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# STOCK MARKET EVALUATION

An Interactive Qualifying Project Report

submitted to the Faculty

of the

WORCESTER POLYTECHNIC INSTITUTE

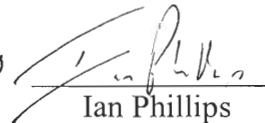
in partial fulfillment of the requirements for the

Degree of Bachelor of Science

by

  
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1. stocks
2. market
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## **ABSTARCT**

A stock market simulation was conducted by using three methods: day trading, pennywise trading, and mid-term trading. These methods were used to trade stocks over a period of twelve weeks and results were analyzed to find which method would result in the largest capital gain. Mid-term trading proved to be the most consistent and successful method of the three, as well as the most financially secure.

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# 1 Introduction

The objectives in undertaking the Stock Market Simulation are two-fold. The first objective is to conduct stock market simulation to compare three methods of trading. These methods are the Penny-Stock method, the Day-Trading method, and the Mid-Term trading method. We will compare the results from the three trading methods to find the style that has the largest profit margin. The second objective, on a more personal note, is to introduce necessary skills to participate in the business world, provide strategies to aid one's future economic security, and supply an education of the inner workings of the stock market. With the knowledge and experiences learned, we would like to earn money in our real-life investment in the future.

## 1.1 ***Benchmark, Portfolio, and Trial Period***

As with all experiments, our simulation needed a control. Due to the nature of the subject matter, it was pretty “cut and dry.” The control of this simulation (the basis for comparing the three methods) is how the *price per share* of our stocks performed. For example, assuming the price chart for Google, Inc. decreased over the period of this simulation, if we made a profit on it overall due to our trading methods and knowledge, we would consider our trading for that company to be a success. The measure of this experiment will simply be the monetary gain or loss. Comparing the control to the measure will give us a clear benchmark. The next step was to assemble our portfolios. This required detailed research and thought-out decisions. Each of us traded with a different style in mind, so we each were obliged to consider different aspects in choosing our companies. For example, the day trader should invest in companies that fluctuate greatly in a short period, but have likelihood to gain value due to the recent trend of the stock. However, the penny-stock trader should consider companies that increase largely in comparison

to its worth. This way, when bought in mass quantities, a large profit margin can be made. Lastly, the mid-term trader should consider companies that are trusted and established. They should be minimally influenced by the whims of the market as a whole. The price charts for these companies should reflect slow, but steady increase over a period of years.

As a group, we want to make the most out of our experience with this stock market simulation. Therefore, after all three of us established an initial portfolio, we ran a trial week of trading. This ensured us a smooth experience into the official stock trading simulation. This trial period will be discussed in detail in Chapter Three. After the trial week, there was nothing left to do but to trade. We started trading on September 20, 2004. We finished on December 16, 2004. Finally, we analyzed our records and made some general conclusions.

## **1.2 *Report Outline***

In order to be a successful trader in the stock market, it is essential to be informed. For example, one needs to be familiar with applicable laws and regulations concerning those companies and the trading of stocks. In addition, it will be helpful to know key historical events and how they affected the market. Therefore, in chapter two, we will review some general information about the stock market. This general information includes the history of the market, and key concepts that every shareholder should understand to make the most of his investment. Chapter three informs the reader with several tips to trading successfully. These subjects include general stock market advice, and factors influencing the stock market.

As mentioned earlier, each of us will trade with a different style in mind. One of the three styles that are used is known as penny-wise trading. The key concepts of this method are illustrated specifically in section 4.1. In addition, a company description (section 4.2), a history

of the companies (section 4.3), the trading simulation records (section 4.4), a written summary of the simulation (section 4.5), and a final earnings analysis (section 4.6) are illustrated for each company used for this method. Chapter four concludes with trading records, an analysis, and a final statement for the penny trading style.

The second of the three styles is day trading. The details of this method are given in chapter five. The format for conveying the details of this method mirror that of the penny trading method.

The third and final style is mid-term trading. The format for reporting this method, like day trading, mirrors that of penny trading. The report for this method is found in chapter six.

After all three methods have been reported in detail, a comparison of the three will be described in chapter seven, and some general comments about each will be made in chapter eight. Lastly, chapter nine will wrap up this report, our findings, and the stock market simulation as a whole.

### **1.3 Chapter Summary**

We, as a group, hope to realize how the stock market works; we want to immerse ourselves in America's economic pastime. Maybe this is not possible in the twenty-one or so weeks that we have. Even so, the best way to learn about something is to do it yourself. We will be getting hands on experience that will help us prepare for future investing.

Another goal is to achieve group unity. Half of this project is establishing a set of tasks. The other, in short, consists of accomplishing those tasks. Through teamwork, consistency and work ethic, we will accomplish what we have set out to do.

## **2 Stock Market History**

The Market that we know of today is much different from the market of the past. Several events throughout history have influenced the stock market and the way people trade; others have entirely altered it.

### ***2.1 The Progression of the Stock Market***

The stock market, as we know it, was established around 1790 in Philadelphia. Before this time, merchant investment was the dominant form of monetary growth experiments. Explorers, businesspersons, and inventors, all looked for wealthy backers who would invest money in their ventures [14].

Several years after the founding of the Philadelphia Stock Exchange, a group of men in New York decided to start their location for stock trading. Having based the system of that in Philadelphia, the New York Stock and Exchange Board opened for trading. The trading style involved shares that appreciated for the success of the company, or depreciated for its failure accordingly [14].

The exchange was not a large factor in the business world, and most investors came from the upper class, until the early 1900s. Around this time, money started to be made in the market in large amounts, and the economy boomed in the “roaring 20’s.” However, this trend was not to continue. In 1929, a recession started a domino effect that led to the Great Depression [14].

For the following half century, the country struggled to rebound from the devastating effects of a depression that changed the view of the world. In 1987, the Dow Jones experienced the largest single day crash the market had ever seen [14].



## **2.2 The Current Stock Market**

The current market is set up to avoid large crashes. It is entwined with the global economy; making the market more stable. Therefore, it is in the best interest of all companies and investors, worldwide, to keep the market stable.

There are many ways the economy and the market are intertwined. One way is the laws associated with banks and bankruptcy. If one invests in the stock market with “paper money”, and loses a mass sum of money, eventually one has to withdraw money from the bank to pay for the paper stock losses. If many people had large debts from gambling on stocks, and the people held their money in the same banks, then banks could easily go bankrupt. Right before the stock market crash, and the great depression, there was no way to protect banks from going bankrupt. Then even more people would lose money (including those who did not invest in the market). To prevent this from happening, the federal government promised to refund people up to \$100,000. Therefore, the government could cover some of its losses, and not worry about widespread economic depression [14].

There is now a Federal Reserve Board, which can moderate the flow of the economy, and therefore the stock market. The current chair of the Federal Reserve board is Alan Greenspan. This board facilitates the economy and can make or abolish economic rules that may stimulate the economy. For example, after 9/11, buyers were few and people sold their stocks in a mad panic. People then held onto the money that they had. In order to stop this stagnant economy (which is terrible in a capitalistic country) Alan Greenspan and the Federal Reserve board decided they would lower the interest rates on pretty much everything. This would then encourage people to take out loans and spend more money on cars, houses, boats etc. The market could then rebuild itself while consumers’ confidence grew. The board can do many

other things, too. In general, it is in place to protect our economy and the market.

The market is now, more so than ever, computer reliant. Over 300,000 computers directly aid the market, and they are all centrally linked in order to process the ongoing transactions. Indirectly, another 26 million computers “located in banks, small businesses, and large corporations” [14], form the backbone of the computer trading industry. The overall market handles 2.2 trillion dollars and upwards per day [14].

Computers completely changed the way we trade. Now people can do hundreds of transactions while sitting on their leather chairs in their office. There once was a time when only people on the floor could sell/buy. The only way to communicate with them was to call them several days in advance to let them know what was going on. Cell phones too added to this hi-tech speed advancement.

## **2.3 Chapter Summary**

The history of the stock market directly effects current trading. It is of great necessity that we understand the new rules that are in place, why they are in place, and how they came to be. Without this general knowledge, we would not know that the stock market is subjected to change, and what types of change it is subject to.

### 3 The Stock Market and Making Money

The stock market, like any other type of investment plan, requires much research and thought. It is not simply a game played with play money. To make money, you cannot just throw money in and expect to make money back. Though it is similar to the lottery, the stock market is far more complex. At times, the overwhelming odds of the lottery seem comparable to the billions of variables involved in stock trading. After buying, shorting, selling and commissions, there seems to be no way to squeeze pennies out of the stock market. But, the best of Wall Street have shown otherwise. Is it luck? Is it skill? Chances are it is a little of both.

#### 3.1 General Stock Advice

“Buy Low, Sell High” is the ultimate advice in playing the stock market. No matter what method one chooses this is the preferred route to take in order to make money. Penny stock trading involves small increments of increasing and decreasing share value (on the scale of 5 cents to \$1), and Channel trading involves increments on the order of \$1-5. There are multitudes of methods that involve numerous ranges of money, or different approaches all together. No matter what the method that is used “Buy Low, Sell High” is *the* mantra all stock investors.

Unfortunately, this information is useless. When will the stock be high and when will it be low? It is difficult to predict such trends. To skillfully predict trends, one needs to narrow down the probability of a stock rising or lowering. To do so, one has to research the factors that influence that stock. Here is an example. Maybe the weather over the season will influence Tropicana’s orange juice crop. Therefore, they have fewer oranges, so they have fewer products to sell, so they make less money. As a result, the company’s value goes down, as does one’s stock. Understanding such key factors is crucial to being an effective stock market entrepreneur.

To make matters worse, this little bit of money made from selling stock is reduced even more because you have to pay the man that was on the floor and physically sold your stock. This is called the commission. Say the average cost of commission is around \$20, then in order to make 10% profit, one would have make \$200. This is not a lot of money! In order to make serious amounts of money, one has to gamble with high amounts of money. But then, in trying to make a 10% profit margin, one could lose everything.

### ***3.2 Factors Influencing the Stock Market***

The stock market is a sea of variables. It is impossible at any given point to know the exact outcome of the trend of the market, a single exchange, a basket, or even a single stock. There is too much going in the market for any single person to know everything about the stock market. We can narrow down variables to twist the odds in our favor. However, we do not want to waste our time trying to figure out every variable affecting the stock, then we will just get bogged down by the unimportant things.

There are larger variables that may influence the stock market that we may narrow down to help the probability of success when trading/ investing. These are the types of things that we can and should know about when trading. Such things include companies going bankrupt, oil prices, the price of tea in china, weekly reports from large companies etc. The stock market is completely interlaced; everything affects everything else. For example, if two large cell phone companies were going to merge, then this new single corporation would have a market edge. People will most likely decide to buy shares of stocks from the new company, and sell a competitor's shares. Let us say, the cell phone companies' product are made from GE parts. GE purchases its materials from ON-Semi, (a company in a semiconductor basket). The chain

moves forth in such a manner, the result is a change in stock market share distribution.

One of the most significant matters involving stock trading is the ability to predict what other people are doing. If one can do this, then the stock market is at one's mercy. Just knowing the confidence of other investors can help one understand if people are going to sell or buy shares of a stock. For example, after 9-11, everyone panicked and withdrew their money from the US stock market. This caused a lot of economic despair. The ongoing boom of the stock market seemed to bust. If one knew of this large withdrawal serious cash could have been eminent. On the same token, if people invested in stocks after the panic, then they would know that the economy was most certainly on its way back up.

Another important factor of concern is the world, and US economy. If the economy is low, the chances are the stock market will be a bare market. In this case, one is better off "shorting" stocks, or borrowing stocks as the market trend is on the way down. Then when the trends inflect, you can buy back the stocks and end up with a positive amount of money. Alternatively, it may be intelligent to buy stocks when the market is at an all time low. It seems that things can only get better from there. If the economy is high (a bull market), then the opposite holds true. It would be in one's best interests to buy some stocks on the way up and sell them when the trends are at a maximum. However, if the trends appear to be at the maximum already, maybe it is in one's best interests to sell the stocks.

### **3.3 Chapter Summary**

Making money is possible when playing stocks, but it is not easy at all. A lot of thought and research must go into the buying and selling of every share of every stock. Granted there is a bit of luck involved, there are ways to narrow down the odds in your favor. Know what's going on

and be aware of the stocks that one owns. Maybe you will make money. Maybe you will lose money. However, one fact is certain, the stock market is uncertain.

## 4 Penny Wise Trading

In the following section, we will be discussing the method of penny stock simulation. We will explain the method, show the simulation, and display the results of trading with small cap issue stocks. Then we will analyze the results.

### 4.1 *Explanation of Penny Wise Trading*

Making money sounds simple. Buy low; sell high. It seems like common sense. There are plenty of ways of achieving success in the stock market using this very general principle. One of the greatest ways to make money is by taking chances on small companies whose market value is between 1 cent and just a couple of dollars. With a significant amount of money, a lot of research, and a little luck, one can be successful by trading stock penny wise.

At first glance, it seems improbable that there will be a large profit turnover when dealing with companies with such trivial publicly traded stock value. It appears as though the commission for trading will consume any profit margin worth speaking of. That is incorrect; it can be quite lucrative.

Firstly, one need to trade in large quantities, in order to increase profit margins so that the commission fees appear small in comparison. Therefore, one needs a large sum of money to being trading. In this simulation, we are given \$200,000 (simulation dollars) for the sole purpose of trading. Obviously, we will not use all that money on a single stock. Instead, that money will be dispersed amongst 6 companies. At times, not even all of the \$200,000 will even be used. It is there just in case we need to make use of it.

The basic premise of making money with penny stocks is as follows: Penny stocks are worth very little in value. Therefore, if the stock price rises by a single cent, then the gross profit

margin is very high. Here is an example. Let us say I bought stock for a small company called AOL (back when it was small). If I invested money in the stock when the stock value was worth 20 cents, and the stock price went up 2 cents, then the increase in overall stock was 10%. This is much larger than if a company's stock like coca cola went up only a single penny. As the total stock value of a company goes up, small increases in stock value affect the percentage of stock value less and less. If I invested \$2000 in AOL stock, and, in the period of about 1 month, the stock rose from 20 cents to \$1 (due to its popularity with the public). Then imagine I sold the stock. I would receive \$10,000 (about \$9,800 after commission) for a profit of \$8,000 (\$7,980 after commission).

Unfortunately when dealing with stocks, losing money is also a distinct possibility. If AOL's stock crashed from 20 cents down to 15 cents, then one would lose \$520 dollars. Alternatively, even worse, if AOL went bankrupt, say goodbye to all that invested money, minus commission puts one at owing money!

When dealing with penny stocks, how can one know how to choose the company that will prosper over the one that goes bankrupt? The answer is quite simple...RESEARCH. This type of trading more than most others requires an enormous amount of research. If one does not research, then one may as well play the lotto. One has to look up the company and find out how they started. What product are they selling? Who are their competitors? Where are they located? Who are their owner/ General Manager? All these questions are good questions to know the answer to. Small businesses and start-up companies are more greatly affected by these influential factors.

Here is an example, if a technology start-up company started in New England, they may be at their end quite soon. The product they sell may be top of the line, but that has little to do with



their near end. Here is why. Dell is relocating most of its work branch to the Asian countries to save money on labor costs; the only main branch of Dell that is staying in the US is the customer service sector. This new start-up company will have most of its labor in New England, which has high labor costs. Therefore, their product will have to be much more expensive to increase their profit margins. Fewer computers will be bought, and less stock value will be given to the company in the stock market. Knowing the company may prevent such terrible investing disasters. Then again, one never knows. Maybe that stock will double in the next month. That sense of pessimism brings me to the next point. Sheer luck is also a factor. Sometimes it works out and one's logic deduction and research pays off. Sometime the opposite occurs. Sometimes, one just has to go with a gut feeling, and hope for the best.

Knowing how the stock market is doing in general will also aid someone in their quest to gain financial gain. Know the day-to-day occurrences that will have major influence either directly or indirectly on the companies that one is penny wise trading with.

Here is an example. If one owns stock in US AIR (which is somewhat dumb because they already announced bankruptcy) then many things may happen with the stock market. The Oil prices are at a maximum price as of now. That is, the highest price they have ever been at ever. Therefore, US AIR has to increase their ticket prices in order to increase their revenue. The question is, will they gain money or lose money. Chances are they will lose money. Less people will want to fly because the ticket prices are so high. People will desire to take vacation time at home as opposed to flying to Disney world (which seems to own half the world). Therefore, the company will sell fewer tickets to these types of people. However, US AIR may anticipate this, and raise their prices even higher than the adjustment for the oil. Now, business people and others who have to fly will cover the cost of the people who refuse to buy such high priced

tickets. Maybe, the company will even make money. Either way this situation is brought about strictly, because the price in oil changed.

Sometimes the flow of larger companies directly affects the rest of the market. For example, sometimes the stock market will have a value so that it was even from when it started. However, on this said day, all the larger companies took a big hit, while smaller and mid companies gained money. It is a distinct possibility that the stock market in general over the next few days will decrease. In a decreasing market, it is not wise to trade. Now, the penny stock over the next few weeks may steadily decrease or even go bankrupt.

Is the market Bear? Is the market Bull? The general trend of the market directly affects the well-being of the stock, which you hold a share of. Watch for stock trading traps and trade carefully keeping the stock market in mind at all times.

Some stocks will be dropped because they go bankrupt and are no longer a part of the market. Some stocks may rise and prosper rather quickly. The stock market may be bare, it may be bull. As long as one is putting money into penny wise trading, along with research, then one can consider all these things and make money by penny wise stock trading.

## ***4.2 Company Descriptions***

The reasons for picking penny wise stocks differ greatly from that of doing any type of trading. Here a lot of small time research is necessary. At this level of trading, everything effects the penny stocks more (because they are worth less money per share). Therefore it is advantageous to know what those factors are. These factors include competitors, annual reports, annual reports of larger companies, key investors etc. A basic guideline for choosing penny stocks is by making sure there are at least 6 key investors. For each company there is a price per

share chart to illustrate the strength of the company.

#### 4.2.1 Dicky Walker Marine Incorporated

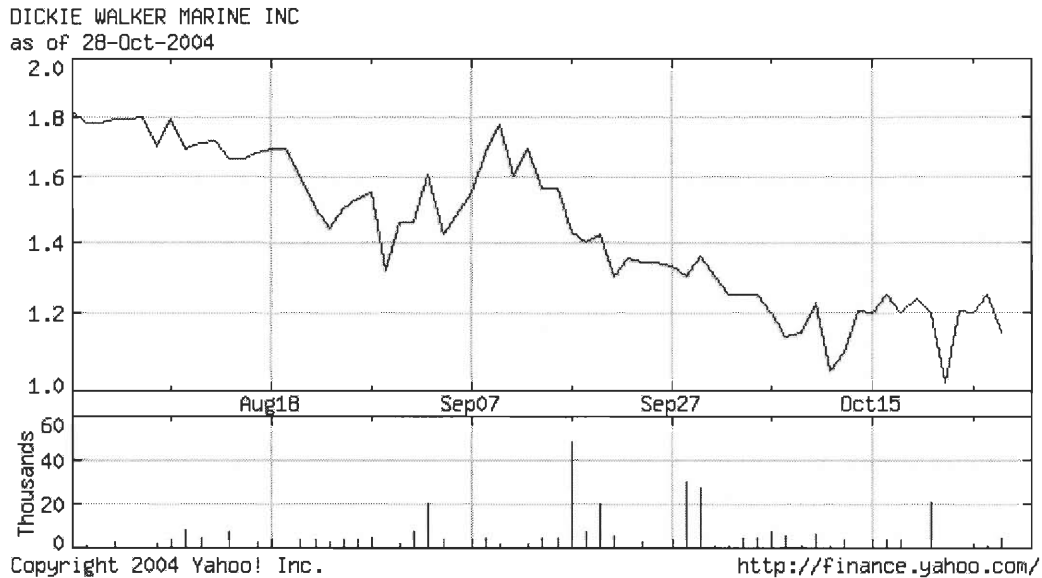


Figure 4.1 Price Chart for Dickie Walker Marie Inc

The above figure shows a demonstration of an erratic stock good for the channel method.

Dicky Walker Marine Incorporated is a trendy style clothing company. Their line of products is unique and very trendy like that of a Steve Madden store, except the trend has simply not yet caught on in as many areas of the country.

On Sept 7 of this year, Dicky Walker announced that it was selling 9 units, 9375 shares of common stock and a note of 12,500 at 8% over 3 years. The company grossed \$225,000. ([http://www.globeinvestor.com/servlet/WireFeedRedirect?cf=GlobeInvestor/config&vg=BigAdVariableGenerator&date=20040903&archive=prnews&slug=2004\\_09\\_03\\_07\\_0347\\_1212955](http://www.globeinvestor.com/servlet/WireFeedRedirect?cf=GlobeInvestor/config&vg=BigAdVariableGenerator&date=20040903&archive=prnews&slug=2004_09_03_07_0347_1212955)).

Which on the scale of penny wise stock trading, is large. Immediately after the announcement of the sale a large stock boom occurred, and then a larger fall. Dicky Walker investors scrambled and thought the sale meant that they were trying to cut their losses early and get out of the

market. However, other research suggests that Dicky Walker invested that money else where, and is awaiting a new clothes line to put money back in. I await an influx of profit from this stock. [6].

This is a stock that has fallen consistently since 9/11. It follows a general trend that suggests it is finally leveling off. I picked this stock much differently than I picked the other penny stocks. With this stock I did not concentrate on research, instead on concentrated on trends.

As one will note from looking at figure 4.2, the stock tends to have many spikes up and down, I assumed that this trend would continue. I used the “channel method” here within the “penny wise method”. I assumed that the stock would bounce around following the trend of a decreasing stock. Therefore, I could buy at the low spike, and then sell at a high spike, or even a level plain. The profit turnout on the penny wise stock can be enormous. This company is a great company to play the “channel” method with.

#### **4.2.2 Hudson Technologies**

Hudson Technologies is a pollution riding company trying to deliver safer refrigeration without as many CFC’s affecting the environment. They have a line of engineers, chemists etc. trying to help make a cleaner more efficient refrigeration system. [8]

With the Presidential report of global warming (Bush), and its intensity to strike fear into the eye of the public. When more people realize how large of an issue it actually is, many people will begin investing money in cleaner more efficient ways to make power, or reduce general pollution. That is on the long time scale of things.

In the short term, Hudson technologies bounces up and down everyday. They appear to be generally stable on average. In other words, the stock generally ends at the same value every day,

but the maximum and minimum change consistently. However, Hudson has announced the introduction of their new technology in Sept. The product is expected to be on the market within the following year (2005). They have a main market in the UK and in Africa. These are countries where large innovative technologies such as the hybrid engine (half electric, half gas engine) were developed etc. The market calls for more safe and clean technology.

Many other reasons exist for picking Hudson technologies. They have made their business far more efficient in the last 8 months by centralizing customer relations, eliminating 1 million dollars in cost etc. [8]

Its primary shareholder is Morgan Chase who owns 75% of the current stock. Once again, it is my belief that when the stock of Morgan Chase fluctuates, so will the stock of Hudson tech.

#### 4.2.3 Nutrition 21

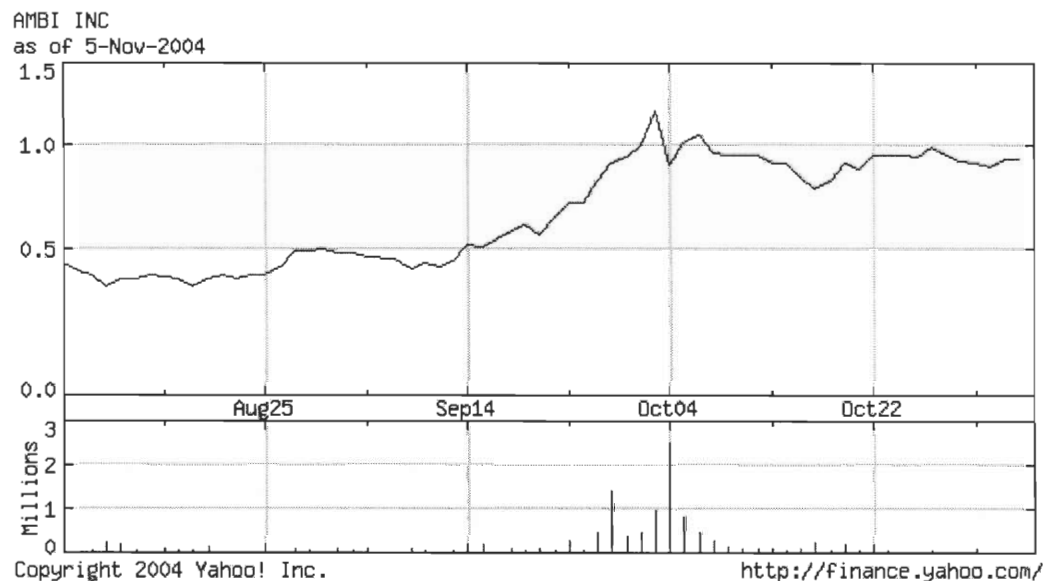


Figure 4.2 Price Chart for Nutrition 21

The above chart shows w small market stock increasing consistently in a bare market.

Health is in, as anyone can see with the Krispy Krème Donuts stock dropping in relation to the Atkins dieting [17] Nutrition 21 holds patents on 35 different drugs and other pharmaceutical products. They have a new product called diachrome, which reeducates cholesterol. [13]

Other reasons include that this stock is on the rise in a bare market, suggesting that it has the potentially to do much better if the market somehow turns around, and many professionals expect a turn around prior to Christmas. One can see this general increase during the bare market trend.

#### **4.2.4 Catuity Loyalty Software Specialties**

Catuity are competitors on the market in their area of expertise. They have been around for 10 years [4] and are consistently on the rise even in the bare market. Catuity's product deals with credit card computer systems and management computer systems as well.

The largest competitor in the similar market is Micros Computer Systems, though they are not located near Catuity by any means, they are one of the largest tech companies of this kind of nature. Many subways are failing (which seems off topic but it is still on topic), subway being a relatively large chain, it is my belief that the stock will lower in the next few weeks or so.

In addition, Visa is using this Catuity Company as a backdoor to redo all their software systems for credit card scanners across the World and the United States. Not only is Visa on Catuity's list of high end investors, but Catuity is also planning a large product expansion of Visa's credit card scanning services [4] Visa is a privately owned stock, however its immediate wealth may have an impact on Catuity's stock. Catuity provides service to Mastercard, a VISA competitor, so they give business to companies from all walks of life.

Other major investors include capital investors, and security companies. There are 7 key

investors listed; one basic guideline to “safely” and “securely” trading penny stocks is to make sure there are at least 6.

I think this company is on the rise. Their reports show nothing to the contrary. Again they continue to rise in an unproductive market. The only problem is that if the large companies have a large recession in stock value/ share holders, later the small companies feel it too. That appears to be the general trend of the “trickle down” market in this dwindling period. But it is my belief that (regardless of what any other of the large companies stocks do) when VISA is on the rise, shortly after Catuity must follow suit. This will be difficult to prove.

#### **4.2.5 Alliance Fiber Optic Products**

AFOP, designs and manufactures a variety of high performance fiber optic components. Signals and communications are an increasingly important industry in the world today. That is why Alliance fiber optic is a competing publicly traded corporation in that market. They are an “emerging and leading” company in that field. Products they make include but are not limited to filters, attenuators, switches, and active devices. This company delivers high-powered communication systems to rapidly growing metropolitan areas. [1]

Alliance Fiber Optics does not have a great number of investors, which normally is bad for trading because it does not ensure that the stock is a valid stock for trading. Instead, it has few investors with big names and big backing. Analysts from Merrill Lynch, U.S Bancorp Piper Jaffray and Soundview Technology are all big investors/ supporters of AFOP’s stock. [1]

#### **4.2.6 Arel Communication and Software**

Arel is a software based company. They specialize in communication technology software

packages. The software helps people work with each other from any area in the country and many places on earth. It aids panel discussions, allows people to attend online groups, helps host “webinars”, helps people participate in training courses and have one-on-one meetings with co-workers. The software package offers high quality real time video and audio feed for face-to-face interaction. It has great visuals and virtual support as well. They also develop server and security software as well. [3]

Some of Arel’s Clientele include major banks such as Bank of America, BMW, Volkswagen, Anheuser Busch, and many other major US companies. Along with its extensive clientele, Arel also has a numerous amount of partners. Examples of such partners are: Telecommunication networks such as York Telecom, The Dish Network, and also larger partners such as Cisco Systems. Arel has a large widespread accumulation of partners and clients. None of them is a big name company, but, as one will see, that has no affect on making money in the stock market. [3]

### **4.3 Company History**

Prior to simulating trading with stocks using penny-wise style trading, it is important to first delve briefly into the companies history. This concise historical background will provide the necessary information for the reader to reference in the analytical portion as well as the reason for choosing the companies’ stock portion of the report.



### 4.3.1 Dicky Walker Marine Incorporated

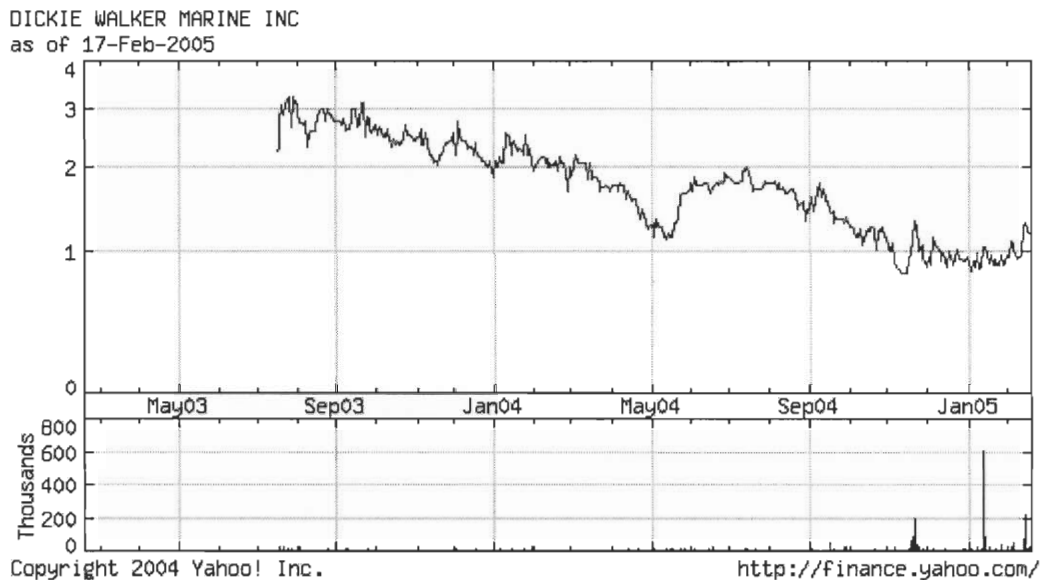


Figure 4.3 Past Performance of Dickie Walker Marine Inc.

Dickey Walker is a boat. The Dickey Walker Marine Company was made in spirit of the Dickey Walker Boat. The Nautical clothing line was inspired by this 52-year-old boat. Founded in 2000, the hope and thought was that American consumers would purchase this nautical based clothing line (directed more toward the 72 million boat owners) and compete with the existing ones such as Nautica. 90% of People in the US live within 100 miles of a large body of water. [6]

The companies stock started at \$2.15 a share and started in the small market cap. Since then, the stock has been steadily decreasing in the bare market in the US. [17]

### 4.3.2 Hudson Technologies

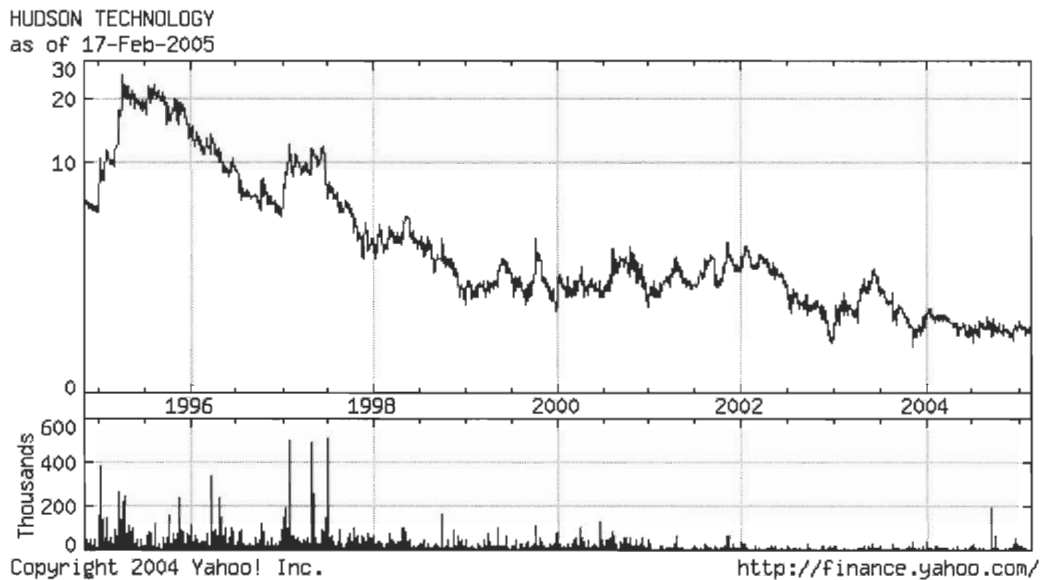


Figure 4.4 Past Performance of Hudson Technology

Hudson Technologies is an engineering based corporation. It creates, designs, improves, and sells refrigerants for air conditioning systems, refrigerators and large cooling systems. They are also involved in removing/ replacing old contaminated cooling/ heating systems for the good of the environment. [8]

Starting in the stock market in 1994, the opening price for a share in the stock's company started at \$8.57. In 2003, Hudson Technology cut its losses and went to the NASDAQ small cap issue market. Since then, the company has bounced back and forth, but has remained relatively consistent. [17]

### 4.3.3 Nutrition 21

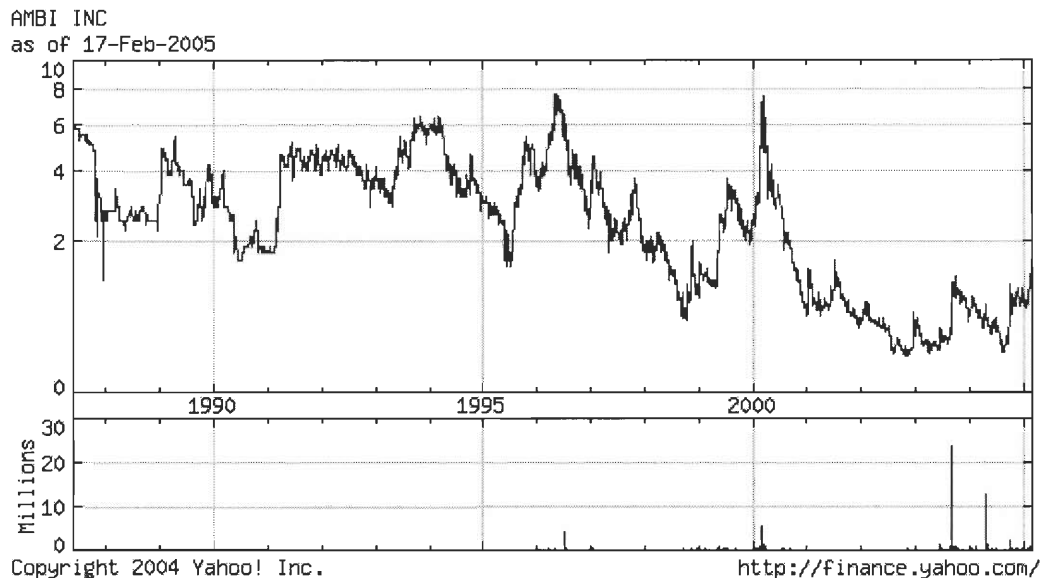


Figure 4.5 Past Performance of Nutrition 21

Between 1959 and 1977, scientists came up with a drug that could keep type two diabetes in check. This drug, Chromium Picolinate, is the drug that nutrition 21 debuted with in 1988 in the stock market. They did not start as a small cap market issue. The Stock started at \$6 a share. The company did not hit the small cap issue market until 2001. The company has had many ups and downs since then (Figure 4.5). [13]

Since the beginning, the company created many more drugs. They hold 24 patents on chromium based products. They have also been involved in 12 research investigative reports based on diabetes. [13]

As one can see, nutrition 21 did not start as a small market cap, instead they became one over a period of several years. [17]

#### 4.3.4 Arel Communication and Software

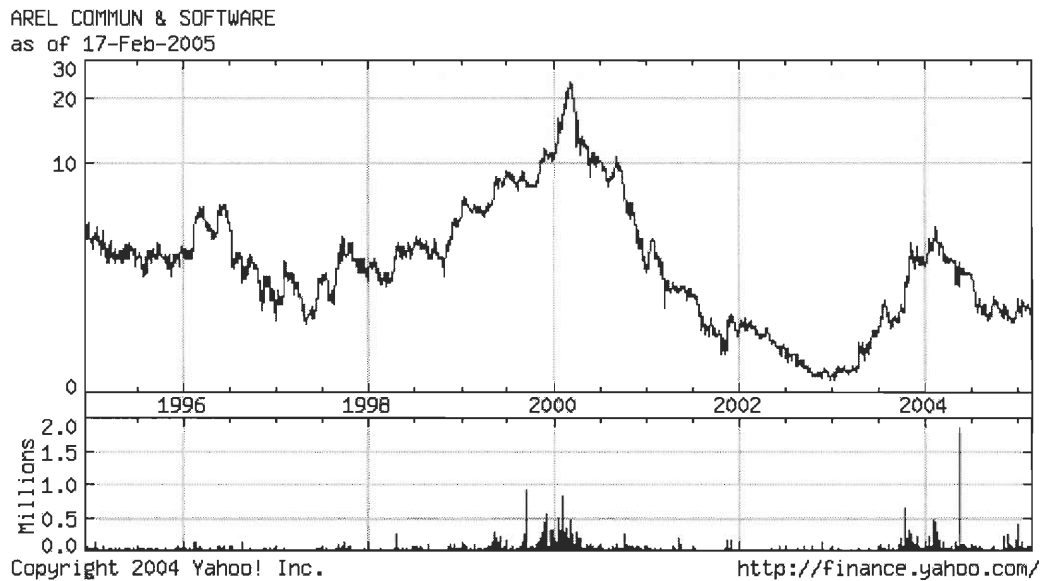


Figure 4.6 Past Performance of Arel

Arel is a software based company. They specialize in communication technology software packages. The software helps people work with each other from any area in the country and many places on earth. It aids panel discussions, allows people to attend online groups, helps host “webinars”, helps people participate in training courses and have one-on-one meetings with co-workers. The software package offers high quality real time video and audio feed for face-to-face interaction. It has great visuals and virtual support as well. They also develop server and security software as well. [3]

This company started as an “under 100M NASDAQ cap issue”. Over the years, the company has amassed great gain and been brought to almost nothing again (17, ARLC). They have gained many partners in technology and cable systems. These partners include Cisco and the satellite DISH network. Recently, they have obtained new clientele. They are software providers for numerous large companies including Volkswagon, AT&T, and Bank of America. [3] One can

plainly see the up down trend of the Arel software company. The company started in 1995.

#### 4.3.5 Catuity Loyalty Software Specialties

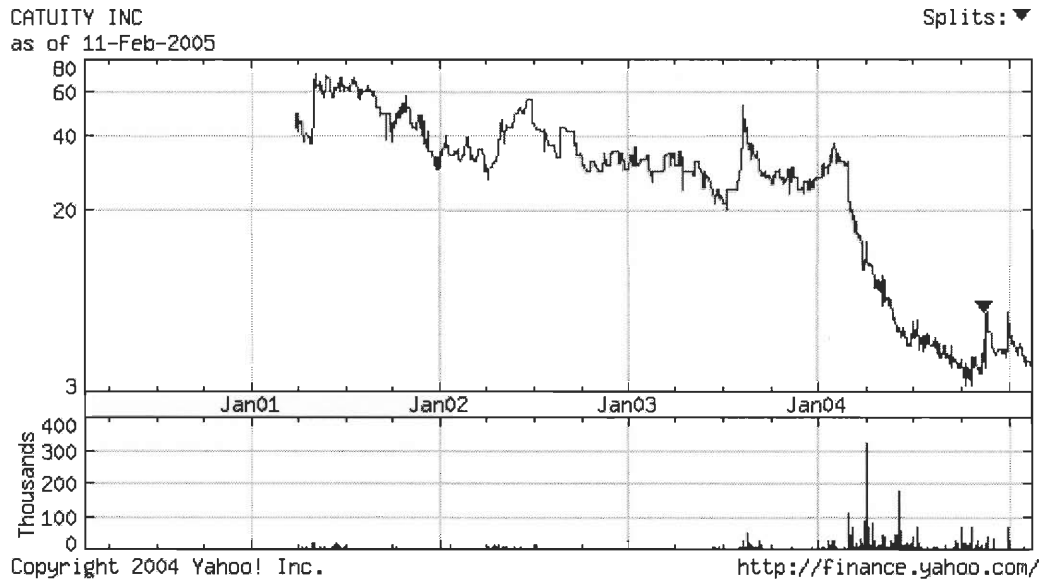


Figure 4.7 Past Performance of Catuity

Catuity has been delivering data entry software systems for several years now. They develop a self rewarding system that serves to give feedback to their surveying of data, to make its product better and better.

Catuity made its market debut as a higher stock cap. They started around \$50 per share at a relatively low volume. Until about January 2004, the stock slowly began its decline. Then, around January of 2004, the stock crashed with great magnitude. [4]

The general decline follows the trend of the bare market. The reason that we selected this stock was not because of its consistency with the market, but rather it was because of its volatility. The day to day fluctuation of the stock presents a great way to make money, especially on the small scale method.

A list of Catuity's key shareholders include various companies and several individuals. Catuity has 11 accredited shareholders which include few big names. Only Visa is a company shareholder with Catuity with some merit. [4] Here, we can see both the volatility and the large crash the Catuity experiences.

#### 4.3.6 Alliance Fiber Optics Products

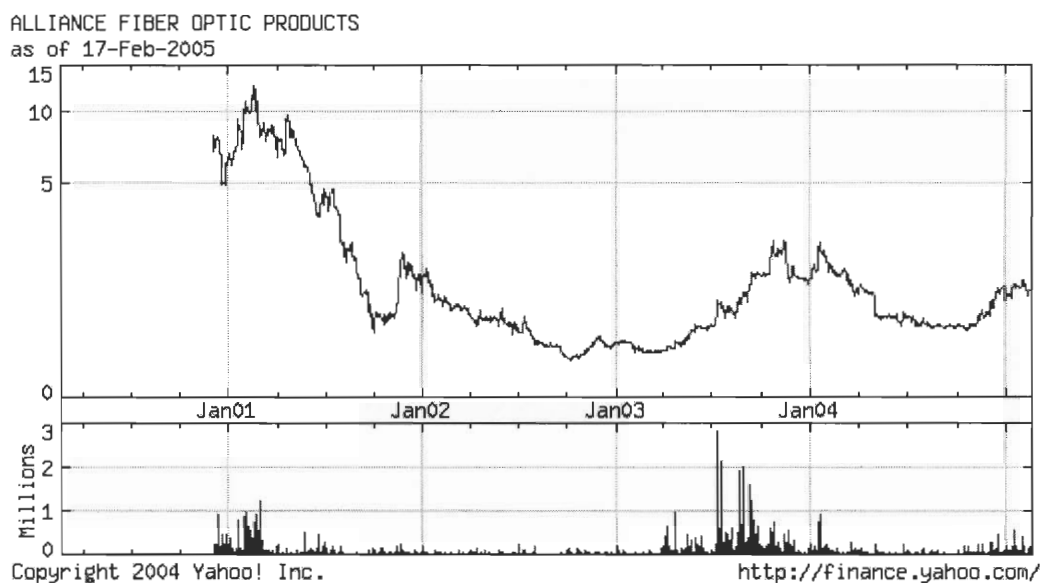


Figure 4.8 Past Performance of Alliance Fiber Optics

Alliance produces a variety of fiber optic cables. They make fiber optic parts that include connector devices, couplers, splitters and other components that are involved with signal and power transferring (over long spans of distance). [1]

This company has been around since the year 1998, however the stock market debut was in the year 2000. The headquarters is in the US, but it also has offices world wide, including many offices in Asia and Europe. [1]

The largest investor to Alliance fiber optics is Meryl Lynch. However, there are many more small businesses that firmly support the fiber optic company. AFOP is supported by their own

security, in other words, they back themselves; a bank does not. [1]

Alliance Fiber Optics has been around since the year 2000. Once again, they did not start their stock market debut in the small market cap in NASDAQ. They started off somewhere around \$7.50 a share. They rise and fall like a sin wave. As one can see, AFOP started its stock debut in December of 2000 at 7.47\$ a share. [17]

## 4.4 Records

Date	Symbol	Order	Share	Price	Cost	Gain	Cash	Holdings	Total Asset	Balance
9/21	HDSN	Buy	15000	0.95	14250	0	185750	14250	200000	0
9/23	HDSN	Sell	15000	1.15	0	2980	202980	0	202980	2980
9/28	HDSN	Buy	20000	0.90	18000	0	184980	18000	202980	2980
9/30	ARLC	Buy	1000	1.70	1700	1000	183280	20700	203980	3980
9/30	CTTY	Buy	10000	0.26	2600	0	180680	23300	203980	3980
10/8	CTTY	Buy	20000	0.22	4400	-1550	176280	26150	202430	2430
10/13	HDSN	Buy	5000	1.06	5300	4580	170980	36030	207010	7010
10/19	HDSN	Sell	5000	0.91	0	-4770	175530	26710	202240	2240
10/19	NXXI	Buy	10000	0.80	8000	-3700	167530	31010	198540	-1460
10/27	NXXI	Sell	5000	0.91	0	-2530	162960	33050	196010	-3990
10/29	DWMA	Buy	20000	1.06	21200	180	141760	54430	196190	-3810
11/1	DWMA	Sell	20000	1.16	0	540	164940	31790	196730	-3270
11/4	AFOP	Buy	5000	0.82	4100	-1000	160840	34890	195730	-4270
11/5	ARLC	Buy	25000	1.06	26500	4570	134340	65960	200300	300
11/9	CTTY	Sell	30000	0.29	0	8740	143020	66020	209040	9040
11/11	NXXI	Buy	10000	0.96	9600	-2650	133420	72970	206390	6390
11/16	DWMA	Buy	10000	0.79	7900	520	125520	81390	206910	6910
11/22	NXXI	Sell	5000	1.08	0	-590	130900	75420	206320.00	6320.00
11/24	ARLC	Sell	5000	1.10	0	-6540	136380	63400	199780.00	-220
11/30	HDSN	Buy	15000	0.80	12000	-1880	124380	73520	197900.00	-2100
12/2	ARLC	Sell	5000	1.04	0	4650	129560	72990	202550.00	2550
12/6	ARLC	Sell	16000	1.11	0	-3000	147300	52250	199550.00	-450
12/6	AFOP	Sell	5000	1.26	0	5280	153580	51250	204830.00	4830
12/10	DWMA	Sell	10000	1.00	0	-3870	163560	37400	200960.00	960.00
	No	No								
12/15	Trade	Trade	0	0	0	4200	163560	41600	205160.00	5160

Table 4.1 Penny Wise Stock Portfolio Table

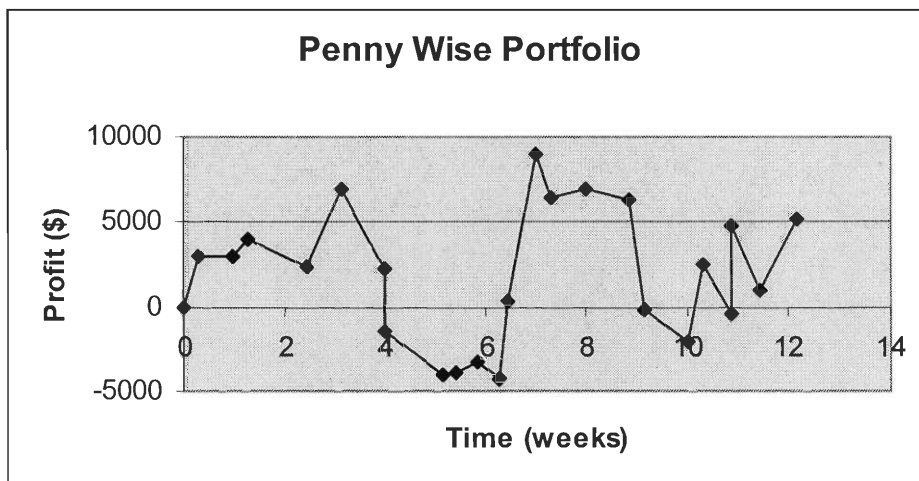


Figure 4.9 Portfolio Performance of Penny Wise Stocks

ALLIANCE FIBER OPTIC PRODUCTS  
as of 17-Feb-2005

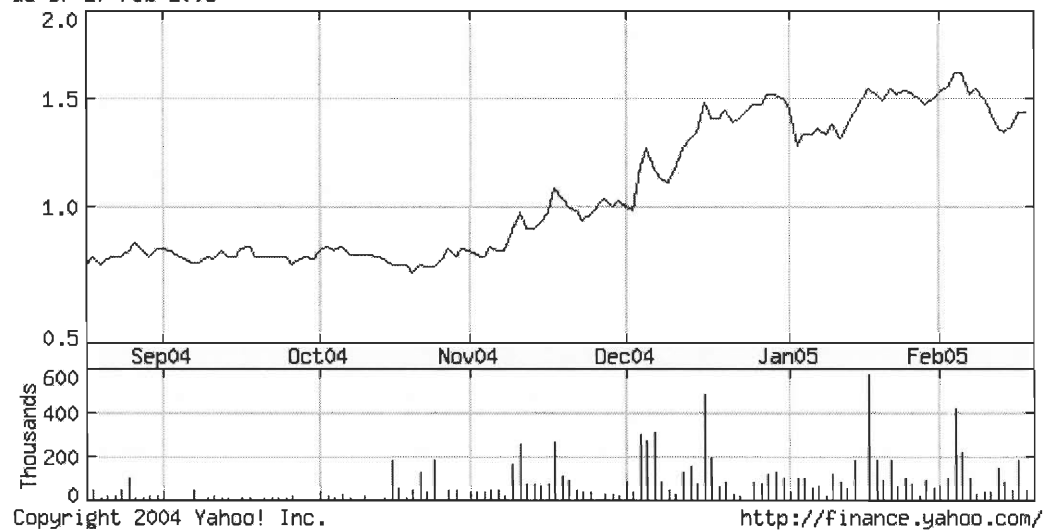


Figure 4.10 AFOP Stock Performance



AREL COMMUN & SOFTWARE  
as of 17-Feb-2005

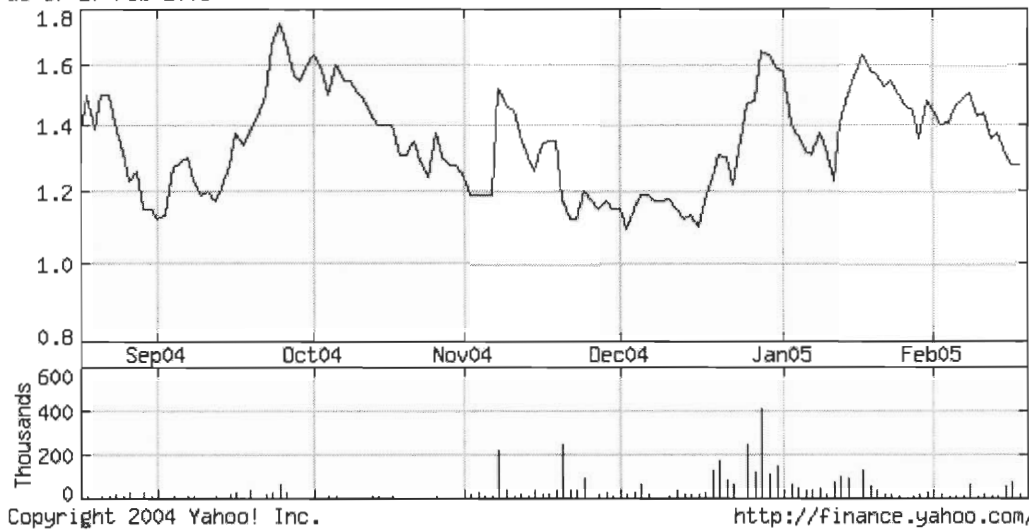


Figure 4.11 Arel Stock Performance

CATUITY INC  
as of 17-Feb-2005

Splits: ▼

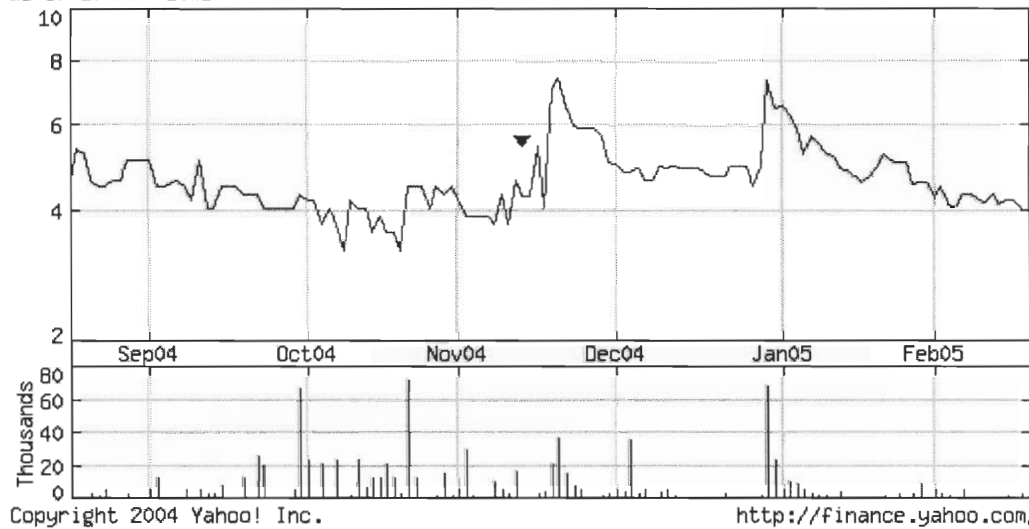
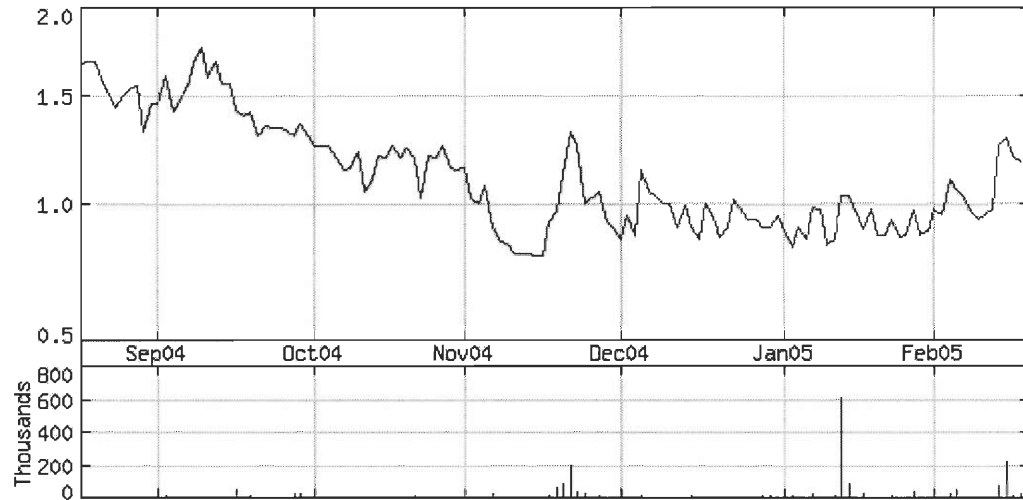


Figure 4.12 Catuity Stock Performance

DICKIE WALKER MARINE INC  
as of 17-Feb-2005

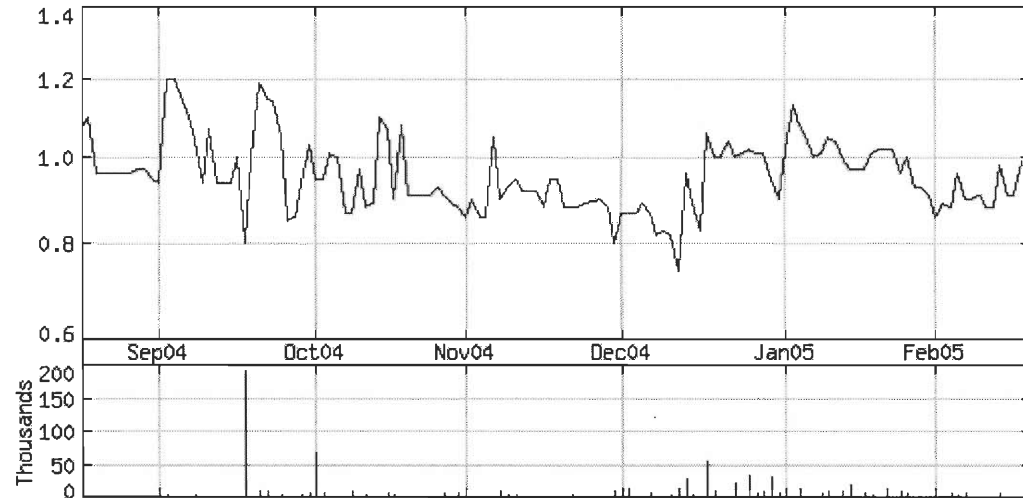


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Figure 4.13 Dicky Walker Marine Stock Performance

HUDSON TECHNOLOGY  
as of 17-Feb-2005



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Figure 4.14 Hudson Technology Stock Performance

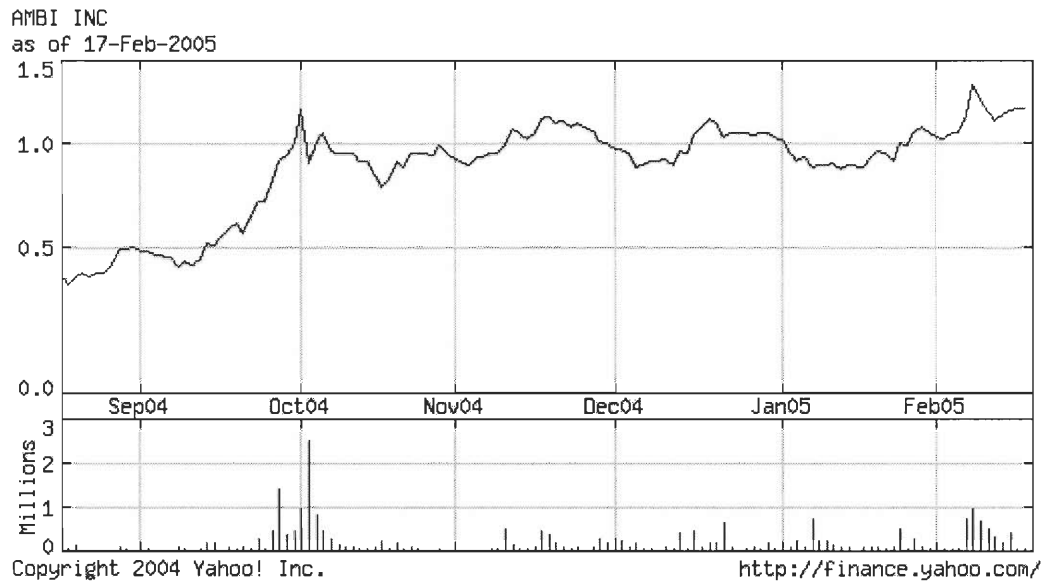


Figure 4.15 Alliance Fiber Optic Stock Performance

## 4.5 Analysis

In this section, reasons for buying and selling stock will be discussed. Also, main themes that frequently reoccurred do to my inexperience/experience with trading stocks will be discussed and evaluated. In addition to this, the section will include trends that were common amongst all stocks that were traded in this simulation (I call them general trends). Sometimes, one stock may directly be related to another stock. In most cases, these relations occur with another stock that I did not simulate. I call these stock trends. Stock Trends will be discussed in the analysis section as well as general trends.

Sept 21<sup>st</sup> was when I made my first trade decision. I started off very conservatively and only purchased from one stock. There were few days that I bought more than one type of stock. I bought 10,000 shares of a stock that had seen much decline in its age, but recently it was fairly consistent. (HDSN). I was surprised that just a few days later the stock had increased about 20%. I then sold the stock. I was new at this, and it showed. Conservatism was one of my

biggest downfalls in the stock market simulation. This is just one instance in a recurring theme. Sept 28<sup>th</sup> was another conservative move. When that same stock dropped down again, I only bought 10,000 shares. I should have bought 100,000 shares.

Another inexperience of trading resulted in the exact opposite behavior. Instead of being too conservative, I would “bet the farm”. The reason for my doing this was that I was tired of not buying enough shares, and getting a lower turnout than I could have. That coupled with the firing advice from our advisor saying something like, “do not worry, it is not your money, it is just a simulation”, led to my demise. This was the biggest reason I lost money. For example, I thought I found a reason for the HDSN stock to increase from its \$1.09 ( its investors stock increased) to even more. Instead, it fell greatly. I then cut my losses and sold the stock when it dropped nearly 15%. That would have been ok if I was being my same conservative self. Instead I decided to buy 8 times the amount I would normally purchase. Totaling a loss of nearly \$15,000.

HDSN	10:30am	Buy	80,000	\$1.09	\$87,200	
HDSN	2:40pm	Sell	80,000	.91		(-) \$14,400

Table 4.2 HDSN Buy and Sell Prices

Every stock is related in the stock market. All stocks on the penny stock level are related to the larger stocks, mainly their larger stocks and main investors. In many cases, when investors stock increases, shortly afterward (a period of a day or two) the penny stock related to that stock also goes up.

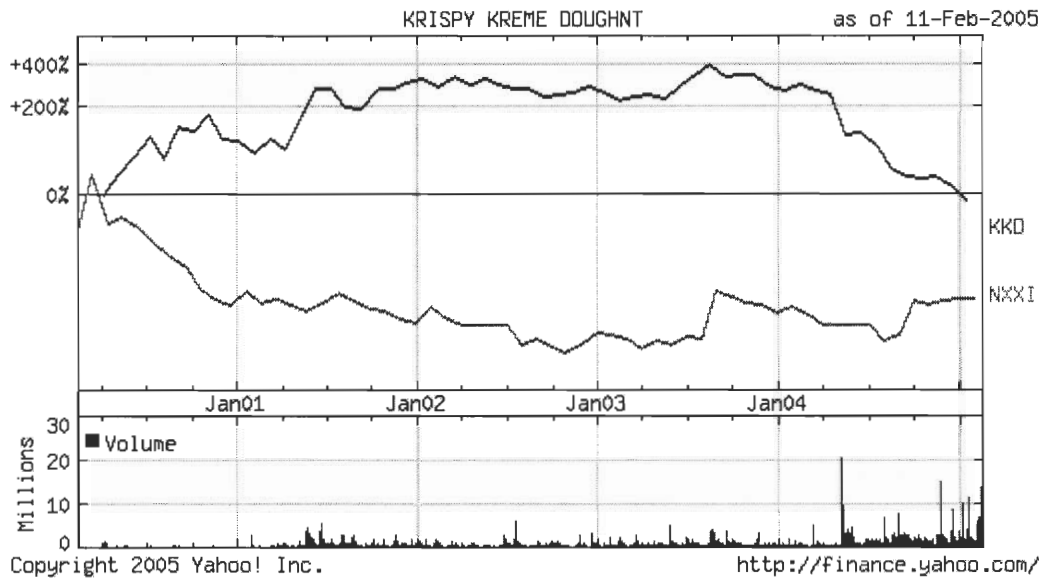


Figure 4.16 Nutrition 21 Vs. Krispy Kreme Donuts

The above chart shows the past 5 years of both the Krispy Kreme donut stock, and the nutrition 21 stock. Note how both stocks over the past 5 years have a mirroring effect. In other words, when one stock is on the rise, the other appears to be falling, and vice-versa. This mirroring affect is one small example as to why health/ nutritional dietary supplements and fatty foods have had opposing markets in American society.

When Krispy Kreme started to expand its business to the north and the west, their stock began increasing (2001). Then, when the Atkins dietary plan was introduced in 2004, Krispy Kreme donuts stock plummeted from 400% of what it started at, back to even. Along the same nutritional line of American society, a mirroring affect of dietary supplements can be seen. For awhile, exercise and low fat were the ways that many Americans sought to lose weight, but, when the “low carb” diet was introduced, many Americans started changing diets. Nutrition 21 offers many dietary supplements, but most of them are for diabetics. Oddly enough, the Atkins low carbohydrate diet was also originally developed for diabetics as well.

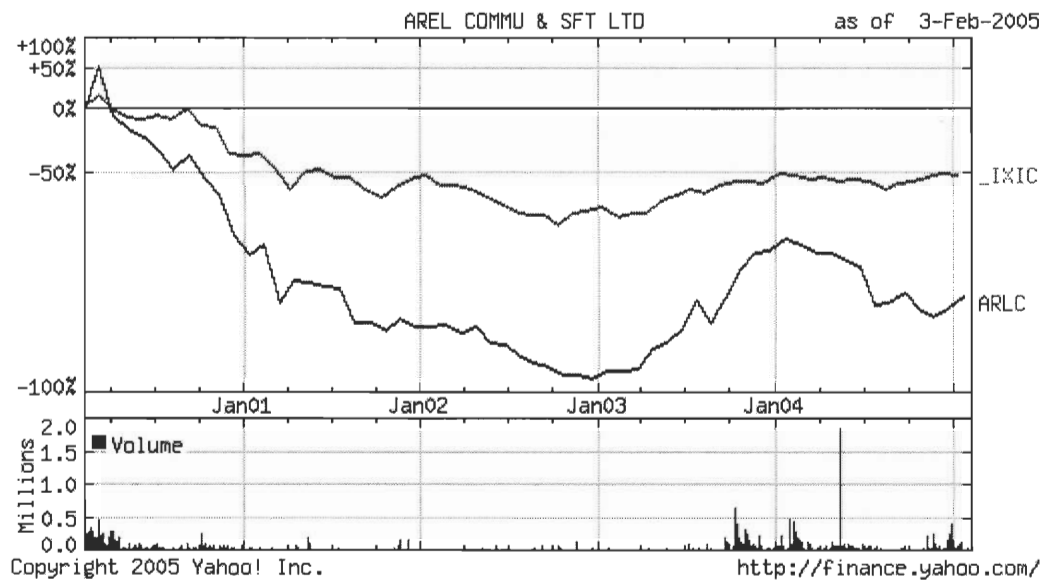


Figure 4.17 Arel Vs. NASDAQ Index Over 5 Years

The above chart demonstrates the dependence of small cap issues on the main market (the NASDAQ index in this case) over a significant period of time. One will note that as the market changes, Arel Communication and Software Ltd.'s stock value changes as well. Actually, Arel's stock is simply "following" the main market stock trend. There are a few things to note here: the magnitude with which the small cap issue stock rises (in this case Arel), is hard to obtain from the magnitude with which the main market increases. In other words, even if one knows that this trend exists, it is still hard to know at what high and low to buy and sell respectively. For example, when the NASDAQ index drops below the 50% threshold, Arel's stock is in the -75% threshold. It is still a useful trend to note.

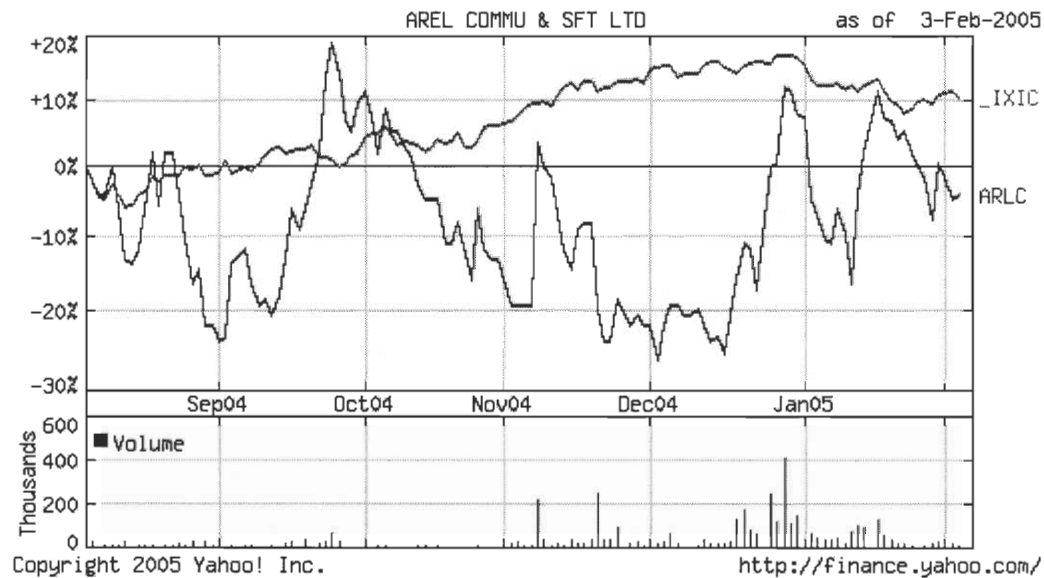


Figure 4.18 Arel Vs. NASDAQ Index Over 6 Months

Here is a sample of the Arel and the NASDAQ index once again, however, the timeline is now shifted from a 5 year spread down to a 6 month spread. Before looking at the analysis for the rest of this section, it is a good idea to record mentally where on the 5 year span this chart lies.

Here it is much harder to see the “following” phenomena of the small cap issue and its main index. One main reason for this is a delayed affect exists. On a 5 year scale, a 15-30 day delay is quite unnoticeable. However, on this mere 6-month scale, one can begin to see the “delay” to which we are referring. Let us look at the 6-month scale right around mid October. We will notice that the NASDAQ index is slowly beginning to rise. However, it is not until mid December, that Arel begins to see a consistent rise in value. That is nearly a period of 60 days of delay! We know this delay phenomana exists too because we can see a large scale overview over the span of 5 years.

Once again, we know the trend is happening, but it is still very difficult to predict how much

“delay” will exist for a particular stock in a particular market. It can be hard to tell when to buy the stock and when to sell the stock. Once again, it is still useful to know this trend.

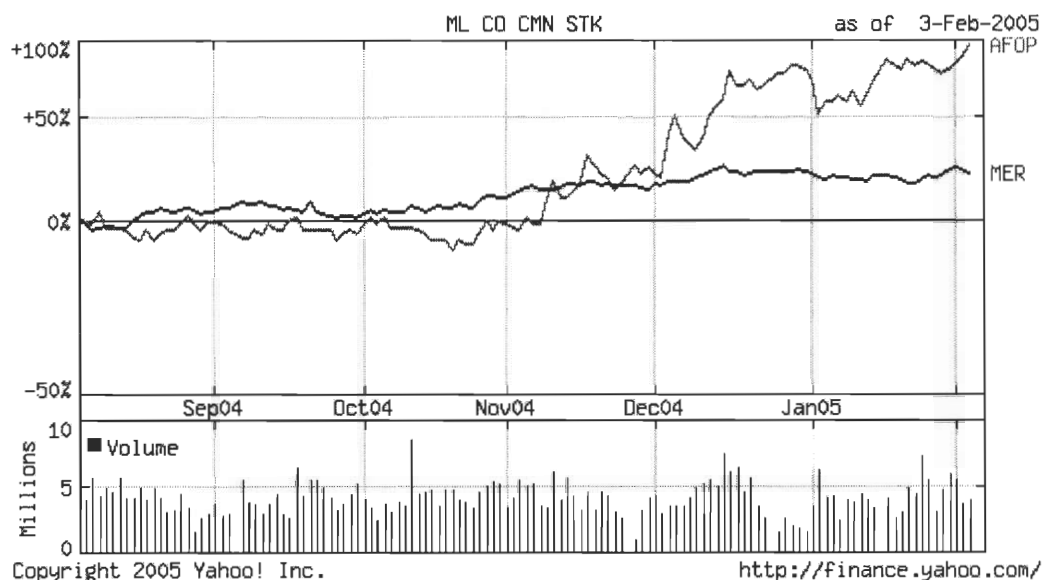


Figure 4.19 Alliance Fiber Optic Vs. Merryl Lynch

The following chart reveals to us a similar trend as the small market cap vs. the main market. This trend deals with the investors, and the small market cap. Here we see a chart for Alliance Fiber Optic Products and one of its main investors Merly lynch. One should note that as the Merly Lynch stock (over this specific 6 month period of time) increase to nearly 25% of its original value, Alliance increases tremendously! The reason for this seems pretty obvious, when Merlyn Lynch makes money, so will its underlying investments.

One way to think about this trend is to think of Merly Lynch as a large stock collectively made up of its smaller cap issues and other investments. It follows that when a lot of small cap stocks do well, then (adding all of these stocks up with the theory of superposition) Merly Lynch’s stock will go up as well.



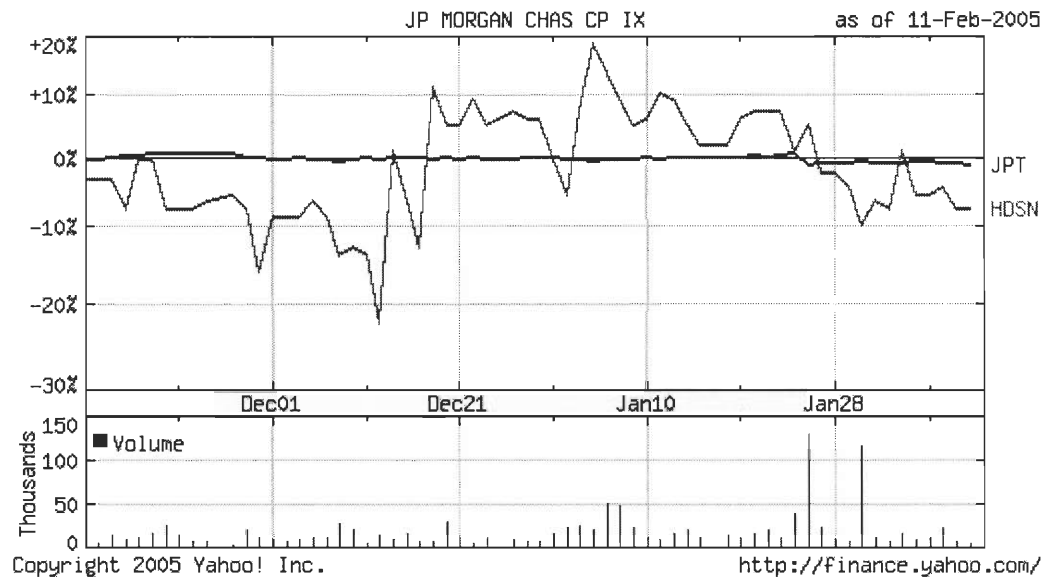


Figure 4.20 Hudson Technology Vs. JP Morgan Chase

Certainly, there are more complexities to the investor/stock relation than previously stated. Here is an example of a small cap stock (Hudson Technologies) and how it does not follow its main investor at all. Morgan chase stock tends to be a rather consistent “flat line”. On the other hand, Hudson’ stock is very fickle; it goes up and down. Here the investor/stock relation does not make sense. Let us think back to the other example with the super position of stocks. If Morgan Chase is comprised of all of its underlying stocks, and if this stock is rising up and down, but all the other stocks are generally staying the same, then Morgan Chase’s stock too will still stay the same. If only one of the stocks is making/ losing the company money, then it will not affect the investing company much money in the long run. In fact, on the large scale stock market, these increments will not even be noticeable.

## 4.6 Chapter Summary

A lot of time stocks all do similar things. In this simulation, I noticed several of these

general trends.

One example of a trend is something called the channel. Even at the penny stock level stocks tend to bounce back and forth between several levels. Even If a stock is “consistent” it still tends to bounce back and forth above and below its average values. For example, DWMA, stayed at a consistent level around \$1.10. but it bounced from \$1.06 up to \$1.16. It was obvious that the stock was going to go up looking at the past three month’s record. In this case, I made about \$3,000. It was a very good prediction.

Oct 29	DWMA	10:30am	Buy	30,000	1.06
Oct 30	DWMA	2:04pm	Sell	30,000	1.16

Table 4.3 DWM Buy and Sell Prices

## 5 Day Trading

In the following section, we will be discussing the method of day trading. As in the last section, we will explain the method in detail, present the simulation, and display the results. Then we will analyze these results and realize a conclusion.

### 5.1 *Explanation of Day Trading*

The style of day trading is one that requires an active market, and a good amount of skill and timing. Day trading in this case is when you buy significant amounts of a stock with the intentions of owning it only for a few minutes, if even that long. When dealing with large sums of money, which can be upwards of \$250,000 at a given time, changes to the market of .05% can result in significant gains or losses. The key is to know when to get out before the stock returns to its original state.

Many stocks fluctuate throughout a day. The starting and closing values are only two points of a day, which has changes in the value every minute of that day. Day trading takes advantage of this fluctuation, and since even poorly performing stocks can have momentary gains, many stocks are good for this style of trading. On the same note, good stocks also have periodic losses throughout the day, and it is possible for a day trader to be caught in a situation of loss. Like all trading, there is gamble as to which way your stocks will perform, in gains or losses.

Companies to focus on in day trading are more unstable in their value. Long term and stable stocks are not preferred, because there is not enough short term jump in the value to make it worth putting in large amounts of money. Markets that are dependent on season, weather, and political climate are better for day trading, as they can quickly change on a moments notice.

Due to this ease in fluctuation and influence from outside sources, day trading is the least

secure form of trading. Those looking to have a safe haven for their money to grow and mature would be better off looking into mid or long term trading and investments. The day trading scene is only for those looking for quick cash many times in a short time period.

## 5.2 Company Descriptions

The companies useful for Day Trading have a volatile movement over a short period of time. Stocks of this type can come from any sector. Trends can develop during the day as to which times are best for trading, but the descriptions below show the high fluctuation necessary for Day Trading. For each company there is a price per share chart to illustrate the strength of the company.

### 5.2.1 Starbucks Corporation

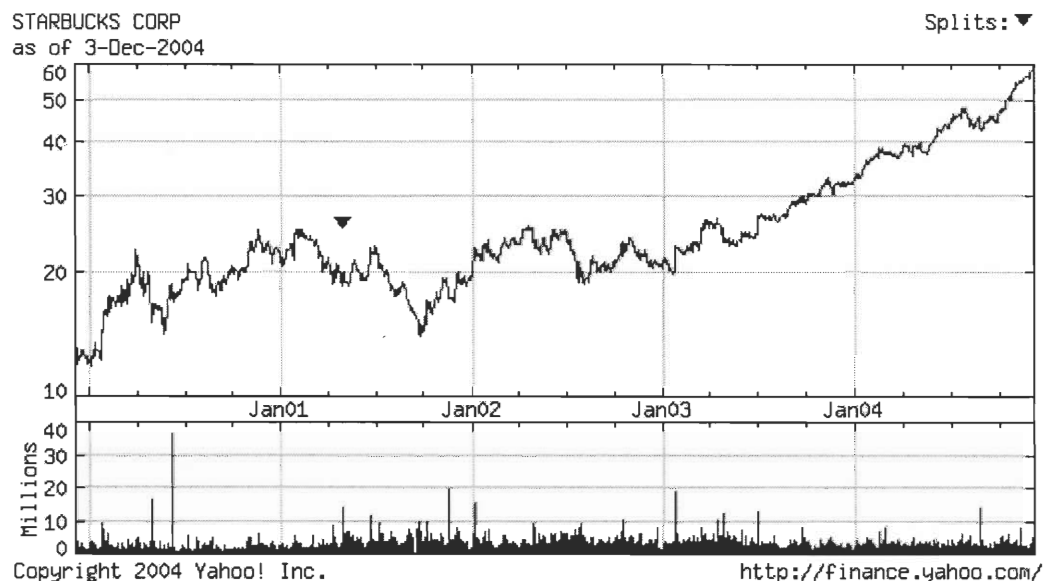


Figure 5.1 Past Performance of Starbucks Corporation

Starbucks Corporation has become one of the leaders in the food and beverage industry in the

past decade. As it is a national chain, its profits are not limited to a certain clientele base, and it brings in revenue from throughout the country.

Being a business based on foodstuffs, this means that the market value of Starbucks would fluctuate if there were massive changes in the prices of any of the foods used. If coffee beans were to rise significantly in price, this would cause production costs to be raised, and until consumer rates rose to offset the resource increase, the stock would fall as profits decreased. As there are several different raw goods used to produce the different forms of coffee and other food items that Starbucks markets in, many different shortages or natural disasters could affect the profit of the company.

Because of this uncertainty of the price of production, and the instability of crop values and how this affects the stock itself, Starbucks is good for day trading. If a hurricane takes out a dairy farm or coffee grove, the Starbucks business will be hit the next day instead of over a slow period of time. As well, knowing that a storm is coming would cause people to try to capitalize on the momentary gains in the company, and try to profit quickly before the impending disaster.

As well, demand varies throughout the day since coffee is seen mostly as a morning drink and throughout the seasons as people desire hot drinks in winter as opposed to summer. These factors are spread over too much time to be worth noticing as a day trader.

## 5.2.2 Google Inc.

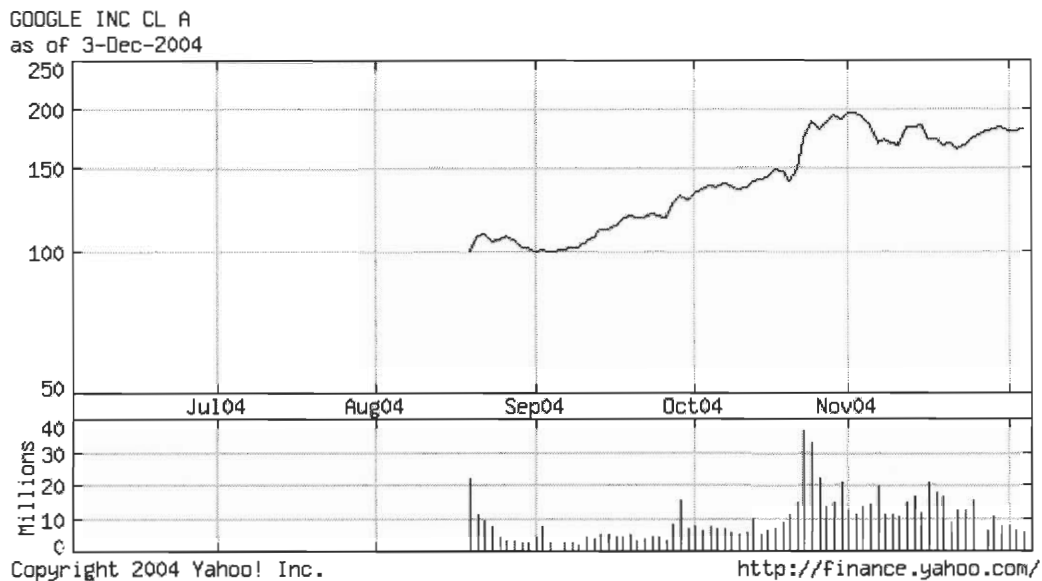


Figure 5.2 Past Performance of Google Inc.

Google Inc. is a newer stock, premiering in the past 6 months. The website went from a privately owned entity into the public sector, and has since risen dramatically in value.

Google is good for day trading, as it is has generally been on a rising slope since its introduction. This means that the odds of profit during the short time that you wish to hold on to the stock are greater than a stock that has been sinking for months.

While a consistent gain is more important to long term trading, it also means that fewer people are going to use it for day trading. Capitalizing on the good fortune while it lasts would benefit the day trader, because the profits could be greater over a short time. Eventually the company should level out, and start to range more during the day.

### 5.2.3 Cabot Oil & Gas

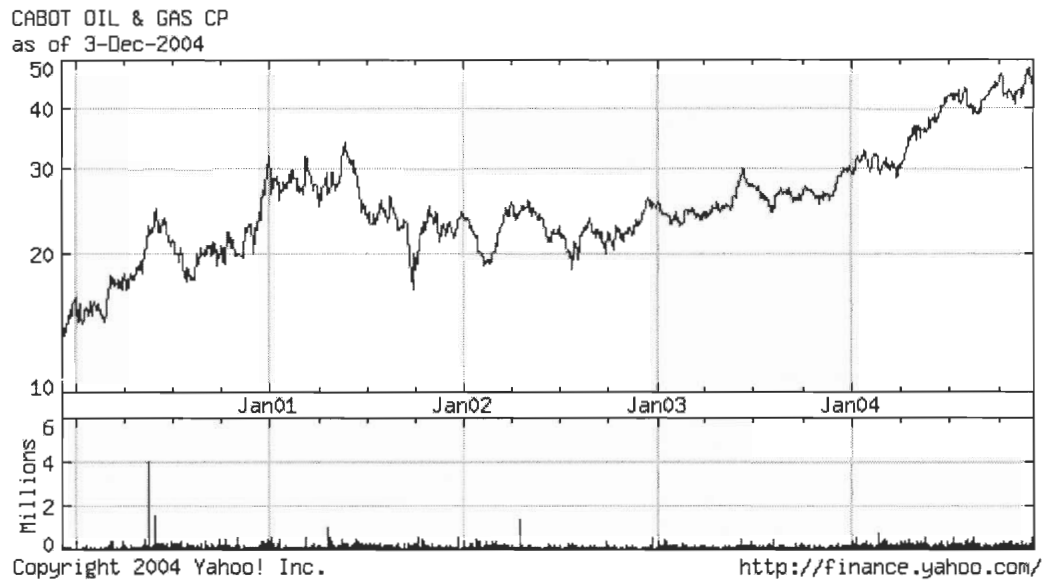


Figure 5.3 Past Performance of Cabot Oil & Gas Corporation

Cabot Oil & Gas is a company that is at the heart of the day trading concept. Oil is a very volatile stock, as the price changes daily due to political reasons as well as production capacity.

The majority of the fluctuations in today's oil prices could come from the precarious political climate of the world. With a world depending on oil, and a small percentage of the planet actually having access and ability to get at the oil, the market is dependent on the mood of the suppliers.

Recently, the oil prices have been on a consistent rise, and they do not seem to be stopping. As demand increases, due to more cars, houses, and other machines being available to use up the oil, the output has stayed consistent. This is a predictable scenario to make the prices go up.

Although there is this constant increase in the price of oil, the economic uncertainty caused by the political world makes the price dance around during the day. The constant up and down cycle makes it a good market to use for day trading. There are large gains daily, although there

are typically almost equally sized losses to keep the market steady. Overall, oil is one of the best markets for there to be day trading in.

#### 5.2.4 Yahoo!, Inc.

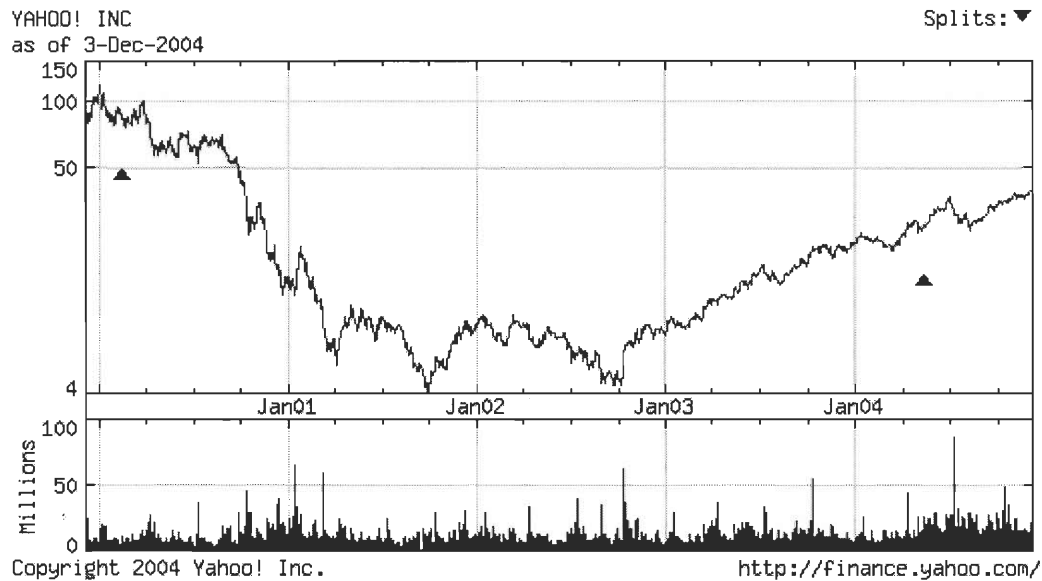


Figure 5.4 Past Performance of Yahoo! Inc.

Yahoo! is one of the internet's leading search engines, as well as also providing email access, financial reports, shopping access, and other connections as a major hub of internet traffic [17]. The company has formed itself into a cornerstone of the online world.

The stock has been publicly traded since 1997, and managed to survive the rise and fall of the Dot-Com companies. Due to the recent explosion of Google Inc. and its internet capabilities, Yahoo! has entered a new realm of competition. Stocks have not fallen, but the new stress from having more and more alternatives continues to pressure the company.

In the ever-evolving market of computer technology, Yahoo! is dependent on this technology to allow it to thrive and continue. As well, other successful internet companies could take away



the share of the market Yahoo! has, in which case prices would start to decline. As every day-trading stock, there are many fluctuations throughout the day. Yahoo! is a moderately stable investment stock, so the odds of an increase during your time-share or favorable.

### 5.2.5 Pixar

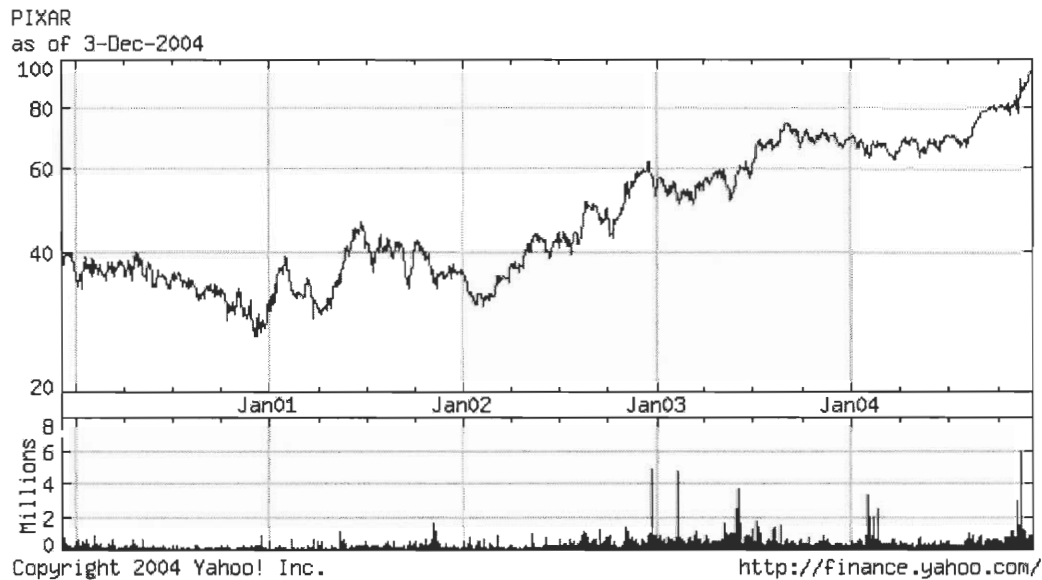


Figure 5.5 Past Performance of for Pixar

Pixar is a computer animation based production studio, known most famously for its production of movies such as Toy Story, Monsters, Inc., and Finding Nemo, all of which are Walt Disney feature films. Their pioneering into the field of computer three-dimensional animation has pushed the creation of new software, hardware, and forced the competing companies to adjust to their techniques.

Pixar split from The Walt Disney Co. in early 2004. This split gave Pixar more opportunities in the movie world, as that it could hire out its services and work on its own agenda. It also was able to free itself from the constraints of the Disney Co. stock system, and take off or flounder without the help of the Disney behemoth.

Pixar has few competitors in the computer animation business, with DreamWorks Animation SKG Inc. being the major industry rival. Disney Co. is now setting up for its own three-dimensional animation after the loss of Pixar's services, but for now, Pixar remains the force at the helm of digital animation.

The split from Disney and the dependence on unpredictable reception by audiences causes changes in the stock itself. One cannot tell if a movie is going to be a great success, or merely time filler in the movie industry. These factors add some uncertainty to the stock, making it worthwhile to invest for short-term purposes.

### **5.3 *Company History***

The history of a company is its overall description. The type of business it is in, recent business moves including mergers and splits with other corporations, or even the formation of the business itself. This history aids in the selection of companies for trading methods.

#### **5.3.1 Pixar**

Pixar is a motion picture company that specializes in computer animation. It has produced many of the leading 3-D rendered cartoons, and has helped push the technology into a more mainstream usage. It has developed major motion pictures for The Walt Disney Company, and has also developed its own private short films to test and perfect new techniques with the digital technology. Pixar also sells its Render Man Technology to other companies wishing to produce computer animation [17].

Since the introduction of movies such as Toy Story, profits for Pixar have been on a steady rise. The California based company has expanded to an employee base of 730, and has reached

an income of \$168.6 million over a 39-week period leading up to October 2, 2004. The company opened public trading in late 1995, and since the opening price of 46 dollars has risen to consistently hover around 80 to 85 dollars. The company seems to be on a track to continue its success, as new development of software and hardware allow the movie industry to expand and evolve [17].

### **5.3.2 Google, Inc.**

Google Inc. is based in the internet searching industry, with other aspects allotted for advertising and internet solutions. Their main focus is providing a reliable search engine for the world to sift through the many websites and to filter through the web traffic in this ever-expanding technological age. It has one of the widest searching web browsers on the internet, and has one of the most sophisticated automated search engines [17].

Company profits are brought in through the selling of space on the internet of advertising spots. This is done either directly through the Google websites, or is achieved through sponsoring advertisements on third-party sites on the Google network. Google also markets a software program called AdWords, which aids companies in their quest to direct their advertising efforts towards the masses. Google Inc. is one of the heavyweight internet browsers, and would seem to stay this way as it adapts to the new internet and the world surrounding it. As the world becomes more dependent on computers and the internet, companies like Google which can navigate the ever-complicating world should continue to prosper [17].

### **5.3.3 Yahoo!, Inc.**

Yahoo! Inc. is an internet provider, which has its roots set in a free email service as well as a

reliable search engine. It is among the top five internet web addresses used for research and web browsing. Yahoo! also has a marketplace function where purchases can be organized through member profiles [17].

Yahoo! also sells its webs space for advertising purposes to gain additional revenue. Since the web browser is free to use, advertising brings a bulk of the income. Yahoo! was greatly affected by the Dot Com crash in 2001, and since then has been trying to rebound to its previous state. As well, increased advertising of its own label has increased in browser usage. Yahoo! is pushing the economy to be more web based, and will be a continued competitor in the internet age until a new form of searching can replace it [17].

#### **5.3.4 Cabot Oil & Gas Corporation**

Cabot Oil & Gas (COG) Corporation is an oil company that looks to explore, develop, produce and market the use of natural gas, some crude oil, and natural gas products. It is based largely in Texas, the Louisiana Gulf Coast, the Rocky Mountains, Anadarko Basin, Appalachian Basin, and the gas deposits of Western Canada. The market is then divided into the Gulf Coast region, the Western region, and the Eastern region. COG also transports and resells the oil it produces [17].

COG should remain a successful company so long as the oil deposits remain plentiful. It has heavy competition with Middle-East oil companies, but since they are based in North America, they aren't competing for actual supplies. With the recent increase in oil prices, the company stands to make good profits. The market for oil and natural gas should remain high until oil supplies start to dwindle [17].

### 5.3.5 Starbucks Corporation

Starbucks Corporation is in a smaller economic, providing only a specific food service instead of a full restaurant experience. It distributes its own brand of coffee and coffee products in not only its chain stores, but also in a retail based form. Starbucks has become a nationally recognized name in the coffee business with not only its Italian style coffee, but the line of products associated with the Starbucks name. Starbucks has become synonymous with the business world, but due to its coffee house, nature also attracts a more artsy crowd [17].

Due to its appeal to multiple groups of patrons, Starbucks looks to continue to increase its revenue and profit margin. When the economy increases, the public are more willing to spend money on unnecessary products such as coffee and exotic teas. The stability of Starbucks depends on the public interest in the product, as well as favorable weather conditions and a successful production of its coffee beans. For the near future, the company will seem to follow its past trend of increasing its value [17].

## 5.4 Records

October 6<sup>th</sup>, 2004

Time	Symbol	Order	Share	Price	Proceed	Gain	Cash	Total Asset
10:17	COG	Buy	2135	46.83	100,002.05	0.00	99,997.95	200,000.00
10:22	COG	Sell	2135	47.02	100,367.70	365.65	200,365.65	200,365.65
10:30	PIXR	Buy	1247	80.20	100,009.40	0.00	100356.25	200,365.65
10:34	PIXR	Sell	1247	79.99	99,727.53	-281.87	200083.78	200083.78
10:38	GOOG	Buy	727	137.5	99,962.50	0	100121.28	200083.78
10:43	GOOG	Sell	727	138.4	100596.80	634.30	200718.08	200718.08
11:00	YHOO	Buy	2888	34.62	99982.56	0	100735.52	200718.08
11:04	YHOO	Sell	2888	34.72	100251.36	288.80	201006.88	201006.88
11:15	SBUX	Buy	2119	47.20	100016.80	0	100990.08	201006.88
11:20	SBUX	Sell	2119	47.25	100102.75	85.95	201092.83	201092.83

Table 5.1: Day Trading Results of October 6<sup>th</sup>

October 14<sup>th</sup>, 2004

Time	Symbol	Order	Share	Price	Proceed	Gain	Cash	Total Asset
10:00	PIXR	Buy	1257	79.55	99994.35	0	101098.48	201092.83
10:07	PIXR	Sell	1257	79.70	100162.90	168.55	201261.38	201261.38
10:10	COG	Buy	2324	43.02	99978.48	0	101282.90	201261.38
10:14	COG	Sell	2324	43.01	99935.24	-43.24	201218.14	201218.14
10:18	YHOO	Buy	2892	34.58	100005.36	0	101212.78	201218.14
10:23	YHOO	Sell	2892	35.16	101662.72	1657.36	202875.50	202875.50
10:30	GOOG	Buy	710	140.9	100039.00	0	102836.50	202875.50
10:35	GOOG	Sell	710	141.5	100445.00	406.00	203281.50	203281.50
10:45	SBUX	Buy	2085	47.96	99996.60	0	103284.90	203281.50
10:50	SBUX	Sell	2085	48.07	100205.95	209.35	203490.85	203490.85

Table 5.2: Day Trading Results of October 14<sup>th</sup>

October 22<sup>nd</sup>, 2004

Time	Symbol	Order	Share	Price	Proceed	Gain	Cash	Total Asset
10:00	SBUX	Buy	1951	51.25	99988.75	0	103502.10	203490.85
10:05	SBUX	Sell	1951	51.20	99871.20	-117.55	203373.30	203373.30
10:10	GOOG	Buy	593	168.5	99920.50	0	103452.80	203373.30
10:17	GOOG	Sell	593	169.6	100552.81	632.30	204005.60	204005.60
10:20	YHOO	Buy	2797	35.75	99992.75	0	104012.85	204005.60
10:25	YHOO	Sell	2797	35.77	100028.69	35.94	204041.54	204041.54
10:30	COG	Buy	2272	44.01	99990.72	0	104050.82	204041.54
10:36	COG	Sell	2272	49.13	100243.36	252.64	204294.18	204294.18
10:40	PIXR	Buy	1222	81.82	99984.04	0	104310.14	204294.18
10:44	PIXR	Sell	1222	81.79	99927.38	-56.55	204237.63	204237.63

Table 5.3: Day Trading Results of October 22<sup>nd</sup>

October 29<sup>th</sup>, 2004

Time	Symbol	Order	Share	Price	Proceed	Gain	Cash	Total Asset
10:00	PIXR	Buy	1238	80.76	99980.88	0	104256.75	204237.63
10:05	PIXR	Sell	1238	80.81	100022.78	41.90	204279.53	204279.53
10:08	COG	Buy	2366	42.26	99987.16	0	104292.37	204279.53
10:13	COG	Sell	2366	42.32	100109.12	121.96	204401.49	204401.49
10:16	YHOO	Buy	2761	36.22	100003.42	0	104398.07	204401.49
10:20	YHOO	Sell	2761	36.18	99872.98	-130.44	204271.05	204271.05
10:24	GOOG	Buy	506	197.7	100036.20	0	104234.85	204271.05
10:30	GOOG	Sell	506	199.0	100674.00	637.80	204908.85	204908.85
10:32	SBUX	Buy	1887	52.97	99954.39	0	104954.46	204908.85
10:36	SBUX	Sell	1887	52.84	99689.08	-245.31	204663.54	204663.54

Table 5.4: Day Trading Results of October 29<sup>th</sup>

November 19<sup>th</sup>, 2004

Time	Symbol	Order	Share	Price	Proceed	Gain	Cash	Total Asset
10:00	SBUX	Buy	1779	56.19	99962.01	0	104701.53	204663.54
10:04	SBUX	Sell	1779	55.73	99123.67	-838.34	203825.20	203825.20
10:06	GOOG	Buy	599	167.0	100033.00	0	103792.20	203825.20
10:13	GOOG	Sell	599	167.8	100492.20	459.2	204284.40	204284.40
10:15	COG	Buy	2308	43.31	99959.48	0	104324.92	204284.40
10:19	COG	Sell	2308	43.47	100308.76	349.28	204633.68	204633.68
10:23	YHOO	Buy	2723	36.72	99988.56	0	104645.12	204633.68
10:28	YHOO	Sell	2723	36.68	99859.64	-128.92	204504.76	204504.76
10:41	PIXR	Buy	1144	87.34	99916.96	0	104587.80	204504.76
10:47	PIXR	Sell	1144	87.31	99862.64	-54.32	204450.44	204450.44

Table 5.5: Day Trading Results of November 19th

December 2<sup>nd</sup>, 2004

Time	Symbol	Order	Share	Price	Proceed	Gain	Cash	Total Asset
10:01	SBUX	Buy	1723	58.03	99985.69	0	104464.75	204450.44
10:05	SBUX	Sell	1723	57.99	99896.77	-88.92	204361.52	204361.52
10:08	COG	Buy	2168	46.12	99988.16	0	104373.36	204361.52
10:12	COG	Sell	2168	45.89	99469.52	-518.64	203842.88	203842.88
10:15	YHOO	Buy	2595	38.53	99985.35	0	103857.53	203842.88
10:19	YHOO	Sell	2595	38.59	100121.05	135.70	203978.58	203978.58
10:26	GOOG	Buy	553	180.8	99982.40	0	103996.18	203978.58
10:31	GOOG	Sell	553	181.1	100128.30	145.90	204124.48	204124.48
10:37	PIXR	Buy	1063	94.02	99943.26	0	104181.22	204124.48
10:44	PIXR	Sell	1063	94.09	99997.67	54.41	204178.89	204178.89

Table 5.6: Day Trading Results of December 2<sup>nd</sup>

December 10<sup>th</sup>, 2004

Time	Symbol	Order	Share	Price	Proceed	Gain	Cash	Total Asset
10:00	YHOO	Buy	2602	38.43	99994.86	0	104184.03	204178.89
10:06	YHOO	Sell	2602	38.42	99948.84	-46.02	204132.87	204132.87
10:09	COG	Buy	2288	43.70	99985.60	0	104147.27	204132.87
10:15	COG	Sell	2288	43.56	99645.28	-340.32	203792.55	203792.55
10:18	SBUX	Buy	1721	58.08	99955.68	0	103836.87	203792.55
10:24	SBUX	Sell	1721	57.89	99608.69	-346.99	203445.56	203445.56
10:27	GOOG	Buy	578	172.8	99878.40	0	130567.16	203445.56
10:33	GOOG	Sell	578	172.9	99916.20	37.80	203483.36	203483.36
10:38	PIXR	Buy	1191	83.91	99936.81	0	103546.55	203483.36
10:44	PIXR	Sell	1191	84.12	100166.92	230.11	203713.47	203713.47

Table 5.7: Day Trading Results of December 10<sup>th</sup>

## 5.5 Analysis

The trading of October 6<sup>th</sup> started out with a sharp gain in COG, and so trading started there to try to take advantage of the upward movement. The actual gain was not very large, but it was a positive start. Pixar was having a stable, low fluctuation day, so the gain or loss would not have been much, so taking a risk would not have sunk the monetary amounts. Unfortunately, the trade resulted in a loss, detracting from the previous gain with COG. Google had just started to rise after a falling for 10 minutes, so it seemed like a good time to try to find a gain. This strategy worked, for a modest gain of approximately 600 dollars. Yahoo was still on a rising trend when the stock was bought, but quickly peaked and started falling, so it was sold for a small profit. Finally, Starbucks was bought on a gamble, hoping the stock would improve, and the change was more of a momentary luck as it brought in almost 86 dollars.

Trading on October 14<sup>th</sup> started with a small sloping rise in Pixar, so it seemed like a good place to bet on the continuing increase. Unfortunately, the difficulties mostly cancelled each other out during the trading period, leaving only a small gain. COG was fairly linear except one large spike downwards. The sell for a negative was prevention against losing more money. Yahoo went on a significant rise, and did not dip back down quickly, and led to a large gain over 1,500 dollars. Google had a small period where it stopped its rapid peak and started to level out, and after such a large rise it looked like it would continue upwards a little more. The small gain resulted from staying just beyond the turnover peak. Starbucks stayed very stable, on a small increasing slope, and there was hope of a spike. There was no drastic change, positive or negative.

On October 22<sup>nd</sup>, the day began with Starbucks going to a quick gaining slope. Unfortunately, after only a few minutes, this reversed into a downward slope, and the stock was



sold to prevent major losses. Google continued its trend of heading upwards, although the gains this day were slow and small. It seemed a safe risk to get at least a small amount of money. Yahoo had begun the morning with a sharp drop off, so the trading felt more like a stab in the dark, hoping for a positive outcome. Sometimes random trades work out like this favor the trader. COG was in a gaining slope for the first half of the entire day, with momentary pauses but no setbacks. The only question was of how large the gains would be. Pixar started the day off high, but then started a slight downward trend, so it was bought in hopes of a momentary respite to be sold off quickly. This turnaround never came.

October 29<sup>th</sup> started with Pixar out of the gates up and down wildly. This led to a very unpredictable day, and the trade was made on a gut feeling of when the best time was. COG had a high start, but quickly came back to opening price, and the payoffs of the early morning were not to return. Yahoo was in a constant plummet for around an hour, and attempts to trade in hopes of an upswing were unsuccessful. Google started extremely high from the morning bell, and after a small movement down, the trade was made to hope the stock went back up, which it did. Starbucks had just come down to around its opening price when the stock started to gain again. This was but a small pause in the downward slope, so another preventive sale was made.

November 19<sup>th</sup> was the first trade to follow the interest rate change announcement of +1% for the next fiscal year. This caused all stocks to head into a downward trend for most of the day, except COG, which due to homes needing heat had encountered a seasonal increase in the price of gas. Google was also profitable, but only due to a well timed trade. Losses accounted most of the day, especially a very sharp fall during the time that Starbucks was traded, resulting in almost 900 dollars of losses.

On December 2<sup>nd</sup>, Starbucks had went high after its opening price, but then started a decline

for about an hour and a half which resulted in slight losses. The price of gas finally fell, with COG taking a rather large hit and any attempts to trade went downhill. Pixar and Yahoo spent the morning in uphill climbs, which stayed consistent so the trades were gains. Google however had a day filled with fluctuations, and made it very difficult to see any sort of trend or pattern developing. The trade ended up working out for the positive.

The final day of trading, December 19<sup>th</sup>, included coinciding losses in everything but Google and Pixar. Yahoo made a sudden drop spike during the trade time, and slowly climbed back up to almost near the buying price before starting to fall again. The stock was sold to prevent major losses. Starbucks and COG both had falling mornings, once again making it hard to make money. Moments of stabilization seemed to appear, but only to continue downwards.

## **5.6 Simulation**

The days with the most success were the first two days of trading, October 6<sup>th</sup> and October 14<sup>th</sup>. A large trade of over 1,500 dollars made the 14<sup>th</sup> a very profitable day. Unfortunately, after this point, days started to level out, taking larger losses, and losses that are more frequent. Google was the most consistent gainer, and did not have a single unprofitable trade in the simulation.

The timing that coincided with the interest rate change affected companies tied in with the rest of the stock market. The two companies to avoid losses at this time were Google and COG, Google being it's own self supporting entity in the digital world, and COG relying on a foreign market to set the oil prices and not the internal market.

The majority of stocks gained early on in the morning, only to progress downwards at some point. These high openings could not be read as indication of a gaining stock, and made early

morning trading more problematic because of the downward progressing stock towards the opening point. Slow starters typically gained more over the morning period, and wound end up providing a stable increase for day trading. It seems to be that trading towards the noon hour would lend better to day traders. As the market has defined itself during the day, the successful stocks have taken much of the risk of a loss of money put in.

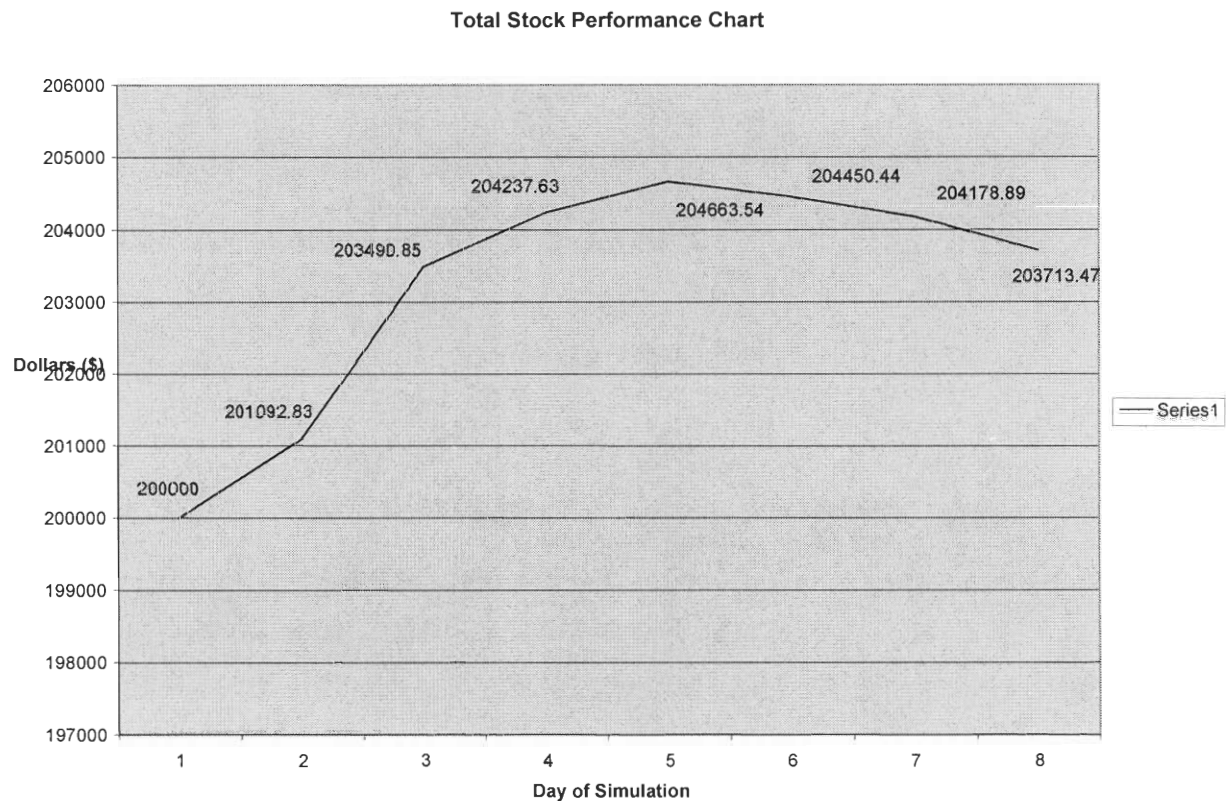


Figure 5.6 Total Stock Performance Chart

## 6 Mid –Term Trading

In the following section, we will be discussing the method of day trading. As in the last two sections, we will explain the method in detail, present the simulation, and display the results. Then we will analyze these results and realize a conclusion.

### 6.1 *Explanation of Mid-Term Trading*

The third and final trading style that was used is mid-term trading. The backbone of this method is to hold stocks for as long as possible after buying them. Of course, it would not be very smart to hold onto stocks that prove themselves poor investments. This is where mid-term trading differs from long-term trading. Whereas long-term trading aims to make small but steady profits on the time scale of years, mid-term trading is a bit more aggressive. A mid-term trader will buy more stocks of a company if he is confident in them, but might sell those same stocks a week later if he realizes that he made a mistake. The basic rule of thumb for this method is simple; invest in stocks that are stable and slowly increasing; aim to buy the stocks that are affected the least by the general whim of the market.

When choosing companies, one should look for the established and long trusted names. He or she should look at the charts with a time scale of years. Of course, if a company's stock dropped significantly at some point, but the market as a whole did, that should be taken into consideration. In general, a company chart for this trading style will have its difficulties. Most likely, it will even have very high peaks and very low valleys at some points. However, overall it should have a steady increase. As stated before, a company that will be able to have this type of internal strength will be a well-noted and long established company. Therefore, a share will cost a pretty penny. But rest assure, if a company is worthy of mid-term investing, the losses

will be rare and manageable, and the profits will be sure and steady. In addition, if a company shows that its increased stock prices reflect an overall improvement in the company, buy more. The opposite is also true; if a company has been struggling for a long enough time to show internal weakness, a mid-term investor should “cut his losses” (so to speak) with that company.

Not too long ago, there was a huge drop in the stock market [12]. Fortunately, this works in favor of the mid-term investor. The market has been making a steady increase since then, but prices are still low. When analyzing charts for a mid-term portfolio, one should especially look for a trustworthy company that has started its rebound.

## **6.2 *Company Descriptions***

The reasons for choosing stocks for the long-term portfolio are simple yet important. Here, an investor wants to play it carefully. Stocks with a volatile price per share history are avoided. Companies who have long shown strong internal strength, innovative methods, and trusted products are the ideal companies to choose. When analyzing the price per share history, an investor observes a chart for at least the past two years. The chart should show slow but steady value worth. For each of the six companies, a price per share chart from September 2002 to September 2004 is shown along with reasons for choosing these companies for the mid-term portfolio.

### 6.2.1 Microsoft

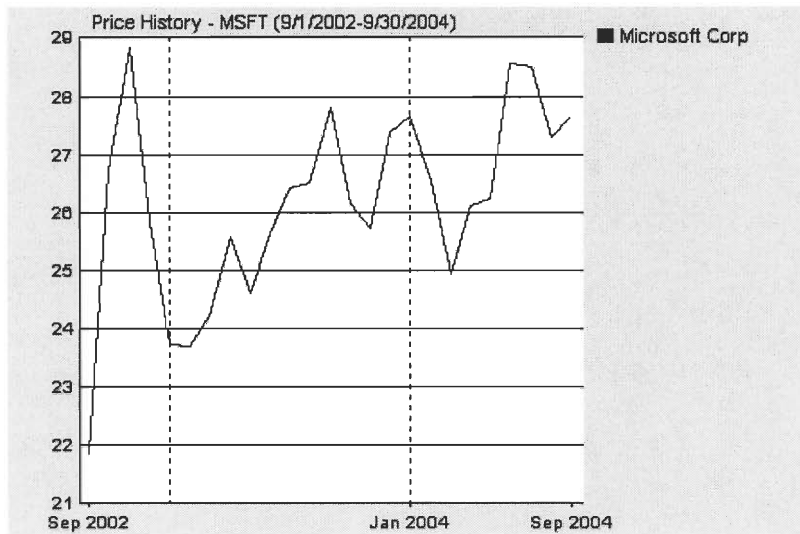


Figure 6.1 Past Performance of Microsoft Inc.

Microsoft embodies the ideal mid-term stock very well. Since this company went public in March of 1986, it has continuously shocked investors and defied the trends of the economy [12]. It is stable and self-reliant. Although all companies are swayed by the economy as a whole, Microsoft is, and always has been, a sturdy business [12]. They have created a very trusted reputation for themselves. For at least the past three years, their charts have been showing a slow and steady increase in stock process (Figure 6.1). Sure, they have their peaks and valleys, some even quite dramatic. However, they always re-stabilize and continue to grow. Microsoft's internal strength and stable stock patterns are magnified by their news of a new, 64-bit, operating system that should be beta tested next year [12], which cemented their status as the top selling software company for years to come.

## 6.2.2 Texas Instruments

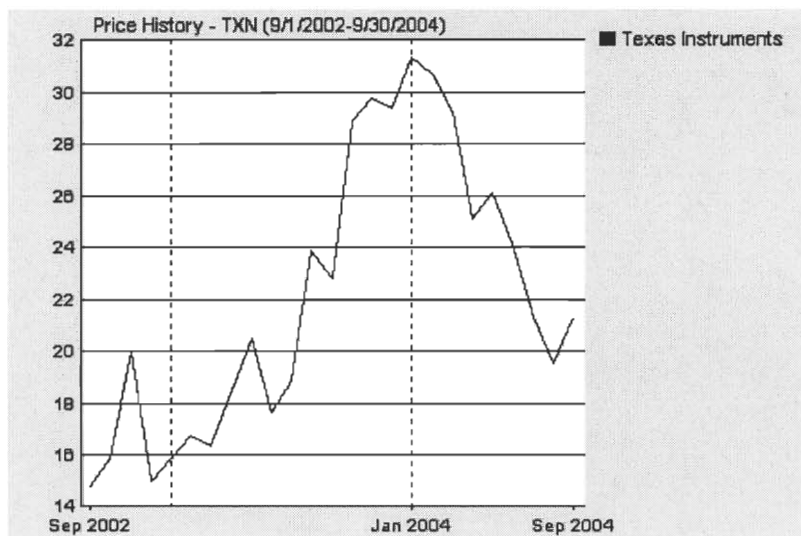


Figure 6.2 Past Performance of Texas Instruments

Texas Instruments has been a part of the New York Stock Exchange (NYSE) for fifty years now [15]. They are established, trusted, and self-reliant. They market and sell high-technology components and systems used for industrial and commercial use [12]. They became so stable by being robust, having three primary businesses. The businesses are Semiconductors, Sensors and Controllers, and Education and Productivity Solutions [12]. The Semiconductor department sells integrated circuits [12]. The Sensors and Controls department sells custom-designed sensors, controls and radio frequency identification systems [12]. The Education and Productivity Solution department sells calculators. These include handheld, four function, and graphing calculators [12].

Although, Texas Instrument's stocks recently took a dive, they have long been a Blue Chip business [15]. This is a strong and experienced company. The dive was merely a market trend that every business experiences at one point or another. Furthermore, over the past six months, Texas Instrument's stocks have been stably, yet quickly increasing. The dive created an ideal investing opportunity for the mid-term trader. It gave investors the opportunity to invest in a

strong company at a very low price.

### 6.2.3 Advanced Micro Devices (AMD)

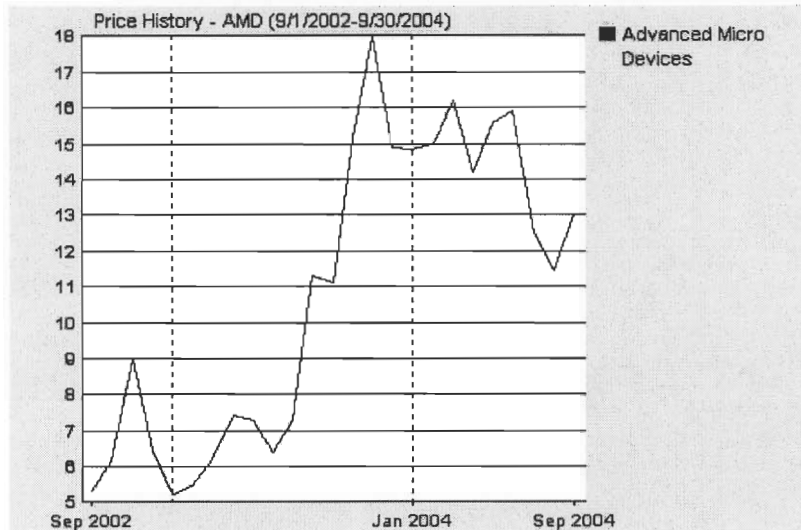


Figure 6.3 Past Performance of AMD

AMD is another company that has proved to be a sturdy, self-reliant company for the past three years and on. A quick glance at the company charts will easily show this (Figure 6.3). Even with their peaks and valleys, the stock prices have been slowly rising. For several years now, AMD has been the second largest name in the sales and distribution of PC hardware, outdone only by Intel [12]. However, this will soon change.

When personal computers first exploded onto the market, Intel was the leader in central processing unit (CPU) and PC microchip sales [12]. This was because of smart contracting with respected PC distributors. However, computers have been closely tied into our daily life for over ten years now. The average consumer is becoming more informed of the inner workings of their computer [12]. Consequently, consumers are researching hardware more as more of them are building and updating their own computers. What they are finding is that AMD provides hardware that performs comparably to those produced by Intel at a fraction of the price [12].



Combined with the recent financial insecurity of Intel [12], AMD is poised to become the dominating name in computer hardware sales in the near future.

#### 6.2.4 McDonald's

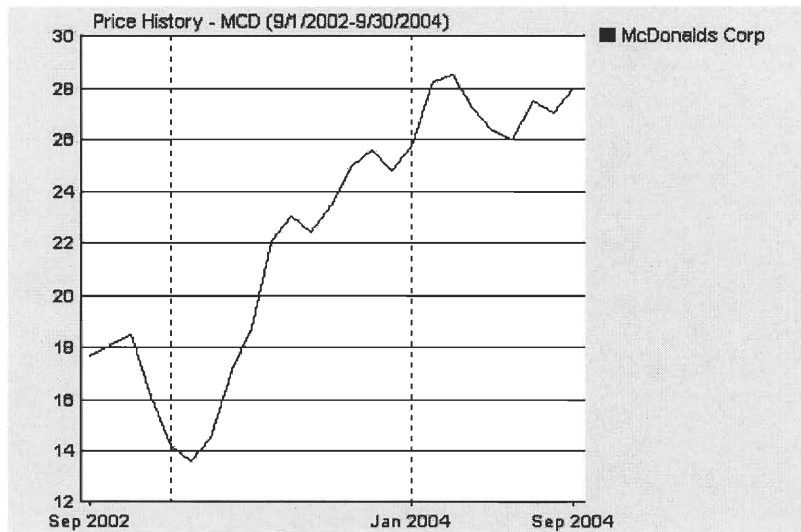


Figure 6.4 Past Performance of McDonald's

McDonald's was incorporated on December 21, 1964 under the name, "Regrub, Inc [12]." Since then, it has revolutionized the restaurant industry. It has been a household name for generations now, with restaurants across the globe. In fact, there are more than 30,000 restaurants in 119 countries, serving 47 million customers a day. McDonald's also owns Boston Market and Chipotle Mexican Grill [12]. It is one of the thirty companies in the Dow Jones industrial average, averaging a 10% yearly increase (Figure 6.4) [12]. With facts like these, it is clear that McDonald's is a company with great internal strength and stability. However, in 2001, their performance disappointed stockholders and their price per share took a hit [12]. This is good news for new investors, though, as McDonald's revenue is rebounding. In 2003, the company earned a total of \$17.1 Billion, up from \$15.4 Billion in 2002 [12].

### 6.2.5 Coors

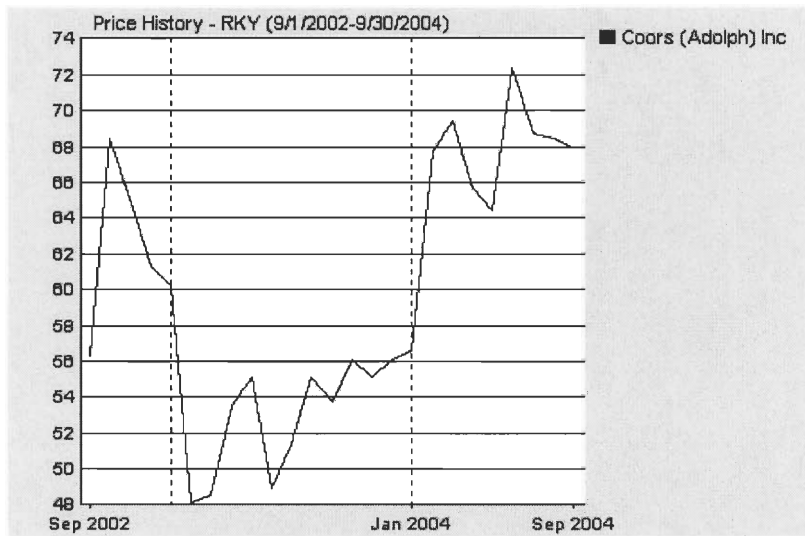


Figure 6.5 Past Performance of Coors

Founded in 1873, Adolph Coors Company is the world's ninth-largest brewer [12]. Annually it grosses \$5.4 Billion in annual sales [12]. This company markets and distributes Coors Light, Coors Original, Aspen Edge, Killian's, Zima XXX and the Keystone family of brands [5]. Investing in Coors at this time is a strategic move for the mid-term investor for two reasons.

One reason is that it is currently the fourth quarter, and, according to the New York Times, the alcohol sector makes a high percentage of their profit at the end of the year [7, 9]. This is because there are more parties and celebrations, and alcohol is given as gifts [7]. The beginning of the fourth quarter is the best time to invest in an alcoholic beverage company because their prices are usually low due to the "September swing [7]." In addition, the closer it gets to the holiday season, the higher the price will rise (Figure 6.5).

However, a mid-term investor must be sure that he will not loose more money during the beginning of the fourth quarter than he will make at the end of the year. This leads to the second key reason to invest in Coors. On July 22, 2004, Coors announced a definitive agreement to merge [5]. This merge, dubbed the "merge of equals" is expected to create a new company with

the financial and industrial means to compete with the brewery giants [5].

#### 6.2.6 Toyota Motor Co., Ltd.

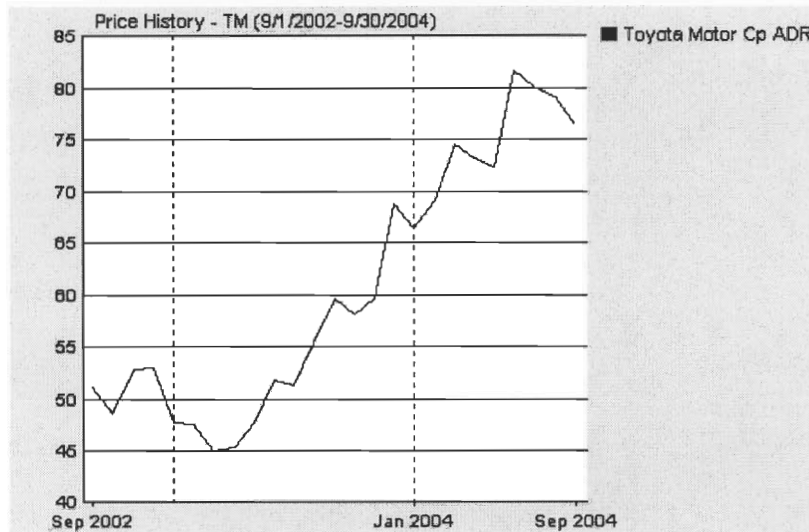


Figure 6.6: Past Performance of Toyota Motor Co., Ltd.

Toyota Motor Corporation designs, manufactures, assembles, and sells vehicles worldwide [12]. The types of vehicles include passenger cars, recreational and sport-utility vehicles, minivans, trucks, and related parts and accessories [12]. It has a financial services department that provides retail financing, wholesale financing, and leasing to its dealers and consumers [12]. It also branches past the automobile industry, dealing with information technology and pre-fabricated housing. This large and diverse market creates a strong financial foundation for the company. In addition, it plans to sell 300,000 gas-electric hybrid automobiles in 2005, paving the way for its steady performance into the future[16]. The Toyota name brand is one that consumers trust; making them one of Japan's top performing companies. Ever since its premier on the New York Stock Exchange, it has shown a continuous, stable increase in stock prices (Figure 6.6) [12, 16]. Obviously, Toyota is a very sound company, worthy of investment from the mid-term trader.

## **6.3 Company History**

As with the penny wise trading, day trading, and any other trading style, it is important to research all of the companies that will be traded wholly. The history of a company hugely influences their credibility and therefore their performance in the stock market.

### **6.3.1 Microsoft**

Microsoft has been a groundbreaking company within the past thirty years, and has played an important role in the so-called “computer revolution.” Their history started in January of 1975, when The Micro Instrumentation and Telemetry Systems (MITS) developed the Altair 8800, the first personal computer [11]. It caught the attention of Bill Gates and Paul Allen, and they began to develop a language known as BASIC for the Altair. In January of the same year, Gates and Allen completed the language and licensed it to MITS [11]. BASIC thus became the first programming language written for the PC [11]. In November, Allen wrote a letter to Gates. In it, he coined the term Micro-soft (taken from the idea that they wrote software for MITS) to refer to the partnership that they shared [11]. Then, in July of 1976, Microsoft reworked and improved BASIC, and sold the language to new distributors, such as DTC, General Electric, NCR, and Citibank [11]. In July 1977, Microsoft (now a registered trademark) released its second language: FORTRAN [11]. The 1978 year-end fiscal report showed that Microsoft sales exceeded \$1 million that year. Microsoft officially became incorporated in June 1981, in the state of Washington. Later that year, IBM introduced its first PC. The machine used the Microsoft operating system, MS-DOS 1.0 [11]. In 1983, Microsoft unveiled its first edition of Windows. It was ready for retail sales in 1985. The following year, Microsoft made its first appearance on the stock market in March 1986 [11]. After several years of updated versions of

Windows and MS-DOS, many new products, and hundreds of millions of dollars in sales, Microsoft releases Windows 95 in August of 1995. It sold over \$1 million in the first 4 days of retail distribution [11]. That year the company reported \$2.02 billion in revenue [11]. Today, Microsoft is the foremost company in developing, marketing, and releasing computer software. It also sells many PC accessories and, recently, even a video game console [11].

### **6.3.2 Texas Instruments**

For over 60 years, Texas Instruments has developed products that have become milestones in technological history. The company was born as Geophysical Service on May 16, 1930 in Texas [15]. The 1930s were the “oil days” of Texas, and the company began by incorporating seismology to find oil [15]. Throughout the 1930s, Geophysical Service quickly, yet stably grew; exploring oil Mexico, Western Canada, Quebec, Venezuela, Columbia, Saudi Arabia, Java, Sumatra, and Ecuador, Panama, India, and the Persian Gulf. In 1938, the company became incorporated in state of Delaware [15]. Then in 1942, GSI (Geophysical Service Incorporated) began providing electronic services to the U.S. Army and Navy. By the end of the 1940s, it received its first airborne radar system contract. By 1950, GSI earned total revenue of \$7.6 million and employed 1,128 people [15]. The following year, the company officially changed its name to Texas Instruments Incorporated. 1952 marked the year that TI entered the semiconductor business, when they purchased a license from Western Electric Company to manufacture transistors [15]. It made its premier on the New York Stock Exchange under the ticker “TXN.” In the following years through the ‘50s, TI developed the first mass-produced high-frequency germanium transistor, the first commercial transistor radio, and the first integrated circuit [15]. They also established offices in England, Italy, Holland, France, Mexico,

Argentina, and Australia [15]. In 1961, TI manufactured and delivered its first integrated circuit computer to the U.S. Air Force [15]. In addition, it received its first missile contract. By the end of the 1960s, TI went global, establishing offices in Europe, South America, Asia, and Japan. 1969 marked a great milestone for TI when Apollo 11 landed the first men on the moon with the help of TI precision switches, thermostats, transistors, and other semiconductor products [15]. In 1973, TI received the first patent for a single-chip microprocessor. In during the 1980's TI continued to break new grounds with their development of the quantum-effect transistor, and RAM chips for the PC [15]. This continued into the '90s with the first quantum-effect Integrated Chip that operates at room temperature, as well as their research and development of voice recognition devices. By the end of the 1990s, TI reached net revenue of \$6.6 billion and employed 70,318 people [15].

### **6.3.3 Advanced Micro Devices (AMD)**

The story of AMD began in 1969 when the company officially became incorporated with \$100,000 [2]. Shortly after, the Am9300 was created. This product, noted by AMD to be its first distinguished product, was a four-bit computer microchip known as a register [2]. Later, the company released its first proprietary product (a device that can only function properly when used with others from the same company) in 1973 [2]. AMD further ushered itself into the mainstream when they sold their first random access memory (RAM) chip in 1975. Their revenue and reputation grew and grew, and in 1979, AMD was finally listed on the NYSE [2]. The '80s was a successful decade for AMD. In 1983 it developed and released a chip known as the INT.STD.1000, which was the highest quality standard for its time [2]. Later in the decade, it made the list of both "The 100 Best Companies to Work for in America" and "The Fortune

500.” AMD amplified its power once more in 1987, when it merged with Monolithic Memories, Inc [2]. The '90 witnessed AMD grow ever stronger. In 1991 it introduced the Am386® microprocessor family, which reached the “one million sold” mark only months later. Two years later, AMD collaborated with Fujitsu to begin work on Flash memory products and devices, which are widely popular today [2]. In 1994, AMD cemented a vital alliance with Compaq Computer Corp, who agreed to use the AMD’s Am486® to power its computers [2]. As the decade continued AMD acquired NexGen, introduced the AMD-K6® processing family. In 1999, it unveiled the AMD Athlon™ processor [2]. This was the world’s first seventh-generation processor for Microsoft® Windows® computing, and it was released months before Intel’s version [2]. Clearly, AMD was becoming a force to reckon with in the microchip industry. AMD is continuing to move up the ranks in the new millennium. In March of 2000, the first computer based solely on AMD hardware was released. In June of 2001, it created the AMD Athlon™ MP processor, the world’s first multiprocessing platform [2]. In February 2002, the company acquired Alchemy Semiconductor and thus formed the Personal Connectivity Solutions business unit [2]. Recently, AMD signed a joint-technology agreement with IBM. It also released the world’s first 64-bit processor, beating Intel to it once again [2].

#### **6.3.4 McDonald’s**

McDonald’s has been one of the most lucrative businesses for decades. Since its conception, it has completely revolutionized the restaurant industry. Some even say that it played a crucial role in changing the face of our nation itself. The story began in 1948, in the town of San Bernardino, California. Here, Dick and Mac McDonald open the first McDonald’s restaurant [10]. It was a drive-thru, and the company symbol was a hamburger-man named “Speedee.”

Then, in 1954, Ray A. Kroc was appointed the first franchising agent for the McDonald's brothers [10]. The next year Kroc opened two more McDonald's: one in Des Plaines, Illinois, and one in Fresno, California [10]. That year, the company's total sales amounted to \$193,772. By 1956, 12 new sites were added in the mid-west area. In 1957, Ray Kroc wanted to endorse his company's name further. So he personally delivered free hamburgers to Salvation Army workers in Chicago at Christmas [10]. By the following year, McDonald's sold its 100 millionth hamburger and reached \$10,896,163 in annual sales. By their fifth anniversary (1960), McDonald's had their first jingle: "look for the golden arches [10]." Their annual sales were up to \$37,579,828. The rights to McDonald's were completely transferred to Ray Kroc in 1961, when he bought the McDonald's brothers for \$2.7 million [10]. In 1962, the company adopted a new slogan, "Go for Goodness at McDonald's," It bought its first advertisement in a national magazine later that year. By 1963, McDonald's was already a national phenomenon. Ray Kroc served the one-billionth hamburger on the "Art Linkletter Show [10]." Also, Ronald McDonald made its debut in Washington, D.C., and the Filet-O-Fish was added to the menu that year [10]. This sandwich was the first to new menu addition since the original. Finally, in 1965, McDonald's celebrated its 10-year anniversary with the first public stock offering [10]. It coasted \$22.50 per share. Later that year, the first television advertisement appeared. In 1966, the McDonald's share made the leap to the NYSE under the ticker "MCD." In 1968, the Big Mac and Apple pie were added to the menu, and the company's success grew. That same year, the one thousandth store opened up in Des Plaines, Illinois [10]. The slogan was changed once again in 1971 to "You Deserve a Break Today – So Get Up and Get Away to McDonald's." In addition, Hamburglar, Grimace, Mayor McCheese, Captain Crook, and the Professor join Ronald McDonald in McDonaldland. In 1975, after continued growth, the first drive-thru is established



in Sierra Vista, Arizona [10]. Also, the slogan is changed, once again, to “We Do it All for You,” and again in 1975 to “Nobody Can Do it Like McDonald’s Can.” However, “You Deserve a Break Today” was the most successful of the slogans, and in 1981, it is renewed as the official one [10]. In the early ‘80s, McDonald’s made the leap from a national phenomenon to a global one. In fact, in 1984 a new store opened up somewhere in the world every 17 hours [10]. Since then, this statistic has barely faltered. A new store has opened once every 18 hours for the past ten years [10]. In 1985, the company introduced the McBlimp. This was the world’s largest airship, and it existed solely to advertise for the company. In 1990, Life Magazine recognized Ray Kroc by listing him in “100 Most Important Americans of the 20th Century [10].” Later that year, the McDonald’s ranked number one among the 100 most popular and widely held common stocks by individuals and investment clubs throughout the U.S. As McDonald’s astonishingly continued to grow, it advertised the milestone of selling over 95 billion hamburgers in 1993 [10]. Later that year, Money Magazine ranked McDonald’s the “favorite stock” of the 30 companies in the Dow Jones [10]. In 2000, McDonald’s sponsored the Olympics in Sydney, Australia [10]. With a world power and phenomenon such as McDonald’s, the company is sure to thrive and continue to grow into the future.

### **6.3.5 Coors**

Coors is an alcoholic beverage company that stands alongside the kings of the sector. It was founded by a young immigrant from Germany named Adolph Coors [5]. Orphaned at an early age, he came to America looking for work. Eventually he found his way to Denver, Colorado [5]. Here, Coors purchased a partnership in a bottling company, and by the end of the year, he was the sole proprietor [5]. Coors had long wanted to establish a brewing company. He

believed that the key ingredient to successfully brew and bear was to use purified water [5]. In Clear Creek Valley, Colorado, Coors found a spring with an abundance of naturally purified water. So, in 1873 Adolph Coors and Jacob Schueler founded “The Golden Brewery.” Schueler, one of Coors’ bottling customers provided \$18,000 [5]. Coors was only able to provide \$2,000. He used many interesting techniques to market his company. For instance, he shipped beer in wagons pulled by mules to thirsty miners in the mountains. He also shipped it in boxcars to early settlers of western territories. In less than a year, the company was starting to catch on. By 1880, it became so successful that Coors was able to buy out his partner and become the sole proprietor. By 1890, the company was selling 545,600 gallons of beer a year [5]. On January 1, 1919, Prohibition was declared in Colorado, and by 1920, it was declared in all states. Even though, Coors worked with his three sons and found a way to keep his breweries open and his operations profitable for 18 years. The family had a porcelain business that started before the Prohibition, and it blossomed during this time [5]. The family made ends meet selling the porcelain products. They also used to breweries to produce and sell malted milk beverages [5]. Coors was fortunate enough to survive the Prohibition. Of the 1,568 breweries operating in 1910, only 750 reopened after Prohibition was repealed in 1933. Adolph Coors actually died in 1929, before the end of the Prohibition. However, in 1933, his son Adolph Jr. Coors reopened the company [5]. In the first year of reopening, the company sold 4,216,000 gallons of beer. Soon after, the company expanded its operations to Ten Western States [5]. Then came World War II. Wartime rationing companies was crippling most companies. However, alcohol was though to be good for the morale of the troops, so the government ensured that brewing companies were able to obtain enough barley and other essential products [5]. In return, Coors promised to set aside half of their productions to sell only to U.S. troops. By the time the war

ended in 1945, Coors was selling 9,300,000 barrels a year [5]. During the postwar period, many brewers experimented with sizes and types of packaging. Kegs and bottles were the primary means, but there arose a demand for added convenience [5]. After much testing and developing, Coors gave the world the first all-aluminum beverage can in 1959 [5]. In the 1970s, Coors made the leap from a regional company to an international one [5]. Despite the company's increasing success, however, many new trends arose in the beer industry. These trends included increased beer advertising, new brands and flavors, and an increased interest in reduced-calorie beverages [5]. In response, the company introduced Coors Light, dubbed "the Silver Bullet," in 1978 [5]. This was destined to become one of the country's best selling beers. Coors continued to expand, and by 1991, it was sold in all 50 states [5]. As time went on, the Company even expanded internationally, with markets in thirty foreign countries. Today Coors is the third largest brewers, with sales exceeding 620,000,000 gallons of beer a year [5].

### **6.3.6 Toyota Motor Co., Ltd.**

The story of the Toyota Motor Company begins with a man named Sakichi Toyoda, born in 1867 [16]. By the end of the century, he completed the Toyoda power loom, and in 1918 established a spinning and weaving company [16]. By 1933, after gaining much power, Toyoda Automatic Loom Works established an internal automobile department. In August 1937, Toyota Motor Co., Ltd. was founded after several years of worldwide motor and automobile development. Shortly after, the Koromo Plant began its operations [16]. The company continued to grow, and in 1947 agreed to a decisive merge with Chuo Spinning Company [16]. In 1947, the production of the Model SA passenger car began. In 1950, after continued success, the company founded Toyota Motor Sales So., Ltd. that was dedicated to the sale of automobiles.

Through the next five years, Toyota grew globally as well as domestically, with sites in El Salvador, Saudi Arabia, and Honduras [16]. In March of 1956, the company entered the industrial vehicle field with the Model A forklift [16]. The rest of the 1950s saw the company continue to grow globally. During this time, sites were established in Costa Rica, Thailand, the United States, Panama, Venezuela, Ethiopia, Brazil, Australia, Ecuador, and Norway [16]. Throughout the '60s, three new plants, a testing center, and two dealing centers opened within Japan [16]. Globally, the company continued to rapidly expand. By the end of the decade, there were manufacturing plants and dealerships in all corners of the world. In December of 1970, Toyota Metal Co. (Toyota's recycling plant), began operations. In December of 1975, Toyota entered yet another business sector: prefabricated housing [16]. Additionally a finance department was created in 1982. Throughout the '80s, Toyota formed several joint production projects worldwide. For example, it joined with General Motors to form the New United Motor Manufacturing, Inc. in the U.S. in 1984. Also, it joined with Volkswagen to start a venture in Germany in 1987. In April 1989, Toyota celebrated its outstanding success when the Toyota Automobile Museum was completed [16]. These collaborations were not limited to the '80s, however. In 1990, Toyota System Research, Inc. was established with Fujitsu [16]. Also, Toyota Soft Engineering Inc. was established in 1991 with Nihon Unisys, Ltd. In 1996, Toyota secured its continued success by establishing Toyota Digital Cruise, Inc. jointly with three other businesses [16]. In addition, it established several research centers. October of 1999 marked a significant milestone when Toyota produced its 100,000,000 vehicle domestically [16]. By the end of the millennium, Toyota Motor Co. reached every nook and cranny of the globe. In this decade, it shows no signs of dying down. The Toyota Financial Services Corp. was established in July 2000 [16]. In December 2001, Toyota established its very own institute, called "Toyota

Institute [16].” Recently, three notable alliances were formed. One was with Nissan to develop hybrid technology, and the other two were with Fuji Heavy Industries and Mitsubishi Motors to begin work on the G-BOOK [16]. In other recent news, the Toyota FCHV became the first-ever, market-ready fuel cell vehicle to be certified by Japan’s Ministry of Land, Infrastructure, and Transport [16].

## **6.4 Records**

In this section, the details of the simulation with respect to the mid-term style are conveyed. In section 6.4.1, the various trades are shown. In section 6.4.2 the performance of each company and how the portfolio performed as a whole are discussed.

### **6.4.1 Trade Records**

Below are the various transactions for the mid-term portfolio. After much research, it was determined that the most promising companies to invest in were Microsoft, Texas Instruments, Advanced Micro Devices, McDonald’s, Coors, and Toyota Motor Co. The first step in executing the stock market simulation was to purchase the necessary stocks.

When an investor completes a transaction there is a charge that averages out to about \$10.00 per transaction. Although the charge is unavoidable, an investor minimizes its impact by buying or selling many shares per transaction. A good number to work with is \$5,000.00 in shares. This way the transaction fee is only .2% of the total cost, so if a stock does well the transaction fee is negligible. Of course, if you have reason to believe that a certain stock will perform exceptionally well, you could purchase more than \$5,000.00 worth. The first transactions, made on September 20, 2004 (Table 6.1) were made with these thoughts in mind.

The mid-term trader “sits on” his stocks for a while, but is more aggressive than the long-term trader is. By December, Coors’ worth did not grow as much as I suspected and it even began to plateau. The performance charts for all six companies can be found in section 6.4.2. Since the alcohol sector is notorious for plummeting soon after the New Year, I decided to sell all my shares in Coors on December 8, 2004 (Table 6.2). On the other hand, the worth of Texas Instruments and AMD had skyrocketed, so I doubled my holdings for both (Table 6.3).

By mid December, the trading period for this simulation was ending and that week the market as a whole was falling. In response, I decided to “sell off” my portfolio and get as much out of it as I could. On December 16, 2004, I sold all shares of my five remaining companies (Table 6.4). This concluded the simulation period.

SYMBOL	CASH INIT (\$)	ORDER	SHARES	PRICE (\$)	COST (\$)	PROCEED (\$)	CASH FNL (\$)	GAIN(+)/LOSS(-)(\$)
MSFT	200,000.00	BUY	219	27.45	6,011.55	6,021.55	193,978.45	N/A
TXN	193,978.45	BUY	315	22.23	7,002.45	7,012.45	186,966.00	N/A
AMD	186,966.00	BUY	387	12.93	5,003.91	5,013.91	181,952.09	N/A
MCD	181,952.09	BUY	217	27.71	6,013.07	6,023.07	175,929.02	N/A
RKY	175,929.02	BUY	75	68.40	5,130.00	5,140.00	170,789.02	N/A
TM	170,789.02	BUY	85	76.50	6,502.50	6,512.50	164,276.52	N/A

**Table 6.1: Trade # 1 - Monday, September 20, 2004, 10:30 AM**

SYMBOL	CASH INIT (\$)	ORDER	SHARES	PRICE (\$)	COST (\$)	PROCEED (\$)	CASH FNL (\$)	GAIN(+)/LOSS(-)(\$)
RKY	164,276.52	SELL	75	73.70	-5,527.50	-5,517.50	169,794.02	377.50

**Table 6.2: Trade # 2 - Wednesday, December 8, 2004, 12:33 PM**

SYMBOL	CASH INIT (\$)	ORDER	SHARES	PRICE (\$)	COST (\$)	PROCEED (\$)	CASH FNL (\$)	GAIN(+)/LOSS(-) (\$)
TXN	169,794.02	BUY	315	24.25	7,638.75	7,648.75	162,145.27	N/A
AMD	162,145.27	BUY	387	22.58	8,738.46	8,748.46	153,396.81	N/A

**Table 6.3: Trade # 3 - Wednesday, December 8, 2004, 12:48 PM**

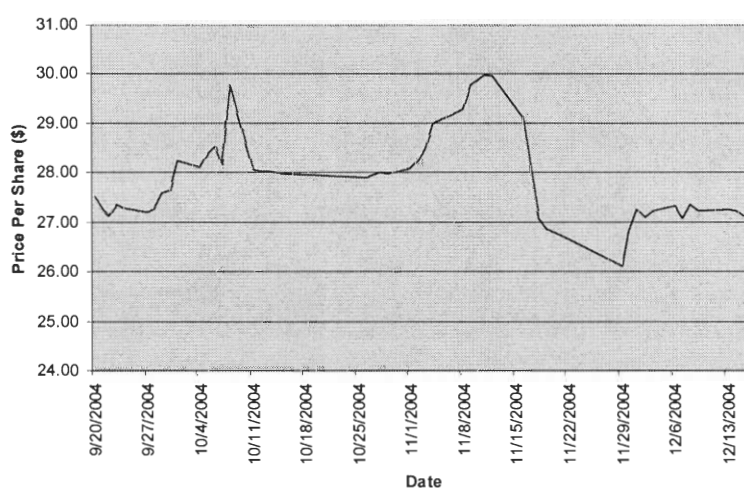
SYMBOL	CASH INIT (\$)	ORDER	SHARES	PRICE (\$)	COST (\$)	PROCEED (\$)	CASH FNL (\$)	GAIN(+)/LOSS (-)(\$)
MSFT	153,396.81	SELL	219	27.17	-5,950.23	-5,940.23	159,337.04	-81.32
TXN	159,337.04	SELL	630	24.39	-15,365.70	-15,355.70	174,692.74	694.50
AMD	174,692.74	SELL	774	22.57	-17,469.18	-17,459.18	192,151.92	3,696.81
MCD	192,151.92	SELL	217	32.49	-7,050.33	-7,040.33	199,192.25	1,017.26
TM	199,192.25	SELL	85	76.85	-6,532.25	-6,522.25	205,714.50	9.75

**Table 6.4: Trade # 4 - Thursday, December 16, 2004, 12:22 PM**

## 6.4.2 Performance Records and Charts

Below are several charts and data tables that illustrate the performance of the mid-term portfolio in detail. First, you will find six charts (Figure 6.7 – 6.12): one for each company. Each plots the price per share over the simulation period, which began on September 20, 2004 and ended December 16, 2004. Note that all shares of Coors were sold on December 8, and so it is depicted in its chart (Figure 6.11).

Following the company charts are a detailed data table and chart of the portfolio as a whole. The data table (Table 6.5) shows several variables. However, the corresponding chart (Figure 6.13) shows the portfolio balance (with respect to the initial cash amount of \$200,000.00) over the simulation period.



**Figure 6.7 Company Performance of Microsoft**

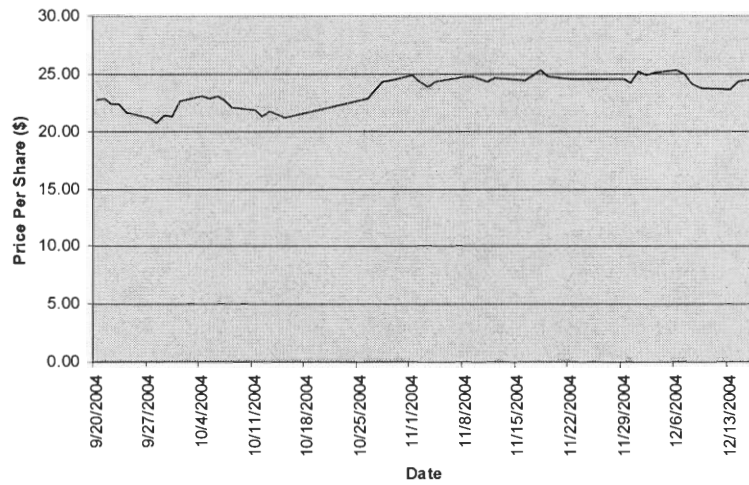


Figure 6.8 Company Performance of Texas Instruments

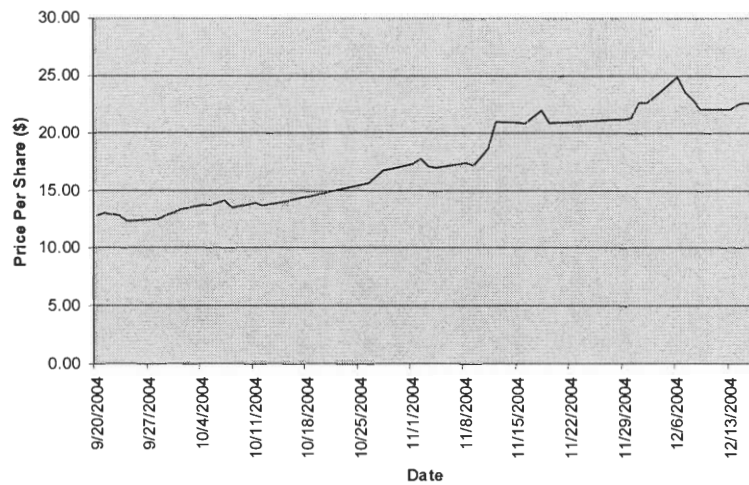


Figure 6.9: Company Performance of Advanced Micro Devices (AMD)



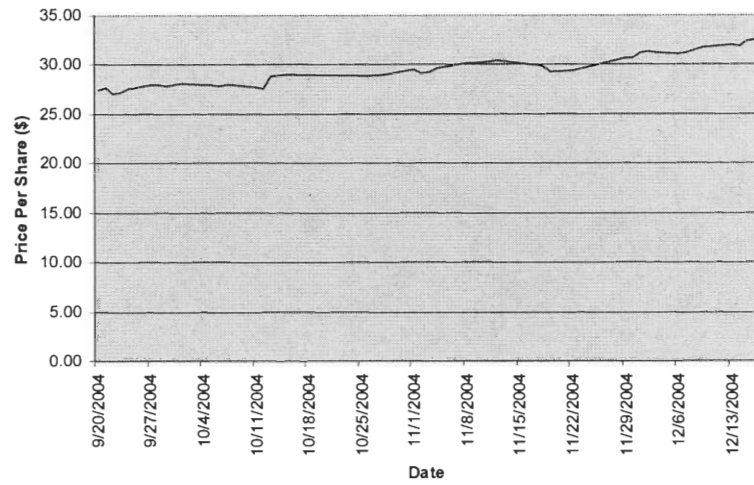


Figure 6.10 Company Performance of McDonald's

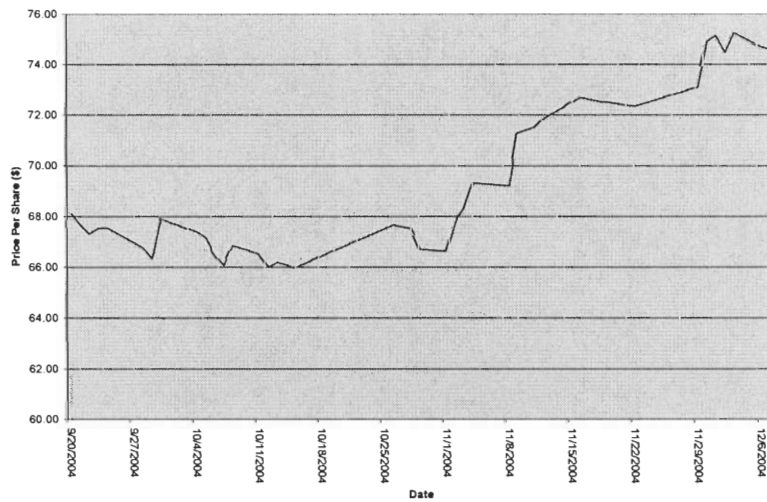


Figure 6.11 Company Performance of Coors

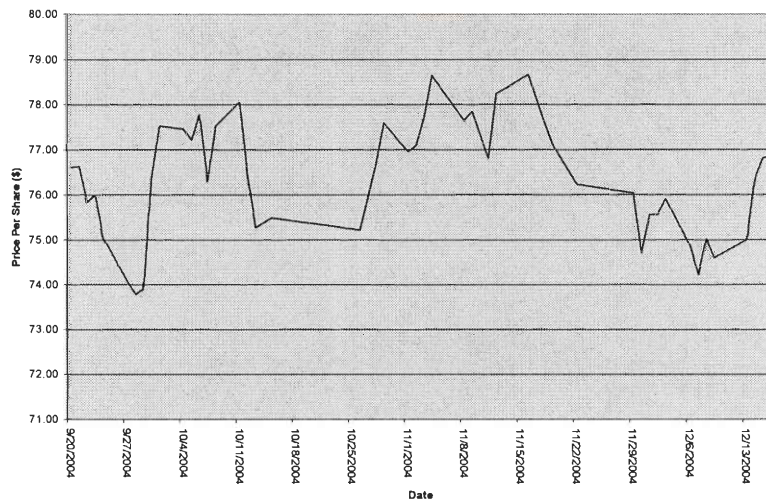


Figure 6.12 Company Performance of Toyota Motor Co., Ltd.

DATE	DAY	CASH (\$)	HOLDINGS (\$)	TOTAL ASSETS (\$)	BALANCE (\$)
9/20/2004	M	164,276.52	35,714.71	199,991.23	-8.77
9/21/2004	T	164,276.52	35,837.04	200,113.56	113.56
9/22/2004	W	164,276.52	35,368.06	199,644.58	-355.42
9/23/2004	R	164,276.52	35,436.87	199,713.39	-286.61
9/24/2004	F	164,276.52	35,049.35	199,325.87	-674.13
9/27/2004	M	164,276.52	34,819.68	199,096.20	-903.80
9/28/2004	T	164,276.52	34,669.95	198,946.47	-1,053.53
9/29/2004	W	164,276.52	35,043.85	199,320.37	-679.63
9/30/2004	T	164,276.52	35,458.36	199,734.88	-265.12
10/1/2004	F	164,276.52	36,298.89	200,575.41	575.41
10/4/2004	M	164,276.52	36,432.88	200,709.40	709.40
10/5/2004	T	164,276.52	36,363.66	200,640.18	640.18
10/6/2004	W	164,276.52	36,570.29	200,846.81	846.81
10/7/2004	T	164,276.52	36,310.21	200,586.73	586.73
10/8/2004	F	164,276.52	36,355.06	200,631.58	631.58
10/11/2004	M	164,276.52	36,069.70	200,346.22	346.22
10/12/2004	T	164,276.52	35,573.17	199,849.69	-150.31
10/13/2004	W	164,276.52	35,965.27	200,241.79	241.79
10/15/2004	F	164,276.52	35,888.94	200,165.46	165.46
10/26/2004	T	164,276.52	37,098.38	201,374.90	1,374.90
10/28/2004	R	164,276.52	38,143.23	202,419.75	2,419.75
10/29/2004	F	164,276.52	38,259.72	202,536.24	2,536.24
11/1/2004	M	164,276.52	38,635.26	202,911.78	2,911.78
11/2/2004	T	164,276.52	38,661.59	202,938.11	2,938.11
11/3/2004	W	164,276.52	38,473.20	202,749.72	2,749.72

11/4/2004	R	164,276.52	38,908.77	203,185.29	3,185.29
11/8/2004	M	164,276.52	39,270.41	203,546.93	3,546.93
11/9/2004	T	164,276.52	39,491.58	203,768.10	3,768.10
11/11/2004	R	164,276.52	39,867.01	204,143.53	4,143.53
11/12/2004	F	164,276.52	41,135.42	205,411.94	5,411.94
11/16/2004	T	164,276.52	40,825.01	205,101.53	5,101.53
11/18/2004	R	164,276.52	40,950.15	205,226.67	5,226.67
11/19/2004	F	164,276.52	40,088.31	204,364.83	4,364.83
11/22/2004	M	164,276.52	39,961.63	204,238.15	4,238.15
11/29/2004	M	164,276.52	40,291.55	204,568.07	4,568.07
11/30/2004	T	164,276.52	40,361.88	204,638.40	4,638.40
12/1/2004	W	164,276.52	41,480.19	205,756.71	5,756.71
12/2/2004	R	164,276.52	41,359.39	205,635.91	5,635.91
12/3/2004	F	164,276.52	41,739.87	206,016.39	6,016.39
12/6/2004	M	164,276.52	42,277.78	206,554.30	6,554.30
12/7/2004	T	164,276.52	41,579.55	205,856.07	5,856.07
12/8/2004	W	153,396.81	52,080.14	205,476.95	5,476.95
12/9/2004	R	153,396.81	51,237.03	204,633.84	4,633.84
12/13/2004	M	153,396.81	51,320.25	204,717.06	4,717.06
12/14/2004	T	153,396.81	52,157.75	205,554.56	5,554.56
12/15/2004	W	153,396.81	52,413.38	205,810.19	5,810.10
12/16/2004	R	205,714.50	0.00	205,714.50	5,714.50

Table 6.5 Portfolio Performance of Mid-Term Portfolio (Data Table)

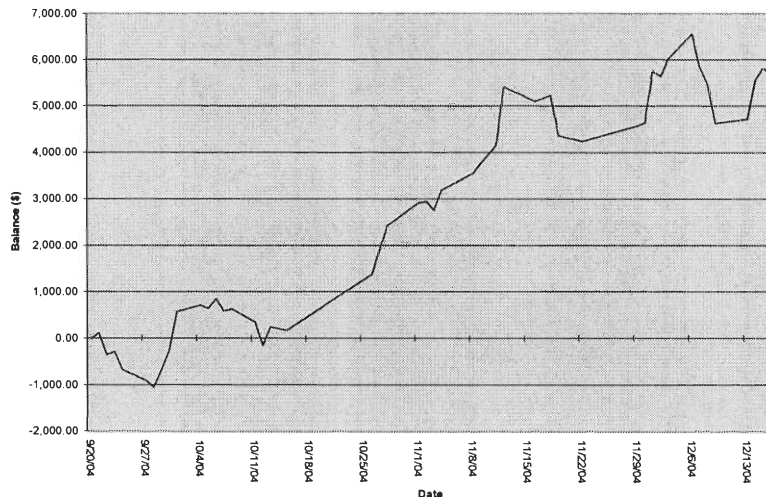


Figure 6.13 Portfolio Performance of Mid-Term Portfolio

## **6.5 Simulation**

The mid-term trading simulation proved to be both lucrative and stable. As made evident by Figure 6.4.12, the portfolio accumulated worth at a steady rate. It had its “ups and downs,” but by late October, the trends were becoming less volatile. After a few months of further stabilization, I changed modified the portfolio by selling off Coors and doubling my shares in Texas Instruments and AMD. This was obviously a smart decision. A quick glance at Figures 6.4.6 and 6.4.7 will show that Texas Instruments and AMD continued to grow. In fact, all companies proved to be smart investments. They all showed signs of steady growth. Surprisingly, Microsoft was the weakest of the six. It had its periods of growth, but overall it was just too volatile. When it was sold off, its price per share was about the same as it was in September, but the transaction fees drove it into a loss, but only a small one. More specifically, Microsoft caused a net loss of \$81.32. AMD proved to be the most lucrative, earning a profit of \$3,696.81. The mid-term portfolio earned a net profit of \$5,714.50.

## **6.6 Analysis**

The companies that proved to be the most lucrative were AMD and McDonald’s. Together, they provided for more than 82% of the net gain. Yet, many investors were wary of both these companies in September. This proves that the key to successful mid-term trading is taking a bit of a risk, but an educated.

In September, I had a hunch that AMD would take off because I was familiar with the computer industry. They were doing poorly in the past, but I they have been causing a buzz recently, and I new it would mean that their value would take off. As for McDonald’s they have long revolutionized American customs and economy. It has showed to be a company with strong

internal leadership. Their stock had been on the decline for a few years, but with a company as strong as this, it makes it all the better to invest in them.

In addition, I found that the third quarter, primarily September is a very volatile time. For a while, it seemed the market as a whole was very unpredictable. However, by mid October, it started to stabilize, as it has done in the past. When President Bush was re-elected in November, the market jumped, then stabilized to a steady increase.

## 7 Methods Comparison

The Day-Trading method is a short time frame, high-risk trading style. It involves large sums of money in stocks that have proven to be successful. These stocks are in commodities and large businesses alike, and the method looks for the moment-to-moment fluctuations rather than a day-to-day consistency. Small percentage gains lead to compounded profits with large sums of money involved. The unpredictability of the market makes it a risky endeavor either way.

Pennywise Trading, like Day-Trading, is looking for a short-term return for the investor, rather than letting the stocks ride for months or even years. Pennywise Trading wants the price to change only a few cents, because most traders will buy many of these stocks to sell off after a gain in a small percentage of the original stock price. Research of the many companies will aid in the selection of a company that will provide a profit.

Both of these methods rely on the good fortune of the market to provide an increase in the value of a certain stock. If the market does not comply, and the stock loses value, both Day-Traders and Pennywise Traders will sell their stocks to head off further losses. This dependence on the markets will increase the stress and tension of participating in these methods. Pennywise trading also incorporates a long research process before trading.

Although penny wise and day trading methods are quite similar in their sporadic ways, they are individually unique. Day trading requires no actual company research; instead, it concentrates simple fluctuations based on the flow of the market as a whole. Penny trading is just a small-scale trading method. However, because so much is at stake, one needs to deeply consider the stocks chosen and the reasons for trading.

A mid-term trader looks for companies that grow steady and slowly. Although one should always expect the market to suddenly plummet, mid-term trading will experience the least

fluxes. At the same time, the mid-term trader should always keep an eye out for a stock that is not growing, is not growing fast enough, or drops too suddenly. On the downside, earning money is with this method is a painstaking process. Change occurs more gradually, so detailed records and analyses must be kept. Midterm Trading is the most stable of the three methods.

## 8 Recommendations for Method Usage

Each of the three methods we used has its own best-fit situation. Day Trading is best used when there is a large amount of funds available, and there is need for a quick gain in money. The process is quick in and quick out, so it is best for those with little time to wait for stocks to climb up. It also can lend itself to those who want active participation in their trading. Many trades can be made in a single day, allowing the investor to play the market for the most gain possible. The Day-Trading method is not good for those who have strict money supplies, and those who want a safe place their money. As the simulation showed, money can quickly be made or lost, so the gamble is significant compared to the gains. It is not a safe method by any means, and requires constant attention and care.

Pennywise is best for if you have the freedom, both financially and in your life, to experiment. There are a few ways to use this method of trading. One way is to have a lot of extra money, and be an accredited investor (one who knows what is going on and how to invest in the stock market). Another way is to just have a few dollars left over and play around with it. This will help one learn and develop the skills necessary to penny-wise trade. This method is very much like gambling, unless one has done the research behind the company, and followed the investors and the general market. Because one is trading with unknown stocks, it is much harder to grasp the trends of the stock. Uneducated investors beware; one should stay away from this unless you know how to take into account a myriad of variables.

Mid-term trading is best for the investor that wants to make some extra cash “on the side.” It can be very lucrative, but requires too much time and patience to be the only source of income for anyone. For example, this method can be used to raise five or six thousand dollars by the end of the year. Or, for the more dedicated investor, it can be a way to raise money for college over a



period of 18 years. It is a prime method for the novice to intermediate trader.

## 9 Conclusion

Making money with this method can be both easy and difficult. The only thing is, it is very inconsistent, as to which it will be at any given moment. Trading with this stock is very time consuming, and it feels like very little work is done (as far as number of trades and progress is concerned); it takes a lot of research to make a single trade. One needs a lot of money to make money. The profit/ loss graph is quite discontinuous and choppy. Each trade results in a large loss or a large gain. I personally would not recommend this method to anyone, unless they were an accredited investor with the time and money to take part in a profitable game.

Day trading is a method that is very inconsistent. The day-to-day movement of the stocks is independent of the previous day's movement. Day trading is also a style that separates itself from the rest of the market, making it harder to predict. You need a large sum of money to start, and it will allow you to participate more fully in the method. There is a sort of building effect, where the little gains from each trade eventually combine to create a large sum of money. However, the large risk that is taken by using this method could also result in the loss of this sum. The Day-trading method is not a way to consistently make money. Since it is impossible to actually predict the stock movement, you need a fair amount of luck. Approximately half of the money earned or lost came as a result of a lucky trade rather than a predetermined stock action. I would not recommend this method to those who do not have the time to fully immerse themselves in the method, and spend time evaluating their own trends to refine them to the day-trading style.

Mid-term trading is the most stable of the three methods. It is a prime method to use for the novice trader trying to get his "feet wet" in the business. It is much less time consuming than the other two methods, as well. Although it requires painstaking recording and researching, this method can be used by someone "trading on the side." It is much less stressful than the other

two methods; it's much less of a gamble. The mid-term portfolio grows slow and steady. It is rare to lose huge amount of money in one day. In addition, the portfolio accumulates money slowly. A quick look at the mid-term portfolio chart (Figure 6.13) will show that this portfolio shows very steady trends. However, this method is not for the trader that is trying to "get rich quick" or make their living on the stock market. The money comes in much too slowly.

The final results of our project are in terms of three single numbers representing how much money we made in each section. This number alone cannot determine the validity of each method. There is more to consider than just a single number. For instance, there may not have been a great cross section of the entire market of the USA, because we only chose stocks from just a couple indexes. In addition, only a certain percentage of the total profit was "earned". In other words, some of the profits were the result of circumstances out of our control.

Overall, the mid-term style performed the best. Granted, the method of choice depends on the individual circumstances. For example, day trading is a more appropriate style when one is sure that a stock will increase suddenly. Penny wise trading is more appropriate when you know if the entire index is on the rise. Mid-term trading is optimal when the market is unpredictable, but no major changes have recently occurred either. However, we found the pennywise and the day-trading methods to be too fickle; they take up a lot of time and are not practical for the average stock market Joe. Therefore, we prefer the mid-term trading style to the other two.

We gained a great deal of knowledge in this stock market simulation. We learned some general concepts and terminology. We learned how society reacts as a whole to certain events in the economy. For example, when President Bush was reelected, the market made a huge leap. In fact, the mid-term portfolio gained almost \$1,000.00 within days after the elections. We also learned of the infamous "September swing," and how to better prepare for it. We learned that

the alcohol sector is prime for investing in the fourth quarter, but they usually plummet soon after the New Year. We learned how to look for companies that are relatively cheap, but are poised to skyrocket. We learned how to analyze company performances and “cut our losses” at an appropriate time. We learned how to be more efficient with our money; we do not want to be too conservative, but we do not want to be too risky either. We gained the knowledge of small stocks “following” the general market, index and/or major investors, and how to take advantage of that knowledge. Overall, this stock market simulation experience will not go in vain. The understanding we have gained may become an active part of our adult investing lives later in life.

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\*Note: All sock quotes in the penny-reading and day trading sections are from Yahoo! Finance. All stock quotes from the mid-term trading portfolio are from MSN Money.