who are affected by the business of Pfizer. In everything from research and development to sales and marketing Pfizer is committed to keeping the highest ethical standards. They are focused on running a workplace of diversity, maintaining a customer centered approach to their business as well as giving back to the communities where they are from.

Pfizer pharmaceuticals help out with over 150 million people worldwide. They are dedicated to helping people live fuller lives with medicines in 11 therapeutic areas. They have also built partnerships to help make sure access to their medicines as well as to educate and empower. The need for new medicines and to keep people healthy is growing every day. Pfizer scientists and researchers continue to discover and develop new ways to prevent and treat debilitating illnesses like Alzheimer's and cancer.
"In 1992, Pfizer became the first U.S. company to establish a corporate governance department" (Pfizer Pharmaceuticals, 2009).

Pfizer became the first U.S. company to make a corporate governance department in 1992. This is why Pfizer's governance committee charter has directors "consider the perspectives of stakeholders in the company's decisions regarding current and emerging political , social, and public policy issues" (Pfizer Pharmaceuticals, 2009).

### 4.2.8 Raytheon (RTN)

## Company Profile

Raytheon is a major American Defense Contractor that concentrates in the manufacturing in defense systems and defense and commercial electronics. They were established in 1922 and are headquartered in Waltham, Massachusetts. They were previously involved in corporate and special-mission Aircraft until 2007. Raytheon currently has 73,000 employees worldwide. Annual revenues approximately exceed $\$ 20$ billion dollars. More that $90 \%$ of Raytheon's revenues were from defense contracts with being the fifth largest defense contractor in the world as of 2007.

## Management

Raytheon is split up in to 6 different businesses. These businesses are Integrated Defense Systems, Intelligence and Information Systems, Missile Systems, Network Centric Systems, Raytheon Technical Services Company LLC, and their Space and Airborne Systems.

The Integrated Defense Systems division of Raytheon is the leader in Joint Battlespace integration. They provide this to a strong domestic and international customer base. This includes the U.S. Armed Forces, the Department of Homeland Security, and the U.S. Missile Defense Agency. In 2008 the IDS generated $\$ 5.2$ billion. Raytheon’s Intelligence and Information Systems is the leading provider in intelligence and information that provides the
right knowledge at the right time. They have around 9,000 employees and it 2008 they had $\$ 2.7$ billion in revenues. Raytheon's Missile Systems are by far the world leader in design, development, and production of missile systems in the U.S. and allied forces. This includes naval weapon systems; land combat missiles, air-to-air, strike, exoatmospheric kill vehicles, guided projectiles, and directed energy weapons. The Network Centric Systems serves all branches of the U.S. military. They develop and produce mission solutions for networking, air traffic management, command and control, and battlespace awareness. Today they are still focused on the needs of today's soldiers by providing them with mission systems integration for the Homeland Security. The Technical Service Company provides scientific, professional, and technical services for defense both to commercial and federal customers around the world. They specialize in integrated training solutions, mission support, customized engineering services, base and range operations, and counter-proliferation and counter-terrorism. The most advanced business Raytheon has is their Space and Airborne Systems. They are the world leader in developing and designing integrated systems for missions. They have supported the military and civil customers that are looking forward in technology. Today they are planning on increasing their role in the mission systems integration.

### 4.3 Trading


#### Abstract

Allied Waste I bought 931 shares of this stock on September $29^{\text {th }}$ at a price of $\$ 10.72$. By October $3^{\text {rd }}$ it had risen to $\$ 11.03$. At that point in time the stock would consistently drop until it hit a price of $\$ 8.54$ by October $10^{\text {th }}$. From this point on it would flutter between $\$ 10.64$ and $\$ 9.00$ until it hit its lowest price of $\$ 7.87$ on October $27^{\text {th }}$. It would eventually it a price of $\$ 10.85$ on November $4^{\text {th }}$ and stay between that and $\$ 10.00$ for the next 15 days. On November $20^{\text {th }}$ it


would drop to $\$ 9.00$ and is currently $\$ 9.25$. On the $5^{\text {th }}$ of December Republic Services and Allied Waste would complete their merger and created one of the nation's leading wastes and environmental service provides. The combined company will be called Republic Services Inc. and will trade on the New York Stock Exchange under the ticker symbol RSG. The Allied Waste stock will be delisted and will not trade on the NYSE any longer.


Figure 4.1 - Price Chart for Allied Waste September $30^{\text {th }}$ to October $31^{\text {st }}$

## Citigroup

I bought 504 shares of this stock at a price of $\$ 19.80$ on the $29^{\text {th }}$ of September. Once I bought Citigroup I saw a $\$ 3$ increase for the first 2 days. Since October $6^{\text {th }}$ Citigroup has been on a steady decline since they sued Wachovia and Wells Fargo for $\$ 60$ Billion dollars. The only spike that I saw was on October $14^{\text {th }}$ when it reached $\$ 18.62$. It is now at $\$ 3.77$ and doesn't look to promising in the future. Ever since the $\$ 14.68$ on November $4^{\text {th }}$ the price has consistently fallen closer and closer to $\$ 0$. There was a steady decline from the $4^{\text {th }}$ to the $18^{\text {th }}$ when it took a big dive from $\$ 8.36$ down to $\$ 3.77$ on the $21^{\text {st }}$. This was the lowest point for this stock, for the time being. It rose back up $\$ 8.28$ on the $28^{\text {th }}$ when news broke of Citigroup stocked up on a

Mexican billionaire's investment. From here on the price would be steady fluctuating from $\$ 6.45$ on the $1^{\text {st }}$ of December to $\$ 8.23$ on the $16^{\text {th }}$ of the same month. When Citigroup announced that they were going to merge their corporate and investment business things took a turn for the worst. The price would go on a steady decline and reach a price of $\$ 7.16$ on January $5^{\text {th }}$. There were rumors that Citigroup would merge brokerage with Morgan Stanley and then the stock dropped drastically to a price of $\$ 2.80$ on the eve of January $20^{\text {th }}$. The highest that the stock recovered to was $\$ 4.21$ on the $28^{\text {th }}$ of January. Since then it has been steady and currently is at $\$ 3.95$. I have lost a total of $\$ 7,988.40$ since I have invested in this stock.


Figure 4.2 - Price Chart for Citigroup 2007 to 2008

## Diebold

On September $29^{\text {th }}$ I bought 320 shares at a price of $\$ 31.09$ each. I first saw a $\$ 2$ dollar increase so have it reach its largest peak at $\$ 33.35$. There was then a steep decrease when it hit $\$ 25.20$ on October $15^{\text {th }}$. It then jumped up to $\$ 28.31$ just too soon fall to its lowest price of $\$ 23.37$ on October $27^{\text {th }}$. There would then be another peak when it hit $\$ 29.72$ on the $31^{\text {st }}$ of October. From then on there has only been a little decrease in price and is currently at $\$ 25.87$.

The price would rise to $\$ 28.00$ on the $28^{\text {th }}$ and would continue to remain between the prices of $\$ 28.00$ and $\$ 26.49$ for a month. Diebold would see a small peak when it hit $\$ 29.09$ on the $5^{\text {th }}$ of January. When Diebold announced they were going to conduct investor calls on January $7^{\text {th }}$ the price then started to decline to a price of $\$ 24.50$ on the $23^{\text {rd }}$ of January. It would seem that the price would be steady. Once Diebold released the results of their fourth quarter and yearend financial results on February $4^{\text {th }}$ the stock would drop to the lowest price it has seen in a while of $\$ 22.86$. Diebold hopes to have a rebuilding year to gather themselves and increase revenues tenfold. I have lost a total of $\$ 1,801.60$ investing in Diebold so far.


Figure 4.3 - Price Chart for Diebold October $7^{\text {th }}$ to January $9^{\text {th }}$

## Hormel Foods

I bought 276 shares of this stock at $\$ 35.99$ a piece. I saw it at its highest peak on October $1^{\text {st }}$ at $\$ 37.03$. From that point on it dropped. On October $17^{\text {th }}$ it was at $\$ 33.94$ when it took a big drop down to $\$ 29.09$ on the $21^{\text {st }}$ of October. From the $21^{\text {st }}$ of October to the $4^{\text {th }}$ of November it remained steady with reaching a point $\$ 29.26$ on the $4^{\text {th }}$. From then until the $24^{\text {th }}$ the price would be a staggered path. The price would bounce from $\$ 26.42$ to $\$ 29.24$ over the course of the next 20 days. On the $25^{\text {th }}$ of November Hormel Foods profit fell to $33 \%$. At this point the price of
the stock would hit $\$ 25.01$ on December $1^{\text {st }}$. This would be the lowest price I would see while investing in this stock. From this point the price would rise. On December $9^{\text {th }}$ Hormel Foods and the meat packing industry would reveal some information on the company and its relevant industry. When this was announced the price was $\$ 27.90$ and would rise to $\$ 30.76$ in 9 days. The price would hit $\$ 31.55$ on January $2^{\text {nd }}$ and on the $5^{\text {th }}$ Hormel donated protein products to the Salvation Army. This would keep the price of the stock steady and remain around the same price range. The price of the stock today is $\$ 31.30$ and I have lost a total of $\$ 1,294.44$ over the course of my investment.


Figure 4.4 - Price Chart for Hormel Foods October 2008 to January 2009

## Milipore

I bought 148 shares of this stock on September $29^{\text {th }}$ at a price of $\$ 67.12$. Two days after I invested in the stock things headed for the worst. There was a $\$ 12.51$ loss over a span of 9 days. It remained steady for only the next 11 days when it dropped again on October $21^{\text {st }}$ and didn't stop until it saw $\$ 46.61$ on the $27^{\text {th }}$ of October. On the $30^{\text {th }}$ of October Milipore lowered their revenue guidance for the fiscal year 2008. With the economy going downhill Milipore didn't really see anything good in sight. The price reached $\$ 55.65$ on November $4^{\text {th }}$ and was steady
until November $20^{\text {th }}$ when it hit $\$ 44.61$. On December $4^{\text {th }}$ the price was at a low of $\$ 46.32$ when Milipore signed a license agreement with Astellas. From this point on they wouldn't see anything lower then this $\$ 46.32$. The price would slowly grow and keep steady without any dips. From the $16^{\text {th }}$ of December to the $12^{\text {th }}$ of January the price of Milipore was between the prices of $\$ 52.82$ and $\$ 50.14$. On the $12^{\text {th }}$ Milipore decided to make it public to support President-Elect Barack Obama’s plan to review the economic stimulus package. This point in time would be a turning point for Milipore. The price would raise 5 points in 4 days. On January $28^{\text {th }}$ the price would hit $\$ 57.37$. From here on in Milipore's price would remain steady even through the acquisition of Guava Technologies. The current price of the stock is $\$ 60.38$ and looks like it is steadily increasing. So far I have lost $\$ 997.52$ on this stock, but I am willing to ride this stock out and see where it takes me.


Figure 4.5 - Price Chart for Milipore September $30^{\text {th }}$ to February $13^{\text {th }}$

## General Electric

On September $29^{\text {th }} 2009$ I invested 409 shares of GE stock at a price of $\$ 24.36$ a piece with $\$ 10$ commission. The stock since then has been traveling a rough road. The only time that the price of this stock was higher then what I bought it at was the next day on September $30^{\text {th }}$ at a
price of $\$ 25.50$. This was the biggest fall that I saw the stock fall since I invested with GE. Before it made an attempt to climb back up it fell all the way down to $\$ 19.01$ on October $9^{\text {th }}$. On the $10^{\text {th }}$ of October the stock would again see what would be a high price relative to now at $\$ 21.50$. GE would begin to make some moves to gain publicity by acquiring Vital Signs Inc. on October $30^{\text {th }}$. At this point in the time the price of GE was $\$ 19.35$. Their hopes for the price to rise after this acquisition were shut right down when the price would just continue to drop. It would fall all the way to $\$ 12.84$ on November $20^{\text {th }}$. GE would begin to see some light when the price would rise to $\$ 17.17$ over the next 8 days and by December $8^{\text {th }}$ the price would hit $\$ 18.88$. On December $16^{\text {th }}$ GE would reiterate their fourth quarter results and declared that they would no longer provide specific quarterly EPS guidance. After this the price stayed steady until January $8^{\text {th }}$ when the price hit $\$ 16.14$ and GE acquired Interbanca. The price would continue to fall even with the business growing and by January $23^{\text {rd }}$ the price was $\$ 12.03$ and the recession would most likely have an impact on GE's fourth quarter. GE stock is still currently in a decline along with the rest of the economy with the recession that we're in. From the $23^{\text {rd }}$ of January to now the price would peak at $\$ 13.50$ on January $28^{\text {th }}$ and $\$ 12.64$ on February $9^{\text {th }}$. These peaks wouldn't last for long. The price is currently at $\$ 10.81$ and shows no signs of going up anytime soon. I have lost $\$ 5,551.95$ from this stock and if I kept holding this stock I would just lose a lot more.


Figure 4.6 - Price Chart for General Electric September $30^{\text {th }}$ to February $17^{\text {th }}$

## Pfizer

I bought 559 shares of Pfizer stock on the $29^{\text {th }}$ of September for a price of $\$ 14.25$. Pfizer inc. would soon see one of their biggest price drops and it would begin on October $6^{\text {th }}$ when the price was $\$ 18.94$. Over the next four days the price would drop to $\$ 15.14$. It would make a quick recovery to a price of $\$ 17.13$ on the $14^{\text {th }}$. The price would be up and down over the next month and reach a price of $\$ 18.14$ on November $4^{\text {th }}$. Again this would be one of its highest peaks that I would see while investing in Pfizer. Over the next 10 days the price would drop to $\$ 16.28$ on November $14^{\text {th }}$ and on that same day Pfizer would launch their Global Regenerative Medicine Research Unit. Over the next 6 days the price would drop to a low of $\$ 14.45$. This price would be the lowest that I would see until recently. The price would slowly make a comeback by rising to a price of $\$ 16.93$ on December $8^{\text {th }}$. This would be the middle of it rise and it would peak on January $2^{\text {nd }}$ when the price would hit $\$ 18.27$. On this day Pfizer had in sight a merger deal with its largest rival. At this point in time the price would start to fall again and would not look back. On January $16^{\text {th }}$ the price was at $\$ 17.50$ when Pfizer decided to cut up to 2,400 sales jobs. On January 26 the price would take a drastic fall to $\$ 15.65$ when Pfizer
would enter a definite merger agreement with Wyeth. This would lower its dividend and have the price continue to fall. By January $30^{\text {th }}$ the price would hit $\$ 14.58$ and would soon fall to $\$ 14.07$ on February $10^{\text {th }}$. The price of Pfizer is currently $\$ 14.25$ and I have a total of $\$ 2.022 .40$ from investing in this stock.


Figure 4.7 - Price Chart for Pfizer September $29^{\text {th }}$ to February 17 $^{\text {th }}$

## Raytheon

I invested in 187 shares of Raytheon stock on September $29^{\text {th }}$ at a price of $\$ 52.99$ a share. Once I bought this stock the price of it would start to drop and not look back to its previous high. On October $9^{\text {th }}$ the price would hit a low of $\$ 45.59$. From the $9^{\text {th }}$ to the $27^{\text {th }}$ the price would stagger from a high of $\$ 49.27$ to a low of $\$ 43.46$ on the $27^{\text {th }}$. This would be the lowest I would ever see Raytheon stock hit throughout my whole investment. Soon after this lull the price would rise to $\$ 51.11$ on October $31^{\text {st. }}$. It would soon continue to drop again to a price of $\$ 45.51$ on November $20^{\text {th }}$. At this point the price would inconsistently rise to a price of $\$ 51.74$ on December $10^{\text {th }}$. The price would level off on the $11^{\text {th }}$ of December when Raytheon Canada would provide high-frequency surface wave radars for Romania. During this level time the price would peak at $\$ 52.49$ on January $5^{\text {th }}$ and see a low of $\$ 49.08$ on December $29^{\text {th }}$. On January $16^{\text {th }}$
the price would peak again at a price of $\$ 52.67$ and that would be the last time it would see that high of a price. By the $30^{\text {th }}$ of January the price would hit $\$ 50.62$. Over the next 17 days the price would steadily drop to $\$ 45.60$ where it currently is on the $17^{\text {th }}$ of February. Over the course of 5 months I would lose a total of $\$ 1,391.93$.


Figure 4.8 - Price Chart for Raytheon October $\mathbf{1}^{\text {st }}$ to October $31^{\text {st }}$

### 4.4 Analysis

The buy and hold trading strategy is a very difficult trading strategy to win in. When you don't know that a recession is coming and you plan on to buy and hold then you will end up losing a lot of your investments. Over the course of the four months of trading I lost a total of $\$ 22,001.72$. The most I lost from one company was $\$ 8,446.96$ from Citigroup Inc. This was a total loss of $84.56 \%$. The company I lost the least amount of money on was Milipore Corporation with a loss of $\$ 1,232.48$. There was no company that I made a gain in over the course of my trading.

| Date | Symbol | Buy/Sell | Price | Shares | Commission | Net Cost | Current <br> Profit/Loss |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9/29/2008 | AW | Buy | 10.72 | 931 | $\$ 10.00$ | $\$ 9,990.32$ | Inactive |
| $9 / 29 / 2008$ | C | Buy | 19.8 | 504 | $\$ 10.00$ | $\$ 9,989.20$ | $\$ 8,446.96$ |
| $9 / 29 / 2008$ | HRL | Buy | 35.99 | 276 | $\$ 10.00$ | $\$ 9,943.24$ | $\$ 1,445.20$ |
| $9 / 29 / 2008$ | MIL | Buy | 17.84 | 559 | $\$ 10.00$ | $\$ 9,982.56$ | $\$ 1,232.48$ |
| $9 / 29 / 2008$ | GE | Buy | 24.36 | 409 | $\$ 10.00$ | $\$ 9,973.24$ | $\$ 5,551.95$ |
| $9 / 29 / 2008$ | PFE | Buy | 17.85 | 559 | $\$ 10.00$ | $\$ 9,988.15$ | $\$ 2,022.40$ |
| $9 / 29 / 2008$ | RTN | Buy | 52.99 | 187 | $\$ 10.00$ | $\$ 9,919.13$ | $\$ 1,391.93$ |
| $9 / 29 / 2008$ | DBD | Buy | 31.09 | 320 | $\$ 10.00$ | $\$ 9,958.80$ | $\$ 1,910.80$ |
| 2/9/2009 |  |  |  |  |  |  | $\$ 4,451.72$ |

Table 4.1 - Trading Chart for Buy and Hold Strategy

## 5 Value Averaging (Ponsler)

### 5.1 Trading Strategy

The Dollar cost strategy advises an investor to invest a fixed amount on a fixed basis. This is typically done at monthly intervals. This strategy is typically used for mutual funds. Two downfalls of using this strategy are that if the stock rises continuously you stand to miss out on higher returns due to your constant investment value. However, if the price suddenly dives you will not be damaged as much as if you had invested a large sum at one time (Suhre, 2009).

Value averaging advises the investor adjusts the amount invested in order to meet a specific target. The amount is adjusted either up or down in order to meet this target. If the initial investment is $\$ 300$ and after a month's time the stock's value has declined to $\$ 250$ you would invest $\$ 350$ the next month in order to bring it to $\$ 600$. If you begin with $\$ 300$ and the stock rises to $\$ 350$ you would invest $\$ 250$ in order to meet the target. This strategy offers better returns in a long term setting than Dollar Cost Averaging (Beattie, 2009).

### 5.2 Companies Selected

### 5.2.1 Google (GOOG)

## Company Profile

Google is a public American corporation that was founded in September 1998. Google started making its name in the technology industry through its state of the art search engine. However, over the course of ten years they have created applications ranging all across the World Wide Web. As of 2008 they have produced web browsers, e-mail services, three dimensional graphics applications, a mobile phone development platform and many other things.

Almost all of Google's revenue comes from the various advertising programs they offer. In 2006 the company earned $\$ 10.492$ billion through advertising and $\$ 112$ million from other venues (Google, Inc., 2009).

It was not until 2004 when Google finally went public. 19,605,052 shares at $\$ 85$ per share later and Google had an estimated value of $\$ 23$ billion. Google’ stock has continued to do well since its Initial Public Offering and in 2007 it hit $\$ 700$ per share (Google, Inc., 2009).

Google continues to prosper in the technology industry through acquiring several startup companies and through their partnerships with other corporations. Some of the startup companies Google has acquired include: Keyhold incorporated, JotSpot, Postini and even YouTube. In 2005 Google announced a partnership with NASA Ames Research Center to build 1,000,000 square feet of offices which will conduct research in the fields of nanotechnology and distributed computing to name a few (Google, Inc., 2009).

## Management

One main focus of Google's management is to not only ascertain how people view and interact with the internet but also to change these actions. Google aims to do this for both business and individuals. Google has identified ten facts that make up their management philosophy.
"Focus on the user and all else will follow" is the first fact that Google lists as their philosophy. There are several ways Google has placed the customer first and continues to do so. Google's user interface started and has remained very minimalistic and easy to use. Google's page load times are incredibly fast for quick access to the requested information. Google refuses
to allow companies to purchase high positions in the search engine. Google keeps advertising relevant to the content and makes sure it is not a distraction (Google, Inc., 2009).
"It's best to do one thing really, really well" is Google's second point that constitutes their management philosophy. Google has chosen to focus on doing search related tasks very well. Through having one of the world's largest search related research groups Google is able to solve complex problems and constantly improve upon their ability to perform searches. While Google creates other products they continue to improve their search methods with a steadfast dedication which makes them the best search engine in the world (Google, Inc., 2009).
"Fast is better than slow" is Google’s third philosophical ideal. Google recognizes that the world is all about instant gratification. People want their information now and they do not want to wait for it. This idea leads Google to have a very strange goal: Google wants their customers to leave their website as quickly as possible. Their dedication to achieving this goal has pushed Google to continuously exceed their previous speed records. Google learned that a cluster of networked computers is able to perform search related tasks much faster than a single large server and this technique gives them an edge on the competition (Google, Inc., 2009).
"Democracy on the web works" is Google's fourth ideal that makes up their philosophy. The basis of Google's search is founded around the billions of users that update and post websites. Google developed a system for ranking pages called PageRank that assigns a value to each page that that link to any given page where the value assigned is based on the number of websites that link to that page. This allows Google to determine which pages on the web are most popular and which information is relevant and interesting to the users (Google, Inc., 2009).
"You don't need to be at your desk to need an answer" is Google’s fifth philosophical ideal. Google recognizes the worldwide shift in the world where data is becoming more mobile through the use of cell phones and other electronic devices. People are no longer stuck behind a desk and Google recognizes this. In order to meet these changes Google has developed ways to enable searching for information via a cell phone and many other electronic devices. Google continues to expand its ability to provide mobile information as the world becomes more mobile (Google, Inc., 2009).
"You can make money without doing evil" is Google’s sixth philosophical ideal. Google is a business, however, the bulk of their profits come in the form of advertising that appears on Google. However, in order to appeal to their first philosophical point Google only displays advertisements that are related to the search terms. Meaning that you will not be bogged down by unrelated advertisements but instead you will be shown advertisements that are directly related to the information for which you are searching. Not only does Google only show related advertisements but also keeps the advertisements unobtrusive. Advertisements do not create new windows, do not make sounds, do not flash colors, are not colorful and do not get in the way of finding the information you are looking for. Google also clearly identifies each advertisement as a sponsored link whenever it is displayed on the page. This means they do not trick their users into clicking ads simply so that they can make money (Google, Inc., 2009).
"There's always more information out there" is Google's seventh philosophical ideal. Google first made its mark by indexing more web pages than any search service had ever indexed before. Once they completed this milestone they began to look for information in other forms. This new information came in the form of allowing people to search through billions of images, PDF files, spreadsheets and other documents. This allows Google to continue to expand
the information that is readily accessible and they continue to add more information as they discover the need.
"The need for information crosses all borders" is Google’s eighth philosophical ideal. Google does not focus their tasks on one part of the world but instead decided to focus on the entire world and in doing so they have created offices across the world. Google can provide the results of a search in more than 35 languages and Google also provides the ability to translate pages from one language into another very easily. This allows Google to provide information to all people across the globe (Google, Inc., 2009).
"You can be serious without a suit" is Google’s ninth philosophical ideal. Google has been built around the ideal that "work should be challenging and challenging should be fun." Google has a very unique culture at their complex in California which is called the Googleplex. Google puts the enjoyment of their employees first above all things. Google places an emphasis on teamwork that allows the employees to be creative and get along as a team which allows them to make huge leaps in technology (Google, Inc., 2009).
"Great just isn’t good enough" is Google’s tenth and final philosophical point. Google does not strive to be the best but instead uses best as it starting point and continue to improve from there. This pushes Google to make innovations in weird and interesting ways such as adding the ability to recover from typos or other user errors. This choice never to be content forces Google to be the best and continue to improve beyond everyone's expectations (Google, Inc., 2009).

### 5.2.2 Microsoft (MSFT)

## Company Profile

Microsoft is an American based multinational corporation that has firm roots in the technology industry. Microsoft was founded in 1978 and is most famous for producing the Windows line of operating systems as well as the Microsoft Office Suite which contains applications that assist text editing, producing spreadsheets and many other areas.

In 1985 Microsoft released the first version of Microsoft Windows and in the following year they had their Initial Public Offering with a starting value of $\$ 21$ and an end value of $\$ 28$, with a peak of $\$ 29.25$. Microsoft's value at the time in 1986 was $\$ 519,777,778$. The stock has since done well reaching an all time high of $\$ 119$ in 1999. Over the course of time Microsoft's stock has seen nine splits and in 2003 they began offering a dividend. Microsoft's stock saw a slight decline in 2003 and descended slowly for the following few years (Funding Universe, 2009).

Although Microsoft has met some troubling times throughout the years they continue to be a strong corporation while providing a variety of products. In 2001 Microsoft released the Xbox and placed its foot firmly into the video game sector. They have continued to evolve their line of offered products ever since their founding (Funding Universe, 2009).

## Management

Microsoft has a specific philosophy in terms of its management and the values the corporation holds at its core. These values include honesty, integrity, openness, excellence, and respect. It is through these values that Microsoft focuses its attention on each and every customer that they deal with. Through all of their daily operations Microsoft tries to keep these core values
at heart while at the same time attempting to provide the bust support and experience for the customer (Microsoft Corporation, 2009).

### 5.2.3 Verizon (VZ)

## Company Profile

Verizon is an American based broadband and telecommunications corporation. Founded in 2000 when Bell Atlantic merged with General Telephone and Electronics Corporation. In 2005 Verizon acquired MCI Communications which turned Verizon into the largest telecommunications company in the world. At the time of the acquisition Verizon had sales of $\$ 93.47$ billion, profits of $\$ 5.65$ billion and assets of $\$ 186.96$ which topped the assets and profits of the other leading telecommunications company AT\&T (Verizon, 2009).

## Management

Verizon is dedicated to putting the customer first through the services they provide and the experiences one has through using Verizon's products. Verizon feels that they will have a strong positive impact on the world if they continue to place their customers first and strive for this in all of their products. Verizon has several values that they maintain in order to keep the customers first (Verizon, 2009).

Verizon attempts to maintain an honest and ethical relationship with its customers which they believe creates a foundation of trust between the customer and the corporation. This foundation of trust keeps the customer first and brings the customer back for repeat business.

Verizon understands that the world is changing and that respect is a very important part of every business model during these changing times. Verizon attempts to show respect for
everyone throughout all levels of their infrastructure. Verizon accepts diversity and individuality with open arms and they also do not disregard any person's views or opinions (Verizon, 2009).

Verizon also holds themselves and their performance to a high level of standard. This drives their innovation through the accepting of creativity in the workplace and pushing their employees to be better. Verizon is constantly trying to improve the customer experience and they are able to continuously improve this each and every day (Verizon, 2009).

Verizon understands that a corporation must be responsible for its actions and therefore they hold themselves accountable as a business and as individuals that constitute a business. Verizon attempts to work together through teamwork to improve the customer experience and to never break the bond of trust they work so hard to create between the corporation and the customer (Verizon, 2009).

### 5.2.4 International Business Machines (IBM)

## Company Profile

International Business Machines Corporation, known as IBM, is an American based multinational computer technology and consulting corporation. Founded in 1986, IBM has been known in recent years as the world’s largest computer company. IBM employs over 388,000 people making it the largest information technology employer in the world as well as the most profitable. Holding more patents than any other United States based technology company IBM also employs engineers as well as consultants in over 170 different countries (IBM, 2009).

## Management

IBM has at the core of their management philosophy three key ideas and values which are: Respect for the individual, the best customer service, superior accomplishment of all tasks (Gerstner, 2009).

In an attempt to respect the individual IBM believes that it should make an effort to enable employees to make the best use of his abilities and potential, salary and promotions are earned through hard work, and keep the channel of communications between manager and employee open at all times (Gerstner, 2009).

In order to provide the best customer service IBM attempts to know what the customer needs, educate the customers on products and how the products are used in the best possible ways, and also to provide maintenance and support for equipment as well as the services that support larger products. These demands allow IBM to provide the best possible customer service.

The final thing IBM attempts to maintain is a level of excellence in all things. In order for IBM to meet the expected level of excellence IBM must be a leader in the developments in the all fields, be aware of the competition, and produce cutting edge products at a low cost. IBM's management is also expected to achieve a level of excellence at all times. The managers are expected to motivate employees to perform their jobs at the expected level of excellence, to have consistent meetings, and maintaining and open mind to all ideas. All of these enable IBM to perform at the level of excellence that is necessary to be a leader in their business (Gerstner, 2009).

### 5.2.5 Apple (AAPL)

## Company Profile

Apple is an American based multinational corporation which has a foundation in the designing and manufacturing of consumer products. Apple also has firm roots in the software and personal computing industry. In recent years Apple has entered the telecommunications industry with the release of the iPhone and Apple also revolutionized the digital media and storage industry with the release of the iPod. It was not until 1984, eight years after it was founded, that Apple had its Initial Public Offering (Funding Universe, 2009).

The stock price surpassed $\$ 100$ in 2007 after the announcement of the iPhone. With Apple's opening of its own line of retail stores, the App Store, in July of 2008, Apple brought in an average of $\$ 1$ million per day and had a daily average of 60 million applications sold (Funding Universe, 2009).

## Management

Apple has a management style that is very unique for the technology world. First of all, Apple develops products to work together with their own products. Apple does not develop hardware products that are to be used with other software; rather, they develop software products that are intended to be used on their own hardware. This allows Apple to have much more control over the development of their products as well as to provide customer service at a level unparalleled in the industry. Apple also has a strange relationship with media and the press. In order to gain the greatest advantage from press releases Apple does not divulge any information about upcoming products until they have a Keynote presentation and the product is officially announced. This strategy allows their product sales to soar due to the hype and excitement surrounding the new products. Apple also has the mindset where they do not praise their
employees without reason. If an employee makes a mistake they will be verbally criticized, if not fired. This allows Apple to keep their employees from feeling secure which drives them to perform at their best at all times as well as to keep Apple's upcoming products a secret. These unique management styles allow Apple to fiercely compete with the best companies in the industry (Chaffey, 2008).

### 5.2.6 Intel (INTC)

## Company Profile

Intel is the world's largest semiconductor company. Intel was originally founded under the name Integrated Electronic Company in 1968. Since that time they have produced many products ranging from motherboard chipsets, flash memory, graphic chips, network cards, and embedded processors. In 2007 Intel was listed as number 25 in a list of the world's 100 most powerful brands (Funding Universe, 2009).

In 2008, Intel had a market capitalization of $\$ 129.34$ billion. Intel announced in July of 2008 that it had reached the highest earnings in the history of the company during the second quarter of 2008. Intel is on the Dow Jones industrial average and is also on the Nasdaq-100 (Funding Universe, 2009).

## Management

Intel does not have an overly complex management strategy. Intel's main "goal is to be the preeminent provider of semiconductor chips and platforms for the worldwide digital economy" (Intel Corporation, 2009). In order to achieve this goal Intel uses their solid foundation in the design and manufacturing of circuits along with their financial resources to their advantage. It is with these things, along with the already established brand recognition, that

Intel believes they have the "reach to establish new technologies and respond to customers' needs quickly" (Intel Corporation, 2009).

### 5.2.7 Amazon (AMZN)

## Company Profile

Amazon is an American electronic commerce company which was founded in 1994 but was not officially online until 1995. Amazon's main course of business is an online bookstore; however, it has come to offer many products over the years such as DVDs, CDs, computer software, video games and even furniture and apparel (Funding Universe, 2009).

Amazon’s Initial Public Offering had a price of $\$ 18$ per share in 1997. In the second quarter of 2001 Amazon saw its first profit of $\$ 5$ million which amounted to about one cent per share. Over the course of 2003 to 2006 the net income rose from $\$ 35.3$ million to $\$ 190$ million with a peak at $\$ 588.50$ million in 2004. Amazon operates the retail websites for many corporations including Target and Sears (Funding Universe, 2009).

## Management

Amazon has decided to focus its management philosophy mainly on long term issues of the company and through doing so there are many ways in which they operate. Along with focusing on the long term issues of the corporation Amazon also has a strong focus on the customer as well as the customer experience. Because of their heavy focus on long term issues Amazon chooses to make many long term decisions that may be seen as bold rather than making short term decisions that could be profitable for the company. Amazon is committed to making decisions that benefit the customers and they believe that by doing this their investors will also be benefitted. Another main focus of Amazon's management philosophy is profits and money. The final thing Amazon focus on is hiring intelligent and talented employees and keeping them
over a long period of time. Amazon believes that having a happy employee base is beneficial to the corporation as a whole (Amazon.com, 2009).

### 5.2.8 Cisco (CSCO

## Company Profile

Cisco is a multinational corporation founded in 1984 and now employs over 66,000 people. Cisco had revenue of $\$ 39$ billion as of 2008. Cisco designs and sells networking technology under five different brand names including Linksys and IronPort (Cisco, 2009).

## Management

Cisco has many corporate philosophies that facilitate the actions the company takes each and every day. These philosophies are separated into four categories: Employees, Environment and Social Investments.

Cisco has many programs and services that are designed with a focus on the employees of Cisco. Not only do these programs benefit the employees they also work to create and maintain an innovative work environment. Some of these employee based programs include: a recruiting and training program as well as a work-life integration program. The latter program works to enable Cisco's employees better balance their work and their family. Cisco also works to hire employees from diverse backgrounds while ensuring that the employees are talented and the best in the market. Cisco also focuses on maintaining a safe work environment for its employees (Cisco, 2009).

Cisco recognizes the growing importance of focusing on the environment in these difficult times. Cisco is committed to moving toward a sustainable lifestyle in every aspect of life. Cisco attempts to work in conjunction with their customers, employees and partners to help
achieve these lofty goals while focusing on the environment. Cisco works tirelessly to increase the efficiency at which energy is used and the ways waste are created and handled during the course of their business. Cisco also implements various environmental policies into the culture surrounding the Cisco Corporation (Cisco, 2009).

While Cisco works to create a suitable work environment for their employees they also work to create better connected and healthier global communities. Cisco believes these communities should have a strong focus on education and the economy. Cisco implements several programs and policies that attempt to help improve the education that is available to students as well as their ability to succeed in this environment. Cisco also provides economic policies and programs that improve growth and increase access to these economic opportunities. Cisco also has a heavy focus on improving the overall health of the members of each of these communities through various services (Cisco, 2009).

### 5.3 Trading

With $\$ 100,000$ to invest I decided to select 8 companies which leaves $\$ 12,500$ per company. In order to apply the Value Averaging trading method I chose to invest in each company on a weekly basis. Value Averaging is typically done on a monthly, or longer, scale; however, for the time constraints of this particular project that was not the best course of action and thus I reasoned investing each week would suffice. Taking into account the 12 week trading period, as well as the $\$ 12,500$ per company, I selected a fixed dollar amount of $\$ 1,000$ to use while applying the trading strategy. Therefore, each week I attempted to purchase $\$ 1,000$ worth of stock per company.

## Google

My first week of trading began on September $30^{\text {th }}$ at which time Google's stock was at a price of $\$ 381.00$. In order to meet my fixed amount of $\$ 1,000$ I purchased 2 shares which was a total of $\$ 772.00$ after commission. During the course of the week, Google’s stock fell to $\$ 371.21$ costing me a total of $\$ 19.58$. On October $7^{\text {th }}$, the start of my second week of trading, Google’s stock was at a price of $\$ 371.21$ in order to meet my fixed amount and taking into account the deficit from the previous week I purchased 2 more shares of Google which was a total of \$752.42. During this week Google rose back above the original price I purchased shares during the first week to a price of $\$ 381.02$ which meant a profit of $\$ 19.62$ for the week. This week turned out well to balance out the deficit from the previous week. In order to meet my average fixed price, I purchased 2 shares of Google at a price of $\$ 381.02$ on October $14^{\text {th }}$ which was a total of $\$ 772.04$. During the week Google dropped again to $\$ 379.32$ which meant a deficit of $\$ 3.40$ which is bearable. Below is a graph showing the changes in Google’s price during the period of September $30^{\text {th }}$ to October $21^{\text {st }}$.


Figure 5.1 - Price Chart for Google (September 30 ${ }^{\text {th }}$ to October 21 ${ }^{\text {st }}$ )

On October $21^{\text {st }}$ I purchased 2 more shares of Google stock at a price of $\$ 379.32$ which cost a total of $\$ 768.64$. Over the course of the week Google dropped to $\$ 368.75$ which left a deficit of $\$ 21.14$ for the week which was my largest loss to date, however, not a very significant loss in the grand scheme of things. I purchased 2 shares of Google on October $28^{\text {th }}$ at a price of $\$ 368.75$ making a total of $\$ 747.50$. Google dropped during the week bringing a deficit of $\$ 3.62$ which, again, is a minor loss. I purchased 2 shares of Google on November $4^{\text {th }}$ at a price of $\$ 366.94$ costing a total of $\$ 743.88$. This week was much worse than any week thus far. Google dropped to a price of $\$ 318.78$ which turns out to be a loss of $\$ 96.32$. At this time I started to worry about the future of Google; however, I stuck with Google because they are a strong company that has thrived in the past. Below is a graph showing the changes in Google’s price during the period of October $21^{\text {st }}$ to November $11^{\text {th }}$.


Figure 5.2 - Price Chart for Google (October $21^{\text {st }}$ to November 11 ${ }^{\text {th }}$ )

On November $11^{\text {th }}$ I purchased 3 shares of Google at a price of $\$ 318.78$ which is a total of $\$ 966.34$. Google's stock settled down slightly from the large drop it saw last week ending the week at a price of $\$ 300.12$ making the week's deficit $\$ 55.98$. November $18^{\text {th }}$ came around and Google's stock was at a price of $\$ 300.12$ and thus I purchased 3 shares of stock which was a total cost of $\$ 910.36$. This week was very similar to last week's drop in that at the week's final deficit turned out to be $\$ 54.21$. While this change is more acceptable, it is still more than I had hoped. On November $25^{\text {th }}$ Google's stock was at a price of $\$ 282.05$ and I purchased 3 shares of their stock which came to a cost of $\$ 856.15$. This week brought another deficit similar to the past two weeks which meant I lost $\$ 48.18$. At this point Google appeared to be making its way back up to the top; however, it was doing so quite slowly. Below is a graph showing the changes in Google's price during the period of November $11^{\text {th }}$ to December $2^{\text {nd }}$.


Figure 5.3 - Price Chart for Google (November 11 ${ }^{\text {th }}$ to December $\mathbf{2 d ~}^{\text {nd }}$ )

On December $2^{\text {nd }}$ I purchased 3 shares of Google stock, in order to meet my fixed price of $\$ 1,000$, at a price of $\$ 265.99$ which was a final price of $\$ 807.97$. This turned out to be my best week yet, and my best week overall due to the fact that at the end of the week Google ended at $\$ 305.97$. This resulted in a gain of $\$ 119.94$ which further supplanted my belief that Google was on the rise again. On December $9^{\text {th }}$ I purchased 3 shares of Google at a price of $\$ 305.97$ which was a total of $\$ 927.91$. Over the course of the week I saw another rise in the price which resulted in a gain of $\$ 57.93$. On my final week of trading I purchased 3 shares of Google at a price of $\$ 325.28$ which comes to a total of $\$ 985.84$. This was an unfortunate week to end the trading on as Google dropped to a price of $\$ 297.11$ resulting in a deficit of $\$ 84.51$ for the week. Below is a graph showing the changes in Google's price during the period of December $2^{\text {nd }}$ to December $23^{\text {rd }}$.


Figure 5.4 - Price Chart for Google (December $2^{\text {nd }}$ to December $23^{\text {rd }}$ )

During the course of the twelve weeks I invested a total of $\$ 10,011.05$ in Google which was slightly less than my maximum of $\$ 12,500$. On the final day of the 12 week trading period I sold all 30 shares of Google at a price of $\$ 297.11$ which was a total of $\$ 8,903.30$. This means I lost a total of $\$ 1,107.75$ over the course of 12 weeks. Below is a table displaying all the trades I made during the trading period.

| DATE | SYMBOL | BUY/S <br> ELL | PRICE | SHARES | COMMIS <br> SION | NET <br> COST | TOTAL <br> PROFIT/LOSS |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $09 / 30 / 08$ | GOOG | BUY | $\$ 381.00$ | 2 | $\$ 10.00$ | $\$ 772.00$ |  |
| $10 / 07 / 08$ | GOOG | BUY | $\$ 371.21$ | 2 | $\$ 10.00$ | $\$ 752.42$ |  |
| $10 / 14 / 08$ | GOOG | BUY | $\$ 381.02$ | 2 | $\$ 10.00$ | $\$ 772.04$ |  |
| $10 / 21 / 08$ | GOOG | BUY | $\$ 379.32$ | 2 | $\$ 10.00$ | $\$ 768.64$ |  |
| $10 / 28 / 08$ | GOOG | BUY | $\$ 368.94$ | 2 | $\$ 10.00$ | $\$ 747.50$ |  |
| $11 / 04 / 08$ | GOOG | BUY | $\$ 366.94$ | 2 | $\$ 10.00$ | $\$ 743.88$ |  |
| $11 / 11 / 08$ | GOOG | BUY | $\$ 318.78$ | 3 | $\$ 10.00$ | $\$ 966.34$ |  |
| $11 / 18 / 08$ | GOOG | BUY | $\$ 300.12$ | 3 | $\$ 10.00$ | $\$ 910.36$ |  |
| $11 / 25 / 08$ | GOOG | BUY | $\$ 282.05$ | 3 | $\$ 10.00$ | $\$ 856.15$ |  |
| $12 / 02 / 08$ | GOOG | BUY | $\$ 265.99$ | 3 | $\$ 10.00$ | $\$ 807.97$ |  |
| $12 / 09 / 08$ | GOOG | BUY | $\$ 305.97$ | 3 | $\$ 10.00$ | $\$ 927.91$ |  |
| $12 / 16 / 08$ | GOOG | BUY | $\$ 325.28$ | 3 | $\$ 10.00$ | $\$ 985.84$ |  |
| $12 / 23 / 08$ | GOOG | SELL | $\$ 297.11$ | 30 | $\$ 10.00$ | $\$ 8,903.30$ | $\$ 1,107.75$ |

Table 5.1 - Trading Chart for Google using Value Averaging

## Microsoft

My initial investment in Microsoft occurred on September $30^{\text {th }}$. Microsoft's stock was at a price of $\$ 26.69$ and in order to meet my average investment price I purchased 37 shares which was a total of $\$ 997.53$. Over the course of the first week Microsoft's stock dropped to a price of $\$ 24.91$ which made my deficit for the first week $\$ 65.86$. The second week started with a purchase of 40 shares of stock at a price of $\$ 24.91$ which is a total price of $\$ 1,006.40$. Again, Microsoft's stock fell during the course of the week giving me a weekly deficit of $\$ 32.40$. Microsoft's stock was at a price of $\$ 24.10$ on October $14^{\text {th }}$ which was the first day of the third week of trading. I purchased 41 shares of Microsoft which was a total of $\$ 998.10$. Microsoft's stock continued to decline in a way similar to the second week. My weekly deficit was $\$ 30.34$. Below is a picture of the changes in Microsoft's stock during the period of September $30^{\text {th }}$ to October $21^{\text {st }}$.


Figure 5.5 - Price Chart for Microsoft (September 30 ${ }^{\text {th }}$ to October 21 ${ }^{\text {st }}$ )

On October $21^{\text {st }}$ Microsoft's stock was at a price of $\$ 23.36$. I purchased 42 shares of stock which was a total of $\$ 991.12$. Over the course of the week Microsoft's stock fell slightly
which made the weekly deficit $\$ 91.56$. This was one of the largest deficits I encountered over the course of the trading period. At the start of the fifth week Microsoft's stock was at a price of $\$ 21.18$ and thus I purchased 47 shares in order to meet the investment range. This was a total cost of $\$ 1,005.46$. This week Microsoft's stock rose by more than two dollars, which made my first weekly profit a total of $\$ 110.45$. The sixth week started on November $4^{\text {th }}$ and Microsoft's stock was at a price of $\$ 23.53$. I purchased 42 shares at this price which came to a total of \$998.26. This week Microsoft's stock declined giving me a deficit of $\$ 93.66$ which almost entirely defeated the gain of the previous week. Pictured below is the change in Microsoft's stock during the period of October $21^{\text {st }}$ to November $11^{\text {th }}$.


Figure 5.6 - Price Chart for Microsoft (October $21^{\text {st }}$ to November 11 ${ }^{\text {th }}$ )

The seventh week started on November $11^{\text {th }}$ and Microsoft's stock was at a price of $\$ 21.30$. This week's purchase was 46 shares which was a total of $\$ 989.80$. Over the week Microsoft's stock fell again which made the weekly deficit $\$ 77.28$. On November $18^{\text {th }}$, the start of the eighth week, Microsoft's stock was at a price of $\$ 19.62$ and at this price I purchased 50 shares which was a total of $\$ 991.00$. Microsoft's stock rose this week which created a profit of
$\$ 53.50$, which is only a small portion of the amount lost in the previous weeks. The ninth week's investment was 48 shares at a price of $\$ 20.69$ which is a total of $\$ 1,003.12$. This week Microsoft's stock fell which created a deficit of $\$ 99.84$. This was my largest weekly deficit over the course of the trading period. Pictured below are the changes in Microsoft's stock during the period of November $11^{\text {th }}$ to December $2^{\text {nd }}$.


Figure 5.7 - Price Chart for Microsoft (November $11^{\text {th }}$ to December $\mathbf{2}^{\text {nd }}$ )

On December $2^{\text {nd }}$ Microsoft's stock was at a price of $\$ 18.61$ and at this price I purchased 53 shares which was a total of $\$ 996.33$. Over the course of the week Microsoft's stock rose creating a profit of $\$ 127.20$. This was my largest weekly profit over the course of the trading period. The eleventh week's investment was 47 shares of stock at a price of $\$ 21.01$ which is a total of $\$ 997.47$. Microsoft's stock fell during the week creating a deficit of $\$ 42.30$. The final week started on December $16^{\text {th }}$ at a price of $\$ 20.11$. I purchased 49 shares of stock at this price which is an investment of $\$ 995.39$. Microsoft's stock continued to fall this week bringing the final weekly deficit to $\$ 45.57$. Pictured below are the changes in Microsoft's stock over the period of December $2^{\text {nd }}$ to December $23^{\text {rd }}$.


Figure 5.8 - Price Chart for Microsoft (December $2^{\text {nd }}$ to December $23{ }^{\text {rd }}$ )

Overall, Microsoft's stock did not perform well during the trading period. From week to week Microsoft's stock steadily declined despite the fact that there were two weekly profits. In total I invested $\$ 11,969.98$ over the course of the trading period and after I sold all 542 shares of stock at a price of $\$ 19.18$ to have a return of $\$ 10,385.56$. This gave Microsoft a total loss of \$1,585.42 over the trading period.

| DATE | SYMBOL | BUY/ <br> SELL | PRICE | SHARES | COMMI <br> SSION | NET <br> COST | TOTAL <br> PROFIT/ <br> LOSS |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $09 / 30 / 08$ | MSFT | BUY | $\$ 26.69$ | 37 | $\$ 10.00$ | $\$ 997.53$ |  |
| $10 / 07 / 08$ | MSFT | BUY | $\$ 24.91$ | 40 | $\$ 10.00$ | $\$ 1,006.40$ |  |
| $10 / 14 / 08$ | MSFT | BUY | $\$ 24.10$ | 41 | $\$ 10.00$ | $\$ 998.10$ |  |
| $10 / 21 / 08$ | MSFT | BUY | $\$ 23.36$ | 42 | $\$ 10.00$ | $\$ 991.12$ |  |
| $10 / 28 / 08$ | MSFT | BUY | $\$ 21.18$ | 47 | $\$ 10.00$ | $\$ 1,005.46$ |  |
| $11 / 04 / 08$ | MSFT | BUY | $\$ 23.53$ | 42 | $\$ 10.00$ | $\$ 998.26$ |  |
| $11 / 11 / 08$ | MSFT | BUY | $\$ 21.30$ | 46 | $\$ 10.00$ | $\$ 989.80$ |  |
| $11 / 18 / 08$ | MSFT | BUY | $\$ 19.62$ | 50 | $\$ 10.00$ | $\$ 991.00$ |  |
| $11 / 25 / 08$ | MSFT | BUY | $\$ 20.69$ | 48 | $\$ 10.00$ | $\$ 1,003.12$ |  |
| $12 / 02 / 08$ | MSFT | BUY | $\$ 18.61$ | 53 | $\$ 10.00$ | $\$ 996.33$ |  |
| $12 / 09 / 08$ | MSFT | BUY | $\$ 21.01$ | 47 | $\$ 10.00$ | $\$ 997.47$ |  |
| $12 / 16 / 08$ | MSFT | BUY | $\$ 20.11$ | 59 | $\$ 10.00$ | $\$ 995.39$ |  |
| $12 / 23 / 08$ | MSFT | SELL | $\$ 19.18$ | 542 | $\$ 10.00$ | $\$ 10,385.56$ | $\$ 1,584.42$ |

Table 5.2 - Trading Chart for Microsoft using Value Averaging

## Verizon

My initial investment in Verizon occurred on September $30^{\text {th }}$ at a price of $\$ 30.62$. In order to meet my investment average I purchased 32 shares which was a cost of $\$ 989.84$. Over the course of the week Verizon's stock fell which made the first week's deficit $\$ 55.36$. The second week started on October $7^{\text {th }}$ when Verizon's stock was at a price of $\$ 28.89$. I purchased 34 shares at this price which was a total cost of $\$ 992.26$. During the week Verizon’s stock barely fell resulting in a loss of $\$ 2.04$. The third week was similar to the second week in that it resulted in loss $\$ 1.36$ after my investment of 34 shares at a price of $\$ 28.95$ fell. The total cost of the third week's investment was $\$ 994.30$. Pictured below are the changes in Verizon's stock during the period of September $30^{\text {th }}$ to October $21^{\text {st }}$.


Figure 5.9 - Price Chart for Verizon (September 30 ${ }^{\text {th }}$ to October 21 ${ }^{\text {st }}$ )

The fourth week started on October $21^{\text {st }}$ when Verizon's stock was at a price of $\$ 28.99$. I purchased 34 shares of stock at this price resulting in a total cost of $\$ 995.66$. Over the course of the week Verizon's stock rose slightly which resulted in the largest weekly profit over the trading period of $\$ 90.44$. The fifth week's investment was 31 shares at a price of $\$ 31.65$ which is
a total cost of $\$ 991.15$. During the week, Verizon's stock rose again which meant a profit of $\$ 29.76$ for the week. This is the fourth week in a row that Verizon's stock has increased in value. The sixth week started with an investment of 30 shares of stock at a price of $\$ 32.61$ which is a total cost of $\$ 988.30$. This week Verizon’s stock fell creating a deficit of $\$ 63.60$ for the week and abruptly ending the streak of increasing. Pictured below are the changes in Verizon's stock during the period of October $21^{\text {st }}$ to November $11^{\text {th }}$.


Figure 5.10 - Price Chart for Verizon (October $21^{\text {st }}$ to November 11 ${ }^{\text {th }}$ )

The seventh week started on November $11^{\text {th }}$ when Verizon's stock was at a price of $\$ 30.49$. I purchased 32 shares at this price which was a total cost of $\$ 985.68$. Over the week Verizon's stock fell again which resulted in a loss of $\$ 40.00$. The eighth week's investment consisted of 34 shares of stock at a price of $\$ 29.24$ which is a total cost of $\$ 1,004.16$. Verizon's stock rose during the course of the week which meant a profit of $\$ 45.56$. The ninth week was similar to the eight week. I purchased 32 shares of stock at a price of $\$ 30.58$ which is a total cost of $\$ 988.56$. The stock rose again this week resulting in a profit of $\$ 49.60$. Pictured below are the changes in Verizon's stock during the period of November $11^{\text {th }}$ to December $2^{\text {nd }}$.


Figure 5.11 - Price Chart for Verizon (November $11^{\text {th }}$ to December $\mathbf{2}^{\text {nd }}$ )

The tenth week started on December $2^{\text {nd }}$ when Verizon's stock was at a price of $\$ 32.13$. I purchased 31 shares of stock at this price for a total cost of $\$ 1,006.03$. The stock rose during the course of the week resulting in a profit of $\$ 65.10$. For the eleventh week's investment I purchased 29 shares of Verizon's stock at a price of $\$ 34.23$ which is a total cost of $\$ 1,002.67$. During the week Verizon’s stock fell resulting in a loss of $\$ 21.17$. The twelfth and final week of trading started with an investment of 29 shares of stock at a price of $\$ 33.50$ which is a total cost of $\$ 981.50$. During the final week of trading Verizon’s stock fell very slightly this resulted in a loss of $\$ 2.61$. Pictured below are the changes in Verizon's stock during the period of December $2^{\text {nd }}$ to December $23^{\text {rd }}$.


Figure 5.12 - Price Chart for Verizon (December $2^{\text {nd }}$ to December $\mathbf{2 3}^{\text {rd }}$ )

Overall, Verizon's stock performed fairly well. It was the only stock out of the eight I invested in that made any profit during the twelve week trading period. Over the trading period I invested a total amount of $\$ 11,920.11$. On December $23^{\text {rd }}$ I sold all 382 shares of Verizon that I had purchased over the trading period at a price of $\$ 33.41$ which resulted in a total return of $\$ 12,752.62$. This resulted in a total profit of $\$ 832.51$. This is a significant gain for twelve weeks and it is the only stock I profited off of over the trading period.

| DATE | SYMBOL | BUY/ <br> SELL | PRICE | SHARES | COMMI <br> SSION | NET <br> COST | TOTAL <br> PROFIT/L <br> OSS |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $09 / 30 / 08$ | VZ | BUY | $\$ 30.62$ | 32 | $\$ 10.00$ | $\$ 989.84$ |  |
| $10 / 07 / 08$ | VZ | BUY | $\$ 28.89$ | 34 | $\$ 10.00$ | $\$ 992.26$ |  |
| $10 / 14 / 08$ | VZ | BUY | $\$ 28.95$ | 34 | $\$ 10.00$ | $\$ 994.30$ |  |
| $10 / 21 / 08$ | VZ | BUY | $\$ 28.99$ | 34 | $\$ 10.00$ | $\$ 995.66$ |  |
| $10 / 28 / 08$ | VZ | BUY | $\$ 31.65$ | 31 | $\$ 10.00$ | $\$ 991.15$ |  |
| $11 / 04 / 08$ | VZ | BUY | $\$ 32.61$ | 30 | $\$ 10.00$ | $\$ 988.30$ |  |
| $11 / 11 / 08$ | VZ | BUY | $\$ 30.49$ | 32 | $\$ 10.00$ | $\$ 985.68$ |  |
| $11 / 18 / 08$ | VZ | BUY | $\$ 29.24$ | 34 | $\$ 10.00$ | $\$ 1,004.16$ |  |
| $11 / 25 / 08$ | VZ | BUY | $\$ 30.58$ | 32 | $\$ 10.00$ | $\$ 988.56$ |  |
| $12 / 02 / 08$ | VZ | BUY | $\$ 32.13$ | 31 | $\$ 10.00$ | $\$ 1,006.03$ |  |
| $12 / 09 / 08$ | VZ | BUY | $\$ 34.23$ | 29 | $\$ 10.00$ | $\$ 1,002.67$ |  |
| $12 / 16 / 08$ | VZ | BUY | $\$ 33.50$ | 29 | $\$ 10.00$ | $\$ 981.50$ |  |
| $12 / 23 / 08$ | VZ | SELL | $\$ 33.41$ | 382 | $\$ 10.00$ | $\$ 12,752.62$ | $\$ 832.51$ |

Table 5.3 - Trading Chart for Verizon using Value Averaging

## International Business Machines

The trading period started on September $30^{\text {th }}$ when IBM's stock was at a price of \$116.96. In order to meet my investment average range, I purchased 8 shares of stock which cost a total of $\$ 945.68$. Over the course of the week IBM's stock dropped which lost me a total of $\$ 130.72$ for the week making the first week one of the worst weeks of the trading period. The second week consisted of a purchase of 9 shares of stock at a price of $\$ 100.62$ which is a total of $\$ 915.58$. Over the week IBM’s stock fell again which brought this week's deficit to $\$ 75.49$. The third week started with IBM's stock at a price of $\$ 92.21$. I purchased 10 shares of stock at this price which cost a total of $\$ 932.10$. IBM's stock continued to fall and this week's deficit came to $\$ 33.50$. Pictured below are the changes in IBM's stock during the period of September $30^{\text {th }}$ to October $21^{\text {st }}$.


Figure 5.13 - Price Chart for IBM (September $30^{\text {th }}$ to October 21 ${ }^{\text {st }}$ )

The fourth week started on October $21^{\text {st }}$ and IBM's stock was at a price of $\$ 88.86$. I purchased 11 shares at this price which cost a total of $\$ 987.46$. Over the week IBM's stock fell but seemed to be leveling out. This week's deficit was $\$ 17.38$. On the fifth week I purchased 11
shares of stock at a price of $\$ 87.28$ which cost a total of $\$ 970.08$. This week IBM's stock rose which gave me a weekly profit of $\$ 59.40$. The sixth week started with IBM's stock at a price of $\$ 92.68$. I purchased 10 shares of stock at this price which is a total of $\$ 936.80$. IBM's stock reversed its direction and fell again giving this week a deficit of $\$ 99.40$. Pictured below are the changes in IBM's stock during the period of October $21^{\text {st }}$ to November $11^{\text {th }}$.


Figure 5.14 - Price Chart for IBM (October $21^{\text {st }}$ to November 11 ${ }^{\text {th }}$ )

The seventh week started on November $11^{\text {th }}$ and IBM's stock was at a price of $\$ 82.74$. I purchased 12 shares of stock which is a total of $\$ 1,002.88$. Over the course of the week IBM's stock fell giving this week a loss of $\$ 31.92$. The eighth week I purchased 12 shares of IBM at a price of $\$ 80.08$ which is a total of $\$ 970.96$. IBM's stock rose slightly this week giving me a weekly profit of $\$ 6.84$. The profit was short lived as the ninth week I purchased 12 shares of IBM at a price of $\$ 80.65$ which is a total of $\$ 977.80$. IBM's stock fell this week giving the week a loss of $\$ 45.00$. Pictured below are the changes in IBM's stock during the period of November $11^{\text {th }}$ to December $2^{\text {nd }}$.


Figure 5.15 - Price Chart for IBM (November 11 ${ }^{\text {th }}$ to December 2 ${ }^{\text {nd }}$ )

The tenth week of trading started on December $2^{\text {nd }}$. IBM's stock was at a price of $\$ 76.90$. I purchased 13 shares of stock at this price costing a total of $\$ 1,009.70$. IBM's stock rose during this week giving the week a profit of $\$ 75.27$. The eleventh week consisted of purchasing 12 shares of IBM at a price of $\$ 82.69$ costing a total of $\$ 1,002.28$. IBM's stock continued to rise during this week which brought the weekly profit to $\$ 44.52$. The twelfth and final week of trading started with IBM's stock at a price of $\$ 86.40$. I purchased 11 shares of stock at this price costing a total of $\$ 960.40$. Over the course of this final week IBM's stock fell again giving the week a loss of $\$ 48.51$. Pictured below are the changes in IBM's stock during the period of December $2^{\text {nd }}$ to December $23^{\text {rd }}$.


Figure 5.16 - Price Chart for IBM (December $2^{\text {nd }}$ to December $23^{\text {rd }}$ )

Overall, IBM's stock performed poorly with most of the weeks having losses. Over the course of the twelve weeks I invested a total of $\$ 11,611.72$ in IBM which consisted of purchasing 131 total stocks at various prices. At the end of the trading period I sold all the stocks in my possession at a price of $\$ 81.99$ which gave a total return of $\$ 10,730.69$. I lost a total of $\$ 881.03$ during the entire trading period. Below is a table containing all of the weekly purchases of IBM stock and also the final sale of all the accumulated shares.

| DATE | SYMBOL | BUY/ <br> SELL | PRICE | SHARES | COMMI <br> SSION | NET COST | TOTAL <br> PROFIT/ <br> LOSS |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $09 / 30 / 08$ | IBM | BUY | $\$ 116.96$ | 8 | $\$ 10.00$ | $\$ 945.68$ |  |
| $10 / 07 / 08$ | IBM | BUY | $\$ 100.62$ | 9 | $\$ 10.00$ | $\$ 915.58$ |  |
| $10 / 14 / 08$ | IBM | BUY | $\$ 92.21$ | 10 | $\$ 10.00$ | $\$ 932.10$ |  |
| $10 / 21 / 08$ | IBM | BUY | $\$ 88.86$ | 11 | $\$ 10.00$ | $\$ 987.46$ |  |
| $10 / 28 / 08$ | IBM | BUY | $\$ 87.28$ | 11 | $\$ 10.00$ | $\$ 970.08$ |  |
| $11 / 04 / 08$ | IBM | BUY | $\$ 92.68$ | 10 | $\$ 10.00$ | $\$ 936.88$ |  |
| $11 / 11 / 08$ | IBM | BUY | $\$ 82.74$ | 12 | $\$ 10.00$ | $\$ 1,002.88$ |  |
| $11 / 18 / 08$ | IBM | BUY | $\$ 80.08$ | 12 | $\$ 10.00$ | $\$ 970.96$ |  |
| $11 / 25 / 08$ | IBM | BUY | $\$ 80.65$ | 12 | $\$ 10.00$ | $\$ 977.80$ |  |
| $12 / 02 / 08$ | IBM | BUY | $\$ 76.90$ | 13 | $\$ 10.00$ | $\$ 1,009.70$ |  |
| $12 / 09 / 08$ | IBM | BUY | $\$ 82.69$ | 12 | $\$ 10.00$ | $\$ 1,002.28$ |  |
| $12 / 16 / 08$ | IBM | BUY | $\$ 86.4$ | 11 | $\$ 10.00$ | $\$ 960.40$ |  |
| $12 / 23 / 08$ | IBM | SELL | $\$ 81.99$ | 131 | $\$ 10.00$ | $\$ 10,730.69$ | $\$ 881.03$ |

Table 5.4 - Trading Chart for IBM using Value Averaging

## Apple

The first week of the trading period started on September $30^{\text {th }}$. Apple's stock was at a price of $\$ 105.26$. I purchased 9 shares of stock in order to meet my average investment goal and this cost me a total of $\$ 957.34$. Over the week Apple's stock fell making the weekly loss $\$ 64.08$. For the second week I purchased 10 shares of Apple at a price of $\$ 98.14$ costing me a total of $\$ 991.40$. This week Apple's stock rose bringing the weekly profit to $\$ 59.40$ which almost entirely reversed the loss from the first week. The third week started with Apple's stock at a price of $\$ 104.08$. I purchased 9 shares of stock which is a total of $\$ 946.72$. During the week Apple’s stock fell losing me a total of $\$ 113.31$ for the week. This ended up to be the worst week I encountered during the trading period. Pictured below are the changes in Apple's stock during the period of September $30^{\text {th }}$ to October $21^{\text {st }}$.


Figure 5.17 - Price Chart for Apple (September 30 ${ }^{\text {th }}$ to October 21 ${ }^{\text {st }}$ )

The fourth week started on October $21^{\text {st }}$ where Apple’s stock was at a price of $\$ 91.49$. I purchased 10 shares of stock which cost a total of $\$ 924.90$. The stock rose slightly during the course of this week making me a total of $\$ 6.00$ which is not a significant gain. For the fifth week

I purchased 10 shares of Apple at a price of $\$ 92.09$. This cost a total of $\$ 930.90$. Over the week Apple's stock rose which made the weekly profit $\$ 148.70$ which made this the most profitable week of the trading period. The sixth week, however, started with Apple's stock at a price of $\$ 106.96$. I purchased 9 shares of stock costing a total of $\$ 972.64$. Over the week Apple’s stock fell which made this week's loss $\$ 99.72$. Pictured below are the changes in Apple's stock during the period of October $21^{\text {st }}$ to November $11^{\text {th }}$.


Figure 5.18 - Price Chart for Apple (October $21^{\text {st }}$ to November $\mathbf{1 1}^{\text {th }}$ )

November $11^{\text {th }}$ was the start of the seventh week. Apple's stock was at a price of $\$ 95.88$. I purchased 10 shares at this price costing a total of $\$ 968.80$. During the week, Apple's stock fell which ended up being a loss of $\$ 59.70$ for the week. For the eighth week I purchased 11 shares of stock at a price of $\$ 89.91$. This cost a total of $\$ 999.01$. During the week, Apple's stock rose to give me a profit of $\$ 33.44$. The ninth week started on November $25^{\text {th }}$ and Apple's stock was at a price of $\$ 92.95$. I purchased 10 shares of stock at this price which cost a total of $\$ 939.50$. Apple's stock fell slightly this week which gave this week a loss of $\$ 4.80$. Pictured below are the changes in Apple's stock during the period of November $11^{\text {th }}$ to December $2^{\text {nd }}$.


Figure 5.19 - Price Chart for Apple (November $11^{\text {th }}$ to December $\mathbf{2}^{\text {nd }}$ )

December $2^{\text {nd }}$ was the start of the tenth week and Apple's stock was at a price of $\$ 92.47$. I purchased 10 shares of stock at this price which cost a total of $\$ 934.70$. Over the week, Apple's stock rose to give this week a profit of $\$ 75.90$. The eleventh week started with a purchase of 9 shares of stock at a price of $\$ 100.06$. This cost a total of $\$ 910.54$. Apple's stock fell again during this week which ended up being a loss of $\$ 47.79$. The twelfth and final week started with Apple's stock at a price of $\$ 94.75$. I purchased 10 shares of stock at this price costing a total $\$ 957.50$. Apple's stock continued to fall making the loss for the final week $\$ 90.10$. Pictured below are the changes in Apple's stock during the period of December $2^{\text {nd }}$ to December $23^{\text {rd }}$.


Figure 5.20 - Price Chart for Apple (December $2^{\text {nd }}$ to December $23^{\text {rd }}$ )

Overall, Apple’s stock performed quite poorly. I invested a total of $\$ 11,433.95$ over the course of the trading period which was purchased through a total of 117 shares of stock at various prices. At the end of the trading period when I sold all the accumulated shares at a price of $\$ 85.74$. This resulted in a return of $\$ 10,021.58$. Apple's total loss ended up to be $\$ 1,412.37$ making Apple one of the worst stocks I invested in. Below is a table displaying all of the trades of Apple's stock over the course of the trading period.

| DATE | SYMBOL | BUY/ <br> SELL | PRICE | SHARES | COMMI <br> SSION | NET <br> COST | TOTAL <br> PROFIT/ <br> LOSS |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $09 / 30 / 08$ | APPL | BUY | $\$ 105.26$ | 9 | $\$ 10.00$ | $\$ 957.34$ |  |
| $10 / 07 / 08$ | APPL | BUY | $\$ 98.14$ | 10 | $\$ 10.00$ | $\$ 991.40$ |  |
| $10 / 14 / 08$ | APPL | BUY | $\$ 104.08$ | 9 | $\$ 10.00$ | $\$ 946.72$ |  |
| $10 / 21 / 08$ | APPL | BUY | $\$ 91.49$ | 10 | $\$ 10.00$ | $\$ 924.90$ |  |
| $10 / 28 / 08$ | APPL | BUY | $\$ 92.09$ | 10 | $\$ 10.00$ | $\$ 930.90$ |  |
| $11 / 04 / 08$ | APPL | BUY | $\$ 106.96$ | 9 | $\$ 10.00$ | $\$ 972.64$ |  |
| $11 / 11 / 08$ | APPL | BUY | $\$ 95.88$ | 10 | $\$ 10.00$ | $\$ 968.80$ |  |
| $11 / 18 / 08$ | APPL | BUY | $\$ 89.91$ | 11 | $\$ 10.00$ | $\$ 999.01$ |  |
| $11 / 25 / 08$ | APPL | BUY | $\$ 92.95$ | 10 | $\$ 10.00$ | $\$ 939.50$ |  |
| $12 / 02 / 08$ | APPL | BUY | $\$ 92.47$ | 10 | $\$ 10.00$ | $\$ 934.70$ |  |
| $12 / 09 / 08$ | APPL | BUY | $\$ 100.06$ | 9 | $\$ 10.00$ | $\$ 910.54$ |  |
| $12 / 16 / 08$ | APPL | BUY | $\$ 94.75$ | 10 | $\$ 10.00$ | $\$ 957.50$ |  |
| $12 / 23 / 08$ | APPL | SELL | $\$ 85.74$ | 117 | $\$ 10.00$ | $\$ 10,021.58$ | $\$ 1,412.37$ |

Table 5.5 - Trading Chart for Apple using Value Averaging

## Intel

The first week of the trading period was on September $30^{\text {th }}$. Intel's stock was at a price of $\$ 17.27$. I purchased 57 shares of stock at this price which cost a total of $\$ 994.39$. During the week, Intel dropped which gave the first week a loss of $\$ 71.25$. For the second week, I purchased 62 shares of stock at a price of $\$ 16.02$. This cost a total of $\$ 1,003.24$. Over the week Intel's stock rose bringing the week's profit to $\$ 60.14$. The third week started with a purchase of 58 shares of stock at a price of $\$ 16.99$. This cost a total of $\$ 995.42$. Intel's stock fell again giving the week a loss of $\$ 55.10$. Pictured below are the changes in Intel's stock during the period of September $30^{\text {th }}$ to October $21^{\text {st }}$.


Figure 5.21 - Price Chart for Intel (September $30^{\text {th }}$ to October 21 ${ }^{\text {st }}$ )

The fourth week started on October $21^{\text {st }}$ with a purchase of 62 shares of stock at a price of $\$ 16.04$ costing a total of $\$ 1,004.48$. Intel's stock fell slightly this week bringing the week's loss to $\$ 11.16$. For the fifth week I purchased 63 shares of stock at a price of $\$ 15.86$. This cost a total of $\$ 1,009.18$. Intel's stock rose slightly this week to bring the week's gain to $\$ 25.20$. The sixth week started with a price of $\$ 16.26$. I purchased 61 shares of stock at this price costing a total of
$\$ 1,001.86$. During the week, the stock fell significantly bringing the week's loss to $\$ 142.13$. This was the largest loss of the trading period. Pictured below are the changes in Intel's stock during the period of October $21^{\text {st }}$ to November $11^{\text {th }}$.


Figure 5.22 - Price Chart for Intel (October $21^{\text {st }}$ to November 11 ${ }^{\text {th }}$ )

The seventh week started on November $11^{\text {th }}$. Intel's stock was at a price of $\$ 13.93$. I purchased 71 shares of stock at this price costing a total of $\$ 999.03$. During the week Intel continued to drop bringing the week’s loss to $\$ 66.03$. For the eighth week I purchased 76 shares of stock at a price of $\$ 13.00$. This cost a total of $\$ 998.00$. Intel rose slightly this week giving the week a gain of $\$ 9.88$. The ninth week Intel continued to rise. I purchased 76 shares of stock for this week at a price of $\$ 13.13$. This cost a total of $\$ 1,007.88$. The ninth week's gain was $\$ 11.40$. Pictured below are the changes in Intel's stock during the period of October $21^{\text {st }}$ to November $11^{\text {th }}$.


Figure 5.23 - Price Chart for Intel (November $11^{\text {th }}$ to December $2^{\text {nd }}$ )

The tenth week started on December $2^{\text {nd }}$ with a purchase of 75 shares of Intel at a price of $\$ 13.28$. This cost a total of $\$ 1,006.00$. Over the course of the week Intel continued to rise seeing a gain of $\$ 76.50$. For the eleventh week I purchased 69 shares of stock at a price of $\$ 14.30$ costing a total of $\$ 996.70$. Over the course of the week Intel rose significantly which gave the week a gain of $\$ 93.15$. This was the largest gain accrued over a single week during the trading period. The twelfth and final week started with a purchase of 63 shares of stock at a price of $\$ 15.65$. This cost a total of $\$ 995.95$. During the week Intel dropped significantly to give the final week a loss of $\$ 82.95$. Pictured below are the changes in Intel's stock during the period of December $2^{\text {nd }}$ to December $23^{\text {rd }}$.


Figure 5.24 - Price Chart for Intel (December $2^{\text {nd }}$ to December $23^{\text {rd }}$ )

During the entire twelve week trading period I invested a total of $\$ 12,012.13$ in Intel. This was invested in the form of 793 shares purchased at various prices during the trading period. At the end of the trading period I sold all 793 shares at a price of $\$ 14.34$. This gave a total return of $\$ 11,361.62$ and making the total loss for the twelve week trading period $\$ 650.51$. While this is not a favorable loss, it is not a devastating loss for twelve weeks of trading.

| DATE | SYMBOL | BUY/ <br> SELL | PRICE | SHARES | COMMI <br> SSION | NET COST | TOTAL <br> PROFIT/ <br> LOSS |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $09 / 30 / 08$ | INTC | BUY | $\$ 17.27$ | 57 | $\$ 10.00$ | $\$ 994.39$ |  |
| $10 / 07 / 08$ | INTC | BUY | $\$ 16.02$ | 62 | $\$ 10.00$ | $\$ 1,003.24$ |  |
| $10 / 14 / 08$ | INTC | BUY | $\$ 16.99$ | 58 | $\$ 10.00$ | $\$ 995.42$ |  |
| $10 / 21 / 08$ | INTC | BUY | $\$ 16.04$ | 62 | $\$ 10.00$ | $\$ 1,004.48$ |  |
| $10 / 28 / 08$ | INTC | BUY | $\$ 15.86$ | 63 | $\$ 10.00$ | $\$ 1,009.18$ |  |
| $11 / 04 / 08$ | INTC | BUY | $\$ 16.26$ | 61 | $\$ 10.00$ | $\$ 1,001.86$ |  |
| $11 / 11 / 08$ | INTC | BUY | $\$ 13.93$ | 71 | $\$ 10.00$ | $\$ 999.03$ |  |
| $11 / 18 / 08$ | INTC | BUY | $\$ 13.00$ | 76 | $\$ 10.00$ | $\$ 998.00$ |  |
| $11 / 25 / 08$ | INTC | BUY | $\$ 13.13$ | 76 | $\$ 10.00$ | $\$ 1,007.88$ |  |
| $12 / 02 / 08$ | INTC | BUY | $\$ 13.28$ | 75 | $\$ 10.00$ | $\$ 1,006.00$ |  |
| $12 / 09 / 08$ | INTC | BUY | $\$ 14.30$ | 69 | $\$ 10.00$ | $\$ 996.70$ |  |
| $12 / 16 / 08$ | INTC | BUY | $\$ 15.65$ | 63 | $\$ 10.00$ | $\$ 995.95$ |  |
| $12 / 23 / 08$ | INTC | SELL | $\$ 14.34$ | 793 | $\$ 10.00$ | $\$ 11,361.62$ | $\$ 650.51$ |

Table 5.6 - Trading Chart for Intel using Value Averaging

## Amazon

The first week of trading started on September $30^{\text {th }}$. I purchased 15 shares of stock at a price of $\$ 63.35$. This cost a total of $\$ 960.25$. The first week saw a rise in Amazon’s stock for a gain of $\$ 28.20$. For the second week I purchased 15 shares of stock at a price of $\$ 65.23$. This cost a total of $\$ 988.45$. Over the course of the week Amazon's stock fell to give a loss of $\$ 140.55$. The third week consisted of a purchase of 17 shares of stock at a price of $\$ 55.86$. This cost a total of \$959.62. During the week Amazon's stock continued to decline giving the week a loss of $\$ 49.13$. Pictured below are the changes in Amazon's stock during the period of September $30^{\text {th }}$ to October $21^{\text {st }}$.


Figure 5.25 - Price Chart for Amazon (September 30 ${ }^{\text {th }}$ to October 21 ${ }^{\text {st }}$ )

The fourth week started on October $21^{\text {st }}$ with a purchase of 18 shares of stock at a price of $\$ 52.97$. This cost a total of $\$ 963.46$. Amazon's stock rose this week to produce a gain of $\$ 55.26$ for the week. For the fifth week I purchased 17 shares of stock at a price of $\$ 56.04$. This cost a total of $\$ 962.68$. Amazon continued to rise this week producing another gain of $\$ 40.97$. The sixth week started with a purchase of 17 shares at a price of $\$ 58.45$. This cost a total of
$\$ 1,003.65$. Over the course of the week Amazon fell very significantly producing a large loss of $\$ 201.45$ for the week. This was the largest loss experienced over the course of the trading period. Pictured below are the changes in Amazon's stock during the period of October $21^{\text {st }}$ to November $11^{\text {th }}$.


Figure 5.26 - Price Chart for Amazon (October $21^{\text {st }}$ to November 11 ${ }^{\text {th }}$ )

The seventh week started on November $11^{\text {th }}$ with a purchase of 21 shares of Amazon at a price of $\$ 46.60$. This cost a total of $\$ 988.60$. Over the week Amazon’s stock continued to plummet bringing this week's total loss to $\$ 171.36$. The eighth week started with a purchase of 26 shares of stock at a price of $\$ 38.44$. This cost a total of $\$ 1,009.44$. During the week Amazon’s stock started to reverse itself seeing a gain of $\$ 97.50$. For the ninth week I purchased 23 shares of stock at a price of $\$ 42.19$ costing a total of $\$ 980.37$. This week Amazon fell again producing a loss of $\$ 23.00$. Pictured below are the changes in Amazon's stock during the period of November $11^{\text {th }}$ to December $2^{\text {nd }}$.


Figure 5.27 - Price Chart for Amazon (November 11 ${ }^{\text {th }}$ to December 2 ${ }^{\text {nd }}$ )

The tenth week began on December $2^{\text {nd }}$ with a purchase of 24 shares of Amazon at a price of $\$ 41.19$. This cost a total of $\$ 998.56$. During the week Amazon's stock rose significantly to produce a gain of $\$ 245.28$. This was the largest gain experienced over the course of the trading period. The eleventh week started with a purchase of 19 shares of stock at a price of $\$ 51.41$. This cost a total of $\$ 986.79$. Amazon’s stock rose slightly again this week to give this week a gain of $\$ 23.18$. The twelfth and final week of trading consisted of purchasing 19 shares of stock at a price of $\$ 52.63$. This cost a total of $\$ 1,009.97$. This week Amazon's stock fell giving the final week of trading a loss of \$53.01. Pictured below are the changes in Amazon’s stock during the period of December $2^{\text {nd }}$ to December $23^{\text {rd }}$.


Figure 5.28 - Price Chart for Amazon (December $2^{\text {nd }}$ to December $23{ }^{\text {rd }}$ )

Overall Amazon’s stock performed almost evenly. Over the twelve week trading period I purchased a total of 231 shares of stock at various prices. The total amount invested was $\$ 11,811.84$. At the end of the trading period I sold all 231 shares at a price of $\$ 49.84$ to give a total return of $\$ 11,503.04$. This brought the total amount lost over the trading period to $\$ 308.80$. This is not a significant loss by any means over a twelve week trading period. Below is a table displaying all the weekly trades of Amazon's stock over the entire trading period.

| DATE | SYMBOL | BUY/ <br> SELL | PRICE | SHARES | COMMI <br> SSION | NET COST | TOTAL <br> PROFIT/ <br> LOSS |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $09 / 30 / 08$ | AMZN | BUY | $\$ 63.35$ | 15 | $\$ 10.00$ | $\$ 960.25$ |  |
| $10 / 07 / 08$ | AMZN | BUY | $\$ 65.23$ | 15 | $\$ 10.00$ | $\$ 988.45$ |  |
| $10 / 14 / 08$ | AMZN | BUY | $\$ 55.86$ | 17 | $\$ 10.00$ | $\$ 959.62$ |  |
| $10 / 21 / 08$ | AMZN | BUY | $\$ 52.97$ | 18 | $\$ 10.00$ | $\$ 963.46$ |  |
| $10 / 28 / 08$ | AMZN | BUY | $\$ 56.04$ | 17 | $\$ 10.00$ | $\$ 962.68$ |  |
| $11 / 04 / 08$ | AMZN | BUY | $\$ 58.45$ | 17 | $\$ 10.00$ | $\$ 1,003.65$ |  |
| $11 / 11 / 08$ | AMZN | BUY | $\$ 46.60$ | 21 | $\$ 10.00$ | $\$ 988.60$ |  |
| $11 / 18 / 08$ | AMZN | BUY | $\$ 38.44$ | 26 | $\$ 10.00$ | $\$ 1,009.44$ |  |
| $11 / 25 / 08$ | AMZN | BUY | $\$ 42.19$ | 23 | $\$ 10.00$ | $\$ 980.37$ |  |
| $12 / 02 / 08$ | AMZN | BUY | $\$ 41.19$ | 24 | $\$ 10.00$ | $\$ 998.56$ |  |
| $12 / 09 / 08$ | AMZN | BUY | $\$ 51.41$ | 19 | $\$ 10.00$ | $\$ 986.79$ |  |
| $12 / 16 / 08$ | AMZN | BUY | $\$ 52.63$ | 19 | $\$ 10.00$ | $\$ 1,009.97$ |  |
| $12 / 23 / 08$ | AMZN | SELL | $\$ 49.84$ | 231 | $\$ 10.00$ | $\$ 11,503.04$ | $\$ 308.80$ |

Table 5.7 - Trading Chart for Amazon using Value Averaging

## Cisco

The first week of trading started on September $30^{\text {th }}$ with a purchase of 45 shares of Cisco at a price of $\$ 21.79$. This cost a total of $\$ 990.55$. Over the course of the week Cisco’s stock declined bringing the week's loss to $\$ 132.75$. This made the first week of trading the week with the largest loss out of all the twelve weeks of trading. The second week consisted of a purchase of 53 shares of stock at a price of $\$ 18.84$. This cost a total of $\$ 1,008.52$. Cisco's stock rose slightly during this week to see a gain of $\$ 22.79$ for the week. For the third week I purchased 51 shares of stock at a price of $\$ 19.27$ which was a total of $\$ 992.77$. Cisco dropped again this week to give the week a loss of $\$ 15.81$. Pictured below are the changes in Cisco's stock during the period of September $30^{\text {th }}$ to October $21^{\text {st }}$.


Figure 5.29 - Price Chart for Cisco (September $30^{\text {th }}$ to October 21 ${ }^{\text {st }}$ )

The fourth week started on October $21^{\text {st }}$ with a purchase of 52 shares of Cisco at a price of $\$ 18.96$. This cost a total of $\$ 995.92$. During the course of the week Cisco’s stock declined bringing the week's loss to $\$ 33.80$. The fifth week started with a purchase of 54 shares of stock at a price of $\$ 18.31$ to cost a total of $\$ 998.74$. Cisco’s stock rose slightly this week to see a gain
of $\$ 1.08$. The sixth week consisted of a purchase of 54 shares of stock at a price of $\$ 18.33$. This cost a total of $\$ 999.82$. Cisco’s stock fell again this week to give the week a total loss of $\$ 62.10$. Pictured below are the changes in Cisco's stock during the period of October $21^{\text {st }}$ to November $11^{\text {th }}$.


Figure 5.30 - Price Chart for Cisco (October $21^{\text {st }}$ to November $11^{\text {th }}$ )

The seventh week started on November $11^{\text {th }}$. Cisco's stock was at a price of $\$ 17.18$. I purchased 58 shares of stock at this price which was a total of $\$ 1,006.44$ invested. During the week Cisco's stock continued to fall which produced a loss of $\$ 42.34$ for the week. The eighth week saw another drop when I purchased 60 shares of stock at a price of $\$ 16.45$ which cost a total of $\$ 997.00$. This week's loss was $\$ 61.80$. The ninth week consisted of a purchase of 64 shares of Cisco at a price of $\$ 15.42$. This cost a total of $\$ 996.88$. Cisco dropped slightly during this week to give a loss of $\$ 6.40$. Pictured below are the changes in Cisco's stock during the period of November $11^{\text {th }}$ to December $2^{\text {nd }}$.


Figure 5.31 - Price Chart for Cisco (November $11^{\text {th }}$ to December $\mathbf{2}^{\text {nd }}$ )

The tenth week started on December $2^{\text {nd }}$ with a purchase of 65 shares of stock at a price of $\$ 15.32$ to be a total cost of $\$ 1,005.80$. This week Cisco rose significantly to produce a gain of $\$ 119.60$ for the week. This was the largest gain experienced over the trading period. For the eleventh week I purchased 58 shares of stock at a price of $\$ 17.16$ to be a total cost of $\$ 1,005.28$. Cisco dropped slightly this week to produce a loss of $\$ 9.86$. The twelfth and final week of trading started with a purchase of 58 shares of Cisco at a price of $\$ 16.99$. This was a total cost of $\$ 995.42$. This week Cisco dropped again to see a loss of $\$ 35.96$ for the week. Pictured below are the changes in Cisco's stock during the period of December $2^{\text {nd }}$ to December $23^{\text {rd }}$.


Figure 5.32 - Price Chart for Cisco (December $\mathbf{2}^{\text {nd }}$ to December 23 ${ }^{\text {rd }}$ )

Overall Cisco performed poorly. Over the course of the trading period I invested a total of $\$ 11,993.14$ in Cisco. This amount was invested in a total of 672 shares of stock purchased at various prices throughout the trading period. At the end of the twelve week trading period I sold all 672 shares at a price of $\$ 16.37$ to produce a return of $\$ 10,990.64$. This made the total loss for the trading period $\$ 1,002.50$. Displayed below is a table containing all the trades of Cisco stock during the trading period.

| DATE | SYMBOL | BUY/ <br> SELL | PRICE | SHARES | COMMI <br> SSION | NET <br> COST | TOTAL <br> PROFIT/L <br> OSS |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $09 / 30 / 08$ | CSCO | BUY | $\$ 21.79$ | 45 | $\$ 10.00$ | $\$ 990.55$ |  |
| $10 / 07 / 08$ | CSCO | BUY | $\$ 18.84$ | 53 | $\$ 10.00$ | $\$ 1,008.52$ |  |
| $10 / 14 / 08$ | CSCO | BUY | $\$ 19.27$ | 51 | $\$ 10.00$ | $\$ 992.77$ |  |
| $10 / 21 / 08$ | CSCO | BUY | $\$ 18.96$ | 52 | $\$ 10.00$ | $\$ 995.92$ |  |
| $10 / 28 / 08$ | CSCO | BUY | $\$ 18.31$ | 54 | $\$ 10.00$ | $\$ 998.74$ |  |
| $11 / 04 / 08$ | CSCO | BUY | $\$ 18.33$ | 54 | $\$ 10.00$ | $\$ 999.82$ |  |
| $11 / 11 / 08$ | CSCO | BUY | $\$ 17.18$ | 58 | $\$ 10.00$ | $\$ 1,006.44$ |  |
| $11 / 18 / 08$ | CSCO | BUY | $\$ 16.45$ | 60 | $\$ 10.00$ | $\$ 997.00$ |  |
| $11 / 25 / 08$ | CSCO | BUY | $\$ 15.42$ | 64 | $\$ 10.00$ | $\$ 996.88$ |  |
| $12 / 02 / 08$ | CSCO | BUY | $\$ 15.32$ | 65 | $\$ 10.00$ | $\$ 1,005.80$ |  |
| $12 / 09 / 08$ | CSCO | BUY | $\$ 17.16$ | 58 | $\$ 10.00$ | $\$ 1,005.28$ |  |
| $12 / 16 / 08$ | CSCO | BUY | $\$ 16.99$ | 58 | $\$ 10.00$ | $\$ 995.42$ |  |
| $12 / 23 / 08$ | CSCO | SELL | $\$ 16.37$ | 672 | $\$ 10.00$ | $\$ 10,990.64$ | $\$ 1,002.50$ |

Table 5.8 - Trading Chart for Cisco using Value Averaging

### 5.4 Analysis

Overall the Value Averaging trading strategy performed poorly, however, most of the failure was due to the decline in the market as a whole and not specifically the fault of the trading strategy implemented. Out of the eight companies I invested in only one of those companies, Verizon, yielded a positive return of $\$ 832.51$. The other seven companies ranged from an overall loss of $\$ 1,584.42$ to $\$ 308.80$. Due to the time constraints of the investment period I was forced to invest on a weekly schedule despite the fact that the Value Averaging trading strategy is typically used on a longer scale where trades occur once a month, or even further apart. Despite this setback I do not believe that the shortened trading schedule had an outstanding effect on the trades. Over the course of the weeks the largest drop over the course of a week was a drop of $\$ 211.45$ while the largest weekly gain I saw was a gain of $\$ 135.28$, both of which were from shares of Amazon. Over the course of the twelve weeks the stocks dropped an average of $\$ 24.43$ each week. Pictured below is a graph which displays the overall return, average weekly return, max weekly loss, and max weekly gain for all the eight stocks I invested in.


Figure 5.33 - Overall and Weekly Return Results for Value Averaging

As you can see both the three weekly averages are relatively constant throughout all the eight stocks, while the overall fluctuates immensely. The top four companies which had the largest losses were Microsoft, Apple, Google, and Cisco in descending order. Microsoft had a loss of $\$ 1,584.42$ and Apple had a loss of $\$ 1,412.37$ giving them the top two slots for largest losses. This is not a surprise due to the fact that the technology industry was hit hard by the economic problems. Verizon, which had an overall return of $\$ 832.51$, had a weekly average loss of $\$ 1.57$, making it the only outlier, which means over the course of the trading period Verizon's stock stayed relatively constant and unaffected by the difficult economic times.

Amazon, which had a rather insignificant overall loss of $\$ 308.80$, had the largest weekly loss and the largest weekly gain of $\$ 211.45$ and $\$ 235.38$ respectively. I find it interesting that one of the companies that loss a smaller amount of money had the largest weekly losses and weekly gains. The majority of the stocks had almost a one to one relationship between their maximum weekly loss and maximum weekly gain while IBM and Intel had around a two to one ratio, and Cisco had slightly more than a one to one ratio.

Over the course of the twelve week trading period I invested a total of \$92,763.92 into 2,898 shares which was just shy of my maximum of $\$ 100,000$. At the completion of the trading period I sold back the accumulated shares for a return of $\$ 86,649.06$ which resulted in an overall loss of $\$ 6,114.86$. I believe that the Value Averaging trading strategy negated some of the losses I could have accrued had I employed a Buy and Hold trading strategy. Rather than investing all my money in the stock at one time it allowed me to slowly invest my money and to adjust the amount invested while taking into account the current performance of the stock. While I did lose $\$ 6,114.86$ over the trading period, this can be accounted for due to the economic problems and the overall state of the stock market during the trading period.

Had I employed the Buy and Hold trading strategy where I made an initial investment in each company using the number of shares invested over the course of the Value Averaging Trading strategy and then selling all the shares of each company back at the end of the twelve weeks, I would have had an overall loss of $\$ 21,472.79$. This is significantly larger than the loss I accrued over the course of Value Averaging which was a loss of $\$ 6,114.86$. The loss I would have accrued had I employed the Buy and Hold strategy is slightly more than 3.5 times the loss I accrued while using Value Averaging. Below is a table depicting the theoretical starting price, ending price, number of shares, and overall loss for each company had I employed the Buy and Hold strategy. This graph should show data that speaks to the benefits of using the Value Averaging trading strategy rather than the Buy and Hold strategy.

| Company | Shares | Initial Price | Final Price | Net Gain/Loss |
| :--- | :--- | :--- | :--- | :--- |
| GOOG | 30 | $\$ 381.00$ | $\$ 297.11$ | $\$ 2,516.70$ |
| MSFT | 542 | $\$ 26.69$ | $\$ 19.18$ | $\$ 4,070.42$ |
| VZ | 382 | $\$ 30.62$ | $\$ 33.41$ | $\$ 1065.78$ |
| APPL | 117 | $\$ 105.26$ | $\$ 85.74$ | $\$ 2,283.84$ |
| INTC | 793 | $\$ 17.27$ | $\$ 14.34$ | $\$ 2,323.49$ |
| AMZN | 231 | $\$ 63.35$ | $\$ 49.84$ | $\$ 3,120.81$ |
| CSCO | 672 | $\$ 21.79$ | $\$ 16.37$ | $\$ 3,642.24$ |
| IBM | 131 | $\$ 116.96$ | $\$ 81.99$ | $\$ 4,581.07$ |

Table 5.9 - Theoretical Results Using the Buy and Hold Strategy

## 6 Comparisons

Due to the declining market the success of each trading strategy was greatly hindered. The Fundamental Trading Strategy had an overall loss of $\$ 23,296$ during the period. The Scalping Trading Strategy had an overall gain \$5,524.5 during the period. The Buy and Hold Trading Strategy had an overall loss of $\$ 22,001.22$ during the period. The Value Averaging Trading Strategy had an overall loss of $\$ 6,114.86$. This resulted in a combined loss of $\$ 45,888.08$ over the trading period while each trading strategy performed at its own level. Below we will compare the individual strategies analyzing their strengths and weaknesses.

Due to the nature of the Fundamental Trading Strategy, and the Value Averaging Strategy they can be easily compared to the Buy and Hold method of trading. Fundamental trading is almost identical to Buy and Hold, however, each trade is based on the knowledge of the current, and past, market as well as the company history and performance. While Buy and Hold does take into account all of these factors, the Fundamental trading strategy takes these as its basis. The overall performance of both of these methods was remarkably similar with a ratio of 0.94 with Buy and Hold’s overall loss compared to the Fundamental strategies’ overall loss. The fact that their performance is similar is due not only to the fact that their strategies are very similar but also due to the similar performance of the market across all sectors of industry. Given a longer simulation period it can be expected that these two trading methods have equal performances over that period.

The Value Averaging method is designed to improve upon the Buy and Hold trading strategy by breaking up the large single investment into multiple smaller investments over the course of the trading period. Not only does it create more investments but each additional investment is increased or decreased in order to meet a selected target investment meaning that
each investment is based purely on the current performance of the market. This allows the investor to invest in synch with the current market performance which should yield a significant difference in overall performance when compared to the Buy and Hold strategy. The Value Averaging had an overall loss of $\$ 6,114.86$ while the Buy and Hold method had an overall loss of $\$ 22,001.72$ which is a ratio of 0.28 comparing the Value Averaging total loss to the Buy and Hold total loss. This shows that the Value Averaging method lost almost one third the amount that the Buy and Hold strategy lost during the same period of trading. This is a significant performance increase.

The Scalping trading strategy is a different type of strategy where the individual shares are sold immediately upon gaining an amount of money. This allows the investor to diminish the chance of accumulating large losses over the course of time. While this strategy may be successful it typically does not yield large gains. The Scalping trading method had an overall gain of $\$ 5,524.50$ over the course of the trading period thereby making it the only trading strategy to earn a profit. This is quite remarkable given the current state of the stock market. However, one reason this trading strategy performed well is due to the fact that if a stock did not increase in value over the trading period it was not sold which completely eliminates any and all losses. The expectation is that over a longer period of time these stocks will rebound and then be sold upon increasing in value. Due to the constraints of this simulation, however, this was not possible.

Depending on the state of the stock market different trading strategies may be more beneficial. Based on the results of our simulation it appears that during times when the stock market is down overall the best strategy, out of the strategies we investigated, is the Value Averaging trading method. It provides the investor with the best ability to minimalize their losses
during a time when the market is losing money overall. However, the Buy and Hold method or the Fundamental method of trading are consistent performers during periods when the market is stable. These strategies would maximize profit during times when the market is increasing, while the Value Averaging and Scalping techniques would still make a profit, however, the amount gained would be significantly less than that gained by the other two methods. The Scalping method would also be beneficial during periods when the market is down; however, if the market never recovers then neither will your investments. Overall, the most successful method we investigated was the Value Averaging method. This method provides the best chances to perform well independent of the state of the market. While the strategy may result in losses from time to time, overall, the frequent smaller investments based on the performance of the market provide the best chances for success in any market conditions.

## 8 Bibliography

Amazon.com. (2009). Amazon.com Investor Relations: Corporate Governance. Retrieved February 09, 2009, from Amazon.com: http://phx.corporate-ir.net/phoenix.zhtml?c=97664\&p=irol-govHighlights

Ambac. (2008). Ambac Financial Group, Inc. Retrieved November 09, 2008, from http://www.ambac.com

Arena Resources. (2008). Arena Resources Inc. - Oil and Gas Development. Retrieved November 02, 2008, from http://www.arenaresourcesinc.com/Pages/company.html

Beattie, A. (2009). Choosing Between Dollar-Cost And Value Averaging. Retrieved February 09, 2009, from Investopedia: http://www.investopedia.com/articles/stocks/07/DCAvsVA.asp

Bloomberg. (2008, September 16). Best Buy's best buy: Napster. Retrieved February 16, 2009, from Vanbots.com: http://www2.canada.com/theprovince/news/money/story.html?id=74995622-0f41-415c-9041-3c77f7d9a542

Caterpiller. (2009). Caterpiler: Home. Retrieved November 09, 2008, from http://www.cat.com/cda/layout?m=8703\&x=7

Chaffey, D. (2008, April 19). Apple case study / Apple business strategy : DaveChaffey.com Internet Marketing. Retrieved February 16, 2009, from DaveChaffey.com: http://www.davechaffey.com/E-commerce-Internet-marketing-case-studies/apple-case-study-apple-business-strategy

Cisco. (2009). Introduction - Our Employees. Retrieved February 09, 2009, from Cisco Systems: http://www.cisco.com/web/about/citizenship/employees/index.html

Cisco. (2009). Introduction - Social Investments - Cisco Systems. Retrieved February 09, 2009, from Cisco Systems: http://www.cisco.com/web/about/citizenship/employees/index.html

Cisco. (2009). News@Cisco -> Corporate Overview. Retrieved February 09, 2009, from Cisco Systems: http://newsroom.cisco.com/dlls/corpinfo/corporate_overview.html

CombinatoRx. (2008). CombinatoRx. Retrieved November 09, 2008, from http://www.combinatorx.com
Commission, U. S. (2008). Investment Advisers Act of 1940. Retrieved February 09, 2009, from http://www.sec.gov/rules/extra/ia1940.htm

Deere and Company. (2008). General Information Deere \& Company. Retrieved November 02, 2008, from http://www.deere.com/en_US/compinfo/index.html?location=ourcompany\&link=aboutus

Diana Shipping. (2008). Diana Shipping. Retrieved November 02, 2008, from http://www.dianashippinginc.com/web/pages.fds?page=5

D'Innocenzio, A. (20088, August 14). Wal-Mart says 2Q profit up 17 pct, raises outlook - USATODAY.com. Retrieved February 16, 2009, from USAToday.com: http://www.usatoday.com/money/economy/2008-08-14-1130743495_x.htm

DryShips, Inc. (2008). DryShips Inc. - Corporate Information. Retrieved November 02, 2008, from http://www.dryships.com/index.cfm?get=profile

Elmer-Dewitt, P. (2008, August 13). Best Buy to sell iPhones starting Sept. 7 - Apple 2.0. Retrieved February 16, 2009, from CNNMoney.com: http://apple20.blogs.fortune.cnn.com/2008/08/13/best-buy-to-sell-iphones-starting-sept-7/

Emling, S. (2009, September 01). Office Depot grows in Europe with acquisition in Sweden / ajc.com. Retrieved February 2009, 2009, from AJC.com:
http://www.ajc.com/gwinnett/content/shared/news/stories/2008/08/OFFICEDEPOT_EUROPE29_PBP.ht ml?cxntlid=inform_artr

EnergyCurrent. (2008, September 16). Offshore Oil \& Gas News: T-9 gets another three years with ExxonMobil. Retrieved March 2, 2009, from EnergyCurrent.com:
http://www.energycurrent.com/index.php?id=2\&storyid=13117

Evergreen Energy, Inc. (2008). Welcome to Evergreen Energy Inc. Retrieved November 09, 2008, from http://www.evgenergy.com

ExonMobil. (2009). company profile. Retrieved March 2, 2009, from ExxonMobil: http://www.exxonmobil.com/Corporate/about_who_profile.aspx

Fox Business. (2009). GuestLogix provides Southwest Airlines Customers with 'freedom from cash' experience and supports introduction of new products and services on-board - FOXBusiness.com. Retrieved February 16, 2009, from FOXBusiness.com:
http://www.foxbusiness.com/story/markets/industries/retail/guestlogix-provides-southwest-airlines-customers-freedom-cash-experience/-2105638978

Funding Universe. (2009). Amazon.com, Inc. -- Company History. Retrieved February 09, 2009, from Funding Universe: http://www.fundinguniverse.com/company-histories/Amazoncom-Inc-CompanyHistory.html

Funding Universe. (2009). Apple Computer, Inc. -- Company History. Retrieved February 09, 2009, from Funding Universe: http://www.fundinguniverse.com/company-histories/Apple-Computer-Inc-CompanyHistory.html

Funding Universe. (2009). Intel Corporation -- Company History. Retrieved February 09, 2009, from Funding Universe: http://www.fundinguniverse.com/company-histories/Intel-Corporation-CompanyHistory.html

Funding Universe. (2009). Microsoft Corporation -- Company History. Retrieved February 09, 2009, from Funding Universe: http://www.fundinguniverse.com/company-histories/Microsoft-Corporation-Company-History.html

Gad, S. (2008, August 20). RealMoney.com: Whole Foods Is Worhth a Whole Lot More. Retrieved February 16, 2009, from RealMoney.com:
http://www.thestreet.com/p/rmoney/investing/10434043.html

General Electric. (2009). GE Products \& Services Overview: Introduction, Business, Categories. Retrieved Februarary 16, 2009, from GE.com: http://www.ge.com/products_services/index.html

Gerstner, L. V. (2009). IBM Management Principles and Practices. Retrieved February 16, 2009, from IBM.com: http://www-03.ibm.com/ibm/history/documents/pdf/management.pdf

Google, Inc. (2009). Corporate Information - Google Milestones. Retrieved February 09, 2009, from Google: http://www.google.com/corporate/history.html

Google, Inc. (2009). Corporate Information - Our Philosophy. Retrieved February 09, 2009, from Google: http://www.google.com/corporate/tenthings.html

Grenon, A. (2009). NEWSMAKER-Boeing CEO McNerney gambles on strike - Forbes.com. Retrieved February 16, 2009, from Forbes.com: http://www.forbes.com/feeds/afx/2008/09/14/afx5421252.html

Hormel Foods. (2009). Hormel Foods > Our Way. Retrieved February 09, 2009, from http://www.hormelfoods.com/about/company/ourWay.aspx

IBM. (2009). IBM Archives: History of IBM. Retrieved February 09, 2009, from IBM: http://www03.ibm.com/ibm/history/history/history_intro.html

Intel Corporation. (2009). Intel Corporation - Corporate Strategy. Retrieved February 16, 2009, from Intel: http://www.intc.com/strategy.cfm

Investopedia.com. (2009). Scalping. Retrieved February 09, 2009, from http://www.investopedia.com/terms/s/scalping.asp

Krakow, G. (2008, November 11). Sony HD Radio Tuner Hits All Right Notes | Page 2 of 3 | Efficient Innovators | Financial Articels \& Investing News | TheStreet.com. Retrieved March 2, 2009, from TheStreet.com: http://www.thestreet.com/story/10446978/2/sony-hd-radio-tuner-hits-all-rightnotes.html

LaMotta, L. (2008, September 10). AirForce Has Boeing's Back - Forbes.com. Retrieved March 2, 2009, from Forbed.com: http://www.forbes.com/2008/09/10/boeing-northrop-closer-markets-equitiescx_lal_0910markets37.html

Levy, M. (2008, October 16). FOXNews.com - Hershey's 3Q profit doubles on lower cost - Business and Money | Business News | Financial News. Retrieved February 16, 2009, from FoxNews.com:
http://www.foxnews.com/printer_friendly_wires/2008Oct16/0,4675,EarnsHershey,00.html
Lipton, J. (2008, August 26). Gurus Go With Amgen, Sell Shire - Forbes.com. Retrieved February 16, 2009, from Forbes.com: http://www.forbes.com/2008/08/26/amgn-rtk-shpgy-pfgurus_ان_0825gurupicks_inl.html

Magin, J. L. (2008, September 5). Ready to rumble - Pacific Business News (Honolulu). Retrieved February 16, 2009, from Business Journals: http://www.bizjournals.com/pacific/stories/2008/09/08/story2.html

Microsoft Corporation. (2009). About Microsoft: Your Potential. Our Passion. Retrieved February 16, 2009, from Microsoft.com: http://www.microsoft.com/about/default.mspx

Mnyandu, E. (2008, November 13). US STOCKS-Market set for flat open on Wal-Mart, data - Forbes.com. Retrieved March 2, 2009, from Forbes.com:
http://www.forbes.com/feeds/afx/2008/11/13/afx5688969.html

Perez, M. (2008, November 12). Sony Xperia X1 Hitting Stores in November -- Sony Smartphone -InformationWeek. Retrieved February 16, 2009, from InformationWeek.com:
http://www.informationweek.com/news/personal_tech/smartphones/showArticle.jhtml;jsessionid=PX OPHY3MKWF1YQSNDLPCKHSCJUNN2JVN?articleID=212002242\&subSection=Hardware

Pfizer Pharmaceuticals. (2009). Corporate Governance at Pfizer | Pfizer: the world's largest reserachbased pharmaceutical company. Retrieved February 16, 2009, from Pfizer: http://www.pfizer.com/about/corporate_governance/corporate_governance.jsp

Pollack, A. (2008, September 16). Good Results for Bone Drug Buoy AMgen. Retrieved February 16, 2009, from The New York Times:
http://www.nytimes.com/2008/09/17/business/17drug.html?_r=1\&ref=todayspaper

Rensola. (2008). Rensola. Retrieved November 09, 2008, from http://www.renesola.com/ourcompany.aspx?action=1

Research In Motion. (2008). Research In Motion. Retrieved November 09, 2008, from http://www.rim.net

South Florida Business Journal. (2008, August 13). Office Depot allies with Netbizz - South Florida Business Journal. Retrieved February 16, 2009, from South Florida Business Journal: http://www.bizjournals.com/southflorida/stories/2008/08/11/daily29.html?ana=from_rss

Suhre, M. (2009). Invest FAQ: Dollar Cost and Value Averaging. Retrieved February 09, 2009, from The Investment FAQ: http://invest-faq.com/cbc/strat-dol-val-avg.html

The Street. (2008, September 24). Nike Beats Profit Estimates | Business News Update | Financial Articles \& Investing News / TheStreet.com. Retrieved February 16, 2009, from TheStreet.com:
http://www.thestreet.com/story/10439176/1/nike-beats-profit-
estimates.html?puc=googlen\&cm_ven=GOOGLEN\&cm_cat=FREE\&cm_ite=NA

Tianyu, Y. (2008, August 23). Nike benefits from Beijing Olympics, leading China's sports market. Retrieved February 16, 2009, from China Daily: http://www.chinadaily.com.cn/bizchina/200808/23/content_6964508.htm

Tomasson, L. (2009, February 23). Bloomberg.com: U.S. Retrieved February 23, 2009, from Bloomberg.com: http://www.bloomberg.com/apps/news?pid=20601103\&sid=akf.aRGsNZgQ\&refer=us

Verizon. (2009). Verizon / Corporate Responsibility | Commitment and Values. Retrieved February 09, 2009, from Verizon: http://responsibility.verizon.com/values/our-values.htm

Verizon. (2009). Verizon / Investor Relations | Company Profile | Corporate History. Retrieved February 09, 2009, from Verizon: http://investor.verizon.com/profile/history/

Walsh, C. (2008, September 16). Can Southwest's Airlines' stunning success continue? Retrieved March 2, 2009, from ScrippsNews.com: http://www.scrippsnews.com/node/36322

Yahoo! Best Buy. (2009). BBY: Profile for BEST BUY CO INC - Yahoo! Finance. Retrieved February 16, 2009, from Yahoo! Finance: http://finance.yahoo.com/q/pr?s=bby

Yahoo! Boeing. (2009). The Boeing Company Company Profile - Yahoo! Finance. Retrieved February 16, 2009, from Yahoo! Finance: http://biz.yahoo.com/ic/10/10221.html

Yahoo! Exxon Mobil. (2009). XOM: Profile for EXXON MOBIL CP - Yahoo! Finance. Retrieved February 16, 2009, from Yahoo! Finance: http://finance.yahoo.com/q/pr?s=XOM

Yahoo! Finance Amgen. (2009). Amgen Inc. Company Profile - Yahoo! Finance. Retrieved February 16, 2009, from Yahoo! Finance: http://biz.yahoo.com/ic/12/12623.html

Yahoo! Hershey. (2009). HSY: Profile for THE HERSHEY COMPANY. Retrieved February 16, 2009, from Yahoo! Finanace: http://finance.yahoo.com/q/pr?s=hsy

Yahoo! Nike. (2009). NIKE, Inc. Company Profile - Yahoo! Finance. Retrieved February 16, 2009, from Yahoo! Finance: http://biz.yahoo.com/ic/14/14254.html

Yahoo! Office Depot. (2009). ODP: Profile for OFFICE DEPOT INC - Yahoo! Finance. Retrieved February 16, 2009, from Yahoo! Finance: http://finance.yahoo.com/q/pr?s=odp

Yahoo! Sony. (2009). SNE: Profile for SONY CP ADR - Yahoo! Finance. Retrieved February 16, 2009, from Yahoo! Finance: http://finance.yahoo.com/q/pr?s=SNE

Yahoo! Southwest Airlines. (2009). LUV: Profile for SOUTHWEST AIRLINES - Yahoo! Finance. Retrieved February 16, 2009, from Yahoo! Finance: http://finance.yahoo.com/q/pr?s=LUV

Yahoo! Wal-Mart. (2009). WMT: Profile for WAL MART STORES - Yahoo! Finance. Retrieved March 2, 2009, from Yahoo! Finance: http://finance.yahoo.com/q/pr?s=wmt

Yahoo! Whole Foods. (2009). WFML: Profile for Whole Foods Marktet, Inc. - Yahoo! Finance. Retrieved February 16, 2009, from Yahoo! Finance: http://finance.yahoo.com/q/pr?s=wfmi

