## March 2009

# Stock Market Simulation 

Edward Chau<br>Worcester Polytechnic Institute<br>Karan Singh Arora<br>Worcester Polytechnic Institute<br>Mark Anthony Brodaski<br>Worcester Polytechnic Institute<br>Michal L. Parzych<br>Worcester Polytechnic Institute<br>Ralph Louis Campanelli<br>Worcester Polytechnic Institute

Follow this and additional works at: https://digitalcommons.wpi.edu/iqp-all

## Repository Citation

Chau, E., Arora, K. S., Brodaski, M. A., Parzych, M. L., \& Campanelli, R. L. (2009). Stock Market Simulation. Retrieved from https://digitalcommons.wpi.edu/iqp-all/357

## 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

By


Date: March 6, 2009


#### Abstract

During this project the group performed a ten-week stock market simulation in which they experimented with different investing strategies to learn how to navigate the stock market. They researched six different investing and trading methods in order to better understand investing. The experience gained from this project will help them become better investors in the future and help them manage their personal finances wisely.


## Acknowledgements

We would like to thank Professor Dalin Tang for providing guidance and proofreading the many drafts of this report. In addition, Investopedia deserves thanks for providing the great simulator we used to trade our stocks and manage our portfolios. Mark Brodaski also deserves to be acknowledged for volunteering to compile the report each week and correct formatting errors.

## Table of Contents

Abstract ..... ii
Acknowledgements ..... iii
Table of Contents ..... iv
List of Figures ..... vii
List of Tables ..... viii
Chapter 1: Introduction ..... 1
1.1 Introduction ..... 1
1.2 Goals ..... 1
1.3 Project Overview ..... 2
Chapter 2: Stock Market Overview ..... 4
2.1 The World's Stock Markets ..... 4
2.2 U.S. Stock Market History ..... 7
2.3 Economic and Political Effects on Stocks ..... 11
Chapter 3: Stock Investing Tools and Information Resources ..... 15
3.1 Finding Reliable Investing Information and Avoiding Bias ..... 15
3.2 Researching Individual Companies/ Important Things to Look for in an Annual Report ..... 19
3.3 Researching Mutual Funds and other Investment Vehicles ..... 22
3.4 Comparisons of Popular Brokerage Firms ..... 25
3.5 Computer Programs and Other Tools for Tracking and Selecting Stocks ..... 28
Chapter 4: Investment Comparisons ..... 31
4.1 Savings Accounts/Certificates of Deposit ..... 31
4.2 Bonds ..... 33
4.3 Individual Stocks ..... 37
4.4 Mutual Funds ..... 38
4.5 Hedge Funds ..... 43
4.6 Limited Partnerships ..... 46
4.7 Real Estate ..... 48
4.8 Small Business ..... 49
Chapter 5: Stock Investing Strategies ..... 52
5.1 Long Term versus Short Term Investing ..... 52
5.2 Fundamental vs. Technical Analysis ..... 54
5.3 Diversification ..... 57
5.4 Short Selling, Day Trading, Put Options, and Call Options ..... 59
5.5 Factoring in Taxes When Considering Investment Strategies ..... 60
5.6 Investing in Active and Retirement Accounts ..... 62
5.7 Conclusion- Why Invest in Stocks and How Much of an Investor's Portfolio Should Consist of Stocks? ..... 63
Chapter 6: Portfolio 1 - Fundamental and Technical Analysis ..... 66
6.1 Companies Selected ..... 66
6.2 Trading ..... 77
6.3 Analysis ..... 108
Chapter 7: Portfolio 2 - Companies With Historical Strong Market Performance ..... 117
7.1 Companies Selected ..... 117
7.2 Trading ..... 125
7.3 Analysis ..... 145
Chapter 8: Portfolio 3 - Energy and Banking Sector ..... 150
8.1 Companies Selected ..... 150
8.2 Trading ..... 157
8.3 Analysis ..... 176
Chapter 9: Portfolio 4 - Long Term Investing ..... 178
9.1 Companies Selected ..... 178
9.2 Trading ..... 186
9.3 Analysis ..... 201
Chapter 10: Portfolio 5 - Short Term Investing ..... 214
10.1 Companies Selected ..... 214
10.2 Trading ..... 223
10.3 Analysis ..... 245
Chapter 11: Portfolio 6 - Long Term Investing ..... 248
11.1 Companies Selected ..... 248
11.2 Trading ..... 258
11.3 Analysis ..... 281
Chapter 12: Portfolio Comparisons ..... 284
Chapter 13: Conclusion ..... 286
References ..... 287
Appendix ..... 308

## List of Figures


Figure 6.3.2: Citigroup from Sep 29 ${ }^{\text {th }}$ to Dec $8^{\text {th }}$----------------------------------------------------110




Figure 6.3.7: Proctor and Gamble from Oct $6^{\text {th }}$ to Dec $8^{\text {th }}-----------------------------------113$

Figure 6.3.9: Wal-Mart from Nov $10^{\text {th }}$ to Dec $8^{\text {th }}$---------------------------------------------------115
Figure 6.3.10: DIA from Sep 29 ${ }^{\text {th }}$ to Dec $8^{\text {th }}$-------------------------------------------------------115
Figure 9.3.1 Celgene Corp. from September $29^{\text {th }}$ to December $5^{\text {th }}-\ldots------------------202$
Figure 9.3.2 Biogen Idec Inc from September $29^{\text {th }}$ to December $5^{\text {th }}--------------------203$
Figure 9.3.3 Colgate-Palmolive Co. from September $29^{\text {th }}$ to December $5^{\text {th }}------------204$

Figure 9.3.5 General Mills from September $29^{\text {th }}$ to December $5^{\text {th }}----------------------206$
Figure 9.3.6 Johnson \& Johnson from September $29^{\text {th }}$ to December 5 ${ }^{\text {th }}----------------207$
Figure 9.3.7 Tupperware Brands Corp. from September 29 ${ }^{\text {th }}$ to December $5^{\text {th }}---------208$

Figure 9.3.9 Wal-Mart Stores Inc. from September $29^{\text {th }}$ to December $5^{\text {th }}$---------------- 210

Figure 9.3.11 Exxon Mobil Corp. from October $9^{\text {th }}$ to December $5^{\text {th }}--------------------212$

## List of Tables

Table 6.1.1: Key Stats of Yahoo Inc. ..... 67
Table 6.1.2: Key Stats of Infosys ..... 69
Table 6.1.3: Key Stats Citigroup ..... 69
Table 6.1.4: Key Stats of 3M ..... 71
Table 6.1.5: Key Stats of US Gold ..... 72
Table 6.1.6: Key Stats of Activision ..... 73
Table 6.1.7: Key Stats of SanDisk ..... 74
Table 6.1.8: Key Stats of LG Display Co. ..... 75
Table 6.1.9: Key Stats of Evergreen Solar ..... 76
Table 6.1.10: Key Stats of United States Oil Fund ..... 77
Table 6.2.1: September $29^{\text {th }}$ Trading Activities ..... 78
Table 6.2.2: September $30^{\text {th }}$ Trading Activities ..... 79
Table 6.2.3: October $1^{\text {st }}$ Trading Activities ..... 80
Table 6.2.4: October 2 ${ }^{\text {nd }}$ Trading Activities ..... 81
Table 6.2.5: October $6^{\text {th }}$ Trading Activities ..... 83
Table 6.2.6: October $7^{\text {th }}$ Trading Activities ..... 84
Table 6.2.7: October $8^{\text {th }}$ Trading Activities ..... 85
Table 6.2.8: October $9^{\text {th }}$ Trading Activities ..... 86
Table 6.2.9: October $12^{\text {th }}$ Trading Activities ..... 87
Table 6.2.10: October $13^{\text {th }}$ Trading Activities ..... 88
Table 6.2.11: October $15^{\text {th }}$ Trading Activities ..... 89
Table 6.2.12: October $16^{\text {th }}$ Trading Activities ..... 90
Table 6.2.13: October $21^{\text {st }}$ Trading Activities ..... 91
Table 6.2.14: October $23^{\text {th }}$ Trading Activities ..... 92
Table 6.2.15: October $29^{\text {th }}$ Trading Activities ..... 94
Table 6.2.16: October $30^{\text {th }}$ Trading Activities ..... 95
Table 6.2.17: October $31^{\text {st }}$ Trading Activities ..... 95
Table 6.2.18: November $3^{\text {rd }}$ Trading Activities ..... 96
Table 6.2.19: November $5^{\text {th }}$ Trading Activities ..... 97
Table 6.2.20: November $10^{\text {th }}$ Trading Activities ..... 98
Table 6.2.21: November $11^{\text {th }}$ Trading Activities ..... 99
Table 6.2.22: November $16^{\text {th }}$ Trading Activities ..... 101
Table 6.2.23: November $18^{\text {th }}$ Trading Activities ..... 102
Table 6.2.24: November $24^{\text {th }}$ Trading Activities ..... 104
Table 6.2.25: November $26^{\text {th }}$ Trading Activities ..... 105
Table 6.2.26: December $2^{\text {nd }}$ Trading Activities ..... 106
Table 6.2.27: December $8^{\text {th }}$ Trading Activities ..... 108
Table 7.2.1 September 29 Trading Activities ..... 126
Table 7.2.2 September 30 Trading Activities ..... 126
Table 7.2.3 October 2 Trading Activities ..... 127
Table 7.2.4 October 3 Trading Activities ..... 128
Table 7.2.5 October 6 Trading Activities ..... 129
Table 7.2.6 December 5 Trading Activities ..... 145
Table 8.2.1 September 29 Trading Activities ..... 157
Table 8.2.2 October 1 Trading Activities ..... 158
Table 8.2.3 October 6 Trading Activities ..... 159
Table 8.2.4 October 13 Trading Activities ..... 162
Table 8.2.5 October 14 Trading Activities ..... 163
Table 8.2.6 November 13 Trading Activities ..... 171
Table 9.2.1 September 29 Trading Activities ..... 187
Table 9.2.2 October 1 Trading Activities ..... 188
Table 9.2.3 October 9 Trading Activities ..... 190
Table 9.2.4 November 13 Trading Activities ..... 201
Table 10.2.1 September 29 Trading Activities ..... 223
Table 10.2.2 September 30 Trading Activities ..... 224
Table 10.2.3 October 1 Trading Activities ..... 224
Table 10.2.4 October 2 Trading Activities ..... 225
Table 10.2.5 October 3 Trading Activities ..... 226
Table 10.2.6 October 6 Trading Activities ..... 227
Table 10.2.7 October 7 Trading Activities ..... 227
Table 10.2.8 October 8 Trading Activities ..... 228
Table 10.2.9 October 9 Trading Activities ..... 229
Table 10.2.10 October 10 Trading Activities ..... 230
Table 10.2.11 October 13 Trading Activities ..... 230
Table 10.2.12 October 14 Trading Activities ..... 231
Table 10.2.13 October 15 Trading Activities ..... 232
Table 10.2.14 October 16 Trading Activities ..... 232
Table 10.2.15 October 17 Trading Activities ..... 233
Table 10.2.16 October 22 Trading Activities ..... 234
Table 10.2.17 October 24 Trading Activities ..... 234
Table 10.2.18 October 27 Trading Activities ..... 235
Table 10.2.19 October 28 Trading Activities ..... 235
Table 10.2.20 October 29 Trading Activities ..... 236
Table 10.2.21 October 30 Trading Activities ..... 236
Table 10.2.22 October 31 Trading Activities ..... 237
Table 10.2.23 November 3 Trading Activities ..... 237
Table 10.2.24 November 4 Trading Activities ..... 238
Table 10.2.25 November 7 Trading Activities ..... 238
Table 10.2.26 November 11 Trading Activities ..... 239
Table 10.2.27 November 13 Trading Activities ..... 240
Table 10.2.28 November 14 Trading Activities ..... 240
Table 10.2.29 November 18 Trading Activities ..... 241
Table 10.2.29 November 18 Trading Activities ..... 241
Table 10.2.31 November 21 Trading Activities ..... 242
Table 10.2.32 November 25 Trading Activities ..... 243
Table 10.2.33 December 5 Trading Activities ..... 245
Table 11.2.1 September 29 Trading Activities ..... 259
Table 11.2.2 December 2 Trading Activities ..... 279
Table 11.2.3 December 3 Trading Activities ..... 280

## Chapter 1: Introduction

In this chapter, we will give a basic introduction for this project, describe our project goals, and give a project overview. The basic structure of our project is described.

### 1.1 Introduction

For our IQP project, our six member group has decided to perform a ten week stock simulation using the simulator on Investopedia. Each of us will select ten stocks to begin with and from there we will use different investment strategies, while recording our actions and keeping track of how our portfolios are doing. While simulating the market, we will research different types of investment strategies and the effect of other factors in choosing these investment strategies. In addition, we have a set list of goals we wish to accomplish by the end of our project. We hope that from this project we will gain experience and the logic needed in order for us to manage our finances successfully in the future.

### 1.2 Goals

Our primary goal for this project is to better understand the stock market and the factors, both economic and political, which influence it. We also hope to understand and implement trading methods through simulations in order to gain real experience and to be able to use trustworthy sources of information in making investment decisions, as well as identify investment bias caused by conflict of interest. Overall, we hope to apply the
techniques and knowledge applied in this project to become more successful investors later in life.

To successfully achieve our goals we will research various investing tools and strategies such as long term versus short term investing, fundamental versus technical analysis, dollar cost averaging, diversified investing versus focused investing on particular economic sectors, short selling, put options, call options, and different investment vehicles such as mutual funds and hedge funds. We will also evaluate and understand the risk versus reward benefits of stocks as compared with various other investments, including savings accounts, certificates of deposit, bonds, and real estate. In order to better understand trading techniques and the mechanics of the stock market, we will research and select a group or multiple groups of stocks, and track their performance throughout the course of the project, with the intention of making a profit. Through our research, we hope to finally be able to make a determination on how much of an investor's active and retirement portfolio should be placed in stocks and other investment vehicles.

### 1.3 Project Overview

Our IQP project team consists of six members all working individually on a ten week stock market simulation in which we buy, sell, short and cover stocks, bonds and ETFs that are listed on the NASDAQ and NYSE including all companies listed on both the Dow Jones Industrial Average and the S\&P500 indexes.

For this simulation our group is responsible for picking an accurate simulator and making trades while keeping track of our profits and losses not only on the simulator but
also independently using a excel table format. This redundant method of keeping track of data will ensure accuracy.

During the course of the IQP, the team shall be researching various topics about the stock market and writing reports on each of them. Each team member has been assigned four unique research sections and is also responsible for a day to day journal as well as an analysis of the simulation. We expect this project to run smoothly and finish within the time frame of three terms.

## Chapter 2: Stock Market Overview

This chapter is intended to give an overview of the various stock markets around the world and the history of selling securities. Also, a complete overview of the history of the United States stock market is given. Finally, economic and political events that influence the price movements in the markets are considered.

### 2.1 The World's Stock Markets

Long before currencies came into being, the world worked on a barter system. When to people wanted to buy or sell anything, they had to trade goods for it. For example, you could exchange a goat for three bales of hay. While this worked fine, due to the lack of standards, you would not get what you wanted at the price you expected every time.

To fill this void, we invented currency. The first forms of currency were in forms of grain receipts in ancient Greece and Mesopotamia. Even this had a flaw. The receipts were only valid as long as there was grain in the granaries. Therefore, humans moved on to using precious metals such as gold, silver and copper for different values of currency. The first archeological evidence of this comes between 1000 BC and 300 BC in the Indus Valley Civilization (246).

As history progressed and our currencies evolved, central banks and licenses to print currency (Right of Coinage) came into being to regulate inflation. By the early 1900s, most countries had adopted a gold or silver standard in which the value of gold or silver stayed constant while the value of the national currency was based on the ratio of
the number of notes printed to the value of the gold or silver reserves held by that nation. This system has lasted nearly 100 years now with a few hiccups along the way.

So now people had something constant that they could use to buy and sell goods. However if you owned a company and wanted to expand or needed a large inflow of cash for some reason, how would you do it? Initially owners would ask their employees to pitch in and in return split the resulting profits. Over time, this evolved into asking people with no connection to the company to pour money into the company and take a percentage of the profit.

Now, the rich owned stakes in various companies but had no way of getting rid of companies they thought were going to do badly or to buy companies that they thought were going to do well but were invested in by somebody else. That led to the birth of 'bourses' or bartering houses for merchants in Bruges, France in the $13^{\text {th }}$ century. This was hugely popular and soon spread to Ghent, Amsterdam, Venice, Pisa, Verona, Genoa and Florence in that order (237).

Later, the Dutch started to issue shares for individual stakes in the company to allow the ordinary public to buy small stakes rather than there being a single investor. In 1602, the Amsterdam Stock Exchange officially opened doors with the Dutch East India Company being the first to offer stocks and bonds (237).

The London Stock Exchange opened in 1688 becoming the second stock exchange in the world. By the late 1700s most large colonial countries in Europe had at least one stock exchange within their borders. The first exchange in the Americas was the New York Stock Exchange opened in 1792 while the first exchange in Asia was the Bombay Stock Exchange opened in 1875 (40, 152).

There are currently 238 stock markets in the world (see Appendix 1 for complete list) (68).

The biggest out of these in terms of total market value is the NYSE, followed by Euronext, Tokyo Stock Exchange, NASDAQ, London Stock Exchange and Shanghai Stock Exchange (as of 2007) (152, 134).

The biggest in terms of number of companies listed is the Bombay Stock Exchange followed by the London Stock Exchange, NASDAQ and the New York Stock Exchange (40, 152, 134).

There are also two purely online stock exchanges, The $\mathrm{k} @$ mille Project Exchange and The World Stock Exchange (WSE).
$\mathrm{k} @$ mille started as a project in 2003 to unite the world and make going public easier for everyone and to give people an easy way of globalizing (115). In 2008 it was launched as a legal stock exchange (115). Although the project had grand aspirations, it hasn't caught on yet and the only affiliate they have currently is the Norway Stock Exchange.

The World Stock Exchange, founded in 2007 by Hope Capital Pty. Ltd. of Melbourne, Australia, was initially meant for the massively multiplayer online role playing game (MMORPG) Second Life as an index for the businesses running on it (238). Second Life has its own currency known as Linden Dollars which is actively exchanged to real currency at the rate $\mathrm{L} \$ 250=$ US\$1 (185).

However, due to many reasons, including the hacking of the WSE in Second Life and the limitations of the Linden Scripting Language, on July $7^{\text {th }}$ 2007, the WSE was removed from Second Life and released as a virtual stock market (180). The currency
was changed to the World Internet Currency (WIC) with no real world exchange rate (238).

The WSE allows anyone with a real or virtual business to have an IPO allowing businesses to gain brand awareness or allowing learning opportunities through simulations of real life. They have 28,168 accounts and have a trading volume of $670,552,030$, providing realistic stock market data without having to follow a real market like the other simulators available (238).

The CEO of WSE has expressed the desire to legalize the market and have real currency exchange between the WIC and the US Dollar. However nothing has materialized of this so far. Based on The $\mathrm{k} @$ mille Project which took five years to go from virtual to real, I believe the WSE still has some ways to go.

### 2.2 U.S. Stock Market History

The first American securities were traded as early as 1725 in an informal auction market in lower New York around Wall Street, which was built along a wall constructed by Peter Stuyvesant in 1653 to protect Dutch settlers from Indians. The early markets were organized following the example of the European exchanges, or bourses, which had already been in operation for over 100 years. The traders organized themselves into two groups, auctioneers and dealers; auctioneers set the prices and dealers traded with the auctioneers and among themselves. This basic form of trading still presides in the modern financial markets. However, the United States continued to lack a centralized center for trading which was essential to the development of its economy (265).

In March of 1792, the first market crash occurred in large part due to the actions
of the market's first inside trader, William Duer, an immigrant from Britain. As a result of Duer's actions, the dealers and auctioneers selling securities recognized the need for a more centralized, structured market. Therefore, the traders signed the Buttonwood Agreement under a buttonwood tree at 68 Wall Street in 1792, formally establishing the first securities trading market in the United States.

The New York brokers realized that they were far behind their rivals in the Philadelphia Exchange, which had been in operation as an organized board of brokers since 1790 (270). The dealers who had signed the Buttonwood Agreement sent a delegate to the Philadelphia Exchange, and met once more in 1817 to establish the first stock exchange in the country, the New York Stock and Exchange Board. The board established standard commission rates, which were higher among non members. This system created a situation whereby brokers on the exchange had an advantage over nonmembers, especially in a time when stock prices were not readily made available to the public (265).

The early 1800s were a time of frequent economic depressions as the market was in its infancy. After a low point in 1830 was reached, when only 31 shares were listed and two were traded, the value of securities traded on the exchange began to grow steadily as the country became more financially stable. In the decade following the transportation and banking industries issued $\$ 138$ million in new securities, many of which were listed on the Exchange Board. One of the earliest speculative bubbles occurred in 1836, when a crop failure triggered a collapse in the real estate market and sent stock shares tumbling downward, some of which had doubled or tripled in value between 1834 and 1835 (270).

By the mid 1850s, the value of outstanding securities in the United States grew to $\$ 1.2$ billion. In late 1853, when traders in London began to sell off American stocks, the market crashed, and the exchange was nearly destroyed. However, the economy again recovered in mid 1855. The volume of trading increased dramatically in the 1850s; in one month in 1856 one million shares were traded (270).

The Civil War era was a time of unparalleled speculation in gold, commodities, and securities. At least four exchanges functioned during the course of the war; during this time the American Exchange, a major exchange which is now part of the NYSE, was formed. Also, in 1863 the New York Stock and exchange board adopted its present name, the New York Stock Exchange. The Civil War and the period immediately following were a time of wide speculation in gold, so much so that Congress attempted to ban it in the Gold Bill in 1864, only to see the value of gold increase over $20 \%$ in the ensuing two week period; the bill was shortly repealed. The infamous "Black Friday" occurred on Friday, September 24, 1869, when Jay Gould sought to corner the gold market and sent prices spiraling downward in the process (270).

In the late 1800 s, the exchange expanded both in volume and in accessibility. In 1867 the electric stock ticker was installed in the exchange, and in 1878 the trading floor was linked to brokerage offices with the installation of a telephone. Also, in 1869 the exchange made several reforms such as adopting a new constitution, which give a Governing Committee executive, legislative and judicial powers, and including safeguards for the over issuance of stock (270).

The Panic of 1893 resulted from a speculative bubble concerning the newly emerging industrial heavyweights; the depression was one of the worst in the history of
the United States, and left a quarter of all railroad companies in bankruptcy court. Between 1897 and 1903, a second speculative craze for industrial consolidations such as the newly formed U.S. Steel developed although many turned out to be disappointing. Meanwhile, the NYSE had an annual stock volume of 265 million, nearly five times that in 1896 (270).

The World War 1 era saw a rapid decrease in stock values that caused the NYSE to close indefinitely. However, this era also witnessed a great increase in the public's participation in the securities market; before the war there were 200,000 securities owners in the United States, and afterwards that number increased to 20 million (270).

The period following World War 1 was one of the largest speculative bubbles in American history. The market value of stocks listed on the NYSE increased dramatically from $\$ 27.1$ billion to $\$ 89.7$ billion from 1925 to 1929 . The bubble burst on "Black Monday" in October of 1929, when stocks came tumbling downwards and the country entered the Great Depression. The ensuing investigations by Congress established regulation by the FTC and later the Securities Exchange Commission, still in effect today. In 1937, the SEC led by Chairman William O. Douglass, mandated that the exchange reorganize to better serve the public (270).

The period of World War II experienced both increases and decreases in the stock market, depending on news from the battlefront. However, the period following 1946 witnessed one of the longest bull markets in U.S. history, which lasted through the 1950s (270).

The 1960s and 1970s saw several speculative bubbles. The first was in conglomerates, companies which inflated their price earnings multiples by merging with
other unrelated companies. The second was in so called concept stocks, which portfolio managers bought in hopes that speculation would drive their prices even higher. The third bubble occurred when blue chip companies became favorable in the early 1970s. The 1970s proved to be bearish market even for the blue chips, however, and companies such as McDonald's and Walt Disney saw their price earnings multiples drop from 83 and 76 in 1972 to 9 and 11, respectively, in 1980 (275).

The 1980s saw a drastic increase in new issue stocks and bubbles in the biotechnology sector. However, one of the largest bubbles in the history of the United States occurred from the mid 1990s into the early 2000s in the technology sector. During this time, the NASDAQ Index, representing the so called "New Economy" companies, more than tripled from late 1998 to early 2000. The ensuing decline in overvalued tech company stocks in the early years of 2000 caused $\$ 8$ trillion in market value to disappear (275).

The security markets in the United States have come a long way since their humble beginnings in the early 1700s. An understanding of the history of stock trading in the United States is applicable in order to put today's stock market in context. Inevitably, history will repeat itself; speculative bubbles and market crashes will occur as long as stocks are traded in a free market system.

### 2.3 Economic and Political Effects on Stocks

There are many different factors which have a significant impact on stocks and the stock market itself. Among these factors are the economic and political effects on stocks. Understanding basic economic and political effects and their concepts can
contribute greatly to helping one make the right investment decisions and invest in the right stocks at the right time.

Economical effects range from supply and demands to cause and effects. Supply and demand is defined as the relationship between what's available and what people want and are willing to pay for. "This equation is the main engine of economic activity and is extremely important for your stock investing analysis and decision-making process" (294). For example, if a certain corporation is oversupplied, and no consumers their product, is it a good idea to invest one's money into this company?

The next economical effect is known as 'cause and effect.' News reports are usually the culprit behind this phenomenon. News reports that cause stock prices to climb include positive reports on the company or the company's industry; and positive reports on the company's customers. An example would be the company you're investing in 'Industry A' and the customers being in 'Industry B'. So if the industry B is doing well, perhaps the stock in industry A is also doing well (294). Negative news report on the company's competitors can perhaps mean that your company might be doing better in that industry, due to customers seeking an alternative.

A bad economy by itself can also have an impact on stocks. In dreadful economic times, consumers do not have the capital to spend on products. Because of this, certain companies will suffer a decrease in stock value due to depreciation in sales of their products. An example might be the oil industry. Because gas is so expensive, consumers are not driving as much, thus do not need to purchase more gas. Other companies such as Wal-Mart Inc. however might find an increase in sales, due to consumers looking for inexpensive goods, thus leading to an increase in their stock worth

Economic effects can also be a result of political/governmental action. Political and governmental actions can have economic consequences. These actions include the manifestation of laws, taxes and regulations, as well as war or the threat of a war. With this power, the government can "cause a company to go bankrupt, disrupt an entire industry, or even cause a depression. It controls the money supply, credit, and all public securities markets." (294). For example if the government chooses to increase the sales tax for a certain product, there would be a decrease in sales and encourage consumers to seek an alternative. On the contrary, the government can pass legislation to promote the use or purchase of a certain product. An example would be the government passing a tax credit encouraging the use of solar power in homes and businesses, which will lead to a positive impact in the solar power device industries (294).

A most recent example of a political influence on stocks would be the $\$ 700$ billion bailout bill. The bill was based around the plan to buy up bad mortgage debt from banks in order to get them to lend to each other again. It was rejected by the Senate with Republicans voting mostly against and Democrats voting mostly for the bill. After the House rejected the bailout plan on September 29, 2008, the Dow Jones fell nearly 777.68 points, surpassing the first trading day after the September 11 attacks. The S\&P index also lost $8.8 \%$ and the Nasdaq fell $9.1 \%$. The drop was due to an acceleration of selling, by investors, on fears that Congress would not be able to fix the frozen credit markets. In addition, banks stopped lending money out to people with good credit scores, causing many problems for people who needed loans to pay for homes or buy cars (295).

With this disaster, the government attempted to pass the bailout bill once again and succeeded on Friday September 3, 2008 with the House voting, 263 to 171.

According to US News there are five reasons to why the House Passed the Bailout Bill: 1. Stock Market Drop, 2. Senate Momentum, 3. FDIC and Market to Market Measures, 4. Big Business Push, and 5. Mounting Fear of Recession (296). The Senate had voted 75 to 24 giving it enough momentum to return to the House once again for a revote. With the passing of the bill stock values have gone back up and the recession has been slowed down, with the encouragement that the people keep investing their money in the Stock Market. In addition, a short selling ban, lasting to October $8^{\text {th }}$, was implemented to prevent investors from short selling and disrupting the market even more. It is clear that economics and politics both affect the stock market greatly, but this shows that the stock market can affect political decisions and legislations and economics. Whatever happens to the stock market can affect the government's decision to make changes and implement rules to fix the economy and the stock market.

## Chapter 3: Stock Investing Tools and Information Resources

This chapter focuses on the valuable tools and resources available to investors to aid in the selection of both specific stocks and other investment vehicles. This chapter begins by providing a detailed guide on how to find reliable investing information among the vast quantities of available materials. Also included in this chapter are guides to effectively research both individual stocks and other investment vehicles such as mutual funds. Finally, the chapter ends with a guide to the usage of computer programs in selecting stocks.

### 3.1 Finding Reliable Investing Information and Avoiding Bias

The stock market is a phenomenal tool by which the savvy investor can make their fortune and the means to live a better life. The problem is that the average American has little or no knowledge of how to navigate the complexities that comprise the stock market. Thus, the majority of people who wish to enter the trading game turn to sources such as books, magazines, television, and investing companies in order to educate themselves. However, many of these sources for investing information provide unreliable and biased advice. The key to finding reliable investing information is to determine which sources offer unbiased and dependable information. As a general rule, there are four ways to determine the reliability of a source of investing information. Based on how much an organization uses advertisements, how they make their money, what their philosophy is, and what their qualifications are one can determine how reliable and unbiased a source is.

In order to understand how to find unbiased information about investing it is important to understand how and why the bad information is so widely available and why so many people are looking for advice. In the past, a person's employer would offer pension plans in which the company saved a portion of the employees pay and invested the money for them. Using this system, the company was responsible for all the investing decisions. However, with current retirement plans, very few companies offer this kind of service. The average worker was left to decide how and where to invest their money. People started turning to financial planners in order to determine where to invest their money. However, with $85 \%$ of financial planners earning most of their income from commissions on stocks they get their clients to buy it is clear that they do not have the client's best interest in mind (291). With information widely available thanks to television, magazines, books, and the internet, people decided to use these sources to educate themselves about investing and to find investing advice. According to Barbara Roper, the director of investor protection at Consumer Federation of America, "the high attraction to books and computer programs is because consumers are worried about planners." (291). The first step in finding a reliable source is to observe how much they use advertisements in their information.

Advertisements are such an important part of any publication because that is usually where the bulk of the income comes from. Although the advertisement departments and the editorial departments are completely separate, the ad departments often have a large influence over what is written. At the very least the ad department considers the content of an article should paint an advertised product in a positive light. Some ad departments that have high levels of control over the editorial content will not
even allow an article to be published that portrays one of the publications big advertisers badly. Eric Tyson, author of Investing for Dummies, says "Advertisers’ influence squashes freedom of speech and, more importantly, prevents readers, views, and listeners from getting the truth and best advice." (291). Additionally, since the majority of investing advice comes from sources that people pay nothing to view (such as internet articles), the quality of the information is often lacking. While there are exceptions to this rule, in general the more advertisements there are the less reliable the source. Another major factor in finding unbiased sources is to look at how the publisher of the information makes their money.

Obviously, all organizations need to make money in order to stay in business. Some organizations sell advertisement slots, some charge subscription fees, some are independently financed, and some receive income from a variety of places. An organization that finances primarily through advertisements is unlikely to give any advice that would anger one of their biggest advertisers in fear of losing that source of income. The same argument can be made for independently financed sources. For example, if a magazine is owned by Morgan Stanley it is unlikely that magazine will publish any articles that say anything negative about Morgan Stanley. It is very hard to consider that kind of source unbiased when it is likely bad advice will be offered in order to avoid displeasing the owner or major advertising company. In general, based upon how organizations make money, companies that generate the majority of their revenue through subscriber fees provide the most unbiased information. Of course, to access the information provided a person must pay for a subscription, but paying a small fee every month for reliable advice is much better than losing thousands of dollars because of
unreliable information. Another method of recognizing reliable information is to look at the philosophy of the organization that provides the information.

The belief of the individual or organization that is providing the advice is important in determining whether or not that advice is biased. Consider an example using car salesmen. If you went to a Ford dealership, the salesman would tell you all of the good things about their cars and mention all of the flaws of their competitors, such as Toyota. If you went to a Toyota dealership, the salesman would have a very different set of information to present to you based on the best aspects of Toyota cars and the worst of Ford cars. The same principle can be applied to investing advice. Someone who has made a fortune by short selling stocks is likely to favor short selling as an important part of trading. Conversely, a trader who has made large profits by buying and holding for long periods of time is unlikely to consider short selling as a valid strategy. Thus, it is important to understand why a person would be in favor of one strategy over another. The best kind of advice would come from a person or company that has no personal interest in advancing one strategy over another or promoting Company A instead of Company B. The last aspect of finding reliable advice is to determine the qualifications of the individual or organization providing the information.

As is the case with most information, people only tend to listen when they believe that the person giving the advice is qualified and knows what they're talking about. However, qualifications can't be taken at face value. Even if an individual claims to be an expert it helps to view all information with a cynical eye. "You can't accept stated credentials and qualifications at face value for the simple reason that some people lie. You can't sniff out a liar by the way he looks or by his gender or age. You can, however,
increase your chances of being tipped off by being skeptical." (291). Clearly, you shouldn't view all information as being false, but a healthy dose of skepticism can go a long way to determining the validity of a person's qualifications.

The stock market, although being a great tool with which a person can make a lot of money, is extremely complex and intricate. In order to make safe investing decisions it is important to find reliable information and unbiased advice. By using four general rules it becomes easier to determine whether or not to trust any given information. How much an organization uses advertisements, how they make their money, what their philosophy is, and what their qualifications are provide a guide for finding reliable and unbiased investing information.

### 3.2 Researching Individual Companies/ Important Things to Look for in an Annual Report

When buying stock in individual companies or mutual funds, financial statements should be read through thoroughly. A company's annual report will tell the experienced investor what financial condition the company is in and its future viability. Italy adopted double entry accounting after Luca Pacioli published the first book on the subject in 1494 (292). Today in the United States, the Securities and Exchange Commission, created in 1934, as well as the Financial Accounting Standards Board, created in 1973, work to ensure that generally accepted accounting principles are followed and that the information contained within the financial statements is truthful (261). As mandated by the SEC, all public companies and private companies which have over 500 shareholders and at least $\$ 10$ million in assets must file financial reports; although other smaller
private companies are under no obligation by the SEC to file financial reports, some do regardless (261). These reports are an invaluable tool to the investor, and should be thoroughly understood before making any investment.

The most important of the reports filed by companies under obligation to do so by the SEC are the $10-\mathrm{K}, 10-\mathrm{Q}$, and $8-\mathrm{K}$. The $10-\mathrm{K}$ is the annual report, which details the company's financial undertakings and financial position; similarly, the $10-\mathrm{Q}$ details the company's financial position every quarter. In contrast, the $8-\mathrm{K}$ serves as a notice of any major events that could drastically change the company's financial position, such as a merger or buyout (261).

The most important of the reports sent to shareholders, the $10-\mathrm{K}$, or annual report, is composed of three major sections of financial data, the balance sheet, the income statement, and the statement of cash flows. These three sections, along with the auditor's report to ensure that the numbers are accurate, are the most important components of an annual report and should be considered above all other sections. The first of these sections, the balance sheet, is subdivided into assets on the left side and liabilities on the right. Among the assets are current assets, fixed assets (property, plant, and equipment), and other assets. Among the liabilities are the current liabilities, long term liabilities, and shareholders' equity. The balance sheet is the section of the annual report which shows the general financial condition of the company. The balance sheet of a good company should show assets and liabilities in proper proportion to one another and to sales and expenses of the company (289).

The second section of the annual report, the income statement, in short tells the investor whether or not the company made a profit over the past year. In this statement,
total revenue is listed and then subsequent expenses are deducted to arrive at gross profit, operating earnings, earnings before tax, and net income. Shrinking profit margins or lack of positive net income should be a warning sign for any investor. The income statement may also be used to calculate the earnings per share, the return on investment for a stockholder (289).

By reading the balance sheet and income statement, the investor may accurately gauge the financial condition and profitability of a business. However, the company's cash position is also important and is stated in the summary of cash flows section. The statement of cash flows provides a bridge between the income statement and balance sheet; it should be used to evaluate the company's ability to pay down its short term liabilities, including payroll. However, the statement of cash flows should not be used as a measure of financial condition (289).

A virtually limitless number of ratios may be calculated from the numbers present on a company's financial statement; the ratios briefly described in this section only scratch the surface of some of the most useful ratios which may help the novice or professional investor determine a company's financial standing. Perhaps the most popular ratio used in the world of finance is the price earnings ratio, which is calculated by dividing the stock price of a company by the earnings per share. The PE ratio is used to gauge the relative market price of a stock as compared with industry indexes or market indexes. Generally, investors are willing to pay a higher PE ratio for high anticipated growth rate stocks (261). Although the market is efficient, the investor should be able to spot speculative crazes using the PE ratio as a guide.

The current ratio, also termed the quick ratio, is a useful ratio when calculating a company's ability to meet its payment obligations, as well as its general liquidity. This ratio is computed by dividing total current assets by total current liabilities. However, the current ratio should be used as a loose gauge to compare companies in the same industry; some heavy capital industries such as banking will have a lower average current ratio than will light capital industries. The inventory to working capital ratio is another useful ratio and is computed by dividing liquid current assets by current liabilities. This ratio provides a gauge as to how much working capital a company has relative to inventory (277). These ratios should be used along with other gauges such as profit margins to compare the company in question to other companies in the industry.

Any investor purchasing individual shares of a public or private company should thoroughly look through its balance sheet to ensure that the company is in good financial condition. The mandatory reporting laws created by the SEC gives the average investor an opportunity to look into the financial position of any public company. Through an annual report, an investor may determine whether a company is overvalued, undervalued, in good financial health, or in poor financial health. Also, the financial statements may provide insight into future growth prospects for the company. Perhaps most importantly, by utilizing the balance sheet an investor will learn how to spot and avoid companies whose stock prices are inflated by speculative bubbles.

### 3.3 Researching Mutual Funds and other Investment Vehicles

Investment vehicles vary from stocks, to mutual funds, to bonds, etc, all of which are a methods with which a person decides to invest with. This section is going to focus
on mutual funds and all the rest are going to be explained in their respective sections which should be easy to find and labeled in the table of contents.

A mutual fund is a professionally managed type of collective investment that an investor would use to invest with. When one decides to use a mutual fund they pool money into a group of investors who invest in either the stock market or bonds or anything else that would make their client money (308). Along with the money that is used to invest there are also numerous expenses that need to be paid like in any other company. These include management fees, non-management fees, $12 \mathrm{~b}-1$ fees and non-12b-1 fees.

The management fee is only the contract fee plus some other underlying fees that vary depending on where someone would invest. Also the management fee tends to be inversely proportional to the amount of money that is made in the mutual fund. The nonmanagement fee is what is paid for the transfer agent working on transferring funds from one place to another. It also includes custodial fees which mean someone would pay for them to watch over their money. There are legal audit expenses and fund accounting expenses (308). Legal audit expenses are expenses paid for people to keep record of everything that the investors money does and fund accounting is an organization tool used to keep all the records. Along with those fees there are also registration fees, board of director's fees, and a printing and postage fee. Each is self explanatory. Also, there are the $12 \mathrm{~b}-1$ and non-12b-1 fees (308). These fees cover marketing expenses by the company and the non- $12 \mathrm{~b}-1$ fees cover all the things that do not fall under the 12 b listing.

There are also numerous types of mutual funds that one could use. There are open-end funds, exchange-trade funds, equity funds, bond funds, money market funds,
and funds of funds each of which are very similar. Open-end funds are funds that have a couple of things occur in their transactions. First off at the end of the day investors are either issued new shares or their shares are bought back if the investor wishes to leave the investing field. Also, funds can be classified as open-end funds if they do not issue undivided interests in specified securities, and if the issue redeemable securities (308).

Exchange-trade funds are a relatively recent innovation and are often structured as an open-end fund with several differences. An exchange-trade fund takes and combines the characteristics of mutual and closed end funds to become the desired fund source. Exchange-trade funds are traded throughout the day on the stock market like closed funds but the difference is that the ETF's are set at an approximated price that is equal to the value of total assets. ETF's tend to also be more efficient in their transactions than traditional mutual funds because there is no issuing and redeeming of securities (308).

There are also Equity funds which are the most typical kind of fund. In an Equity fund a manager invests your money in equities which are stocks. Through the time that the investor has invested in those equities (stocks) they gain money from it. There are also bond funds which make up 18\% of mutual funds and it yields monthly dividends and they include short term, to long term investments. There are municipal bonds and highyield of "junk" bonds. The municipal bonds have lower yields but they are also a lot lower risk wise and tend to be safer with a few tax advantages, where as the "junk" bond is much higher yield but at the same time are far riskier (308).

The last few types of funds are the money market fund and the fund of funds. The money market fund makes up $26 \%$ of mutual funds and has the least risk in investing in it, but at the same time it yields the lowest return rates. When an investor decides to
invest with the money market fund it is a short-term investment in debt instruments such as treasury bills, commercial paper, and bankers' acceptances. The fund of funds is a fund that invests in underlying mutual funds and has very small fees. Underlying funds are typically a fund that an investor can invest in individually but decides to do it through another investor. The fee that is paid is very minimal and accounts only for the allocation of the fund (308).

There is also an investment vehicle called a "hedge" fund which may seem to be similar to a mutual fund but it is not, it will be covered in its respective part later on. That makes up all the types of mutual funds and for the rest of the types of investment vehicles that are not covered here will be covered in other sections (308).

### 3.4 Comparisons of Popular Brokerage Firms

### 3.4.1 Merrill Lynch

Founded in 1914 by Charles Merrill, it has been in business for 95 years. Merrill Lynch was the first firm on Wall Street to publish an annual fiscal report. It has always underwrote it's securities directly compared to other larger companies who use independent brokers for placement of securities. As of January 1, 2009 Merrill Lynch is a division of Bank of America (207).

### 3.4.2 UBS Wealth Management USA (PaineWebber)

Founded in 1880 in Boston, MA by William Paine, it has been at the forefront of investing for 129 years. After leading the company for almost fifty years, William Paine died September 24, 1929, just before the stock market crash. In 1963, the company moved to Wall Street from Boston. In 2000, the company merged with UBS to create

UBS PaineWebber until 2003 when it was renamed UBS Wealth Management USA (237).

### 3.4.3 JP Morgan Chase (Bear Stearns)

Bear Stearns was founded in 1923 and is now a division of JP Morgan Chase due to the subprime mortgage crisis in 2007. The only firm to survive the Stock Market Crash of 1929 without laying off a single employee, it now has around 13,500 employees. Bear Stearns printed one of the most read market papers, Early Look at the Market-Bear Stearns Morning View. After being bailed out by JP Morgan Chase in early 2008, it became the key brokerage division for JP Morgan Chase (114).

### 3.4.4 TD Ameritrade

TD Ameritrade was created in 2006 from a merger between Ameritrade Clearing, Inc. and TD Waterhouse. Ameritrade Clearing, Inc. was created in 1983 in Nebraska. Over the years it kept with the most recent technology. It was the first company that had online trading and is the second largest discount broker. Its current revenue is $\$ 2.632$ billion (207).

### 3.4.5 E-Trade

Founded in 1982 as TradePlus Inc., E-Trade became the online division working with America Online and Compuserve. After reorganizing, it became E-Trade Group. Currently the largest discount stock broker, it is worth $\$ 3.57$ billion (73).

### 3.4.6 Charles Schwab Corp

Charles Schwab was founded in 1971 as First Commander Corp. Today it is a mix between the traditional brokerage firms and a discount broker. As of 2005, they
were switching from traditional brokers to "investment advisors" to keep up with online trading. Charles Schwab Corp is worth $\$ 23.7$ billion (237).

### 3.4.7 Fidelity Investments

Fidelity Investments was founded in 1946 and provides large family mutual funds, distributers, investment advisors, retirement services, and discount brokerages. A very well rounded company, they tend to focus on mutual funds and retirement services more than the other discount brokerage firms. Fidelity Investments is worth $\$ 12.87$ billion (75).

### 3.4.8 Scottrade

Scottrade was founded in 1980 in Scottsdale, AZ as Scottsdale Securities but quickly moved to St Louis. Offering online trading in 1996, they decided to change the company name to Scottrade. Scottrade has 370 branch offices but does a large portion of their trading online. Scottrade is worth $\$ 1.03$ billion (184).

### 3.4.9 September 22, 2008

As of September 22, 2008, both Morgan Stanley and Goldman Sachs would no longer be involved in investment banking because of the banking crisis that started on the $16^{\text {th }}$ of that month. They were popular firms when we started our project but now have seized operations in that division.

### 3.5 Computer Programs and Other Tools for Tracking and Selecting

## Stocks

There are literally thousands of websites that offer tools that track stocks in nearly real-time and offer tools such as day, month and week charts. The giants among these are of course Yahoo and Google.

Most of these feeds are not real time and have a delay of 5 to 20 minutes. However most of these websites also offer real time tracking for a fee (Yahoo has a free trial scheme for this). These websites also allow you to create an account where you can upload the list of stocks you own and only get data on these stocks and how they performed during the day. This data includes the previous day's closing value, the current day's opening value and the current value, along with accessory data such as volume traded, average volume (over 3 months), day's and year's high and low, net assets, P/E and yield. Most of these websites also have links to news articles about the stocks you are looking at with expert opinions and other data embedded in it.

On the flip side we have a few hundred websites offering market simulators. While the number is a lot smaller than the previous one, it is still a huge number. Some of these simulators are paid while the rest remain free. These simulators are used by people who want to gain experience about the stock market without having any financial risk involved. There also some individuals who enjoy the thrill of risk without any real life impact.

Stock market simulators are broken into two categories, financial and fantasy (236). The financial simulators use real life data (albeit with a 15 to 30 minute delay to prevent users misusing real time data). The only differences between the real world and a financial simulator are that you are using fantasy money and that your trades will not
have any effect on the real markets. This kind of simulator is used by people to experiment and determine whether they should in fact invest real money or not. It also used to analyze the market and can serve as a mirror to your real life stocks.

The fantasy simulators work as independent markets with fantasy items such as movies, sports icons or celebrities listed (236). In this case, the prices depend on the laws of supply and demand just like the real markets. This kind of simulation is used mostly for fun; however it can be used as a very informative teaching device about the market's internal running and can be used to simulate the pros and cons of insider trading or other real world complications such as the Warren Buffet effect.

A major complication of these games is that they are accessible by just about anyone and even actively used in middle school curriculum (236). Such games, by allowing usage of fantasy money give players the ability to make risky decisions which may or may not pay off. When risky choices pay off, the returns are huge and this may result in a generation of people who believe that they can make money in the market without any real decisions or planning. In the real world such choices are foolhardy.

Again, these games, being tailored to suit school curriculums, are generally 8 to 12 weeks long and this creates a sensibility that requires short term trading which in the real world is very bad for the market (236). Short term and risky trading are two of the reasons the USA economy is suffering today. However, when used properly and in the right mindset, I believe that these tools are very helpful to users who want to gain experience and understanding about the market.

## Our Simulator

Our simulator can be found on http://simulator.investopedia.com/. This simulator allows users to join 'games' or groups of users competing to see who can do the best over a particular time frame and within a certain set of user created rules. Such rules include broker fee per share, maximum percentage of real life volume that can be traded, simulation starting value and simulation starting and ending dates.

Like the other simulators, it has a delayed feed of 20 minutes but does not allow trades past 4 pm (even though technically it should allow trades it 4.20 pm ). The simulator allows you to trade American stocks, ETFs, bonds and options with the option of shorting them. The simulator also has the added functionality of setting stop-loss and limit orders at an extra fee which the game creator has to set as well.

The Investopedia Simulator offers users daily gains and losses as well as storing the entire trade history. It ranks the players in a game by net value at the end of each day and allows us to view other player's portfolios and trade history. It also has the option of tracking another user which basically involves you being notified when that user has made a trade. All in all it is a robust simulator that has approximately 130,000 registered accounts although every now and then, due to the number of users, it tends to be a little slow.

## Chapter 4: Investment Comparisons

This chapter provides an overview of the various investment vehicles available to an investor. In addition to stock investments and derivatives of the stock market other investments are considered such as savings accounts, bonds, limited partnerships, real estate, and small business. Both the effectiveness and the risk level of each investment is discussed.

### 4.1 Savings Accounts/Certificates of Deposit

Savings Accounts and Certificates of Deposit are two forms of storing money in a bank. The two are similar in the fact that they are in fact 'insured' and have near zero risk. The money you 'earn' is in the form of interest however there are certain cases in which you do not gain money but rather lose it. Still, many people believe that storing money in a savings account or a CD is preferable to just keeping cash.

Savings Accounts are simply bank accounts that have a certain minimum amount of money in them and gain some interest as defined by the bank. Savings accounts differ from checking accounts in the sense that while checking accounts allow you to write cheques and use debit cards, the savings account does not. However, you are allowed to access your money through ATMs and bank branches.

While this sounds ideal, many banks have restrictions on how soon you can close the account from the day it is opened and others charge fees for ATM withdrawals. Even with these shortcomings, around $65 \%$ of all Americans have at least one savings account (258).

On the other hand, CDs work on the principle of fixed deposit periods and fixed interest rates. These periods generally range from 3 months to 5 years. The fixed interest rates are set when the money is deposited and is often more than what is offered for a savings account. However the major downside is that you cannot withdraw the deposited money before maturation unless you are willing to forfeit the interest.

Also, if general interest rates go up (due to inflation or other external circumstances), the fixed interest rate agreed upon earlier stands. However, there are a few banks that offer customers one 'bump up' during the course of the maturation. This means that they allow the costumer to change the interest rate to the current interest rate once during the period the money is in the bank at any time that the customer chooses.

The name Certificate of Deposit came about because originally the customer used to get a certificate from the bank stating, the amount invested, the interest rate and the date of maturation. However in this day and age of computers and digital piracy, the certificate has largely disappeared to be replaced by a mere note in the customer's passbook.

More often than not, interest rates in checking accounts or CDs depend not only on the prevalent FDIC or NCUA rates but also on the amount that is invested (258). Higher interest rates are obviously better for the consumer.

Savings Accounts and CDs have near zero risk. As a result, the payout is also smaller. While savings accounts have relatively small interest rates, the mere flexibility they offer is enough of a reason to have one. Certificates of Deposit on the other hand tell a different story.

While CD rates are much higher than savings accounts, they are often close to the inflation rate prevalent at the time (258). This implies that if you invest $\$ 100$ in a CD for a year at $10 \%$ per annum and the inflation rate is also $10 \%$, at the end of the year you will get back $\$ 110$ however the amount you can buy for that $\$ 110$ will be the same as you could buy for $\$ 100$ a year back.

Then if you account for taxes, you might end up losing money (258). While this sounds bad, if you make sure you pick a bank with interest rates higher than the rate of inflation, you should be ok. Also, since inflation rates can vary significantly over the course of 5 years, the inflation at the agreed interest rate could drop (or if you are unlucky rise) and the final interest you receive after taxes could lead you to making a huge amount in profits (or a huge amount in losses).

To conclude I would like to state that while CDs are relatively low risk, you must read the small print while buying one and also keep in mind inflation and other factors such as the possibility of needing the money before maturation. Also, in my opinion, each person should have a savings account with a small amount of money in it, not to use to make money but rather to store excess cash. The flexibility of savings accounts can only be matched by checking accounts which lack in giving the customer interest.

### 4.2 Bonds

Although not officially part of the stock market, bonds are nonetheless an important part of any investor's portfolio. Generally considered less risky than stocks, bonds are essentially loans by a different name. Basically, an organization issues bonds in order to raise money. People buy the bonds at a certain price and over the course of
time they receive interest on the bond. At the end of the bond's time span, called the maturity, the bond holder gets their money back as well as the interest the bond has earned. While all bonds generally follow this format, not all bonds are alike. There are a multitude of characteristics and clauses that make bonds different. "In order to understand the activities of a securities firm's bond division, its organization and operation, it is necessary to understand bonds, what they are, how they are issued, and how they are used." (3). Understanding the differences between bonds and the characteristics of bond properties are essential in making sound investing decisions.

There are three basic types of bonds: Government, Municipal, and Corporate. Government bonds are, clearly, offered by the government. They are offered in order for the government to finance various operations. One of the most commonly known government bonds is the war bond, in which the government issues bonds in order to finance a war. Since all government bonds are backed by the government, they pay a fixed amount of interest and are practically risk free (100). The only plausible way for a government bond to default is if the government fails, which is an unlikely situation. In addition to being very safe, some government bonds are unique in that you do not have to pay federal income tax on the interest earned.

Municipal bonds are similar to government bonds in that are issued by smaller government organizations, such as states and cities. They are typically used to finance projects that cannot be paid for through taxes alone. Like government bonds, you do not have to pay federal income tax on the interest from municipal bonds. Another advantage is that these bonds are usually exempt from state and local taxes (291).

The third major category of bond is the corporate bond. These bonds are issued by companies in order to help finance the company. There is a large variety of corporate bonds, as large numbers of companies are looking for extra financing. Corporate bonds are much riskier than government issued bonds because there is a much higher chance of default. Conversely, corporate bonds have the potential to earn much more money than other kinds of bonds. Due to the risk associated with corporate bonds and the large selection it is important to understand the properties of bonds when selecting corporate bonds.

One of the most important features of a bond is how secure it is. "The chance of default is an important consideration to bond buyers. Since there are many thousands of different bond issues, gathering information to assess the chances of default of individual issues is a difficult process." (274). Thankfully, there are ratings that categorize bonds based on the quality of the bond and the chance of default. Some of these rating agencies include Standard \& Poor's, Duff \& Phelps, and Moody's (3). These ratings usually take the form of letter designations, with A being the highest. High quality bonds are those with ratings above the middle $B$ range, while bond with ratings below the mid- $B$ range are considered high yield (junk) bonds. While high rated bonds are the safest bonds to buy, they offer lower interest rates than high yield bonds. This is because the low rated bonds must offer some sort of incentive to buyers in order to compete with the high rated bonds. Junk bonds have the potential to offer higher returns than quality bonds, but they are much riskier because there is a greater chance of default.

Every bond has several important components that must be considered when purchasing. The issue price is the price at which the investor buys the bond. In the

United States, the issue price is generally $\$ 1,000(100)$. However, depending on how the company is doing the issue price may fall, in which case the amount the investor pays for the bond is called the nominal amount. Every bond also has something called the maturity date. This is the date at which the issuer must repay the investor the nominal amount. Bonds have a wide range of maturities. Short-term bonds mature in three years or less, intermediate-term bonds mature in three to ten years, and long-term bonds mature in more than ten years (291). The coupon of a bond is the interest rate that the issuer must pay the investor, and the coupon dates are the dates when the interest is paid. The two final important components of bonds are the callability and putability of the bond. The callability is the right of the issuer to call the bond back in at the time they choose (100). This means that the companies basically buy the bond back from the investor before the maturity date. Since there are generally premiums the issuer must pay in order to call a bond, companies only do this when they think they can make a good amount of money by calling bonds and then issuing them at lower interest rates. The putability of a bond is the right of the bond holder to sell their bonds back to the issuer before the maturity date (100). Although not as common as callability, a good number of bonds include put options.

Bonds are an important part of any investor's portfolio. Although they do not provide ownership in a company like stocks do, they are less risky than stocks. Since bonds pay out interest at set intervals, they are a good way to supplement a yearly income. However, being less risky than stocks does not mean that bonds are perfectly safe. In order to properly invest in bonds, investors must understand their properties and the risks and benefits associated with the different kinds of bonds.

### 4.3 Individual Stocks

Investing in individual stocks can be done through accounts with brokerage firms and even computer-based programs. In order to invest in stocks using a brokerage firm, investors need to open an account by filling out forms and depositing money into the account. Investors must be at least 18 years old to open an account. If they are not, a parent or guardian would have to open a custodial account for them. After opening the account, an investor can tell the broker at the firm which stocks he want wants to buy or sell and the broker will carry out the order for them.

Before investing one's money however, it is important to know that there are different types of brokerage firms. They are separated as either discount brokers or fullservice brokers. Discount brokers may charge lower fees, but in return offer investors less services. Financial services companies such as E-Trade and Scott-Trade are online discount stock brokerage services, made for 'self-directed' investors. It is also important to know that brokerage firms charge annual account fees as well as fees called commissions. Different firms may have differences on their charge on annual account fee; flat-rate commissions; and perhaps commissions at a percentage of the total dollar amount of the stock transaction (103).

Despite the hassle of opening an account and buying stocks through a brokerage firm or service, individual stocks have their advantages. There are many 'attractive characteristics' which come with the purchase of Individual Stocks. One perk that comes with investing in individual stocks would be 'hands on investing.' Unlike mutual funds, by investing in individual stocks, one would know where his money, where the investment can be all spread out and diversified. This type of investment gives one "the
opportunity to get to know the company and feel comfortable about where your money is going," (191). The negative side to investing in individual stocks is that it takes up a lot of time. Investors need to keep up to date and learn how to research the individual stocks of the companies they have invested in. It may add up to more work, but it is worth it. With the risk that comes with investing in Individual Stocks, there may also be high reward. By investing in individual stocks, there is a chance for an investor to double or even triple their investment annually, a feat which can never be accomplished with mutual funds. The last advantage, as already mentioned, is the fact that there are no ongoing fees after one pays the brokerage fee. Fees for owning mutual funds can drain the return from one's investments (151).

After knowing the risks and advantages involved, there are still many other aspects to consider when investing into individual stocks. It is important to consider how much money one is willing to invest into individual stocks and how much of one's portfolio should be invested into individual stocks. It may be a good idea to diversify the investment as well, so that if one section of the economy is doing poorly you would not lose all of your investment instantly.

### 4.4 Mutual Funds

Mutual funds should be thoroughly understood by any investor seeking to maximize long term gains and reduce the unsystematic risk of investing in individual companies. The mutual fund is an investment vehicle composed of stocks, bonds, or other investments which is managed by a professional money manager or management team. These funds range from actively managed funds, in which the fund's managers
take an active role in monitoring the fund's performance and adjusting its assets in the pursuit of better returns to index funds, in which the managers simply seek to mimic the performance of a specific benchmark index. Funds vary widely in their holdings, which may range from low risk government treasury securities in the case of a money market fund to holdings of other funds, which are often called "funds of funds". Mutual funds are ideal for the long term investor and should be considered in both retirement and non retirement accounts.

Although not typically thought of as a corporation, mutual funds are regulated under the 1940 Investment Company Act, and their structure closely resembles that of any large company. Each fund has a management company, board of directors, investment advisor, independent custodian, transfer agent, and fund distributor. The management company oversees all actions of the fund and often also takes the role of investment advisor, deciding which assets to buy and sell. The board of directors is elected from the shareholders and oversees the actions of the management team, with the option to reject or renew its contract every year. As mandated by the SEC, the board must be composed of both interested and disinterested directors (261). To further protect the shareholders, an independent custodian, usually a bank or trust, is entrusted with the fund's assets, and an independent transfer agent is entrusted with the sales of fund assets. Lastly, the fund distributor is in charge of distributing the funds to the public and may also act as a wholesaler to brokerage firms. Just as a public company must issue an annual report, the fund must issue a prospectus detailing the fund's goals, risks, and annual returns for the past decade (269).

The major benefit of mutual funds is their ability to diversify an investor's portfolio. When observed on an individual level, each stock in a portfolio or fund contains a certain amount of systematic and unsystematic risk. Systematic risk is derived from the tendency of all stocks to be volatile and follow general market movements, although with varying degrees. However, unsystematic risk is defined as volatility confined to a particular company. For example, a bad storm which severely damaged the oil platforms of an offshore oil drilling company would be classified as unsystematic risk. According to Modern Portfolio Theory, investors may expect increased reward from bearing high levels of systematic risk but can expect no rewards from increased unsystematic risk. Therefore, by increasing the number of stocks in one's portfolio, an investor may reduce risk levels to the systematic or basic market variability levels; reducing unsystematic risk in such a way is the basic advantage of buying mutual funds (275).

So how many stocks must be held in a mutual fund for ideal returns? For a purely domestic portfolio of stocks, a combination of 50 diverse, equal sized companies reduces risk by $60 \%$, while an equivalent portfolio which also holds international stocks will reduce risk by over $80 \%$; the preceding examples are based on past performance. Holding more than 50 well diversified stocks appears to have little benefit in reducing risk. Also, an investor may wonder what percentage of foreign stocks is ideal to hold in a portfolio. From 1970 to 2006, a portfolio consisting of $24 \%$ ownership in the Europe, Australia, and Far East Index and 76\% ownership in U.S. stocks maximized risk reduction and also provided increased returns from a portfolio consisting of $100 \%$ U.S. stocks (275).

However, not all funds consist of perfectly diversified funds of domestic and international stocks. Many funds offered by companies such as Fidelity and T. Rowe Price specialize in particular industries or sectors of the economy. Therefore, when selecting from such funds the wise investor should distribute his investment onto many funds. A simulation found that a portfolio of six growth funds reduced variability on average by $31 \%$ to $41 \%$, while a portfolio of six growth and income funds reduced variability by $47 \%$ to $52 \%$ from that which would be expected from holding one fund (261). In addition, holding bond and money market funds as part of a diversified portfolio will further reduce risk; although the bond market has shown a positive correlation to the stock market from the early 80s to the late 90 s, from 2000 to 2006 the two have been negatively correlated (275). However, diversifying in less volatile funds composed of bonds and treasury securities come at the expense of decreased long term returns.

Perhaps the greatest debate among the mutual fund community is whether to choose actively managed funds or index funds. However, one element in selection is undeniable; the individual investor should avoid load funds as much as possible. The most common types of loading fees are front end loads, $12 \mathrm{~b}-1$ fees, and contingent differed sales charges. Front end loads are deducted up front from the principal investment and typically range from $3 \%$ to $6 \%$. Contingent deferred sales charges, or "back end loads", typically are applicable only to investors who sell their funds in a specified time period following the purchase; this deduction usually declines the longer the fund is held. On the other hand, $12 \mathrm{~b}-1$ fees deduct money annually for commissions and marketing costs. Despite conventional wisdom, a higher loading fee in the case of
mutual funds does not guarantee better performance; in fact, there is no correlation between higher fees and larger annual returns. Unlike the management fee, the loading is primarily used to cover marketing and commission costs (269).

As to the debate between selecting actively managed funds versus index funds, both sides have convincing arguments. Proponents of fundamental analysis would most likely choose actively managed funds, in the belief that a skilled manager can outperform market averages. However, index fund advocates would point out that even if the manager beat the market averages, which is no easy task, the extra earnings would be consumed by the added management fees and taxes associated with increased trading.

The evidence seems to overwhelmingly back the index fund advocates. Although fund performances are readily available in publications such as Morningstar, beating market averages is no easy task; just because a fund beat market averages one year does not guarantee similar future returns. For example, the average top twenty market performer of the 1970s underperformed market averages in the 1980s; the same holds true for the top performers of the 1980s, which underperformed averages in the 1990s. Only one fund manager, investing superstar Peter Lynch, outperformed market averages consistently throughout the 1970s and 1980s in Fidelity's Magellan Fund (269).

However, spotting a superstar exception such as Peter Lynch, who has retired, is no easy task; also, whether or not Lynch could have continued to beat market averages is unknown. On average, the vast majority of managed funds under perform their index fund counterparts, when management fees are taken into account. For example, during the longest bull run in the U.S. stock market, from 1982 to 1998, the average returns of the mutual funds that spanned the period were $16.5 \%$, which was $87 \%$ of the total market
return as measured by the Wilshire 5000 Equity Index, which averaged $18.9 \%$ over the same time frame. By comparison, an index fund seeking to match market results would have returned almost $99 \%$ of the total market return. Over a period of 16 years, the accumulated growth for the index fund would have been $97 \%$ as opposed to $70 \%$ for the managed fund (277).

Mutual Funds are an ideal vehicle for any investor seeking to minimize unsystematic risk, for which there is no reward. Although mutual funds are not the path to short term fortunes, a carefully selected diversified portfolio composed of mutual funds will provide generous returns over the long run. Individual investors who choose no load, low management fee index funds may more often than not beat the professionals, as illustrated by past fund averages and market history. The favorability of mutual funds is demonstrated by their growing popularity; in 1974 their combined industry assets were a mere $\$ 35.8$ billion, which grew to over $\$ 6.8$ trillion by the end of the 1990s (261). Any serious investor should consider mutual funds as a vital component in both retirement and non retirement investment accounts.

### 4.5 Hedge Funds

As previously noted, hedge funds maybe seem to be the same as mutual funds but they actually much different. Hedge funds are private investment funds that are open only to a limited range of investors. That range varies anywhere from 10 to a maximum of 500 individual investors. As a whole, the investors tend to invest in the broadest range of investments possible. They invest in shares, debt and commodities, works of art, etc (92). Also, hedge funds are very aggressively managed portfolios that use very advanced
investment strategies. Some of the strategies that they use are long and short derivative positions with the main goal of generating the highest return possible (93).

To obtain the highest profits possible, hedge funds follow dynamic investing strategies that are set to generate the most profit with the lowest risk possible systemically. There are two major types of hedge funds, one of which is an onshore or US hedge fund or an offshore hedge fund. With an offshore hedge fund come a few advantages that onshore funds don't have as well, there is no US taxation on the amount of money that is made and the previously stated capacity of hedge funds of 500 investors is irrelevant. For all kinds of hedge funds there is no need to register with the SEC and disclose the amount of assets in the account unlike mutual funds. The hedge funds are also not permitted to advertise to the public and $65 \%$ of the investors in each hedge fund have to be accredited to be allowed to invest. The only way for individuals to be accredited is to have a net worth of at least one million dollars, with a good reason because the minimum investment required is $\$ 250,000$. Also for first time investors there is a lock up period where they are not allowed to withdraw the money (273).

Hedge funds also have a unique set of fees that must be paid which include management fees, performance fees, and withdrawal/redemption fees. The management fee is similar to any other management fee where a percentage of the funds net value, the total investor's capital goes to the manager of the fund. The management fee ranges from one percent to four percent per annum. The defining characteristic of a hedge fund is the performance fee. The performance fee is a fee that the manager of the fund acquires when the fund does very well and makes money. This fee however has some managers make risky moves that would make a lot of money in the short run but in the end fail,
although the better the manager the higher the performance fee is with less risk of losing all the money. There is also a countermeasure that regulates the riskiness of the manager called the high water mark. The high water mark works in a manner of that the manager of the fund gets paid the percentage of the difference from what the fund has risen to in the past. For example if the fund were to start at $\$ 100$ and then rise to a value of $\$ 150$, the manager would get the percentage of the difference which is $\$ 50$ in this case. However if the value would drop to $\$ 125$ he would make nothing, and then the value would once again rise to $\$ 160$ the manager would make the percentage difference from the previous high mark of $\$ 150$ which in this case would be $\$ 10$ and the new high water mark would be $\$ 160$ (92). Also some managers will ensure that they won't take a performance fee until the value of the fund rises above a set mark, this is called a hurdle rate which also has investors trust the manager of their money that much more. For some of the managers there is also a withdrawal or redemption fee which is set in place to encourage long term investments and to discourage the investors from taking their money back after just investing (264).

Hedge funds tend to be the most strategically planned and organized funds. There are many kinds of strategies that one could apply to this type of investment. One such type is a convertible arbitrage where there would be a simultaneous buying of convertible securities and a short selling of the same issues common stock. A convertible security can go for example from being a bond to equity as long as it makes money (65). Also there are distressed securities in which the securities of the company or government that are bankrupt or soon to be. With this type of strategy the influx of money into the company hopes to bring it back and make money in that way (69). Along with those,
there are also equity hedge funds and an equity market neutral strategy. The equity market neutral strategy tends to exploit the investment opportunities unique to a certain group of stocks but at the same time being neutral to others, this works along the lines of how the Swiss work with their banking system (72). More of the strategies include an event driven strategy which is to exploit the pricing irregularity caused by specific corporation events, and another exploit strategy is the merger arbitrage, in which it would exploit two or more merging companies. There are also many more strategies that could be applied to hedge funds to make money, in the end it just boils down to the fact that hedge funds tend to be a little safer than other types of funds (285).

### 4.6 Limited Partnerships

Limited partnerships are similar to general partnerships "except that in addition to one or more general partners, there are one or more limited partners," (126). According to Wikipedia, general partners are pretty much in the same position as partners in a conventional firm. They have the power to control management, use partnership property, and share profits of the firm "in predefined proportions, and have joint and several liabilities for the debts of partnerships." According to the United States Uniform Limited Partnership Act $\S 402(b)$, "An act of a general partner which is not apparently for carrying on in the ordinary course the limited partnership's activities or activities of the kind carried on by the limited partnership binds the limited partnership only if the act was actually authorized by all the other partners," (126).

Limited partners are like shareholders, where they have limited liability. This means that they are only responsible for the debt the firm builds up in respect to the
amount they have invested. The difference from a general partner is that limited partners have no management authority, and the general partners are the ones that pay the limited partners. An important part though, is that a limited partnership requires at least one general partner and one limited partner (124).

To form a limited partnership, two or more person is required to file a Certificate with the Corporations Division. Declared in the Certificate are: 1. the name of the partnership; 2. the general character of its business; 3. the address of its office in the Commonwealth and the name and street address of its agent for services of process; 4. the name and business address of each general partner; 5. the last date certain upon which the limited partnership is to dissolve; 6. any other matters the partners determine to include therein. A certificate of limited partnership would cost roughly around \$200. And since July, 1, 2008 every limited partnership is required to file an annual report with the Corporate Division and the fee to filing this report is $\$ 450$ electronically and $\$ 500$ by paper (128).

In the United States limited partnerships can be found most readily in the film industry and real-estate. It is most commonly used when one or more financial backers decide that they would rather contribute money/resources and have the other partner do the actual work. This kind of partnership can also be seen in firms which want to provide shares to individuals without the additional tax liability of a corporation. "Well-known limited partnerships include Carnegie Steel Company, Bloomberg L.P. and CNN," (126).

According to Wiki, the earliest form of limited partnership was formed in Rome in the $3{ }^{\text {rd }}$ century BC, known as 'societates publicanorum.' During this time period in the Roman Empire, there were 'corporations' which had many investors, and interests were
publicly traded. This however, required that at least one partner with unlimited liability. In addition to this, this system has also been seen in the medieval Islamic world and medieval Italy (126).

### 4.7 Real Estate

A Real Estate Investment Trust (REIT) is a company investing in real estate. The Trust is exempt from corporate taxes in exchange $90 \%$ of all income is given to the investors via dividends. REITs give you cash flow of real estate at the same time having the liquidity of common stock (249). First introduced in 1960 as a law and throughout the sixties they slowly gained popularity. Unfortunately, in the early 1970's, the bubble burst and many people were burned. When the gas prices skyrocketed in the seventies, the real estate of cross country motels and other similar places was no longer available as a source of income. This means all those Trusts that had invested in similar real estate did not fare well. Today people understand that they need their Trusts to be more diverse than just one type of real estate which helps prevent economic shock (268).

There are two types of REITs, equity-oriented and mortgage-oriented. Equityoriented are formed to acquire ownership interest in commercial, industrial, or residential property and income comes from rental of the property. They also can include land and other real estate assets (268). Mortgage-oriented real estate invest by lending funds for construction or permanent mortgages such as commercial mortgages, construction loans, multi-unit residential mortgages and other loan related real estate investments (268). The problem with both these types is the risks. The four risks fall under business risk, market risk, purchasing power risk, and interest rate risk. The business risk is one of the worst.

If a property will not sell/rent, the risk for that property is higher than a property that had multiple clients. You must look at projected returns compared to the business involved. The second type of risk is market risk. Market risk is the drop in the real estate market due to changes in the stock market itself (278). The next type of risk is purchasing power risk. This means the real estate cannot keep up with inflation. While real estate is usually the least affected by this risk, it is still a risk, especially today. The final risk is interest rate risk. This risk is primarily for the mortgage-oriented real estate. If there was a rise in interest rates, it would cause the value of the Trust to fall (278).

Overall, REITs are usually a good investment because you get the security of real estate while at the same time the liquidly of stocks. High yields raise the overall yield of the portfolio, thus minimizing volatility and providing stability even in major bear markets (249). This is why REITs are the easiest way for individuals to participate in the real estate recovery.

### 4.8 Small Business

Yet another type of investment type is to invest in small business. There is a set of characteristics that define a small business, from the amount of workers to the volume of sales made (192). There are both risks and rewards to investing in small business just as there is in all the other types of different investment types, but investing in small business is based on luck and the business that is invested in doing well which is much riskier than normal investment types (193).

The definition of small business varies with the type of business that is started. Merchant and wholesalers have a much lower limit of employees that can be hired which
is one hundred where are other small businesses such as furniture, or transportation have a limit of between five hundred and one thousand employees. Also, there are businesses that don't have an employee limit placed on the business but rather they have a monetary limit which can vary by quite a lot. For example, crop production doesn't have an employee limit; instead it has a monetary limit of $\$ 750,000$ annually. However there are businesses that have a much higher monetary limit. Forestry and logging has a limit of seven million dollars and the highest limit is set around thirty five million dollars to a variety of banking, oil pipeline, civil engineering, and other engineering businesses (309).

One of the strategies to invest in small business is not to use money that is needed. The volatility of a small business going out of business is rather high; therefore there is a great risk in investing everything in one and then losing all that money. There are companies that specialize in small business investments all under the SBIC or the SSBIC (234). The first stands for the "regular" Small Business Investment Company and the last stands for Specialized Small Business Investment Company. Also a great way to obtain a good small business to invest in is to talk to tax, financial, or legal advisors since a good small business won't advertise itself but would rather find an investor through a network of contacts so that they know that the investor is indeed serious rather than someone who knows nothing (64).

In conclusion, small businesses come in a large variety of types from the small "ma and pa" shops that have a few employees to others with up to one thousand employees, or those with monetary limits of only $\$ 750,000$ or up to thirty five million dollars. The variety is there, and the opportunities to invest are there too, but there is also
the risk of investing and the knowledge needed behind it to succeed. Small business investing is one of the hardest to master.

## Chapter 5: Stock Investing Strategies

In this chapter various strategies for investing are discussed and their effectiveness is evaluated. Topics such as long term versus short term investing, fundamental versus technical analysis, diversification, and factoring in taxes when investing are discussed among others. Finally, the chapter ends with an evaluation of how much of an investor's portfolio should consist of stocks.

### 5.1 Long Term versus Short Term Investing

One of the hardest aspects of the stock market to judge is when to sell your investments. Since the market is constantly fluctuating it is hard to accurately judge what will happen to stock prices in the future. Many investors get scared when the market drops and sell out of fear, while others hold on to declining stocks too long in hopes of a rebound. However, there are no set guidelines that govern whether to invest for a long period of time or short period of time. Long term investing and short term investing each have their pros and cons and it is hard to say definitively which strategy is more rewarding. Although each approach has its strengths and weaknesses investors must decide for themselves what timeframe of investing will better suite their trading style and situation.

Short term investing is, obviously, an investment that covers a relatively short period of time. Typically, short term investments span a few weeks or a few months and offer high returns. Of course, the reason that short term investments have the potential to make a lot of money in a short time frame is that there is a large amount of risk associated with them. As shown in Financial Risk Management, by Philippe Jorion and

Sarkis Joseph Khoury, "Risk can be defined as the volatility of unexpected outcomes, usually the value of assets or liabilities of interest." Basically this means that short term investments are more volatile than long term investments and they have a higher chance of unexpected results, such as losing money. This is especially the case when investing in stocks. Since the market fluctuates so rapidly it requires precision and a good amount of speculation about when best to sell the stocks. This means that a large portion of time must be devoted to monitoring the market in order to not miss a potential chance to sell (263). However, when a short term investment is properly managed the profit from that investment is immediately available. That is perhaps the best strength of short term investing: the availability of the profit from the investment. If money is required in a relatively short time frame, short term investments can provide it. Long term investments typically take years and years before showing any profit, which is obviously not acceptable if the money is needed at the moment. By contrast, long term investments span large time frames and offer typically greater rewards.

Long term investments span many years, usually decades, and are relatively low risk. This type of investment works by compounding the initial amount, taking a small investment and turning it into a substantial profit (263). "The slow-but-steady pace of long-term investments allow for a much greater degree of stability and a much lower risk than short-term investments." (280). On the other hand, the money invested in long term strategies will not be available for many years to come, so if money is tight a long term investment is probably not the best bet. Plus, if it is absolutely necessary to withdraw money from a long term investment there are usually penalties or fines that must be paid in order to get the money. In addition, an investor must be able to have confidence in his
or her investment and weather out the swings of the market. The greatest strength of long term investments is the fact that typically the longer the investment spans the higher the return. Risk is also minimized in long term investing due to the fact that this kind of investment is unaffected by the daily or weekly swings of the market. Even if the market has a bad year there is plenty of time for it to recover and for the investment to show a gain. "Studies show that as we lengthen our investment horizon, the average annual rate of return over that timeline becomes less variable." (6). This essentially means that the longer an investment is allowed to continue the more likely it is to perform as expected.

Long term and short term investments each have associated benefits and risks. While these properties make the different investment strategies seem better than the other at certain times neither has a clear advantage in terms of the best investing strategy. When immediate returns in a short amount of time are required short term investments are the way to go and when long periods of time are available and small amounts of risk are required long term investments are the best strategy. It is important that each investor consider their goals and choose the type of investment strategy that best suits their situation.

### 5.2 Fundamental vs. Technical Analysis

Fundamental and Technical Analyses are the most common ways of analyzing the stock markets and their indexed companies to figure out which stocks would yield the best returns. Fundamental Analysis lays emphasis on the company background and the current information available (112). Conversely, Technical Analysis believes that all current information is already reflected in the stock prices and that all movements in the
stock are determined by investor reactions which can be predicted by looking at past trends (112).

Whereas to brokers, day traders or other individuals immersed in the stock it may seem that one or the other out of the two is better, to the lay-man or inexperienced trader, both these methods seem complementary to each other. As a result, there are many people who base their stock picks on fundamental analysis but decide when to buy and sell depending on technical analysis.

The core theory behind Fundamental Analysis is that while markets may 'misprice' a stock in the short run, the 'actual price' of the stock shall eventually be reached (112). What this means is that if they believe a company's stock should cost a certain ideal amount and the real cost is different; the universal trend shall be towards that ideal amount.

They start their analysis looking at the global economic situation, such as GDP, inflation, exchange rates and other factors, and hence decide a suitable area to invest in. They then look at factors such as sales and global market trends, generally found in the media, to decide which companies within this area they should invest in. Finally, they look at the current stock prices and after investigating the company's $\mathrm{P} / \mathrm{E}$ ratio, debt to equity ratio, current assets vs. current liabilities ratio and the company's financial returns over previous quarters among other things to come up with a number which they believe the current price will eventually tend to. They then make trades depending on the difference of the two. In a sense, fundamental analysis can be thought of using a simple math algorithm to predict the markets (112).

Technical Analysts base their theory on the paradigm that history repeats itself. They believe that by looking at past trends, they can predict future trends however only for a short period into the future. The analysts will look over the old charts of the stock and based on various 'patterns' that they see predict what the stock will do in the short term.

Different analysts coming from different schools of thought look for different patterns in these charts. Such patterns are based on the prices, moving averages, or trade volumes. The patterns searched for include peaks, trend lines, pivot points, Rahul Mohinder Oscillations, parabolic curves, PAC charts and various other things (112).

Most large investors run down technical analysis including Warren Buffet who stated "I realized Technical Analysis didn't work when I turned the charts upside down and didn't get a different answer" (295). However, various studies have shown that a person can profit from technical analysis. Like Fundamental Analysis which is compared to a math algorithm, Technical Analysis can be viewed as a logical algorithmic way of predicting the market.

While both analysis techniques seem like good tools that can be used to make choices, the stock market is as unpredictable as human emotions as it is in a way governed by human emotions. As a result, rather than arguing about which theory works best, we should accept all views, consider them for what we think they are worth and thereby make educated guesses based on our own considerations.

### 5.3 Diversification

Perhaps the most important aspect of an investor's portfolio is diversification. Diversification refers to the process of selecting a variety of investments within a portfolio. Essentially, it is a financial application of "don't keep all your eggs in one basket." For example, imagine an investor can choose between two companies to invest in. Company A sells only rain-jackets while the Company B only sells sun-glasses. If you only invest is Company A you will have great returns when it is raining, but poor performance when it is sunny. Alternatively, if all your investments are in Company B sunny weather will give good returns while clouds and rain will give horrible returns. However, if you invest in both companies, your risk is minimized and your portfolio is guaranteed to be much more stable and profitable. By spreading out the types of investments, an investor can minimize risk while still maintaining a reasonable rate of return.

There are two primary types of diversification: horizontal diversification and vertical diversification. Horizontal diversification refers to variation within asset categories while vertical diversification refers to variation between asset categories (38). An example of horizontal diversification would be to invest in a variety of stocks. Since stocks are all part of the same general market they are part of the same asset category. "Studies and mathematical models have shown that maintain a well-diversified portfolio of 25 to 30 stocks will yield the most cost-effective level of risk reduction." (70). In order to properly diversify within the same asset category several factors must be considered. One factor is that the investments should be varied based on the business of the company. By spreading investments between the automobile, electronics, and food
industries, for example, you minimize the risk of losses in of those three categories. Additionally, varying the geographic location of investments is another factor that should be taken into account. Investors can attempt to minimize the risk of economic decline in a certain area by spreading out their investments in terms of geographic location (250). The other type of diversification, vertical diversification, is equally important in maintaining a well balanced portfolio. By spreading out investments between asset categories, an investor can protect against the decline of one particular investment group. A simple example of vertical diversification is splitting investments between stocks and bonds. If the stock market is declining, government bonds will likely remain steady and maintain their value, keeping the portfolio balanced. Conversely, if a bond's value is decreased due to better interest rates on a new bond the stocks in the portfolio will help balance the loss. By using the principles of diversification properly an investor can minimize the risk of investing.

Although diversification is the best way to minimize risk it is important to understand that it is in no way a guarantee against losses. "Diversification did nothing to reduce market risk. Indeed, a more and more diversified portfolio tends to look more and more like the market." (256). If the stock market is experiencing a truly horrible decline the way it has in the past couple months, it is inevitable that investors will lose money. What diversification guarantees is that it will help minimize losses. It is illogical to expect that you can make money off the market without any risk, but by properly diversifying your portfolio the risk can be minimized while the returns stay profitable.

### 5.4 Short Selling, Day Trading, Put Options, and Call Options

Short selling is the act of selling someone else's stocks or bonds with the intent to purchase back at a lower price. Short selling is controversial and throughout history, most major stock market crashes are blamed on short selling (286). Short selling works by borrowing shares from someone and depending on the brokerage firm, sometimes leaving a deposit with them as collateral. Next, the shares are sold and the money is added to the account at the brokerage firm. When the time is right, the shares are then covered. If the price has dropped, a profit is made, if the price goes up, there is a loss. Lastly, the shares are returned to the original share holder (262). Short selling dates back to 1609 when a Dutch trader sold more shares than he owned after eight years without dividends (190). Day trades and hedge funds are the most popular at selling short. Short selling is investing against said stock or bond (267). Right after we started the simulation, short selling was banned in the United States for 799 companies from September 19-October 2. This was done to help prevent people from taking advantage of these companies who were being hit by the market.

Day trading is the act of buying and selling stocks or bonds within the same day. Because of the time length and rapid returns, day trading can be very profitable or extremely unprofitable. Many day traders can gain and loose huge percentages a day (190). Day trading is most risky if the trader has poor discipline, inadequate risk capital, incompetent money management, or margin usage. Day traders usually use direct access brokerage firms vs. retail brokerage firms because of time and commissions. Day trading can focus on an unlimited amount of strategies and is extremely hard to predict and accomplish (190).

A put option gives a buyer the option to sell a commodity, stock, or bond to the seller at a certain time for a certain price. The seller is obligated to buy where the buyer is not obligated to sell. In return, the buyer pays the seller a premium in exchange for the deal (190). The buyer will make the money if the stock price drops, where the seller will make the premium if the stock price goes up.

A call option is the opposite of a put option. The buyer has the option to buy a commodity, stock, or bond from the seller at a certain time for a certain price. The seller is obligated to sell where the buyer is not obligated to buy. In return, the buyer pays the seller a premium in exchange for the deal (190). The buyer will make money if the stock price goes up, where the seller will make the premium if the stock price goes down.

### 5.5 Factoring in Taxes When Considering Investment Strategies

One should always take taxes into consideration when he is investing, dividing assets or selling his investments. Taxes play a big role in determining the amount of revenue one gets in return from their investments.

The first thing to take into account is capital gains. When one sells an investment in order to make a profit he usually gets taxed (206). For a short investment, meaning that they sell within the first year they own the investment, they would have to pay taxes at the ordinary rates as high as $35 \%$. If one decides to sell after a year or more however, it will be known as a long-term investment and he would only pay taxes as high as $15 \%$ for most stocks and funds. Some prefer to invest in Individual stocks over Mutual funds because mutual funds have distributions and they have to pay capital gains tax even
though they did not sell shares of the fund. This happens when "the fund itself sells some of its holdings," $(5,206)$.

The rates are different on other type of investments. For homeowners who are selling their primary residence, they don't have to pay taxes up till $\$ 250,000$ for single filers and $\$ 500,000$ for couples. "Collectibles, such as gold coins or antiques, have a higher maximum rate of 28 \%,"(5).

In addition to taxes on capital gain, one also has to pay taxes on interest and dividends. "Qualified dividends on stocks and stock mutual funds are eligible for the same lower maximum $15 \%$ rate." Even if one decides to reinvest back into their security they are still taxed. Municipal bonds, however has tax free federal returns and can offer state income-tax benefits (5).

One can also get additional tax breaks if they look into IRA and 401(k) contributions, which "can reduce your taxable income and give you tax-deferred growth, where you'll only pay tax when you take money out. "With some exceptions, the tax law imposes a $10 \%$ penalty if you withdraw money from your account prior to reaching age $591 / 2 . "(109) *$ Roth IRAs require no tax on interest and dividends as long as one follows the rules. One has to have had an account for at least 5 years and is $591 / 2$ or older, or one is using the withdrawal for a first time home purchase (\$10,000 lifetime limit) (109).

If one does poorly and takes a loss on an investment they can claim the loss against the capital gains they have. If the losses outweigh the gains one can usually take $\$ 3,000$ of losses against other types of income including wages. This is known as harvesting losses, but one has to be careful of the wash sale rule which can take away deductions if one tries to buy back what they sold within the 30 day period $(5,206)$.

Because of taxes one has to consider a lot more than just how much they invest and how much revenue they get in return. However, if one were able to incorporate taxes into their investment strategies there are huge opportunities to make money. It can also be risky because tax laws change so frequently (311).

### 5.6 Investing in Active and Retirement Accounts

Strategies for different accounts vary greatly, and that is no different for active and retirement accounts. Active accounts tend to be managed by making judgments about the market movement instead of relying on automatic adjustments through other means (8). Active accounts are said to have superior investments because they invest through research and investigation of the stocks that they are going to invest in or by selecting funds that have outperformed the market in the past. There is very little nonchalance in the way an active account is managed.

One of the strategies for Active trading has been named "scalp trading". It is the most challenging of the strategies and it requires a discipline and focus beyond that of normal investors (110). There is a low exposure to risk using this strategy, and there are over one hundred trades that occur in one day and an even greater number of trade opportunities and one has to know what to do to make the largest sum of money. In scalp trading there are a few ways to go about making money, the investor either sets a profit target per trade between $.1 \%$ and $.25 \%$, they track the stocks breaking out to new intraday highs or lows or follows the news to read upcoming volatility to predict the outcome of the market (183). That is one of the ways that an active account could work.

Retirement accounts are almost a complete opposite of active accounts in the way that the strategies work. Retirement accounts tend to be 401(k), IRA, Roth IRA, or other types of accounts that gain money over a period of time (62). Retirement accounts tend to tap into bonds, CD's and money markets more so than the active counterpart. Also, retirement funds are much more conservative when they come to their investments. However, there seem to be contradicting sources saying that retirement funds should be aggressive with investing where as others say to be conservative, however, it seems that a conservative investment would be much more reasonable (111). Also there is a choice to make with retirement accounts as to when to roll over all the assets in one's $401(\mathrm{k})$ and IRA into a single annuity to have a nice amount of money in one place or Roth IRA which has no tax but a significant growth to save for later years (200).

There are significant differences between the strategies used for an active and retirement account, one being that the active is managed much more aggressively than the retirement, and also that the returns are much different. Retirement accounts are well managed if they invest in a single thing and wait for it to grow over time, a long-term investment is the perfect type of strategy for retirement accounts as well as $401(\mathrm{k})$ plans and IRA's (107).

### 5.7 Conclusion - Why Invest in Stocks and How Much of an Investor's Portfolio Should Consist of Stocks?

Why should an individual investor buy stocks? The simplest answer to this question is that there are no other comparable long term investment vehicles. Although savings accounts and bonds are less risky investment vehicles, neither offer comparable returns to the stock market; as for derivatives, the opportunity for high short term rates of
return is high but so too is the risk of failure. When used as long term diversified investments in either active or retirement accounts, stocks will produce healthy returns and mitigate the effect of inflation on an investor's money.

The percentage of an investor's portfolio to allocate to stocks should be determined by age and risk tolerance. Although stocks are considered a risky investment, the pitfall of only investing in low risk securities is that an investor may only break even after inflation and taxes are factored in (291). Inflation is as old as the concept of money, and if left unchecked, will destroy an investor's purchasing power over time (276). For example, a $2 \%$ average inflation rate compounded over 25 years will devalue an investor's money nearly $40 \%$ (291). In addition, when invested over the long term and well diversified, the riskiness of stocks is drastically reduced. From the period 1950 to 2005, for example, common stocks held for a 25 year time period averaged an almost $10.5 \%$ return. This return was reduced by only approximately $3 \%$ if that had been the worst 25 year market performance during the period. In contrast, common stocks held for a one year period averaged $13.1 \%$ but returned $-26.4 \%$ in the market's worst one year performance (275). Risk may also be drastically reduced by diversifying stocks held in a portfolio, possibly through mutual funds.

In addition to risk tolerance, age is also a main factor in determining the amount of stock to hold in a portfolio. In general, younger people should hold more stock, while older people should reduce their stock holdings and gradually place their money in safer securities such as bonds and savings accounts. For example, Burton G. Malkiel, author of A Random Walk Down Wall Street, suggests a portfolio consisting of $65 \%$ stocks, $10 \%$ real estate, $20 \%$ bonds, and $5 \%$ cash for investors in their mid twenties and a
portfolio consisting of only $35 \%$ stocks, $15 \%$ real estate, $40 \%$ bonds, and $10 \%$ cash for investors in their late sixties. Younger investors are also advised to hold a larger portion of international stocks, which are more risky but offer more reward. Investors who do not want to bother with readjusting their portfolios with age may choose a life cycle fund. Life cycle funds, developed in the 2000s, automatically readjust their assets according to an investor's age and are offered by most of the major mutual fund companies (275).

The benefits of investing in the stock market should never be overlooked. Despite the perception by many that the market is too risky, partly due to media bias, the stock market on average has produced returns of over $10 \%$ per year throughout much of the past century, while the short and long term bond markets have produced returns of 5.2\% and $3.8 \%$, respectively, from 1926-1997 (291). Risk may drastically be reduced by holding stocks over a long period of time and maintaining a diversified portfolio; since the level of risk involved with investing in stocks is reduced over time, age is the second major determinant in the percentage of a portfolio an investor should allocate to stocks.

## Chapter 6: Portfolio 1 - Companies Chosen Using a Mix of

## Fundamental and Technical Analysis

This portfolio was chosen by looking at company history and backgrounds (fundamental analysis). However the times of buying and selling were chosen by looking for patterns in the stock price charts using technical analysis.

### 6.1 Companies Selected

### 6.1.1 Yahoo (YHOO)

The two founders of Yahoo!, David Filo and Jerry Yang, Ph.D. students in Electrical Engineering at Stanford University started their student hobby in a campus trailer in February 1994 as a way to keep track of their personal interests on the Internet. Before long they were spending more time on their home-brewed lists of favourite links than on their doctoral dissertations. Eventually, Jerry and David's lists became too long and unwieldy, and they broke them out into categories, then subcategories... and that signified the birth of the core concept of the Yahoo! search engine (239).

Their website started out as "Jerry and David's Guide to the World Wide Web" but eventually received a new moniker with the help of a dictionary. The name Yahoo! is considered to be an acronym for "Yet Another Hierarchical Officious Oracle," yet the founders insist they selected the name because its definition reads: "rude, unsophisticated, and uncouth."

Before long, hundreds of people were accessing their guide from well beyond the Stanford trailer. Yahoo! celebrated its first million-hit day in the fall of 1994, translating
to almost 100,000 unique visitors (239). In April 1995, Sequoia Capital agreed to fund Yahoo! with an initial investment of nearly $\$ 2$ million. Yahoo! launched a highlysuccessful IPO in April 1996 with a total of 49 employees (239).

Yahoo is a stable company with a rich history. It has shown a downward trend since hitting a peak in mid March (\$28) to beginning September (\$16). I believe that Yahoo is going to be on an upwards trend soon and that is the reason why I am investing in it. Also, Microsoft may make another offer for Yahoo which will cause its stocks to rise even higher, at which point I will sell them for a profit.

| Company | Yahoo Inc. |
| :--- | :--- |
| Market Cap (\$ Millions) | 26,690 |
| Avg Volume (3 Month) (1000s) | 18,546 |
| 52-Week High Price | 34.08 |
| 52-Week Low Price | 17.25 |
| Common Shares Outstanding (1000s) | $1,385,790$ |
| Current Cost | 19.26 |

Table 6.1.1: Key Stats of Yahoo Inc. (175)

### 6.1.2 Infosys (INFY)

Infosys Technologies Ltd. was started with a few people with little money and a big dream. Today, they are a global leader in IT and consulting with revenues of over US\$ 4 billion.

Infosys offers services that span business and technology consulting but most importantly, outsourcing. Infosys pioneered the Global Delivery Model (GDM), which emerged as a disruptive force in the industry leading to the rise of offshore outsourcing. The GDM is based on the principle of taking work to the location where the best talent is available, and where it makes the best economic sense, with the least amount of
acceptable risk. Infosys thus has a global footprint with over 40 offices and development centers in India, China, Australia, the Czech Republic, Poland, the UK, Canada and Japan. Infosys currently has over 91,000 employees (7).

Direct quote from The Economic Times, MUMBAI (Sep $26^{\text {th }}$ 2008): IT stocks could be the preferred investors' choice due to rupee depreciation and hopes of improvement in global market sentiment after the intervention of the US Federal Reserve for rescuing insurance giant AIG, according to market analysts.

The partially convertible Indian currency fell to 46.98 against the dollar--its weakest level since July 24, 2006, on increasing demand from banks earning arbitrage between domestic and offshore markets amidst fluctuating sentiments in the stock market. Sustained high demand from oil companies and the banks indulged in non-deliverable forward contracts resulted in a sharp depreciation of rupee against the greenback this year due persisting global financial crisis but has raised hopes for companies much dependent on rupee movement, market men observed.

If the company rises in its parent stock market (the BSE), it is only a matter of time before it rises on the NASDAQ as well. Since a majority of its employees are in India, with the rupee depreciating against the dollar, the company has to pay out less (it is a personnel-heavy company, which means that it has more people and less infrastructure) hence more profits.

| Company | Infosys |
| :--- | :--- |
| Cap (\$ Millions) | 20,821 |
| Avg Volume (3 Month) (1000s) | 3,133 |
| 52-Week High Price | 55.80 |
| 52-Week Low Price | 32.65 |
| Common Shares Outstanding (1000s) | 571,996 |
| Current Cost | 34.25 |

Table 6.1.2: Key Stats of Infosys (167)

### 6.1.3 CitiGroup (C)

Citigroup Inc., also known as Citi is also a major financial services company based in New York City. It was formed from by merger of Citicorp and Travellers Group on April 7, 1998. They have 275,000 employees in over 100 countries as a diverse and global finance company (49).

On the twenty-ninth of September, the Citigroup stock fell along with most of the financial services stocks listed on the market. Also, I have heard of news of Citigroup buying Wachovia bank so I assume the stock will rise (48).

| Company | CitiGroup |
| :--- | :--- |
| Market Cap (\$ Millions) | 122,521 |
| Avg Volume (3 Month) (1000s) | 159,346 |
| 52-Week High Price | 48.95 |
| 52-Week Low Price | 12.85 |
| Common Shares Outstanding (1000s) | $5,445,393$ |
| Current Price | 20.03 |

Table 6.1.3: Key Stats Citigroup (159)

### 6.1.4 3M (MMM)

3M was founded in 1902 at the Lake Superior town of Two Harbours, Minn by five businessmen who set out to mine a mineral deposit for grinding-wheel abrasives. It turns out that mining was not very profitable and soon the company moved on to other and better prospects.

A major milestone occurred in 1925 when Richard G. Drew, a young lab assistant, invented masking tape - an innovative step toward diversification and the first of many Scotch ${ }^{\circledR}$ Pressure-Sensitive Tapes (4).

Over the years 3 M diversified dramatically to include new and innovative products.

In 2004, sales topped $\$ 20$ billion for the first time. Recent innovations include Post-it ${ }^{\circledR}$ Super Sticky Notes, Scotch ${ }^{\circledR}$ Transparent Duct Tape, optical films for LCD televisions and a new family of Scotch-Brite ${ }^{\circledR}$ Cleaning Products that give consumers the right scrubbing power for a host of cleaning jobs (4).

3 M has a history of innovating and doing well at it. In 2 weeks it shall release a handheld projector. "We've seen prototypes. We've heard announcements. But finally, someone has gotten something out to the consumer, and (again) it's not Motorola: it's 3M, with their $\$ 359$ MProl10 which should be shipping on September 30. The fan less, speaker less, LED lamp palm sized projector weighs only a third of a pound but can display a VGA image ( $640 \times 480$ ) up to 50 inches diagonally at any surface you care to point it at. It doesn't sound like it's quite as bright as the prototypes we've seen, but so far $3 M$ has been the only company to actually push one of these through to the shelves.

I'm really not sure, though, whether this is going to kick off a whole generation of palmsized projectors, or if the real progress (and money) is in integrated projectors" (240).

Once this is released, it shall only be a matter of time before Apple or Nokia (who are the market leaders in cell phones right now) purchase the patent to implement these projectors into cell phones.

| Company | 3 M |
| :--- | :--- |
| Market Cap (\$ Millions) | 48,741 |
| Avg Volume (3 Month) (1000s) | 5,066 |
| 52-Week High Price | 97.00 |
| 52-Week Low Price | 67.26 |
| Common Shares Outstanding (1000s) | 698,990 |
| Current Price | 68.85 |

Table 6.1.4: Key Stats of 3M (155)

### 6.1.5 US Gold (UXG)

US Gold is a United States based company engaged in the exploration of gold primarily in Nevada and Mexico. The Company currently has large land holdings, a strong treasury and decent share liquidity. In the past 3 years US Gold's land position within Nevada's Cortez Trend has grown from 36 to 170 square miles. The Cortez Trend is part of the Battle Mountain-Eureka Gold Belt that includes Barrick's property (35 million ounces of gold) and the Ruby Hill mine (4 million ounces) to the south (218).

The Company also owns approximately 1,330 square miles of mineral rights in Mexico's Sinaloa State, including the Magistral Gold Mine. Exploration work there was initiated in early 2008 and has produced encouraging results (218).

Gold prices post biggest 1-day gain ever
Wednesday September 17, 6:53 pm ET
By Stevenson Jacobs, AP Business Writer
NEW YORK (AP) -- Gold prices exploded Wednesday -- posting the biggest one-day gain ever in dollar terms -- as fears of more credit market turmoil unnerved investors and triggered a flood of safe-haven buying.

Gold for December delivery rose as much as $\$ 90.40$, or 11.6 percent, to $\$ 870.90$ an ounce in after-hours trading on the New York Mercantile Exchange after jumping $\$ 70$ to settle at $\$ 850.50$ in the regular session. That was the biggest one-day price jump ever; gold's previous single-day record was a $\$ 64$ gain on Jan. 29, 1980. In percentage terms, it was gold's largest one-day advance since 1999.

If gold drops again, the next scare will push it up. Hence I will buy gold when it is low and thereby sell when it is high.

| Company | US Gold |
| :--- | :--- |
| Market Cap (\$ Millions) | 71 |
| Avg Volume (3 Month) (1000s) | 473 |
| 52-Week High Price | 6.80 |
| 52-Week Low Price | 0.75 |
| Common Shares Outstanding (1000s) | 76,179 |
| Current Price | 1.08 |

Table 6.1.5: Key Stats of US Gold (173)

### 6.1.6 Activision Blizzard (ATVI)

Activision Inc. is a worldwide leader in the game publishing industry. Although the company has a diverse range of products, they focus primarily on the core gaming industry of young adult males. In 2007, the companies release portfolio included Call of Duty 3, Guitar Hero II, Tony Hawk's Project 8, Tony Hawk's Downhill Jam, Marvel:

Ultimate Alliance, Over the Hedge, and X-Men: The Official Game, out of which 4 were huge hits (9).

One of the reasons Activision is so big is the fact that they do not have a contract with any one console but rather produce games for the PS3, Xbox360 and Wii at the same time thereby reaching out to the widest audience.

Activision has exclusive contracts with DreamWorks for games for all their new released movies. In the past year, we have seen highly successful movies such as "Bee Movie", "Kung Fu Panda" and "Transformers" released by DreamWorks (9). When the games for these movies are announced later this year the company's stock is bound to go up.

Also, Activision is going to release DJ Hero soon. The build up to the game has been huge and once it is out the stock has nowhere to go but up.

| Company | Activision Blizzard |
| :--- | :--- |
| Market Cap (\$ Millions) | 21,253 |
| Avg Volume (3 Month) (1000s) | 11,549 |
| 52-Week High Price | 19.28 |
| 52-Week Low Price | 9.40 |
| Common Shares Outstanding (1000s) | $1,318,438$ |
| Current Price | 16.38 |

Table 6.1.6: Key Stats of Activision (156)

### 6.1.7 SanDisk (SNDK)

SanDisk is the world leaders in flash memory devices. They were founded in 1988 by Dr. Eli Harari, an internationally recognized authority on non-volatile memory technology. Since then, they have grown into a company worth $\$ 3.9$ billion and along the way got themselves listed as a publically shared company in end of 1995 (182).

SanDisk's products span anything with portable memory such as flash drives, memory cards and mp3 devices. SanDisk is the only company, worldwide, that has the rights to both manufacture and sell every major flash card format, including CompactFlash ${ }^{\circledR}$, SD $^{\mathrm{TM}}$, miniSD ${ }^{\mathrm{TM}}$, microSD ${ }^{\mathrm{TM}}$, MultiMediaCard ${ }^{\mathrm{TM}}$, Reduced Size MultiMediaCard (RS-MMC ${ }^{\text {TM }}$ ), Memory Stick PRO $^{\text {TM }}$ and related Memory Stick ${ }^{\circledR}$ products, xD-Picture Card ${ }^{\mathrm{TM}}$ and USB flash drives (182).

SanDisk is a company that's built on good foundations and principles. I personally own 2 of their products (a flash drive and an mp3 player) and recently ordered a $3^{\text {rd }}$ one (docking station with speakers). I have been using one for about three years now and I have no problem whatsoever with it. I anticipate that they will expand their portfolio soon. Also, flash memory is just getting more and more popular. Therefore, I believe that this is a safe buy.

| Company | SanDisk |
| :--- | :--- |
| Market Cap (\$ Millions) | 4,865 |
| Avg Volume (3 Month) (1000s) | 13,730 |
| 52-Week High Price | 55.98 |
| 52-Week Low Price | 13.06 |
| Common Shares Outstanding (1000s) | 225,010 |
| Current Price | 21.56 |

Table 6.1.7: Key Stats of SanDisk (171)

### 6.1.8 LG (LPL)

Established in 1958, LG Electronics, Inc. (LG) is a global leader and technology innovator in consumer electronics, home appliances and mobile communications. Their portfolio includes CDMA Handsets, GSM Handsets, 3G Handsets, Air Conditioners, Refrigerators, Microwave Ovens, Washing Machines, Vacuum Cleaners, Plasma TVs, LCD TVs, Micro Display Panel TVs, OLED Panels, Home Theater Systems, DVD

Recorders, Super Multi DVD Rewriters, CD $\pm$ RW, Notebook PCs, Desktop PCs, PDAs, PDA Phones, MP3 Players, New Karaoke Systems and Car Infotainment Systems (125).

The company is based in Korea but has 52,000 employees across the world. It is one of the leaders in cellular phones in USA (125). In 2001, LG combined which Phillips, another leading brand to start up a company called LG Display Co. LTD. which is listed on the NYSE and this is the company I am investing in (125).

LG is another one of my safety stocks in case the market crashes. With a diverse and experienced company such as LG, the profits I anticipate shall be low, however so will the risks.

| Company | LG Display Co. |
| :--- | :--- |
| Market Cap (\$ Millions) | 9,725 |
| Avg Volume (3 Month) (1000s) | 1,438 |
| 52-Week High Price | 31.29 |
| 52-Week Low Price | 10.80 |
| Common Shares Outstanding (1000s) | 715,631 |
| Current Price | 13.10 |

Table 6.1.8: Key Stats of LG Display Co. (168)

### 6.1.9 Evergreen Solar (ESLR)

Evergreen Solar, founded in 1994, develops, manufactures and sells solar power products, primarily solar panels, which provide reliable and environmentally clean electric power throughout the world. Evergreen is a fully-integrated manufacturer of solar wafers, cells and modules. This makes them unique in the solar panel manufacturing industry as one of only a few solar companies that have all sections of manufacturing under one roof (74).

Solar energy is a huge potential market along with all renewable sources of energy. I took a look at most of the companies involved with solar power that I found on this simulator and picked Evergreen as it seemed like the most reliable and stable of them.

| Company | Evergreen Solar |
| :--- | :--- |
| Market Cap (\$ Millions) | 1,029 |
| Avg Volume (3 Month) (1000s) | 12,433 |
| 52-Week High Price | 18.85 |
| 52-Week Low Price | 3.30 |
| Common Shares Outstanding (1000s) | 164,687 |
| Current Price | 5.96 |

Table 6.1.9: Key Stats of Evergreen Solar (163)

### 6.1.10 United States Oil Fund (USO)

United States Oil Fund, is a commodity pool that issues limited partnership interests or units that may be purchased and sold on the American Stock Exchange (the AMEX) (214). The Company invests in futures contracts for light, sweet crude oil and other types of crude oil, heating oil, gasoline, natural gas and other petroleum-based fuels that are traded on the New York Mercantile Exchange (NYMEX), International Currency Exchange (ICE) Futures or other United States and foreign exchanges (collectively, Oil Futures Contracts). It holds interests in other oil-related investments such as cash-settled options on Oil Futures Contracts, forward oil contracts, and oil-based over-the-counter transactions (214).

Oil prices rose to a new high and then stabilized at $\$ 110$ a barrel approximately. On Sept $23^{\text {rd }}$ and $26^{\text {th }}$, The price of oil dropped significantly based first on fears that the US economy was collapsing and then the $\$ 700$ billion bailout deal (282).

Now that the bailout plan looks like it will be passed, I expect the oil prices to stabilize again around $\$ 110$, which would lead to the stock prices increasing.

| Company | United States Oil Fund |
| :--- | :--- |
| Market Cap (\$ Millions) | 772 |
| Avg Volume (3 Month) (1000s) | 14,912 |
| 52-Week High Price | 119.17 |
| 52-Week Low Price | 60.19 |
| Common Shares Outstanding (1000s) | 8,900 |
| Current Price | 86.35 |

Table 6.1.10: Key Stats of United States Oil Fund (174)

### 6.2 Trading

Monday, September 29 ${ }^{\text {th }} 2008$ (Day 1)
Today, I bought my initial 10 stocks which I had picked after doing market research. These stocks included Evergreen Solar (ESLR), Infosys (INFY), Yahoo, 3M, Activision, SanDisk, LG, US Oil, US Gold and Nintendo.

This was the time I realized that this simulator does not let me invest in foreign stock and nor could I find an ETF for the Nintendo stock on NYSE or NASDAQ.

Finding that I still had about $\$ 150,000$ remaining, and it being 3 pm (after the banks had crashed due to non passing of the rescue bill) I bought into Citigroup and Goldman Sachs for a total of $\$ 40,000$. I also saw that Apple had dropped about 15 dollars per share due to being downgraded by experts (slowdown of market). I bought Apple at 108 per share for 500 shares. I had set it to buy when Apple when at 102, however this simulator waits 20 minutes before it completes the transaction.

Nearing market closing time, I was going through the list of the highest gainers of the day and found Bank Atlantic and Rydex among them. Going by past statistics, they
were unusually high and I expect that they will drop soon. Therefore, I short sold them to the tune of $\$ 7000$.

The day ended with me losing about $\$ 4,400$. The only stocks that went up were Evergreen Solar and Infosys. Therefore, I set up the simulator to sell them the next day.

| Date | Symbol | $\begin{aligned} & \hline \text { Buy / } \\ & \text { Sell } \end{aligned}$ | Shares | Price | Net Cost / Proceeds | Profit <br> / Loss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 250,000 |  |
| 9/29 | YHOO | Buy | 500 | 17.85 | 8,944.99 |  | 237,015.02 |  |
| 9/29 | MMM | Buy | 400 | 66.71 | 26,703.99 |  | 202,231.06 |  |
| 9/29 | ATVI | Buy | 250 | 15.09 | 3,792.49 |  | 233,222.53 |  |
| 9/29 | SNDK | Buy | 200 | 20.1 | 4,039.99 |  | 245,960.01 |  |
| 9/29 | LPL | Buy | 250 | 12.07 | 3,037.49 |  | 228,935.05 |  |
| 9/29 | USO | Buy | 250 | 78.17 | 19,562.49 |  | 182,668.57 |  |
| 9/29 | UXG | Buy | 1000 | 1.23 | 1,249.99 |  | 231,972.54 |  |
| 9/29 | INFY | Buy | 750 | 30.72 | 23,059.99 |  | 159,608.58 |  |
| 9/29 | ESLR | Buy | 600 | 5.1 | 3,079.99 |  | 156,528.59 |  |
| 9/29 | GS | Buy | 250 | 122.12 | 30,549.99 |  | 125,978.60 |  |
| 9/29 | C | Buy | 400 | 20.03 | 8,031.99 |  | 117,946.61 |  |
| 9/29 | AAPL | Buy | 500 | 108.57 | 54,304.99 |  | 63,641.62 |  |
| 9/29 | REC | Short | 9 | 124.69 | 1,142.20 |  | 64,783.82 |  |
| 9/29 | BBX | Short | 1000 | 6.04 | 6,059.99 |  | 70,843.81 |  |

Table 6.2.1: September $29^{\text {th }}$ Trading Activities

Tuesday, September $30^{\text {th, }} 2008$ (Day 2)
Another thing I learnt about the simulator today is that the simulator does not sell the stocks, which you have told it to sell the previous night, as soon as the market opens. Rather, the instructions go thru around 12 Noon. ESLR sold at $\$ 5.70$ instead of $\$ 6.10$ (yesterday's closing price) as I had hoped and INFY for $\$ 32.33$ rather than $\$ 33.56$.

I sold US Gold at $\$ 1.40$ per share after it had risen up from my buying price of \$1.23. I also decided to short sell ESLR as I had a gut feeling that it would fall soon. Within 2 hours, it had dropped 10 cents per share so I decided to cover it. Near the end of the day, I had \$99,000 in cash; therefore I decided to invest in IBM and Staples.

| Date | Symbol | Buy / Sell | Shares | Price | Net Cost / Proceeds | Profit / Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30/9 | ESLR | Sell | 600 | 5.7 |  | 180 | 74,313.81 | 180 |
| 30/9 | ESLR | Short/Cover | 500 | 5.6,5.7 |  | 50 | 74,313.81 | 50 |
| 30/9 | INFY | Sell | 750 | 32.33 | 24,227.51 | 1167.52 | 98,541.32 | 1397.52 |
| 30/9 | YHOO |  |  |  |  |  | 98,541.32 |  |
| 30/9 | MMM |  |  |  |  |  | 98,541.32 |  |
| 30/9 | ATVI |  |  |  |  |  | 98,541.32 |  |
| 30/9 | SNDK |  |  |  |  |  | 98,541.32 |  |
| 30/9 | LPL |  |  |  |  |  | 98,541.32 |  |
| 30/9 | USO |  |  |  |  |  | 98,541.32 |  |
| 30/9 | UXG | Sell | 1000 | 1.4 | 1,389.01 | 130.02 | 99,930.33 | 1527.54 |
| 30/9 | GS |  |  |  |  |  | 99,930.33 |  |
| 30/9 | C |  |  |  |  |  | 99,930.33 |  |
| 30/9 | AAPL |  |  |  |  |  | 99,930.33 |  |
| 30/9 | SPLS | Buy | 1000 | 22.1 | 22,119.99 |  | 77,810.34 |  |
| 30/9 | IBM | Buy | 100 | 113.94 | 11,413.99 |  | 66,396.35 |  |
| 30/9 | REC |  |  |  |  |  | 66,396.35 |  |
| 30/9 | BBX |  |  |  |  |  | 66,396.35 |  |

Table 6.2.2: September $30^{\text {th }}$ Trading Activities

Wednesday, October $1^{\text {st, }} 2008$ (Day 3)
The first thing I did today was to sell Goldman Sachs and Citigroup due to the fear that more bad news would cause these already volatile stocks to plunge. I wanted to buy Google stock as I believed it would rise. However, as I did not have the revenue to do so, I had to sell my Apple stock to raise capital.

Noticing that Rydex had finally dropped it made financial sense to cover the short. However BankAtlantic (BBX) was acting against my predictions and had risen. Later in the day BBX dropped a small amount from earlier. It was still higher than the price I had shorted it at, so I covered only $75 \%$ of it still incurring a loss of about $\$ 4,000$.

In the meantime, the Dow Jones Index had dropped around 100 points so I bought an ETF (the DIA) expecting a rise soon. I also sold LG as it was in the green for the first
time since I had invested in it. I also did a little extra research that ended with me investing in LMT and CZN.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total Cash | Total <br> Profit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
| $10 / 1$ | MMM |  |  |  |  |  | $66,396.35$ |  |
| $10 / 1$ | ATVI |  |  |  |  |  | $66,396.35$ |  |
| $10 / 1$ | SNDK |  |  |  |  |  | $66,396.35$ |  |
| $10 / 1$ | LPL | Sell | 250 | 12.83 | 3227.49 | 190.00 | $69,623.84$ | $1,717.54$ |
| $10 / 1$ | USO |  |  |  |  |  | $69,623.84$ |  |
| $10 / 1$ | GS | Sell | 250 | 126.11 | 31547.49 | 997.50 | $101,171.33$ | $2,715.04$ |
| $10 / 1$ | C | Sell | 400 | 21.73 | 8711.99 | 680.00 | $109,883.32$ | $3,395.04$ |
| $10 / 1$ | AAPL | Sell | 500 | 111.92 | 55979.99 | $1,675.00$ | $165,863.31$ | $5,070.04$ |
| $10 / 1$ | SPLS |  |  |  |  |  | $165,863.31$ |  |
| $10 / 1$ | IBM |  |  |  |  |  | $165,863.31$ |  |
| $10 / 1$ | GOOG | Buy | 100 | 411.15 | 41134.99 |  | $124,728.32$ |  |
| $10 / 1$ | DIA | Buy | 500 | 107.97 | 54004.99 |  | $70,723.33$ |  |
| $10 / 1$ | GE | Buy | 500 | 24.57 | 12304.99 |  | $58,418.34$ |  |
| $10 / 1$ | CZN- | Buy | 100 | 51 | 5119.99 |  | $53,298.35$ |  |
| $10 / 1$ | LMT | Buy | 150 | 108.26 | 16258.99 |  | $37,039.36$ |  |
| $10 / 1$ | REC | Cover | 9 | 117.25 | 1075.24 | 66.96 | $35,964.12$ | $5,137.00$ |
| $10 / 1$ | BBX | Cover | 750 | 9.97 | 7497.49 | -2967.49 | $28,466.63$ | $2,169.51$ |

Table 6.2.3: October $1^{\text {st }}$ Trading Activities

Thursday, October $2^{\text {nd, }} 2008$ (Day 4)
Having lost nearly $\$ 8000$ yesterday, I was a bit wary and decided to wait before making any major portfolio changes. While I was waiting, all my stocks went from green to red. I reinvested in Apple as the asking price was lower than when I first bought it. The stock proceeded to drop $\$ 6$ per share during the course of the day. I also bought eBay which, following the day's trends, also fell $\$ 1$ per share. All my stocks dropped today, except SanDisk which rose a meager amount.

$\left.$| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total Cash |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | | Total |
| :--- |
| Profit | \right\rvert\,

Table 6.2.4: October $2^{\text {nd }}$ Trading Activities

Friday, October $3^{\text {rd, }} 2008$ (Day 5)
The previous week had made me nervous, so today I didn't invest in anything more hoping to wait until a stock rose up enough for me to sell it and raise capital for more transactions. However, while I watched, Apple plunged $\$ 11$ per share, Google $\$ 15$ per share, and IBM $\$ 11$ per share while the others dropped smaller amounts. I made no trades today.

Yahoo did rise from the past two days and so I set up the simulator to sell it first thing Monday morning. I also plan on selling Google and Activision and covering the remaining BBX (even at a loss). My transactions lined up for Monday include reinvesting in Apple and Citigroup and buying Aracruz Cellulose, MetLife and Superior Energy.

At the end of the week, my net worth has dropped to $\$ 227,119$ from a starting value of $\$ 250,000$. This week, I have learnt from Google to not invest $\$ 50,000$ in a single
company, and from BBX that just because a company rises without explanation does not mean it will drop immediately.

Monday, October $6^{\text {th, }} 2008$ (Day 6)
The BBX stock dropped again, so I took the decision to cover the rest of the stock that had been shorted earlier. I also sold Yahoo! and Activision as I realized that in this market situation, they would keep dropping instead of rising and making a profit.

After watching a few news reports on Yahoo! Finance, and reading related articles on the market situation, I invested in MetLife, Superior Energy and Aracruz. I also noticed that Citigroup had dropped to $\$ 17.23$ per share, which resulted in me reinvesting in it.

Realizing that Google was still plunging, I took the difficult decision or selling it at a loss of nearly $40 \$$ per share, which is my worst loss yet. I also bought a few more Apple shares (it was down $18 \$$ from the last time I bought it). At the end of the day, MetLife had gone up a small amount so I decided to sell it.

| Date | Symbol | $\begin{array}{ll} \hline \text { Buy } \\ \text { Sell } \end{array}$ | Shares | Price | Net Cost / Proceeds | Profit / Loss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10/6 | YHOO | Sell | 500 | 15.27 | 7,654.99 | -1,290 | 4,569.64 | 879.51 |
| 10/6 | MMM |  |  |  |  |  | 4,569.64 |  |
| 10/6 | ATVI | Sell | 250 | 12.35 | 3,107.49 | -685 | 7,677.13 | 194.51 |
| 10/6 | SNDK |  |  |  |  |  | 7,677.13 |  |
| 10/6 | USO |  |  |  |  |  | 7,677.13 |  |
| 10/6 | C | Buy | 200 | 17.23 | 3,465.99 |  | 4,211.14 |  |
| 10/6 | AAPL | Buy | 300 | 91.96 | 27,607.99 |  | -23,396.85 |  |
| 10/6 | SPLS |  |  |  |  |  | -23,396.85 |  |
| 10/6 | IBM |  |  |  |  |  | -23,396.85 |  |
| 10/6 | GOOG | Sell | 100 | 373.98 | 37,417.99 | 3717 | 14,021.14 | 3,911.51 |
| 10/6 | DIA |  |  |  |  |  | 14,021.14 |  |
| 10/6 | GE |  |  |  |  |  | 14,021.14 |  |
| 10/6 | CZN- |  |  |  |  |  | 14,021.14 |  |
| 10/6 | LMT |  |  |  |  |  | 14,021.14 |  |
| 10/6 | EBAY |  |  |  |  |  | 14,021.14 |  |
| 10/6 | SPN | Buy | 250 | 25.42 | 6,374.99 |  | 7,646.15 |  |
| 10/6 | MET | Buy/Sell | 100 | 42.33/41.28 | 4,252.99 | -124.99 | 7,521.16 |  |
| 10/6 | ARA | Buy | 100 | 22.52 | 2,271.99 |  | 5,249.17 |  |
| 10/6 | BBX | Cover | 250 | 9.5 | 2,394.99 | -865 | 2,854.18 | 3,046.51 |

Table 6.2.5: October $6^{\text {th }}$ Trading Activities

Tuesday, October $7^{\text {th }} 2008$ (Day 7)
Today, I sold Aracruz and the DJI ETF (DIA) at a loss of $10 \$$ per share as I had given up hope of a recovery. I also sold SPN due to a bad gut feeling about the stock.

I tried to sell all my CZN stocks but the simulator only allows us to trade up to $10 \%$ of the volume traded in real life. This meant that I could only sell 30 shares of CZN today. However I set the simulator to sell them as soon as possible. After Apple, Staples and IBM made some recovery I sold them as well. Near the end of the day, I shorted QCOM.

| Date | Symbol | $\begin{aligned} & \hline \text { Buy / } \\ & \text { Sell } \end{aligned}$ | Shares | Price | Net Cost / Proceeds | Profit / Loss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10/7 | MMM |  |  |  |  |  | 2,854.18 |  |
| 10/7 | SNDK |  |  |  |  |  | 2,854.18 |  |
| 10/7 | USO |  |  |  |  |  | 2,854.18 |  |
| 10/7 | C |  |  |  |  |  | 2,854.18 |  |
| 10/7 | AAPL | Sell | 500 | 92.03 | 45995.01 | -3,234.97 | 48,849.19 | -188.46 |
| 10/7 | SPLS | Sell | 1000 | 18.66 | 18640.01 | -3,479.98 | 67,489.20 | -3,668.44 |
| 10/7 | IBM | Sell | 100 | 95.6 | 9540.01 | -1,873.98 | 77,029.21 | -5,542.42 |
| 10/7 | DIA | Sell | 500 | 97.71 | 48835.01 | -5169.98 | 125,864.22 | -10,712.40 |
| 10/7 | GE |  |  |  |  |  | 125,864.22 |  |
| 10/7 | CZN- | Sell | 30 | 44 | 1300.01 | -3819.98 | 127,164.23 | -14,532.38 |
| 10/7 | LMT |  |  |  |  |  | 127,164.23 |  |
| 10/7 | EBAY |  |  |  |  |  | 127,164.23 |  |
| 10/7 | SPN | Sell | 250 | 20.2 | 5030.01 | -1,344.98 | 132,194.24 | -15,877.36 |
| 10/7 | ARA | Sell | 100 | 18.58 | 1838.01 | -433.98 | 134,032.25 | -16,311.34 |
| 10/7 | QCOM | Short | 500 | 40.7 | 20330.01 |  | 154,362.26 |  |

Table 6.2.6: October $7^{\text {th }}$ Trading Activities

Wednesday, October $8^{\text {th, }} 2008$ (Day 8)
Today, I sold USO and shorted Exxon Mobil on news that oil prices were rising.
After some research, I bought Imclone Systems, Pfizer and a transport ETF. I also shorted Kellogg on reports that they were losing sales to generic brands.

By the end of the day, I decided to end a few of my long term sales by selling GE, 3M and Lockheed Martin. After I felt that oil prices had topped off, I bought InterOil Corp. I then bought P\&G on hopes that commodity sales would rise.

| Date | Symbol | Buy / Sell <br> Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total Cash | Total Profit |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
| $10 / 8$ | MMM | Sell | 400 | 58.86 | 23524.01 | $-3,179.98$ | $177,886.27$ | $-19,491.32$ |
| $10 / 8$ | SNDK |  |  |  |  |  | $177,886.27$ |  |
| $10 / 8$ | USO | Sell | 250 | 72.18 | 18025.01 | $-1,537.48$ | $195,911.28$ | $-21,028.80$ |
| $10 / 8$ | C |  |  |  |  |  | $195,911.28$ |  |
| $10 / 8$ | GE | Sell | 500 | 20.42 | 10190.01 | $-2,114.98$ | $206,101.29$ | $-23,143.78$ |
| $10 / 8$ | CZN- |  |  |  |  |  | $206,101.29$ |  |
| $10 / 8$ | LMT | Sell | 150 | 100.48 | 15052.01 | $-1,206.98$ | $221,153.30$ | $-24,350.76$ |
| $10 / 8$ | EBAY |  |  |  |  |  | $221,153.30$ |  |
| $10 / 8$ | QCOM | Cover | 500 | 38.55 | 19294.99 | $1,035.02$ | $201,858.31$ | $-23,315.74$ |
| $10 / 8$ | IMCL | Buy | 250 | 66.52 | 16649.99 |  | $185,208.32$ |  |
| $10 / 8$ | IYT | Buy | 150 | 70.8 | 10639.99 |  | $174,568.33$ |  |
| $10 / 8$ | PFE | Buy | 100 | 17.78 | 1797.99 |  | $172,770.34$ |  |
| $10 / 8$ | IOC | Buy | 500 | 17.47 | 8754.99 |  | $164,015.35$ |  |
| $10 / 8$ | PG | Buy | 200 | 65.57 | 13133.99 |  | $150,881.36$ |  |
| $10 / 8$ | K | Short | 100 | 54.75 | 5455.01 |  | $156,336.37$ |  |
| $10 / 8$ | EXM | Short | 100 | 10.6 | 1040.01 |  | $157,376.38$ |  |

Table 6.2.7: October $8^{\text {th }}$ Trading Activities

Thursday, October $9^{\text {th, }} 2008$ (Day 9)
Today I sold InterOil at a $1.5 \$$ profit per share. Later on in the day, I covered Kellogg, again at a profit. Then, I shorted, and later covered, National Western Life Insurance with a huge $12 \$$ per share profit. I also covered Exxon Mobil as it had been rising during the day.

During the course of the day, I bought a Swiss/US currency ETF in the belief that the Swiss market shall stay constant while the dollar looses value due the economical situation.

| Date | Symbol | Buy / Sell | Shares | Price | Net Cost / Proceeds | Profit <br> / Loss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10/9 | SNDK |  |  |  |  |  | 157,376.38 |  |
| 10/9 | C |  |  |  |  |  | 157,376.38 |  |
| 10/9 | CZN- | Sell | 10 | 41.25 | 4125 | -97.5 | 161,501.38 | -23,413.24 |
| 10/9 | EBAY |  |  |  |  |  | 161,501.38 |  |
| 10/9 | IMCL |  |  |  |  |  | 161,501.38 |  |
| 10/9 | IYT |  |  |  |  |  | 161,501.38 |  |
| 10/9 | PFE |  |  |  |  |  | 161,501.38 |  |
| 10/9 | IOC | Sell | 500 | 18.9 | 9430.01 | 675.02 | 170,931.39 | -22,738.22 |
| 10/9 | PG |  |  |  |  |  | 170,931.39 |  |
| 10/9 | SZE | Buy | 200 | 10.49 | 2117.99 |  | 168,813.40 |  |
| 10/9 | NWLI | Short | 75 | 168 | 12600 |  | 181413.40 |  |
| 10/9 | NWLI | Cover | 75 | 158.58 | 11893.5 | 706.5 | 169,519.90 | -22,031.72 |
| 10/9 | K | Cover | 100 | 50.83 | 5102.99 | 352.02 | 164,416.91 | -21,679.70 |
| 10/9 | EXM | Cover | 100 | 9.99 | 1018.99 | 21.02 | 163,397.92 | -21,658.68 |

Table 6.2.8: October $9^{\text {th }}$ Trading Activities

Friday, October $10^{\text {th, }} 2008$ (Day 10)
Today, I invested in Mosaic and shorted an S\&P ETF. I also bought GE as it was presenting its quarterly report today and I expect them to announce surplus profits from international ventures. Later in the day, after they made their announcement, I sold GE at a profit. The reason I decided not to hold GE stock for longer was due to the fact that GE has been very volatile in the past 2 weeks.

I bought Google to test the stop loss/high option in the simulator. Each trade like this costs $\$ 29.95$ as commission. By the end of the day, I realized that this option does not work the way you would expect it to, due to the 20 minute delay rule.

At the end of the day I covered the S\&P ETF because I wanted to wait for news over the weekend before reinvesting in it. The week ended with $\$ 218,318.10$, which means my portfolio showed a $\$ 16,000$ loss over the past week. However my overall
percentage was higher the S\&P, Dow and NASDAQ averages so I end this week satisfied with my performance.

| Date | Symbol | $\begin{aligned} & \text { Buy / } \\ & \text { Sell } \\ & \hline \end{aligned}$ | Shares | Price | Net Cost / Proceeds | Profit / Loss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10/12 | SNDK |  |  |  |  |  | 164,446.92 |  |
| 10/12 | C |  |  |  |  |  | 164,446.92 |  |
| 10/12 | GE | Buy | 100 | 18.7 | 1889.99 |  | 162556.93 |  |
| 10/12 | GE | Sell | 100 | 19.22 | 1922 | 32.01 | 164,478.93 | -21,626.67 |
| 10/12 | CZN- |  |  |  |  |  | 164,478.93 |  |
| 10/12 | EBAY |  |  |  |  |  | 164,478.93 |  |
| 10/12 | IMCL |  |  |  |  |  | 164,478.93 |  |
| 10/12 | IYT |  |  |  |  |  | 164,478.93 |  |
| 10/12 | PFE |  |  |  |  |  | 164,478.93 |  |
| 10/12 | PG |  |  |  |  |  | 164,478.93 |  |
| 10/12 | SZE |  |  |  |  |  | 164,478.93 |  |
| 10/12 | MOS | Buy | 150 | 33.86 | 5098.99 |  | 159,379.94 |  |
| 10/12 | SPY | Short | 250 | 86.76 | 21709.99 |  | 181089.93 |  |
| 10/12 | SPY | Cover | 250 | 85.54 | 21995 | 285.01 | 159,664.95 | -21,341.66 |
| 10/12 | GOOG | Short | 70 | 313.16 | 21999.99 |  | 181664.85 |  |
| 10/12 | GOOG | Cover | 70 | 316.76 | 22271.98 | -271.99 | 159,392.96 | -21,613.65 |

Table 6.2.9: October $12^{\text {th }}$ Trading Activities

Monday, October $13^{\text {th, }} 2008$ (Day 11)
This morning, I sold Mosaic for a $6 \$$ per share profit. I was consistently checking all day and the moment Imclone System's selling price exceeded the price I bought it at (after being below for 4 days), I sold it.

Google had closed at $\$ 313$ per share on Friday night but opened at around $\$ 370$ per share today. I had set the simulator to buy at market opening and once the market had opened I could not cancel the order. However, due to the 20 minute delay, the simulator bought Google at $\$ 365$.

After rising to $\$ 10$ and losing me so much money, BBX dropped back to $\$ 5.10$. I have learnt from my mistakes and this time, instead of shorting it, I bought 500 shares of it.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit <br> /Loss | Total Cash | Total Profit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
| $10 / 13$ | SNDK |  |  |  |  |  | $159,392.96$ |  |
| $10 / 13$ | C |  |  |  |  |  | $159,392.96$ |  |
| $10 / 13$ | GOOG | Buy | 200 | 365.52 | 73123.99 |  | $86,268.97$ |  |
| $10 / 13$ | CZN- |  |  |  |  |  | $86,268.97$ |  |
| $10 / 13$ | EBAY |  |  |  |  |  | $86,268.97$ |  |
| $10 / 13$ | IMCL | Sell | 250 | 66.99 | 16727.51 | 77.52 | $102,996.48$ | $-21,536.13$ |
| $10 / 13$ | IYT |  |  |  |  |  | $102,996.48$ |  |
| $10 / 13$ | PFE |  |  |  |  |  | $102,996.48$ |  |
| $10 / 13$ | PG |  |  |  |  |  | $102,996.48$ |  |
| $10 / 13$ | SZE |  |  |  |  |  | $102,996.48$ |  |
| $10 / 13$ | MOS | Sell | 150 | 40.25 | 6017.51 | 918.52 | $109,013.99$ | $-20,617.61$ |
| $10 / 13$ | BBX | Buy | 500 | 5.1 | 2569.99 |  | $106,444.00$ |  |

Table 6.2.10: October $13^{\text {th }}$ Trading Activities

Tuesday, October $14^{\text {th }} 2008$ (Day 12)
Tuesday was very volatile with all my stocks rising and falling small amounts over the course of the day. With the simulator having to wait 20 minutes before processing my order, I did not think the risk was worth the thrill of day trading. The day ended with some stocks higher than the day before while others were lower. Like I mentioned before, the day was volatile.

Wednesday, October $15^{\text {th, }} 2008$ (Day 13)
Over the past 2 days, the American market (the Dow in particular) was following the Asian markets. Following on news that Asian markets rose roughly $4 \%$ on the $15^{\text {th }}$ (thanks to time differences I knew Asian closing prices before the American markets even opened), I bought the Dow Jones ETF (DIA).

While the market did rise till about 12 , it went down sharply after that. My theory was proven wrong as were most of my previous ones. The market dropped steadily after noon. One of the good points of this was the SZE stock I had bought earlier went up because the dollar dropped. I sold it at the end of the day.

| Date | Symbol | $\begin{aligned} & \hline \text { Buy / } \\ & \text { Sell } \\ & \hline \end{aligned}$ | Shares | Price | Net Cost Proceeds | Profit <br> / Loss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10/15 | SNDK |  |  |  |  |  | 106,444.00 |  |
| 10/15 | C |  |  |  |  |  | 106,444.00 |  |
| 10/15 | GOOG |  |  |  |  |  | 106,444.00 |  |
| 10/15 | CZN- |  |  |  |  |  | 106,444.00 |  |
| 10/15 | EBAY |  |  |  |  |  | 106,444.00 |  |
| 10/15 | IYT |  |  |  |  |  | 106,444.00 |  |
| 10/15 | PFE |  |  |  |  |  | 106,444.00 |  |
| 10/15 | PG |  |  |  |  |  | 106,444.00 |  |
| 10/15 | SZE | Sell | 200 | 10.65 | 2110.01 | -7.98 | 108,554.01 | -20,625.59 |
| 10/15 | BBX |  |  |  |  |  | 108,554.01 |  |
| 10/15 | DIA | Buy | 500 | 91.84 | 45939.99 |  | 62,614.02 |  |

Table 6.2.11: October $15^{\text {th }}$ Trading Activities

Thursday, October $16^{\text {th, }} 2008$ (Day 14)
Today the market dropped, rose and dropped again. Here, by 'market' I mean the Dow Jones Industrial Index as that is what most of my stocks have been in, and what I have been trying to predict.

I anticipated the second drop of the day perfectly and sold the DIA ETF on its high for the day. However, it was still lower that what I bought it at. I also shorted the same ETF a few moments later.

At the end of the day, my portfolio was at a similar position as it was last night.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total Cash | Total Profit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
| $10 / 16$ | SNDK |  |  |  |  |  | $62,614.02$ |  |
| $10 / 16$ | C |  |  |  |  |  | $62,614.02$ |  |
| $10 / 16$ | GOOG |  |  |  |  |  | $62,614.02$ |  |
| $10 / 16$ | CZN- |  |  |  |  | $62,614.02$ |  |  |
| $10 / 16$ | EBAY |  |  |  |  |  | $62,614.02$ |  |
| $10 / 16$ | IYT |  |  |  |  |  | $62,614.02$ |  |
| $10 / 16$ | PFE |  |  |  |  |  | $62,614.02$ |  |
| $10 / 16$ | PG |  |  |  |  |  | $62,614.02$ |  |
| $10 / 16$ | BBX |  |  |  |  |  | $62,614.02$ |  |
| $10 / 16$ | DIA | Sell | 500 | 88.24 | 44100.01 | -1839.98 | $106,714.03$ | $-22,465.57$ |
| $10 / 16$ | DIA | Short | 500 | 86.31 | 43135.01 |  | $149,849.04$ |  |

Table 6.2.12: October $16{ }^{\text {th }}$ Trading Activities

Friday, October $17^{\text {th, }} 2008$ (Day 15)
My stocks either rose or stayed stable today. Since my portfolio mostly contains my long term stocks and the shorted DIA, I did not see it fit to make any changes today. I did not buy anything new as my research from the night before did not yield any clear ideas for stocks that I could day trade in.

At the end of the week, my net value is $\$ 211,794.67$, a $\$ 7,000$ drop from last Friday. This drop was expected thanks to the number of bad decisions, and thereby trades, I made this week. I also dropped in rank to fourth out of the six portfolios. I expect to regain my rank of second place on Monday.

Monday, October $20^{\text {th, }} 2008$ (Day 16)

Today was a good day for the market but since I didn't sell, a bad day for me. Google and Citigroup rose sharply but I felt that they would rise more over the next few days so I did not get rid of them. SanDisk continued its freefall after news that it was
highly over valued by Samsung when they offered to buy it out at $26 \$$ a share. Analysts believe that Samsung will make another offer soon and so I'm still hanging onto my stock hoping it will rise again.

Anticipating a drop tomorrow, I set up stop loss orders on Google and BBX.

Tuesday, October $21^{\text {st, }} 2008$ (Day 17)
As I feared, the market dropped today. Surprisingly however, SanDisk went up about 40 c /share so I'm hoping it will start rising again. Due to the market drop, my stop loss orders on BBX and Google were fulfilled and they got sold during the course of the day.

Compared to the rest of the IQP group my loss when the market drops seems to be lower, partly due to the fact I own less stocks. However this probably means then when it does go up I'll make less money. I plan to rectify this by investing more in the next two days.

| Date | Symbol | Buy / Sell | Shares | Price | Net Cost / Proceeds | Profit / Loss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10/21 | SNDK |  |  |  |  |  | 149,849.04 |  |
| 10/21 | C |  |  |  |  |  | 149,849.04 |  |
| 10/21 | GOOG | Sell | 200 | 371.67 | 74314.01 | 1190.02 | 224,163.05 | -21,275.55 |
| 10/21 | CZN- |  |  |  |  |  | 224,163.05 |  |
| 10/21 | EBAY |  |  |  |  |  | 224,163.05 |  |
| 10/21 | IYT |  |  |  |  |  | 224,163.05 |  |
| 10/21 | PFE |  |  |  |  |  | 224,163.05 |  |
| 10/21 | PG |  |  |  |  |  | 224,163.05 |  |
| 10/21 | BBX | Sell | 500 | 7.19 | 3575.01 | 1005.02 | 227,738.06 | -20,270.53 |
| 10/21 | DIA |  |  |  |  |  | 227,738.06 |  |

Table 6.2.13: October 21 $^{\text {st }}$ Trading Activities

Wednesday, October $22^{\text {nd, }} 2008$ (Day 18)
I made no trades today due to a volatile market. Like earlier, my past experience has told me that taking guesses just isn't worth the risk involved.

Thursday, October $23^{\text {rd, }} 2008$ (Day 19)
The market kept dropping today till about 2 pm . I decided to cover my shorted DIA stock. Sometime later, I decided to buy some as well, this time worth $\$ 60,000$ to ensure that I have a large amount invested in the market in case it goes up. I also believe that the DIA stock will settle around 91 by next Tuesday from the 83 it is at now. Between 2 pm and closing, the market rose up slightly to match its opening values.

| Date | Symbol | $\begin{aligned} & \text { Buy / } \\ & \text { Sell } \\ & \hline \end{aligned}$ | Shares | Price | Net Cost / Proceeds | Profit Loss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10/23 | SNDK |  |  |  |  |  | 227,738.06 |  |
| 10/23 | C |  |  |  |  |  | 227,738.06 |  |
| 10/23 | CZN- |  |  |  |  |  | 227,738.06 |  |
| 10/23 | EBAY |  |  |  |  |  | 227,738.06 |  |
| 10/23 | IYT |  |  |  |  |  | 227,738.06 |  |
| 10/23 | PFE |  |  |  |  |  | 227,738.06 |  |
| 10/23 | PG |  |  |  |  |  | 227,738.06 |  |
| 10/23 | DIA | Cover | 500 | 84.34 | 42189.99 | 945.02 | 185,548.07 | -19,325.51 |
| 10/23 | DIA | Buy | 750 | 84.14 | 63124.99 |  | 122,423.08 |  |

Table 6.2.14: October $23^{\text {th }}$ Trading Activities

Friday, October $24^{\text {th, }} 2008$ (Day 20)
The market dropped again as people sold stocks due to the global crisis even though all governments are advising their citizens not to. I lost about $\$ 10,000$ today but I believe the next week shall show some relief as I feel all my stocks have already hit bottom. I toyed with the idea of buying more SanDisk stock today but eventually I
decided to keep some money out of the market. It is the end of the week. My net value is $\$ 215,890.52$, while the percentage I have invested in stocks is $46 \%$, mostly in DIA. Hopefully it will go up next week.

Monday, October $27^{\text {th, }} 2008$ (Day 21)
The market dropped. I have a feeling that the market has hit rock bottom now and it will just keep rising after this. My portfolio only consists of 'bought' stocks so I had no shorted stocks to cover on a day I felt was the bottom. I therefore made no trades today.

Tuesday, October $28^{\text {th }} 2008$ (Day 22)
The NASDAQ rose sharply today. However I do not anticipate this to be stable. I expect a slight drop tomorrow and then the day after it may rise again to regain these values. The Dow rose but not too sharply and I anticipate that this rise shall be stable and it will rise a little more tomorrow. No trades were made today in the anticipation of a further rise.

Wednesday, October $29^{\text {th }} 2008$ (Day 23)
The NASDAQ dropped slightly like I predicted. I held on to all my NASDAQ stocks (e.g. SanDisk, EBay). The Dow rose again like I expected. I think yesterdays predictions were my luckiest. I sold the Dow Diamonds (DIA) as I believe the Dow did today what the NASDAQ did yesterday. I also set up a short at market open for the DIA as I believe that the Dow shall drop a little during day trading tomorrow before regaining what it lost by the end of the day.

Another thing that happened today was that 50 stocks of CZN were traded in the real world. I have been desperately trying to get rid of them so I had to decide if selling 5 stocks (the simulator allows us to sell up to $10 \%$ of the real life volumes) was worth the $\$ 20$ commission I would have to pay. Eventually I decided to hold onto it a while longer.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit <br> / Loss | Total Cash | Total Profit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
| $10 / 29$ | SNDK |  |  |  |  |  | $122,423.08$ |  |
| $10 / 29$ | C |  |  |  |  |  | $122,423.08$ |  |
| $10 / 29$ | CZN- |  |  |  |  |  | $122,423.08$ |  |
| $10 / 29$ | EBAY |  |  |  |  |  | $122,423.08$ |  |
| $10 / 29$ | IYT |  |  |  |  |  | $122,423.08$ |  |
| $10 / 29$ | PFE |  |  |  |  |  | $122,423.08$ |  |
| $10 / 29$ | PG |  |  |  |  |  | $122,423.08$ |  |
| $10 / 29$ | DIA | Sell | 750 | 92.82 | 69634.99 | 6510 | $192,058.07$ | $-12,815.51$ |

Table 6.2.15: October $\mathbf{2 9}^{\text {th }}$ Trading Activities

Thursday, October $30^{\text {th, }} 2008$ (Day 24)
The DIA opened around 70 cents lesser than yesterday's closing value peak. I immediately shorted it and later in the day covered it in two parts. The reason for having two transactions instead of one was that when I was executing my first transaction I was in two minds whether it would increase or drop after that. So I covered $1 / 3^{\text {rd }}$ of the stock saving $2 / 3^{\text {rd }}$ for later. However it didn't drop anymore and instead starting rising so I covered the remaining amount, still managing a decent profit.

The rest of my stocks did what I had expected them to, which was to make up whatever little they dropped on Wednesday. However the IYT stock (a Transport Industry ETF) exceeded my expectations. Later on at night I read an article the IYT was stable at a stable position even with this high jump.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit <br> / Loss | Total Cash | Total <br> Profit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
| $10 / 30$ | SNDK |  |  |  |  |  | $192,058.07$ |  |
| $10 / 30$ | C |  |  |  |  |  | $192,058.07$ |  |
| $10 / 30$ | CZN- |  |  |  |  |  | $192,058.07$ |  |
| $10 / 30$ | EBAY |  |  |  |  |  | $192,058.07$ |  |
| $10 / 30$ | IYT |  |  |  |  |  | $192,058.07$ |  |
| $10 / 30$ | PFE |  |  |  |  |  | $192,058.07$ |  |
| $10 / 30$ | PG |  |  |  |  |  | $192,058.07$ |  |
| $10 / 30$ | DIA | Short | 750 | 92.04 | 68602.5 |  | 260660.57 |  |
| $10 / 30$ | DIA | Cover | 750 | 90.90 | 69417.52 | 815.02 | $192,873.09$ | $-12,000.49$ |

Table 6.2.16: October $30^{\text {th }}$ Trading Activities

Friday, October $31^{\text {st, }} 2008$ (Day 25)
I lost my second rank in the middle of the day due to a huge jump in the value of Wal-Mart stock yesterday. I looked at the charts for Wal-Mart and found that it was at a 1 month high. I decided to short it without realizing that the person, who had bought it, had bought it just after the huge crash on the $6^{\text {th }}$ of October. Wal-Mart kept going up throughout the day as did the rest of my stocks.

This marked the end of another week. My net value rests at $\$ 226,624.57$, while the percentage invested in the market is $17.5 \%$. The total number of transactions I have made is 98 .
$\begin{array}{|l|l|l|l|l|l|l|l|l|}\hline \text { Date } & \text { Symbol } & \begin{array}{l}\text { Buy / } \\ \text { Sell }\end{array} & \text { Shares }\end{array}$ Price $\left.\begin{array}{l}\text { Net Cost / } \\ \text { Proceeds }\end{array} \quad \begin{array}{l}\text { Profit / } \\ \text { Loss }\end{array}\right)$ Total Cash $\left.\begin{array}{l}\text { Total } \\ \text { Profit }\end{array}\right]$

Table 6.2.17: October 31 $^{\text {st }}$ Trading Activities

Monday, November $3^{\text {rd, }} 2008$ (Day 26)
Wal-Mart is starting to look like a bad decision. It has kept rising since I bought it. SanDisk rose 40c/share, Citigroup rose 30c/share, EBay dropped 30c/share, IYT rose 60c/share while Procter \& Gamble and Pfizer Inc stayed approximately the same.

Again a day where the markets were volatile so I didn't make any short term trades. There was some good news however; the real world volume of CZN- traded today was 300 so I could sell off 30 of their shares. I now have only 30 left to get rid of.

| Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total Cash | Total Profit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |
| SNDK |  |  |  |  |  | $220,353.10$ |  |
| C |  |  |  |  |  | $220,353.10$ |  |
| CZN- | Sell | 30 | 38 | 1120.01 | -390 | $221,473.11$ | $-12,390.49$ |
| EBAY |  |  |  |  |  | $221,473.11$ |  |
| IYT |  |  |  |  |  | $221,473.11$ |  |
| PFE |  |  |  |  |  | $221,473.11$ |  |
| PG |  |  |  |  |  | $221,473.11$ |  |
| WMT |  |  |  |  |  | $221,473.11$ |  |

Table 6.2.18: November $3^{\text {rd }}$ Trading Activities

Tuesday, November $4^{\text {th, }} 2008$ (Day 27)
All the stocks in my portfolio rose today, including Wal-Mart. However, today was a Tuesday and I was in class from 10 am to 5 pm therefore I didn't get a chance to make any trades. Ideally I would have liked to sell a few of my long term stocks now that they are in the green.

Today, Obama won the US elections and is going to be the first black president. The news analysts on television (Fox News) have predicted a further rise in the markets tomorrow.

Wednesday, November $5^{\text {th, }} 2008$ (Day 28)
Today, I made the foolish mistake of thinking that the Dow would keep raising once Obama promised to "face the economic crisis head on".

The analysts from yesterday's election and my own thoughts today were proven wrong once again. Most of my stocks fell. SanDisk was the only exception due it having hit bottom a few days ago and was still rebounding. Thankfully I managed to sell IYT while it was still green, the first time I have seen it green in the past three weeks.

Today I bought the Dow Diamonds (DIA) at $\$ 94.99$ in the morning. At the end of the day, it was at $\$ 93$. On the bright side, Wal-Mart dropped as well.

| Date | Symbol | $\begin{aligned} & \hline \text { Buy / } \\ & \text { Sell } \end{aligned}$ | Shares | Price | Net Cost / Proceeds | Profit / <br> Loss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11/5 | SNDK |  |  |  |  |  | 221,473.11 |  |
| 11/5 | C |  |  |  |  |  | 221,473.11 |  |
| 11/5 | CZN- |  |  |  |  |  | 221,473.11 |  |
| 11/5 | EBAY |  |  |  |  |  | 221,473.11 |  |
| 11/5 | IYT | Sell | 150 | 70.99 | 10628.51 | -11.48 | 232,101.62 | -12,401.97 |
| 11/5 | PFE |  |  |  |  |  | 232,101.62 |  |
| 11/5 | PG |  |  |  |  |  | 232,101.62 |  |
| 11/5 | DIA | Buy | 750 | 94.99 | 71262.49 |  | 160,839.13 |  |
| 11/5 | WMT |  |  |  |  |  | 160,839.13 |  |

Table 6.2.19: November $5^{\text {th }}$ Trading Activities

Thursday, November $6^{\text {th, }} 2008$ (Day 29)
Everything dropped a small amount today, except for DIA which dropped a huge $6 \$ /$ share. My portfolio is sharply in the red today due the fact that I had invested heavily in DIA.

On the plus side, the shorted Wal-Mart fell as well and it is now in the green. I made no trades today.

Friday, November $7^{\text {th }}, 2008$ (Day 30)
Today I clawed my way back to second rank. My portfolio rose today but not enough for me to be in the green for anything so I didn't sell or buy anything. Wal-Mart is still green and will hopefully stay that way till next week when I shall get rid of it.

On a whole this week has been very volatile and unlike last week I didn't manage to predict anything successfully. As I result I ended up losing a few thousand dollars. Anyway, I have a lot more invested in the market than I did last week so if the market does rise on Monday (and I believe it will), then I shall make a huge profit.

It is the end of the week again with my net value at $\$ 223,026.78$, while the percentage invested in the market is $54.65 \%$. The total number of transactions made until now is 101 .

Monday, November $10^{\text {th }}, 2008$ (Day 31)
Today Wal-Mart dropped a little more so I covered it. This is my first profit sale in over a week. Like Wal-Mart, most of my stocks dropped except Procter and Gamble which rose a small $0.07 \%$. I did not make any other trades today.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit <br> /Loss | Total Cash | Total <br> Profit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
| $11 / 10$ | SNDK |  |  |  |  |  | $160,839.13$ |  |
| $11 / 10$ | C |  |  |  |  |  | $160,839.13$ |  |
| $11 / 10$ | CZN- |  |  |  |  |  | $160,839.13$ |  |
| $11 / 10$ | EBAY |  |  |  |  |  | $160,839.13$ |  |
| $11 / 10$ | PFE |  |  |  |  |  | $160,839.13$ |  |
| $11 / 10$ | PG |  |  |  |  |  | $160,839.13$ |  |
| $11 / 10$ | DIA |  |  |  |  |  | $160,839.13$ |  |
| $11 / 10$ | WMT | Cover | 500 | 54.36 | 27199.99 | 280.02 | $133,639.14$ | $-12,121.95$ |

Table 6.2.20: November $10^{\text {th }}$ Trading Activities

Tuesday, November $11^{\text {th, }} 2008$ (Day 32)
Most of my stocks went down again today, except for Pfizer and Citizens Util. (CZN). I got tired of waiting for DIA to go back up and feeling that it was going to drop further, I sold it and then shorted a greater amount in the hope I would make up whatever I lost. Sure enough it dropped over a dollar per share over the course of the day. I covered it before the end of the day and then bought back my old stake at this new price.

On a side note, CZN went up to 47 from 39 but the volume traded was only 100. I still do not think selling only 10 stocks is worth the commission.
\(\left.$$
\begin{array}{|l|l|l|l|l|l|l|l|l|}\hline \text { Date } & \text { Symbol } & \begin{array}{l}\text { Buy / } \\
\text { Sell }\end{array} & \text { Shares } & \text { Price } & \begin{array}{l}\text { Net Cost / } \\
\text { Proceeds }\end{array} & \begin{array}{l}\text { Profit / } \\
\text { Loss }\end{array} & \text { Total Cash }\end{array}
$$ \begin{array}{l}Total <br>

Profit\end{array}\right]\)| $11 / 11$ | SNDK |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Table 6.2.21: November $11^{\text {th }}$ Trading Activities

Wednesday, November $12^{\text {th, }} 2008$ (Day 33)
The market crashed today. DIA dropped $\$ 3.28 /$ share. All my stocks fell today with no exceptions. I did not make any trades as I did not think the drop was stable enough to short.

Thursday, November $13^{\text {th, }} 2008$ (Day 34)
Wal-Mart fell to $\$ 53$ in the middle of the day which is a 3 week low for it. I bought it at this price was rewarded when it rose up to 55 by the end of the day. However I believe it will keep rising so I am going to keep it for a little while longer. DIA went up by $\$ 5.5$ / share which implies that today was a good day for my stocks. PG, PFE and EBay also went up significantly.

Friday, November $14^{\text {th }}, 2008$ (Day 35)
Today was a very bad day for my portfolio. SanDisk and EBay hit new lows since being included in my portfolio. Citigroup is also very close to its overall low. DIA also dropped the small amount it had gained yesterday. In the middle of the day (at around 2 pm ) I felt that the drop was complete and it was time for a short upturn for the next 2 hours. With this I mind, I bought 500 shares of Mobile Telesys (MBT). However, the market kept dropping so I am now down $1 \%$ on MBT.

Today signified another end of week with a net value around $\$ 217,136.85$, which includes a drop of $\$ 5,889.93$ from last Friday. The percentage I have invested in the market is $59.4 \%$, up $5 \%$ from the end of last week. Number of transactions made this week is 7 , bringing the total number of transactions to 108 .
$\left.\begin{array}{|l|l|l|l|l|l|l|l|l|}\hline \text { Date } & \text { Symbol } & \begin{array}{l}\text { Buy / } \\ \text { Sell }\end{array} & \text { Shares } & \text { Price } & \begin{array}{l}\text { Net Cost / } \\ \text { Proceeds }\end{array} & \begin{array}{l}\text { Profit / } \\ \text { Loss }\end{array} & \text { Total Cash }\end{array} \begin{array}{l}\text { Total } \\ \text { Profit }\end{array}\right]$

Table 6.2.22: November $16^{\text {th }}$ Trading Activities

Monday, November $17^{\text {th }}, 2008$ (Day 36)
The market dropped a lot today. The only exception was SanDisk which went up marginally. I did not make any trades today as I believe that the market will go up the rest of the week.

Tuesday, November $18^{\text {th, }} 2008$ (Day 37)
The Dow Jones stocks in my portfolio (PFE, PG, WMT, EBAY and DIA) recovered slightly today regaining their Friday closing values. Everything else continued its freefall. MBT is starting to look like a really bad investment and hopefully it will go up later.

I was searching for more stocks to invest in and I found that ESLR was at $\$ 3.12 /$ share which is $2 \$$ lower than it was after the market crash on September $30^{\text {th }}$. I bought it thinking it will once again rise back to the $\$ 5$ range.

| Date | Symbol | Buy / Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total Cash |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |
| $11 / 18$ | SNDK |  |  |  |  |  | $93,489.19$ |
| $11 / 18$ | C |  |  |  |  |  | $93,489.19$ |
| $11 / 18$ | CZN- |  |  |  |  |  | $93,489.19$ |
| $11 / 18$ | EBAY |  |  |  |  |  | $93,489.19$ |
| $11 / 18$ | PFE |  |  |  |  |  | $93,489.19$ |
| $11 / 18$ | PG |  |  |  |  | $93,489.19$ |  |
| $11 / 18$ | DIA |  |  |  |  |  | $93,489.19$ |
| $11 / 18$ | WMT |  |  |  |  | $93,489.19$ |  |
| $11 / 18$ | MBT |  |  |  |  |  | $93,489.19$ |
| $11 / 18$ | ESLR | Buy | 1000 | 3.12 | 3139.99 |  | $90,349.20$ |

Table 6.2.23: November $18^{\text {th }}$ Trading Activities

Wednesday, November $19^{\text {th, }} 2008$ (Day 38)
Today was another bad day for my stocks. I lost approximately $\$ 25,000$ today. ESLR, SNDK, EBAY and PFE all dropped approximately $1 \$$ per share, while WMT, C and PG lost $2 \$$ per share and DIA and MBT lost up to $4 \$$ per share. The biggest loser in terms of percentage was ESLR with $27 \%$ followed by Citigroup with $23 \%$.

Again, I made no more trades today.

Thursday, November $20^{\text {th, }} 2008$ (Day 39)
Whereas I thought yesterday was bad, today was much worse. The stocks nearly mirrored yesterday's drops in terms of value with Citigroup being the biggest percentage loser with $26.04 \%$ and DIA being the highest value loser with four dollars and 30 cents. I made no trades today. The market has been going up regularly on Fridays so hopefully tomorrow it will do so again. Maybe if it goes up enough I'll have the confidence to make a few trades.

Friday, November $21^{\text {st }}, 2008$ (Day 40)
Today was another volatile day. The market sank until noon and then rallied to end high. Most of my stocks made up Thursday's losses and some ate away into Wednesday's loss as well. The two exceptions to this were SanDisk and Citigroup. SanDisk rose a little but not enough to satisfy me or even match the average index. Citigroup on the other hand dropped $\$ 3.77 /$ share. It has now dropped $78.12 \%$ since the time I bought it. In hindsight buying Citigroup was a really bad decision. I had bought it thinking that the Wachovia deal would push up the prices but the deal fell through and that resulted in this astonishing loss.

My net value at the end of this week is $\$ 209,177.86$; a drop of $\$ 7,958.99$ from last Friday's closing value. The percentage invested is $59.4 \%$ which is the same as last week. However the reason for this constant percentage is that while the value of my stock assets dropped, I invested more in the market. I made only 1 trade this week, bringing the total number of transactions to 109 .

Monday, November $24^{\text {th }}, 2008$ (Day 41)
Today I had the excellent opportunity to get rid of all my CZN stocks in a single trade. I sold it for $\$ 47.27 /$ share which still represented a small loss but I was just happy to not have it in my portfolio anymore.

The market rose sharply today and I believe that this rise is because it is thanksgiving week. Hopefully this trend will continue throughout the week. The sharpest rise I saw today was of MBT which rose $28 \%$.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total Cash | Total <br> Profit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
| $11 / 24$ | SNDK |  |  |  |  |  | $90,349.20$ |  |
| $11 / 24$ | C |  |  |  |  |  | $90,349.20$ |  |
| $11 / 24$ | CZN- | Sell | 30 | 47.27 | 57.28 | -111.9 | $90,349.20$ | $-12,233.85$ |
| $11 / 24$ | EBAY |  |  |  |  |  | $90,349.20$ |  |
| $11 / 24$ | PFE |  |  |  |  |  | $90,349.20$ |  |
| $11 / 24$ | PG |  |  |  |  |  | $90,349.20$ |  |
| $11 / 24$ | DIA |  |  |  |  |  | $90,349.20$ |  |
| $11 / 24$ | WMT |  |  |  |  |  | $90,349.20$ |  |
| $11 / 24$ | MBT |  |  |  |  |  | $90,349.20$ |  |
| $11 / 24$ | ESLR |  |  |  |  |  | $90,349.20$ |  |

Table 6.2.24: November $\mathbf{2 4}^{\text {th }}$ Trading Activities

Tuesday, November $25^{\text {th }} 2008$ (Day 42)
Yesterday's trend continued albeit in a less dramatic way. Most of the stocks continued rising a little. Nevertheless, PG and ESLR registered slight losses while MBT underwent a correction to end up losing half its rise from yesterday.

Overall the stocks I have invested heavily in did well so I am satisfied with today's result. Wednesday, November $26^{\text {th, }} 2008$ (Day 43)

Today represented another brilliant day for the market. I earned around $\$ 7000$ today. Near the end of the day I sold Wal-Mart and then shorted it. I do not believe that this bull-run can continue at this level for very long.

I should have sold MBT today, but it hadn't surpassed the buying price and I didn't want to have to add another loss to my tables. I think that I will just wait till it goes back up.

| Date | Symbol | $\begin{aligned} & \text { Buy / } \\ & \text { Sell } \\ & \hline \end{aligned}$ | Shares | Price | Net Cost / Proceeds | Profit <br> / Loss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11/26 | SNDK |  |  |  |  |  | 90,349.20 |  |
| 11/26 | C |  |  |  |  |  | 90,349.20 |  |
| 11/26 | EBAY |  |  |  |  |  | 90,349.20 |  |
| 11/26 | PFE |  |  |  |  |  | 90,349.20 |  |
| 11/26 | PG |  |  |  |  |  | 90,349.20 |  |
| 11/26 | DIA |  |  |  |  |  | 90,349.20 |  |
| 11/26 | WMT | Sell | 500 | 55.7 | 27830.01 | 950 | 118,179.21 | -11,283.85 |
| 11/26 | MBT |  |  |  |  |  | 118,179.21 |  |
| 11/26 | ESLR |  |  |  |  |  | 118,179.21 |  |
| 11/26 | WMT | Short | 500 | 55.73 | 27845.01 |  | 146,024.22 |  |

Table 6.2.25: November $\mathbf{2 6}^{\text {th }}$ Trading Activities

Thursday, November $27^{\text {th, }} 2008$ (Day 44)
Today was thanksgiving and the markets were closed today.

Friday, November $28^{\text {th }}, 2008$ (Day 45)
Today was another lively day for the market. Most of my stocks rose some more or stayed steady at their earlier heights. I was planning on selling DIA, PG and PFE later in the day. Unfortunately, the market closed at 1 pm instead of the normal 4 pm so I did not get a chance to do anything. I am feeling really bad about this because I would have made a huge profit.

The number of transactions made this week is 3 , bringing the total transactions to 112. My net worth is much higher than before but I do not think it is sustainable. Unfortunately I did not get to sell everything and make a profit. I think next week I'll take larger and more numerous risks and hopefully reap bigger rewards. My aim for the next week is to break even.

Monday, December $1^{\text {st }}$, 2008 (Day 46)
Exactly what I did not want to happen happened. The market opened a lot below its closing on Friday. It then proceeded to drop even further. The market closed today lower than it has in two weeks. What this means is that whatever hopes I had of making risky decisions have been eliminated. In such a market I refuse to buy or sell anything. I may short or cover but the market started off low this morning. I expected it to be volatile however it just fell further. I'll probably cover Wal-Mart tomorrow.

Tuesday, December 2 ${ }^{\text {nd }}, 2008$ (Day 47)
I decided to take some risks today. I bought some more DIA as I believe it will rise towards the end of this week. Like planned, I covered my Wal-Mart stock. Thankfully most of my stocks started rising later on in the day. While it didn't even come close to regaining Friday's glory, it seems to be making a comeback.
\(\left.$$
\begin{array}{|l|l|l|l|l|l|l|l|l|}\hline \text { Date } & \text { Symbol } & \begin{array}{l}\text { Buy / } \\
\text { Sell }\end{array} & \text { Shares } & \text { Price } & \begin{array}{l}\text { Net Cost / } \\
\text { Proceeds }\end{array} & \begin{array}{l}\text { Profit } \\
\text { /Loss }\end{array} & \text { Total Cash }\end{array}
$$ \begin{array}{l}Total <br>

Profit\end{array}\right]\)| $12 / 2$ | SNDK |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $12 / 2$ | C |  |  |  |  |  |
| $12 / 2$ | EBAY |  |  |  |  |  |
| $12 / 2$ | PFE |  |  |  |  |  |
| $12 / 2$ | PG |  |  |  |  |  |
| $12 / 2$ | DIA | Buy | 500 | 84.24 | 42139.99 |  |
| $12 / 2$ | MBT |  |  |  |  | $146,024.22$ |
| $12 / 2$ | ESLR |  |  |  |  |  |
| $12 / 2$ | WMT | Cover | 500 | 53.78 | 26909.99 |  |

Table 6.2.26: December $2^{\text {nd }}$ Trading Activities

Wednesday, December $3^{\text {rd }}$, 2008 (Day 48)
The market rose again today. Today I made a conscious decision to not make anymore trades until the last day. I have already paid $\$ 2,308.74$ in commissions so far and I do not want to spend any more. I believe the market will stay somewhat steady over the next two days so there is no reason why I should waste money on fees. DIA went up today, which is a very good thing since I have more than $\$ 100,000$ invested in it alone. At this late point, the rest of my stocks do not matter as much anymore.

Thursday, December $4^{\text {th, }} 2008$ (Day 49)
The market dropped again today but it wasn't nearly as much as Monday's drop. I felt really tempted to pick up some more stocks today but I realized that it would not have been a good idea as I was short on cash and also already had 1250 stocks of DIA. Today I watched the market fluctuate without making any trades.

Friday, December $5^{\text {th, }} 2008$ (Day 50)
Today was an interesting day as I was did not have work for most of it and spent it just looking at the indexes. For the first few hours the market rose and then it fell for the next 3 hours before rising steeply for half an hour and then falling over the next hour. Finally, between 2 pm and 4 pm , the market rallied to end on a high.

The market has risen beyond my expectations today, which is a good thing since our simulation ends today.

Today is the end of our simulation. My ending net value is $\$ 221,932.12$, a drop of $\$ 28,067.88$ over the past 10 weeks. I have paid fees and interest and also earned interest. I have placed limit sells and stop loss sales. I have bought and shorted stocks. This brings my total transactions to 114 . I have learnt a lot through this simulation and hopefully will implement it later on in life.

Monday, December 8th, 2008 (Day 51)
Today I sold everything so I could tally my total earnings for my own benefit during analysis.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total Cash | Total Profit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
| $12 / 8$ | SNDK | Sell | 200 | 9.39 | 1897.99 | $-2,142$ | $78,872.23$ | $-12,490.83$ |
| $12 / 8$ | C | Sell | 200 | 8.24 | 1667.99 | $-6,364$ | $80,540.22$ | $-18,854.83$ |
| $12 / 8$ | EBAY | Sell | 500 | 14 | 7019.99 | -2910 | $87,560.21$ | $-21,764.83$ |
| $12 / 8$ | PFE | Sell | 100 | 16.92 | 1711.99 | -86 | $89,272.20$ | $-21,850.83$ |
| $12 / 8$ | PG | Sell | 200 | 63.43 | 12705.99 | -428 | $101,978.19$ | $-22,278.83$ |
| $12 / 8$ | DIA | Sell | 1250 | 88.39 | 110507.49 | 3597.5 | $212,485.68$ | $-18,681.33$ |
| $12 / 8$ | MBT | Sell | 500 | 28.58 | 14309.99 | -960 | $226,795.67$ | $-19,641.33$ |
| $12 / 8$ | ESLR | Sell | 1000 | 2.63 | 2649.99 | -490 | $229,445.66$ | $-20,131.33$ |

Table 6.2.27: December $8^{\text {th }}$ Trading Activities (Final Table)

### 6.3 Analysis

Over the past 10 weeks of trading, my portfolio has consisted of two kinds of stocks. The first and more prominent among these were my long term stocks or stocks that I had held for longer than 3 weeks or $30 \%$ of the simulation. While this may seem like a short time for a real world situation, considering our simulation was only 10 weeks
and the state of the market during those 10 weeks (registering the largest in-day drop and then the record in-week rise), I believe that 3 weeks or $30 \%$ is long enough to be called long-term.

On the other side of the spectrum, my portfolio consisted of several short term stocks which I held for less than 3 weeks and some only for a few hours. My portfolio leaned heavily towards these short term stocks with 26 out of 40 unique stocks being part of my short term section.

The long-term stocks were also divided into two distinct parts, the first being the stocks I bought once and sold once. The second part was the long term stocks which I actively traded in. Moneywise, the actively traded long term stocks were in the majority at times holding nearly $50 \%$ of my budget or $\$ 125,000$. These were my favorite part of the simulation.

The long term single sale stocks I owned were traded using fundamental analysis only. I researched companies I thought were stable, I checked newspapers and I looked extensively at yearly averages. I bought these stocks hoping to hold them till the end of the simulation but I had to end up selling a few due to adverse news reports and once to raise capital for my other trades.

The following graphs represent my long term single sale stocks from the time I bought them to the time I sold them.

SanDisk (SNDK) - Sep $29^{\text {th }}$ to Dec $5^{\text {th }}$


Figure 6.3.1: SanDisk from Sep $29^{\text {th }}$ to Dec $8^{\text {th }}$ (Yahoo! Finance)

Citigroup (C) - Sep $29^{\text {th }}$ to Dec $5^{\text {th }}$


Figure 6.3.2: Citigroup from Sep $29^{\text {th }}$ to Dec $8^{\text {th }}$ (Yahoo! Finance)

## Citizens Util EPPIC (CZN-P) - Oct $1^{\text {st }}$ to Nov $24^{\text {th }}$



Figure 6.3.3: CZN from Oct $1^{\text {st }}$ to Nov $24^{\text {th }}$ (Yahoo! Finance)

EBay (EBAY) - Oct $2^{\text {nd }}$ to Dec $5^{\text {th }}$


Figure 6.3.4: EBay from Sep $\mathbf{2 9}^{\text {th }}$ to Dec $8^{\text {th }}$ (Yahoo! Finance)
iShares Dow Jones Transportation Average (IYT) - Oct $8^{\text {th }}$ to Nov $10^{\text {th }}$


Figure 6.3.5: IYT from Oct $6^{\text {th }}$ to Nov $10^{\text {th }}$ (Yahoo! Finance)

Pfizer Inc. (PFE) - Oct $8^{\text {th }}$ to Dec $5^{\text {th }}$


Figure 6.3.6: Pfizer from Oct $6^{\text {th }}$ to Dec $8^{\text {th }}$ (Yahoo! Finance)

Procter \& Gamble Co. (PG) - Oct $8^{\text {th }}$ to Dec $5^{\text {th }}$


Figure 6.3.7: Proctor and Gamble from Oct $6^{\text {th }}$ to Dec $8^{\text {th }}$ (Yahoo! Finance)

Mobile Telesystems OJSC (MBT) - Nov $14^{\text {th }}$ to Dec $5^{\text {th }}$


Figure 6.3.8: MBT from Nov $14^{\text {th }}$ to Dec $8^{\text {th }}$ (Yahoo! Finance)

The most important out of the actively traded long term stocks were DIA and WMT. I picked WMT using fundamental analysis and because a friend of mine recommended it. I picked DIA by looking at various charts and found that DIA had a relatively high intra-day range average and was still steady week by week. However the times for buying and selling we based on a mixture of news reports about the market status, gut feeling, and technical analysis.

I used the double peak system a few times when deciding when to short these two stocks. This system basically says that if a stock has been steady over the past few months/years, it will hit a peak and drop and then hit a new peak higher than the old one before crashing and then rising again to the first peak. Therefore using this system it would be best to sell and short at alternate peaks while covering or buying at alternate lows.

The graphs for these two stocks are shown below. The key for the graphs is as follows

```
Buy Sell
Short \squareCover
XDay-Trades
```

The day-trades markers will have text with the explanation of which trades I made intraday.

## Wal-Mart (WMT)



Figure 6.3.9: Wal-Mart from Nov $10^{\text {th }}$ to Dec $8^{\text {th }}$ (Yahoo! Finance)

## DIAMONDS Trust, Series 1 (DIA)

Also known as The DOW Diamonds


Figure 6.3.10: DIA from Sep $\mathbf{2 9}^{\text {th }}$ to Dec $8^{\text {th }}$ (Yahoo! Finance)

The rest of my stocks were short term only. I bought most of them keeping the short term in mind and therefore did not do as much research while picking them. However while most were picked by looking at previous charts of highest gainers/losers and other predictive methods, a few like Yahoo!, ESLR, and LPL were picked using the fundamental analysis method of picking the company and not the stock.

I found, over the course of the simulation, that the stocks I had chosen within the first 2 weeks did badly but after I got used to the market system and starting understanding the nuances of the stocks and also finding the kind of companies I could predict with relative ease, I started making profits.

Initially I had made a huge loss, however I made this up over the next 5-6 weeks. Around week 7 I made a few key mistakes but I started catching back up over the last 3 weeks. I beat the market averages, escaped major subprime losses and even though I ended $\$ 20,000$ in the red, I believe I did well and am happy with my performance.

## Chapter 7: Portfolio 2 - Companies With Historical Strong Market Performance

This portfolio was chosen by analyzing historical stock data and choosing the companies with a history of growth and good market performance. The companies chosen come from a variety of backgrounds, from technology powerhouses to food distributors.

### 7.1 Companies Selected

### 7.1.1 Microsoft Corporation (MSFT)

Microsoft was founded on April 4, 1975 by Bill Gates and Paul Allen in Albuquerque, New Mexico (135). Five years later Steve Ballmer joined Bill Gates at Microsoft. They started aggressively marketing Microsoft, most notably their MS-DOS operating system. Soon, Microsoft made a major breakthrough with the first retail version of Microsoft Windows on November 20, 1985 (135). Just five months after debuting Windows, Microsoft went public with an IPO on March 13, 1986 (135). The initial offering price was $\$ 21.00$ and by the end of the trading day was $\$ 28.00$. Gates and Allen made millions from the offering and continued to expand their company. The following years saw Microsoft stock rise steadily, making numerous employees millions. Although the last several years have seen a slow decline in stock price, I believe Microsoft will soon start to rebound. Microsoft has an incredible range of products, including Windows, Office, Internet Explorer, and Xbox 360. The Windows Vista operating system made record profits last year and will only continue to gain popularity as time goes on. Microsoft has also begun a new advertising campaign designed to shift
the focus back to their products. The 52 week range is $23.50-37.50$ with the current stock price of 25.16 (136).
7.1.2 Take-Two Interactive Software Inc. (TTWO)

Take-Two Interactive is a publisher, developer, and distributor of interactive entertainment software, hardware, and accessories. In simple terms, they finance, develop, and distribute video games. Founded in 1993, Take-Two has since established itself as one of the premier developers in the gaming industry (66). With notable franchises such as BioShock, Max Payne, Midnight Club, 2K Sports, and the ever controversial Grand Theft Auto, Take-Two is a common name in the gaming community. It is an American based company with headquarters in New York City and is the owner of several smaller game developers and publishers, most notably Rockstar. Recently, EA announced an offer to buy Take-Two for around $\$ 2$ billion, translating to a $\$ 26$ per share transaction (204). The offer was initially made to Take-Two's board of directors, but the directors turned down the offer in hopes of remaining independent. This prompted EA to make the offer public, hoping the enticement of profits provided by the buyout would prompt shareholders to side with EA. However, nothing came of the offer and EA announced on September 14, 20008 that they had let the $\$ 2$ billion offer expire (204). This caused Take-Two stock price to fall from around 26 to about 16. Based on news that EA and Take-Two are supposedly in talks again I believe that Take-Two's stock will begin to rise again. The 52 week range is $13.53-27.95$ with the current stock price of 16.57 (205).

### 7.1.3 Amazon.com Inc. (AMZN)

Founded in 1994, Amazon.com became one of the first major companies to sell items online (14). Jeff Bezos, the founder, started Amazon as an online bookstore but soon expanded into sales of almost anything. As one of the companies formed during the "dot-com bubble", Amazon distinguished itself by slow and steady growth instead of astronomical growth like that attributed to many dot.com companies. However, when these companies dissolved due to bankruptcy, buyouts, bad business practice, and unstable foundations Amazon persevered and continued to grow. On May 15, 1997 Amazon made its IPO with a price of $\$ 18.00$ per share (14). In 2001, Amazon turned its first profit, setting the tone for its future. Amazon remains profitable to this day and because of that has proved to be stable and secure despite market fluctuations. I believe that Amazon will continue to grow. Not only does it offer some of the best deals on its merchandise but with rising energy costs people are looking for more and more ways to save money. Online shopping is one way to save money and with free shipping for its members, Amazon is currently one of the best ways to buy what you need. The 52 week range is $61.20-101.09$ with the current stock price of 81.00 (15).

### 7.1.4 SunPower Corporation (SPWR)

SunPower Corporation is the manufacturer of the world's most efficient solar power systems. Founded in 1985 by Dr. Richard Swanson, the company has established itself as one of the industry leaders for renewable energy (95). Their solar cells and solar panels hold the world record for efficiency with a $23.4 \%$ efficiency (201). In 2007, SunPower bought PowerLight Corporation. PowerLight is a provider of large-scale solar
power systems and operates worldwide. This acquisition has allowed SunPower to gain control of all aspects of solar production. Due to this, SunPower has plans to reduce the cost of installing a solar system by $50 \%$ of current costs by 2012 (95). I believe that due to the state of the environment and the growing energy crisis renewable energy is about to emerge as one of the fastest growing industries in the world. However, like the dot.com bubble of the 90 's I believe there will be many companies that don't have the necessary means or expertise to form a profitable enterprise. Thus, an established company such as SunPower is a relatively safe pick while at the same time has the potential for huge growth. The 52 week range is $53.18-164.49$ with the current stock price of 89.62 (202).

### 7.1.5 Intel Corporation (INTC)

Intel is the world's largest semiconductor company. Founded in 1968 by Gordon Moore and Robert Noyce, Intel began as a semiconductor manufacturer (106). Its primary was SRAM chips, which is a type of computer memory. With Andy Grove, another key Intel employee at the helm, the company soon began to branch out into other manufacturing and production and created the first microprocessor in 1971 (106). The founders realized that the future was in microprocessors and began to focus on their production. By the end of the 80 's, Intel had established itself as one of the leaders of the computer industry and during the 90 's became the most profitable supplier to the PC industry (106). However, other companies soon emerged to compete with Intel and their record profits slowly dipped. By refocusing on processors and chipsets Intel has managed to remain one of the industry leaders. Although Intel's stocks have been on a
downward trend in the last couple months I believe the company will soon be on the rise again. Due to the upcoming release of their new processor microarchitecture, codenamed Nehalem and widely regarded as revolutionary, I believe Intel is about to make a big comeback and reinforce its reputation as the computing industry leader. The 52 week range is $18.05-27.99$ with the current stock price of 19.23 (105).

### 7.1.6 Google (GOOG)

Google is an important part of any internet user's repertoire of tools. It was created in 1996 by two students at Stanford, Larry Page and Sergey Brin, who were trying to form a better search engine. Soon after leaving Stanford they started Google Inc. on September 7, 1998 (87). They soon started selling advertising using advertisements associated with the keywords users typed into the search engine. Every time a user clicked on the advertisement shown, Google would receive a previously determined amount of money. However, the major source of early income for Google was from outside funding, including money from a co-founder of Sun Microsystems, Kleiner Perkins Caufield \& Byers, and Sequoia Capital (87). On August 19, 2004 Google made its initial public offering. At a price of $\$ 85$ per share, Google made a market capitalization of around $\$ 23$ billion (87). Since then, Google shares have done very well, reaching above $\$ 700$ per share in 2007. For someone like me who grew up with the internet, it is hard to imagine what it would be like without a tool as useful as Google. I can think of no reason why Google wouldn't be around for a very long time to come, so it is a safe bet that Google shares will be reasonably secure. I chose Google for the security it offers and also because I can't imagine a company with such an incredibly
used product like the Google search engine being affected too much by the economy. The 52 week range is $406.38-747.24$ with the current stock price of 435.11 (88).

### 7.1.7 H.J. Heinz Co. (HNZ)

This company was started over 100 years ago in Pennsylvania by Henry John Heinz. In 1869 Heinz and partner L.C. Noble started a business delivering processed foods to local stores (233). They soon relocated from Sharpsburg to nearby Pittsburgh in 1872 (90). However, the company ran into some financial trouble and fell apart in 1875. Heinz soon started over, this time with the help of his family, and introduced the tomato ketchup that is famous today. The company was run primarily by the Heinz family until 1987 when Tony O'Reilly took over as CEO and chairman (90). However, O'Reilly helped shape the company into a major international company and into the company Heinz is today. Today, Heinz sells over 1300 products in more than 50 countries and is a $\$ 10$ billion global company (233). I chose Heinz because it has a strong history of good sales and staying power. Even after the events of 2001, when most companies saw a large dip in their share price, Heinz fell very little. The products they make are essential to many people and there is little danger of their products becoming unnecessary in the coming years. The 52 week range is $41.37-53.00$ with the current stock price of 50.56 (91).

### 7.1.8 Staples Inc. (SPLS)

Staples is one of the great office supply superstores. It was founded in 1986 with a store in Brighton, Massachusetts (197). The founder, Thomas Stemberg, was frustrated by the lack of proper supplies in the local stores and so opened his own office supply store. The business quickly expanded and additional stores soon followed. Today, Staples has more than 2,000 stores in 27 countries (199). They have also expanded their products, carrying everything from pencils to computers. I chose Staples because of the necessity of its products. As long as there are schools and offices, people will always need school and office supplies. With $\$ 27$ billion in sales, Staples has proved that it is a strong competitor in the office supply area (199). In addition, their stocks have been on a steady rise since 2003. Although there is a recent dip I believe that the strong need for office supplies will continue the increase in Staples' stock price. The 52 week range is 19.69 - 26.57 with the current stock price of 23.69 (198).

### 7.1.9 Wal-Mart Stores Inc. (WMT)

Sam Walton, the founder of Wal-Mart, got his start in retail working at a J.C. Penney in 1940. He was soon offered the managerial position at a variety store called Ben Franklin and from there he opened his own store in Bentonville, Arkansas called "Walton's Five and Dime". Walton successfully sold more products than his competitors by selling his items for less than all the other businesses. He quickly expanded and opened his first Wal-Mart in Rogers, Arkansas on July 2, 1962 (226). The store was so successful that within five years 24 more stores were opened. When Wal-Mart first started trading stock as a publicly-held company in 1972, it had 38 stores in five states
(226). The success of Wal-Mart is due to the reason behind Walton's initial success: low prices and a large variety of items. Today, Wal-Mart is the world's largest public corporation with over $\$ 300$ billion in revenue and over 2 million employees (226). The reason I chose Wal-Mart is similar to why I chose Amazon. As energy costs and the cost of living continue to increase, people will start looking for ways to save money. Buying from stores with the lowest prices, such as Wal-Mart and Amazon is an easy way to save money. Wal-Mart stocks have shown a steady increase since it became public and although the stock prices have leveled off slightly in years past they have recently started to rise again. The 52 week range is $42.50-63.85$ with the current stock price of 60.71 (227).

### 7.1.10 GameStop Corp. (GME)

GameStop is the largest video game retailer in the world (76). It is actually the result of a series of mergers that turned four competing software retailers into the world's greatest entertainment software retailer. It all started when a small software retailer called Babbage's merged with Software Etc. in 1994 (76). The companies were united under the name NeoStar Retail, but unfortunately the management did not unite. Due to lack of communication between the two former companies, Neostar had to go into Chapter 11 reorganization in 1996 (76). Barnes \& Noble stepped in and offered to finance the company to keep it from going under. Thus, when Funco, Inc. was acquired by Barnes \& Noble in 2000, it was only natural that the Funcoland stores were merged with Neostar (76). This time, the name of the stores was changed to GameStop. The company continued to expand and soon started talks with one of the last remaining video
game retailers, EB Games. In 2005, EB Games and GameStop announced a merger. Although both chains kept the current name of the store, the EB Games stores are in the process of changing to GameStop. The reason I chose GameStop as a company is due to the strength of video games. Video game sales increased in spite of a bad economy and a rising cost of living. With GameStop positioned as the leader in the video game retailer business, their stocks can only go up. The 52 week range is $33.29-63.77$ with the current stock price of 36.16 (77).

### 7.2 Trading

Monday, September 29, 2008 (Day 1)
Today I bought my initial ten stocks. I bought about $\$ 20,000$ worth of shares in each company, leaving $\$ 50,000$ to invest for later. Unfortunately, today was the day the stock market took the biggest plunge since $9 / 11$. The Dow Jones industrial average fell 778 points, 94 points more than the 684 points lost the day after $9 / 11$. This was due to the fact that the economic bailout package was voted down in the House today. This caused investors to panic and started a selling frenzy, driving share prices lower and lower. All but one of my stocks, Take-Two Interactive, dropped today.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 250,000 |  |
| $9 / 29 / 08$ | MSFT | Buy | 748 | 26.08 | $19,527.83$ |  | $230,472.17$ |  |
| $9 / 29 / 08$ | TTWO | Buy | 1288 | 15.26 | $19,674.87$ |  | $210,797.30$ |  |
| $9 / 29 / 08$ | AMZN | Buy | 296 | 66.55 | $19,718.79$ |  | $191,078.51$ |  |
| $9 / 29 / 08$ | SPWR | Buy | 262 | 73.62 | $19,308.43$ |  | $171,770.08$ |  |
| $9 / 29 / 08$ | INTC | Buy | 1083 | 18.34 | $19,882.21$ |  | $151,887.87$ |  |
| $9 / 29 / 08$ | GOOG | Buy | 50 | 394.07 | $19,723.49$ |  | $132,164.38$ |  |
| $9 / 29 / 08$ | HNZ | Buy | 392 | 50.6 | $19,855.19$ |  | $112,309.19$ |  |
| $9 / 29 / 08$ | SPLS | Buy | 877 | 22.2 | $19,489.39$ |  | $92,819.80$ |  |
| $9 / 29 / 08$ | WMT | Buy | 330 | 59.68 | $19,714.39$ |  | $73,105.41$ |  |
| $9 / 29 / 08$ | GME | Buy | 570 | 33.72 | $19,240.39$ |  | $53,865.02$ |  |

Table 7.2.1 September 29 Trading Activities

Tuesday, September 30, 2008 (Day 2)
The market rebounded a bit today. I believe that people are encouraged by the fact that the government is revising the bailout package in order to try to get it passed. I decided to buy 1000 more shares in Take-Two and 500 more shares in GameStop. I invested extra in these two companies because they are showing signs of strength and growth amid the shaky market.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost/ <br> Proceeds | Profit / <br> Loss | Total <br> Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $9 / 30 / 08$ | MSFT |  |  |  |  |  | $53,865.02$ |  |
| $9 / 30 / 08$ | TTWO | Buy | 1000 | 16.14 | $16,159.99$ |  | $37,705.03$ |  |
| $9 / 30 / 08$ | AMZN |  |  |  |  |  | $37,705.03$ |  |
| $9 / 30 / 08$ | SPWR |  |  |  |  |  | $37,705.03$ |  |
| $9 / 30 / 08$ | INTC |  |  |  |  |  | $37,705.03$ |  |
| $9 / 30 / 08$ | GOOG |  |  |  |  |  | $37,705.03$ |  |
| $9 / 30 / 08$ | HNZ |  |  |  |  |  | $37,705.03$ |  |
| $9 / 30 / 08$ | SPLS |  |  |  |  |  | $37,705.03$ |  |
| $9 / 30 / 08$ | WMT |  |  |  |  |  | $37,705.03$ |  |
| $9 / 30 / 08$ | GME | Buy | 500 | 34.21 | $17,124.99$ |  | $20,580.04$ |  |

Table 7.2.2 September 30 Trading Activities

Wednesday, October 1, 2008 (Day 3)
Today I took no action because most of my stocks are starting to increase in value. This was probably due to the fact that the Senate passed the revised bailout plan. If the plan passes in the House in a few days it will most likely help the stock market regain some momentum.

Thursday, October 2, 2008 (Day 4)
I decided to buy 800 shares of Morgan Stanley today at a price of $\$ 23.91$ per share. With the bailout package seeming more likely each day I thought it would be a good idea to have some shares of a bank holding company. With their share prices so low right now I believe I am in a good position to make a good amount of money when the stock market finally starts to grow again.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total <br> Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 2 / 08$ | MSFT |  |  |  |  |  | $20,580.04$ |  |
| $10 / 2 / 08$ | TTWO |  |  |  |  |  | $20,580.04$ |  |
| $10 / 2 / 08$ | AMZN |  |  |  |  |  | $20,580.04$ |  |
| $10 / 2 / 08$ | SPWR |  |  |  |  |  | $20,580.04$ |  |
| $10 / 2 / 08$ | INTC |  |  |  |  |  | $20,580.04$ |  |
| $10 / 2 / 08$ | GOOG |  |  |  |  |  | $20,580.04$ |  |
| $10 / 2 / 08$ | HNZ |  |  |  |  |  | $20,580.04$ |  |
| $10 / 2 / 08$ | SPLS |  |  |  |  |  | $20,580.04$ |  |
| $10 / 2 / 08$ | WMT |  |  |  |  |  | $20,580.04$ |  |
| $10 / 2 / 08$ | GME |  |  |  |  |  | $20,580.04$ |  |
| $10 / 2 / 08$ | MS | Buy | 800 | 23.91 | $19,147.99$ |  | $1,432.05$ |  |

Table 7.2.3 October 2 Trading Activities

Friday, October 3, 2008 (Day 5)
I noticed something odd in my portfolio today. My SunPower shares had been at the same price for the past couple days so I went to Yahoo! Finance to check the stock price. This site told me that the symbol SPWR no longer existed. Instead, SPRWA and SPRWB were created. However, the stock simulator we are using did not switch my stocks to one of these symbols and so my shares were frozen at a price of $\$ 60.75, \$ 12.87$ below my purchase price of $\$ 73.62$. I was forced to sell all 262 shares of SunPower for a loss of $\$ 3,371.94$. Instead of buying more SunPower shares with the money I received for the sale I decided to split the money between two of my stocks that were relatively close to their purchase price. I purchased 20 shares of Google at $\$ 398.09$ and 150 shares of Walmart at $\$ 59.61$. My stocks are doing relatively decent considering all the movement in the market this week. My total assets at the end of this week are \$243,100.09.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost/ <br> Proceeds | Profit / <br> Loss | Total <br> Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 3 / 08$ | MSFT |  |  |  |  |  | $1,432.05$ |  |
| $10 / 3 / 08$ | TTWO |  |  |  |  |  | $1,432.05$ |  |
| $10 / 3 / 08$ | AMZN |  |  |  |  |  | $1,432.05$ |  |
| $10 / 3 / 08$ | SPWR | Sell | 262 | 60.75 | $15,936.49$ | $-3,371.94$ | $17,368.54$ | $-3,371.94$ |
| $10 / 3 / 08$ | INTC |  |  |  |  |  | $17,368.54$ |  |
| $10 / 3 / 08$ | GOOG | Buy | 20 | 398.09 | $7,981.79$ |  | $9,386.75$ |  |
| $10 / 3 / 08$ | HNZ |  |  |  |  |  | $9,386.75$ |  |
| $10 / 3 / 08$ | SPLS |  |  |  |  |  | $9,386.75$ |  |
| $10 / 3 / 08$ | WMT | Buy | 150 | 59.61 | $8,961.49$ |  | 425.26 |  |
| $10 / 3 / 08$ | GME |  |  |  |  |  | 425.26 |  |
| $10 / 3 / 08$ | MS |  |  |  |  |  | 425.26 |  |

Table 7.2.4 October 3 Trading Activities

Monday, October 6, 2008 (Day 6)
Today was another horrible day for the market. The Dow fell below 10,000 for the first time in four years today. I noticed early in the day that all my stock prices were dropping sharply so I decided to short sell all of my stocks. I sold around noon and bought to cover on all of them about two hours later. I made $\$ 3452.72$, not much but enough to cover the loss incurred on Friday because of SunPower. However, all of my stocks ended the day badly except for GameStop, which was still up $0.86 \%$ from the purchase price.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 6 / 08$ | MSFT | Short | 748 | 25.07 | $18,772.35$ |  | $19,197.61$ |  |
| $10 / 6 / 08$ | TTWO | Short | 2288 | 14.17 | $32,440.95$ |  | $51,638.56$ |  |
| $10 / 6 / 08$ | AMZN | Short | 296 | 62.93 | $18,647.27$ |  | $70,285.83$ |  |
| $10 / 6 / 08$ | INTC | Short | 1083 | 16.82 | $18,236.05$ |  | $88,521.88$ |  |
| $10 / 6 / 08$ | GOOG | Short | 70 | 368.09 | $25,786.29$ |  | $114,308.17$ |  |
| $10 / 6 / 08$ | HNZ | Short | 392 | 50.67 | $19,882.63$ |  | $134,190.80$ |  |
| $10 / 6 / 08$ | SPLS | Short | 877 | 19.09 | $16,761.92$ |  | $150,952.72$ |  |
| $10 / 6 / 08$ | WMT | Short | 480 | 57.32 | $27,533.59$ |  | $178,486.31$ |  |
| $10 / 6 / 08$ | GME | Short | 1070 | 33.08 | $35,415.59$ |  | $213,901.90$ |  |
| $10 / 6 / 08$ | MS | Short | 800 | 21.35 | $17,099.99$ |  | $231,001.89$ |  |
| $10 / 6 / 08$ | MSFT | Cover | 748 | 24.62 | $18,435.75$ | 336.6 | $212,566.14$ | $-3,035.34$ |
| $10 / 6 / 08$ | TTWO | Cover | 2288 | 13.78 | $31,548.63$ | 892.32 | $181,017.51$ | $-2,143.02$ |
| $10 / 6 / 08$ | AMZN | Cover | 296 | 62.21 | $18,434.15$ | 213.12 | $162,583.36$ | $-1,929.90$ |
| $10 / 6 / 08$ | INTC | Cover | 1083 | 16.65 | $18,051.94$ | 184.11 | $144,531.42$ | $-1,745.79$ |
| $10 / 6 / 08$ | GOOG | Cover | 70 | 361.33 | $25,313.09$ | 473.2 | $119,218.33$ | $-1,272.59$ |
| $10 / 6 / 08$ | HNZ | Cover | 392 | 50.49 | $19,812.07$ | 70.56 | $99,406.26$ | $-1,202.03$ |
| $10 / 6 / 08$ | SPLS | Cover | 877 | 18.66 | $16,384.81$ | 377.11 | $83,021.45$ | -824.92 |
| $10 / 6 / 08$ | WMT | Cover | 480 | 56.43 | $27,106.39$ | 427.2 | $55,915.06$ | -397.72 |
| $10 / 6 / 08$ | GME | Cover | 1070 | 32.73 | $35,041.09$ | 374.5 | $20,873.97$ | -23.22 |
| $10 / 6 / 08$ | MS | Cover | 800 | 21.22 | $16,995.99$ | 104 | $3,877.98$ | 80.78 |

Table 7.2.5 October 6 Trading Activities

Tuesday, October 7, 2008 (Day 7)

Once again, the market dropped a great deal today. My total assets fell from $\$ 239,172.43$ to $\$ 220,527.40$, almost $\$ 20,000$ in one day. The Dow dropped 508.39 and brought all of my stocks below their purchase price. One of the reasons for the large drop today was that a rumor was heard that Mitsubishi UFJ Financial Group Inc. was pulling out of a deal to buy $24.9 \%$ of Morgan Stanley's voting shares. This caused not only Morgan Stanley to fall, but also most of the other large financial institutions traded in the NYSE. The apparent lack of action from the Fed is another reason for the continuing decline of the market. Investors are worried that the government won't be able to move fast enough to prevent further bankruptcies and other financial problems which is triggering massive selling. Until a serious step is taken to stop the decline I don't see any end in sight.

Wednesday, October 8, 2008 (Day 8)
The market dropped another 189 points today. Although not good, compared to Monday and Tuesday it feels almost like a successful day. Once again, I lost money but a small amount compared to the previous days. The largest drain on my portfolio is my shares in Morgan Stanley, which are down almost $30 \%$ from the purchase price. I had initially thought that the bailout would bolster confidence in financial institutions, which is why I bought Morgan Stanley in the first place. However, I was clearly wrong in this regard and the only thing I can do now is hope the market recovers and brings the stock prices back up. I didn't buy or sell any stocks today because I am going to wait until the market bottoms out or starts going back up in order to avoid selling any stocks prematurely.

Thursday, October 9, 2008 (Day 9)
I thought that the market might be reaching the end of the huge drops because Wednesday was a moderately small drop. However, the DJIA today fell 678.91 points, which brought the close to $8,579.19$. This was the first close below 9,000 points in five years. My Morgan Stanley shares are now about $50 \%$ below the purchase price and all my other stocks are about $15 \%$ below their purchase price, with Staples even worse at $25 \%$ below purchase price. The only company I regret buying stock in is Morgan Stanley. All my companies show reasonable drops in stock price given the horrible performance of the market, but Morgan Stanley is doing outright horrible. I had thought that the government bailout would restore investor confidence, but I was completely wrong.

Friday, October 10, 2008 (Day 10)
With a drop of 128 in the Dow Jones today my stocks fell as usual but a relatively small amount compared to previous days. This brought the DJIA down a total of $40.3 \%$ since its record close on October 9, 2007. Due to the huge problems the market is facing, the government announced that they will buy ownership stake is a variety of American banks in order to help them raise money. The shares will be the nonvoting kind so that the government will not be able to control the companies by buying a majority of shares. This is the first time since the Great Depressions that the government has taken equity ownership is banks. Hopefully, this move in addition to the $\$ 700$ billion bailout plan will
provide the momentum to get the market and the economy back on track. My total assets at the end of this week are $\$ 200,216.34$, which is $\$ 42,883.75$ lower than last week.

Monday, October 13, 2008 (Day 11)
Today was another historic day for the stock market. The DJIA rose 936 points, the largest increase in a single day since it rose 499.19 points in 2000 . The market is nowhere as high as it used to be but today was a step in the right direction. The huge drops and mass selling that occurred last week is a good sign that the market has reached the bottom of its drop and the only place to go from here is up. The market won't be back to where it was for a long time but with any luck the huge losses from the previous days are over with. Thanks to the gain today my assets went up almost $\$ 30,000$ to $\$ 229,412.40$. Hopefully my stocks will soon be above the purchase price and my strategy of long term trading will pay off.

Tuesday, October 14, 2008 (Day 12)
The market had a somewhat boring day today. The Dow Jones fell about 76 points and most of my stocks dropped a little bit in price. Surprisingly, my shares of Morgan Stanley rose a couple of dollars. This was most likely due to the fact that the government is moving swiftly to implement their bailout plan. Another surprise was that GameSpot, which yesterday was almost back up to its purchase price, fell almost $9 \%$ today. I believe this is just due to the fact that the market is still very volatile, so I'm confident that it will soon go back up.

Wednesday, October 15, 2008 (Day 13)
Reports assessing the state of the United States economy were issued today, sending the Dow Jones down about 733 points. The reports seemed to indicate the U.S. is in a recession or heading into one and the market was greatly affected by this. My stocks once again lost dollars from their purchase price. Right now I'm just trying to ride out the crazy market.

Thursday, October 16, 2008 (Day 14)
At first it seemed like the market was going to have another bad day today, but everything turned around late in the afternoon and the market ended about 400 points up from the open. My total assets increased about $\$ 10,000$, but all of my stocks are still in the red. I'm waiting for at least one of them to surpass its purchase price so I can sell and buy some new stocks. I currently only have a little less than $\$ 4000$ in cash, so I can't really buy any new stocks right now.

Friday, October 17, 2008 (Day 15)
The DJIA fell about 127 points today, ending a crazy week on a somewhat quiet note. Some of my stocks are getting closer to their purchase price but I'm not sure if they will make it back to or even past their purchase price within the remaining seven weeks of this simulation. Hopefully, the market will continue to increase little by little so that I can at least make back what I lost. My total assets at the end of this week are $\$ 215,536.01$, which is $\$ 15,319.67$ higher than last week.

Monday, October 20, 2008 (Day 16)
This week had a good start with the Dow Jones ending about 413 points up from the open. All my stocks increased a little bit and my overall assets increased in value. Although my stocks are increasing in value, only GameStop, which is currently at $\$ 33.19$, is anywhere near its purchase price of $\$ 33.95$. Hopefully the market will continue to improve and all my stocks will soon surpass their purchase price.

Tuesday, October 21, 2008 (Day 17)
All my stocks fell a few percentage points today as the Dow fell over 200 points. None of my stocks fell very much, which indicates that the market has somewhat bottomed out after the last couple weeks. For now there will most likely be small fluctuations up and down as the market steadies itself.

Wednesday, October 22, 2008 (Day 18)
Unfortunately, the market had another drop today. The Dow fell 514.45 points and all my stocks dropped a bit. Every time the market seems to be stabilizing it experiences another big fall. The only consolation is that at some point it will have to hit bottom and from there the only way to go is up. I'm trying to hold onto all my original stocks in hopes that they will eventually become profitable.

Thursday, October 23, 2008 (Day 19)
Although the DJIA rose about 172 points today my total assets still dropped in value. This was due primarily to the fact that Take-Two and GameStop each dropped
today. I can only speculate that one of the reasons for this is that there is a probably a drop in business before the Christmas season starts as people stop spending money and buying products in anticipation of buying and receiving gifts for the holiday. Hopefully as December gets closer the shares for these companies will increase in value.

Friday, October 24, 2008 (Day 20)
Once again the market dropped today. The Dow Jones fell about 312 points and all my stocks fell in value. This week started out promisingly enough and it seemed as though the market had bottomed out and was going to remain where it was. However, a series of closes hundreds of points below the open showed that the market is still in a downward trend. Obviously, this crisis is not going to be solved overnight but I had hoped that after about 4 weeks of horrible days on Wall Street the market would level out. For next week I hope that things will start to calm down and hopefully we'll stop seeing swings of hundreds of points. My total assets at the end of this week are $\$ 193,658.02$, which is $\$ 22,000$ lower than last week.

Monday, October 27, 2008 (Day 21)
The week opened with a relatively low drop of 200 points today. As usual, I lost some money but that is pretty much consistent with this simulation.

Tuesday, October 28, 2008 (Day 22)
Today was an awesome day for the market. The Dow Jones shot up 889.35 points and my portfolio increased about $\$ 20,000$. Speculation about a Fed Rate cut tomorrow is a possible reason for the increase. The more probable explanation is that the market is just following its recent trend of huge losses and huge increases. My new belief is that the market will probably not regain an upward trend by the end of this 10 week simulation and instead continue its roller coaster ride of gains and losses.

Wednesday, October 29, 2008 (Day 23)
With a relatively modest drop of about 74 points the market wasn't as crazy as past days. One reason for this is due to a cut in the fed funds rate, bringing it down to $1 \%$. This is the lowest rate since 2004 and the hope is that it will provide some incentive for banks to increase lending again.

Thursday, October 30, 2008 (Day 24)
Today the market rose about 190 points. Although its nothing special compared to previous days, anything that isn't a loss is welcome. I doubt the trend will continue, however, as the market continues to fluctuate.

Friday, October 31, 2008 (Day 25)
Amazingly, the market rose another 144 points today, the first two day increase the market has seen for quite a few weeks. Possibly fueling the increase are rumors of another Fed Rate cut in the near future. However, whether or not that will happen and if
that is what is actually helping the market remains to be seen. My total assets at the end of this week are $\$ 211,465.96$, which is $\$ 17,807.94$ higher than last week.

Monday, November 3, 2008 (Day 26)
Since I started watching the market 5 weeks ago almost every day saw incredible highs and lows in the market, with daily swings in the hundreds of points. However, today the market saw its first single digit change since the beginning of this simulation. The DJIA fell only 5.18 points, which to me seems more incredible than the historic swings previously seen. It will be interesting to see what the market does with the election tomorrow.

Tuesday, November 4, 2008 (Day 27)
Today the DJIA rose about 305 points. I believe that the election played a major role in the increase as investors are likely optimistic when thinking about the change that election implies. Hopefully the upward trend will continue tomorrow regardless of who wins the election.

Wednesday, November 5, 2008 (Day 28)
The market resumed its past habits today by falling 486.01 points. One reason it fell today is because investors are wary of how the new president will handle the economic crisis. Obama won the election, but I think that if McCain won the result for the market would be the same. Investors are scared of the change in leadership, not the specific leader.

Thursday, November 6, 2008 (Day 29)
Today the Dow Jones dropped about 443 points. Contributing to this fall was the news from Cisco Systems that retail sales were down and an announcement from the Labor Department that stated the number of people drawing unemployment was at a 25 year high. Unfortunately, the stock market is reacting to the volatility of the country and with each new piece of bad news the market will fall.

Friday, November 7, 2008 (Day 30)
As investors stopped panicking today the market rose 248.02 points. This week was interesting, with Monday showing the smallest change I've seen since the start of the simulation and a huge combined loss Wednesday and Thursday. The only thing I can say for sure about this market is that I have no idea what will happen next. My total assets at the end of this week are $\$ 198,834.10$, which is $\$ 12,631.86$ lower than last week.

Monday, November 10, 2008 (Day 31)
This week started off with a relatively low drop of about 76 points. Although I doubt a stable trend is likely to develop for the week, there is always the possibility that the market will stabilize.

Tuesday, November 11, 2008 (Day 32)
Once again I have been proven wrong. The DJIA dropped about 170.36 points today, proving that the market is still volatile. I haven't made any trades for a long time
in hopes that the market will eventually rebound but at the rate it is continuing to drop I doubt I will be able to recoup my losses in the remaining weeks of the simulation.

Wednesday, November 12, 2008 (Day 33)
Today was another horrible day, with the market falling 401.86 points. The main cause for the drop was the news that the government will not buy banks' bad mortgages as was originally planned. Obviously, this caused all my stocks to drop. In addition, Morgan Stanley announced that are going to lay off $10 \%$ of their staff in their institutional securities group, which caused my shares of Morgan Stanley to drop considerably. Also, Intel Corp. decreased its fourth quarter revenue and earnings outlook due to decreased consumer demand. This news was announced after trading closed, which means the stock price will go down overnight and at open tomorrow there will be a lot of selling, driving the price lower.

Thursday, November 13, 2008 (Day 34)
Unsurprisingly, the market rebounded today with a gain of over 550 points in the Dow Jones. It is unsurprising because for the past couple weeks the pattern has been huge losses followed by huge gains, keeping the market at a low plateau. The main reason for the increase was that as investors started to buy again everyone else followed suit, leading to a rebound. If this has not happened today it is likely that the market would have set a new record low from the low achieved a few weeks ago.

Friday, November 14, 2008 (Day 35)
The market ended the week with a drop of almost 338 points. This week was not helped by the news from the government that the bailout will not be accomplished as originally planned. Also, there is a chance that the government will provide a bailout for the automotive industry, leading to more uncertainty in the market. My total assets at the end of this week are $\$ 182,888.87$, which is $\$ 15,945.23$ lower than last week.

Monday, November 17, 2008 (Day 36)
With a drop of 223.73 points today the market closed at $8,273.58$. This is very close to the low set a couple weeks ago. If the DJIA drops below the bottom it set there is no telling how low it will go before it stabilizes again. Contributing to this drop is the fact that the proposed automaker bailout plan is looking less likely every day, which is causing investors to panic.

Tuesday, November 18, 2008 (Day 37)
The Dow Jones rose 151.17 points today which means it did not break through the bottom established a couple weeks ago. Hopefully tomorrow the market will rebound like it usually does and keep from falling even more.

Wednesday, November 19, 2008 (Day 38)
Unfortunately, the market fell 427.47 points today, bringing the Dow Jones Industrial Average down to $7,997.28$. This is the first time since 2003 that the Dow has been below 8,000 . The main reason for the decline is the fact that the auto industry is in
desperate need of help in order to stay in business. In particular, GM, Ford, and Chrysler have appealed to the people, claiming that without a federal bailout they will be unable to keep their companies running. While it remains to be seen whether or not the $\$ 25$ billion bailout package will be passed, it is certain that the economy will be hurt by the collapse of these auto industry giants.

Thursday, November 20, 2008 (Day 39)
The market fell another 444.99 points today, bringing the new record low to 7,552.29. The cause of the drop is that investors are losing hope in a bailout for the auto industry, leading to large volumes of selling. Regrettably, it appears that even if a bailout occurs it will not be fast enough to stop more drops in the market. Regardless of whether or not the bailout is the right thing to do it is obvious that Wall Street will suffer without it.

Friday, November 21, 2008 (Day 40)
With a rise of 494.13 points today the Dow Jones climbed back over the 8,000 mark today. One reason for this rise was the news that Barack Obama was planning on appointing Timothy Geithner, the New York Fed president, as his new treasury secretary. This was good news for investors who had been unhappy with the way the current treasury secretary, Henry Paulson, was handling the financial situation. Hopefully, this news will continue to calm the unpredictable market. My total assets at the end of this week are $\$ 167,393.09$, which is $\$ 15,495.78$ lower than last week.

Monday, November 24, 2008 (Day 41)
Today was a great start to the week. The market rose almost 400 points, gaining back the losses from last week. The major factor in the rise was the news that the government will enact a $\$ 20$ billion plan to bailout Citigroup. Hopefully investors will view this as a sign the government is ready to take action and the market will continue to rise.

Tuesday, November 25, 2008 (Day 42)
Once again, the market closed with a gain today. Although not as impressive as previous gains, anything that is not a loss is a welcome sight. The Fed today announced the creation of a program to purchase mortgage-backed securities in order to help unfreeze the credit market. This was probably a factor in the increase in the market.

Wednesday, November 26, 2008 (Day 43)
Thankfully, the market rose about 250 points today. The primary reasons for the increase are the prospect of an automaker bailout and the fact that the government is starting to use the bailout money to help banks in need. Additionally, the fact that Barack Obama is finalizing his economic team is calming the fears of investors. Although the stock market is closed tomorrow hopefully on Friday the trend will continue and the market will grow again.

Thursday, November 27, 2008 (Day 44)
The market was closed today, therefore no changes occurred.

Friday, November 28, 2008 (Day 45)
Today the Dow rose 102.43 points to 8829.04 . This brings the market to the largest five day increase since 1932. Although nowhere near to the point the market was at before this crash, a five day increase is a good sign of emerging stability, especially an increase this large. My total assets at the end of this week are $\$ 187,345.44$, which is $\$ 19,952.35$ higher than last week.

Monday, December 1, 2008 (Day 46)
Today the National Bureau of Economic Research issued a report stating that the U.S. economy has been in a recession since December 2007. This caused the market to fall about 680 points. It's been pretty obvious that the country has been a recession for a while, but the report was still enough of a blow that investors got scared and caused the fall.

Tuesday, December 2, 2008 (Day 47)
With a rise of 270 points today the Dow gained back some of the loss from yesterday. The news that Ford Motor Company had enough money to make it through 2009 and might not even need government help at all was a major source of hope for investors. Along with the news that the Fed will continue to help loosen credit markets, this was enough good news that the market rose.

Wednesday, December 3, 2008 (Day 48)
Even though the economic news today was fairly bad the market still rose. Some of the bad news today included a report from the Fed of worsening economic conditions and a drop in productivity. Although this news only confirms the fact that we're in a recession, similar news on Monday caused a huge drop. Hopefully this is a sign that the market is regaining some of its strength.

Thursday, December 4, 2008 (Day 49)
The market fell about 215 points today, ending the two day increase. The fall was caused for a variety of factors including another bad U.S. automaker congressional meeting, anxiety about the November employment report, and low sales reports. However, some of my stocks increased today, which caused my portfolio to increase slightly in value.

Friday, December 5, 2008 (Day 50)
Today was the last day of our simulation. Thankfully, unlike the beginning of the simulation, it ended on a good note. The market rose 259.18 points today, bringing the DJIA to 8635.42. The primary reason for the increase came from a report that the country lost over half a million jobs last month. This news actually gave investors hope because they are starting to feel that bad news will cause the government to be more active in the economy and be more likely to give aid. My total assets at the end of this week are $\$ 188,752.07$, which is $\$ 1,406.63$ higher than last week and $\$ 61,247.93$ lower
than the amount I started the simulation with. I made a very small profit by short selling during one of trading, so my overall loss during this simulation was $\$ 60,963.07$.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12 / 5 / 08$ | MSFT | Sell | 748 | 19.87 | 14862.76 | -4645.08 | $18,740.74$ | -4564.3 |
| $12 / 5 / 08$ | TTWO | Sell | 2288 | 12.1 | 27684.8 | -8105.08 | $46,425.54$ | -12669.38 |
| $12 / 5 / 08$ | AMZN | Sell | 296 | 48.26 | 14284.96 | -5413.84 | $60,710.50$ | -18083.22 |
| $12 / 5 / 08$ | INTC | Sell | 1083 | 13.29 | 14393.07 | -5469.15 | $75,103.57$ | -23552.37 |
| $12 / 5 / 08$ | GOOG | Sell | 70 | 283.99 | 19879.3 | -7786 | $94,982.87$ | -31338.37 |
| $12 / 5 / 08$ | HNZ | Sell | 392 | 36.49 | 14304.08 | -5531.12 | $109,286.95$ | -36869.49 |
| $12 / 5 / 08$ | SPLS | Sell | 877 | 18.46 | 16189.42 | -3279.98 | $125,476.37$ | -40149.47 |
| $12 / 5 / 08$ | WMT | Sell | 480 | 58.21 | 27940.8 | -695.1 | $153,417.17$ | -40844.57 |
| $12 / 5 / 08$ | GME | Sell | 1070 | 21.27 | 22758.9 | -13566.5 | $176,176.07$ | -54411.07 |
| $12 / 5 / 08$ | MS | Sell | 800 | 15.72 | 12576 | -6552 | $188,752.07$ | -60963.07 |

Table 7.2.6 December 5 Trading Activities

### 7.3 Analysis

Our simulation ran for ten weeks, from September 29, 2008 to December 5, 2008.
In those ten weeks the stock market saw some of its worst falls and greatest increases since the Great Depression. Thankfully, we were running a simulation and not using real money, otherwise I would have lost a fortune. It was the perfect time to be conducting a simulation on the market because it allowed us to see the market at its worst. I am fairly certain that if this isn't the worst economy I will see in my lifetime, it will certainly be one of the top contenders.

In terms of performance, Microsoft Corporation (MSFT) shares did fairly well. I initially chose Microsoft because it has an impressive stock history and it is also a wellknown company that I felt would do well in times of trouble. At the end of the simulation, my shares of Microsoft were down $23.81 \%$ from their purchase price. This drop was caused by the market crash and was consistent with most of my other stocks.

Take-Two Interactive Software Inc. (TTWO) also showed average performance. I had thought that Take-Two would do very well because the company was in talks with Electronic Arts for EA to buy Take-Two. In fact, I bought an extra 1000 shares based on speculation about the buyout. However, the deal fell through and Take-Two shares dropped quite a bit. They rebounded slightly by the end of the simulation and ended with a $22.65 \%$ drop from purchase price.

My shares of Amazon.com Inc. (AMZN) were another middle of the road stock. Amazon shares showed a strong history of growth and I felt fairly confident that would only continue to rise as the simulation went on due to people starting to buy Christmas gifts. As was the case with all my stocks, the market crash caused Amazon shares to drop dramatically. My shares of Amazon dropped $27.48 \%$ from their purchase price. They were affected slightly more than Microsoft and Take-Two due to the fact that Amazon in an online retailer and the first thing people cut back on in the bad economic situation was shopping.

SunPower Corporation (SPWR) was one of my risky companies that I invested in. I am sure that renewable energy is the wave of the future and so I thought SunPower shares would show some growth. However, renewable energy is still a relatively new industry and it was hit hard by the market crash. I sold all my SunPower shares on the fifth day of the simulation for a loss of $\$ 3371.94$.

Another company that performed decently was Intel Corporation (INTC). My shares dropped $27.54 \%$ for Intel. I don't think that this company was affected any differently by the crash than the majority of companies. I chose Intel not only because it is the most profitable supplier of the PC industry but also because I knew that they were
going to be releasing a brand new product into the computer world. I thought that this new micro-architecture, which is changing the way computer hardware interacts, would be a great boost to Intel share prices. Due to the market crash it didn't work out that way but it probably helped prevent greater losses.

Google (GOOG) shares were by far the most expensive shares I bought. Google has had an amazing rise as a company and they seemed indestructible. I bought 20 extra shares of Google because I was very confident that the shares would do well. Unfortunately, the market crash showed that Google was not immune to the realities of the economy. My shares of Google fell $28.14 \%$ from their purchase price. I think that the market crash scared Google investors more so than other companies because up until the crash Google was on an incredible rise. When the market dropped and Google shares dropped with it investors finally realized that Google was no different than any other company and some of them panicked. I think that contributed to the slightly high drop in Google share prices.

The one company that surprised me during the crash was H.J. Heinz Co. (HNZ). I thought that no matter what happened to the economy Heinz shares would stay strong. After all, ketchup is one of the most used condiments in the U.S., if not the world. I believed that even if people were cutting back on all spending in their lives that food, and therefore ketchup, which is fairly inexpensive, would be one of the last things to get cut down. However, since my shares dropped $27.89 \%$ from their purchase price the company was obviously in no way shielded from the crash.

The second best performing company I chose was Staples Inc. (SPLS). Not only is Staples one of the major suppliers of business supplies, but it is also one of the first
places students go for school supplies. Businesses always need ink, paper, copies, etc., and Staples is one of the best places for those supplies. Plus, parents usually put their children's needs before their own and therefore will not neglect to buy new binders, pencils, backpacks, and all variety of school supplies for their kids. Due to these factors, Staples fared relatively well during the market crash and finished $16.85 \%$ below purchase price.

Wal-Mart Stores Inc. (WMT) was my top performer during the simulation. The reason for this is fairly obvious. The slogan "Always Low Prices" was used for 19 years and sums up the primary reason people shop at Wal-Mart. They are known for having the lowest prices around and in this economy everyone is looking to save money. While other companies were losing business Wal-Mart continued to have the best prices and drew in all sorts of people. Thanks to the money people saved buying Wal-Mart products shares ended only $2.43 \%$ below purchases price.

My biggest disappointment was GameStop Corp. (GME). With video games a multi-billion dollar industry, and GameStop the largest video game retailer in the world, I believed that this company would do very well. I bought 500 extra shares because at first GameStop seemed immune to the crash. However, I was sorely mistaken and GameStop soon showed it was very much affected by the economy, with my shares ending $37.35 \%$ below purchase price. This was the worst performance of all of my stocks. I believe that the reason GameStop did so poorly was the nature of its products. Video games are first and foremost a form of entertainment and the first thing people cut back on in times of economic hardship are unnecessary items, such as entertainment products. Thus, GameStop was hit hard and I lost the most money on my shares in this company.

My final investment was in Morgan Stanley (MS). I bought 800 shares of Morgan Stanley four days into the simulation. In retrospect, it was a horrible decision. I don't know what I was thinking investing in a financial services company during a stock market crash. The main reason I bought shares of Morgan Stanley was a friend advised me to do so. This taught me a valuable lesson: never take investing advice from unqualified individuals. Morgan Stanley was my second worst performing company, ending $34.25 \%$ below purchase price.

At the beginning of this simulation I started out with $\$ 250,000$ and over the course of the simulation I invested all of it spread out among 11 companies. I ended with $\$ 188,752.07$ in total assets, which means I lost $\$ 61,247.93$. Thankfully, it was only a simulation and I didn't lose real money. Overall, I think that the companies I picked did fairly well considering the circumstances. If the economic situation had been different I believe that my companies, based on their strong stock history, would have returned a profit. Although my portfolio lost a ton of money and all my stocks dropped tremendously in value I learned a lot about how the market works and gained invaluable experience about money that will be very important in the future.

## Chapter 8: Portfolio 3 - Energy and Banking Sector

This portfolio concentrated heavily on the banking and energy sectors of the economy. The trading rate for this portfolio was low as compared with Portfolio 1 and Portfolio 5. The only stock derivatives used in this portfolio were put options.

### 8.1 Companies Selected

### 8.1.1 ConocoPhillips (COP)

ConocoPhillips is an energy company based in Houston, Texas. It is the third largest energy company in the United States, based on its market capitalization and energy reserves; ConocoPhillips is also the fifth largest refiner and the sixth largest reserves holder in the world, when compared to other non government controlled energy companies. The company conducts operations in almost 40 countries and has a global workforce of $33,100(63)$.

Overall, ConoccoPhillips seems to be a solid investment choice especially when considering the present market environment; investing in an energy sector company which does not rely heavily on discretionary spending seems to be a good choice considering the present faltering economy. Sales have grown $48.5 \%$ since the last quarter, as compared with a slightly lower industry average of $43.30 \%$. ConocoPhillips is also better valued than its competitors, selling at a price earnings ratio of 7.1 as compared with the industry average of 8.8 . The return on equity ratio for the company is slightly below the S\&P 500 index average, but the return on assets and capital are both higher than the index average. One point of concern is that the quick ratio is 0.8 , indicating that

ConocoPhillips has taken on more debt than its industry competitors, which have an average quick ratio of 1.0 (141).

### 8.1.2 GulfMark Offshore Inc. (GLF)

GulfMark Offshore Inc. is in the offshore marine services industry, and is listed on the NYSE. The company works mainly with the oil and natural gas industry as well as the offshore exploration industry. The company maintains a fleet of ships and equipment to transport people and supplies to offshore drilling platforms. The base of operations for GulfMark Offshore is the North Sea, but the company maintains a worldwide presence (89).

GulfMark Offshore is in an excellent financial position and is valued reasonably compared to other similar companies in the industry. GulfMark had a net profit margin of $37.1 \%$, as compared with a margin of $16.0 \%$ with other companies in the industry and $10.9 \%$ for the S\&P 500 Index. The company demonstrates average performance in its return on assets, capital, and equity when compared with its S\&P 500 counterparts. Also, the company is very liquid, having a quick ratio of 6.2 as compared with an industry average of 1.6 (144).

### 8.1.3 Diamond Offshore Drilling, Inc. (DO)

Diamond Offshore Drilling is in the offshore drilling industry and is listed on the NYSE. The company is a contractor which works with the oil and natural gas industry. Based in Houston, Texas, Diamond Offshore maintains a worldwide presence and maintains one of the largest fleets of offshore oil rigs in the world. Diamond offshore
may benefit substantially from the new pro offshore drilling sentiment in the United States (67).

Diamond Offshore is slightly overvalued, with a price earnings ratio of 14.5 compared with its competitors which have an average price earnings ratio of 13.5 . However, the return on assets, equity, and capital all look very favorable when compared to both industry competitors and S\&P 500 averages. Also, Diamond Offshore has a relatively high quick ratio, indicating a high rate of liquidity (142).

### 8.1.4 TJX Companies Inc. (TJX)

TJX is in the retail sector of the economy and is listed on the NYSE. Although general retail and discretionary spending based companies are faltering in today's market, discount retail seems to be weathering the times. TJX thrives on low cost retail, and tries to set prices at $20 \%$ to $60 \%$ lower than regular department store costs. TJX sells a variety of merchandise through a variety of different stores. T.J. Maxx, Marshalls, HomeGoods, and A.J. Wright are based in the United States, while Winners and HomeSense are based in Canada, and T.K. Maxx and HomeSense are based in Europe (208).

TJX looks to be in good financial health and an excellent investment opportunity. Assuming that the EPS for 2007 will remain constant, TJX has a current PE ratio of about 18.5, which is less than the PE ratios of its counterparts in 2007. TJX has excellent return on equity, assets, and capital when compared to both its industry competitors and the S\&P 500 Index. Although the quick ratio is 0.4 , indicating a high amount of debt and low liquidity, this figure is typical in the retail industry where companies need to hold large amounts of inventory (150).

### 8.1.5 Exxon Mobil Corp (XOM)

Exxon Mobil is the world's largest energy company, and is listed on the NYSE. The company deals mainly in the exploration and production of oil and natural gas, and also has interests in electrical power generation. The company conducts operations on six continents, and had a 2007 net income of over $\$ 40$ billion.

The company has a slightly overvalued price earnings ratio of 9.8 , but has steadily outperformed the competition in return on equity, assets and capital. The company is also healthy financially; it has a quick ratio of 1.1, indicating a good amount of liquidity (149).

### 8.1.6 Superior Energy Services, Inc. (SPN)

Superior Energy Services specializes in offshore drilling technology and is listed on the NYSE. The company was founded two decades ago, when it was solely an oilfield products manufacturing firm but has expanded to offer services as well. After its IPO in 1995 Superior Energy Services acquired over ten small and mid-sized well intervention and oilfield tool rental companies within three years and grew its revenues by $\$ 68$ million during that timeframe. Since then, Superior Energy Services has maintained its high rate of acquisitions, increasing its market share in the business. In 2003, the company formed SPN Resources to acquire mature Gulf of Mexico properties, and in 2006 the company expanded its on shore drilling capacity by its acquisition of Warrior Energy Services, a natural gas and oil well services company (203).

Superior Energy Services is a very good buy at $\$ 35.00$ per share. At this price, the price earnings ratio is 7.3 , assuming that the earnings per share for FY2009 stays at
$\$ 4.80$. A 7.3 PE ratio stands out in an industry which had an average PE ratio of 16.5 last year. Also, the company had a gross margin of $54.3 \%$ last year, compared with an average of $31.5 \%$ for its industry counterparts. The company's quick ratio was 2.4 last year, compared with an industry average of 1.6 , indicating a high amount of liquidity (147).

### 8.1.7 Goldman Sachs Group Inc. (GS)

Goldman Sachs Group is an investment banking, securities, and investment management company listed on the NYSE; the company serves corporations, governments, financial institutions, and high net worth individuals. The company is located worldwide with its main offices in New York. Altogether, the company brought in $\$ 49.9$ billion in revenues in FY2007 (209).

Goldman Sachs Group is a good investment choice because the stock is undervalued at $\$ 135$ per share. This price is only $54 \%$ of the company's 52 week high, and if the earnings estimates of the company are correct give the company a current PE ratio of 10.5 (143). Goldman Sachs, unlike many of its competitors, was not negatively affected in its earnings by the subprime mortgage crisis. Top investing managers at the company anticipated the crash, and although the company was invested in some of the subprime mortgages, the money bet against the mortgages led to the company turning a $\$ 4$ billion profit in 2007, which far exceeded the losses. The company posted a net income for 2007 of $\$ 11.6$ billion, a record for the company, while many of its rivals posted losses. In fact, Berkshire Hathaway is set to acquire $\$ 5$ billion worth of Goldman Sachs preferred stock shares (288).

### 8.1.8 Morgan Stanley (MS)

Morgan Stanley is a financial services firm which is headquartered in New York and listed in the NYSE. Morgan Stanley provides its services to corporations, governments, financial institutions, and individuals. The company provides institutional securities, global wealth management, and asset management (140). Despite the firm's high stakes in the subprime mortgage market which led to huge losses, Morgan Stanley still manages $\$ 736$ billion in assets, and represents one of the world's largest market shares along with Goldman Sachs (248).

Morgan Stanley took a $\$ 3.6$ billion fourth quarter loss in 2007, mostly due to the firm's high level of investment in the subprime mortgage market. However, the company seems to be rebounding; now is the best time to acquire Morgan Stanley at a bargain price. Its current price of $\$ 27$ per share is a mere $39 \%$ of its 52 week high. At a current price of $\$ 26$ per share, and if the earnings estimates are correct at $\$ 4.50$ per share, Morgan Stanley has a PE ratio of less than 6, a good buy by any standard. In fact, last year the S\&P 500 average was almost 25 (146).

### 8.1.9 JP Morgan Chase (JPM)

JP Morgan Chase is a financial holding company based in New York which is listed on the NYSE. The company is the second largest banking institution in the world, outranked only by Citigroup; it has a total of $\$ 2$ trillion in assets, has 180,000 employees, and operates in over 60 countries around the world. In light of the recent financial crisis, JP Morgan Chase has acquired many of its failing rivals, such as Bear Sterns and more recently Washington Mutual (114).

Despite the recent financial crisis, JP Morgan Chase does not seem to be in bad financial condition. In fact, JP Morgan has posted positive EPS in all quarters since the credit crisis. Furthermore, the company has acquired the assets of many of its struggling competitors for deeply discounted prices. For example, the recent acquisition of the bulk of Washington Mutual's for $\$ 1.9$ billion represents a deep discount from what it previously offered for the company in April, over $\$ 13$ billion dollars, or $\$ 8$ per share. The CEO of JP Morgan expects that the recent acquisition will add 50 cents to the EPS in the fourth quarter (145).

### 8.1.10 Charles Schwab Corporation (SCHW)

Charles Schwab is a financial holding company based in San Francisco, CA, and is listed on NASDAQ. The company deals mainly in securities brokerage and banking. As of January 2008, the company had 7 million active brokerage accounts, 1.2 million corporate retirement plan participants, and 262,000 banking accounts.

Despite the recent mortgage crisis, Charles Schwab seems to be sheltered from any negative impacts. The company is estimated to have an EPS of $\$ 1.09$ per share for FY2008, an $18.21 \%$ increase from 2007 earnings. The company also had an excellent $65.3 \%$ gross margin for 2007 , as compared with $25.3 \%$ for its industry competitors. The company also has above average returns on equity and capital (148).

### 8.2 Trading

Monday, September 29, 2008 (Day 1)
Today I placed an order on Investopedia.com, our stock simulator, to buy my ten stocks. My stocks consisted of five energy sector companies, four investment and banking companies, and one retail company. Today was definitely not the best day to buy stocks, particularly at the beginning of the day. Even before the $\$ 700$ billion dollar bailout bill was shot down in Congress, the markets began a freefall. The Dow Jones Industrial Average experienced its largest ever single day point drop, 777 points, and other indexes and markets followed suit (NASDAQ lost 200 points, or about $10 \%$ ). The drop was larger than that experienced on September 17, 2001, when the DJIA dropped 685 points.

| Date | Symbol | Buy / Sell | Shares | Price | NetCost/Proceed | Profit/Loss | Total |
| :---: | :---: | :---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |
| $9 / 29 / 08$ | DO | Buy | 223 | 106.87 | $23,852.00$ |  |  |
| $9 / 29 / 08$ | GLF | Buy | 625 | 47.28 | $29,569.99$ |  |  |
| $9 / 29 / 08$ | COP | Buy | 196 | 73.88 | $14,500.47$ |  |  |
| $9 / 29 / 08$ | GS | Buy | 253 | 134.49 | $34,045.96$ |  |  |
| $9 / 29 / 08$ | SCHW | Buy | 822 | 23.40 | $19,254.79$ |  |  |
| $9 / 29 / 08$ | MS | Buy | 1212 | 24.76 | $30,029.11$ |  |  |
| $9 / 29 / 08$ | JPM | Buy | 414 | 46.58 | $19,304.11$ |  |  |
| $9 / 29 / 08$ | SPN | Buy | 583 | 33.57 | $19,591.30$ |  |  |
| $9 / 29 / 08$ | XOM | Buy | 185 | 78.92 | $14,620.19$ |  |  |
| $9 / 29 / 08$ | TJX | Buy | 1251 | 31.43 | $39,338.92$ |  |  |

Table 8.2.1 September 29 Trading Activities

Tuesday, September 30, 2008 (Day 2)
No action was taken today. In terms of the markets today, Wall Street experienced a huge rebound. The DJIA gained 485 points and the NASDAQ gained
almost 100 points. The financial markets seemingly overreacted yesterday in the huge sellout.

Wednesday, October 1, 2008 (Day 3)
Today, I purchased 14 contracts of Morgan Stanley call options, at a price of $\$ 3.60$ per share. The strike price is $\$ 26.00$, and the expiration date is November 18, 2008. The markets held their ground today, closing only slightly lower than their opening values.

| Date | Symbol | Buy / <br> Sell | Shares | Price | NetCost/Proceed | Profit/Loss | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 1 / 08$ | DO |  |  |  |  |  |  |
| $10 / 1 / 08$ | GLF |  |  |  |  |  |  |
| $10 / 1 / 08$ | COP |  |  |  |  |  |  |
| $10 / 1 / 08$ | GS |  |  |  |  |  |  |
| $10 / 1 / 08$ | SCHW |  |  |  |  |  |  |
| $10 / 1 / 08$ | MS |  |  |  |  |  |  |
| $10 / 1 / 08$ | JPM |  |  |  |  |  |  |
| $10 / 1 / 08$ | SPN |  |  |  |  |  |  |
| $10 / 1 / 08$ | XOM |  |  |  |  |  |  |
| $10 / 1 / 08$ | TJX |  |  |  |  |  |  |
| $10 / 1 / 08$ |  |  |  |  |  |  |  |

Table 8.2.2 October 1 Trading Activities

Thursday, October 2, 2008 (Day 4)
No action was taken today. Bad economic news, such as a government report showing unemployment claims reaching a seven year high, sent Wall Street down again. The DJIA closed down 348 points.

Friday, October 3, 2008 (Day 5)
No action was taken today. The market plunged again despite the approval of the bailout plan. NASDAQ lost 29 points for the day, and $11 \%$ for the week. The DJIA finished down 157 points, and for the week its value dipped $7 \%$.

Monday, October 6, 2008 (Day 6)
Today the markets plunged despite the fact that the bailout plan was approved by Congress. The markets recovered drastically towards the end of the day, but still ended the day losing value; the DJIA lost 370 points. I believe that the market is undervalued right now and in an effort to cover my losses, I am going to buy some put options. Therefore, I have sold 1000 shares of TJX stock to increase my cash reserve and therefore flexibility.

| Date | Symbol | Buy / Sell | Shares | Price | NetCost/Proceed | Profit/Loss | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 6 / 08$ | DO |  |  |  |  |  |  |
| $10 / 6 / 08$ | GLF |  |  |  |  |  |  |
| $10 / 6 / 08$ | COP |  |  |  |  |  |  |
| $10 / 6 / 08$ | GS |  |  |  |  |  |  |
| $10 / 6 / 08$ | SCHW |  |  |  |  |  |  |
| $10 / 6 / 08$ | MS |  |  |  |  |  |  |
| $10 / 6 / 08$ | JPM |  |  |  |  |  |  |
| $10 / 6 / 08$ | SPN |  |  |  |  |  |  |
| $10 / 6 / 08$ | XOM |  |  |  |  |  |  |
| $10 / 6 / 08$ |  |  |  |  |  |  |  |
| $10 / 6 / 08$ | MS KI |  |  |  |  |  |  |

Table 8.2.3 October 6 Trading Activities

Tuesday, October 7, 2008 (Day 7)
No action was taken today. I had put the order in for COP put options last night, but the order did not go through in the morning in our stock simulator. I am glad that the order was cancelled, because once again the markets slid downwards, with the DJIA losing more than 500 points, or $5 \%$, in a sell off that was caused by skepticism of the ability of the global credit markets to survive the credit crisis.

Wednesday, October 8, 2008 (Day 8)
No action was taken today. My attempted put option order again failed to go forward on Investopedia, because as prices rose in the morning the simulator's "diversification rule" forbade more than $10 \%$ of my portfolio to be made up of one investment. Today, the markets fell again on global credit market uncertainties, despite a rally early in the morning. The DJIA closed down 189 points, or $2 \%$.

Thursday, October 9, 2008 (Day 9)
No action taken today. I have decided not to buy or sell until the market stops moving so erratically. Today would have been a good day for short selling, because the market went into another freefall, with the DJIA losing 679 points to close at 8,579 ; exactly one year ago the DJIA hit an all time high above 14,000 . The movements in the market were again dictated by fears of a looming global recession.

Friday, October 10, 2008 (Day 10)
No action taken today. The markets were relatively flat today, with the DJIA losing 128 points, NASDAQ gaining 4.39 points, and the S\&P 500 losing 10.70 points. The major industrialized countries around the world seem to be proposing bailout packages similar to that passed by the United States on October 3, 2008. This week has been the worst ever for the DJIA, in both point and percentage terms, and it has been the worst week for the S\&P 500 since 1933. The DJIA lost 1,874.19 points, or $18.2 \%$, which was worse than the week ending on July 22, 1933, when the index dropped 17\% (242).

Monday, October 13, 2008 (Day 11)
Today the stock market experienced a historic surge that ended in the DJIA gaining 936.42 points, its largest ever point gain in history. In terms of percentages, the DJIA climbed $11.08 \%$, the largest percentage since 1932. The global markets also soared, with similar gains felt in Europe and Asia. These historic gains seem to be the result of decreasing fears about the world credit crisis and a general devaluation of the market. This morning I purchased 31 contracts of a Morgan Stanley call option with a strike price of $\$ 12.50$. I believe that now Morgan Stanley is generally undervalued. Today alone the options I purchased increased over $24 \%$ in value.

| Date | Symbol | Buy / <br> Sell | Shares | Price | NetCost/Proceed | Profit/Loss | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 13 / 08$ | DO |  |  |  |  |  |  |
| $10 / 13 / 08$ | GLF |  |  |  |  |  |  |
| $10 / 13 / 08$ | COP |  |  |  |  |  |  |
| $10 / 13 / 08$ | GS |  |  |  |  |  |  |
| $10 / 13 / 08$ | SCHW |  |  |  |  |  |  |
| $10 / 13 / 08$ | MS |  |  |  |  |  |  |
| $10 / 13 / 08$ | JPM |  |  |  |  |  |  |
| $10 / 13 / 08$ | SPN |  |  |  |  |  |  |
| $10 / 13 / 08$ | XOM |  |  |  |  |  |  |
| $10 / 13 / 08$ | TJX |  |  |  |  |  |  |
| $10 / 13 / 08$ | MS KI |  |  |  |  |  |  |
| $10 / 13 / 08$ | MS KV | BUY | $3,100.00$ | 5.80 |  |  |  |

Table 8.2.4 October 13 Trading Activities

Tuesday, October 14, 2008 (Day 12)
Today I sold my shares in Superior Energy Services. I am contemplating buying put options in the company because of the fact that the stock is so far undervalued. If earnings estimates are correct for 2008, SPN has a price earnings ratio of 5 and is down about $40 \%$ from when I first purchased it. I believe that despite falling oil prices SPN may make a comeback. In terms of the markets today, there was an early rally upon news that the government was going to step in and buy $\$ 250$ billion dollars worth of preferred stock in nine major U.S. banks, but the DJIA closed 76 points lower on renewed recession fears (271).

| Date | Symbol | Buy/ <br> Sell | Shares | Price | NetCost/Proceed | Profit/Loss | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 14 / 08$ | DO |  |  |  |  |  |  |
| $10 / 14 / 08$ | GLF |  |  |  |  |  |  |
| $10 / 14 / 08$ | COP |  |  |  |  |  |  |
| $10 / 14 / 08$ | GS |  |  |  |  |  |  |
| $10 / 14 / 08$ | SCHW |  |  |  |  |  |  |
| $10 / 14 / 08$ | MS |  |  |  |  |  |  |
| $10 / 14 / 08$ | JPM |  |  |  |  |  |  |
| $10 / 14 / 08$ |  |  |  |  |  |  |  |
| $10 / 14 / 08$ | XOM |  |  |  |  |  |  |
| $10 / 14 / 08$ | TJX |  |  |  |  |  |  |
| $10 / 14 / 08$ | MS KI |  |  |  |  |  |  |
| $10 / 14 / 08$ | MS KV |  |  |  |  |  |  |

Table 8.2.5 October 14 Trading Activities

Wednesday, October 15, 2008 (Day 13)
No action was taken today. The markets again experienced a rapid sell off as a result of renewed fears of a global recession, despite the government's efforts to secure the credit market. The DJIA fell 733 points, or $7.87 \%$, which marks the largest percentage decline since "Black Monday" in 1987, when stocks dipped 22\% (259).

Thursday, October 16, 2008 (Day 14)
No action was taken today, which was another wild day on Wall Street, which thankfully ended with the DJIA gaining 401 points. Earlier in the day, the DJIA was down by almost the same amount. In addition, oil fell below $\$ 70$ per barrel for the first time in over a year. Falling oil prices have heavily damaged my portfolio, which is concentrated heavily in the energy sector. Although all of my stocks have fallen, the energy sector companies have suffered the most drastic losses. The gains in the stock market today came despite fears about a long term recession. Despite gains in the U.S.
market, Europe and Asian markets suffered some huge losses, including the Nikkei which was down 11\%.

Friday, October 17, 2008 (Day 15)
No action was taken today. Today the markets again gyrated, this time within an interval of about 600 points. The DJIA closed with a loss of 127 points, while the NASDAQ fell 6 points. For the week, the DJIA was up $4.5 \%$ and the NASDAQ was up over 3.5\%. Today President Bush again assured Americans that the $\$ 700$ billion bailout will work, but may take time, and famous investor Warren Buffet urged others to follow his example and once again begin buying stocks (271).

Monday, October 20, 2008 (Day 16)
No action was taken today. Today the markets made huge gains, with the DJIA up 413 points and the NASDAQ up 58 points. The chairman of the Federal Reserve, Ben Bernanke, made insinuations that a second financial rescue package would do the country well. Other countries around the world seem to be following suit with the United States with their own financial bailout plans, including the United Kingdom, Germany, and South Korea. I hope this news will positively affect the stocks that I hold in the banking sector (271).

Tuesday, October 21, 2008 (Day 17)
No action was taken today. Today the stock market fell with news of bad earnings reports which brought back renewed fears of a recession. The DJIA fell 231
points, and the NASDAQ fell 73 points; European and Asian markets also suffered losses. However, some signs point to the credit crisis easing up, including the low rates of lending between American and European banks (271).

Wednesday, October 22, 2008 (Day 18)
No action was taken today. Today was a huge loss for Wall Street, with the DJIA falling 514 points and the NASDAQ falling 81 points. The loss was the result of more bad earnings reports and weak future projections. In addition, crude oil prices fell $7 \%$ to under $\$ 67$ per barrel (271).

Thursday, October 23, 2008 (Day 19)
No action was taken today. The stock market again rebounded after early losses, and the DJIA gained 172 points and the NASDAQ fell 11 points by closing. Alan Greenspan testified today before Congress, and blamed the subprime mortgages on the banks issuing the mortgages and the investors that did not adequately consider the involved risk. He also said that unemployment should be expected to increase in the future (271).

Friday, October 24, 2008 (Day 20)
No action was taken today. Today was another dismal day on Wall Street; the DJIA fell 312 points to close at less than 8,379 , and the NASDAQ fell over 51 points to close at 1,552 . For the week, the indexes fell $5 \%$ and $9 \%$, respectively. Losses were not confined to the United States, however; major stock markets around the world posted
huge losses. Also, today OPEC announced that it would cut oil production by 1.5 million barrels per day beginning November. Despite this news, however, the price of oil dropped 5\% to $\$ 64$ per barrel (271).

Monday, October 27, 2008 (Day 21)
No action was taken today. Despite news that the government would begin distributing bailout money to nine major banks, the DJIA fell 203 points and the NASDAQ fell 46 points. Overseas, Asian markets suffered steeper losses; Japan's main index dropped $6 \%$ to a 26 year low. Some good news, however, came from the Commerce Department, which pointed to a 3\% increase in new home sales in September (271).

Tuesday, October 28, 2008 (Day 22)
No action was taken today. Stock markets around the world posted huge gains because of the expectation that the Federal Reserve will again cut interest rates tomorrow. The DJIA rose $11 \%$, to close above the 9,000 point mark, and the NASDAQ rose $10 \%$. However, other economic news was not so good today; a new report that was released by a private research group shows declining consumer confidence, and a possible $\$ 10$ billion government financial rescue of GM and Chrysler is in consideration (271).

Wednesday, October 29, 2008 (Day 23)
No action was taken today. As expected, the Federal Reserve cut a key interest rate, which sent stocks higher. However, the a sell off late in the day caused the DJIA to
lose 74 points. Around the world, stock markets rallied today, with average gains between 7\% and 9\%.

Thursday, October 30, 2008 (Day 24)
No action was taken today. Despite disappointing news from the Commerce Department that reported that gross domestic product was down $0.3 \%$, the DJIA rose 189 points and the NASDAQ gained 41 points. These gains can be attributed to worldwide interest rate cuts, which also caused gains in Europe and Asia. Exxon Mobile, which is in my portfolio, posted a record $\$ 15$ billion in profits for the third quarter; however, during this quarter oil prices were strong.

Friday, October 31, 2008 (Day 25)
No action was taken today. The stock market ended in another rally today as the DJIA gained 144 points to close at 9,325 for the week and the NASDAQ gained 22 points to close at 1,721 .

Monday, November 3, 2008 (Day 26)
No action was taken today. Stock prices were very stable throughout the day, despite the fact that energy stocks, which compose the bulk of my portfolio, suffered noticeable declines as crude oil prices once again fell $\$ 3.90$ to $\$ 63.91$ per barrel. The decline came following an industry report showing that crude oil prices suffered their steepest one month decline in prices in history, losing $33 \%$ of its value. Overall, the DJIA lost only 5 points, or $0.06 \%$, and other indexes posted similar results.

Tuesday, November 4, 2008 (Day 27)
No action was taken today. Today is election day and was also a good day for the stock market. The DJIA gained 305 points to close at 9625 , or $3.28 \%$. Similar gains were made by the S\&P 500, which gained $4.08 \%$ and the Nasdaq Composite, which gained $3.12 \%$. The Election Day results were the strongest on record. Besides the election, the markets also reacted to improving credit markets, a $\$ 7.00$ increase in the price per barrel of crude oil, and the largest single day decline of the dollar in 13 years.

Wednesday, November 5, 2008 (Day 28)
No action was taken today. Today the stock market erased its election day gains and posted huge losses. The DJIA was down 486 points to close at 9,139 , and the Nasdaq was down 98 points to close at 1,681 points. The Speaker of the House is again urging President Bush to approve another stimulus package.

Thursday, November 6, 2008 (Day 29)
No action was taken today. Today the stock market again posted huge loses; the DJIA lost 443 points, or $4.85 \%$, and the S\&P 500 lost $5.03 \%$. Today retailers released weak sales reports, and the market is prepared for weak employment reports to be released Friday. Today marks the worst two day streak in the history of the DJIA; over 900 points have disappeared from the index.

Friday, November 7, 2008 (Day 30)
No action was taken today. The DJIA was up 248 points today, while the Nasdaq was up 39 points, closing the week on a positive note. As expected, an employment report came out today that showed some more signs that the economy is in a recession. The unemployment rate hit $6.5 \%$, the highest since March of 1994; in October, the country lost 240,000 jobs. Also, the automobile industry is seeking a financial aid package by the government. General Motors made clear that without an aid package and improving economic conditions, the company could run out of cash reserves by the fist half of 2009.

Monday, November 10, 2008 (Day 31)
No action was taken today. Despite early market gains fueled by news of a $\$ 580$ billion economic stimulus package in China, the markets slowly dwindled throughout the day and ended in negative territory. The DJIA 73 points and the Nasdaq Composite lost 30 points. Goldman Sachs, a company which is in my portfolio, fell to a five and a half year low on news that it may post its first quarterly loss since the company went public in 1999. This news comes despite the previous perception that Goldman Sachs was the most protected financial holding company from the subprime mortgage crisis. Morgan Stanley, another investment bank in my portfolio, also went into a steep decline today.

Tuesday, November 11, 2008 (Day 32)
No action was taken today. The stock market made steep declines today, despite the fact that no government economic reports were scheduled and the bond market was
closed in recognition of Veteran's Day. Worries about the economic crisis pushed the DJIA down 177 points and the Nasdaq Composite lost 36 points.

Wednesday, November 12, 2008 (Day 33)
Today I purchased 50 contracts of Superior Energy Services call options at a price of $\$ 3.00$ each and a commission fee of $\$ 107.49$; I believe that the oil industry has hit an all time low and will spring back in the coming months. However, today was not a good day to buy anything in the stock market. For the third straight day in a row, the market dipped; this time the DJIA lost 411 points and the Nasdaq Composite lost 82 points, a loss of $4.73 \%$ and $5.17 \%$, respectively. The market declined on bad retail news and an announcement by Secretary of the Treasury Henry Paulson that the $\$ 700$ billion bailout money would not be used to buy troubled assets. Also, crude oil once again plunged to its lowest levels since January 2007, which sent all of my oil industry stocks downward even more.

Thursday, November 13, 2008 (Day 34)
No action was taken today. Today marked the third largest point gain and the $22^{\text {nd }}$ largest percentage gain in the history of the DJIA, which ended up 553 points higher than the start of the day, almost $7 \%$; the Nasdaq Composite rose up over 97 points, or $6.50 \%$. Along with the huge gains on Wall Street, crude prices jumped $\$ 2.08$ to $\$ 58.24$ per barrel, although the International Energy Agency warned that crude oil demand growth could be negative for the first time in 25 years.

| Date | Symbol | Buy / Sell | Shares | Price | NetCost/Proceed | Profit/Loss | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $11 / 13 / 08$ | DO |  |  |  |  |  |  |
| $11 / 13 / 08$ | GLF |  |  |  |  |  |  |
| $11 / 13 / 08$ | COP |  |  |  |  |  |  |
| $11 / 13 / 08$ | GS |  |  |  |  |  |  |
| $11 / 13 / 08$ | SCHW |  |  |  |  |  |  |
| $11 / 13 / 08$ | MS |  |  |  |  |  |  |
| $11 / 13 / 08$ | JPM |  |  |  |  |  |  |
| $11 / 13 / 08$ | XOM |  |  |  |  |  |  |
| $11 / 13 / 08$ | TJX |  |  |  |  |  |  |
| $11 / 13 / 08$ | MS KI |  |  |  |  |  |  |
| $11 / 13 / 08$ | MS KV |  |  |  |  |  |  |
| $11 / 13 / 08$ |  |  |  |  |  |  |  |

Table 8.2.6 November 13 Trading Activities

Friday, November 14, 2008 (Day 35)
No action was taken today. Today the DJIA dropped 338 points and the Nasdaq Composite dropped 80 points. The majority of the losses were incurred in the final 30 minutes of trading, for no apparent reason. During this time the DJIA lost over 350 points. During the week, the stock market swung within a 1,000 point range, with the DJIA ending down 450 points, a loss similar to last week.

Monday, November 17, 2008 (Day 36)
No action was taken today. Today the DJIA lost just under 224 points and the Nasdaq Composite lost almost 35 points. The Dow is less than 100 points away from its 5.5 year low hit on October 27. The largest losses were experienced by the financial sector, which fell on average 6\%. Bernstein Research lowered its earnings forecasts for

Morgan Stanley and confirmed that Goldman Sachs would end the quarter with a loss. JP Morgan also unveiled plans to make drastic cuts to its workforce.

Tuesday, November 18, 2008 (Day 37)
No action was taken today. Today the markets lost value early but made a rebound, with the DJIA gaining 151 points by the end of the day, closing at 8,425 . Fund managers of index funds tied to the S\&P 500 had to find a replacement for AnheuserBusch today because the company was purchased by InBev SA, a Belgian company.

Wednesday, November 19, 2008 (Day 38)
No action was taken today. Today the markets slid dramatically as the DJIA closed down over 427 points, or $5.07 \%$, and the Nasdaq Composite lost over 96 points, or $6.53 \%$. The DJIA broke through the 8,000 point mark for the first time since March 2003 and is down $43 \%$ from its high of 14,164 set in October 2007. All of my financial sector stocks, including JP Morgan, Morgan Stanley, and Goldman Sachs, all saw double digit dips. The Commerce Department stated that consumer prices made the largest one month dip since February 1947.

Thursday, November 20, 2008 (Day 39)
No action was taken today. Today was another sell off on Wall Street, with the DJIA losing $5.6 \%$ and the Nasdaq Composite losing 5.1\%. More fears of recession pushed the market down to lows not seen since the late 1990s. Meanwhile, treasury
prices increased dramatically as more people are cashing out of funds and moving their money to more secure government bonds.

Friday, November 21, 2008 (Day 40)
No action was taken today. Today the DJIA moved back above the 8,000 point mark, reversing some of the drastic losses taken this week. The DJIA gained over 494 points, while the Nasdaq gained over 68 points. The gains occurred when news broke that President Elect Obama would hire Timothy Geithner as Treasury Secretary, who played a big role in structuring the bailout for AIG.

Monday, November 24, 2008 (Day 41)
No action was taken today. Today marks the best two day percentage increase since October of 1987. The DJIA rose over 396 points and the Nasdaq rose over 87 points. Much of today's gains can be attributed to the government's $\$ 300$ billion bailout of Citigroup and the announcement of President Elect Obama's economic team, which Wall Street seems to have confidence in.

Tuesday, November 25, 2008 (Day 42)
No action was taken today. Today the markets finished up a relatively small amount, with the S\&P 500 gaining $0.7 \%$. Recent consumer confidence reports show a larger than expected increase in November.

Wednesday, November 26, 2008 (Day 43)
No action was taken today. Today the stock market rose for the fourth day in a row; the DJIA closed up over 247 points for the day, marking the best four day streak since 1932. The Nasdaq also made gains and finished up over 67 points. Part of the market gains may be attributed to oil rising over 7\%. Also, investors may believe that the government will likely bail out the auto industry; General Motors stock rose $35 \%$ today.

Friday, November 28, 2008 (Day 44)
No action was taken today. Today was the fifth straight day of gains for the stock market, the first since July of 2007. The DJIA rose over 102 points, and the Nasdaq rose by over 3 points. The day after Thanksgiving is historically a good day for the markets, despite disappointing retail news and pending economic reports which are expected to show more signs of a recession.

Monday, December 1, 2008 (Day 45)
No action was taken today. Today the market erased over half of the gains achieved last week. The DJIA closed down over 679 points, or $7.7 \%$, and the Nasdaq lost over 137 points, or $9.0 \%$. The decline was the fourth worst in history for the DJIA in terms of points lost and the $12^{\text {th }}$ worst in terms of percentage lost. New reports released today were to blame; today the National Beaureau of Economic Research revealed that the U.S. has been in a recession since December of 2007, despite the fact that there has not been two consecutive quarters of negative economic growth. Also, manufacturing
activity was revealed to be at a 26 year low. This news led all 30 components of the DJIA to lose at least 4\%; JP Morgan, which is in my portfolio, took double digit loses.

Tuesday, December 2, 2008 (Day 46)
No action was taken today. Today the market made a rebound from yesterday's huge loses; the DJIA finished up 270 points and the Nasdaq finished up over 51 points. The gains were made despite disappointing sales reports from auto makers. Also, crude oil fell to 3.5 year lows to $\$ 46.96$ per barrel.

Wednesday, December 3, 2008
No action was taken today. After oscillating up and down, the markets closed on positive territory. The DJIA gained over 172 points while the Nasdaq gained over 42 points. Despite more disappointing economic reports showing that the fragile state of the US economy in November, the DJIA bounced back, marking the seventh of the past eight trading days where the index has made significant gains. An consideration by the Treasury Department to use Fannie Mae and Freddie Mac to lower interest rates to 4.5\% boosted stocks in the financial sector, such as Morgan Stanley.

Thursday, December 4, 2008
No action was taken today. Today the markets lost ground; the DJIA lost over 215 points and the Nasdaq lost over 46 points. Crude oil prices also fell today; in the past five days, crude prices have sank $20 \%$. Two major factors influencing the market today were the jobless reports and the doubts about the viability of the "Big Three" automakers.

Friday, December 5, 2008
No action was taken today. Today the markets made gains; the DJIA gained over 259 points while the Nasdaq gained over 63 points. These gains come despite another barrage of disappointing reports. In November, the US reportedly lost 533,000 jobs, and one out of every ten mortgages is either delinquent or in foreclosure. Also, today crude prices fell again to $\$ 40$ per barrel, down $25 \%$ this week alone; Merrill Lynch predicts that crude could plummet as low as $\$ 25$ per barrel.

### 8.3 Analysis

This portfolio was comprised of five energy sector companies, four investment and banking companies, and a retail company. The stocks were purchased on September 29, 2008, and the simulation ended on December 5, 2008, a span of 49 trading days. During the first day of trading the Dow Jones Industrial Average posted its largest ever point loss in history, a stunning 777 point drop, and this provided a gauge as to what direction the value of the stocks in this portfolio would take for the remainder of the simulation.

From the start of the simulation to the end, the DJIA fell $22.5 \%$ and the Nasdaq Composite fell $30.9 \%$, a reflection of the recent credit crisis and subsequent recession of the U.S. economy since the summer of 2008. However, this portfolio underperformed the market averages. The starting asset value of $\$ 250,000$ fell to $\$ 147,037$ by the end of the simulation, a drop of $41.2 \%$. Much of this disparity can be attributed to the options that were purchased during the simulation. In total, $\$ 22,700$, or $9.1 \%$ of the starting asset value of the portfolio, was lost in the highly volatile option market. All three of the put
option purchases in Morgan Stanley and Superior Energy Services proved to be unprofitable. If the money allocated to options was instead held as a cash reserve, the total asset value of the portfolio would have instead declined $32.11 \%$, which is closer to the market averages.

The average stock in the portfolio declined $30.9 \%$. This high percentage of decline may be attributed to the fact that this portfolio was not well diversified and concentrated heavily on the banking and energy sectors of the economy. The offshore drilling industry was particularly hard hit from dwindling worldwide oil demand; Diamond Offshore and Gulfmark Offshore, which were held throughout the simulation and were the first and third worst performing stocks in the portfolio, lost an average of $47.1 \%$ of their initial values. Goldman Sachs, which was the second worst performing stock in the portfolio, lost $47.4 \%$ of its starting value; this company, despite the fact that it was not as heavily invested in risky mortgage securities as some of its competitors such as Merrill Lynch and Lehman Brothers, lost much of its value regardless as did the majority of investment and banking firms.

Overall, this was the worst performing portfolio in the stock market simulation. A combination of holding companies concentrated in the financial and energy sector of the economy as well as risky put options led to large losses by the end of the simulation. This portfolio is a testament to the value of diversification and long term investing, which used together produce much better results for the average investor.

## Chapter 9: Portfolio 4 - Long Term Investing

This stock portfolio utilizes the strategy of long term investment. This chapter presents a concise history of the individual stocks chosen and the reasoning behind each selection. Included is a journal consisting of daily comments on the portfolio and the stock market. The chapter wraps up with an analysis of the simulation; evaluating the performance of each stock and the actions taken within the 10 -week period.

### 9.1 Companies Selected

### 9.1.1 Colgate Palmolive Co. (CL)

Colgate Palmolive Co. is a maker/marketer of mouthwash, toothpaste, and toothbrushes. In addition to oral care products, the company makes and markets personal care and household cleaners such as deodorants, shampoos, soaps, bleaches, laundry products, as well as nutritional pet foods. The company operates in 70 countries; selling its products in over 200 countries (20).

The company started in 1806, with William Colgate's starch and soap and candle business in New York City. With his death, his son, Samuel Colgate, reorganized the company as Colgate and Company in 1857. In 1864 B.J Johnson opened a soap factory in Milwaukee which would become the Palmolive Company. As years passed each developed their own soap products and Colgate would introduce toothpaste in jars and later on in tubes. Then in 1926 Palmolive and Peet merge to form Pamolive-Peet Company. Two years later Colgate would merge with Palmolive-Peet to become known as Colgate Palmolive-Peet Company. It was not until 1953 that Colgate-Palmolive Co. became the company's official name with its corporate headquarters at 300 Park Ave.,

NYC which opened 3 years later. Throughout the years that followed it would continue to introduce new toothpastes and dishwashing soap and other new products (61). In 2007 Colgate Palmolive Co.'s sales growth increased by $12.7 \%$ with a net income of $\$ 1,737,400,000$. The 52 week range is $\$ 66.21-81.98$ with a current stock price of $\$ 75.71$ (21). There is a potential in this company's future. Soaps and toothpaste are necessities and consumers will continue to purchase these products. And if Colgate-Palmolive continues to make improvements to these products there is a chance for the company to keep growing.

### 9.1.2 Wal-Mart Stores Inc (WMT)

According to Finance on AOL, Wal-Mart is the "world's \#1 retailer, with more than 7,250 stores, including about 975 discount stores, 2,800 combination discount and grocery stores ,and 590 warehouse stores (SAM'S CLUB)." (34) Although 55\% of the stores are in the US, Wal-Mart is rapidly expanding, for it is currently becoming a top retailer in both Canada and Mexico. "It also owns a $95 \%$ stake in Japanese retailer SEIYU (34)." Sam Walton, the founder of Wal-Mart, traveled the country learning about discount retailing, before opening the first Wal- Mart in Rogers, Ark, which he supplied $95 \%$ of the money for. The business would slowly expand to become one of the most successful retailers in the world (228). In 2008 the sales growth of Wal-Mart Stores Inc. increased by $8.6 \%$ with a net income of $\$ 12,731,000,000$. Looking at the past year the stock has been doing well, steadily increasing with the current price at $\$ 59.70$. The 52 week range is $\$ 42.50-63.85$ (35). Due to a bad economic status, Wal-Mart would be a
fine choice. Because of the dreadful economic status, consumers lacking the funds to spend will turn discount stores, such as Wal-Mart.

### 9.1.3 Johnson \& Johnson (JNJ)

Johnson and Johnson is as health care giant operating in over 250 countries. The Pharmaceuticals division makes drugs for the treatment of neurological conditions, blood disorders, autoimmune diseases, and pain. The Medical Devices and Diagnostics division produces surgical equipment, monitoring devices and contact lenses. And the consumer division creates over the counter drugs, skin products, health and oral care and first aid products (26). Founded in 1886, and growing through mergers and the formation of new companies, has led Johnson \& Johnson to become the world's largest heal care company. The company boasts 75 consecutive years of sales increase and 45 consecutive years of dividend increase, showing consistent financial performance (113). In 2007, Sales growth has increased by $14.6 \%$ with a net income of $\$ 10,576,000,000$. Its 52 week range is $\$ 61.17-72.76$ with its current price at $\$ 69.21$ (27). The company's stocks are currently at a peak. If prices start falling selling short may be an option, in order to cover losses.

### 9.1.4 Biogen Idec Inc (BIIB)

Biogen Idec Inc. formed from the merge of IDEC Pharmaceuticals and Biogen. It is known for the development of new and better drugs; focusing on areas such as oncology, immunology, and neurology. Among the major products is Avonex, which is popularly used to treat relapsing multiple sclerosis; Rituxin, a monoclonal antibody
developed with Genentech to treat B-cell non-Hodgkin's lymphoma; Tysabri, the recently approved treatment for multiple sclerosis; and Fumaderm, a psoriasis drug marketed in Germany (17). Founded in 1978, Biogen Idec is a leader in the discovery and development and commercialization of new treatments. In 2007 the Sales growth grew $18.2 \%$ to almost $\$ 3.2$ billion, with a net income of $\$ 638,200,000$. Its 52 week range is $\$ 45.37-84.75$ with its current price at $\$ 49.98$, making it an optimal time to buy (16). There is a possibility for the stock to do well. Just recently, when MS drug reports released showing positive long term effects from Avonex, shares of Biogen Idec rose from $\$ 1.01$ or $2.1 \%$ (16). The biomedical field is an excellent field to invest in due to the constant development of new drugs and technology. There is a drawback however; if studies show negative results from drug usage, stocks values will surely fall. It is a gamble to take though, knowing that biotechnology will be a big part of the future.

### 9.1.5 Celgene Corp(CELG)

Celgene was initially founded as a unit of Celanese Corporation in 1980 but when Celanese Corp and American Hoechst Corp merged in 1986, Celgene spun off as an independent biopharmaceutical company. Celgene products include Thalomid, which is used to treat multiple myeloma (bone marrow cancer), Revlimid, which is also used to treat multiple myeloma and a malignant blood disease called MDS; and Vidaza which they acquired by purchasing Pharmion for $\$ 2.9$ billion in March 2008. The firm also has other drugs in development to fight cancer and inflammatory diseases (44). In 2007 Sales growth increased by $56.4 \%$ with a net income of $\$ 226,400,000$. Its 52 week range
is $\$ 41.26-77.39$ with its current price at $\$ 67.95$ (19). Like BIIB, it is believed that biomedical stocks are a good option to invest in despite possible fluctuations.

### 9.1.6 Pentair Inc (PNR)

Pentair Inc is "a global diversified operating company serving the commercial, industrial, municipal and residential markets through innovative solutions under strong brand names (154)." The Pentair Water Segment includes global filtration, flow technologies and pool and spa business. With $70 \%$ of the company's sales in water units, this segment makes well pumps, sump pumps, and valves for water softeners, pool cleaners, heaters, spa fittings, filters, and thermometers. The other part of the company is known as the Pentair Technological Products Segment, which helps to protect electrical and electronic equipment and people who use them. This segment makes products such as Hoffmann and Schroff protective housings and accessories for electronic controls and instruments (30). In 2007 Pentair Inc's sales growth increased by $7.7 \%$, with a net income of $\$ 210,900,000$. The 52 week range is $\$ 26.02-41$ with a current stock price of $\$ 38.52$ (31). Compared to its peers, AOX and IEX, Pentair Inc. has been doing significantly well. It is a good time to invest in water stocks because of the increased need for water. Stocks for water itself, the bottling and the filtering of water are bound to rise, if not now in the long run. PNR was chosen because of technological aspect of water. Perhaps I will invest in different water stocks later on if it does well.

### 9.1.7 General Mills Inc (GIS)

General Mills is the $2^{\text {nd }}$ biggest cereal making company behind its rival Kellogg. Cereals under its brand include Cheerios, Check, Total, Kid, and Wearies. According to AOL Finance "General Mills is a brand leader in flour (Gold Medal), baking mixes (Betty Crocker, Bisquick), dinner mixes (Hamburger Helper), fruit snacks (Fruit RollUps), grain snacks (Chex Mix, Pop Secret), and canned and frozen vegetables (Green Giant). It is also a leading maker of branded yogurt (Colombo, Go-Gurt, and Yoplait)." And recently, in 2001 it has doubled its company size by acquiring Pillsbury. This has made it the one of the world's largest food companies, with its products being sold in over 100 countries (22). According to its site, the average U.S shopper places at least one General Mills product in their cart each time they visit the grocery store. It started off as two flour mills in the 1860 s, producing superior flour. Then somehow in the middle they introduced memorable characters such as Betty Crocker, Bullwinkle, the Lone Ranger, and Pillsbury Doughboy. And up to today, its focus has been on food (80). In 2008, General Mills' sales growth increased by $9.7 \%$ with a net income of $\$ 1,294,700,000$. The 52 week range is $\$ 51.00-72.01$ with its stock price currently at $\$ 69.61$ (23). Food is a necessity to survive and with an increasing population around the world the revenue in the food industry should increase with time thus leading to the company doing better in the market.

### 9.1.8 Kellogg Co (K)

Kellogg is the \#1 cereal maker, with known brands such as Frosted Flakes, Corn Pops and Rice Krispies. Because of the increase demand for alternatives to the cereal-
milk combination, Kellogg has had to rely on snacks such as Eggo waffles, Nutri-grain and Pop-tarts. It has recently bought Keebler Foods which makes products such as Fudge, Shoppe, and Cheez-It, to show that it is not just a cereal company (28). Kellogg has recently celebrated its 100 year anniversary in 2006. Founded by Mr. Kellogg, as a small manufacturer and a marketer of better for you breakfast food, the company has grown tremendously throughout the years. It began with the founding of the processing wheat flakes which led to the formation of the Battle Creek Toasted Corn Flakes Company in 1906, which was later changed to the Kellogg Company (116). The company has been doing quite well with an $8 \%$ increase of sales growth and a net income of $\$ 1,103,000,000$. The 52 week range is $\$ 46.25-58.51$ with its current stock price at $\$ 57.39$ (29). This stock investment should stay steady or steadily rise because of the increased interest in people to eat a good breakfast before the start of the day. Kellogg has been around for over 100 years, it is not going to go downhill anytime soon.

### 9.1.9 Tupperware Brands Corp (TUP)

This company makes and sells both household and beauty products. Brands include, Avroy Shlain, BeautiControl, Fuller, NaturCare, Nutrimetics, Nuvo, Swissgarde, and Tupperware. The company deploys a sales force of 2.1 million people in over 100 countries. BeautiControl sells beauty and skin care products and fragrances in North America, Latin America, and the Asia/Pacific region (34). Tupperware made its debut in 1946, the revolutionary post-war period. Before its debut early Tupper plastic-like material was being made for the war. Its first consumer products were the Wonderlier Bowl and Bell Tumbler, which offered lightweight food containers which were less
lightly to break than glass. With the baby boom, the women had the "Tupperized" kitchen, which was an organized and neat kitchen, using Tupperware containers, which looked better and kept the food fresher, longer (213). The 52 week range of TUP is $\$ 23.60-44.98$ with its current stock price at $\$ 28.41$ suggesting that perhaps this is a good time to purchase shares. In 2007 the sales growth increased by $13.6 \%$ with a net income of $\$ 116,900,000$ (33). I chose this stock because it is useful, and consumers should continue to purchase this product. It serves as a replacement for disposable plastic bags and it is microwaveable. There is a chance it can grow into a much bigger company and continue to expand.

### 9.1.10 Hasbro Inc (HAS)

Hasbro is the $2^{\text {nd }}$ largest toy maker in the world, behind Mattel, although graphs show that it's been doing better than Mattel in the past year. It produces G.I. Joe, PlayDoh, Tonka toys, Nerf balls, and board games, such as Scrabble, Candy Land, Monopoly and Trivial Pursuit, as well as trading cards which include, Pokemon, and Magic: The Gathering (24). Hasbro was founded by two brothers, in the 1920s, which initially sold textile remnants and then moved on to manufacture pencil boxes and school supplies. Companies that would later become part of the family include Play-skool which was founded by two teachers to help children learn at home as well, and Parker Brothers, which developed MONOPOLY, the world's all-time best selling game. By the 1940s, it would expand to making toys, including paint sets, wax crayons, and doctor and nurse kits. Its first major success came in 1950s with Mr. Potato Head. The 1950s also gave birth to Play-Doh with the formula still a secret more than 45 years later. The 1960s
introduced the G.I. Joe action figures and in 1968 Hasbro became a publicly traded company on AMEX. As the decades passed new toys were introduced along with new innovations (94). Its 52 week range is $21.57-41.68$ with its current price at 35.66 . In 2007 it had a $21.8 \%$ increase in sales growth with a net income of $\$ 333,000,000$ (25). Children will always have a need for toys to play with. If Hasbro continue to make toys and be innovative there is a possibility for it to continue to have huge success in the toy industry.

### 9.2 Trading

Monday, September 29, 2008 (Day 1)
Using Investopedia's Simulator, I placed an order on the stocks the night before, so that they would immediately buy them when the market opens. We later learned that there is a 20 minute delay or perhaps more. I was doing quite well in the morning, at one point even being up $\$ 34$ with the greatest lost being around $\$ 3000$. I did not get a chance to look at it again till after the market closed, which was around 4-5ish. And I suddenly saw that I was down by $-\$ 8,519.28$. Then I learned that the bailout bill was turned down and the market had a mini crash causing all stocks to fall down.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 250,000 |  |
| $9 / 29 / 08$ | CELG | Buy | 302 | $\$ 65.13$ | $19,689.25$ |  | $230,310.75$ |  |
| $9 / 29 / 08$ | BIIB | Buy | 400 | $\$ 49.46$ | $19,803.99$ |  | $210,506.76$ |  |
| $9 / 29 / 08$ | JNJ | Buy | 288 | $\$ 68.81$ | $19,837.27$ |  | $190,669.49$ |  |
| $9 / 29 / 08$ | WMT | Buy | 328 | $\$ 60.05$ | $19,716.39$ |  | $170,953.10$ |  |
| $9 / 29 / 08$ | CL | Buy | 260 | $\$ 76.40$ | $19,883.99$ |  | $151,069.11$ |  |
| $9 / 29 / 08$ | HAS | Buy | 560 | $\$ 34.80$ | $19,507.99$ |  | $131,561.12$ |  |
| $9 / 29 / 08$ | TUP | Buy | 704 | $\$ 27.86$ | $19,633.43$ |  | $111,927.69$ |  |
| $9 / 29 / 08$ | K | Buy | 348 | $\$ 56.86$ | $19,807.27$ |  | $92,120.42$ |  |
| $9 / 29 / 08$ | GIS | Buy | 287 | $\$ 69.49$ | $19,963.62$ |  | $72,156.80$ |  |
| $9 / 29 / 08$ | PNR | Buy | 518 | $\$ 38.50$ | $19,962.99$ |  | $52,193.81$ |  |

Table 9.2.1 September 29 Trading Activities

Tuesday, September 30, 2008 (Day 2)
The stocks that I have invested in have gone from $\$-8.5 \mathrm{k}$ to $\$-3 \mathrm{k}$. Everything in the market seems to be going back up but I am still in the red. Since most of my stocks are long term investments, I decided to sit tight and wait to see the results of tomorrow before I take action.

Wednesday, October 1, 2008 (Day 3)
My stocks have dropped once again, so I decided to invest more into the stocks that are losing since they are now at a lower price than what I purchased them at. I reinvested in Tupperware, Johnson \& Johnson and Pentair Inc, because these are big companies that have been around for quite a while they will not let a small crash take them down that easily, so they should rise again in the long run.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total <br> Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | $52,193.81$ |  |
| $10 / 1 / 08$ | CELG |  |  |  |  |  | $52,193.81$ |  |
| $10 / 1 / 08$ | BIIB |  |  |  |  |  | $52,193.81$ |  |
| $10 / 1 / 08$ | JNJ | Buy | 74 | $\$ 67.69$ | $5,029.05$ |  | $47,164.76$ |  |
| $10 / 1 / 08$ | WMT |  |  |  |  |  | $47,164.76$ |  |
| $10 / 1 / 08$ | CL |  |  |  |  |  | $47,164.76$ |  |
| $10 / 1 / 08$ | HAS |  |  |  |  | $47,164.76$ |  |  |
| $10 / 1 / 08$ | TUP | Buy | 455 | $\$ 26.31$ | $11,991.04$ |  | $35,173.72$ |  |
| $10 / 1 / 08$ | K |  |  |  |  | $35,173.72$ |  |  |
| $10 / 1 / 08$ | GIS |  |  |  |  |  | $35,173.72$ |  |
| $10 / 1 / 08$ | PNR | Buy | 436 | $\$ 34.25$ | $14,952.99$ |  | $20,220.73$ |  |

Table 9.2.2 October 1 Trading Activities

Thursday, October 2, 2008 (Day 4)
Although I reinvested more into those stocks, the market dropped again making me regret not buying any banks because the stocks for banks were rising tremendously. I decided to sit tight and watch since now 4 of my stocks are barely in the green.

## Friday, October 3, 2008 (Day 5)

The morning started quite well with me only down $\$ 4000$. Today is the day where the bill goes to the House which turned it down last time. This time however it goes through, there did not seem to be a big impact on the stock market after it goes through but then once again at the end of the day it drops and now I am down - $\$ 9,316.22$.

Monday, October 6, 2008 (Day 6)
Even though the bailout bill goes through, it looks like it did not help the stock market much. My stocks drop once again to a grand total loss of $-\$ 15,784.44$; the two stocks which are doing really badly are TUP and PNR. TUP has been constantly
dropping, I am debating about selling it, but decided not to. PNR is a big water company I trust that it will surely go back up in the future. I decided to once again sit tight and wait for the market to improve.

Tuesday, October 7, 2008 (Day 7)
The values of my stocks have decreased once again. I was thinking about selling short since the market is doing so poorly but it seems that selling short is illegal. There is a ban on selling short which ends on Wednesday, 10/8/08 at 11:59 PM. I do not want to take the risk that my stocks will go back up, so I do not sell my stocks once again, but wait for a better time.

Wednesday, October 8, 2008 (Day 8)
A few stocks improved a bit from yesterday, but overall I lost more. The market seems grim, but I am still too scared to take my stocks out of the market. I will be able to sell short tomorrow, my plan is to sell short so that I can make up my losses, and hopefully wait till my original investment go back up, so I can sell them without losing so much.

Thursday, October 9, 2008 (Day 9)
The values have dropped once again. I spent today looking at different stocks, and the values were already so low, I didn't know which one to invest in by selling short. I ended up just investing in Exxon Mobil since I saw that they were close to their 52
week low. One hour when I look back, Exxon has fell even more, making me lose a little more than $\$ 1000$ rather than gaining.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total <br> Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 9 / 08$ |  |  |  |  |  |  | $20,220.73$ |  |
| $10 / 9 / 08$ | CELG |  |  |  |  |  | $20,220.73$ |  |
| $10 / 9 / 08$ | BIIB |  |  |  |  |  | $20,220.73$ |  |
| $10 / 9 / 08$ | JNJ |  |  |  |  |  | $20,220.73$ |  |
| $10 / 9 / 08$ | WMT |  |  |  |  |  | $20,220.73$ |  |
| $10 / 9 / 08$ | CL |  |  |  |  |  | $20,220.73$ |  |
| $10 / 9 / 08$ | HAS |  |  |  |  |  | $20,220.73$ |  |
| $10 / 9 / 08$ | TUP |  |  |  |  |  | $20,220.73$ |  |
| $10 / 9 / 08$ | K |  |  |  |  |  | $20,220.73$ |  |
| $10 / 9 / 08$ | GIS |  |  |  |  |  |  |  |
| $10 / 9 / 08$ | PNR |  |  |  |  |  |  |  |
| $10 / 9 / 08$ | XOM | Buy | 270 | $\$ 72.87$ | $19,694.89$ |  | 525.84 |  |

Table 9.2.3 October 9 Trading Activities

Friday, October 10, 2008 (Day 10)
I have bad luck in the stock market. Exxon Mobil has dropped even more and I am losing almost $\$ 3000$ from it, even though I have just recently purchased it the day before. At one point in the day I was down $\$ 9000$ in both TUP and PNR, but at the end of the day it had gone back up quite a bit again making my total loss, $-\$ 44,954.33$. All I can really do is sit tight once again, and hope that my stocks go up and wait for a better day.

Monday, October 13, 2008 (Day 11)
The market jumped up quite a lot from yesterday, and I am now currently only down by $-\$ 24,589.86$. Exxon-Mobil has gone into the green with me up $\$ 56.70$. Looking at the numbers all the values of my stocks have gone up since yesterday. Things are finally starting to look good, and I am hoping that it will get better.

Tuesday, October 14, 2008 (Day 12)
My portfolio has decreased a bit once again, but not enough to really make a big impact. I am not worried because the market could always go up again later on.

Wednesday, October 15, 2008 (Day 13)
The fluctuation of the stock market is getting a bit annoying. On some days the market will rise and on some days it will fall. I think the only thing I can do at the moment is sit back and wait for the right time to sell and reinvest.

Thursday, October 16, 2008 (Day 14)
The value of my stocks has once again gone up. It seems as though the market likes to go up and down, but never continuously go up, making it seem like the market is not really going anywhere at all.

Friday, October 17, 2008 (Day 15)
Yes, my portfolio of stocks has gone down again, proving my observation of the market going up and down constantly correct. Once again I don't think that this is a good time to take action.

Monday, October 20, 2008 (Day 16)
The market has not changed much today so there is no reason to take any action because I don't have much money left to invest into anything else.

Tuesday, October 21, 2008 (Day 17)
My portfolio has dropped once again, but it is only on paper and I am only down by $-\$ 30 \mathrm{k}$. Which is quite good compared to how much I've been down before.

Wednesday, October 22, 2008 (Day 18)
My goal at the moment is to get rid of TUP and PNR as quickly as possible, because these are the two stocks that are killing me. Once they increase in value I will sell them and reinvest my money into better investments.

Thursday, October 23, 2008 (Day 19)
The market increased helping a bit but quite enough to match the start of the week, so we can clearly say the stocks are dropping. Perhaps I should have sold earlier so that I had money to invest in stocks when the market was so low.

Friday, October 24, 2008 (Day 20)
No actions were made today. It seems as though whenever the Dow Jones increases or decreases my portfolio increases or decreases as well. Because of this I am going to start looking at the Dow Jones and its impact on my portfolio each and every day from now on. I also now see that perhaps Exxon-Mobil may have been bad investment. The oil industry should drop since there is a low demand on gas at the moment, because everyone does not want to pay for gas.

No actions were made today. Looking at the end of last week, the values have dropped once again. So this is no time to take any action, but to wait. Today, I looked up Dow Jones Index and found that it is just an average of 30, large industrial stocks, such as GM, Goodyear, IBM and Exxon. I also discovered the S\&P 500 which is the average of 500 different large companies. Most believe that the $\mathrm{S} \& \mathrm{P}$ is a better benchmark of how the U.S. Market is doing.

Tuesday, October 28, 2008 (Day 22)
No actions were made today. The value of the stocks has increased once again. I am still waiting for TUP and PNR to improve and increase to higher stock values so that I can sell them and cut my losses. The Dow Jones has shown an increase of 889.35 and the S\&P 500 an increase of 91.59 . My total assets is currently $\$ 217,341.73$.

Wednesday, October 29, 2008 (Day 23)
No actions were made today. The value of the portfolio has decreased slightly. I did nothing, still waiting for the right time to make a move. The Dow Jones has shown a drop of -74.16 and the $\mathrm{S} \& \mathrm{P} 500$ a drop of 10.42 . My total assets is currently $\$ 216,088.67$.

Thursday, October 30, 2008 (Day 24)
No actions were made today. The value of the stocks has stayed steady. I did nothing, still waiting for the right time to make a move. The Dow Jones has shown an
increase of 189.73 and the S\&P 500 an increase of 24 . My total assets are currently \$216,585.65.

Friday, October 31, 2008 (Day 25)
No actions were made today. The value of the stocks has increased once again. It seems as though the market is finally doing well since it seems to be constantly increasing as the week goes on. The Dow Jones has shown an increase of 156.24 and the S\&P 500 an increase of 14.66. My total assets are currently $\$ 222,236.48$.

Monday, November 3, 2008 (Day 26)
No actions were made today. My portfolio is doing well, I have two stocks in the green and I am currently only down by $\$ 26,167.81$. The stocks are finally doing a lot better but it may drop tomorrow due to Election Day, where it has been shown to happen in the past. The Dow Jones has shown a drop of -17.1 and the S\&P 500 and drop of 2.45. My total assets are currently $\$ 223,026.49$.

Tuesday, November 4, 2008 (Day 27)
No actions were made today. It seems like Election Day has not impacted the stock market yet, because it has gone up more again, with my stock value currently at $\$ 22,482.83$. Perhaps the impact of who gets elected will affect the stock market more tomorrow. The Dow Jones has shown an increase of 305.45 and the S\&P 500 an increase of 39.45. My total assets are currently $\$ 226,711.47$.

Wednesday, November 5, 2008 (Day 28)
No actions were made today. It seems our assumption was correct; the market has dropped in value today. I am not worried though because this is only temporary and the market will surely go up again sooner or later. The Dow Jones fell 486.01 points and the $\mathrm{S} \& \mathrm{P}$ fell 52.98 points, leading my total value to drop to $216,902.00$.

Thursday, November 6, 2008 (Day 29)
No actions were made today. The stock value has decreased even more today, but once again I am not worried because I believe the value of the stocks will go up in the future. The Dow Jones fell 443.48 points and the $S \& P$ fell 47.89 points, leading my total value to drop to $\$ 206,878.76$.

Friday, November 7, 2008 (Day 30)
No actions were made today. Today is the first day the stock market has gone up since Obama was elected to be the next President. I am going to wait to see what happens next week before taking any action with the stocks I hold. The Dow Jones has shown an increase of 248.02 and the S\&P 500 an increase of 26.11 . My total assets are currently $\$ 216,280.51$.

Monday, November 10, 2008 (Day 31)
No actions were made today. My stock portfolio did not seem to change much today; where some values have gone up, while others have decreased in value. Overall,
the total value did not change much, so no actions were made. Dow Jones changed by73.27 and the S\&P by -11.78.

Tuesday, November 11, 2008 (Day 32)
No actions were made today. The values have decreased today, but once again I am not going to do anything. The values will increase eventually so there is nothing to worry about. The Dow Jones fell 176.58 points and the $\mathrm{S} \& \mathrm{P}$ fell 20.26 points, leading my total value to drop to $\$ 210,128.14$.

Wednesday, November 12, 2008 (Day 33)
No actions were made today. The market has dropped even more today. It must be because of the change to the bailout bill that got people worried and causing the market to drop. The Dow Jones fell 411.3 points and the S\&P 46.65 fell points, leading my total value to drop to $\$ 201,367.09$.

Thursday, November 13, 2008 (Day 34)
No actions were made today. The portfolio has increased today, by quite a bit too compared to the day before. I am going to wait once again. I am however upset that I did not sell TUP earlier when it was at such a low loss. The Dow rebounded by 552.59 points and the S\&P with 58.99.

Friday, November 14, 2008 (Day 35)
No actions were made today. My portfolio dropped a bit today, but it is not as bad as I expected it to be, and not as bad as it was two days ago. There is still time and I have the patience to wait for the values to go back up. The Dow Jones fell 337.94 points and the $\mathrm{S} \& \mathrm{P}$ fell 38 points, leading my total value to drop to $\$ 205,591.47$.

Monday, November 17, 2008 (Day 36)
No actions were made today. The values of my stocks have dropped since last Friday. I am not too worried though, because I still believe that there is a chance that the value will increase in the future. The Dow Jones fell 223.73 points and the $\mathrm{S} \& \mathrm{P}$ fell 22.54 points, leading my total value to drop to $\$ 202,909.73$.

Tuesday, November 18, 2008 (Day 37)
No actions were made today. The stock prices keep dropping and I am now thinking that the future may look grim. I am still waiting for the value to reach the right level, so I can sell and wait for prices to drop once again so that I can reinvest my money. The Dow Jones increased by 151.17 points and the $S \& P$ went up 8.37 points, leading my total value to drop to $\$ 204,657.07$.

Wednesday, November 19, 2008 (Day 38)
No actions were made today. My guess was correct, the market is falling. I did nothing today, but regret that I did not sell when my combined lost was only a bit more
than $\$ 20 \mathrm{k}$. The Dow Jones fell 427.47 points and the $\mathrm{S} \& \mathrm{P}$ fell 52.54 points, leading my total value to drop to $\$ 193,977.23$.

Thursday, November 20, 2008 (Day 39)
No actions were made today. The Dow fell by a colossal -444.99 and the S\&P followed with -54.14. My total value at the moment has fallen to $\$ 183,499.02$.

Friday, November 21, 2008 (Day 40)
No actions were made today. The Dow Jones has shown an improvement 494.13 and the S\&P 500, 47.59. The total value of my stocks has gone up bit today, and my losses have been decreased. I am currently starting to research alternatives to invest my money in if I sell my stocks.

Monday, November 24, 2008 (Day 41)
No actions were made today. It was another good day for the Dow Jones and the S\&P 500, with increases of 396.97 and 51.78 respectively. The stock values did increase today, but I am still slightly under $\$ 200,000$ and I would like it to be higher before I sell my stocks and reinvest.

Tuesday, November 25, 2008 (Day 42)
No actions were made today. Once again there was an increase, but it is so minimal and total assets are still under $\$ 200,000$. The Dow has gone up by 36.08 and the S\&P by 5.58. I am however starting to worry though, because due to trends in the Dow

Jones and S\&P 500, stability is show if not a small recession. I worry that there will be a plummet and I will back at where I was just a few days ago.

Wednesday, November 26, 2008 (Day 43)
No actions were made today. I was able to break the $\$ 200,000$ barrier today, and I am at $\$ 204,518.05$. In relations with my gains, the Dow Jones has increased by 247.14 and the S\&P 500 by 30.29 . This marks the $4^{\text {th }}$ day that the market has shown improvements, making my worries vanish.

Friday, November 28, 2008 (Day 44)
No actions were made today. The Dow and the S\&P rose 102.43 and 8.56 respectively and my stocks value increased little today, by around $\$ 1,000$. I was debating on selling and then reinvesting when it is lower because there is only 1 week left of the simulation and this is the highest I've been since 2 weeks ago. I decided not to, since the market is so unpredictable and I believe that even if there is a dip, it should not be worse than what was gained the past few days.

Monday, December 1, 2008 (Day 45)
No actions were made today. For some unexpected reason, the market plummeted today by a lot. Many factors could have led to the cause of this dive, but I blame the news and the peoples' belief that the country is in an economical crisis. Because the Dow Jones and S\&P 500 fell -679.95 and -80.03 respectively, the total value
of my stocks has decreased dramatically by $\$ 15 \mathrm{k}$, to $\$ 190,472.28$. I am kicking myself because I should have listened to my gut yesterday and sold and reinvested today.

Tuesday, December 2, 2008 (Day 46)
No actions were made today. The market rose today, but it is too risky to take any action because the market can go either way and I do not want to suffer any more painful losses. I can see that my personality is playing a role in how I manage my investments. Because I have suffered too many losses I have practically given up hope that there is a chance for me to redeem myself in this faltering economy. With a Dow Jones increase of 270 points and an S\&P 500 increase of 32.6 , my stocks have also increased by roughly $\$ 6.7 \mathrm{k}$ to $\$ 197,255.24$.

Wednesday, December 3, 2008 (Day 47)
No actions were made today. Today, the market rose again. The Dow Jones rose 172.6 points to 8591.69 and the S\&P 500 rose 21.93 to 870.74 . The total value of my stocks, at the end of the day, is $\$ 200,114.85$. I hope this is a sign that the U.S. economy is improving and that my portfolio will continue to improve and end on a good note.

Thursday, December 4, 2008 (Day 48)
No actions were made today. I did not think it would be wise to start trading when there was only one day remaining in the simulation. Today, the Dow Jones fell 215.45 to 8376.24 and the S\&P 500 fell 25.52 to 845.22 . This impacted my stocks greatly, dropping my total assets down to $\$ 194.273 .66$.

Friday, December 5, 2008 (Day 49)
Although our stock market simulation has ended, I kept my stock portfolio on Investopedia and did not sell anything in order to continue to analyze the market on my own. The current value of my portfolio is listed below in Table 9.2.4. Today, the Dow Jones rose 259.18 points to 8635.42 and the S\&P 500 rose 30.85 to 876.07 which also led to my portfolio increasing by $\$ 7249.60$ compared to the day before.

| Date | Day | Symbol | Buy <br> Sell | Shares | Price | Net Cost <br> $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | 525.84 |  |
| $12 / 5 / 2008$ | 49 | CELG | Sell | 302 | $\$ 53.98$ | $16,321.95$ | $3,367.30$ | $16,807.81$ | 3367.3 |
| $12 / 5 / 2008$ | 49 | BIIB | Sell | 400 | $\$ 44.25$ | $17,719.99$ | $2,084.00$ | $34,487.82$ | 5451.3 |
| $12 / 5 / 2008$ | 49 | JNJ | Sell | 362 | $\$ 58.23$ | $21,099.25$ | $3,767.07$ | $55,547.09$ | 9218.37 |
| $12 / 5 / 2008$ | 49 | WMT | Sell | 328 | $\$ 58.21$ | $19,112.87$ | 603.52 | $74,619.98$ | 9821.89 |
| $12 / 5 / 2008$ | 49 | CL | Sell | 260 | $\$ 63.01$ | $16,402.59$ | $3,481.40$ | $90,982.59$ | 13303.29 |
| $12 / 5 / 2008$ | 49 | HAS | Sell | 560 | $\$ 27.84$ | $15,610.39$ | $3,897.60$ | $106,553.00$ | 17200.89 |
| $12 / 5 / 2008$ | 49 | TUP | Sell | 1159 | $\$ 16.69$ | $19,363.70$ | $12,260.77$ | $125,876.72$ | 29461.66 |
| $12 / 5 / 2008$ | 49 | K | Sell | 348 | $\$ 42.73$ | $14,890.03$ | $4,917.24$ | $140,726.77$ | 34378.9 |
| $12 / 5 / 2008$ | 49 | GIS | Sell | 287 | $\$ 63.87$ | $18,350.68$ | $1,612.94$ | $159,037.47$ | 35991.84 |
| $12 / 5 / 2008$ | 49 | PNR | Sell | 954 | $\$ 23.18$ | $22,133.71$ | $12,782.27$ | $181,131.20$ | 48774.11 |
| $12 / 5 / 2008$ | 49 | XOM | Sell | 270 | $\$ 76.60$ | $20,701.99$ | $1,007.10$ | $201,793.21$ | 47767.01 |

Table 9.2.4 November 13 Trading Activities

### 9.3 Analysis

Looking back at this stock market simulation, it can be seen that much better steps could have been taken with the $\$ 250,000$ given to us to start off with. It was a smart idea to split the money among the stocks chosen equally to create diversification, but perhaps the choices and the time period for purchasing each stock was not ideal. Let's analyze the stocks chosen and how each performed throughout this stock market simulation.

Celgene Corp. (CELG) $-\operatorname{Sep} 29^{\text {th }}$ to Dec $5^{\text {th }}$


Figure 9.3.1 Celgene Corp. from September $\mathbf{2 9}^{\text {th }}$ to December $5^{\text {th }}$ (Yahoo! Finance)

CELG was chosen because of the belief that biotechnology is the future and that this individual stock would do well in the long-run. Looking back at the simulation, the value of CELG has varied over the months, and my value at the end of the simulation is significantly lower, by $\$ 3367.30$, than what had been paid. Although a large lost was taken, it does not mean that CELG is a bad company to invest in, but rather a poor choice of the date of purchase. It can be seen that the stock started falter towards the end of November, which would have been a good time to buy.

Biogen Idec Inc. (BIIB) - Sep $29^{\text {th }}$ to Dec $5^{\text {th }}$


Figure 9.3.2 Biogen Idec Inc from September $29{ }^{\text {th }}$ to December $5^{\text {th }}$ (Yahoo! Finance)

BIIB was chosen for the same reasons as CELG, but as an alternate biotechnology stock. From BIIB I took a loss of about $\$ 2,084$. But like CELG, there are no regrets for investing in this field. I still believe that biotechnology has a lot of potential in the future, and as long people have medical needs, there will be a need for such companies. Like CELG, I also believe that I could have waited and chosen a better opportunity to invest, such as the end of October and the end November.

Colgate-Palmolive Co. (CL) $-\operatorname{Sep} 29^{\text {th }}$ to Dec $5^{\text {th }}$


Figure 9.3.3 Colgate-Palmolive Co. from September $29^{\text {th }}$ to December $5^{\text {th }}$ (Yahoo! Finance)

CL was chosen because it is a big company and is well known among the dental product industry. This may have been my fault; because I started investing in company while it was at its peak. As seen in the figure, the failed bail-out bill and the crash that followed hit the company hard and it wasn't until the middle of October that it started to stabilize. Since then CL has been at a stable $\$ 60-65$, with the exception of a slight drop which it recovered from. Although I only lost $\$ 3481.40$ from this stock, I regret the decision of investing in a company that is well known. Because it is so well known there may not be a chance for it to shoot up and make a huge profit for me.

Hasbro Inc.(HAS) - Sep $29^{\text {th }}$ to Dec $5^{\text {th }}$


Figure 9.3.4 Hasbro Inc. from September $29^{\text {th }}$ to December $5^{\text {th }}$ (Yahoo! Finance)

Investing in HAS was a very poor decision. The factor not taken into account was the hysteria of lead being in the paint of toys children played with. In addition, I did not take into consideration the fact that children everywhere are playing videogames instead of board games and action figures. The figure supports my observation, showing the value of HAS steadily decreasing throughout the months, before making a comeback late in November. A total a loss of $\$ 3897.6$ was taken. This leads me to the conclusion that I should have invested in the video game industry as well.

General Mills Inc. (GIS) - Sep $29^{\text {th }}$ to Dec $5^{\text {th }}$


Figure 9.3.5 General Mills from September 2 $^{\text {th }}$ to December $5^{\text {th }}$ (Yahoo! Finance)

General Mills was initially invested in because of its popularity and the belief that people would start being more health conscience and eating cereal and perhaps other products which GIS owns. Like CL, the timing of the investment was off, due to investment at its peak. The value seems quite stable after the dip it took mid October. From GIS a loss only $\$ 1615.94$ was taken, which does not seem to be a lot compared to the other investments, but it could have done better. Its stability even in these economical times makes it a good long-term investment.

Johnson \& Johnson (JNJ) - Sep $29^{\text {th }}$ to Dec $5^{\text {th }}$


Figure 9.3.6 Johnson \& Johnson from September $29^{\text {th }}$ to December $5^{\text {th }}$ (Yahoo! Finance)

Johnson \& Johnson was a gamble. It was at its peak with the products it developed, and I was gambling on its technological research department to keep improving. It was a matter of time for the stock the fall and the crash was the push it needed. As the graph shows, even after it recovered from the crash, in the middle of October, the stock value was steadily decreasing throughout the 10 weeks. I do not deny the fact that Johnson and Johnson is a good long term individual stock to invest in though. From JNJ I lost $\$ 3767.07,15 \%$ of what was invest. I was able to lose such a minimal amount because I had purchased additional shares to cover, when the stock was at one of its low point.

Tupperware Brands Corp. (TUP) $-\operatorname{Sep} 29^{\text {th }}$ to Dec $5^{\text {th }}$


Figure 9.3.7 Tupperware Brands Corp. from September 29 ${ }^{\text {th }}$ to December $5^{\text {th }}$ (Yahoo! Finance)

Tupperware was a horrible mistake. It was mainly the fault of the investor. It should have been researched thoroughly and seen that TUP was not doing so well internationally as it use to. In addition to the mistake of investing in TUP, the investor reinvested into TUP hoping that it would help to cover losses, but instead as the value continuously fell even more was lost. From TUP $\$ 12,260.77$ was lost from the $\$ 31,624.47$ invested, which is over $38 \%$. Another mistake was that when there was a chance, I chose not sell when it was at its peak, which was at the beginning of November and lost my chance to cut my losses tremendously.

Kellogg Co. (K) - Sep $29^{\text {th }}$ to Dec $5^{\text {th }}$


Figure 9.3.8 Kellogg Co. from September $29^{\text {th }}$ to December $5^{\text {th }}$ (Yahoo! Finance)

The reasoning behind K was the same as GIS, and as the figure shows it turned out worse. Shares were bought when it was at its peak late September and from that point on, the stock went downhill. It is surprising that only a loss of $\$ 4,917.24$ was taken. My conclusion from K is that food companies are unpredictable, and one should only purchase shares if they are completely certain that the company can show improvements.

Wal-Mart Stores Inc. (WMT) - Sep $5^{\text {th }}$ to Dec $29^{\text {th }}$


Figure 9.3.9 Wal-Mart Stores Inc. from September $29^{\text {th }}$ to December $5^{\text {th }}$ (Yahoo! Finance)

WMT was a good choice. Although the graph shows many fluctuations throughout the months, the stock was able to build up back to almost the point at which it was bought. From this stock the investor only suffered a loss of $\$ 603.82$, the least of all the others. This was because, in a bad economy people would want to pay less for necessities and Wal-Mart is a place where you can get such a bargain. I would not say that Wal-Mart is a good long-term investment because when the economy starts improving, the value may depreciate, but because of the grim outlook of the future it is possible to say that it is a 'good long-term investment.'

Pentair Inc. (PNR) - Sep $5^{\text {th }}$ to Dec $29^{\text {th }}$


Figure 9.3.10 Pentair Inc. from September $29^{\text {th }}$ to December $5^{\text {th }}$ (Yahoo! Finance)

The reasoning behind investing in Pentair was logical, but the logic behind continuing to keep it throughout the 10 weeks was not. PNR started doing poorly almost immediately and then when even more money was invested into it, the stock kept dropping. As the graph shows the value has been steadily decreasing since the beginning of October. PNR was my biggest loser, and I suffered a loss of $\$ 12782.27$, which was $36.6 \%$ of what was invested.

Exxon Mobil Corp. (XOM) - Oct $9^{\text {th }}$ to Dec $5^{\text {th }}$


Figure 9.3.11 Exxon Mobil Corp. from October $9^{\text {th }}$ to December $5^{\text {th }}$ (Yahoo! Finance)

Investing in XOM was an excellent idea. The timing was just right, due to the buying of shares when it was almost at its lowest point. Even though there are many fluctuations throughout the week, an upward motion can be seen as the simulation progressed, thus creating a profit. It is a common misconception that because oil is doing so poorly, companies such as Exxon Mobil would be doing poorly as well. That, however, is not true. Just because the value of oil drops does not mean that XOM should be doing badly, they can still get the same percentage of profits because they buy oil and then refine it and then resell it. From XOM I was able to reap a profit of $\$ 1007.10$.

There was a lot I was able to learn from this simulation. The most important thing I learned is that timing and research is important. Don't rush to invest your money hoping to get profits, take your time and watch the market for the right time to put your money in. The day right after the crash would have been a goodtime to invest and
perhaps the day after the President was elected as well. Research is also important; don't just invest into companies you think are popular and assume they will do well. I made that mistake with Tupperware, just because I thought it was popular, I did not take into account how it was doing internationally. This led to a loss of $60 \%$ of what I invested into it. Overall, I suffered a loss of $\$ 47,767.01$, which $19.1 \%$ of the $\$ 250,000$ I started with.

The Stock Market can also tell us how the economy is doing and what people think the future holds. However, if everyday people hear the radio and see on TV how bad the economy is doing and how bad times are, they won't go out and spend money and the Stock Market will die and so with the economy along with it.

If there was a chance to do redo this simulation or perhaps invest real money in the stock market, decisions would have to be made carefully. It may even call for a new portfolio to be chosen for the money to be invested in. It is hard to say, because 10 weeks is way too short of a simulation of the real Stock Market. If one were to want to get insanely rich in 10 weeks, he would have to keep selling short and be constantly looking for chances to buy and sell.

## Chapter 10: Portfolio 5 - Short Term Investing

Short term investing is a highly risky investing strategy. This portfolio was chosen using daily reports from internet sites and MSNBC TV. The companies come from a very large variety of industries and most stocks did not stay in the portfolio more than a week. This portfolio also focused on stops and limits in order to minimize losses in the market.

### 10.1 Companies Selected

### 10.1.1 Kraft (KFT)

Kraft is a food manufacturer and packager. Founded in 1903 by James Kraft, it started out as a cheese company. Over the years, it has grown to a large conglomerate that owns many brands. Some of the largest brands owned are Kraft, A1, Cracker Barrel, General Foods International, Honey Maid, Jell-o, Kool-Aid, Maxwell House, Nabisco, Oscar Mayer, Planters, and others (121). These are all food products that don't really overlap into different markets. As of Friday, September 19, 2008, the stocks increased by $\$ 1.23$ to a total of $\$ 34.97$ at the end of the day (122). The net revenue for the second quarter increased to $\$ 11.2$ billion USD for an increase of $21.4 \%$. Kraft is trying to decrease production costs to offset the costs of shipping materials. Food products are increasing in cost due to fuel and other transportation costs (123). I am investing in Kraft because in the past week, it has been determined that AIG is being removed from the Dow Jones and being replaced by Kraft. This is a very monumental move because this doesn't happen many times as the last time was in February 2008. I believe this move will help increase the stocks of Kraft while AIG will decrease. Kraft also has a very large
product base. As the transportation cost increase, people who do not buy store brands will still buy the Kraft products. Even if one product does badly, Kraft can afford to allow one brand to go down while they keep the others in the green. This is why I will invest in Kraft.

### 10.1.2 Toyota (TM)

Toyota Motor Corporation is the largest car manufacturers in the country. Toyota is also creator of one of the most efficient production methods. Founded in Japan in 1935, Toyota rising in the Japanese market, started to export cars to America in 1957. Eventually the first American plant was made in Kentucky in 1988. Toyota owns the Toyota brand, as well as Lexus and Scion. It has recently become a very popular brand due to the high gas mileage, quality and life of the vehicle (210). On Friday, September 19, 2008, Toyota stocks rose $\$ 4.71$ over the opening value to become $\$ 91.35$ (211). The sales for the first quarter were 729 thousand units, a 33 thousand unit drop. This is explained because the North American sales are mostly trucks and with the rising gas prices, many people a switching over to the compact cars (212). Also, people who are going into debt are not paying back the lending department so the revenue is decreased from 91.1 billion yen to 69.1 billion yen which is a decrease of 852.5 million USD to 646.6 million USD. Even though the profits are decreasing, the market shares increased 17.4 percent over the last quarter. I believe Toyota is a very stable company overall, as it is a popular brand. The reason I picked Toyota is because I know many people who drive Toyota vehicles and they get good gas mileage and length of engine life compared to many American owned brands. Also, Toyota makes more vehicles in the US than the
other major companies. This gives jobs to American people and stimulates the economy. Most other companies use Mexican, Canadian, or other factories to get cheaper labor and therefore increasing revenue. This is why I believe Toyota is a good choice to invest in.

### 10.1.3 CKE Restaurants (CKR)

In 1945, Carl Karcher started a drive in barbeque. As business increased Carl expanded making two more restaurants and named them Carl's Jr after the first restaurant. As business increased, Carl's Jr decided to focus on what people want, bring in burgers such as the Western Bacon Cheeseburger. In the last 90's, Carl's Jr bought Hardees, becoming the fourth largest fast food chain. After the Super Size Me movie, other fast food chains decided to scale back but not Carl's Jr. Carl's Jr and Hardees continued to give the American people what they want and didn't get put off by political correctness. They have been followed now by Burger King and Wendy's. Carl's Jr is on the cutting edge of what the customer wants (50). I believe this is why Carl's Jr is good to invest in. As of Friday, September 19, 2008, CKE Restaurants was down $\$ 0.41$ to $\$ 11.99$ per share (51). For their second quarter, the net increase was $\$ 12.3$ million over the prior year which was $\$ 11.7$ million while operating costs decreased $19.3 \%$ by decreasing employee benefits and payroll costs (52). High school and college students cost cheaper and do not need the benefits of a full time employee. These numbers show in the long, CKE is increasing in revenue; therefore, I will invest in CKE.

### 10.1.4 Coca Cola (KO)

Coca Cola is the number one soft drink company in the world. Besides soda, they also make energy drinks and sports drink. Coca Cola was invented in Atlanta, GA in 1886 by a pharmacist. His name was Dr John Stith and in 1888 sold his business right before his death. As business grew, plants were created until now Coca Cola and its network of bottlers comprise the most sophisticated and pervasive production and distribution system in the world (53). As of Friday, September 19, 2008, Coca Cola was down $\$ 0.67$ to be $\$ 52.72$ at closing on Friday afternoon (54). Today's results are against being up $17 \%$ percent in the second quarter. Also, because of product initiatives, by the end of 2011, it is projected that annual savings will be up $\$ 400$ to $\$ 500$ million (55). Coca Cola has bought back $\$ 1.0$ billion in stocks over the first two quarters and is planning on increasing that to $\$ 1.75-\$ 2.0$ billion by the end of the year. The unit cases sold compared to last year is even with the net revenue up since last year is $8 \%$ and the operating costs are down $9 \%$ (56). Coca Cola is very enjoyable and I personally like the Vault products. Coca Cola also makes PowerAde which I drink a 32 oz bottle a day. By drinking their products, I know the quality is up there even though the quantity made is high. Through being a consumer, I realize that they will keep doing business and with good results so their stocks should increase over time. This is why I am going to invest in Coca Cola.

### 10.1.5 Molson Coors (TAP):

Molson Coors is the fifth largest brewing companies in the world. It was created in 2005 in a merger of Molson and Coors consolidating the two companies to be able to
compete in the global market. Their largest brands include the Coors Family, the Molson Canada Family, and the Keystone Family. As well as owning those brands, it brews and distributes the Miller Brands, such as Miller, Heineken, and Corona. Over the second quarter this year, net sales increased $4.8 \%$ to $\$ 1.76$ billion. Also increasing this past quarter was sales per barrel, which increased 3.9 percent. Sales volume increased by 0.9 percent to 13.6 hectoliter. Unfortunately, because of increased energy and commodity inflation, the earnings were 93.3 million after taxes while the second quarter in 2007 was $\$ 184.3$ million. This is $50.6 \%$ less or $\$ 91$ million less this quarter (138). Beer is a product that people enjoy and will keep buying. Alcohol can be addicting for some people and that means that those people will keep buying this product no matter what the cost. On Thursday, September 18, 2008 at $4: 01 \mathrm{pm}$, Molson Coors closed $\$ 0.67$ over the previous day's closing costs which were $\$ 48.00$ (137). I will buy approximately 400 shares, which is about $\$ 24,000$. Depending on the opening price on the day we start, it may change the number of shares but I still am going to put about $\$ 20,000$ in each stock. this will allow me approximately $\$ 50,000$ if I want to risk on a company depending on how the market is doing. Molson and Coors make a steady business on alcohol products but currently, 25 state attorney generals have expressed Miller and Coors to abandon their group venture to create a caffeinated alcoholic beverage (251). Although this may affect their stocks, I personally believe that it may be the right decision because the new beverage is aimed at younger people, namely college student who already drink energy drinks when the need them and alcohol when they want. This beverage would give them a depressant and energy drinks are stimulants. This can be a deadly combination if too much of either is consumed but if they are somehow able to get the perfect mix, it will
become a very popular product. I know many people whose favorite type of cheap beer is Keystone Light and they will keep buying it because it is one of the cheapest types in the United States.

### 10.1.6 Build a Bear Workshop (BBW)

Build a Bear Workshop was created in 1997 by Maxine Clark. She had worked in the toy industry for many years and realized a personalized toy was popular with children. Creating Build a Bear Workshop, Maxine Clark made a store that allowed children to personalize their stuffed animals down to the smallest detail. Even though these toys are very expensive, parents still buy them for their children and also hold birthday parties for their children and friends, bringing in even more revenue for the company (41). As of Friday, September 26, 2008, the stock price was $\$ 8.03$, up $\$ 0.32$ over the opening price. That is $4.15 \%$ up on Friday. On Friday, Build a Bear Workshop was the most active stock in the toy market (43). During the second quarter, Build a Bear Workshop bought back 520,000 shares for a cost of $\$ 4.8$ million. The European market was the most active; it increased $39 \%$ over the previous year's second quarter (42). I bought this stock because Build a Bear Workshop is a company on the rise, so until it peaks, the company should keep doing better

### 10.1.7 Raytheon (RTN)

Raytheon was created in 1922 by Laurence K. Marshall, Vannevar Bush, and Charles G. Smith in Cambridge, MA. After Raytheon got started, World War II pushed them into the defense industry. Raytheon created microwave radar for ships to help
defend against U-Boats. Since then it has also made the microwave oven, guided missiles, NASA communications, and the patriot missile (177). As of Friday, September 26,2008 , the stock price was $\$ 56.06$, down $\$ 0.10$ under the opening price. While they are down, they were classified as the third "bullish" stock on Yahoo! Finance (179). For the second quarter, sales are $\$ 5.9$ Billion, up $11 \%$. There is also a backlog of $\$ 37.5$ Billion which means that there is no shortage of work in the defense contract industry and with Raytheon being a leader in the industry, there will be work for a while to come (178). I picked this stock because as long as our country keeps fighting wars, Raytheon will have contracts to make new inventions to fight these wars.

### 10.1.8 Cisco Systems (CSCO)

Cisco is a company that creates connection hardware, software, and services that protean to Internet Protocol network technologies. Created in 1984 at Stanford University, Cisco focuses on network and internet communications. Some of their divisions are Linksys, Scientific Atlanta, and WebEx. In 2007, Cisco invested $\$ 4.5$ billion in research and development and estimate by 2010, 14 billion devices will be connected to the internet (45). As of Friday, September 26, 2008, Cisco traded at $\$ 23.82$, up $\$ 0.34$ over the opening price. That is a $1.45 \%$ increase (47). As of January 1, 2008, Cisco had net sales of $\$ 34.9$ billion for the 2007 year, $\$ 6.4$ billion increase over 2006. The net income was $\$ 7.3$ billion, up $\$ 1.7$ over 2006 (46). I picked Cisco Systems as a stock because they are one of the frontrunners in the networking industry. As everything becomes more technologically advanced, people look to companies such as Cisco to keep them communicating with other companies. With the need for faster, more reliable
communications, companies will buy Cisco products and get support. Networking is becoming one of the most important parts of our lives, with technology becoming so advanced. This is why I invested in Cisco Systems.

### 10.1.9 General Motors (GM)

General Motors is the largest car manufacturer in North America. It was founded on September 16, 1908. As times changed, so has General Motors. After the Great Depression and World War II, almost everyone had a car. Through the sixties and seventies, GM reengineered the cars again to become lighter, more aerodynamic and fuel efficient. During the 1980 s and 1990s, GM focused on expanding to a global market as communication barriers slowly crumbled. As people became more tech savvy in the 21 century, GM has expanded to have many alternative fuel sourced cars, including hybrid, flex fuel, and extended range electric vehicles (81). On the 100th birthday of GM, they announced the Chevy Volt would be a production car in 2011 and they are now creating the engine factory for this car. Being the only vehicle with the extended range electric vehicle classification, it has no competitors as of now (82). As of Friday, September 26, 2008, GM traded at $\$ 9.76$, down $\$ 0.27$ from the opening price (84). Net sales for the automotive division in 2007 were $\$ 178,199$ million, up $\$ 7020$ million over 2006 (83). The reason I picked this stock is because General Motors is one of the leading innovators of new concepts in the automotive industry which is still one of the largest industries in our lives today.

### 10.1.10 Sherwin Williams (SHW)

Founded in 1866, Sherwin Williams is the largest paint and coatings producer in the United States. Henry Sherwin even invented the re-sealable paint can as we know it today. Sherwin Williams is at the forefront of paint and coatings innovation and have come up with many new ideas in the past one hundred forty two years. They have extensive laboratories to investigate how new paints react and create coatings for many jobs that current paints will not suffice for (186). Friday, September 26, 2008, \$61.72, Sherwin Williams was up $\$ 1.08$ over the opening price (189). During the first quarter, sales increased $1.5 \%$ to a record $\$ 1.782$ billion $(187,188)$. I picked Sherwin Williams as a stock because over the past few years, I have noticed some really awesome new automotive colors and they all seem to be traced back to Sherwin Williams. With new colors coming out all the time and new uses for their coatings, Sherwin Williams continues to be a global leader in new coatings and paints. Some of their biggest brands are Dutch Boy, Pratt \& Lambert, Martin-Senour, Dupli-Color, Krylon, Thompson's and Minwax (186). Sherwin Williams also has contracts with some large mass merchandisers and home improvement warehouses. They also supply original equipment manufacturers in a number of industries and special purpose coatings for the automotive aftermarket, industrial maintenance and traffic paint markets. This is why I am investing in Sherwin Williams.

### 10.2 Trading

Monday, September 29, 2008
At around noon, all my stocks except for KFT, KO, and TAP were down. I was down about $\$ 2,000$. Before the market opened, I attempted to sell short on WB, trying to buy 1000 shares when it was $\$ 10$ but the simulator did not allow me to buy them before the stock crashed to below a dollar. After I got back from my afternoon class, I was down $\$ 10,000$ and all my stocks were down. I learned right before I went to class that the House voted against the Bailout Bill so that helped spur a mini stock market crash.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $9 / 29 / 08$ |  |  |  |  |  |  | $250,000.00$ |  |
| $9 / 29 / 08$ | GM | Buy | 2047 | $\$ 10.20$ | $20,899.39$ |  | $229,100.61$ |  |
| $9 / 29 / 08$ | CSCO | Buy | 838 | $\$ 23.29$ | $19,537.01$ |  | $209,563.60$ |  |
| $9 / 29 / 08$ | RTN | Buy | 356 | $\$ 55.24$ | $19,685.43$ |  | $189,878.17$ |  |
| $9 / 29 / 08$ | TM | Buy | 220 | $\$ 86.93$ | $19,144.59$ |  | $170,733.58$ |  |
| $9 / 29 / 08$ | CKR | Buy | 1800 | $\$ 10.86$ | $19,567.99$ |  | $151,165.59$ |  |
| $9 / 29 / 08$ | KFT | Buy | 607 | $\$ 32.59$ | $19,802.12$ |  | $131,363.47$ |  |
| $9 / 29 / 08$ | KO | Buy | 380 | $\$ 52.08$ | $19,810.39$ |  | $111,553.08$ |  |
| $9 / 29 / 08$ | TAP | Buy | 430 | $\$ 46.23$ | $19,898.89$ |  | $91,654.19$ |  |
| $9 / 29 / 08$ | SHW | Buy | 324 | $\$ 60.41$ | $19,592.83$ |  | $72,061.36$ |  |
| $9 / 29 / 08$ | BBW | Buy | 2488 | $\$ 7.78$ | $19,376.63$ |  | $52,684.73$ |  |

Table 10.2.1 September 29 Trading Activities

Tuesday, September 30, 2008
When I checked the market at around noon, I saw that the banking sector was doing very well today so I invested in C, JPM, WB, GS, and MS with 100 shares each. At around 3pm, I also decided to invest 1000 shares in NCC and 500 shares in AIG. I then sold C, JPM, WB, GS, and MS and made money on all but JPM and WB. I forgot about the commission so I lost money on WB but I lost money on JPM because when I
sold, the price dropped and because of the 20 minute lag on Investopedia, JPM had dropped lower than what I paid for it so I ended up losing money.

| Date | Symbol | Buy $/$ <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit <br> /Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| $9 / 30 / 08$ | C | Buy | 100 | $\$ 20.45$ | $2,064.99$ |  | $50,619.74$ |  |
| $9 / 30 / 08$ | WB | Buy | 100 | $\$ 3.09$ | 328.99 |  | $50,290.75$ |  |
| $9 / 30 / 08$ | JPM | Buy | 100 | $\$ 46.26$ | $4,645.99$ |  | $45,644.76$ |  |
| $9 / 30 / 08$ | GS | Buy | 100 | $\$ 127.99$ | $12,818.99$ |  | $32,825.77$ |  |
| $9 / 30 / 08$ | MS | Buy | 100 | $\$ 22.96$ | $2,315.99$ |  | $30,509.78$ |  |
| $9 / 30 / 08$ | GS | Sell | 100 | $\$ 129.07$ | $-12,887.01$ | 68.02 | $43,396.79$ | 68.02 |
| $9 / 30 / 08$ | WB | Sell | 100 | $\$ 3.42$ | -322.01 | 6.98 | $43,718.80$ | 61.04 |
| $9 / 30 / 08$ | MS | Sell | 100 | $\$ 24.34$ | $-2,414.01$ | 98.02 | $46,132.81$ | 159.06 |
| $9 / 30 / 08$ | JPM | Sell | 100 | $\$ 45.94$ | $-4,574.01$ | 71.98 | $50,706.82$ | 87.08 |
| $9 / 30 / 08$ | C | Sell | 100 | $\$ 21.05$ | $-2,085.01$ | 20.02 | $52,791.83$ | 107.10 |
| $9 / 30 / 08$ | NCC | Buy | 1000 | $\$ 1.80$ | $1,819.99$ |  | $50,971.84$ |  |
| $9 / 30 / 08$ | AIG | Buy | 500 | $\$ 3.32$ | $1,679.99$ |  | $49,291.85$ |  |

Table 10.2.2 September 30 Trading Activities

Wednesday, October 1, 2008
Today around noon, I bought 1000 more of NCC because it was still going up. I also sold short 75 shares on APPL because I saw it was dropping and 100 shares of GE because of the Buffet deal. In the afternoon around 3, I bought 5000 more shares of NCC because it is doing so well and sold all my GM and sold them short. I lost some money selling GM but hopefully will make some of it back by selling it short

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit $/$ <br> Loss | Total <br> Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 1 / 08$ | NCC | Buy | 1000 | $\$ 2.44$ | $2,459.99$ |  | $46,831.86$ |  |
| $10 / 1 / 08$ | AAPL | Short | 75 | $\$ 110.74$ | $-8,285.51$ |  | $55,117.37$ |  |
| $10 / 1 / 08$ | GE | Short | 100 | $\$ 24.72$ | $-2,452.01$ |  | $57,569.38$ |  |
| $10 / 1 / 08$ | NCC | Buy | 5000 | $\$ 2.87$ | $14,369.99$ |  | $43,199.39$ |  |
| $10 / 1 / 08$ | GM | Sell | 2047 | $\$ 9.43$ | $-19,283.22$ | $1,616.17$ | $62,482.61$ | $1,509.07$ |
| $10 / 1 / 08$ | GM | Short | 2047 | $\$ 9.43$ | $-19,283.22$ |  | $81,765.83$ |  |

Table 10.2.3 October 1 Trading Activities

Thursday, October 2, 2008
Before the market opened this morning, I set my simulator to buy 2000 shares of JPM. Around 3pm, I sold all my BBW because I was down so much on it and I sold it short to make money off it. I also sold short TGT and QQQQ because both of them were on the largest losers of the day.

| Date | Symbol | Buy $/$ <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit / <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 2 / 08$ | JPM | Buy | 200 | $\$ 49.25$ | $9,869.99$ |  | $71,895.84$ |  |
| $10 / 2 / 08$ | BBW | Sell | 2488 | $\$ 6.58$ | $-16,351.05$ | $3,025.58$ | $88,246.89$ | $4,534.65$ |
| $10 / 2 / 08$ | BBW | Short | 2488 | $\$ 6.58$ | $-16,351.05$ |  | $104,597.94$ |  |
| $10 / 2 / 08$ | TGT | Short | 150 | $\$ 44.95$ | $-6,722.51$ |  | $111,320.45$ |  |
| $10 / 2 / 08$ | TGT | Short | 150 | $\$ 44.95$ | $-6,722.51$ |  | $118,042.96$ |  |
| $10 / 2 / 08$ | QQQQ | Short | 500 | $\$ 36.79$ | $-18,375.01$ |  | $136,417.97$ |  |

Table 10.2.4 October 2 Trading Activities

Friday, October 3, 2008
A little after the day started, I saw NCC was up above \$4. As soon as I noticed it go below 4, I sold that and AIG for a profit of $\$ 8,790.03$ and $\$ 555.01$ respectively. While I was in the green, I decided to sell anything that was red. I sold CSCO, SHW, CKR, and TM all at a loss of $\$ 6,555.12$. I sold short on PENN because it was going down all morning but then as it started to go up, I bought to cover in order for a loss of $\$ 459.99$. when PENN was going down, I bought AAPL, UST and PRU because they were going up but after the stock market plummeted after the bill was passed, they all dropped, just like almost everything on the entire market. At the end of week 1, I have a worth of $\$ 246,004.34$ and of that $\$ 147,775.42$ is cash. I believe I have been more bullish than bearish this week because I have bought and sold many stocks this week, some kind of recklessly such as the bank trade on Tuesday or without research, such as the AAPL
buying and the PENN selling on Friday. Even though I have been somewhat reckless, I believe I am doing well for someone who was down $\$ 10,000$ by the time stocks closed Monday after buying them on that morning. I look at it that I was too bearish on Monday and if I really want to make money, I have to buy lots of shares and hope they go up or sell short and hope they go down.

| Date | Symbol | Buy / Sell | Shares | Price | Net Cost/ Proceeds | Profit / Loss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10/3/08 | JPM | Sell | 200 | \$49.99 | -9,978.01 | 108.02 | 146,395.98 | 4,426.63 |
| 10/3/08 | QQQQ | Cover | 500 | \$37.54 | 18,789.99 | 414.98 | 127,605.99 | 4,841.61 |
| 10/3/08 | TGT | Cover | 50 | \$44.69 | 2,254.49 | 13.65 | 125,351.50 | 4,855.26 |
| 10/3/08 | TGT | Cover | 50 | \$44.69 | 2,254.49 | 13.65 | 123,097.01 | 4,868.92 |
| 10/3/08 | TGT | Cover | 50 | \$44.69 | 2,254.49 | 13.65 | 120,842.52 | 4,882.57 |
| 10/3/08 | TGT | Cover | 50 | \$44.69 | 2,254.49 | 13.65 | 118,588.03 | 4,896.22 |
| 10/3/08 | TGT | Cover | 50 | \$44.69 | 2,254.49 | 13.65 | 116,333.54 | 4,909.88 |
| 10/3/08 | TGT | Cover | 50 | \$44.69 | 2,254.49 | 13.65 | 114,079.05 | 4,923.53 |
| 10/3/08 | TM | Sell | 220 | \$78.64 | -17,280.81 | 1,863.78 | 131,359.86 | 6,787.31 |
| 10/3/08 | CSCO | Sell | 838 | \$21.37 | -17,888.07 | 1,648.94 | 149,247.93 | 8,436.25 |
| 10/3/08 | CKR | Sell | 450 | \$10.17 | -4,556.51 | 335.49 | 153,804.44 | 8,771.74 |
| 10/3/08 | CKR | Sell | 450 | \$10.17 | -4,556.51 | 335.49 | 158,360.95 | 9,107.23 |
| 10/3/08 | CKR | Sell | 450 | \$10.17 | -4,556.51 | 335.49 | 162,917.46 | 9,442.71 |
| 10/3/08 | SHW | Sell | 324 | \$55.10 | -17,832.41 | 1,760.42 | 180,749.87 | 11,203.13 |
| 10/3/08 | CKR | Sell | 450 | \$10.17 | -4,556.51 | 335.49 | 185,306.38 | 11,538.62 |
| 10/3/08 | AAPL | Cover | 75 | \$102.98 | 7,743.49 | 542.02 | 177,562.89 | 10,996.60 |
| 10/3/08 | NCC | Sell | 7000 | \$3.92 | -27,420.01 | 8,770.04 | 204,982.90 | 2,226.56 |
| 10/3/08 | AIG | Sell | 500 | \$4.47 | -2,215.01 | 535.02 | 207,197.91 | 1,691.54 |
| 10/3/08 | PENN | Short | 500 | \$19.82 | -9,890.01 |  | 217,087.92 |  |
| 10/3/08 | AAPL | Buy | 200 | \$104.11 | 20,841.99 |  | 196,245.93 |  |
| 10/3/08 | PENN | Cover | 500 | \$20.70 | 10,369.99 | 479.98 | 185,875.94 | 2,171.52 |
| 10/3/08 | UST | Buy | 300 | \$65.77 | 19,750.99 |  | 166,124.95 |  |
| 10/3/08 | PRU | Buy | 300 | \$61.14 | 18,361.99 |  | 147,762.96 |  |

Table 10.2.5 October 3 Trading Activities

Monday, October 6, 2008
Today, I did a lot of work on my portfolio. I started by selling my AAPL shares and shorting them instead. I also shorted JPM, C, MS, WB, WFC, LVS, RY, and BAC. I also bought RBS. I then sold PRU, RTN, UST and the shares I just bought of RBS. I
also covered MS, JPM, and RY, all of which I had shorted earlier today. I did this to prevent loss.

| Date | Symbol | Buy $/$ <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 6 / 08$ | AAPL | Sell | 200 | $\$ 92.93$ | $-18,566.01$ | $2,275.98$ | $166,328.97$ | $4,447.50$ |
| $10 / 6 / 08$ | AAPL | Short | 500 | $\$ 91.96$ | $-45,960.01$ |  | $212,288.98$ |  |
| $10 / 6 / 08$ | JPM | Short | 250 | $\$ 43.13$ | $-10,762.51$ |  | $223,051.49$ |  |
| $10 / 6 / 08$ | C | Short | 500 | $\$ 17.65$ | $-8,805.01$ |  | $231,856.50$ |  |
| $10 / 6 / 08$ | MS | Short | 500 | $\$ 21.64$ | $-10,800.01$ |  | $242,656.51$ |  |
| $10 / 6 / 08$ | WB | Short | 2000 | $\$ 5.94$ | $-11,860.01$ |  | $254,516.52$ |  |
| $10 / 6 / 08$ | RBS | Buy | 1000 | $\$ 2.76$ | $2,779.99$ |  | $251,736.53$ |  |
| $10 / 6 / 08$ | PRU | Sell | 300 | $\$ 53.45$ | $-16,015.01$ | $2,346.98$ | $267,751.54$ | $6,794.48$ |
| $10 / 6 / 08$ | MS | Cover | 500 | $\$ 21.03$ | $10,534.99$ | 265.02 | $257,216.55$ | $6,529.46$ |
| $10 / 6 / 08$ | JPM | Cover | 250 | $\$ 42.98$ | $10,764.99$ | 2.48 | $246,451.56$ | $6,531.94$ |
| $10 / 6 / 08$ | RTN | Sell | 356 | $\$ 51.51$ | $-18,317.57$ | $1,367.86$ | $264,769.13$ | $7,899.80$ |
| $10 / 6 / 08$ | WFC | Short | 500 | $\$ 32.75$ | $-16,355.01$ |  | $281,124.14$ |  |
| $10 / 6 / 08$ | UST | Sell | 300 | $\$ 63.80$ | $-19,120.01$ | 630.98 | $300,244.15$ | $8,530.78$ |
| $10 / 6 / 08$ | RBS | Sell | 1000 | $\$ 2.51$ | $-2,490.01$ | 289.98 | $302,734.16$ | $8,820.76$ |
| $10 / 6 / 08$ | LVS | Short | 500 | $\$ 19.00$ | $-9,480.01$ |  | $312,214.17$ |  |
| $10 / 6 / 08$ | RY | Short | 350 | $\$ 41.84$ | $-14,624.01$ |  | $326,838.18$ |  |
| $10 / 6 / 08$ | BAC | Short | 350 | $\$ 32.08$ | $-11,208.01$ |  | $338,046.19$ |  |
| $10 / 6 / 08$ | RY | Cover | 350 | $\$ 44.21$ | $15,493.49$ | 869.48 | $322,552.70$ | $9,690.24$ |

Table 10.2.6 October 6 Trading Activities

Tuesday, October 7, 2008
Today I covered AAPL, WFC, WB, BAC, and C. I then bought EBAY and
STLD. I bought EBAY because people may start to sell things there to make money and
STLD because you always need steel.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 7 / 08$ | AAPL | Cover | 500 | $\$ 94.63$ | $47,334.99$ | $1,374.98$ | $275,217.71$ | $11,065.22$ |
| $10 / 7 / 08$ | WFC | Cover | 500 | $\$ 32.97$ | $16,504.99$ | 149.98 | $258,712.72$ | $11,215.20$ |
| $10 / 7 / 08$ | WB | Cover | 2000 | $\$ 5.69$ | $11,399.99$ | 460.02 | $247,312.73$ | $10,755.18$ |
| $10 / 7 / 08$ | BAC | Cover | 350 | $\$ 27.24$ | $9,553.99$ | $1,654.02$ | $237,758.74$ | $9,101.16$ |
| $10 / 7 / 08$ | C | Cover | 500 | $\$ 16.39$ | $8,214.99$ | 590.02 | $229,543.75$ | $8,511.14$ |
| $10 / 7 / 08$ | EBAY | Short | 1000 | $\$ 17.00$ | $-16,980.01$ |  | $246,523.76$ |  |
| $10 / 7 / 08$ | STLD | Short | 1000 | $\$ 10.56$ | $-10,540.01$ |  | $257,063.77$ |  |

Table 10.2.7 October 7 Trading Activities

Wednesday, October 8, 2008
Today I bought YRCW, HPQ, QQQQ, and NCC. I bought YRCW because it is a transporting company and goods always need to be moved. I bought HPQ because I personally just bought a HP and I like it. QQQQ and NCC has been a big gainer so I want to try to make some money off them. I then covered GE, EBAY, LVS, and STLD. I did this because I was losing money on them.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 8 / 08$ | YRCW | Buy | 5000 | $\$ 5.49$ | $27,469.99$ |  | $229,593.78$ |  |
| $10 / 8 / 08$ | GE | Cover | 100 | $\$ 21.11$ | $2,130.99$ | 321.02 | $227,462.79$ | $8,190.12$ |
| $10 / 8 / 08$ | EBAY | Cover | 1000 | $\$ 17.27$ | $17,289.99$ | 309.98 | $210,172.80$ | $8,500.10$ |
| $10 / 8 / 08$ | LVS | Cover | 500 | $\$ 17.51$ | $8,774.99$ | 705.02 | $201,397.81$ | $7,795.08$ |
| $10 / 8 / 08$ | STLD | Cover | 1000 | $\$ 9.91$ | $9,929.99$ | 610.02 | $191,467.82$ | $7,185.06$ |
| $10 / 8 / 08$ | HPQ | Buy | 500 | $\$ 41.75$ | $20,894.99$ |  | $170,572.83$ |  |
| $10 / 8 / 08$ | QQQQ | Buy | 500 | $\$ 33.70$ | $16,869.99$ |  | $153,702.84$ |  |
| $10 / 8 / 08$ | NCC | Buy | 8000 | $\$ 2.43$ | $19,459.99$ |  | $134,242.85$ |  |

Table 10.2.8 October 8 Trading Activities

Thursday, October 9, 2008
I did a lot of trading today. I covered BBW and GM in the morning while selling YRCW, HPQ, TAP, KO, KFT and QQQQ. I then sold short WFC, TUP, C, and WMT and bought TUP and S. Later, I covered WFC, TUP, and C and sold TUP while buying AAPL. I do not know why I bought and shorted TUP at the same time but it did not affect my portfolio because as one lost, the other gained. I also sold the rest of my original stocks. They were losing me too much money for me to ignore it anymore so I sold them. I hope to invest in more bullish stocks so I can make money fast.

| Date | Symbol | Buy <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 9 / 08$ | BBW | Cover | 2488 | $\$ 5.85$ | $14,574.79$ | $1,776.26$ | $119,668.06$ | $5,408.80$ |
| $10 / 9 / 08$ | GM | Cover | 2047 | $\$ 6.01$ | $12,322.46$ | $6,960.76$ | $107,345.60$ | $1,551.96$ |
| $10 / 9 / 08$ | YRCW | Sell | 5000 | $\$ 6.81$ | $-34,030.01$ | $6,560.02$ | $141,375.61$ | $8,111.98$ |
| $10 / 9 / 08$ | WFC | Short | 1000 | $\$ 28.11$ | $-28,090.01$ |  | $169,465.62$ |  |
| $10 / 9 / 08$ | TUP | Buy | 1000 | $\$ 21.22$ | $21,239.99$ |  | $148,225.63$ |  |
| $10 / 9 / 08$ | TUP | Short | 1000 | $\$ 21.22$ | $-21,200.01$ |  | $169,425.64$ |  |
| $10 / 9 / 08$ | C | Short | 1000 | $\$ 14.06$ | $-14,040.01$ |  | $183,465.65$ |  |
| $10 / 9 / 08$ | HPQ | Sell | 500 | $\$ 40.05$ | $-20,005.01$ | 889.98 | $203,470.66$ | $7,222.00$ |
| $10 / 9 / 08$ | TAP | Sell | 430 | $\$ 42.18$ | $-18,117.41$ | $1,781.48$ | $221,588.07$ | $5,440.52$ |
| $10 / 9 / 08$ | KO | Sell | 380 | $\$ 45.91$ | $-17,425.81$ | $2,384.58$ | $239,013.88$ | $3,055.94$ |
| $10 / 9 / 08$ | KFT | Sell | 607 | $\$ 29.50$ | $-17,886.51$ | $1,915.61$ | $256,900.39$ | $1,140.33$ |
| $10 / 9 / 08$ | QQQQ | Sell | 500 | $\$ 33.13$ | $-16,545.01$ | 324.98 | $273,445.40$ | 815.35 |
| $10 / 9 / 08$ | WMT | Short | 500 | $\$ 53.90$ | $-26,930.01$ |  | $300,375.41$ |  |
| $10 / 9 / 08$ | S | Buy | 5000 | $\$ 4.55$ | $22,769.99$ |  | $277,605.42$ |  |
| $10 / 9 / 08$ | TUP | Sell | 1000 | $\$ 21.55$ | $-21,530.01$ | 290.02 | $299,135.43$ | $1,105.37$ |
| $10 / 9 / 08$ | WFC | Cover | 1000 | $\$ 28.35$ | $28,369.99$ | 279.98 | $270,765.44$ | 825.39 |
| $10 / 9 / 08$ | TUP | Cover | 1000 | $\$ 22.03$ | $22,049.99$ | 849.98 | $248,715.45$ | 24.59 |
| $10 / 9 / 08$ | C | Cover | 1000 | $\$ 14.06$ | $14,079.99$ | 39.98 | $234,635.46$ | 64.57 |
| $10 / 9 / 08$ | AAPL | Buy | 500 | $\$ 88.31$ | $44,174.99$ |  | $190,460.47$ |  |

Table 10.2.9 October 9 Trading Activities

Friday, October 10, 2008
Before the market open I set NCC, AAPL and S to sell at market open. I also set GE to sell short and WMT to cover. At around 10 am , I shorted WMT and AAPL and then decided to buy NCC and AAPL. I know shorting and buying AAPL pretty much counteracted itself, but I changed my mind about AAPL after buying it and the simulation told me I had to wait 15 min plus the 20 min lag so it would be at least 35 min before I could get rid of AAPL. I then sold AAPL and NCC while covering WMT, GE, and AAPL around noon. At the same time, I shorted MS, GS and QQQQ. At 1pm, I covered MS and GS while buying PRU and LNC. I also shorted WY. I ended the week down less than $\$ 10,000$, which is down from the previous week but I believe compared to the bullish nature of how I handle the stock market, I believe I am doing very well.

| Date | Symbol | Buy $/$ <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 10 / 08$ | WMT | Cover | 500 | $\$ 49.03$ | $24,534.99$ | $2,395.02$ | $165,925.48$ | $2,330.45$ |
| $10 / 10 / 08$ | AAPL | Sell | 500 | $\$ 85.70$ | $-42,830.01$ | $1,344.98$ | $208,755.49$ | 985.47 |
| $10 / 10 / 08$ | NCC | Sell | 8000 | $\$ 1.99$ | $-15,900.01$ | $3,559.98$ | $224,655.50$ | $2,574.51$ |
| $10 / 10 / 08$ | S | Sell | 5000 | $\$ 3.35$ | $-16,730.01$ | $6,039.98$ | $241,385.51$ | $8,614.49$ |
| $10 / 10 / 08$ | WMT | Short | 500 | $\$ 50.48$ | $-25,220.01$ |  | $266,605.52$ |  |
| $10 / 10 / 08$ | GE | Short | 2000 | $\$ 18.70$ | $-37,380.01$ |  | $303,985.53$ |  |
| $10 / 10 / 08$ | AAPL | Short | 100 | $\$ 85.70$ | $-8,550.01$ |  | $312,535.54$ |  |
| $10 / 10 / 08$ | AAPL | Buy | 100 | $\$ 91.62$ | $9,181.99$ |  | $303,353.55$ |  |
| $10 / 10 / 08$ | NCC | Buy | 8000 | $\$ 2.36$ | $18,899.99$ |  | $284,453.56$ |  |
| $10 / 10 / 08$ | WMT | Cover | 500 | $\$ 50.11$ | $25,074.99$ | 145.02 | $259,378.57$ | $8,469.47$ |
| $10 / 10 / 08$ | AAPL | Cover | 100 | $\$ 94.09$ | $9,428.99$ | 878.98 | $249,949.58$ | $9,348.45$ |
| $10 / 10 / 08$ | NCC | Sell | 8000 | $\$ 2.24$ | $-17,900.01$ | 999.98 | $267,849.59$ | $10,348.43$ |
| $10 / 10 / 08$ | AAPL | Sell | 100 | $\$ 92.15$ | $-9,195.01$ | 13.02 | $277,044.60$ | $10,335.41$ |
| $10 / 10 / 08$ | QQQQ | Short | 500 | $\$ 30.70$ | $-15,330.01$ |  | $292,374.61$ |  |
| $10 / 10 / 08$ | GE | Cover | 2000 | $\$ 19.05$ | $38,119.99$ | 739.98 | $254,254.62$ | $11,075.39$ |
| $10 / 10 / 08$ | MS | Short | 250 | $\$ 9.40$ | $-2,330.01$ |  | $256,584.63$ |  |
| $10 / 10 / 08$ | GS | Short | 1000 | $\$ 88.70$ | $-88,680.01$ |  | $345,264.64$ |  |
| $10 / 10 / 08$ | GS | Cover | 1000 | $\$ 83.21$ | $83,229.99$ | $5,450.02$ | $262,034.65$ | $5,625.37$ |
| $10 / 10 / 08$ | MS | Cover | 250 | $\$ 8.14$ | $2,054.99$ | 275.02 | $259,979.66$ | $5,350.35$ |
| $10 / 10 / 08$ | LNC | Buy | 1000 | $\$ 20.11$ | $20,129.99$ |  | $239,849.67$ |  |
| $10 / 10 / 08$ | PRU | Buy | 1000 | $\$ 35.00$ | $35,019.99$ |  | $204,829.68$ |  |
| $10 / 10 / 08$ | WY | Short | 1000 | $\$ 45.61$ | $-45,590.01$ |  | $250,419.69$ |  |

Table 10.2.10 October 10 Trading Activities

Monday, October 13, 2008
Due to my lack of internet today, I did not check the stock market until 3:30pm.
When I checked it, I was very confused. I was up with PRU and LNC so I covered QQQQ and WY while buying NCC. I ended the day over \$270,000 which is my first day of making money.

| Date | Symbol | Buy $/$ <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 13 / 08$ | WY | Cover | 1000 | $\$ 47.33$ | $47,349.99$ | $1,759.98$ | $203,069.70$ | $7,110.33$ |
| $10 / 13 / 08$ | QQQQ | Cover | 500 | $\$ 34.39$ | $17,214.99$ | $1,884.98$ | $185,854.71$ | $8,995.31$ |
| $10 / 13 / 08$ | NCC | Buy | 8000 | $\$ 2.31$ | $18,499.99$ |  | $167,354.72$ |  |

Table 10.2.11 October 13 Trading Activities

Tuesday, October 14, 2008
Today, with the stock market up, I decided to buy MS, C, JPM, TAP, BAC and GS. To cover my investments, I set sell stops for LNC, PRU in the green and for everything else so I would not lose more than $\$ 1,000$ per transaction. I also bought JNJ because Warren Buffet recommended it. I also shorted DAI because Chrysler's third quarter results came out way down and PEP because soda sales are down as well. PRU and MS both auto sold for a profit.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 14 / 08$ | MS | Buy | 100 | $\$ 21.21$ | $2,140.99$ |  | $165,213.73$ |  |
| $10 / 14 / 08$ | TAP | Buy | 100 | $\$ 43.06$ | $4,325.99$ |  | $160,887.74$ |  |
| $10 / 14 / 08$ | JPM | Buy | 100 | $\$ 43.33$ | $4,352.99$ |  | $156,534.75$ |  |
| $10 / 14 / 08$ | C | Buy | 100 | $\$ 18.48$ | $1,867.99$ |  | $154,666.76$ |  |
| $10 / 14 / 08$ | BAC | Buy | 100 | $\$ 26.43$ | $2,662.99$ |  | $152,003.77$ |  |
| $10 / 14 / 08$ | GS | Buy | 100 | $\$ 125.97$ | $12,616.99$ |  | $139,386.78$ |  |
| $10 / 14 / 08$ | JNJ | Buy | 250 | $\$ 64.21$ | $16,072.49$ |  | $123,314.29$ |  |
| $10 / 14 / 08$ | DAI | Short | 250 | $\$ 37.84$ | $-9,440.01$ |  | $132,754.30$ |  |
| $10 / 14 / 08$ | MS | Sell | 100 | $\$ 21.75$ | $-2,155.01$ | 14.02 | $134,909.31$ | $8,981.29$ |
| $10 / 14 / 08$ | PRU | Sell | 1000 | $\$ 51.61$ | $-51,590.01$ | $16,570.02$ | $186,499.32$ | $7,588.73$ |
| $10 / 14 / 08$ | PEP | Short | 250 | $\$ 53.35$ | $-13,317.51$ |  | $199,816.83$ |  |

Table 10.2.12 October 14 Trading Activities

Wednesday, October 15, 2008
Today, GS, LNC and TAP all sold for a loss but prevented more of a loss. Now I understand how stops and limits work, I also was able to cover DAI at a limit. I did not do any real stock market work today; instead I allowed the computer to do all the work. It costs an extra $\$ 10$ per transaction but I believe it assists me in saving more money than if I catch it.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 15 / 08$ | LNC | Sell | 1000 | $\$ 28.77$ | $-28,750.01$ | $8,620.02$ | $228,566.84$ | $16,208.75$ |
| $10 / 15 / 08$ | DAI | Cover | 250 | $\$ 33.82$ | $8,474.99$ | 965.02 | $220,091.85$ | $17,173.77$ |
| $10 / 15 / 08$ | TAP | Sell | 100 | $\$ 37.14$ | $-3,694.01$ | 631.98 | $223,785.86$ | $16,541.79$ |
| $10 / 15 / 08$ | GS | Sell | 100 | $\$ 114.95$ | $-11,475.01$ | $1,141.98$ | $235,260.87$ | $15,399.81$ |

Table 10.2.13 October 15 Trading Activities

Thursday, October 16, 2008
Today, the computer auto sold NCC and covered PEP. I also accidently bought GS with an auto buy because I had setup GS with a buy stop. Because of finals week, I was unable to really get into the stock market this week the way I did the previous two weeks. I am planning on going back into the previous method of buying and selling as soon as I get back on a normal schedule.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 16 / 08$ | NCC | Sell | 8000 | $\$ 2.99$ | $-23,900.01$ | $5,400.02$ | $259,160.88$ | $20,799.83$ |
| $10 / 16 / 08$ | GS | Buy | 1000 | $\$ 110.58$ | $110,599.99$ |  | $148,560.89$ |  |
| $10 / 16 / 08$ | PEP | Cover | 250 | $\$ 51.90$ | $12,994.99$ | 322.52 | $135,565.90$ | $21,122.35$ |

Table 10.2.14 October 16 Trading Activities

Friday, October 17, 2008
With classes done, I sold GS for a gain of about a thousand dollars. I also bought USO because oil prices are down and I believe they will go up soon because of our dependence of oil.

| Symbol | Buy / <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GS | Sell | 1000 | $\$ 111.88$ | $-111,860.01$ | $1,260.02$ | $247,425.91$ | $22,382.37$ |
| USO | Buy | 250 | $\$ 60.65$ | $15,182.49$ |  | $232,243.42$ |  |

Table 10.2.15 October 17 Trading Activities

Monday, October 20, 2008
This week I am working the night shift at the library and sleeping all day. Unfortunately, the stock market is only open 9:30am-4pm so I do not know how much work I can get done in the morning. Today is the first day I did not have any transaction, including auto transactions.

Tuesday, October 21, 2008
Again, I did not have any transactions because my sleep pattern is messed up but I'm setting the alarm clock for tomorrow so I can make transactions.

Wednesday, October 22, 2008
Today, USO auto sold at stop before I woke up today. When I woke up, I sold short X and STLD because the steel commodity is down so the steel industry is down too. Unfortunately, the limits I set for them got hit at $3: 58 \mathrm{pm}$

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 22 / 08$ | USO | Sell | 250 | $\$ 54.92$ | $-13,710.01$ | $1,472.48$ | $245,953.43$ | $20,909.89$ |
| $10 / 22 / 08$ | X | Short | 1000 | $\$ 35.93$ | $-35,910.01$ |  | $281,863.44$ |  |
| $10 / 22 / 08$ | STLD | Short | 1000 | $\$ 9.63$ | $-9,610.01$ |  | $291,473.45$ |  |
| $10 / 22 / 08$ | X | Cover | 1000 | $\$ 34.57$ | $34,589.99$ | $1,320.02$ | $256,883.46$ | $22,229.91$ |
| $10 / 22 / 08$ | STLD | Cover | 1000 | $\$ 9.01$ | $9,029.99$ | 580.02 | $247,853.47$ | $22,809.93$ |

Table 10.2.16 October 22 Trading Activities

Thursday, October 23, 2008
Today I did not make any transactions but have decided I will work more on the stocks next week when I get back to normal schedule.

Friday, October 24, 2008
Today, I shorted QQQQ, PRU, GE, and LVS. Unfortunately, I did not get my limits set up in time so PRU has lost me $\$ 2050$. GE has lost me $\$ 90$ which isn’t bad but QQQQ is broken exactly even. LVS is $\$ 155$ in the green. Overall, I am up $\$ 17712.67$ to $\$ 267,712.67$. My current return is $100.18 \%$. I have earned $\$ 90.56$ in interest and lost $\$ 3407.77$ in commissions. Monday, I am planning on covering PRU and buying those shares instead.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 24 / 08$ | LVS | Short | 500 | $\$ 6.63$ | $-3,295.01$ |  | $251,148.48$ |  |
| $10 / 24 / 08$ | QQQQ | Short | 250 | $\$ 29.51$ | $-7,357.51$ |  | $258,505.99$ |  |
| $10 / 24 / 08$ | PRU | Short | 500 | $\$ 30.36$ | $-15,160.01$ |  | $273,666.00$ |  |
| $10 / 24 / 08$ | GE | Short | 500 | $\$ 17.65$ | $-8,805.01$ |  | $282,471.01$ |  |

Table 10.2.17 October 24 Trading Activities

Monday, October 27, 2008

This morning, I bought 10,000 shares of AIG. With AIG down very low, I believe it will eventually go up and I will make money. For every one cent AIG goes up, I gain $\$ 100$. With it already at $\$ 1.70$, it cannot drop much more.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 27 / 08$ | AIG | Buy | 10000 | $\$ 1.70$ | $17,019.99$ |  | $265,451.02$ |  |
| $10 / 27 / 08$ | PRU | Buy | 500 | $\$ 33.97$ | $17,004.99$ |  | $248,446.03$ |  |
| $10 / 27 / 08$ | PRU | Cover | 500 | $\$ 33.97$ | $17,004.99$ | $1,844.98$ | $231,441.04$ | $20,964.95$ |

Table 10.2.18 October 27 Trading Activities

Tuesday, October 28, 2008
Today, my limits covered GE and LVS. My stop also sold JPM. Other than that, I did not do any trading today.

| Date | Symbol | Buy $/$ <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 28 / 08$ | GE | Cover | 500 | $\$ 17.73$ | $8,884.99$ | 79.98 | $222,556.05$ | $20,884.97$ |
| $10 / 28 / 08$ | JPM | Sell | 100 | $\$ 33.10$ | $-3,290.01$ | $1,062.98$ | $225,846.06$ | $19,821.99$ |
| $10 / 28 / 08$ | LVS | Cover | 500 | $\$ 4.91$ | $2,474.99$ | 820.02 | $223,371.07$ | $20,642.01$ |

Table 10.2.19 October 28 Trading Activities

Wednesday, October 29, 2008
My limit for QQQQ failed on Tuesday so I covered it at market opening. I had put the limit at $\$ 29.75$ but because it did not cover, instead it covered at $\$ 31.95$, for a loss of $\$ 550$ more than the $\$ 60$ loss that I had set the limit at.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 29 / 08$ | QQQQ | Cover | 250 | $\$ 31.95$ | $8,007.49$ | 649.98 | $215,363.58$ | $19,992.03$ |

Table 10.2.20 October 29 Trading Activities

Thursday, October 30, 2008
Because PRU is still dropping, I bought 500 more shares of it so I could make more money when it goes back up.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 30 / 08$ | PRU | Buy | 500 | $\$ 29.98$ | $15,009.99$ |  | $200,353.59$ |  |

Table 10.2.21 October 30 Trading Activities

Friday, October 31, 2008
Today, right before the market closes; I bought 10,000 shares of NCC, 1,000 shares of LNC, 250 shares of BUD and 250 shares of RIMM. I bought BUD because I was reading an article that said BUD was getting an offer to be bought out at $\$ 65$ per share. With it worth less than that, if I keep it till it is sold or goes over $\$ 65$, I will have made money. I bought RIMM because they have a new Blackberry that just came out and I believe it will be more popular. I bought NCC and LNC because they are down from when I usually buy them so I think I can make some more money off them. As of Friday after markets close, I am worth $\$ 270,769.19$. Of that, $\$ 130,197.19$ is cash and $\$ 140,572.00$ is tied up in stocks. For the stocks I own, I am up $\$ 1,046$ since I bought them.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 / 31 / 08$ | NCC | Buy | 10000 | $\$ 2.47$ | $24,719.99$ |  | $175,633.60$ |  |
| $10 / 31 / 08$ | BUD | Buy | 250 | $\$ 62.31$ | $15,597.49$ |  | $160,036.11$ |  |
| $10 / 31 / 08$ | RIMM | Buy | 250 | $\$ 50.88$ | $12,739.99$ |  | $147,296.12$ |  |
| $10 / 31 / 08$ | LNC | Buy | 1000 | $\$ 17.01$ | $17,029.99$ |  | $130,266.13$ |  |

Table 10.2.22 October 31 Trading Activities

Monday, November 3, 2008
Watching my stocks go up, I knew it would not last many days. I bought TAP and then all my stocks but JNJ, C, and BAC auto sold throughout the day. I had planned on selling it tomorrow afternoon because I am speculating that unlike in years past, the presidential election will drive down the stock market.

| Date | Symbol | Buy $/$ <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $11 / 3 / 08$ | NCC | Sell | 10000 | $\$ 2.48$ | $-24,780.01$ | 560.02 | $155,046.14$ | $20,552.05$ |
| $11 / 3 / 08$ | TAP | Buy | 250 | $\$ 37.73$ | $9,452.49$ |  | $145,593.65$ |  |
| $11 / 3 / 08$ | LNC | Sell | 1000 | $\$ 18.97$ | $-18,950.01$ | $1,920.02$ | $164,543.66$ | $22,472.07$ |
| $11 / 3 / 08$ | RIMM | Sell | 250 | $\$ 52.64$ | $-13,140.01$ | $1,400.02$ | $177,683.67$ | $23,872.09$ |
| $11 / 3 / 08$ | BUD | Sell | 250 | $\$ 63.20$ | $-15,780.01$ | 585.46 | $193,463.68$ | $24,457.55$ |
| $11 / 3 / 08$ | AIG | Sell | 10000 | $\$ 2.14$ | $-21,380.01$ | $4,760.02$ | $214,843.69$ | $29,217.57$ |
| $11 / 3 / 08$ | TAP | Sell | 250 | $\$ 36.93$ | $-9,212.51$ | 239.98 | $224,056.20$ | $28,977.59$ |
| $11 / 3 / 08$ | PRU | Sell | 1000 | $\$ 32.40$ | $-32,380.01$ | 865.03 | $256,436.21$ | $29,842.62$ |

Table 10.2.23 November 3 Trading Activities

Tuesday, November 4, 2008
I decided to buy 1000 shares of QQQQ when I got out of class this morning at 10am. Unfortunately, it auto sold at around 3:30 this afternoon for a loss of $\$ 60$. I have kept only C, JNJ, and BAC because I believe if Obama gets elected, the stock market will decrease.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $11 / 4 / 08$ | QQQQ | Buy | 1000 | $\$ 33.38$ | $33,399.99$ |  | $223,036.22$ |  |
| $11 / 4 / 08$ | QQQQ | Sell | 1000 | $\$ 33.32$ | $-33,300.01$ | 99.98 | $256,336.23$ | $29,742.64$ |

Table 10.2.24 November 4 Trading Activities

Wednesday, November 5, 2008
I was correct, the Dow Jones dropped today after Obama was declared the President-Elect. None of my stocks that are left dropped below the sell stop so I still own them.

Thursday, November 6, 2008
The Dow Jones continued to drop all the way down to 8695.79 . This is very saddening and I will not buy any stocks till the Dow gets closer to 9000 .

Friday, November 7, 2008
Today, JNJ auto sold because it hit my sell stop. I have lost $\$ 1000$ over JNJ and am relieved that the Dow Jones closed today at 8943.81 . I plan to buy more stock on Monday morning. This week, I ended with $\$ 273,968.34$. Of that, $\$ 3,231.00$ is tied up in stocks. I plan to use about $\$ 100,000$ Monday in buying stocks and am hoping that the market will go up.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $11 / 7 / 08$ | JNJ | Sell | 250 | $\$ 57.92$ | $-14,460.01$ | $1,612.48$ | $270,796.24$ | $28,130.16$ |

Table 10.2.25 November 7 Trading Activities

Monday, November 10, 2008
Today I was very busy and was unable to perform any transactions like I had planned. Tomorrow, I will try investing in my usual stocks and hope they go up.

Tuesday, November 11, 2008
Today, right before the closing bell, I bought 1000 shares of LNC, PRU and NCC. I also bought 250 shares of TAP, BUD, JNJ, and GS. I bought these because they are down from my normal buying prices for them.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit <br> $/$ Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $11 / 11 / 08$ | LNC | Buy | 1000 | $\$ 15.95$ | $15,969.99$ |  | $254,826.25$ |  |
| $11 / 11 / 08$ | PRU | Buy | 1000 | $\$ 26.74$ | $26,759.99$ |  | $228,066.26$ |  |
| $11 / 11 / 08$ | NCC | Buy | 1000 | $\$ 2.36$ | $2,379.99$ |  | $225,686.27$ |  |
| $11 / 11 / 08$ | BUD | Buy | 250 | $\$ 66.56$ | $16,659.99$ |  | $209,026.28$ |  |
| $11 / 11 / 08$ | TAP | Buy | 250 | $\$ 41.45$ | $10,382.49$ |  | $198,643.79$ |  |
| $11 / 11 / 08$ | GS | Buy | 250 | $\$ 73.18$ | $18,314.99$ |  | $180,328.80$ |  |
| $11 / 11 / 08$ | JNJ | Buy | 250 | $\$ 59.35$ | $14,857.49$ |  | $165,471.31$ |  |

Table 10.2.26 November 11 Trading Activities

Wednesday, November 12, 2008
The stocks I bought yesterday dropped a little but not too much. I decided to keep them

Thursday, November 13, 2008
BAC and C both auto sold and I sold LNC, PRU, NCC, and GS because they were combined losing about $\$ 10,000$. I made a bad decision when I bought the financial stocks in the current economic state. Tomorrow, I will try a different industry.

| Date | Symbol | Buy $/$ <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $11 / 13 / 08$ | BAC | Sell | 100 | $\$ 16.33$ | $-1,613.01$ | $1,049.98$ | $167,084.32$ | $27,080.18$ |
| $11 / 13 / 08$ | LNC | Sell | 1000 | $\$ 13.93$ | $-13,910.01$ | $2,059.98$ | $180,994.33$ | $25,020.20$ |
| $11 / 13 / 08$ | GS | Sell | 250 | $\$ 63.78$ | $-15,925.01$ | $2,389.98$ | $196,919.34$ | $22,630.22$ |
| $11 / 13 / 08$ | NCC | Sell | 1000 | $\$ 2.27$ | $-2,250.01$ | 129.98 | $199,169.35$ | $22,500.24$ |
| $11 / 13 / 08$ | PRU | Sell | 1000 | $\$ 23.18$ | $-23,160.01$ | $3,599.98$ | $222,329.36$ | $18,900.26$ |
| $11 / 13 / 08$ | C | Sell | 100 | $\$ 8.48$ | -828.01 | $1,039.98$ | $223,157.37$ | $17,860.28$ |

Table 10.2.27 November 13 Trading Activities

Friday, November 14, 2008
Today I bought stocks in the solar industry. I bought 250 shares of FSLR and 500 shares each of ESLR, LDK, SOLF, CSIQ, TLS, JASO, and ASTI. I also set stop limits so I would not lose more than $\$ 1,000$ per stock. At around noon, JNJ, TAP, and FSLR all auto sold. As of today, I am worth $\$ 264,493.78$. I have $\$ 224,533.78$ in cash and $\$ 39,960.00$ in stocks. I am in the green with BUD, CSIQ, TLS, and JASO. I am in the red on ESLR, LDK, SOLF, and ASTI. This means I am combined $\$ 165.00$ over buying.

| Date | Symbol | Buy $/$ <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $11 / 14 / 08$ | ESLR | Buy | 500 | $\$ 3.39$ | $1,714.99$ |  | $221,442.38$ |  |
| $11 / 14 / 08$ | FSLR | Buy | 250 | $\$ 120.86$ | $30,234.99$ |  | $191,207.39$ |  |
| $11 / 14 / 08$ | ASTI | Buy | 500 | $\$ 4.26$ | $2,149.99$ |  | $189,057.40$ |  |
| $11 / 14 / 08$ | JASO | Buy | 500 | $\$ 2.48$ | $1,259.99$ |  | $187,797.41$ |  |
| $11 / 14 / 08$ | TSL | Buy | 500 | $\$ 9.32$ | $4,679.99$ |  | $183,117.42$ |  |
| $11 / 14 / 08$ | CSIQ | Buy | 500 | $\$ 6.40$ | $3,219.99$ |  | $179,897.43$ |  |
| $11 / 14 / 08$ | SOLF | Buy | 500 | $\$ 5.50$ | $2,769.99$ |  | $177,127.44$ |  |
| $11 / 14 / 08$ | LDK | Buy | 500 | $\$ 14.96$ | $7,499.99$ |  | $169,627.45$ |  |
| $11 / 14 / 08$ | JNJ | Sell | 250 | $\$ 61.82$ | $-15,435.01$ | 577.52 | $185,062.46$ | $18,437.80$ |
| $11 / 14 / 08$ | TAP | Sell | 250 | $\$ 41.97$ | $-10,472.51$ | 90.02 | $195,534.97$ | $18,527.82$ |
| $11 / 14 / 08$ | FSLR | Sell | 250 | $\$ 116.51$ | $-29,107.51$ | $1,127.48$ | $224,642.48$ | $17,400.34$ |

Table 10.2.28 November 14 Trading Activities

Monday, November 17, 2008
Today, I did not make any changes in the stock market, I only watched. I am very interested in what is to come later in the week but the solar stocks are holding steady. If they keep holding steady, I will keep them and not make any changes.

Tuesday, November 18, 2008
Today TSL and ESLR auto sold at their stop limits. I believe that I should ditch the rest of the solar stocks while they keep dropping. I will do this tomorrow.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $11 / 18 / 08$ | TSL | Sell | 500 | $\$ 7.19$ | $-3,575.01$ | $1,104.98$ | $228,217.49$ | $16,295.36$ |
| $11 / 18 / 08$ | ESLR | Sell | 500 | $\$ 2.75$ | $-1,355.01$ | 359.98 | $229,572.50$ | $15,935.38$ |

Table 10.2.29 November 18 Trading Activities

Wednesday, November 19, 2008
LDK sold at its stop limit but I sold SOLF, CSIQ, JASO, and ASTI at market. I then bought 100 shares of WMT and sold short 3000 shares of QQQQ. Within the hour, QQQQ started going back up so I covered it and took the loss.

| Date | Symbol | Buy $/$ <br> Sell | Shares | Price | Net Cost $/$ <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $11 / 19 / 08$ | LDK | Sell | 500 | $\$ 12.93$ | $-6,445.01$ | $1,054.98$ | $236,017.51$ | $14,880.40$ |
| $11 / 19 / 08$ | ASTI | Sell | 500 | $\$ 3.44$ | $-1,700.01$ | 449.98 | $237,717.52$ | $14,430.42$ |
| $11 / 19 / 08$ | JASO | Sell | 500 | $\$ 2.18$ | $-1,070.01$ | 189.98 | $238,787.53$ | $14,240.44$ |
| $11 / 19 / 08$ | CSIQ | Sell | 500 | $\$ 4.94$ | $-2,450.01$ | 769.98 | $241,237.54$ | $13,470.46$ |
| $11 / 19 / 08$ | SOLF | Sell | 500 | $\$ 4.14$ | $-2,050.01$ | 719.98 | $243,287.55$ | $12,750.48$ |
| $11 / 19 / 08$ | WMT | Buy | 100 | $\$ 51.91$ | $5,210.99$ |  | $238,076.56$ |  |
| $11 / 19 / 08$ | QQQQ | Short | 3000 | $\$ 27.46$ | $-82,360.01$ |  | $320,436.57$ |  |
| $11 / 19 / 08$ | QQQQ | Cover | 3000 | $\$ 27.59$ | $82,789.99$ | 429.98 | $237,646.58$ | $12,320.50$ |

Table 10.2.30 November 19 Trading Activities

Thursday, November 20, 2008
Today I did nothing because I didn't think I could gauge the stock market today and after losing $\$ 15,000$ between the solar stock and the QQQQ, I was licking my wounds. I believe that I cannot just quit because I lost a little money, I need to get back into the game and play it the way I would if it was my money.

Friday, November 21, 2008
Today I decided to invest in steel and gold. I bought 250 shares each of STLD, X, GG, and AU. I also sold short pharmaceutical suppliers because I believe they are going down. I sold short 250 shares each of CVS, AET, WAG, VMW, JPM, BAC, and WFC. I then bought 500 shares of YRCW. As it got later in the day, it was obvious that I was losing money on the pharmaceuticals so I covered JPM, CVS, AET and WAG.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit <br> /Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $11 / 21 / 08$ | X | Buy | 250 | $\$ 22.41$ | $5,622.49$ |  | $232,024.09$ |  |
| $11 / 21 / 08$ | STLD | Buy | 250 | $\$ 5.42$ | $1,374.99$ |  | $230,649.10$ |  |
| $11 / 21 / 08$ | GG | Buy | 250 | $\$ 22.04$ | $5,529.99$ |  | $226,119.11$ |  |
| $11 / 21 / 08$ | AU | Buy | 250 | $\$ 17.47$ | $4,387.49$ |  | $222,731.62$ |  |
| $11 / 21 / 08$ | ADSK | Short | 250 | $\$ 12.93$ | $-3,212.51$ |  | $226,944.13$ |  |
| $11 / 21 / 08$ | CVS | Short | 250 | $\$ 23.59$ | $-5,877.51$ |  | $233,821.64$ |  |
| $11 / 21 / 08$ | AET | Short | 250 | $\$ 14.84$ | $-3,690.01$ |  | $238,511.65$ |  |
| $11 / 21 / 08$ | WAG | Short | 250 | $\$ 21.63$ | $-5,387.51$ |  | $244,899.16$ |  |
| $11 / 21 / 08$ | VMW | Short | 250 | $\$ 17.69$ | $-4,402.51$ |  | $249,301.67$ |  |
| $11 / 21 / 08$ | JPM | Short | 250 | $\$ 20.42$ | $-5,085.01$ |  | $255,386.68$ |  |
| $11 / 21 / 08$ | WFC | Short | 250 | $\$ 20.25$ | $-5,042.51$ |  | $260,429.19$ |  |
| $11 / 21 / 08$ | BAC | Short | 250 | $\$ 10.75$ | $-2,667.51$ |  | $264,096.70$ |  |
| $11 / 21 / 08$ | YRCW | Buy | 500 | $\$ 1.59$ | 814.99 |  | $263,281.71$ |  |
| $11 / 21 / 08$ | JPM | Cover | 250 | $\$ 20.53$ | $5,152.49$ | 67.48 | $259,129.22$ | $12,253.02$ |
| $11 / 21 / 08$ | AET | Cover | 250 | $\$ 16.41$ | $4,122.49$ | 432.48 | $256,006.73$ | $11,820.54$ |
| $11 / 21 / 08$ | CVS | Cover | 250 | $\$ 24.76$ | $6,209.99$ | 332.48 | $250,796.74$ | $11,488.06$ |
| $11 / 21 / 08$ | WAG | Cover | 250 | $\$ 22.11$ | $5,547.49$ | 159.98 | $245,249.25$ | $11,328.08$ |

Table 10.2.31 November 21 Trading Activities

Monday, November 24, 2008
Today I did not touch my portfolio. Instead of investing in stocks, I looked up to see how stocks were doing today. I might try to buy some more TAP tomorrow if they are still doing well. I debated about buying QQQQ but looking at my history, which is probably a bad decision.

Tuesday, November 25, 2008
Today I covered all my short sold stocks for WFC, BAC, VMW, and ADSK. I also sold my long stocks of X, YRCW, GG, and AU. I decided to buy 1 share of BRK.A but it dropped a couple hundred so I sold it. I also bought TAP but it auto sold when the price dropped too low.

| Date | Symbol | Buy / <br> Sell | Share | Price | Net Cost $/$ <br> Proceeds | Profit / <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $11 / 25 / 08$ | VMW | Cover | 250 | $\$ 20.19$ | $5,067.49$ | 664.98 | $241,181.76$ | $10,663.10$ |
| $11 / 25 / 08$ | ADSK | Cover | 250 | $\$ 15.24$ | $3,829.99$ | 617.48 | $237,351.77$ | $10,045.62$ |
| $11 / 25 / 08$ | WFC | Cover | 250 | $\$ 26.61$ | $6,672.49$ | $1,629.98$ | $231,679.28$ | $8,415.64$ |
| $11 / 25 / 08$ | BAC | Cover | 250 | $\$ 15.09$ | $3,792.49$ | $1,124.98$ | $228,886.79$ | $7,290.66$ |
| $11 / 25 / 08$ | X | Sell | 250 | $\$ 27.34$ | $-6,815.01$ | $1,192.52$ | $235,701.80$ | $8,483.18$ |
| $11 / 25 / 08$ | YRCW | Sell | 500 | $\$ 2.94$ | $-1,450.01$ | $2,265.00$ | $237,151.81$ | $6,218.18$ |
| $11 / 25 / 08$ | BRK.A | Buy | 1 | $\$ 92,510.00$ | $92,529.99$ |  | $144,621.82$ |  |
| $11 / 25 / 08$ | TAP | Buy | 250 | $\$ 44.52$ | $11,149.99$ |  | $133,471.83$ |  |
| $11 / 25 / 08$ | GG | Sell | 250 | $\$ 24.67$ | $-6,147.51$ | 917.52 | $140,619.34$ | $7,135.70$ |
| $11 / 25 / 08$ | STLD | Sell | 250 | $\$ 6.82$ | $-1,685.01$ | 610.02 | $142,304.35$ | $7,745.72$ |
| $11 / 25 / 08$ | AU | Sell | 250 | $\$ 19.92$ | $-4,960.01$ | 872.52 | $148,264.36$ | $8,618.24$ |
| $11 / 25 / 08$ |  |  |  |  | - |  |  |  |
| $11 / 25 / 08$ | BRK.A | Sell | 1 | $\$ 92,400.00$ | $92,380.01$ | 149.98 | $241,644.37$ | $8,468.26$ |
|  | TAP | Sell | 250 | $\$ 42.52$ | $10,610.01$ | 539.98 | $253,254.38$ | $7,928.28$ |

Table 10.2.32 November 25 Trading Activities

Wednesday, November 26, 2008
Today I did not participate in the market because I had to go pick up my grandfather on Cape Cod for Thanksgiving. I did listen to the market on the radio though and I am happy I got rid of the stocks I did yesterday.

Friday, November 28, 2008
I did not do anything with my portfolio today because I did not know the market was open today. I did get up early and buy some products to do my share in the economy. WMT did go up today even though there was a trampling in a store on Long Island. I believe that WMT might be the only retailer to not be dominated by the economic problems in America.

Monday, December 1, 2008
Because it is the last week of the simulation, I cannot see making any major changes in my portfolio so I will keep it as is for the rest of the week.

Tuesday, December 2, 2008
Still watching MSNBC, I cannot believe the market has gone down this much over this amount of time. Looking forward to the data analysis of the project so see what I did well and what I did badly.

Wednesday, December 3, 2008
WMT dropped today but I had canceled my stop-limit on Monday so it did not sell. I hope I can last the week without taking another hit like todays.

Thursday, December 4, 2008
WMT is still dropping. With results not a good as previous years for the retail market, it is easy to see WMT losing money. I will sell tomorrow when I end the simulation.

Friday, December 5, 2008

Today is the last day of the simulation. After selling WMT, my profile is worth $\$ 258,092.30$. During the simulation, I made $\$ 8,092.30$ over the course of two and a half months. Looking at the economy and the other stock portfolios in our group, I did very well. I do believe though that our economy currently does not have a way to make money in the market and my best bet is to hide all my money under my mattress. Most of the money I made was dumb luck and not staying with something if it was dropping. I am happy with the experience I got and how much I learned about the market

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit $/$ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12 / 5 / 08$ | WMT | Sell | 100 | $\$ 52.95$ | $-5,275.01$ | 164.02 | $258,092.30$ | $8,092.30$ |

Table 10.2.33 December 5 Trading Activities

### 10.3 Analysis

As I do not believe in investing in anything long term, all my stocks were short term if not day trades. I believe my strategy helped me in the 10 week span because of the six people in the group; I am the only one who finished the simulation in the green. My strategy was to listen to the news and depending on what affected the stock market. I
would buy or sell stocks in order to stay ahead of the media. The stock market is in some tough times right now and I personally believe that long term investments will not overcome short term losses. Because of the issues surrounding the stock market today, this simulation showed me just how risky the stock market really is.

Before I bought any stock, I looked at its recent movement in the market. There were many stocks I stopped considering at this stage because I believed the risk was way too high for investment. When the stock market had the mini-crash on the first day of our simulation, I knew I had to make a decision. I ended up only using about $50 \%$ to $75 \%$ of my cash at all times while the rest made interest in the "bank." The best deals I made were on Prudential. Prudential went up very high on Columbus Day and I made back more than I had lost to that point. The other major part of my strategy was to set stop limits so when the prices started to drop, the simulation would automatically sell for me even if I wasn't around. The stop limits ended up saving me a lot of money that I would have lost when stocks sold while I was in class or working when I could not check the stock constantly.

While Prudential was my biggest gainer, my biggest loser was Apple. Apple stocks were so unpredictable I was selling low and buying high. When I bought Apple stock it seemed to drop immediately and started to rise as soon as I sold it. After a few transactions I refused to buy it anymore no matter how low it got. The stock was fluctuating about twenty to thirty dollars a week in both directions. As the stock market became more unstable throughout the simulation, I saw that happen in a couple other stocks but I remembered my lesson and did not invest in them or I sold them immediately.

My strategy of buying and selling quickly worked very well for me and if I was to do this again, the only thing I would change was which stocks and how many shares of each I would buy. There are a few stocks that I thought I should not have bought while there were some I had tossed aside just to find out it started doing well.

## Chapter 11: Portfolio 6 - Long Term Investing

The following chapter is the portfolio of Mike Parzych. It will include details about the stocks that he chose and the methodology behind it. Also, it will have a detailed day by day synopsis of how his portfolio performed in the real life stock market. Along with the performance of his portfolio there will be a following analysis describing how he thought his portfolio would perform compared to how it actually did.

### 11.1 Companies Selected

### 11.1.1 NSOL (Nuclear Solutions Inc.)

Nuclear Solutions is based out of Washington, D.C., and the company operates in two business segments. The first is a technology development company which focuses on nanotechnology, homeland security and defense, environmental technology, microbattery power systems, and a synthetic fuel business that works on ultraclean synthetic diesel, along with much more to do with nuclear waste and material. The second business is conducted through its subsidiary, Fuel Frontiers, Inc, which is mostly based upon work with different fuel types (294). Nuclear Solutions Inc operates in the US and Europe and was founded in 1997 as Stock Watch Man, Inc. and changed its name to Nuclear Solutions Inc. in 2001 (295). The reason behind choosing this particular stock is that this kind of stock might do well in the future since the US and other countries are going to push for other fuel sources, and this company being one of many that is trying to find new better ways of using what we currently have. Although looking at the graph of how the stock has been doing in the past two years it is quite evident that it is on a
downward swing. On April 20, 2007 the price of the stock was at its highest for the two year span and has decreased from there. Also the stock has been going down farther in the past few days as well (296).

### 11.1.2 LMT (Lockheed Martin Corp.)

Lockheed Martin Corporation researches, designs, develops, manufactures, integrates, operates and sustains advanced technological systems and provides a wide range of services that include science, engineering, and information. Lockheed Martin Corporation operates in four different areas of expertise which are aeronautics, electronic systems, information and global services, and space systems; they have both domestic and international customers. They mostly acquire jobs for defense, civil and commercial applications, the largest being to the US government (131). Lockheed Martin Corporation was originally known as Alco Hydro-Aeroplane Company and was established in 1912 in Santa Barbara, California by two brothers Allan and Malcolm Loughead, and later renamed the Loughead Aircraft Company. Throughout the great depression and the time the company went through a lot of hard times, the company failed in 1926 and after, Allan formed Lockheed Aircraft Company in Hollywood California which was later sold out to Detroit Aircraft Corporation. Later in 1995 it merged with Martin Marietta and formed Lockheed Martin Corporation (132). Looking at the graph of the stock it seems to be going up and up ever since the end of 2006, with its peak being around the $29^{\text {th }}$ of August 2008 (133).

### 11.1.3 KNM (Konami Corp)

Konami Corp operates in three different business segments, digital entertainment, health and fitness, and finally gaming and systems. Some of the products that Konami distributes include video game software for both hand held and home console users, mainly manufactured by Nintendo and Sony, and widely known for the games Dance Dance Revolution, Metal Gear Solid, Silent Hill, and the card games that they have introduced (296). Also Konami distributes both fitness and arcade machines along with gaming machines for casinos along with LCD screens that accompany those games (118). Konami Corp is based out of Chiyoda-ku, Tokyo, and was incorporated in March of 1973. However, Konami actually started as a jukebox rental and repair business by Kagemasa Kōzuki in 1969 (119). Currently the stock is on the upswing from the look of the charts, however, Konami reached its peak for the year on April $4^{\text {th }}$ and it has been decreasing since then, with its sharpest drop occurring after the end of August and throughout the duration of September until the $16^{\text {th }}$ of the month. Now it seems that the stock is heading back up for the Christmas time of the year. A reason to choose Konami as one of the stocks is because there is a high interest in how companies which have a high investment in the gaming industry deal with the unveiling of new games, and depending on if the game is a success if the stock would raise or plummet. Understanding that games are not the only thing that a company falls back upon there must not be any expectance to see a huge reaction of the stock, however, also it'd be good to have this stock around to compare it to how good or bad Nintendo and Sony are doing (120).

### 11.1.4 HMC (Honda Motor Co., LTD.)

Honda Motor Company was incorporated on September 24, 1948 and its main headquarters are in Tokyo Japan. It was founded by Soichiro Honda and currently Honda produces and manufactures a large variety of motor products, ranging from cars, bikes, jets, to the individual engines for each (96). Honda is on the top automobile manufacturers in the world and also makes an effort to reduce the dependence of vehicles on petroleum based fuels by investing in research of hybrid electric cars and hydrogen powered fuel cell cars. Honda has three hybrid cars that they are working on and also a hydrogen powered vehicle as well. Honda also has a long life in the racing industry with their Indy car series, and also the Formula One series (97). Throughout the years they have manufactured their own type of engines and moved into being a forerunner in the automobile industry. Looking at the stock chart for the past five years of Honda Motor Co. their stock began to sore around May $7^{\text {th }} 2004$ and reached a peak January $19^{\text {th }} 2007$ and have had a steady increase decrease pattern up till now (98). In the past five days they have gone down by $1.69 \%$ but appear to be heading back up. Honda is a very fuel efficient vehicle company and due to the price of petroleum the more fuel efficient the car the better it is to buy, also they are working on the hybrid and hydrogen cars which should also make their stock rise (99).

### 11.1.5 AMD (Advanced Micro Devices)

Advanced Micro Devices is based in Sunnyvale California and is an American multinational semiconductor company that develops and produces microprocessors, embedded processors, chipsets, graphics cards, and much more for consumer products
(11). AMD was founded on May $1^{\text {st }}, 1969$ by a group of former executives from Fairchild Semiconductor, and began by producing logic chips and then in 1975 entered into the production of RAM chips (12). They produce a multitude of chip sets and processors that are widely used in computers around the world and in a wide variety of other places (13). Examining the stock chart for AMD from the past five years, it is quite evident that they had reached a peak on February $24^{\text {th }} 2006$ with a total value of 40.54 and since then they have steadily descended from their perch and now are currently around 5.16. Looking at the past month AMD has also descended, but if you look at the 5 day stock chart, they have been at a constant rise and fall pattern and as things keep going it seem they will go back up (10). A good reason behind choosing this company as a stock is to see how this companies stock performs throughout our simulation as computers are a high need to people daily.

### 11.1.6 VZ (Verizon Communications)

Verizon Communications was incorporated in 1983 and provides a wide array of communications to the world including wired lines and wireless. The wired lines include communications services including voice, internet access, broadband video and data, next generation Internet protocol (IP) network services, network access, long distance and others (222). Their wireless communications include domestic voice and data products. Verizon provides these wired services to consumers, carriers, businesses and government customers both domestically and internationally in over 150 countries, and the wireless services to the United States (223). Looking at the stock chart of Verizon Communications, over the past five years the company has been going up and down
reaching two peaks. One was on November $12^{\text {th }}, 2004$ and the other being more recently on December $7^{\text {th }}$ 2007. Since then they has steadily decreased and are on quite the low point of their stock price swing. But looking at the past and analyzing the path of the stock it seems that it will eventually go back up, therefore being a good time to buy and see if it does indeed rise. A reason to buying this stock is an interest in how Verizon will do with their Verizon FIOS land lines and internet. They market it as being the fastest, but that might not be the case and it might have any impact on the way that the stock does (224).

### 11.1.7 UTX (United Technologies Corp.)

United Technologies Corporation was incorporated in 1934 and is a conglomerate of companies that were founded in 1929 as United Aircraft and Transport Corporation. The core group of companies that made up that corporation was Boeing Airplane Company, Boeing Air Transport, Chance Vought, Hamilton Standard, Pratt \& Whitney, and Sikorsky Aircraft (215). United Technologies Corporation is based in Hartford Connecticut and is one of the largest US manufacturers which along with the core group of companies also include Otis Hamilton Sundstrand, and Carrier. It researches, develops, and manufactures aircraft engines, helicopters, heating and cooling components, fuel cells, elevators, and numerous other high-technology products (216). United Technologies Corporation is a large military contractor which focuses on the production of missile systems and military helicopters. For the past five years UTC has been steadily increasing in its stock price as shown by the stock chart and it reached a peak on October $5^{\text {th }} 2007$, and it's been steady since then. Also, within the past month
they have kept quite the steady stock price over all. A reason to purchasing this stock is that they have a high interest in aerospace structures and is also one of the greatest corporations that manufactures and produces those things (217).

### 11.1.8 KO (Coca-Cola Company)

The Coca-Cola Company is the manufacturer, distributer, and marketer of nonalcoholic beverages in over 200 countries. The company includes products Sprite, Fanta, Diet Coke, and Coke and it also owns or licenses more than 450 other brands (59). The Coca-Cola Company was incorporated in September 1919 and is based out of Atlanta Georgia. The first Coke drink that was ever made was in 1886 in a pharmacy by a John Pemberton and three years later Asa Griggs bought the rights to the business and from then on Coke has become what we know it to be now (57). The first Coke recipe is known to have cocaine in it and also caffeine which is a reason as to why people would get so addicted to it and have to keep buying it, a brilliant business strategy just as tobacco companies realized. With this recipe the Coke drink began to grow in popularity and in 1904 it had to stop using the cocaine, however, the company still blossomed and became what it is now (60). Looking at the stock for the past five years it went from one peak to another and is heading back to a ditch. However, looking at the past five days the company is doing rather well. So I would assume that it should do well for the time being that I have bought it as well. A reason behind buying this stock would be to make sure that at least one company in the portfolio is not dependent on technology and how the price of oil is going up. Coke being a company focused on beverages should do rather well (58).

### 11.1.9 USU (USEC)

United States Enrichment Corporation (USEC) is a global energy company that supplies low enriched uranium to commercial nuclear power plants for use in their reactors. Also either directly or through subsidiaries USEC supplies low enriched uranium to both domestic and international utilities for use in about 150 nuclear reactors worldwide (221). USEC is also an executive agent for the United States for a nuclear non-proliferation program with Russia known as Megatons for Megawatts, and also USEC is contracted to the United States Department of Energy (219). Along with supplying the low enriched uranium the USEC also stored the depleted uranium from nuclear power plants. The way that USEC was created was through the Energy Policy Act of 1992, which is a U.S. federal law made to privatize uranium enrichment for civilian use. Its headquarters are in Bethesda Maryland and the current CEO is John K Welch. Looking at the stock chart for USEC in the past five years they reached a peak of 23.91 on May $11^{\text {th }} 2007$ and have gone down since then. But looking at the five day chart the company has stayed somewhat consistent with the price of their stock, and it being rather low being a good time to buy (220). The reason to buy this stock would be because the previous nuclear stock that was bought was only a "penny stock" and not worth investing during this time for our simulation. However, due to the times and the oil being so high there is a chance that the reliance on nuclear power will go up and the stock will also go up. Also, the fact that the United States has a few nuclear power plants, and the fact that it's almost winter brings the question of where is the power going to come from for the cold weather. And with the price of oil so high, the nuclear reactors
might have to increase their output, and thus showing that nuclear power is not as dangerous as most people seem to view it as, and therefore raising the stock.

### 11.1.10 DIS (The Walt Disney Company)

The Walt Disney Company is one of the largest media and entertainment companies in the world. They operated in four different areas within their company and subsidiaries which include media networks, parks and resorts, studio entertainment, and consumer products. The Walt Disney Company was founded on October $16^{\text {th }} 1923$ by Walt and Roy Disney as an animation studio, and is headquartered at the Walt Disney Studios in Burbank California (229). It now is one of the biggest Hollywood studios, owns eleven theme parks, and multiple television networks including ABC and ESPN. On May $5^{\text {th }} 2006$ the company acquired Pixar and throughout the years they also have acquired Club Penguin Entertainment Inc, NASN Limited, iParenting Media, and the Disney Store chain (231). The Walt Disney Company is well known for the Disney theme parks all across the world, and the movies that they have made in the past. Including all the Disney cartoons like The Jungle Book, and the Lion King and the list is ongoing of the cartoons that they have made for children. They are most famous though for Mickey Mouse and his fellow friends. Looking at the stock chart for Disney for the past five years, they have steadily been going up in their stock price and seem to have hit a plateau of consistent increases and decreases in their stock price. Their highest in the past five years was on May $11^{\text {th }} 2007$ (230). Any interest in The Walt Disney stock is an interest in cartoons, and all their theme parks, and a good idea to see how their stock
fluctuates and acts in correspondence to the things that is seen on television or read from the news.

### 11.1.11 OXY (Occidental Petroleum Corporation)

The Occidental Petroleum Corporation is one of the largest companies that work with oil and natural gas in the world. They are international and have over nine thousand workers in four continents. They focus on the most profitable oil and gas assets from their bases in North America, Latin America, and the Middle East/North Africa (297). Occidental Petroleum Corporation is also the fourth largest United States gas and oil company based on equity values. The corporation was founded in 1920 and in 1961 it found the second largest natural gas deposit in California. Between then and 1971 Oxy expanded their worldwide operations to include Libya, Peru, Venezuela, Bolivia, Trinidad and the United Kingdom. Also the corporation has connection with the Love Canal and the accident on the Piper Alpha oiling rig. A decision to obtain this stock was the price of gas going down it would be a good idea to short sell a petroleum based corporation or company (298). The graph for OXY over the past year and it looked like it was actually slipping a little but it was still rather steady (299). However, thinking that it would have more bad days in the future I decided to purchase and short sell it. Over the few days that I did own Oxy stocks it did indeed make me a sum of money.

### 11.1.12 V (Visa)

Visa inc. operates the largest electronic payment network and is also one of the world's most recognized financial service companies. It originated from a network of
banks that decided to make their own card and then once the first bank decided to pull back the rest of the banks decided to unite and create a global network that was named Visa (301). The name came about from the company's founder Dee Hock which he thought would be easy to pronounce in all the countries and identified easily in all of them as well, also it seemed to denote world wide acceptance (300). The decision to buy this stock was of the fact that black Friday was coming around and also the fact that since there seemed to be more purchases made online and with cards. Even though looking at their graph from the past year it doesn't seem that they are doing too well in due time they will raise the price of their stock. Also most of stocks don't have an infinite ceiling of growth in them, some stocks don't get passed twenty dollars, where as others don't pass ten dollars per share.

### 11.2 Trading

Monday, September 29, 2008 (Day 1)
The first day of our stock simulation was the worst day for stocks in general; I had bought all my stocks at opening value Monday to make sure that I would start right when the stock market opened. Then as soon as Congress failed to pass the law to bail out companies all the stocks plummeted and I was down over $\$ 8,000$ by the end of the first day. My largest loss was Advanced Micro Designs which went down over 14.2\% and with over 2000 shares bought I lost $\$ 2063.26$. After witnessing the events of today, I have come to the conclusion that I won't be frantically selling and buying stocks like I have witnessed other people do, but I will instead keep with the amount of shares and the stocks that I have bought to begin with. That way, I will be able to see, the total amount that the company's I bought have improved, or decreased in value. With that kind of
process, I can go back to news articles and try to formulate a correlation between the ways the company's stock fluctuated. With this I hope to be able to predict the outcome of future stocks by reading articles about the company far in advance to buying the stock.

| Date | Symbol | $\begin{aligned} & \text { Buy / } \\ & \text { Sell } \end{aligned}$ | Shares | Price | Net Cost / Proceeds | $\begin{aligned} & \text { Profit / } \\ & \text { Loss } \end{aligned}$ | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 250,000 |  |
| 9/29/08 | LMT | Buy | 266 | 112.55 | 29,958.29 |  | 220,041.71 |  |
| 9/29/08 | SNE | Buy | 617 | 32.41 | 20,016.96 |  | 200,024.75 |  |
| 9/29/08 | KNM | Buy | 381 | 26.22 | 10,009.81 |  | 190,014.94 |  |
| 9/29/08 | HMC | Buy | 468 | 32 | 14,995.99 |  | 175,018.95 |  |
| 9/29/08 | AMD | Buy | 2906 | 5.16 | 15,014.95 |  | 160,004.00 |  |
| 9/29/08 | VZ | Buy | 621 | 32.18 | 20,003.77 |  | 140,000.23 |  |
| 9/29/08 | UTX | Buy | 575 | 60.86 | 35,014.49 |  | 104,985.74 |  |
| 9/29/08 | DIS | Buy | 610 | 32.75 | 19,997.49 |  | 84,988.25 |  |
| 9/29/08 | USU | Buy | 2814 | 5.33 | 15,018.61 |  | 69,969.64 |  |
| 9/29/08 | KO | Buy | 381 | 52.48 | 20,014.87 |  | 49,954.77 |  |

Table 11.2.1 September 29 Trading Activities

Tuesday, September 30, 2008 (Day 2)
Today there was a huge rebound in the price of all the stocks; I went from losing thousands to being up by around $\$ 500$. The one thing that surprised me the most was the way that the stock market could rebound by that much in just one day. Companies that I thought would do very poorly became ones that percentage wise, raised the most, and over all, the rose almost equal in monetary value to the other ones I bought. The one disappointment that I had in my stocks was the failure of Sony, which didn't do all too well. I am going to have to see what they were doing and working on before today to see if their stock was somehow affected by the products they were advertising or planning to make. However, overall, today was a successful day for most of my stocks. I only hope that they keep improving.

Wednesday, October 1, 2008 (Day 3)
Looking at my stocks throughout the day I can see that they are all failing again. All but the Coke Company are doing poorly, not as poorly as they did on Monday, but poorly enough to be losing me over $\$ 2,000$. At the end of the day I was down $\$ 3,605$ from what I started with. And from the start of the day to the end there were but a few companies that increase from their start value. Sony, AMD, Disney, and Coke were the only companies out of all of mine that had their stock value at the end of the day higher than that at which they opened the day with. However, the only stocks that were able to make me money by being over the price at which I bought them were Coke, and Konami. Which I find to be demoralizing to my stock experience, my first thought when buying Konami was to short sell them, but now as being one of my two companies bringing in money, I can see how I have made errors in choosing my stocks based solely on popularity and not so much on written proof. It has also come to me that deep knowledge of a company prior to purchasing its stock is also an advantage.

Thursday, October 2, 2008 (Day 4)
This was the worst day I have had in terms of stock prices and the way they plummeted. Today is worse than Monday when the stock market was supposed to be bad. Maybe I just didn't hear much about the stock market doing poorly today, but at the end of today I was down $\$ 14,000$ ! My mind can't even grasp the thought of losing that much money in one day. It is an enormous sum of money that with my current mind set; I could buy pretty much anything and everything that I have ever dreamed of up till now,
losing that much money just throws me aback. However the only money that has made money for me has been constant and that's been Coke. It's not up by much today, but none the less it's still making me money. Eventually I hope that all my stocks will either go up by at least a cent from what I bought them at, or I break even. The last thing that I would like to do is lose thousands and thousands of dollars.

Friday, October 3, 2008 (Day 5)
The final weekly outcome is quite grim indeed. Thinking that my stocks would sky rocket due to the fact that the government was planning on having a bailout plan for all of them was quite the optimistic outlook. After seeing how my stocks plummeted I was just shocked in how poorly they could be doing. Having invested so much money in each one and just seeing them do so poorly is a very unsettling sight. The good news is that it's not real money and I'm able to learn from my mistakes. Starting next week I am planning on reviewing articles and news from each company and seeing if there is any correlation between the daily outcome of the stock and that day's news. If there is any correlation between them I might be able to somehow predict the outcome of at least one of my companies. That way it won't be as much of a shock if the stock decides to go down further than it is now. Yet, even if I am able to do that, I do not plan on buying new stocks, but to keep with the original ten that I bought and hope for the best. I will also try to monitor my stocks over the weekend to see if there are any new things that spring up within the companies that might help their stocks rise.

Monday, October 6, 2008 (Day 6)
Today was an awful day for stocks once again. DOW dropped over 800 and all my stocks are plummeting into what seems to be a bottomless hole. From what I started with, I currently am down $\$ 22,733$, which is an astounding sum of money. I feel that the way that I have thought of playing the stock market is futile at best, there is no way that it seems my stocks will make it above the price that I paid for them. It would seem to me that a wise choice would be to try and buy a stock or stocks to counterbalance my losses. However, I'm not sure at what point to sell the stocks that I currently have. Looking again at their stock graphs, they are all at the lowest point in five years it seems, so hopefully they will all rise back to above what I paid for them. This is all hypothetically optimistic thinking.

I have begun my examination of the past weeks articles on one company and for this week I am going to focus my examination on the Coca-Cola Company in hopes of seeing how the company could foreshadow their stock prices either going up or going down. The first news of a positive outlook on the stock was posted on September $30^{\text {th }}$ when the Coca-Cola Company had an article out that spoke of how they are currently doing very well in terms of selling volumes of soft drink to the public. This article was mostly based in the EU but nonetheless it still has an impact on the whole scale of the company. However, as soon as October $3^{\text {rd }}$ came around all the articles talk about how the company are in need to laying people off and how sales have gone flat in some countries, like Russia, and it seems that the news and articles are behind the stock market. Therefore, it seems that predicting the stock market from the company news is not that possible, at least not for the Coca-Cola Company (57).

Tuesday, October 7, 2008 (Day 7)
My stocks and everyone else's seem to be doing very poorly. I am still against the idea of short selling any of the companies that I have bought because it would be, what seems currently, useless since the money that I would be making would balance out only the money that I lost investing in the stock in the first place. I will hope that by the end of the simulation that all my stocks will be either around or above the price that I bought them at. I don't think that is a hard thing to wish for since when I bought the stocks they were already at an all time low, but now that low seems like it was a high point for their stocks. I hope that my faith in the stocks that I picked is returned fully with the stocks making me money in the long run. However, the company that has lost me the most so far is UTC which has gone down by $16.31 \%$ and has lost me a total of $\$ 5,617$. Yet the biggest percent change that I have is the USEC which has gone down $31.73 \%$. This is all just statistically based, and the true fact is that UTC has gone down $\$ 9.77$ where as USEC has only gone down $\$ 1.65$. The only thing is, I bought a huge sum of stocks of that company since it was cheap and therefore lost the second highest amount of money from it.

To continue me examination of the past week for a new company I have chosen to inquire about how the United States Enrichment Corporation has performed in the news. On September 29, 2008 there was an article talking about how the company was going to get one million dollars to work on their plant in Ohio, and it seemed that the stock was supposed to go up that day and continue upward. Even the next day it was listed as one of the top stocks under $\$ 10.00$ and it also wrote that the stock depended on the election to. The way that the stock was talked about it seemed as if it was one of the best stocks
out there. Even articles from yesterday pit the nuclear stock against whoever is elected in office. From what I have gathered it seems that if McCain is elected the president than the nuclear market will skyrocket. However at the same time the articles don't say much about the downfall of the stock price, they all write about how the stock is surviving well and should be up soon. Viewing my own stock report this is hard to believe since I have lost over $\$ 4,000$ investing in this stock. Even though shown on their graph they are at an all time low, I would hope that there is nowhere to go but up from this point (219).

Wednesday, October 8, 2008 (Day 8)
There are things that people won't experience more than once in a life time. For example Halley's Comet and the Great Depression. However, they don't have the same kind of effect on people since the comet is awe inspiring where as the Great Depression brought hardships upon many people, but to get on track, the stock market at this time is what I think a one in a life time experience. There was a ban on short selling stocks which I thought was quite interesting since I have never heard of things like that happening. Onto my stocks, they are all going down and there seems to be no end to it. I am thinking of bailing out on my original plan of sitting on the stocks that I bought and hoping for them to go up and making money that way to a plan more instituted by the rest of the group, to short sell the stocks. I think that the best course of action for me currently is to finish what I have started and by the end of three weeks and finishing all the company investigations on the way the news reported them I will begin a new and revised plan. I will not only look at the past year of stock charts for the companies but also at the news articles, hoping that I have learned something from the articles that I
have read and will be able to foretell what the stock market will do on an overall basis not on a day to day basis.

Today's stock of interest is the Disney Company. I would think that this company would be doing good with all the stories and current television that it owns, plus the rights to most of the young artists out there for example Hannah Montana, and High School Musical plus the theme park. Owning all those things I don't really understand how they could be doing so poorly. They are down $26.09 \%$ from where I bought them. I thought that at the time I was buying the stock that it was going to go up, however, I was ill informed and making only optimistic guesses at that time. Now reading and examining the article of the past week I see that there was some doubt in how the stock was going to do. Viewing an article written on October 1, 2008, there was a lot of talk about how even "Mickey Mouse would fall" to the credit crisis. They also wrote they weren't sure of that but the way that things were looking it was going to affect the bookings for the next year (302). It seems that their assumptions were right on, it seems like you shouldn't doubt the Wall Street Journal. Farther into the articles closer to today's date they are filled with how the stock dropped and how due to the concerns over the economy Disney wouldn't try to revitalize one of its oldest parks. It seems that the articles for Disney are much easier to predict and if I had read them I would have probably short sold Disney instead of buying it, but at the time I was only interested in how the stock chart was doing and it seemed that it was on a down slope and would come back up. I was right about the downhill slide, but not about how the stock would rise again. Given that it has only been over a week since we have started the simulation, I am down over $\$ 30,000$.

Thursday, October 9, 2008 (Day 9)
There seems to be a reoccurring theme in the way my stock portfolio is looking. It's all covered in red font meaning that I'm losing more money and not making any at all. Today I'm down $\$ 43,966.50$ from what I started with. That is a huge sum of money. If I was only making that much money it would be that much better. But if the stock market was as easy as buy and sit around till it goes up and then sell a lot of people would probably be millionaires. As I said yesterday, my plan still stands until the third week of the simulation when I'm going to start to buy companies that will be making me money rather than losing me money as the ones I currently have. That might mean stick with the ones that I have, or it might mean to get rid of them and to get some that are low and will make me money. The goal that I have set for myself is to make it back up to $\$ 250,000$ by the end of the simulation so that I break even. If I am able to do that I will call this a successful job and chalk it up to luck.

United Technologies Corporation is the fourth company that I am going to attempt to try and dissect. At the end of September UTC made a deal with the US navy for over $\$ 100$ million dollars. I would think that such a big time contract would make the company's stock go up instead of plummet (303). Also towards the end of September they made a few more contract deals with other company's and this didn't help the stock out either.(304) Which is interesting because it seems that the stocks have very little to do with what the company is actually doing. For the rest of the articles that I examined UTC was doing everything well as a company it was renewing contracts and doing what a company has to do to stay alive and make a profit. However, as soon as the DOW went down so did UTC, so it seems that the stock isn't really dependent on how well the
company is doing, but how well the stock market is doing on a whole. Therefore, even if the company is making millions of dollars and the stock market is doing very poorly, the stock of that company will also do very poorly. With this insight it seems almost useless to examine how well a company is doing and its plans for the future because if the entirety of the stock market plunges so will the stock you have chosen (305).

Friday, October 10, 2008 (Day 10)
The last day of our second week of simulation, there is no change to my portfolio in the positive direction, but I did lose more money. I currently am down $\$ 46,987.69$ from what I started with. I'm not doing the worst out of the rest of the group, but I am however doing very poorly. There doesn't seem to be a way for me to make money other than to short sell at the moment. The thing is though, that I don't want to short sell the stocks because eventually everything does have to go up.

Verizon is the next company that I am going to examine and see how the company has done outside of the stock market. Looking at the past articles, Verizon was doing well in the beginning of the month with it winning the highest score in the JD Power and Associates Customer Satisfaction Study in New England (306). Throughout the last of the month Verizon sold one of its towers for $\$ 192$ million and then also planned the buyout of Alltel by the end of the year. These things should have given Verizon a boost in their stock and looking at their stock on my spread sheet they did indeed do rather well, and where other companies went down a lot Verizon only went down a few cents. The rest of the articles are positive except for one of them that says that Verizon has hit a two year low as the market plummets which I think is in regard to
the stock market. However even with that the rest of the articles are all positive, therefore, there doesn't seem to be a way to predict Verizon through the way the company is doing either (307).

Monday, October 13, 2008 (Day 11)
Today I was down 31 thousand dollars and it doesn't seem that my stocks are going to be going up anytime soon. I am still going to stay with the plan that I outlined before and not sell any of my stocks.

Looking at news for AMD it seems that they were doing fairly well in the customers eyes. They were putting out new chip sets and the news didn't seem to have anything negative to say about them. However, my stocks were still going down not drastically but they were fluctuation quite frequently and nothing ever made the stock go into the positive scale for me. Once again it seems that reading the news doesn't prove to be a good foreshadowing of how the stock will do in the market (11).

Tuesday, October 14, 2008 (Day 12)
Today I'm losing even more money than the day before, I haven't sold any of my stocks nor have I bought any new ones to balance out the losses that I have.

Today's stock to examine is Honda Motor Company. From the news that I have read, the company is doing very well their sales have actually gone up for the month of September and they are doing well this month as well. Also, the news isn't saying anything negative about them, there are no losses and there is nothing that should be making their stock go down so low. Their used cars sales are also up compared to other
retailers and there doesn't seem to be a correlation between the news articles and how the stock itself is doing (96).

Wednesday, October 15, 2008 (Day 13)
Being down 44 thousand doesn't make it seem possible to make any money investing in the stock market the way that I am currently, however, I do plan on sticking to my plan until it is deemed by me to be over and done with.

Konami is my next company to try and predict by reading the news. Once again there are no negatives to be seen, and only positives. Konami joined up with sprint and has announced mobile games; also they have just shipped Dance Dance Revolution 3 which is a popular game. And the stock just doesn't match up to what the news is printing (293).

Thursday, October 16, 2008 (Day 14)
Once again a failed day on the stock market, my stocks are all going down and there seems to be no return from the dreaded red text.

It seems that Sony is riddled with bad news articles about its stock. There are multiple articles about how the stock has gone down and how it's doing poorly; the one thing that does seem interesting is that it's all after the fact. Therefore there wouldn't be any use for late news if I were to try and predict the outcome of the stock through that there would be no way to sell in time since the stock would have plummeted and then the news would have come out about it. Once again, there seems to be a failed attempt to predict stocks (195).

Friday, October 17, 2008 (Day 15)
The last day of the week and my stocks are doing worse than ever. There seems to be no end to how badly they will do. Starting in two weeks I am going to start selling and buying new stocks to try and make back some of the money that I have lost.

The last stock there is to examine is Lockheed Martin, and the news articles that I have seen about them are all positive about how the F-35 has passed its flight tests and how the company is now going to be working with NASA and nothing that is remotely related to how poorly their stock is doing. That is surprising because I would think that if the company was doing so well why its stock wouldn't be doing just as well. This investigation into the news to see a correlation between news and stocks has proven nothing other than the stock market is very difficult to predict. Hopefully I will be able to do better later (133).

Monday, October 20, 2008 (Day 16)
My stocks seemed to rebound a little today, and hopefully they will be going up. This week is mainly a week to watch my stocks and see if they are falling into a bigger hole or are digging themselves out of the self created holes they are already in.

Tuesday, October 21, 2008 (Day 17)
Nothing to report today other than the fact that my stocks are plummeting again, worse than before even, there seems to be no end to how low the prices can go.

Wednesday - Friday, October 22-24, 2008 (Days 18-20)
For the past few days my stocks have done nothing but plummet some more. I am currently down 50,000 and there seems to be no end to their failure. I don't know if I should stick with the stocks are buy new ones for the coming week. It will take some time to come to that conclusion but hopefully whatever I decide will make me money rather than lose more.

Monday, October 27, 2008 (Day 21)
It seems that the stocks are slowing down on how badly the prices are falling and a few of my stocks are actually making back some of the money, it's a slow process but it is still happening. I am going to stay with the stocks that I have now and see what can be done with them by the end of the week. Verizon is the one that has shown the most progress in raising their stock price. It went up from $\$ 26$ to $\$ 27$ and hopefully this is as low as the prices for all the stocks will drop.

Tuesday, October 28, 2008 (Day 22)
Today the stocks have gone up more than they have in the past few weeks. It appears that they are going back to the prices at which I bought them at which would be nice, because then I would hopefully sell them and buy some new stocks that may go up even higher, or make money off the ones that I keep. Verizon is within $1 \%$ of what I bought it at and hopefully it keeps going up.

Wednesday, October 29, 2008 (Day 23)
The stocks continue to climb out of their holes and it is quite apparent that they are eventually going to come out of it. Even though I am still in the negatives for all my companies I am hoping that within the week I will be only down a few thousand. Verizon is still doing the best but other stocks are also rising back.

Thursday, October 30, 2008 (Day 24)
My stocks appear to be coming back from their low points and it seems that they will just keep getting stronger. In my opinion I won't be selling any of them next week I am going to wait it out a little longer since they do seem to be doing much better.

Friday, October 31, 2008 (Day 25)
Today my stocks were doing better than yesterday which means that my idea of them actually doing well is coming true. They are making my money and that is all that I wanted. That also means that I won't be selling the stocks that own except for maybe a few of them on Monday.

Monday, November 3, 2008 (Day 26)
Today I have done nothing but observe my stocks, they seem to be doing just as well as last week, nothing has been going down, and they are all going up. It seems that eventually they will break even if not go far above what I bought them at.

Tuesday, November 4, 2008 (Day 27)
Verizon is the first of my stocks to go into the green for the first time since the first week of this simulation. I don't plan on selling it since I think that it might still go up. However, I have been told that because of the elections all the stocks will plummet again. Yet, I do not think it will be too much of a drop.

Wednesday, November 5, 2008 (Day 28)
I guess that I was wrong about the elections, Verizon has dropped below what I had bought it at, and all my other stocks have also dropped. However, I do think that eventually they will go up again. It's the closing of the Year, and I think that for Christmas most of my stocks will go up, in particular Disney, Konami, Verizon, and Sony.

Thursday, November 6, 2008 (Day 29)
Today the stocks have gone down even farther than from before. I am down 46 thousand and it seems that it may be the end. Hopefully my stocks will go back up.

Friday, November 7, 2008 (Day 30)
My stocks have gone up slightly today, with Verizon being only a bit off what I bought it at. Hopefully by the end of next week Verizon will be in the green and making me some money for a change. Also, I think that my other stocks are also going up in percentage and therefore eventually going to go back to what I bought them at as well.

Monday, November 10, 2008 (Day 31)
Another typical day for the stock market, there is no breaking news of how the stocks are going to either go up or down. My Stocks don't seem to be making me too much money, but at the same time they aren't losing me money. Therefore I am content with where they stand.

Tuesday, November 11, 2008 (Day 32)
Being down forty-five thousand doesn't seem to be that bad anymore. My stocks are for the most part still stationary and nothing seems to be happening. The one upsetting thing is that there is a lack of green in my portfolio. I have not had a stock go positive for a long time now. Hopefully by the end of the simulation that will change.

Wednesday, November 12, 2008 (Day 33)
Yet again, a boring day at the stock office, my stocks still don't seem to be moving much in either direction, it seems that it would be an ideal time to buy right now. However, I do not want to sell any of my stocks because of the large loss I am going to take.

Thursday, November 13, 2008 (Day 34)
It seems that finally my stocks are bouncing back from the low that they have hit, it seems that they are steadily going back up, some faster than others; it seems that Verizon is doing the best out of all the companies that I have bought. I think that once Verizon breaks even I will sell it in order to buy a new stock.

Friday, November 14, 2008 (Day 35)
My stocks are going strong, and hopefully they will keep on pace for the positive, that way I will be able to make money. Looking back I should have short sold when I could and that way made some money. But I was thinking that the market would right itself sooner rather than later. Looking at the stocks now shows how wrong I was to assume that.

Monday, November 17, 2008 (Day 36)
Today my stocks have gone down, but not by much, only a few thousand. It seems funny how I can just say a "few" thousand dollars. In real life that is a lot of money for me, and I would be glad to have that much just drop in my bank account right now. However, getting back to the stocks, it seems that I really don't know what I'm doing with my stocks; I'm just letting them sit there and idle. Neither selling nor buying, I'm torn about whether to sell them and buy more, or just let them even out. I have been battling with this for the past few weeks, not knowing what to really do.

Tuesday, November 18, 2008 (Day 37)
Stocks are still going down. It doesn't look good for the stocks that I have purchased, and not good for any stocks. The DOW keeps dropping and it seems that the market is dying with it.

Wednesday, November 19, 2008 (Day 38)
Being down sixty thousand dollars is a large sum, and it seems to be getting larger by the minute. The stock market isn't really crashing it's just slowly drowning it seems. If the stocks went from what they were around this time last year to a sudden drop of what it is now there would be a drastic change to lives, and the government would have done something in an instant. However, since it seems to be happening so slowly they don't seem to notice. I could make an analogy to something, but I'd rather not.

Thursday, November 20, 2008 (Day 39)
Looking at the prices of the stocks at the time that I bought them and comparing them to the prices that they are at right now is mind blowing. I have lost almost fifty percent of Lockheed Martin, and almost forty percent of Sony's value. It just seems that there is no end as to how low the values of these stocks can go. I just hope that there will be a turnaround soon.

Friday, November 21, 2008 (Day 40)
The stocks are doing better than yesterday, but still awful in comparison to what they were before. Hoping that next week will be a better week since it's going to be black Friday and people are going to go out and buy things, hopefully making the market go up.

Monday, November 24, 2008 (Day 41)
Today isn't a bad turn out. The stocks aren't doing awful, I haven't lost ten thousand dollars from Friday, and it could be worse. However, I am hoping that this week will be a better week for the stock market with black Friday looming just a few days away.

Tuesday, November 25, 2008 (Day 42)
Yet again not as exciting of a day as I thought it would be, the stocks don't seem to be really reacting to the fact that black Friday is going to be this Friday. Maybe it's just that fact that I don't have very many companies that would be affected by it. For example Lockheed Martin wouldn't really make much money on black Friday, unless they are giving out deals on new planes and such. However, Sony should be going up but it really isn't as far as I'm concerned, which makes me think that nothing will really happen this black Friday for the stocks.

Wednesday, November 26, 2008 (Day 43)
The day before Thanksgiving and the stocks seem to be doing pretty well. The numbers are going up, and it seems that they will be over all a pretty high value by the end of this week. However I am curious as to what happens tomorrow on thanksgiving for the stock market and all the prices.

Thursday, November 27, 2008 (Day 44)
Today is Thanksgiving and the stock market seems to be taking a break. I can't seem to find values for my stocks so I am hoping that they are doing very well and on black Friday they sky rocket into the hundreds!

Friday, November 28, 2008 (Day 45)
The end of Black Friday and my stocks are quite high. Sony however has upset me with its stock dropping as much as it did. I would think that Sony would do very well on black Friday being a high manufacturer of electronics and things of that nature. But overall the stocks seem to be looking pretty well. Verizon is also looking to break even soon, and am planning on selling it as soon as it does; I will not take risks with it dropping back down.

Monday, December 1, 2008 (Day 46)
Today, the first day after the crazy shopping sprees that everyone had over the weekend, and I'm down sixty thousand dollars. The only good thing is that Verizon is close to breaking even, and with that I will buy a new stock or maybe even more!

Tuesday, December 2, 2008 (Day 47)
Today has been a much more successful day, most if not all of my stocks have gone up and I'm down only fifty thousand dollars now. And I have decided to short sell Occidental Petroleum since the price of gas is going down that I think it would be a good thing to short sell on, I should have however, short sold this much sooner and made more
money that way. Also, I have put in an order to sell my shares of Verizon once they hit thirty three dollars per share. That way I am going to make a little bit on the company.

| Date | Symbol | $\begin{aligned} & \text { Buy / } \\ & \text { Sell } \\ & \hline \end{aligned}$ | Shares | Price | Net Cost / Proceeds | $\begin{aligned} & \text { Profit / } \\ & \text { Loss } \end{aligned}$ | Total <br> Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12/2/08 | LMT |  |  |  |  |  | 49,954.77 |  |
| 12/2/08 | SNE |  |  |  |  |  | 49,954.77 |  |
| 12/2/08 | KNM |  |  |  |  |  | 49,954.77 |  |
| 12/2/08 | HMC |  |  |  |  |  | 49,954.77 |  |
| 12/2/08 | AMD |  |  |  |  |  | 49,954.77 |  |
| 12/2/08 | VZ |  |  |  |  |  | 49,954.77 |  |
| 12/2/08 | UTX |  |  |  |  |  | 49,954.77 |  |
| 12/2/08 | DIS |  |  |  |  |  | 49,954.77 |  |
| 12/2/08 | USU |  |  |  |  |  | 49,954.77 |  |
| 12/2/08 | KO |  |  |  |  |  | 49,954.77 |  |
| 12/2/08 | OXY | Short | 500 | 48.12 | 24079.99 |  | 25,874.78 |  |

Table 11.2.2 December 2 Trading Activities

Wednesday, December 3, 2008 (Day 48)
I have successfully sold all my shares of Verizon and have decided to buy Visa since I have a feeling that they will be making me money in the future. Also, my choice of short selling the petroleum company was a good choice as well since I am making money from that as well. Also, I am only down fifty thousand dollars which is also a good thing. However, looking back I should have somehow foreseen this and bought a much larger sum of things, or just bought a greater variety of stocks.

| Date | Symbol | Buy / <br> Sell | Shares | Price | Net Cost / <br> Proceeds | Profit / / <br> Loss | Total <br> Cash | Total <br> Profit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $12 / 3 / 08$ | LMT |  |  |  |  |  | $25,874.78$ |  |
| $12 / 3 / 08$ | SNE |  |  |  |  |  | $25,874.78$ |  |
| $12 / 3 / 08$ | KNM |  |  |  |  |  |  |  |
| $12 / 3 / 08$ | HMC |  |  |  |  |  | $25,874.78$ |  |
| $12 / 3 / 08$ | AMD |  |  |  |  |  |  | $25,874.78$ |
| $12 / 3 / 08$ | VZ | Sell | 621 | 48.12 | $29,902.51$ | $9,898.74$ | $55,777.29$ | $9,898.74$ |
| $12 / 3 / 08$ | UTX |  |  |  |  |  | $55,777.29$ |  |
| $12 / 3 / 08$ | DIS |  |  |  |  |  | $55,777.29$ |  |
| $12 / 3 / 08$ | USU |  |  |  |  |  | $55,777.29$ |  |
| $12 / 3 / 08$ | KO |  |  |  |  |  | $55,777.29$ |  |
| $12 / 3 / 08$ | OXY |  |  |  |  |  |  |  |
| $12 / 3 / 08$ | V | Buy | 900 | 51.93 | $46,756.99$ |  | $9,020.30$ |  |

Table 11.2.3 December 3 Trading Activities

Thursday, December 4, 2008 (Day 49)
My stocks are doing very well and my new investment, Visa is making me money and so is the petroleum company that I short sold which I am proud of. Although I wish that my judgment could have helped me buying the original companies and making money from the start.

Friday, December 5, 2008 (Day 50)
On the final day I am down forty-seven thousand dollars, much less than some other members of my group. Also, Visa has made me one thousand dollars and the short sold petroleum company also has made me one thousand dollars. I only wish that the rest of my stocks had done as well.

### 11.3 Analysis

Throughout the 10 week stock simulation my conglomerate of stocks had its positive gains but mostly it consisted of nothing more than negative losses. There were only a few stocks that ever made it above the price that I bought them at and at exactly that time I sold them so that I would break even. In the end I was waiting to sell my stocks so that I wouldn't have a loss. However that was not possible most of the stocks that I had bought at the beginning of the simulation were down by an average of twenty percent and it was impossible for them to break even therefore I had to take a major loss at the end of the simulation, approximately forty-seven thousand dollars of loss.

Looking back at my stocks and the simulation process there are things that I should have done to obtain a better performance and end up making money rather than losing so much. At the beginning I should have short sold the stocks that I bought and then once they had gotten so low, I should have bought them and waited for the prices of the stocks to raise. With that strategy I would have made a huge sum of money. However, with my lack of knowledge of the stock market and the lack of knowledge of the news I failed to recognize that strategy and failed to make money. Towards the end of the simulation I did however gain some knowledge and made a few good decisions to make a few extra thousand dollars. One such decision was to buy Visa and to short sell a petroleum company. Noticing the trend in the media of how the gas prices were going down and more people were buying on credit, it seemed like a valid choice to buy those stocks.

In my journal entries I also tried to examine a way to predict the path of a stock by analyzing their performance in the past in the news and trying to read of current news
that the company was attempting to do. This was a slight success such that I could somewhat see where the company was heading but it did not really aid me in the choices of whether I should buy, short sell, or sell the stock if I already had it. That is where the analysis stopped. I was not able to reliably examine the stocks and my examination was a poor one at best. I have found that I am not capable of analyzing the stocks through the media as much as I had assumed that I might. In the end I just stuck with the stocks that I had purchased in the beginning of the simulation so that I could see how the stocks would progress.

Another reason as to why I had stuck with the stocks that I had bought in the beginning was because I looked at the graphs of the stock before hand to buying them and it showed that the stocks had risen to a point much higher than of which I had bought them at. Therefore I had assumed that in due time the stocks would once again rise to that point at which I would sell them for a large profit. However, the problem that I encountered was that I had no idea of the time that it would take for the stocks to rise to that level again. During the simulation I had no perception of time. The only thing that I had witnessed was the drastic drop of the stocks and I assumed that the stocks could jump in price at the same rate.

At the end of the simulation I had assessed all my stocks and it seemed that most of them would do much better in the long run rather than trying to make money on them in the short term. Therefore I think that most of the stocks that I had purchased should be dubbed my long term stocks where as the two stocks that are fewer than ten dollars, namely USEC and AMD, should be dubbed my short term penny stocks, although I did hold onto both those stocks till the end of the simulation. Yet a few weeks after the end
of the simulation USEC made it up to six dollars which would have been a good increase during the simulation at which point I would have sold it to make a few thousand dollar profit of the stock. In the end I think the reason my portfolio did so badly was because of my inexperience and my lack of knowledge of the stock market.

## Chapter 12: Portfolio Comparisons

This chapter examines the overall performance of each portfolio in the simulation. It is an attempt to show and explain which portfolio outperformed its peers and which underperformed and to compare the styles in which the various group members invested in the market. This is a quantitative approach that focuses on the amount of money that the portfolio managed to have at the end of the simulation. There is no comparison of individual stocks nor an in depth analysis of every trade made during the simulation.

After the completion of the stock simulation there had been an obvious split among the portfolios. Portfolio 1 and Portfolio 5 performed best during the simulation, while Portfolio 3 performed worst with an over $40 \%$ loss. Interestingly, after the first two weeks of the simulation the standings had been set for who was going to be the leader. Portfolio 5, managed by Corey Feeley, was the frontrunner and ended the simulation with a profit. Feeley employed a risky trading strategy which included frequent buying, selling, and short selling. His trading strategy most resembled that of a hedge fund manager. Closely trailing his lead, Portfolio 1, managed by Karan Arora, employed many of the same trading tactics along with some technical analysis.

In contrast to the two frontrunners, Portfolio 3, managed by Ralph Campanelli, was the worst performing portfolio in the simulation; Campanelli invested heavily in the banking and energy sectors of the economy, which were greatly devalued during the recession. However, the reason behind the large disparity between Portfolio 3 and the market averages was the experimentation in options trading, which resulted in a nearly $10 \%$ net asset value loss.

The three remaining portfolios in the group, Portfolio 2, Portfolio 4, and Portfolio 6, employed more of a buy and hold strategy, and the stocks were chosen based on fundamental analysis. Although these middle ground portfolios employed some short term investing strategies such as short selling, these tactics were performed to a far lesser degree than Portfolio 1 and Portfolio 5. Also, none of the middle ground portfolios attempted to experiment with the risky options market as did Portfolio 3.

As demonstrated in the above analysis, the portfolios' return in this simulation was based directly on the level of risk that the manager took in trading tactics. Portfolio 1, Portfolio 3, and Portfolio 5 undertook the greatest amount of risk in the simulation, and therefore were at the extremes of the best and worst performing portfolios. In contrast, Portfolio 2, Portfolio 4, and Portfolio 6 employed less risky trading tactics and as a result their performances were more closely linked to the market averages.

## Chapter 13: Conclusion

This project consisted of six separate portfolios managed by each of the individual members of the IQP during a ten week simulation process. The investing simulation program Investopedia was chosen as a stock simulator, but all records were also kept manually in Microsoft Excel. Each group member was given an allowance of $\$ 250,000$ to invest and as a guide was told to diversify in at least ten different stocks, bonds, funds, or commodities. In addition to traditional buy and hold trading, group members were permitted to engage in any of the more risk prone strategies such as buying stock options and short selling stocks.

During our ten week simulation the U.S. economy sunk into a recession caused by a collapse in the subprime mortgage market. This overall market trend had a great effect on all of our portfolios, especially given the short time period in which we were given to invest; of the six portfolios, only Portfolio 5 turned a profit. The performance of the portfolios seemed to be based on the level of risk that the managers took during the simulation; those that engaged in buying derivatives and short selling were in the upper and lower extremes, while those that did not engage in such risky practices were average performers. These results were typical given the short time period in which we were given to invest.

Overall this simulation provided a basic introduction to the investment world. Through research in various investment vehicles and trading strategies we were able to better understand the market and its potential to increase the value of an investor's portfolio over time, an effect that cannot be ignored given the deleterious effect of inflation on one's money.

## References

1. Goldman, Morgan Stanley discloses subprime loans. 2008. USA Today, 9/26, 2008.
2. Real estate investment trust. 200812/13]. Available from http://en.wikipedia.org/wiki/REIT.
3. The stock market handbook1970., ed. Frank G. Zarb and Gabriel T. Kerekes. Homewood, Illinois: Dow Jones-Irwin, Inc.
4. 3 M - history. [cited 9/27 2008]. Available from http://solutions.3m.com/wps/portal/3M/en_US/our/company/information/history/.
5. 60 second guide to investor tax issues. [cited 1/9 2009]. Available from http://www.fool.com/personal-finance/taxes/60-second-guide-to-investor-taxissues.aspx Tax.
6. 7 compelling reasons why long term investing is better than short term trading. [cited 12/7 2008]. Available from http://www.thedigeratilife.com/blog/index.php/2008/05/12/7-compelling-reasons-why-long-term-investing-is-better-than-short-term-trading/.
7. About Infosys, what we do. [cited 9/20 2008]. Available from http://www.infosys.com/about/what-we-do/default.asp.
8. Active portfolio strategy. [cited 1/9 2009]. Available from http://dictionary.bnet.com/definition/active+portfolio+strategy.html.
9. Activision blizzard - company background. [cited 9/27 2008]. Available from http://investor.activision.com/background.cfm.
10. Advanced micro device. [cited 9/27 2008]. Available from http://www.reuters.com/finance/stocks/companyProfile?symbol=AMD.N\&rpc=6 6.
11. Advanced micro devices. [cited 9/27 2008]. Available from http://finance.google.com/finance?q=AMD.
12. Advanced micro devices. [cited 9/27 2008]. Available from http://en.wikipedia.org/wiki/AMD.
13. Advanced micro devices. [cited 9/27 2008]. Available from http://www.amd.com/us-en/.
14. Amazon.com. [cited 9/21 2008]. Available from http://en.wikipedia.org/wiki/Amazon.com.
15. Amazon.com inc. [cited 9/21 2008]. Available from http://finance. yahoo.com/echarts?s=AMZN\#.
16. AOL money \& finance: Biogen Idec inc corp. stock quote. [cited 9/20 2008]. Available from http://finance.aol.com/quotes/biogen-idec-incorporated/biib/nas.
17. AOL money \& finance: Biogen Indec inc corp. profile. [cited 9/20 2008]. Available from http://finance.aol.com/company/biogen-idecincorporated/biib/nas/overview.
18. AOL money \& finance: Celgene corp profile. [cited 9/20 2008]. Available from http://finance.aol.com/company/celgene-corporation/celg/nas/overview.
19. AOL money \& finance: Celgene corp stock quote. [cited 9/20 2008]. Available from http://finance.aol.com/quotes/celgene-corporation/celg/nas.
20. AOL money \& finance: Colgate-palmolive co profile. [cited 9/20 2008]. Available from http://finance.aol.com/company/colgate-palmolivecompany/cl/nys/overview.
21. AOL money \& finance: Colgate-Palmolive co stock quote. [cited 9/20 2008]. Available from http://finance.aol.com/quotes/colgate-palmolive-company/cl/nys.
22. AOL money \& finance: General mills inc profile. [cited 9/27 2008]. Available from http://finance.aol.com/company/general-mills-inc-unitedstates/gis/nys/overview.
23. AOL money \& finance: General mills inc stock quote. [cited 9/27 2008]. Available from http://finance.aol.com/quotes/general-mills-inc-unitedstates/gis/nys.
24. AOL money \& finance: Hasbro inc profile. [cited 9/27 2008]. Available from http://finance.aol.com/company/hasbro-inc-united-states/has/nys/overview.
25. AOL money \& finance: Hasbro inc stock quote. [cited 9/27 2008]. Available from http://finance.aol.com/quotes/hasbro-inc-united-states/has/nys.
26. AOL money \& finance: Johnson \& Johnson corp. profile. [cited 9/20 2008]. Available from http://finance.aol.com/company/johnson-andjohnson/jnj/nys/overview.
27. AOL money \& finance: Johnson \& Johnson corp. stock quote. [cited 9/20 2008]. Available from http://finance.aol.com/quotes/johnson-and-johnson/jnj/nys.
28. AOL money \& finance: Kellogg co profile. [cited 9/27 2008]. Available from http://finance.aol.com/company/kellogg-company/k/nys/overview.
29. AOL money \& finance: Kellogg co stock quote. [cited 9/27 2008]. Available from http://finance.aol.com/quotes/kellogg-company/k/nys.
30. AOL money \& finance: Pentair inc profile. [cited 9/27 2008]. Available from http://finance.aol.com/company/pentair-inc/pnr/nys/overview.
31. AOL money \& finance: Pentair inc stock quote. [cited 9/27 2008]. Available from http://finance.aol.com/quotes/pentair-inc/pnr/nys.
32. AOL money \& finance: Tupperware brands corp. profile. [cited 9/27 2008]. Available from http://finance.aol.com/company/tupperware-brandscorporation/tup/nys/overview.
33. AOL money \& finance: Tupperware brands corp. stock quote. [cited 9/27 2008]. Available from http://finance.aol.com/quotes/tupperware-brandscorporation/tup/nys.
34. AOL money \& finance: Wal-mart inc profile. [cited 9/20 2008]. Available from http://finance.aol.com/company/wal-mart-stores-inc/wmt/nys/overview.
35. AOL money \& finance: Wal-mart stores inc stock quote. [cited 9/20 2008]. Available from http://finance.aol.com/quotes/wal-mart-stores-inc/wmt/nys.
36. Apple - about apple. [cited 9/29 2008]. Available from http://www.aboutus.org/Apple.com.
37. Baby steps for individual stock picking. [cited 11/23 2008]. Available from http://www.thesimpledollar.com/2007/07/14/baby-steps-for-individual-stockpicking/.
38. Beginners' guide to asset allocation, diversification, and rebalancing. [cited 12/13 2008]. Available from http://www.sec.gov/investor/pubs/assetallocation.htm.
39. Biogen idec - company overview. [cited 9/20 2008]. Available from http://www.biogenidec.com/site/company.html.
40. Bombay stock exchange limited - key statistics. [cited 10/24 2008]. Available from http://www.bseindia.com/about/st key/list cap raised.asp.
41. Build a bear workshop. [cited 10/1 2008]. Available from http://www.buildabear.com/aboutus/ourcompany/ourfounder.aspx.
42. Build a bear workshop. [cited 10/1 2008]. Available from http://phx.corporateir.net/phoenix.zhtml? $\mathrm{c}=182478 \& \mathrm{p}=$ irol-newsArticle\&ID=1178763\&highlight.
43. Build a bear workshop. [cited 10/1 2008]. Available from http://finance.yahoo.com/echarts?s=BBW\#chart1:symbol=bbw;range=1d;indicato $\underline{r}=$ volume;charttype=$=$ line; crosshair $=$ on;ohlcvalues $=0 ; \operatorname{logscale}=$ on;source $=$ undefin ed.
44. Celgene corporation - history of an integrated biopharmaceutical company. [cited 9/27 2008]. Available from http://www.celgene.com/about-celgene/biopharmaceutical-company-about.aspx.
45. Cisco. [cited 10/1 2008]. Available from http://newsroom.cisco.com/dlls/corpinfo/corporate_overview.html.
46. Cisco. [cited 10/1 2008]. Available from http://www.cisco.com/web/about/ac49/ac20/ac19/ar2007/financial_highlights/ind ex.html.
47. Cisco. [cited 10/1 2008]. Available from http://finance.yahoo.com/echarts?s=CSCO\#chart1:symbol=csco;range=1d;indicat $\underline{\text { or=volume } ; \text { charttype }=\text { line; } \text { crosshair }=\text { on;ohlcvalues }=0 ; \operatorname{logscale}=\text { on; } \text { source }=\text { undefi }}$ ned.
48. Citi and Wachovia reach agreement-in-principle for citi to acquire Wachovia's banking operations in an FDIC-assisted transaction. [cited 9/29 2008]. Available from http://www.citigroup.com/citi/press/2008/080929a.htm.
49. Citi's history. [cited 9/29 2008]. Available from http://www.citigroup.com/citi/corporate/history/citigroup.htm.
50. CKR restaurants. [cited 10/1 2008]. Available from http://www.ckr.com/about history.html.
51. CKR restaurants. [cited 10/1 2008]. Available from http://finance.yahoo.com/echarts?s=CKR\#symbol=CKR;range=1d.
52. CKR restaurants. [cited 10/1 2008]. Available from http://phx.corporate-ir.net/phoenix.zhtml?c=117249\&p=irolnewsArticleInvestor\&ID $=1198273$ \&highlight.
53. Coca cola company. [cited 10/1 2008]. Available from http://www.thecocacolacompany.com/heritage/chronicle global business.html.
54. Coca cola company. [cited 10/1 2008]. Available from http://finance.yahoo.com/echarts?s=KO\#chart1:symbol=ko;range=1d;indicator=v olume; charttype=line;crosshair=on;ohlcvalues $=0 ; \operatorname{logscale}=$ on;source $=$ undefined.
55. Coca cola company. [cited 10/1 2008]. Available from http://www.thecocacolacompany.com/presscenter/nr 20080717 corporate second qtr_earnings.html
56. Coca cola company. [cited 10/1 2008]. Available from http://www.thecocacolacompany.com/presscenter/pdfs/ko earnings20080717.pdf.
57. Coca-cola company. [cited 9/27 2008]. Available from http://finance.google.com/finance? $q=$ =NYSE:KO.
58. Coca-cola company. [cited 9/27 2008]. Available from http://www.reuters.com/finance/stocks/companyProfile?symbol=KO.N\&rpc=66.
59. Coca-cola company. [cited 9/27 2008]. Available from http://en.wikipedia.org/wiki/Coca-Cola.
60. Coca-cola company. [cited 9/27 2008]. Available from http://heritage.cocacola.com/.
61. Colgate-Palmolive company history. [cited 9/20 2008]. Available from http://www.colgate.com/app/Colgate/US/Corp/History/1806.cvsp.
62. A comparison of active and passive investment strategies. [cited 1/9 2009]. Available from http://www.evansonasset.com/index.cfm/Page/2.htm.
63. ConocoPhillips- who we are. [cited 9/21 2008]. Available from http://www.conocophillips.com/about/who we are/index.htm.
64. A consumer's guide to small business investments. [cited 1/9 2009]. Available from http://www.wdfi.org/ymm/sbic/brochures/small business investment.htm.
65. Convertible arbitrage. [cited 1/9 2009]. Available from http://en.wikipedia.org/wiki/Convertible arbitrage.
66. Corporate overview. [cited 9/21 2008]. Available from http://ir.take2games.com/index.cfm.
67. Diamond offshore- our company. [cited 9/21 2008]. Available from http://www.diamondoffshore.com/ourCompany/ourcompany overview.php.
68. Directories of stock exchanges. [cited 10/24 2008]. Available from http://directories.globalcustodian.com/directories/index.jsf/Stock+Exchanges.
69. Distressed securities. [cited 1/9 2009]. Available from http://en.wikipedia.org/wiki/Distressed securities.
70. Diversification. [cited 12/13 2008]. Available from http://www.investopedia.com/terms/d/diversification.asp?viewed=1.
71. eBay - the world's online marketplace. [cited 10/4 2008]. Available from http://pages.ebay.com/aboutebay/thecompany/companyoverview.html.
72. Equity market neutral. [cited $1 / 9$ 2009]. Available from http://en.wikipedia.org/wiki/Equity market_neutral.
73. E-trade. [cited 12/13 2008]. Available from http://en.wikipedia.org/wiki/E*TRADE.
74. Evergreen solar - company. [cited 9/27 2008]. Available from http://www.evergreensolar.com/app/en/company/.
75. Fidelity investments. [cited 12/13 2008]. Available from http://en.wikipedia.org/wiki/Fidelity Investments.
76. GameStop. [cited 9/28 2008]. Available from http://en.wikipedia.org/wiki/Gamestop.
77. GameStop corp. [cited 9/28 2008]. Available from http://finance.yahoo.com/echarts?s=GME\#.
78. GE - our company. [cited 10/4 2008]. Available from http://www.ge.com/company/businesses/index.html.
79. GE - our company. [cited 10/4 2008]. Available from http://www.ge.com/company/index.html.
80. General mills: Company overview. [cited 9/27 2008]. Available from http://www.generalmills.com/corporate/company/overview.aspx.
81. General motors. [cited 10/1 2008]. Available from http://www.gm.com/corporate/about/history/.
82. General motors. [cited 10/1 2008]. Available from http://media.gm.com/servlet/GatewayServlet?target=http://image.emerald.gm.co

83. General motors. [cited 10/1 2008]. Available from http://www.gm.com/corporate/investor_information/docs/fin_data/gm07ar/downl oad/gm07ar_financialhighlights.pdf.
84. General motors. [cited 10/1 2008]. Available from $\underline{\mathrm{http}}: / /$ finance.yahoo.com/echarts?s=GM\#chart1:symbol=gm;range=1d;indicator= volume;charttype $=$ line $;$ crosshair $=$ on $;$ ohlcvalues $=0 ; \operatorname{logscale}=$ on $;$ source $=$ undefined..
85. Global market turmoil continues after the rejection of the mortgage-rescue plan in America. [cited 9/30 2008]. Available from http://www.economist.com/finance/displaystory.cfm?story id=12329351.
86. Goldman Sachs - about us. [cited 9/29 2008]. Available from http://www2.goldmansachs.com/our-firm/about-us/index.html.
87. Google. [cited 9/28 2008]. Available from http://en.wikipedia.org/wiki/Google.
88. Google inc. [cited 9/28 2008]. Available from http://finance.yahoo.com/echarts?s=GOOG\#.
89. GulfMark offshore- about GulfMark. [cited 9/21 2008]. Available from http://www.gulfmark.com/about.php.
90. H.J. Heinz company. [cited 9/28 2008]. Available from http://en.wikipedia.org/wiki/H. J._Heinz_Company.
91. H.J. Heinz co. [cited 9/28 2008]. Available from http://finance.yahoo.com/echarts?s=HNZ\#.
92. Hedge fund. [cited 1/9 2009]. Available from http://en.wikipedia.org/wiki/Hedge fund.
93. Hedge fund. [cited 1/9 2009]. Available from http://www.investopedia.com/terms/h/hedgefund.asp.
94. The history of Hasbro, inc. [cited 9/27 2008]. Available from http://www.hasbro.com/default.cfm?page=ci history hasbro.
95. History of Sun Power. [cited 9/21 2008]. Available from http://www.sunpowercorp.com/About-Us/History.aspx.
96. Honda motor company. [cited 9/27 2008]. Available from http://finance.google.com/finance?q=HMC.
97. Honda motor company. [cited 9/27 2008]. Available from http://world.honda.com/profile/overview/.
98. Honda motor company. [cited 9/27 2008]. Available from http://en.wikipedia.org/wiki/Honda.
99. Honda motor company [cited 9/27 2008]. Available from http://www.reuters.com/finance/stocks/companyProfile?symbol=HMC.N\&rpc=66.
100. How do bonds work? [cited 11/23 2008]. Available from http://money.howstuffworks.com/personal-finance/budgeting/bonds.htm.
101. How to keep more of your investment income. [cited $1 / 9$ 2009]. Available from http://moneycentral.msn.com/content/Taxes/Taxshelters/P33601.asp.
102. IBM archives - valuable resources on IBM's history. [cited 10/4 2008]. Available from http://www-03.ibm.com/ibm/history/.
103. Individual stocks or mutual funds... which are best for me? [cited 11/23 2008]. Available from http://googolplex.cuna.org/12433/cnote/article.php?doc id=1729.
104. Individual stocks vs. index funds. [cited 11/23 2008]. Available from http://ezinearticles.com/?Individual-Stocks-Vs-Index-Funds\&id=1679931.
105. Intel corporation. [cited 9/21 2008]. Available from
http://finance.yahoo.com/echarts?s=INTC\#.
106. Intel corporation. [cited 9/21 2008]. Available from http://en.wikipedia.org/wiki/Intel.
107. Investing in your future. [cited $1 / 9$ 2009]. Available from http://www.ucop.edu/treasurer/publications/Invest.pdf.
108. Investing online. [cited 12/13 2008]. Available from http://en.wikipedia.org/wiki/Investing_online.
109. Investment basics - minimizing investment taxes. [cited 1/9 2009]. Available from https://www.wellsfargo.com/investing/basics/minimize_taxes.
110. Investment philosophy. [cited 1/9 2009]. Available from http://www.portfoliosolutions.com/strategy.html.
111. Investment tips: Investment strategies for after retirement. [cited 1/9 2009]. Available from http://www.essortment.com/career/investmenttips sfmy.htm.
112. Investopedia help section. [cited 12/13 2008]. Available from http://www.investopedia.com/ask/answers/131.asp.
113. Johnson \& Johnson history. [cited 9/20 2008]. Available from http://www.jnj.com/connect/about-jnj/company-history/.
114. JP Morgan chase and co. - about JPMorgan chase. [cited 9/26 2008]. Available from $\underline{\text { http://www.jpmorganchase.com/cm/cs?pagename=}=\text { Chase/Href\&urlname=jpmc/abo }}$ ut.
115. The $\mathrm{k} @$ mille project. [cited 10/24 2008]. Available from http://kamille.com/.
116. Kellogg company - Kellogg history. [cited 9/27 2008]. Available from http://www.kelloggcompany.com/company.aspx? $\mathrm{id}=39$.
117. Konami corp. [cited 9/27 2008]. Available from Konami Corp.
118. Konami corp. [cited 9/27 2008]. Available from http://www.reuters.com/finance/stocks/companyProfile?symbol=KNM.N\&rpc=66.
119. Konami corp. [cited 9/27 2008]. Available from http://www.konami.com/.
120. Konami corp. [cited 9/27 2008]. Available from http://en.wikipedia.org/wiki/Konami.
121. Kraft. [cited 10/1 2008]. Available from http://www.kraft.com/About/history/.
122. Kraft. [cited 10/1 2008]. Available from http://finance.yahoo.com/echarts?s=KFT\#chart1:symbol=kft;range=1d;indicator=v olume;charttype=line;crosshair=on;ohlcvalues=0;logscale=on;source=undefined.
123. Kraft. [cited 10/1 2008]. Available from http://phx.corporate-ir.net/phoenix.zhtml?c=129070\&p=irol-newsArticle\&ID=1179876\&highlight=.
124. Legal definition of limited partnership. [cited 12/7 2008]. Available from http://legal-dictionary.thefreedictionary.com/limited+partnership.
125. LG electronics USA - company profile, facts \& figures. [cited 9/27 2008]. Available from http://us.lge.com/about/company/facts figures.jsp.
126. Limited partnership. [cited $12 / 7$ 2008]. Available from http://en.wikipedia.org/wiki/Limited partnership.
127. Limited partnership. [cited 12/7 2008]. Available from http://www.quickmba.com/law/partnership/limited/.
128. Limited partnership information. [cited 12/7 2008]. Available from http://www.sec.state.ma.us/cor/corpweb/corlp/lpinf.htm.
129. Lockheed martin - about us \& history. [cited 10/4 2008]. Available from http://www.lockheedmartin.com/aboutus/index.html.
130. Lockheed martin - about us \& history. [cited 10/4 2008]. Available from http://www.lockheedmartin.com/aboutus/history/timeline/index.html.
131. Lockheed martin corporation. [cited 9/27 2008]. Available from http://www.reuters.com/finance/stocks/companyProfile?symbol=LMT.N\&rpc=66.
132. Lockheed martin corporation. [cited 9/27 2008]. Available from http://en.wikipedia.org/wiki/Lockheed.
133. Lockheed martin corporation. [cited 9/27 2008]. Available from http://finance.google.com/finance?q=NYSE:LMT.
134. Market valuation report. [cited 10/24 2008]. Available from http://www.padfiles.net/values.php.
135. Microsoft. [cited 9/21 2008]. Available from http://en.wikipedia.org/wiki/Microsoft.
136. Microsoft corporation. [cited 9/21 2008]. Available from http://finance.google.com/finance?client=ob\&q=NASDAQ:MSFT.
137. Molson Coors brewing company-graph for September 18, 2008. [cited 9/18 2008]. Available from http://finance.yahoo.com/echarts?s=TAP\#symbol=TAP;range=1d.
138. Molson Coors second quarter results. [cited 9/18 2008]. Available from http://www.molsoncoors.com/newsroom/press-releases/19-2008/504-molson-coors-reports-second-quarter-2008-financial-results.
139. More baby steps for individual stock picking: Investing in what you know and holding it. [cited 11/23 2008]. Available from
http://www.thesimpledollar.com/2007/07/17/more-baby-steps-for-individual-stock-picking-investing-in-what-you-know-and-holding-it/.
140. Morgan Stanley- company information. [cited 9/26 2008]. Available from http://www.morganstanley.com/about/company/index.html.
141. MSN money- ConocoPhillips. [cited 9/21 2008]. Available from http://moneycentral.msn.com/detail/stock_quote?Symbol=cop.
142. MSN money- diamond offshore. [cited 9/21 2008]. Available from http://moneycentral.msn.com/detail/stock quote?Symbol=do.
143. MSN money- Goldman Sachs. [cited 9/26 2008]. Available from http://moneycentral.msn.com/detail/stock quote?Symbol=gs.
144. MSN money- GulfMark offshore. [cited 9/21 2008]. Available from http://moneycentral.msn.com/detail/stock quote?Symbol=glf.
145. MSN money- Morgan chase and co. [cited 9/26 2008]. Available from http://moneycentral.msn.com/detail/stock_quote?Symbol=jpm.
146. MSN money- Morgan Stanley. [cited 9/26 2008]. Available from http://moneycentral.msn.com/detail/stock_quote?Symbol=ms.
147. MSN money- superior energy. [cited 9/26 2008]. Available from http://moneycentral.msn.com/detail/stock quote?Symbol=spn.
148. MSN money-Charles Schwab. [cited 9/26 2008]. Available from http://moneycentral.msn.com/detail/stock quote?Symbol=schw.
149. MSN money-Exxon Mobil. [cited 9/21 2008]. Available from http://moneycentral.msn.com/detail/stock quote?Symbol=xom.
150. MSN money-TJX. [cited 9/21 2008]. Available from http://moneycentral.msn.com/detail/stock quote?Symbol=tjx.
151. Mutual funds versus individual stock picking: Which is right for you? Available from $\underline{\mathrm{http}}: / /$ www.thesimpledollar.com/2007/03/30/mutual-funds-versus-individual-stock-picking-which-is-right-for-you/.
152. New York stock exchange - listings. [cited 10/24 2008]. Available from http://www.nyse.com/about/listed/1170350259411.html.
153. NYSE securities. [cited 10/4 2008]. Available from http://www.nasdaq.com/asp/symbols.asp?exchange=N\&start=F\&page=2\&sort=na me\&Type=0.
154. Pentair, inc. - investor relations - overview. [cited 9/27 2008]. Available from http://phx.corporate-ir.net/phoenix.zhtml?c=105908\&p=irol-irhome.
155. Quote - 3M. [cited 9/20 2008]. Available from http://community.investopedia.com/stocks/MMM.
156. Quote - activation. [cited 9/27 2008]. Available from http://community.investopedia.com/stocks/ATV.
157. Quote - apple inc. [cited 10/4 2008]. Available from http://community.investopedia.com/q.aspx?s=AAPL.
158. Quote - Bank Atlantic Bancorp. [cited 9/29 2008]. Available from http://community.investopedia.com/q.aspx?s=BBX.
159. Quote - citigroup. [cited 9/29 2008]. Available from http://community.investopedia.com/q.aspx?s=C.
160. Quote - citizens trust. [cited 10/1 2008]. Available from http://community.investopedia.com/q.aspx?s=CZN-.
161. Quote - diamonds trust SR 1 ETF. [cited 10/1 2008]. Available from http://community.investopedia.com/q.aspx?s=DIA.
162. Quote - eBay inc. [cited 10/2 2008]. Available from http://community.investopedia.com/q.aspx?s=EBAY.
163. Quote - evergreen solar. [cited 9/27 2008]. Available from http://community.investopedia.com/stocks/ESLR.
164. Quote - GE. [cited 10/1 2008]. Available from http://community.investopedia.com/q.aspx?s=GE.
165. Quote - Google. [cited 10/1 2008]. Available from http://community.investopedia.com/q.aspx?s=GOOG.
166. Quote - IBM. [cited 9/30 2008]. Available from http://community.investopedia.com/q.aspx?s=IBM.
167. Quote - Infosys. [cited 9/20 2008]. Available from http://community.investopedia.com/stocks/INFY.
168. Quote - LG display. [cited 9/27 2008]. Available from http://community.investopedia.com/stocks/LPL.
169. Quote - Lockheed martin. [cited 10/1 2008]. Available from http://community.investopedia.com/q.aspx?s=LMT.
170. Quote - RYDEX IV 2X S\&P SSE ETF. [cited 9/29 2008]. Available from http://community.investopedia.com/q.aspx?s=REC.
171. Quote - SanDisk. [cited 9/27 2008]. Available from http://community.investopedia.com/stocks/SNDK.
172. Quote - staples inc. [cited 9/30 2008]. Available from http://community.investopedia.com/q.aspx?s=SPLS.
173. Quote - US gold. [cited 9/27 2008]. Available from http://community.investopedia.com/stocks/UXG.
174. Quote - US oil. [cited 9/27 2008]. Available from http://community.investopedia.com/stocks/USO.
175. Quote - yahoo! inc (YHOO). [cited 9/20 2008]. Available from http://community.investopedia.com/stocks/YHOO.
176. Quote- Goldman Sachs. [cited 9/29 2008]. Available from http://community.investopedia.com/q.aspx?s=GS.
177. Raytheon. [cited 10/1 2008]. Available from http://www.raytheon.com/ourcompany/history/leadership/index.html.
178. Raytheon. [cited 10/1 2008]. Available from http://library.corporateir.net/library/84/841/84193/items/301490/Q208_Earnings_Release.pdf.
179. Raytheon. [cited 10/1 2008]. Available from http://finance.yahoo.com/echarts?s=RTN\#chart1:symbol=rtn;range=1d;indicator=v olume;charttype=line;crosshair=on;ohlcvalues=0;logscale=on;source=undefined.
180. Reuters - world stock exchange hit by L\$3.2 million theft. [cited 10/24 2008]. Available from http://secondlife.reuters.com/stories/2007/07/25/world-stock-exchange-hit-by-132-million-theft/.
181. Rydex investments - ETF profiles. [cited 10/4 2008]. Available from http://www.rydexfunds.com/ETFCenter/products/overview.rails?rydex_symbol=R EC.
182. SanDisk corporate - about SanDisk corporation. [cited 9/27 2008]. Available from http://www.sandisk.com/Corporate/About/.
183. Scalp trading - active investing strategy. [cited 1/9 2009]. Available from http://www.mysmp.com/day-trading/scalp-trading.html.
184. Scottrade. [cited 12/13 2008]. Available from http://en.wikipedia.org/wiki/Scottrade.
185. Second life - currency exchange. [cited 10/24 2008]. Available from http://secondlife.com/whatis/currency.php.
186. Sherwin Williams. [cited 10/1 2008]. Available from http://excellence.sherwin.com/history timeline.html.
187. Sherwin Williams. [cited 10/1 2008]. Available from http://www2.sherwinwilliams.com/investorrelations/.
188. Sherwin Williams. [cited 10/1 2008]. Available from http://www2.sherwinwilliams.com/investorrelations/Quarterly_Reports/1Q2008.pdf.
189. Sherwin Williams. [cited 10/1 2008]. Available from http://finance.yahoo.com/echarts?s=SHW\#chart1:symbol=shw;range=1d;indicator= volume; charttype $=$ line; crosshair $=$ on;ohlcvalues $=0 ; \operatorname{logscale}=$ on;source $=$ undefined..
190. Short selling. [cited 12/13 2008]. Available from http://en.wikipedia.org/wiki/Short selling.
191. Should you own stocks or mutual funds. [cited 11/23 2008]. Available from http://stocks.about.com/od/investing101/a/Youownstocks.htm.
192. Small business. [cited 1/9 2009]. Available from http://en.wikipedia.org/wiki/Small business.
193. Small business investment companies. [cited 1/9 2009]. Available from http://www.smallbusinessnotes.com/financing/sbic.html.
194. Sony corporation. [cited 9/27 2008]. Available from http://www.sony.net/.
195. Sony corporation. [cited 9/27 2008]. Available from http://finance.google.com/finance?q=SNE+\(Sony+Corp\)\&hl=en.
196. Sony corporation. [cited 9/27 2008]. Available from http://en.wikipedia.org/wiki/Sony.
197. Staples inc. [cited 9/28 2008]. Available from http://en.wikipedia.org/wiki/Staples Inc.
198. Staples, inc. [cited 9/28 2008]. Available from http://finance.yahoo.com/echarts?s=SPLS\#.
199. Staples.com - about us information. [cited 10/4 2008]. Available from http://www.staples.com/sbd/cre/marketing/about us/index.html.
200. Stock option trading in your IRA. [cited 1/9 2009]. Available from http://www.terrystips.com/stock_calls.shtml.
201. SunPower. [cited 9/21 2008]. Available from http://en.wikipedia.org/wiki/Sunpower.
202. SunPower corporation. [cited 9/21 2008]. Available from http://finance.yahoo.com/echarts?s=SPWR\#.
203. Superior energy- company history. [cited 9/26 2008]. Available from http://www.superiorenergy.com/about/history/.
204. Take-two interactive. [cited 9/21 2008]. Available from http://en.wikipedia.org/wiki/Take-Two_Interactive.
205. Take-two interactive software inc. [cited 9/21 2008]. Available from http://finance.yahoo.com/echarts?s=TTWO\#.
206. Tax and investment strategy. [cited 1/9 2009]. Available from http://www.newyorklife.com/cda/0,3254,11539,00.html.
207. TD Ameritrade. [cited 12/13 2008]. Available from http://en.wikipedia.org/wiki/Ameritrade.
208. TJX- about us. [cited 9/21 2008]. Available from http://www.tjx.com/about.asp.
209. Today, "Goldman, Morgan Stanley discloses subprime loans". [cited 9/26 2008]. Available from http://www.usatoday.com/money/economy/housing/2008-01-29-goldman-ms-subprime_N.htm.
210. Toyota. [cited 10/1 2008]. Available from http://www.toyota.co.jp/en/history/index.html.
211. Toyota. [cited 10/1 2008]. Available from http://finance.yahoo.com/echarts?s=TM\#chart1:symbol=tm;range=1d;indicator=vol ume;charttype=line;crosshair=on;ohlcvalues=0;logscale=on;source=undefined.
212. Toyota. [cited 10/1 2008]. Available from http://www.toyota.co.jp/en/news/08/0807 1.html.
213. Tupperware brands: Heritage. [cited 9/27 2008]. Available from http://www.tupperwarebrands.com/company-heritage.html.
214. United states oil fund (ETF) on Google finance. [cited 9/27 2008]. Available from http://finance.google.com/finance?client=ob\&q=AMEX:USO.
215. United technology corporation. [cited 9/27 2008]. Available from http://en.wikipedia.org/wiki/United Technologies_Corporation.
216. United technology corporation. [cited 9/27 2008]. Available from http://finance.google.com/finance?q=NYSE:UTX.
217. United technology corporation. [cited 9/27 2008]. Available from $\underline{\mathrm{http}: / / \mathrm{www} . r e u t e r s . c o m / f i n a n c e / s t o c k s / c o m p a n y P r o f i l e ? s y m b o l=U T X . N \& r p c=66 . ~}$
218. US gold - about us. [cited 9/27 2008]. Available from http://www.usgold.com/about/.
219. USEC. [cited 9/27 2008]. Available from http://finance.google.com/finance?q=usu.
220. USEC. [cited 9/27 2008]. Available from $\underline{\mathrm{http}: / / \mathrm{www} . r e u t e r s . c o m / f i n a n c e / s t o c k s / c o m p a n y P r o f i l e ? s y m b o l=U S U . N \& r p c=66 . ~}$
221. USEC. [cited 9/27 2008]. Available from http://en.wikipedia.org/wiki/USEC.
222. Verizon communications. [cited 9/27 2008]. Available from http://finance.google.com/finance?q=vz.
223. Verizon communications. [cited 9/27 2008]. Available from http://www.reuters.com/finance/stocks/companyProfile?symbol=VZ.N\&rpc=66.
224. Verizon communications. [cited 9/27 2008]. Available from http://en.wikipedia.org/wiki/Verizon_Communications.
225. Verizon communications. [cited 9/27 2008]. Available from http://en.wikipedia.org/wiki/Verizon_Communications.
226. Wal-mart. [cited 9/28 2008]. Available from http://en.wikipedia.org/wiki/WalMart.
227. Wal-mart stores inc. [cited 9/28 2008]. Available from http://finance.yahoo.com/echarts?s=WMT\#.
228. Wal-mart stores, inc. - history timeline. [cited 9/20 2008]. Available from http://walmartstores.com/AboutUs/7603.aspx.
229. The Walt Disney company. [cited 9/27 2008]. Available from http://en.wikipedia.org/wiki/The Walt Disney Company.
230. The Walt Disney company. [cited 9/27 2008]. Available from http://www.reuters.com/finance/stocks/companyProfile?symbol=DIS.N\&rpc=66.
231. The Walt Disney company. [cited 9/27 2008]. Available from http://finance.google.com/finance?q=dis.
232. Welcome to Bank Atlantic Bancorp. [cited 9/29 2008]. Available from http://www.bankatlanticbancorp.com/.
233. Welcome to our home-Heinz. [cited 9/28 2008]. Available from http://www.heinz.com/.
234. What is small business. [cited 1/9 2009]. Available from http://www.sba.gov/services/contractingopportunities/sizestandardstopics/size/inde x.html.
235. Who we are-staples. [cited 9/28 2008]. Available from http://www.staples.com/sbd/cre/marketing/about us/index.html.
236. Wikipedia - stock market simulator. [cited 11/19 2008]. Available from http://en.wikipedia.org/wiki/Stock market simulator.
237. Wikipedia - stock exchange. [cited 10/24 2008]. Available from http://en.wikipedia.org/wiki/Stock_exchange.
238. World stock exchange. [cited 10/24 2008]. Available from http://www.wselive.com/.
239. Yahoo! inc.- company overview. [cited 9/20 2008]. Available from http://yhoo.client.shareholder.com/press/overview.cfm.
240. Ackerman, Evan. 3m MPro1 10 handheld projector. [cited 9/27 2008]. Available from http://www.ohgizmo.com/2008/09/15/3m-mpro110-handheld-projector-ships-in-2-weeks/.
241. Aitken, Michael J., Alex Frino, Michael S. McCorry, and Peter L. Swan. 1998. Short sales are almost instantaneously bad news: Evidence from the Australian stock exchange. The Journal of Finance 53, (6) (Dec.): 2205-23, http://www.jstor.org/stable/117466.
242. AP Report. MSNBC: After volatile day, Dow ends its worst week. [cited 10/10 2008]. Available from http://www.msnbc.msn.com/id/3683270/.
243. Asensio, Manuel. 2001. Sold short: Uncovering deception in the markets. New York, New York: Wiley.
244. Balasubramanian, Sridhar, Prabhudev Konana, and Nirup M. Menon. 2003. Customer satisfaction in virtual environments: A study of online investing. Management Science 49, (7) (Jul.): 871-89, http://www.jstor.org/stable/4133963.
245. -. 2003. Customer satisfaction in virtual environments: A study of online investing. Management Science 49, (7) (Jul.): 871-89, http://www.jstor.org/stable/4133963.
246. Banaji, Jairus. 2003. Islam, the Mediterranean and the rise of capitalism. Paper presented at
Theory as history: Ernest Mandel's Historical Analysis of World Capitalism, Amsterdam.
247. Barber, Brad M., and Terrance Odean. 2002. Online investors: Do the slow die first? The Review of Financial Studies 15, (2, Special Issue: Conference on Market Frictions and Behavioral Finance): 455-87, http://www.jstor.org/stable/2696785.
248. Barr, Alistair. Market Watch, "Morgan Stanley reports new subprime-related hit". [cited 9/26 2008]. Available from
http://www.marketwatch.com/news/story/morgan-stanley-reports-new-
37/story.aspx? guid=\%7B84AE5381-B041-478D-BD71-
9A93B4670052\%7D\&siteid=yhoof.
249. Block, Ralph L. 2002. Investing in REITs: real estate investment trusts. Princeton, NJ: Bloomberg Press.
250. Bowyer, John W. 1966. Investment analysis and management. Homewood, Illinois: Richard D. Irwin, Inc.
251. Bray, Chad. States urge MillerCoors to scrap caffeinated drink. in The Wall Street Journal [database online]. New York, 2008 [cited 9/18 2008]. Available from http://online.wsj.com/article/SB122168951163649657.html?mod=yahoo hs\&ru=ya hoo.
252. Brent, Averil, Dale Morse, and E. Kay Stice. 1990. Short interest: Explanations and tests. The Journal of Financial and Quantitative Analysis 25, (2) (Jun.): 273-89, http://www.jstor.org/stable/2330829.
253. -. 1990. Short interest: Explanations and tests. The Journal of Financial and Quantitative Analysis 25, (2) (Jun.): 273-89, http://www.jstor.org/stable/2330829.
254. Brown, Jason. 2006. How economics affect stocks. 12/13, http://e-articles.info/e/a/title/How-economics-affects-stocks/ (accessed 11/2/2008).
255. Christophe, Stephen E., Michael G. Ferri, and James J. Angel. 2004. Short-selling prior to earnings announcements. The Journal of Finance 59, (4) (Aug.): 1845-75, http://www.jstor.org/stable/3694880.
256. Crowell, Richard A. 1977. Stock market strategy. New York, New York: McGrawHill, Inc.
257. Dwinell, Joe. 2008. False report of jobs’ illness sends apple stock tumbling. Boston Herald, 10/4, 2008.
258. Edelman, Ric. 2003. The truth about money. 3rd ed. New York, New York: Harper Business.
259. Egan, Matt. Fox business: Dow dives 733; worst loss since 1987. [cited 10/16 2008]. Available from http://www.foxbusiness.com/story/markets/futures-decline-earnings-return-prominance/.
260. -. Fox business: Dow dives 733; worst loss since 1987. [cited 10/26 2008]. Available from http://www.foxbusiness.com/story/markets/futures-decline-earnings-return-prominance/.
261. Epstein, Lita. 2005. Reading financial reports for dummies. Hoboken, NJ: Wiley Publishing, Inc.
262. Fabozzi, Frank J. 2004. Short selling: strategies, risks, and rewards. Hoboken, N.J: Wiley.
263. Foo, Jag. Long term investing vs. short term trading. [cited 12/7 2008]. Available from http://stocksforgrads.com/investing-basics/long-term-investing-vs-short-termtrading/.
264. Fung, William, and David A. Hsieh. 2001. The risk in hedge fund strategies: Theory and evidence from trend followers. The Review of Financial Studies 14, (2) (Summer): 313-41, http://www.jstor.org/stable/2696743.
265. Geisst, Charles R. 1997. Wall street: A history. New York: Oxford University Press.
266. Gerlach, Douglas. 2000. The complete idiot's guide to online investing. 2nd ed. Indianapolis, IN: Que.
267. Gordon J. Alexander. 1993. Short selling and efficient sets. The Journal of Finance 48, (4) (Sep.): 1497-506, http://www.jstor.org/stable/2329048.
268. Haight, G. Timothy and Ford, Deborah Ann. 1987. REITs: new opportunities in real estate investment trust securities. Chicago, Il: Probus Pub. Co.
269. Haller, Leon. Making sense of accounting information. New York, New York: Van Nostrand Reinhold Company Inc.
270. Leffler, George L. 1963. The stock market. New York: The Ronald Press Company.
271. Leher, Jim. PBS newshour: News summary. Available from http://www.pbs.org/newshour/news summaries.
272. Levy, Judith. Diamond in the rough: Investors keen on dow ETF. [cited 10/1 2008]. Available from http://seekingalpha.com/article/18978-diamond-in-the-rough-investors-keen-on-dow-etf.
273. Liang, Bing, On the Performance of Hedge Funds (May 1998). Available at SSRN: http://ssrn.com/abstract=89490 or DOI: 10.2139/ssrn. 89490
274. Livingston, Miles. 1999. Bonds and bond derivatives. Malden, MA: Blackwell Publishers Inc.
275. Malkiel, Burton G. 2007. A random walk down wall street. New York: W.W. Norton and Company.
276. Markstein, David L. How to make your money do more. New York, New York: Trident Press.
277. Miller, Donald E. 1972. The meaningful interpretation of financial statements. New York, New York: American Management Association.
278. Mullaney, John A. 1998. REITs: Building profits with real estate investment trusts. New York, New York: Wiley.
279. Mullins, Luke. 2008. 5 reasons the house passed the bailout bill U.S. News (10/3), http://www.usnews.com/blogs/the-home-front/2008/10/3/5-reasons-the-house-passed-the-bailout-bill.html?s_cid=rss:the-home-front:5-reasons-the-house-passed-the-bailout-bill (accessed 11/2/2008).
280. Mussi, John. Comparing short-term and long-term investments. [cited 12/7 2008]. Available from http://designedby.finalsense.com/learning/investment/comparing_short term.htm.
281. Philippe Jorion and Sarkis Joseph Khoury. 1996. Financial risk management. Cambridge, MA: Blackwell Publisher Inc.
282. Reuters. 2008. Oil falls below $\$ 107$ after record one-day surge. Forbes, September 23, 2008. http://www.forbes.com/reuters/feeds/reuters/2008/09/23/2008-0923T092213Z_01_SYD221917_RTRIDST 0 MARKETS-OIL-UPDATE-5.html.
283. Salter, Jessica. 2008. First 'Google phone' will cost \$199. UK Telegraph, 9/19, 2008.
284. Senchack, A. J., Jr., and Laura T. Starks. 1993. Short-sale restrictions and market reaction to short-interest announcements. The Journal of Financial and Quantitative Analysis 28, (2) (Jun.): 177-94, http://www.jstor.org/stable/2331285.
285. Smedts, Kristien and Jan, Dynamic Investment Strategies of Hedge Funds (2006). ; K.U. Leuven AFI Working Paper No. 0622. Available at SSRN: http://ssrn.com/abstract=958879
286. Staley, Kathryn F. 1997. The art of short selling. New York, New York: Wiley.
287. Thomsett, Michael C. 2001. Mastering online investing. Chicago, IL: Dearborn Trade.
288. Tom Bawden, Susan T. Online, "Goldman Sachs makes $\$ 4 \mathrm{bn}$ profit on daring subprime bet". [cited 9/26 2008]. Available from
http://business.timesonline.co.uk/tol/business/industry sectors/banking and financ e/article3054952.ece.
289. Tracy, John A. How to read a financial report: Wringing cash flow and other vital signs out of the numbers. New York, New York: John Wiley \& Sons.
290. Twin, Alexandra. 2008. Stocks crushed. CNNMoney.com, 9/29, 2008. http://money.cnn.com/2008/09/29/markets/markets newyork/index.htm?postversio $\underline{\mathrm{n}=2008092918}$ (accessed 11/2/2008).
291. Tyson, Eric. 1999. Investing for dummies, $2^{\text {nd }}$ edition. New York, New York: Hungry Minds Inc.
292. Vause, Bob. Guide to analyzing companies. London, England: Profile Books Ltd.
293. Konami Corporation. Available from
http://finance.google.com/finance?q=NYSE:KNM
294. Nuclear Solutions Inc. Available from http://www.goldmood.com/cosmos/h/NSOL.OB.html
295. Nuclear Solutions Inc. Available from http://www.nuclearsolutions.com/about.html
296. Nuclear Solutions Inc. Available from http://finance.google.com/finance?q=OTC:NSOL
297. Wikipedia - Occidental Petroleum. Available from http://en.wikipedia.org/wiki/Occidental_Petroleum
298. Occidental Petroleum. Available from http://www.oxy.com/About_Oxy/Pages/overview.aspx
299. Occidental Petroleum. Available from http://finance.google.com/finance?hl=en\&fkt=671\&fsdt=983\&q=Occidental\ Pe troleum\%20Corporation\&um=1\&ie=UTF-8\&sa=N\&tab=we
300. Visa Inc. Available from http://www.corporate.visa.com/av/main.jsp?src=home
301. Wikipedia - Visa Inc. Available from http://en.wikipedia.org/wiki/Visa_(company)
302. Fuchs, Marek. The Street.com "Don't be so down on Disney". Available from http://www.thestreet.com/story/10440186/1/dont-be-so-down-ondisney.html?puc=googlen\&cm_ven=GOOGLEN\&cm_cat=FREE\&cm_ite=NA
303. Ranade, Malini. Top News.in "Titan Industries Ink Long Term Pact with United Technologies Arm." Available from
http://www.topnews.in/titan-industries-inks-longterm-pact-united-technologies-arm-271596
304. http://www.forbes.com/feeds/ap/2008/09/26/ap5475804.html
305. United Technologies Corporation. Available from http://finance.google.com/finance?q=NYSE:UTX\&morenews=10\&rating=1\&origi $\mathrm{n}=10$
306. Market Watch. "Verizon Wireless scores highest". Available from http://www.marketwatch.com/news/story/verizon-wireless-scores-highest-
307. Verizon Wireless. Available from http://finance.google.com/finance?q=NYSE:VZ\&morenews=10\&rating=1\&origin= 10
308. Wikipedia - Mutual Fund. Available from http://en.wikipedia.org/wiki/Mutual_fund
309. Table of Small Business Size Standards. Available from http://www.sba.gov/idc/groups/public/documents/sba_homepage/serv_sstd_tablepd f.pdf
310. The Great Investors - Warren Buffet. [Cited 12/13/2008]. Available from http://www.investopedia.com/university/greatest/warrenbuffett.asp
311. Mladjenovic, Paul. 2006. Stock Investing for Dummies, 2 ${ }^{\text {nd }}$ Edition. Hoboken, NewYork: Wiley Publishing, Inc.
312. Twin, Alexandra. Stocks crushed: Approximately $\$ 1.2$ trillion in market value is gone after the House rejects the $\$ 700$ billion bank bailout plan. Available from http://money.cnn.com/2008/09/29/markets/markets_newyork/index.htm
313. Mullin, Luke. 5 Reasons the House Passed the Bailout Bill. Available from http://www.usnews.com/blogs/the-home-front/2008/10/3/5-reasons-the-house-passed-the-bailout-bill.html

## Appendix 1

List of Stock Exchanges by Country:

## Africa

## Botswana

- Botswana Stock Exchange (BSE)


## Cameroon

- Douala Stock Exchange (DSX)


## Cape Verde

- Bolsa de Valores de Cabo Verde (BVC)


## Egypt

- Cairo \& Alexandria Stock Exchange (CASE)


## Ghana

- Ghana Stock Exchange (GSE)


## Kenya

- Nairobi Stock Exchange (NSE)


## Malawi

- Malawi Stock Exchange (MSE)


## Mauritius

- The Stock Exchange of Mauritius (SEM)


## Morocco

- Casablanca Stock Exchange

Mozambique

- Maputo Stock Exchange


## Namibia

- Namibian Stock Exchange (NSX)


## Nigeria stock exchange forlagos

- Nigerian Stock Exchange
- Abuja Stock Exchange


## South Africa

- JSE Securities Exchange / Johannesburg Stock Exchange (JSE)
- JSE Alternative Exchange (ALTX)
- The South African Futures Exchange (SAFEX)
- Bond Exchange of South Africa (BESA)


## Sudan

- Khartoum Stock Exchange (KSE)


## Swaziland

- Swaziland Stock Exchange (SSX)


## Tanzania

- Dar-es-Salaam Stock Exchange (DSE)


## Tunisia

- Bourse de Tunis (BVMT)


## Uganda

- Uganda Securities Exchange (USE)


## West Africa

- Bourse Regionale des Valeurs Mobilieres (BRVM)


## Zambia

- Lusaka Stock Exchange (LuSE)


## Zimbabwe

- Zimbabwe Stock Exchange (ZSE)


## Oceania

## Australia

- Australia Pacific Exchange (APX)
- Australian Securities Exchange (ASX)
- Bendigo Stock Exchange (BSX)
- National Stock Exchange of Australia (NSX) formerly Newcastle Stock Exchange
- Sydney Futures Exchange (SFE)


## Fiji

- South Pacific Stock Exchange (SPSE), formerly the Suva Stock Exchange


## New Zealand

- New Zealand Exchange Limited (NZX)


## Papua New Guinea

- Port Moresby Stock Exchange Limited (POMSoX)


## Asia

## Afghanistan

- Kabul International Stock Exchange


## Bahrain

- Bahrain Stock Exchange


## Bangladesh

- Chittagong Stock Exchange
- Dhaka Stock Exchange


## People's Republic of China

- Shanghai Stock Exchange
- Shenzhen Stock Exchange


## Hong Kong

- Hong Kong Exchanges and Clearing (HKEx)


## India

- Ahmedabad Stock Exchange
- Bangalore Stock Exchange
- Bhubaneshwar Stock Exchange
- Bombay Stock Exchange (BSE)
- Calcutta Stock Exchange
- Cochin Stock Exchange
- Coimbatore Stock Exchange
- Delhi Stock Exchange Association
- Gawahati Stock Exchange
- Hyderabad Stock Exchange (HSE)
- Inter-connected Stock Exchange of India
- Jaipur Stock Exchange
- Ludhiana Stock Exchange Association
- Madhya Pradesh Stock Exchange
- Madras Stock Exchange (MSE)
- Mangalore Stock Exchange
- National Stock Exchange of India (NSE)
- OTC Exchange of India
- Pune Stock Exchange
- Uttar Pradesh Stock Association
- Vadodara Stock Exchange
- Meerut Stock Exchange

Indonesia

- Indonesia Stock Exchange (IDX)
- Jakarta Futures Exchange (JFX)

Iran

- Tehran Stock Exchange (TSE)

Iraq

- Iraq Stock Exchange (ISX)


## Israel

- Tel-Aviv Stock Exchange (TASE)


## Japan

- Fukuoka Stock Exchange
- JASDAQ Securities Exchange
- Nagoya Stock Exchange
- Osaka Securities Exchange
- Sapporo Stock Exchange
- Tokyo Stock Exchange


## Jordan

- Amman Stock Exchange


## Kazakhstan

- Kazakhstan Stock Exchange (KASE)


## Kuwait

- Kuwait Stock Exchange


## Kyrgyzstan

- Kyrgyz Stock Exchange


## Lebanon

- Beirut Stock Exchange


## Malaysia

- Bursa Malaysia
- Kuala Lumpur Commodity Exchange
- Bursa Derivatives
- MESDAQ
- FTSE Bursa Malaysia Index


## Maldives

- Maldives Stock Exchange


## Mongolia

- Mongolian Stock Exchange


## Nepal

- Nepal Stock Exchange


## Oman

- Muscat Securities Market


## Pakistan

- Islamabad Stock Exchange (ISE)
- Karachi Stock Exchange (KSE)
- Lahore Stock Exchange (LSE)


## Palestine

- Palestine Securities Exchange (PSE)


## Philippines

- Philippine Stock Exchange (PSE)
- Philippine Dealing Exchange (PDEx)


## Saudi Arabia

- Saudi Arabia Electronic Securities Information System, precursor to Tadawul
- Tadawul


## Singapore

- Singapore Exchange (SGX)
- Singapore Commodity Exchange (SICOM)


## Sri Lanka

- Colombo Stock Exchange


## South Korea

- Korea Exchange


## Taiwan

- Taiwan Stock Exchange


## Thailand

- Stock Exchange of Thailand (SET)
- Agricultural Futures Exchange of Thailand (AFET)
- Thailand Futures Exchange (TFEX)
- Market for Alternative Investment (MAI)


## United Arab Emirates

- Abu Dhabi Securities Market
- Dubai Financial Market
- Dubai International Financial Exchange


## Uzbekistan

- Tashkent Stock Exchange


## Vietnam

- Ho Chi Minh Stock Exchange (HOSE)
- Hanoi Securities Trading Center (HASTC)


## Europe

## Pan-European

- Euronext
- OMX Exchanges


## Armenia

- Armenian Stock Exchange (Armex)


## Austria

- Wiener Börse


## Azerbaijan

- Baku Stock Exchange


## Belgium

- Euronext Brussels


## Bosnia and Herzegovina

- Sarajevo Stock Exchange (SASE)
- Banja Luka Stock Exchange (BLSE)


## Bulgaria

- Bulgarian Stock Exchange


## Channel Islands

- Channel Islands Stock Exchange


## Croatia

- Zagreb Stock Exchange (ZSE)


## Cyprus

- Cyprus Stock Exchange (CSE)


## Czech Republic

- Prague Stock Exchange (PSE)


## Denmark

- Copenhagen Stock Exchange (KFX), one of the OMX Exchanges


## Estonia

- Tallinn Stock Exchange, one of the OMX Exchanges


## Faroe Islands

- Faroese Securities Market, in cooperation with Iceland Stock Exchange (VMF)


## Finland

- Helsinki Stock Exchange, one of the OMX Exchanges (HEX, Helsingin Pörssi / Helsingfors Börs)


## France

- Euronext Paris (CAC 40)


## Georgia

- Georgian Stock Exchange (GSX)


## Germany

- Berliner Börse
- Börse Hamburg
- Börse Hannover
- Börse München
- Börse Stuttgart
- Börse Düsseldorf
- Eurex (Frankfurt-based; (owned by Deutsche Börse and SWX)
- Frankfurt Stock Exchange (owned by Deutsche Börse; Index: DAX)


## Gibraltar

- Gibraltar Stock Exchange (GibEX)


## Greece

- Athens Stock Exchange (General)


## Hungary

- Budapest Stock Exchange (BSE) In association with Wiener Börse


## Iceland

- Iceland Stock Exchange (Kauphöll Íslands)


## Ireland

- Irish Stock Exchange (ISE or ISEQ)
- Irish Enterprise Exchange (IEX)

Italy

- Borsa Italiana


## Latvia

- Riga Stock Exchange, one of the OMX Exchanges


## Lithuania

- Vilnius Stock Exchange, one of the OMX Exchanges


## Luxembourg

- Luxembourg Stock Exchange


## Macedonia

- Macedonian Stock Exchange


## Malta

- Malta Stock Exchange


## Moldova

- Moldavie Stock Exchange


## Montenegro

- Montenegro Stock Exchange
- NEX Stock Exchange


## Netherlands

- Euronext Amsterdam (AEX index)


## Norway

- Oslo Stock Exchange


## Poland

- Warsaw Stock Exchange (WSE, GPW - Giełda Papierów Wartościowych w Warszawie)
- NewConnect


## Portugal

- Euronext Lisbon (PSI-20)
- OPEX


## Romania

- Bucharest Stock Exchange (Bursa de Valori Bucureşti or BVB) (indices BET, BET-C, BET-FI and ROTX)
- SIBEX (formerly known as Sibiu Monetary Financial and Commodities Exchange)
- RASDAQ, merged with Bucharest Stock Exchange in December 2005, becoming one of its market sections.


## Russia

- Moscow Interbank Currency Exchange (MICEX)
- Moscow Stock Exchange(MSE)
- RTS Stock Exchange
- Saint Petersburg Stock Exchange (SPBEX)


## Serbia

- Belgrade Stock Exchange (BELEX)


## Slovakia

- Bratislava Stock Exchange (BSSE)


## Slovenia

- Ljubljana Stock Exchange (LJSE)


## Spain

- Bolsas y Mercados Españoles
o Bolsa de Madrid
o Borsa de Barcelona
o Bolsa de Valencia
o Bolsa de Bilbao


## Sweden

- Nordic Growth Market - specializes in exotic options like turbo warrants
- Stockholm Stock Exchange, one of the OMX Exchanges


## Switzerland

- SWX Swiss Exchange
- Bern eXchange (BX)


## Turkey

- Istanbul Stock Exchange (ISE)


## Ukraine

- PFTS Ukraine Stock Exchange


## United Kingdom

- London Stock Exchange (FTSE 100 Index)
- Plus Markets
- Markit BOAT
- Project Turquoise


## North America

## Bahamas

- Bahamas Securities Exchange


## Barbados

- Barbados Stock Exchange (BSE)


## Bermuda

- Bermuda Stock Exchange (BSX)


## Canada

- CNQ
- Nasdaq Canada
- TSX Group
- Toronto Stock Exchange
o TSX Venture Exchange
- Winnipeg Commodity Exchange
- Montreal Exchange


## Cayman Islands

- Cayman Islands Stock Exchange (CSX)


## Costa Rica

- Bolsa Nacional de Valores de Costa Rica


## Cuba

- Havana Stock Exchange closed in September 1960


## Dominican Republic

- Bolsa de Valores de la República Dominicana


## Eastern Caribbean

- Eastern Caribbean Securities Exchange (ECSE)


## El Salvador

- Bolsa de Valores de El Salvador


## Guatemala

- Bolsa de Valores de Guatemala


## Honduras

- Bolsa Centroamericana de Valores
- Bolsa Honduras de Valores


## Jamaica

- Jamaica Stock Exchange


## Mexico

- Bolsa Mexicana de Valores (BMV)


## Nicaragua

- Bolsa de Valores de Nicaragua


## Panama

- Bolsa de Valores de Panama


## Trinidad and Tobago

- Trinidad and Tobago Stock Exchange


## United States of America

- American Stock Exchange (AMEX)
- Boston Stock Exchange (BSE)
o Boston Equities Exchange (BEX)
o Boston Options Exchange (BOX)
- Chicago Board Options Exchange (CBOE)
- Chicago Board of Trade (CBOT) - Owned and operated by CME Group Inc.
- Chicago Mercantile Exchange (CME) - Owned and operated by CME Group Inc.
- Chicago Stock Exchange (CHX)
- International Securities Exchange (ISE)
o ISE Options Exchange
- ISE Stock Exchange
- Miami Stock Exchange (MS4X)
- NASDAQ Stock Market, The - Owned and operated by NASDAQ OMX Group, Inc. (formerly The Nasdaq Stock Market, Inc.).
o NASDAQ Global Select Market
o NASDAQ Global Market (formerly NASDAQ National Market)
o NASDAQ Capital Market (formerly NASDAQ Small Cap Market)
- National Stock Exchange (NSX)
- New York Stock Exchange (NYSE) - Owned and operated by NYSE Euronext.
o NYSE Arca (formerly Pacific Exchange)
- Philadelphia Stock Exchange (PHLX)


## South America

## Argentina

- Buenos Aires Stock Exchange (MERVAL)


## Bolivia

- Bolsa Boliviana de Valores (BBV) web site


## Brazil

- BM\&F Bovespa (São Paulo Stock Exchange)
- Rio de Janeiro Stock Exchange (BVRJ)
- Maringá Mercantile and Futures Exchange
- BOVMESB (Minas, Brasília and Espírito Santo Stock Exchange)


## Chile

- Santiago Stock Exchange
- Santiago Electronic Stock Exchange
- Valparaíso Stock Exchange (BOVALPO)


## Colombia

- Bolsa de Valores de Colombia (BVC)


## Costa Rica

- Bolsa Nacional de Valores de Costa Rica (BNV)


## Ecuador

- Bolsa de Valores de Guayaquil (BVG)
- Bolsa de Valores de Quito (BVQ)


## El Salvador

- Bolsa de Valores de El Salvador (BVES)


## Guatemala

- Bolsa Nacional de Valores (BNV)


## Guyana

- Guyana Stock Exchange


## Honduras

- Bolsa Centroamericana de Valores (BCV)
- Bolsa de Valores de Honduras (BHV)


## Nicaragua

- Bolsa de Valores dre Nicaragua (BVDN)


## Panama

- Bolsa de Valores de Panama (BVP)


## Paraguay

- Bolsa de Valores y Productos de Asunción (BVPASA)


## Peru

- Bolsa de Valores de Lima (BVL)


## Uruguay

- Bolsa de Valores de Montevideo
- Bolsa Electronica de Valores de Uruguay BEVSA


## Venezuela

- Bolsa de Valores de Caracas (Caracas Stock Exchange) (BVC)

