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Stock Market Simulation

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### **Abstract**

A five-week stock simulation was conducted on the stock market using basic resources to mold an investment strategy and test the method in the current market. Two portfolios were created using our research and specific strategies. The knowledge gained from completion of this project will allow us to have a basic understanding and formidable investment strategies to apply to our future portfolios.

### **Acknowledgments**

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## **1. Introduction**

This project is being conducted in order to analyze the stock market and gain inference into investment options in hopes to not only develop a stronger understanding of the economic options within our society but to also apply our research to a portfolio within our current market. Our goals for the project are to increase our overall knowledge of the stock market and potentially allow ourselves to increase our economic wealth through use of the stock market in the years to come. Through our research we will analyze specific investment methods and conduct investment simulations in order to implement our research into a more practical setting. Portfolios will be created in order to apply these investment strategies and test our ability bring theory into the modern market. This research will not only include an in depth analysis of the chosen investment strategy but also a study of the companies which we feel best represent the situation described by our chosen investment method in order to create a growing portfolio in a five week simulation period.

This research process and period will allow us to gain a better understanding of the current market and hopefully give us insight into profitable methods of investing allowing us to develop a more keen insight into the world of modern economics in a free market system. The research will not be limited to these specific items; daily research will be required in order to analyze current events as well as market fluctuation. Through this portion of research we will begin to understand the impacts of current events on the global market and gain a first hand analysis of our chosen investment methods.

Through the completion of this project we will have given ourselves a stronger foundation in the field of economics and also gain the experience of test-driving our

ability to make money through stock market investments. We will understand how the market is affected by our society and world we live in, as well as have a thorough background in two specific investment strategies. This project will allow us to make smarter financial decisions after our years at WPI and hopefully allow us to increase our economic wealth.

## **2. Investment Options**

There are many ways that one can invest their money in today's economy. The purpose of this chapter is to outline some of the many options. We have chosen the most popular options and gone in depth on how they work and why people choose them over other options. The chapter will cover mutual funds, bonds, certificates of deposit, stock market, money market, hedge funds and treasury bills.

### ***2.1 Mutual Funds***

A mutual fund is an investment company that pools money from a large group of investors into one diversified portfolio of investments in order to reach a goal of return or growth. Investors give their money to the mutual fund, which is then invested into the market in the form common stock, bonds and other securities. The investors themselves do not own the stocks or bonds that the mutual fund used their money to purchase, the investors instead own a portion of the entire mutual fund. Although they are considered the owners of the mutual fund, unlike stockholders they have no say in how the company itself is run [12].

The investors purchase the shares of the mutual fund directly from the fund itself. An advantage to purchasing shares in a mutual fund is that the shares are very liquid. They can be sold back to the company or active broker at any time. The shares themselves may represent hundreds of different securities because they represent a percentage of the overall mutual fund. This creates a more stable and diversified portfolio. The company itself is managed by fund investment advisors who have access to the best market data and research and in turn are given the responsibility of

maintaining their portion of the portfolio. This maintenance includes the selection, buying and selling of all securities. These advisors are also registered with the Securities and Exchange Commission and allow the investors of the mutual fund to be able to invest like a professional, although this does not entirely ensure that all investments will be profitable [12].

Mutual funds trade in large quantities of shares allowing them to pay less brokerage commissions than an individual investor would make. This means that the mutual fund is able to get a larger number of shares per dollar than that of an individual investor increasing the overall wealth of the mutual fund as a whole. Mutual funds also provide their customers with easy access Internet services and customer service making them an easy choice for first time or inexperienced investors [12].

Mutual funds making investing easy and user friendly to an average person, however they give their investors no control over where their money is invested [12].

## ***2.2 Certificates of Deposit***

A certificate of deposit is also referred to as a CD and is a very simple way to invest ones money. A CD is a promissory note issued to someone by a commercial bank and is a low risk investment. This certificate entitles the holder to receive interest on the money in the account but there are certain rules that apply to CD's. There is a maturity date on the CD, which is when the holder of the certificate can receive the money that has been earned in the account. This makes a CD a time deposit meaning that the investor cannot take the money out of the account on demand. Although they can take the money out before the maturity date, there is usually a penalty, which is incurred by the holder.

There are two types of CD's, small and large. Small CD's are less than \$100,000 dollars and large are greater than \$100,000 dollars. The majority of large CD's and even some small CD's are negotiable [1].

The interest rate on the CD is settled on before the investment is made. This rate is established by the bank and can vary from time to time. It is a constant rate throughout the CD's lifetime and does not change at any point before the maturity date. This is a low risk investment because the holder knows what they will be making in profit off of the investment when they first begin. The only risk is possibly getting a better rate at another bank or another time other than the time and place you choose. For example, if one was to invest \$10,000 dollars in a CD with a fixed interest rate of 5% compounded annually, at the end of the year it will be worth \$10,500 dollars. The investor made \$500 dollars with extremely low risk and did not have to do anything besides put the money into the CD [1].

Most banks have some rules for CD's that the investor must follow. The bank usually requires a minimum amount invested, about \$500 dollars. The longer that one is locked into the CD, the higher the interest rate. If one is willing to let the bank hold onto their money for a longer time, the bank is willing to give the investor a higher rate of return on their CD. The CD's are FDIC insured at most banks and gives the investor a sense of security with leaving the money with the bank. However, a big downfall to a CD is losing the ability to take the money out when you want it and also to invest that money in a different way and possibly make more money down a different road [1].

CD's are a great investment for some one who is looking for low risk, and a guaranteed profit. Although the risk is low and a certificate of deposit is a smart

investment, the yield or profit is not nearly as high as that of many other investment options [1].

### ***2.3 Money Markets***

In today's financial world, when a company needs a very conservative and safe way to earn interest on some money, they turn to a money market. Money markets are one of the safest investments that are very short compared to other investments. Money is lent and borrowed for short periods of time ranging from a few days to about 13 months. Money markets use negotiable CD's, banker's acceptances, U.S. Treasury bills, commercial paper, municipal notes, federal funds and repurchase agreements [2].

The participants in a money market can vary from a large company to a single private investor. It is very popular for an investor to put money into a money market in between investments in order to earn interest on the money. This is the perfect place for the money due to the high liquidity and short-term obligation offered by the money market. Money markets are available at most financial institutions and can be opened easily by an investor. Professional money managers are in charge of most of the money in the money markets. They know which investments are conservative and safe for the investor's money. The investor is usually given a checkbook, which they can draw upon the funds in the account [2].

There are however some negatives to investing in a money market. For example, some financial institutions place a limit on the number of checks that can be drawn on the money market account each month. This is a small inconvenience but there is a much larger downfall to the money market if you aren't planning on investing a lot of money.

The rate of interest is directly related to the amount of assets, which are deposited into the money market account. In the case of a CD your rate is determined by the amount of time your money is held by the bank where as in this case, the money market is friendly to the wealthier investor [2].

Investing funds into a money market is ideal for wealthy investors who are looking for a guaranteed return with very low risk, and most importantly, high liquidity. Being able to take out money from the account is the biggest advantage that the money market has over similar investments such as CD's. It is a great place to gain interest on money, which is in between investments instead of the money sitting in an ordinary checking account collecting no interest at all. If one has time and money to set aside, it is smarter for that person to invest in a CD due to the higher returns. However, if one is willing to cut their returns and rely on a more liquid investment, then they are the ideal participants in a money market [2].

## ***2.4 Hedge Funds***

A hedge fund is a private investment, which is most commonly a partnership open up to a limited amount of investors. In order to be involved in a hedge fund, a very large minimum investment is required. The fund is a highly aggressive portfolio, which needs to be managed by a sophisticated investor. The investors in hedge funds use advanced investment strategies and also invest in both the domestic market and foreign markets as well. The hedge funds are not regulated quite contrary to the mutual funds we have previously talked about. This is due to the sophistication of the investors and their

knowledge. However, it takes more than just being a knowledgeable investor to be involved with hedge funds [12].

By law the majority of the investors in the fund need to be accredited. This basically means that the investor must make a minimum amount of money each year and must also have a net worth of \$1 million dollars. In order to have these kinds of returns the investor must be very knowledgeable of his investments and money. For the very wealthy, a hedge fund is basically their form of a mutual fund. What makes the investments similar is that they both pool the money and are professionally managed. A hedge fund however is much more flexible in terms of the strategies used when investing [12].

The risk of a hedge fund can vary from fund to fund. Hedging is actually known as the practice to reduce risk, but the main goal of a hedge fund is to maximize returns from the investments. When hedge funds were first introduced they were to reduce the risk of the bear market and they did that completely. Nowadays there are many more investment strategies, which increase the risk of hedge funds. The risk can many times be much higher than that of the actual market itself [12].

This is important because not all hedge funds are the same. The returns, volatility and risk vary in each hedge fund due to the large number of investment strategies used in hedge funds. There are about 14 different strategies used in hedge funds and they all vary in terms of risk. It is very important to understand all the types of strategies in order to capitalize in the market with hedge funds [12].



## **2.5 Stocks**

Stocks are shares of ownership in the assets and earnings of a business corporation. Each stock is a percentage of ownership for any public corporation although this percentage can be very marginal. There are two types of stocks, which are typically purchased from a stockbroker. These two types of stocks are common stocks and preferred stocks. Investors view stocks as potential income because they represent partial ownership of a company and if the company's profits increase, then in turn receive a cash dividend or an increase in the overall market value of their currently owned stocks [12].

Common stock is the most common and basic form of ownership of a corporation. The stocks average a rate of return that is nearly twice as high as the return made from preferred stocks and bonds, however, this return is not guaranteed. An investor would typically expect a rate of return of approximately 10% or higher each year from the common stocks in their portfolio [12].

Stockowners can also be referred to a stockholder or a shareholder, and despite their partial ownership of the company, they have only a limited liability for any business losses and this liability can at a maximum be the loss of their money invested into the company's stocks. If the corporation were to go bankrupt the common stockholder's ownership value consists of the amount left per share after the claims of all creditors are satisfied first [12].

Common stock holders also have voting rights, which is a proportionate voice in the matters affecting the overall corporations i.e. the election of the company's board of directors. These proportionate votes are based on the number of stocks the shareholder owns (the more stock you own, the more votes you get in an election) [12].

Preferred stock is the second type of stock that can be more specifically defined as a fixed-income ownership security in a corporation. The owners of a preferred stock receive an annual dividend, like common stock holders, however this dividend is a fixed amount per share and the corporation is responsible to pay all preferred stockholders prior to paying the dividends to the common stockholders. But unlike the common stock holder, this dividend does not fluctuate even if a company becomes extremely profitable the preferred stockholders will receive the same annual pay out. Although they are less profitable, preferred stocks are a valuable market tool to those who desire a reliable stream of income from their initial investment [12].

Despite the difference in profitability, both common stockholders and preferred stockholders take a similar market risk and are not guaranteed to receive annual dividends. However, if an investor chooses to invest his/her money into a company which does in fact grow and become highly profitable, then the shareholders are entitled not only to their dividend of the annual overall earnings, but they also have the option to sell their shares of the company for the most current market value of the corporations stocks [12].

## ***2.6 Bonds***

An investment similar to stock is a bond. A bond is a debt security, which is very similar to an I.O.U. The reason that it is similar is because when someone purchases a bond they are in fact actually lending money to someone else. When someone purchases a bond they loan money to a government agency, municipality, corporation, federal agency or another entity. The reason that someone would purchase a bond is actually

very simple. The issuer of the bond promises to pay the investor a specified interest rate on the bond during its life. The issuer also promises to pay the face value of the bond to the investor when the maturity date is reached [3].

A bond is another safe investment in today's market and many people choose to invest in bonds as a way to diversify their portfolio. It is always smart to diversify your portfolio having cash assets, stocks and bonds. Stocks can be risky and you do not want to have cash just sitting in an account and making no money off of it. A bond is a great way to gain interest and make money off of part of your portfolio. Bonds typically have a predictable stream of payments and repayment of principal and many people invest in them to preserve and increase their capital or to receive dependable interest income. This can be great for retirement planning or saving money for your child to go to college. Whatever the case may be, investing in bonds can greatly benefit you in achieving these goals [3].

Bonds pay interest that can vary from bond to bond. They can pay interest that is fixed, floating or payable at maturity. Most bonds have fixed interest rates and are paid out semi-annually. For example, if an investor were receiving 8% interest on a \$1,000 dollar bond, they would receive \$80 dollars a year. It would be paid in \$40 dollar increments every six months and when the bond matured, the investor would receive the initial \$1,000 dollar principal. The maturity of a bond varies from one day to more than 30 years even. There are two ways that a bond can be affected during its life by provisions [3].

These provisions are calls and puts. A call provision is when the issuer of the bond is required to repay the face value of the bond to the investor before the date of

maturity. This tends to happen when the interest rates have dropped significantly since the time the bond was issued. It is very important to ask if the bond you are purchasing has the call provision. Bonds with a call provision tend to yield more annually due to the risk of the bond being called earlier than the set maturity date. A put on the other hand is when the investor can require the issuer to repurchase the bond at specified times before the maturity. This can be caused by high interest rates and the investor needing cash to invest at a higher rate of interest. Although a bond is a safe way to make money, if used in the correct way it can also be a very successful way to make money [3].

## ***2.7 Treasury Bills***

A Treasury Bill is one form of Treasury securities which an investor can use to gain return on a given amount of money. A Treasury Bill, or T-Bill, is a short-term government IOU for a time period of one year or less and the investment itself is virtually risk free. However with risk comes return, so when compared to common stock, T-Bills are found at the opposite end of the investment spectrum [4].

An important thing to remember when compiling an investment portfolio is to diversify your investment options in order to increase your overall investment security. If an investor puts all of his/her money into a single company's common stock, then the individual's portfolio depends entirely on the growth and stability of a single company. If the investor had taken the same amount of money and spread it out over a few different types of investment tools (common stocks, bonds, etc.) then their overall portfolio is no longer based on the economic growth of a single company, but rather on several different

factors, which will in turn make the individual's portfolio more stable and less effected by a single company's actions [4].

A T-Bill is on the lowest end of the risk vs. return spectrum. The money put into a T-Bill will be returned to the investor with a marginal rate of interest, however the rate of return has zero risk, meaning that there is no chance of the investor not receiving their money when their T-Bill has expired [4].

### **3. Trading Options**

In this chapter we will be discussing the different methods which investors use on a daily basis. We want to explore all of our options and choose the best method for our investing in the simulation. Methods range from long term to short term and each have their own benefits and downfalls. We hope to find the method which will best suit our five-week trading period.

#### ***3.1 Swing Trading***

Swing trading is a popular way to trade for many investors. The majority of swing traders are day traders and those who trade from home. Swing trading is a trading in a short time period, usually about a few days to a week. The idea of the swing trade is to follow price trends and try to make money by accurately estimating what a certain stock is going to do over a few days. For example, one would buy the stock when they think the price is relatively low and they feel that it is going to rise over the next few days or weeks. Then they sell the stock when they feel the price has reached its highest point to make money off of that stock [5].

This form of trading is a great way to make money quickly. If one can follow trends and make an educated guess on certain stocks, they can easily make a profit. Large corporations do not follow the ideas of swing trading because they are investing much larger amounts of money. Swing trading is safer to do with average amounts of money rather than very large. This method of trading is best done in various areas of the market so that much capital can be gained. Investors that swing trade are not interested in the intrinsic value of the stock. They are actually interested in simply the price trends

of the stock. By following the trends correctly, there is much opportunity to make money [5].

Swing trading is somewhat risky but when done correctly is very beneficial. Unlike the buy and hold method where you can buy large hoping that the price will increase over a long period of time, you have to trade quickly and make what you can while you can. Swing trading seems to be a wise choice for an investment strategy in our five-week simulation. In these five weeks we can trade quickly, and hope to make money quickly in our short stint in the stock market. However, there are many other methods in which one can invest and we need to research all of them to find the correct one for our simulation [5].

### ***3.2 Day Trading***

Day Trading is the practice of buying and selling financial instruments within the same trading day and that all positions will typically, but not necessarily, be closed before the market close of the given trading day. Traders who practice this method of market trading are commonly referred to as, “day traders.” Day traders are typically employed by banking or investment firms and specialize in equity investments and fund management. Day trading has also grown in popularity among common traders due to the increase in technology allowing the average person to view market fluctuation with a marginal lag time making it unnecessary to physically be on Wall Street [12].

Day trading itself is not an actual investment strategy but more the genre of many other investment strategies. A day trader’s primary goal is to make a profit very quickly, typically a matter of only minutes or even seconds, and then close on all positions in

order to avoid any over-night market change or speculation that could affect their position. By trading quickly and multiple times throughout the day, most day traders receive trading fee discounts from the brokerage as a trading bonus. Day traders must also actively search and speculate on potential trading setups where the trader thinks they can make a profit [12].

Day trading is often done with money that is borrowed; this is referred to as margin trading. Day traders will often borrow money or stocks in order to make their daily profit and return the money or shares to the broker before the day is over. The advantage to day trading on the margin is that most margin interests are typically charged on overnight balances making this method a scar free choice for day traders. Day trading can generate either huge percentage returns or losses on any one trading day and therefore day traders are often seen more as gamblers by other investors. However, day traders do have the ability to earn millions per year through this investment strategy [12].

Trend following is the first of the sub-categories of day trading. Trend following is not specific to day trading, for it is the primary tool in all trading time frames, however, it simply means that the trader looks to find a financial instrument which is going to continue to rise or fall in value. The trader buys the financial instrument when they believe that the current trend will continue. The trader would buy in hopes of a rising value to make a profit later in the day by selling the shares at the later/higher prices. Trend following is also a major part of short-selling in order to make a quick profit [12].

Short selling means that the trader borrows the stocks from a broker in hopes that the price of the stock will fall throughout the time period of the day. The trader then sells the stocks off at the higher price and buys them back at the end of the day for the lower



price due to the predicted fall in market value. The trader can then return the stocks to the original broker who loaned them the stocks and the trader can then keep the difference. The original broker is therefore left with the same stock, which has now decreased in value throughout the day [12].

### ***3.3 Value Investing***

Value investing is a common method used in the trading of stocks but has also been constantly evolving over the years. Value investors try to find stocks that they feel are underpriced in the stock market. It is common for the market to over react or under react to issues or information provided by the news and other sources. The stock prices therefore do not correspond with the company's long-term basis. The result of this is the value investor buying the stock when the price is deflated and then profiting off of the company [12].

The main problem with value investing is the intrinsic values of stocks. This value is estimated and is not always true. Investors come up with this value by using multiple forms of information on the company and estimating the value. Therefore, multiple investors with the same information on the stocks could come up with multiple different intrinsic values for the company. Most value investors choose stocks with lower than average price to earnings ratios and high dividend yield. Value investors also use different techniques to implement this strategy [12].

Some value investors only look at the current values of a stock. The factors that go into an intrinsic value can change over time and many value investors only look at the present values. They place no value on past information or future growth of the

company. However, many value investors base their decisions solely on the possible future growth and cash flows of the company. Despite all the ways of value investing it is based on the same principal. This principal is to buy something for less than it is actually worth [12].

### ***3.4 Buy and Hold Trading***

Buy and hold trading is exactly what it sounds like, you buy and then hold. Investors purchase a stock at a certain price then hold onto the stock for a long period of time regardless of the fluctuations in price or the stock market overall. This is a popular yet passive way for an investor to invest in the stock market. The investor is constantly selecting stocks and purchasing them but is not concerned with the short-term price movements and other indicators of the stock. There has been much dispute over whether the buy and hold method is an effective strategy for the stock market. In favor of the buy and hold method, it has been shown that over a long period of time there is usually a high return from the stock. However, many argue that the method is not nearly as effective as any other method used when trading in the stock market [6].

Having an active trading method is said to be better due to the constant changes and opportunities that arise in the stock market. However, the tax benefits are much higher for a long-term investment due to the fact that they are taxed at a much lower rate than short-term investments. One of the strongest arguments for the buy and hold method is the efficient market hypothesis [6].

The efficient market hypothesis states that financial markets are informational efficient. What this means is that prices on stocks or bonds already reflect all known

information, meaning it is impossible to outperform the market by using information that is already known by the market. Basically, this hypothesis is saying the only way one can out perform the market is through luck. Whether or not this is true, a good point is brought up. If one believes this and invests based on this principle, then the buy and hold method is perfect for that investor. They buy the stock and hold it for a long period of time and they do not try to outperform the market itself. This trading method is perfect for a conservative investor who is in no rush to attain profits. It is a relatively safe investment which has been proven to produce a decent profit over a long period of time [6].

#### **4. Company Profiles**

In this chapter we are going to give a quick company profile for each of the companies that we are planning on investing in. We have done much research and looked at both the history and financial status of multiple companies. Through this research we have each chosen a handful of stocks that we want to invest in. The market this year is tough so we had to choose wisely in which stocks we think will benefit us the most over the course of the next five weeks. We chose stocks in which we thought were essential to people and would most likely rise over the time we invest in them.

##### ***4.1 H.J. Heinz Company (HNZ)***

Sector: Consumer/Non-Cyclical

Industry: Food Processing

The H.J. Heinz Company was started on July 27, 1900. The company and all of the subsidiaries manufacture and market a line of processed food products in both the United States and around the world. Most of us know Heinz for the ketchup but they also produce many other condiments, sauces, frozen foods, soups, beans, pasta meals, infant and other processed foods. The company manufactures these products for both consumer needs as well as foodservice and institutional customers. The products are developed in test labs and experimental kitchens then go on to production.

The company manufactures and contracts for the manufacturing of its products from a range of raw foods. Before certain seasons contracts are made with farmers for a portion of the raw foods that they use in their products. Other raw materials such as dairy products, meats and sugars are purchased from approved suppliers. Although many crops

can only be grown in certain times of the year, most of the products for Heinz are produced year round. The company sells the products through its own sales organizations and through other distributors. Heinz sells most of their products on a very large scale.

I have always been interested in Heinz and have had stock in them since I was a child. I cannot touch this investment until I am out of college but it has made me a significant amount of money. I knew that Heinz would be a good company to look into and maybe invest in. After some research I found that Heinz was a safe stock to invest in but also could make me money in a short period of time. I found out that Heinz was looking to purchase the France based company of Benedicta. This company is a manufacturer of tabletop sauces and salad dressings. I figured that whether or not Heinz makes this purchase in the five-week period that we are trading, it is a safe investment which I feel that I can profit from.

Heinz is a distributor of many different types of foods which also attracted me to the company. In the economy today we are struggling with high food prices and times are tough. I feel that Heinz is still going to sell just as many condiments and other products that people feel that they need especially large-scale restaurants and organizations which have relied on Heinz in the past. People will still buy their products and I think that they will greatly benefit from this rise in food prices, in turn making the stock fluctuate in my favor. Whether Heinz can prove to yield high returns with this purchase of another company or not is beyond my knowledge, but I feel that this stock will make me a sure profit and prove to be a sound investment [7].

#### ***4.2 The Mosaic Company (MOS)***

Sector: Basic Materials

Industry: Chemical Manufacturing

The Mosaic Company was established on January 23, 2004. The company is a producer of phosphate and potash combined and also produces nitrogen and animal feed ingredients. There are four segments of business in which Mosaic operates which include phosphates, potash, offshore and nitrogen. The phosphates segment is involved with plants in Florida that produce phosphate fertilizer and feed phosphate as well as plants in Louisiana that also produce phosphate fertilizer. They mine and process potash in Canada and the US and then sells the potash in North America and internationally. The company produces and markets fertilizer to many South American Countries and farmers.

The Mosaic Company produces about 4.4 million tons of phosphoric acid a year. This acid is a very important part of the production for concentrated phosphate fertilizer and animal feed products. The company's concentrated phosphate products are sold worldwide to crop nutrient manufacturers, distributors and retailers. The company does all the mining themselves, mostly in Florida and Louisiana. The same goes for the Potash and offshore segment of the company.

While researching companies I was given advice to look into fertilizer companies and companies that were in the same field as fertilizer companies. I then discovered that there were many companies about to do well which were suppliers to many fertilizer manufacturers. Mosaic was a name given to me by a friend who stated they were a large company which did a lot of work with fertilizers and animal feed. I did more research and soon found out that it was a producer of phosphate and potash. I read only good

things about the company and felt that this was a perfect stock to make money off of in this bearish market. If there is one thing that we need as consumers, it is food. With food prices rising farmers are charging more for their products and fertilizer companies are doing the same to farmers etc. I figured that going right to the source would be the best option, invest in the companies that are supplying the fertilizer producers with their ingredients. I also read they are rising on the analytical optimistic forecast in the news and are only going to keep rising. I decided that I would choose a few companies involved in this field and Mosaic seemed to be a promising investment [8].

### ***4.3 Potash Corp./Saskatchewan (USA)(POT)***

Sector: Basic Materials

Industry: Non-Metallic Mining

Potash Corporation of Saskatchewan Inc. is an integrated fertilizer as well as related and industrial feed products company. All of the company's potash is produced from six mines in Saskatchewan and one in New Brunswick. The nitrogen operations involve the production of nitrogen fertilizers and nitrogen feed and industrial products. The industrial products include ammonia, urea, nitrogen solutions, ammonium nitrate and nitric acid. As far as the phosphate operations for the company go, they manufacture and sell solid and liquid phosphate fertilizers, animal feed supplements and industrial acid. This industrial acid is used in food products and industrial processes. The company indirectly holds all the outstanding interests in PCS Joint Venture, Ltd. which used to manufacture, process and distribute fertilizer and agricultural supplies from plants in Florida and Georgia.

The company is also involved with producing potash and mining the potash. Potash is predominantly used as a fertilizer. All of this potash comes from the southern province of Saskatchewan where the extensive deposits of potash are located. Nitrogen operations include the production of nitrogen fertilizers and nitrogen chemicals. The products produced are used for agricultural, industrial and animal nutrition purposes. The company is a very large producer of these products and is thriving in today's market of rising food prices.

While researching the Mosaic Company I stumbled upon this company as well. I figured if Mosaic had an opportunity to do well, so did this company. I found that the company was trading at about 215 dollars a share, which is expensive, but affordable in this simulation. If I can invest in a company trading at such a high level, I have the opportunity to make more money. The company is usually bought around \$212 dollars and sold around \$231 dollars. I figured that the company will only do better and this was a good time to buy the stock. It is known that farmers are going to have to pay more for fertilizers in the next five years. The company has a lot of pricing power, and they say that they are not nearly at their peak. If the price of fertilizer is only going to rise, the stock will rise accordingly. This is due to the rising prices of grain, in turn causing the prices of fertilizers to rise. The research I did showed that the company was going to be expanding its mining and the production of fertilizer as well as raising the prices of their fertilizer. This is a good time to trade this stock and capitalize off of what the consumer market needs, food [9].



#### ***4.4 The Boston Beer Company, Inc.(SAM)***

Sector: Consumer/Non-Cyclical

Industry: Beverages (Alcoholic)

The Boston Beer Company is involved with the business of producing and selling low-alcoholic beverages throughout the United States and in selected international markets. The company sells about 2 million barrels of its products a year and in 2007 sold over 20 beers under the Samuel Adams brand names and five flavored beverages under the Twisted Tea brand name. The company has breweries located in Cincinnati and Boston and also brewed under contract in multiple other breweries in the United States.

Samuel Adams Boston Lager, Sam Adams Light and Samuel Adams Seasonal beers are the company's core focus beers. These are the most popular and are very important to the company's portfolio and heritage. The seasonal beers are brewed at different times throughout the year and each is very popular. Boston Beer sells its products to a network of about 400 wholesale distributors who then sell the products to retailers. These retailers include pubs, restaurants, grocery chains, package stores and stadiums. The products are mostly sold in the United States but also markets in Canada, Europe, Israel, the Caribbean and the Pacific Rim.

While thinking of stocks and what people in this country enjoy and will continue to buy regardless of the market, I thought of alcohol. This may sound bad but it is true, many Americans enjoy drinking on a regular basis and I figured with the popularity of Samuel Adams and especially Samuel Adams Summer Seasonal, this would be a good stock to invest in. Looking at the stock over the past year I found that the price was

between 30 to 50 dollars and fluctuated from time to time. The company just took a big hit when they had to recall a large amount of select beers due to the bottles. I feel that this hit the company hard but they will easily rebound. People will still buy their products and the company will only rebound.

There has been much talk in the news of Anheuser-Busch Company being bought out by a Belgian Beer company. I did not want to get too involved with this stock due to this large fluctuation that may occur very soon which could be great or disastrous. The Anheuser-Busch Company has been on a constant rise for the past few months and a sudden crash is what kept me away from the company. I felt that if I could trade quickly and not hold too much on the Boston Beer Company stock, I could make money quickly and effectively in the five weeks of simulation [10].

#### ***4.5 Apple Inc. (AAPL)***

Sector: Technology

Industry: Computer Hardware

Apple was founded on January 3, 1977 and designs, manufactures and markets personal computers, portable digital music players and mobile communication devices and sells a variety of related software, services and networking solutions. The company makes its sales worldwide through the use of its online stores, retail stores and its direct sales force. In addition to these products the company sells a variety of third party iPod and iPhone compatible products which include application software, printers, storage devices, speakers, headphones and various other accessories.

This company has grown immensely since its conception in 1977 and would have been an extremely smart investment to hold onto from then till now. However, no one really knew how well the company would do in the future. The biggest change in the company was the release of the iPod. The iPod was a great MP3 player that blew up and sold like crazy. It led to newer versions, smaller versions and faster versions of itself in the future and eventually led to the iPhone. The iPhone has the capabilities of a phone with the addition of music, Internet, GPS and many other accessories. This was a revolutionary new cell phone last year and the company did really well.

I did a lot of research and found that when the iPhone was first released on June 29, 2007 the price of Apple stock was at about \$120 dollars a share then jumped to about \$140 dollars a share soon after. The new iPhone 3G is being released on July 11 this year and I think that I can capitalize off of this new release. Being as we start our simulation very close to the release date, I can wait till the release when the price makes an initial drop, then buy low and sell when the price rises. Although the price is very high I think it can still rise in the five weeks of our simulation. The price of the stock has been ever changing over the past few weeks and I feel that if I can play the market right, I can make great profits off of the Apple stock [11].

#### ***4.6 CSX Corporation (CSX)***

Sector: Industrials

Industry: Industrial Transportation

CSX Corporation, based in Jacksonville Florida, is a transportation company providing international rail, intermodal and rail-to-truck transload services. CSX

provides its industrial transportation service to every population and industrial center East of the Mississippi River. The company operates an average of 1,200 trains transporting an average of 20,000 carloads of freight per day.

In today's world, our societies are beginning to see the necessity of environmentally friendly alternatives. Everyday citizens as well as Corporate America are "Going Green" in an attempt to make less of an impact on the environment and still achieve our everyday business goals. CSX provides major industries with a method of transportation that gives off a lower CO<sub>2</sub> emission than a truck or a plane. Trains can move a single ton of freight 423 miles on a single gallon of fuel, which makes them a "greener" alternative to their shipping counterparts.

Today's market is beginning to show signs of an environmentally conscious consumer society. I believe that Corporate America will begin looking for the "greenest" option and therefore choose rail transportation when possible. This increase in rail usage will in turn increase the overall profits of CSX and bring a rise in their stock price. I believe that this shift in American society from being over-consumers to environmentally friendly will give rise to "green" companies.

Although I may not see a great increase in our five-week simulation I feel that I would like to support a more environmentally conscious society and purchase stock in CSX. I feel that I am not alone in this decision and with the overall cost effective and emissions effective it will be an easy decision for the rest of America to make and begin using railroads whenever possible in order to do our part in helping the environment [13].

#### ***4.7 Insteel Industries, Inc. (IHHN)***

Sector: Industrials

Industry: Construction Materials

Insteel Industries, Inc. is one of the nation's largest manufacturers of steel wire reinforcing products for concrete construction applications. The Company manufactures and markets prestressed concrete strand and welded wire reinforcement, including concrete pipe reinforcement, engineered structural mesh and standard welded wire reinforcement. Insteel's products are sold primarily to manufacturers of concrete products that are used in non-residential construction. The company's products are typically used on grand scale jobs such as bridge construction, highway construction and large-scale sewerage and water pipe construction.

States are constantly trying to maintain their infrastructure. Massachusetts in particular has been building a new highway system in our State's capital, which has totaled \$14.6 billion. Roadways receive constant strain from automobiles. As far as other major city and state infrastructure, a sewer system rarely needs to be replaced, however, they consistently receive wear and tear that will eventually result in a very expensive replacement project. Most of the major highway systems here in Massachusetts alone are receiving some sort of government funded repair/rework; making me believe that investing in a company that works solely on this large of a scale can still be a very good investment [15].

#### ***4.8 Eli Lilly and Company (LLY)***

Sector: Health Care

Industry: Pharmaceuticals

Colonel Eli Lilly in Indianapolis Indiana founded Eli Lilly and Company in 1901. The Company discovers, develops, manufactures, and sells products in one business segment, pharmaceutical products. Their products are primarily prescription pharmaceutical drugs. The Company manufactures and distributes its products through owned or leased facilities in the United States, Puerto Rico, and 26 other countries. The company's products are sold in approximately 135 different countries. Most of the products the Company sells today were discovered or developed by its own scientists. The Company directs its research efforts primarily toward the search for products to prevent and treat human diseases. The Company also conducts research to find products to treat diseases in animals and to increase the efficiency of animal food production. Eli Lilly and Co. sells its products primarily to wholesale distributors. At December 31, 2005, the Company owned 13 production and distribution facilities in the United States and Puerto Rico. Its own production and distribution facilities in 13 countries outside the United States and Puerto Rico, containing an aggregate of approximately 4 million square feet of floor space. Major production sites include facilities in the United Kingdom, France, Ireland, Spain, Italy, Brazil, and Mexico.

Recently Time Magazine published an article regarding the War in Iraq. The article stated that any US soldier currently serving our country in Iraq could be prescribed Prozac with basically no questions asked. As un-ethical of an issue as this may seem, I figured that there would soon be an increase in the stock value of Eli Lilly & Co. because

the government is increasing their product sales to any soldier who would like them. As we all know the current War Against Terrorism is a very patchy subject with most people, however, it is quite obvious that not only the civilian public but also the soldiers fighting in the war are having trouble accepting their actions and therefore finding themselves in states of depression and in need of medical assistance to accept their occupation. I would like to clarify the fact that I am not trying to profit off of another man's troubles, but this could result in an increase in sales for Eli Lilly and Co., which in turn will increase their stock price providing both annual dividends and increased stock value [14].

#### ***4.9 Evergreen Solar, Inc. (ESLR)***

Sector: Technology

Industry: Semiconductors

Evergreen Solar, Inc. develops, manufactures and markets solar power products around the world. The company is enabled by its String Ribbon technology to create thin and affordable solar panels. The Company's revenues are primarily derived from the sale of solar modules, which are assemblies of photovoltaic cells that have been electrically interconnected and laminated in a physically durable and weather-tight package. Evergreen Solar, Inc. sells its products using distributors, and other middleman corporations who often add value through system design by incorporating its modules with electronics, structures and wiring systems. Its products are sold primarily in the United States, Germany and Korea. Evergreen Solar, Inc. manufactures and markets solar power products, including solar cells, panels and systems. It markets and sells all solar

panels manufactured by EverQ under the Evergreen Solar brand, as well as manages customer relationships and contracts [16].

#### ***4.10 Superior Well Services, Inc. (SWSI)***

Sector: Energy

Industry: Oil Well Services & Equipment

Superior Well Services, Inc provides a range of different wellsite solutions to both oil and natural gas companies. Their two most common services are technical pumping and down-hole surveying services. The company operates from 26 service centers spread across 17 different states. Despite the high prices of oil, our nation continues to depend upon the sale of oil and we therefore rely on companies that maintain services to the oil industry. I feel that a company such as Superior Well Services, Inc. will be a profitable company due to the constant necessity to pump oil.

Energy has become one of the worlds primary concerns. Between environmental issues as well as oil prices, there is a lot of money dependent on the production of energy regardless of which fuel is being used. I feel that the United States is make a conscious effort in attempting to reduce our overall energy use and decrease emissions, however, most of our fuel is oil and most of our power is derived from the combustion of oil.

Like all machines and equipment, the oil industry requires services in order to stay in operation and therefore I believe that a company such as Superior Well Services will continue to climb steadily until an energy resource surpasses oil as our fuel of choice [17].



#### ***4.11 Complete Production Services, Inc. (CPX)***

Sector: Energy

Industry: Oil Well Services & Equipment

Complete Production Services, Inc. is a provider of specialized services and products focused on developing hydrocarbon reserves. The Company focuses on basins within North America, and provides services and products within each specific basin. The company operates in three business segments: completion and production services, drilling services and product sales. Through the completion and production services segment, Complete Production Services, Inc. establishes, maintains and enhances the flow of oil and gas throughout the life of a well. Through the drilling services segment, it provides services and equipment for land drilling, specialized rig logistics and site preparation. Through the product sales segment, Complete provides a variety of equipment used by oil and gas companies throughout the lifecycle of their wells.

Like Superior Well Services, Inc. I believe that our world economies dependency on the oil industry will make investments into companies such as Superior Well Services, Inc. and Complete Production Services, Inc. not only dependable but more importantly profitable [18].

## **5. Simulation 1 (Mark Cirillo)**

In this section of the paper, I will be outlining what my portfolio is looking like each week. I will cover what I purchased and what I sold for the week and summarize my findings. This is basically the summary of my action in the stock market for the week. There will be five of these summaries for each week of simulation.

### ***5.1 Weekly Summary 1***

#### ***Week of 7/7/2008-7/11/2008***

##### **Weekly Summary of Portfolio 1 by Mark Cirillo**

This week was the first week of simulation by us. We decided to each begin with \$100,000 dollars and invest it however we felt would be necessary. I decided to divide the money up equally into about five stocks. I chose the five stocks that I thought I could make the most profit off of in the five weeks of simulation. Based on my research I chose the five stocks Heinz (HNZ), Mosaic (MOS), Potash Inc. (POT), Boston Beer Company (SAM), and Apple (AAPL). I only invested in 4 of the 5 companies at the beginning of this week due to news that made it seem wise to invest in Apple later in the week.

I spent about \$20,000 dollars average on each stock and bought the appropriate amount of shares in each company. I began to invest on Tuesday July 8, 2008 and picked a good time to strike. In the following section I will provide a snapshot of the performance of the stock for the week and also how I am doing with the stock. Following this will be the summary of my trades and the financial transactions I made over the week.

This week I made about \$4535 dollars if I were to sell all my shares right now. I only sold some of the shares of Boston Beer Company due to my thinking that the stock price would drop and I did not think it would be wise to hold onto all the shares of that stock. I will continue to buy stock in that company when the price drops to a low and I think it will begin to rise again. I feel that with the stock market the way it is, for me to be in the black is a great thing. My stocks are all showing an increase in price and I have not lost any money.

This week was a good first week to do more observing than trading. I feel that I now have a better understanding of the stock market how it really works. I only sold one stock and it was a profitable one. My total equity in the market is about \$104535 dollars and I still have money to put into the stock market and especially Apple. My return for the week is +4.5%. I am very pleased with my success in the first week and I hope that I can keep it up.

## H.J. Heinz Company (HNZ)

Purchase Price: 48.19

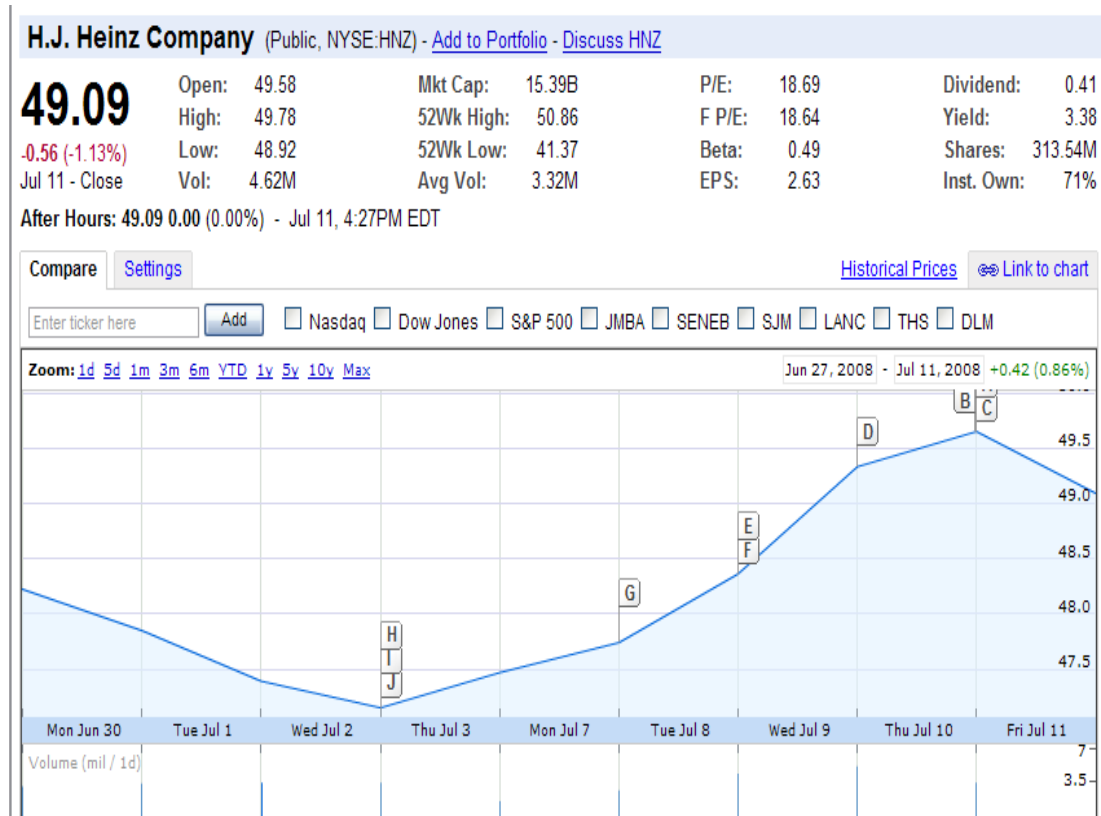


Figure 5.1.1 H.J. Heinz Week 1

I have bought stock in Heinz and the stock has rose in price by almost a dollar making me about \$367 dollars. I did not sell the stock yet so I do not physically have the money but as it is the stock has made me money. It has risen all week and looks like it is about to fall a bit so I might be selling the stock come Monday morning. I know that the stock is a slow moving company but if I can make my moves and buy and sell at the correct time I can capitalize off of the stock greatly.

## *The Mosaic Company (MOS)*

Purchase Price: 120.88



Figure 5.1.2 The Mosaic Company Week 1

This has been the smartest purchase that I made this week. I saw that the price was low and it was a good time to buy. I bought the stock at \$120 dollars and it has risen to over \$140 dollars. If I were to sell the stock right now I would make almost \$3,500 dollars. I think that the stock will continue to rise over next week but I am not sure. I will sell the stock as soon as I see the price begin to fall if it stops rising. The price of fertilizer is still rising and will continue to rise so I may even purchase more stock of the company in the next week or two. I hope that this stock will continue to make me money like it has this week.

## Potash Inc. (POT)

Purchase Price: 218.26



Figure 5.1.3 Potash Corporation Week 1

I purchased stock in POT due to how well my stock in Mosaic was doing. I purchased it a day after I purchased my other stocks and it proved to be a good thing. The stock is rising and I feel will continue to rise over next week. It seems that for my two companies involved with fertilizer it will be wise to hold onto them a bit longer than the other stocks due to the rising price of fertilizer. Due to the stock rising about \$3 dollars in just a few days, I have made about \$280 dollars with this stock. I think that the price will continue to rise soon and I can capitalize off of this stock.

### *The Boston Beer Company (SAM)*

Purchase Price: 40.51



Figure 5.1.4 The Boston Beer Company Week 1

I made a purchase in Boston Beer and I have been keeping a close eye on the stock and sold much sooner than I thought I would. I noticed that the price rose for most of the week then began to drop. I sold before the price decreased too much, and it proved to be a wise decision, seeing as how I made over \$800 dollars on the stock. I feel that this stock will need to be watched carefully and bought and sold at specific times. If I can trade well then I can make money off the company. I will buy into the stock next week when I feel the price is low enough to profit off of.

## Apple (AAPL)



Figure 5.1.5 Apple Inc. Week 1

I made the purchase of Apple at the end of the week because of the new release of the iPhone. I feel that with the release of the new iPhone on Friday the company has shown a sudden drop and I feel that the price will increase greatly next week after the consumers purchase the new iPhone. I think the price will rise due to the new product and I can make some quick money off of this stock. However, if the price is continuing to drop on Monday, which I don't think it will, I will suffer greatly. I am excited because I feel that Apple has the potential to be one of my biggest moneymakers in this five-week simulation.



### Week 1 Trading Summary

Date	Symbol	Action	Price	Shares	Net Costs/Proceeds	Profit/Loss	Total Cash	Total Profit
7/8/2008	SAM	Buy	40.51	488	-19778.88		80221.12	
7/8/2008	HNZ	Buy	48.19	408	-19671.52		60549.6	
7/8/2008	MOS	Buy	120.88	166	-20076.08		40473.52	
7/10/2008	POT	Buy	218.26	90	-19653.4		20820.12	
7/10/2008	SAM	Sell	42.3	488	20632.4	853.52	41452.52	853.52
7/11/2008	AAPL	Buy	172.58	116	-20029.28		21423.24	

Table 5.1.1 Week 1 Trading Summary

## ***5.2 Weekly Summary 2***

### ***Week of 7/14/2008-7/18/2008***

Weekly Summary of Portfolio 1 by Mark Cirillo

This was our second week of simulation and I continued to be intrigued by the stock market. I was hesitant to trade at times but feel that using my research and the news, I was able to make a few smart trades this week. As of last week, I have made a profit of \$853.52. I feel that I did not make a lot of money in the first week due to the fact that I wanted to observe the market and give my stocks a chance to go up like I thought they would. My patience paid off and I was able to make more money this week. I have now made a profit totaling \$6,716.88.

My decisions were based on the news and my research done so far. I sold my stocks in Mosaic, Potash and Apple and bought back stock in Potash and Boston Beer Company. I made big profit off of the fertilizer companies but due to the news I heard about the industry, I decided to sell and it proved to be a smart move. I feel that the stocks of Mosaic and Potash can still rise in price, but I sold them in fear that they would continue to fall. I am using more of a buy and hold method with my stock in Heinz due to the fact that the stock has only shown profit and is not changing in price too much. I think it will prove to be a safe and steady stock to show me a decent profit in the five weeks. Here is what happened with each stock this week shown in the following.

## H.J. Heinz Company (HNZ)



Figure 5.2.1 H.J. Heinz Week 2

There has not been much going on with the H.J. Heinz Company this week and I have still not sold the shares of the company that I own. I feel that I am hesitant to buy and sell this stock because I feel that it is smarter to use the buy and hold method with this stock. It has only given me a profit and I feel that it will continue to show me a profit if I hold onto it. I feel that buying and selling the stock multiple times a week unveils the possibility of losing money. If I hold the stock I think it is only going to rise and show me an average profit in the end of this five-week simulation.

### *The Mosaic Company (MOS)*



Figure 5.2.2 The Mosaic Company Week 2

This week Mosaic rose in price in the beginning of the week then showed a drop during the rest of the week. I bought the stock at \$120.88 and sold it on Monday the 14<sup>th</sup> at the price of \$146.68 showing a profit of over \$4,000. I sold the stock due to news on Monday of the company selling their venture in nitrogen-fertilizer to a Norwegian company for about \$1.6 Billion dollars. This sale gave me a scare and I was thinking of selling the stock soon anyways. The price rose to about \$26 dollars higher than my purchase price, which I thought, was great and I knew brokers would be skeptical about the company during this sale period. The selling of the stock proved to be wise and I will soon invest more money into the Mosaic Company.

### Potash Inc. (POT)



Figure 5.2.3 Potash Corporation Week 2

The Potash Company this week was very active. After seeing what was happening the rest of the market and especially the other fertilizer companies, I decided to sell the stock early in the week. This was a wise decision seeing as how I made the purchase at around \$218 dollars and sold it on Monday for about \$228 dollars showing me a profit of roughly \$935 dollars. I made my move quick and then did not purchase the stock again until Thursday the 17<sup>th</sup>. I bought it when I thought it was going to go up again and I hope that the stock will do as I think and rise to create more profit for me. I feel that based on the trends of the stock I have nothing to worry about and I can capitalize off of this stock highly in the remaining 3 weeks of simulation.

### *The Boston Beer Company (SAM)*



Figure 5.2.4 The Boston Beer Company Week 2

The Boston Beer Company showed me a profit of about \$800 dollars last week and I purchased more stock in the company on Tuesday the 15<sup>th</sup>. I decided that the stock was not going to drop any more in price and this was a good time to reinvest in the company. This is a tough stock to guess on but I think so far I have been doing a good job. The price does not change dramatically but if I can trade at the correct times I can capitalize off the changes. With Budweiser about to be bought out, Boston Beer Company would become the largest domestic brewing company. This is only good news for the company. If I can continue to buy and sell the stock at the correct times, I believe I will see great returns from this investment.

## Apple (AAPL)



Figure 5.2.5 Apple Inc. Week 2

Apple did not do what I thought it would do this week. I anticipated a large rise in price due to the release of the new iPhone. I was wrong but was able to realize my mistake and still profit from my initial investment in Apple. I bought the stock at \$172 and sold it on Monday for \$178 dollars. I ended up making only just over \$600 dollars but was lucky that I heard the news of the problems and competition of the new iPhone. Although the sales of the new phone were high, the demand was underestimated and they could have done a lot more with the new phone. There were a few mechanical issues and I think that investors are still skeptical about the company at the moment. I feel that I sold my shares just in time before the price really dropped and lost me money. I have not reinvested yet but plan to shortly due to my anticipation of the price rising sooner than later. I think sales will continue and confidence will be regained in the company.

## Week 2 Trading Summary

Date	Symbol	Action	Price	Shares	Net Costs/Proceeds	Profit/Loss	Total Cash	Total Profit
7/14/2008	MOS	Sell	146.68	166	24338.88	4262.8	45762.12	5116.32
7/14/2008	POT	Sell	228.76	90	20588.4	935	66350.52	6051.32
7/14/2008	AAPL	Sell	178.49	116	20694.84	665.56	87045.36	6716.88
7/15/2008	SAM	Buy	40.99	366	-15002.34		72043.02	
7/17/2008	POT	Buy	208.65	120	-25038		47005.02	

Table 5.2.1 Week 2 Trading Summary



### ***5.3 Weekly Summary 3***

#### ***Week of 7/21/2008-7/25/2008***

Weekly Summary of Portfolio 1 by Mark Cirillo

This week was a busy week of trading for me. I was able to capitalize largely off of the two stocks that have been making me the most money, Potash and Mosaic. They fluctuated in price throughout the week and I bought and sold as soon as I saw a slight change in price, whether it was up or down. I was able to make almost \$4,000 dollars off of the trading of these two stocks alone. The outlook on these stocks is optimistic and I think I can continue to capitalize off of these stocks in the last two weeks of simulation.

I have continued to hold the Heinz stock due to the lack of fluctuation in the price. It has only gone up since the purchase and to sell the stock now would not make much sense in my opinion. I do not think that I will make as much as I thought I would off of this stock, but I do feel that it will show me a slight profit in the end.

So far I have shown a profit totaling \$10,653.78 dollars in just 3 weeks off of an initial investment of \$100,000 dollars. With the market the way it is I am very impressed with my investment strategies. I feel that the fertilizer companies have made me the most money and they will continue to show me profit in the future. My research on both the market and my stocks is paying off and the following will show my trading actions for the week.

### *H.J. Heinz Company (HNZ)*



Figure 5.3.1 H.J. Heinz Week 3

This week the Heinz Company showed a slight increase going up to almost \$50 dollars a share. I was hesitant to sell at this price and don't think that it would have been very wise. I feel that the price will only continue to rise in the next couple of weeks and selling the stock at the end of the five weeks should prove to be the best decision. I have been making solid profit off of my other stocks and I will continue to do so if I trade wisely over the next two weeks. I think Heinz is a safe stock to hold on to and will show a slight profit at the end of this simulation.

### *The Mosaic Company (MOS)*



Figure 5.3.2 The Mosaic Company

The Mosaic Company made a few drastic changes in price this week. I bought the stock again this week on Monday when the price was low. The price immediately shot up and was up almost 10 points. Then on Tuesday the price began to drop and I sold the stock early in the day. This was smart and earned me a profit of about \$2,000 dollars. The price dropped the rest of the week and then began to rise again on Friday, which is why I re-purchased the stock. I feel that the stock will continue to change in price next week and I can make more money with this stock. The outlook is good and I feel that with the market the way it is my money will be made on the fertilizer companies.

### Potash Inc. (POT)



Figure 5.3.3 Potash Inc. Week 3

Potash Inc. took a drop in price this week but I feel that this will not last much longer and the price will rise again. When I noticed that the stock price was beginning to drop on Tuesday, I sold my shares in anticipation of the stock price continuing to drop. It did drop some more and selling when I did was a good move. I thought that the price on Friday was quite low and as soon as I saw the price begin to rise, I bought stock in the company again. I feel this coming week will prove to be a success and the price will change giving me plenty of opportunity to trade using my strategy of swing trading. The fluctuations in price are perfect for this type of trading and it has worked great so far.

### *The Boston Beer Company (SAM)*



Figure 5.3.4 The Boston Beer Company Week 3

This week the Boston Beer Company showed a great increase in stock price compared to the past few weeks. The price does not usually change very much but it rose to about \$45 dollars this week which is high compared to prices over the past few weeks. I noticed that the price was high on Thursday morning and decided to sell when the price dropped a little bit. It was pretty even on Friday but I feel that there will be a decrease this coming week. I hope to purchase the stock again when the price is really low.

### Week 3 Trading Summary

Date	Symbol	Action	Price	Shares	Net Costs/Proceeds	Profit/Loss	Total Cash	Total Profit
7/21/2008	MOS	Buy	129.18	270	-34888.6		12116.42	
7/22/2008	MOS	Sell	138.05	270	37263.5	2374.9	49379.92	9091.78
7/22/2008	POT	Sell	221.75	120	26600	1562	75979.92	10653.78
7/24/2008	SAM	Sell	45.98	366	16818.68	1816.34	92798.6	12470.12
7/25/2008	MOS	Buy	119.25	335	-39958.75		52839.85	
7/25/2008	POT	Buy	195	205	-39985		12854.85	

Table 5.3.1 Week 3 Trading Summary

#### ***5.4 Weekly Summary 4***

***Week of 7/28/2008-8/1/2008***

Weekly Summary of Portfolio 1 by Mark Cirillo

This week was a good week of trading for me. I have decided to do a few things that I maybe should have done earlier in the simulation but am going to do now. I have noticed a significant similarity in the two fertilizer stocks MOS and POT. They have mostly the same trends and seem to change in price together. More importantly, they are both performing very well in the market and have made me a significant amount of money.

I have decided to hold onto my stock in Heinz as it has proved to be a steadily increasing stock for me which will show me a profit in the end of this simulation. However, I have decided to not reinvest in either Apple or The Boston Beer Company. This is due to the poor performance of Apple and the lack of anything really from The Boston Beer Company. I feel that it will be smarter to reinvest the rest of my money in those two companies. If they continue to perform like they have, starting low in the beginning of the week then rising as the week goes on, I can profit greatly from both of them.

This simulation has taught me a lot about the stock market and I am happy with my increase in skills to help me choose to make this decision. Had I not watched the market like I have over the past 4 weeks, I would have had no clue as to what to do in this situation. My research has paid off and I hope that my decision will prove to be a wise one and I can capitalize off of investing all my money into these two stocks.

### H.J. Heinz Company (HNZ)



Figure 5.4.1 H.J. Heinz Week 4

This week Heinz still showed only slight changes in the price of the stock. I did not expect a large change and there was no news suggesting a large change but I did realize one thing about the stock. This is the highest that the stock has been since we began the simulation 4 weeks ago. This is the one stock that has consistently risen in price the entire simulation. As I have stated throughout this simulation, this stock will most likely be sold at the very end and show me a slight profit over the five-week period. I feel that the stock will continue to rise for one more week and I hope to make a profit, not a loss, off of this steady stock.



### *The Mosaic Company (MOS)*

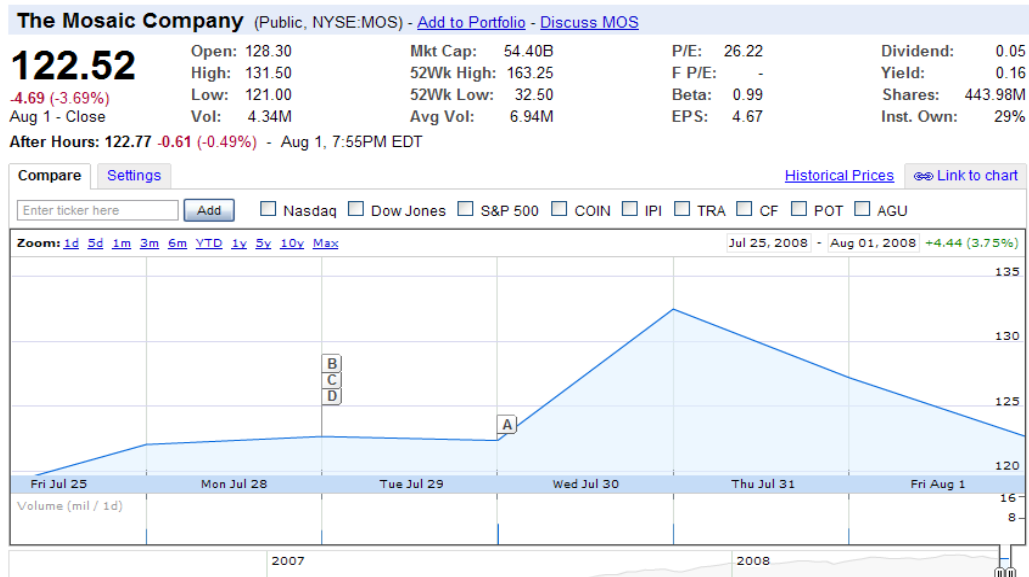


Figure 5.4.2 The Mosaic Company Week 4

Last week there was a lot of action with the Mosaic Company and I was able to capitalize off of these changes. I was hoping to do the same thing this week and was only able to trade the stock once. Last week when the price was low and I was thinking that the price would rise in the following week, I decided to invest more money into the stock. I invested almost \$40,000 dollars into this one stock and just like I thought, the price went up. News is out saying that the 4<sup>th</sup> quarter earnings of The Mosaic Company have almost quadrupled in the just one year. I knew this was good news for the stock and my research had paid off. On Wednesday the stock reached a high of around \$132 dollars and this caught my eye. I watched the stock early on Thursday morning and the price was dropping fast. I sold the stock while I could and made a profit of almost \$4,000 dollars. It paid off to invest more into this company and less in my other stocks. I hope I can capitalize at least one more time in the final week of the simulation.

### Potash Inc. (POT)



Figure 5.4.3 Potash Corporation Week 4

If there is one thing that has caught my eye this simulation it is the similarities between the two fertilizer companies. It seems that they are both doing really well in the market and their trends seem to follow very similar patterns. I have been trading them at similar times and did not realize until now how similar the two stocks are. Last week I decided to invest more money into both of these companies and less in my other companies stocks. When I was watching both POT and MOS on Wednesday as the price greatly rose, I felt that when MOS was dropping, POT would do the same. As soon as I decided to sell MOS on Thursday, I did the same thing with POT. They both proved to be wise decisions and made me a total profit of over \$7,000 dollars. The stock dropped towards the end of the week and just like Mosaic, I will keep my eye on this stock and hope to make a few more trades with this stock and capitalize in my final week of trading.

**Week 4 Trading Summary**

Date	Symbol	Action	Price	Shares	Net Costs/Proceeds	Profit/Loss	Total Cash	Total Profit
7/31/2008	MOS	Sell	130.49	335	43704.15	3745.4	56559	16215.4
7/31/2008	POT	Sell	212.38	205	43527.9	3542.9	100086.9	19758.3

Table 5.4.1 Week 4 Trading Summary

### ***5.5 Weekly Summary 5***

***Week of 8/4/2008-8/8/2008***

Weekly Summary of Portfolio 1 by Mark Cirillo

This week was a slow week for me trading in the market. I was on to something last week realizing that the two fertilizer companies, MOS and POT both changed in price in a similar pattern. I had sold my stock in all my companies but Heinz and was planning to invest most of my cash into both MOS and POT this last week and make a solid profit using the knowledge that I had from the past four weeks of trading. However, things did not work out how I had planned.

I began the week looking for a good time to invest in the two fertilizer companies and that time did not seem to come at all. The price of both of the stocks continued to drop throughout the week. Analysts believe that this drop is due to the drop in commodities prices. This is directly related to the stocks and how they will do. The price of commodities was high coming into this simulation which made these stocks a great buy. However, as we come to a close of this simulation, the price of commodities is dropping, as is the price of the stocks in the fertilizer industry. I decided that I had made a solid profit off of these two fertilizer stocks already and there was no need to risk losing everything I had earned in the past four weeks. I did not reinvest in those stocks and simply sold my stock in Heinz toward the end of the week.

On Thursday August 7 I noticed that the price of Heinz was as high as it was all week and decided to sell all my shares of stock that I had purchased at the beginning of this simulation. I knew about two weeks into the simulation that I was only going to hold onto Heinz as a safe stock which I was hoping would show me a decent profit at the end

of the simulation. This proved to be a good decision and selling the stock on Thursday added a profit of about \$1400 dollars to my total profit. I am very happy with this profit and think that the buy and hold method was the best for this stock. If I used the swing trading method like I did on my other stocks, I would have made a hundred here and there but by holding onto the stock until the end of the simulation, I was able to make over a thousand dollars.

Overall after five weeks of trading, I have made over \$20,000 dollars. I think that for a young and new investor I did very well. I was lucky enough to have stumbled upon the two fertilizer companies at the right time and capitalized greatly off of those companies. As you can see, with the price of commodities falling, those two fertilizer stocks do not have a bright immediate future.

## H.J. Heinz Company (HNZ)



Figure 5.5.1 H.J. Heinz Week 5

This week I knew that I was going to sell my shares of Heinz at some point but I was not sure exactly when. I noticed the price of the stock was rising all week and on Thursday it was higher than usual, so I decided to sell then. Rather than risk the stock price falling, I decided to sell and make what I could. I purchased the stock at the price of \$48.19 and sold the stock at \$51.87. Having invested almost \$20,000 dollars into this company, I made about \$1400 dollars in profit in just five weeks. I think that Heinz has proved to be a great stock to have for the long run. Just by looking at the price rising over five weeks and even over the past few years, you can see that it is a great stock to buy and hold. This may have not been the best stock for this short five-week simulation, but I did show me a slight profit and did not hurt my portfolio.

## The Mosaic Company (MOS)

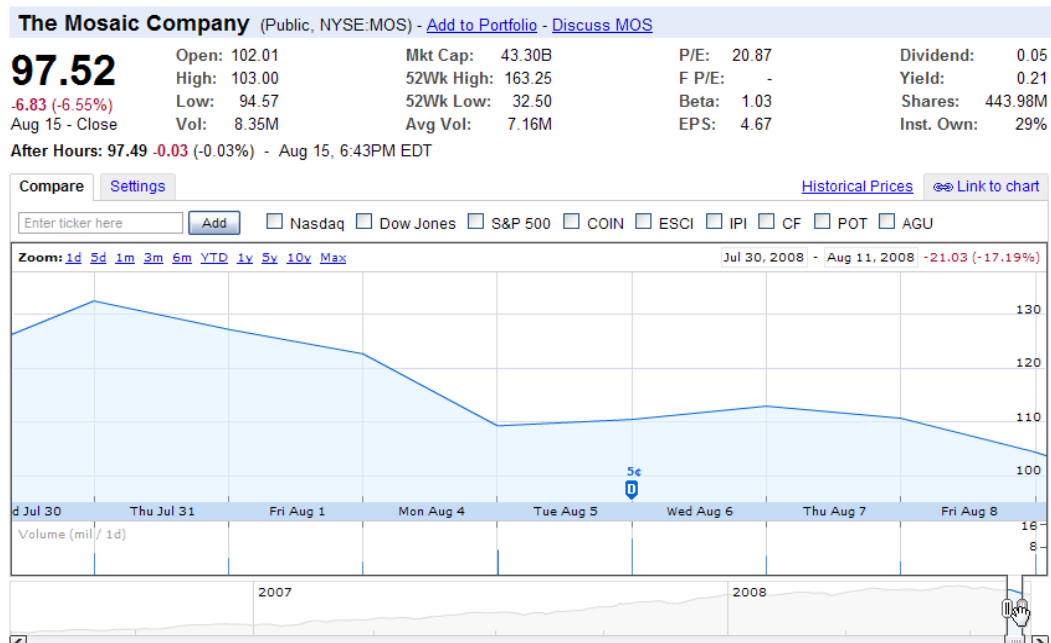


Figure 5.5.2 The Mosaic Company Week 5

As you can see the price of the stock is continuing to drop for The Mosaic Company this week. It would have been a mistake to invest a lot of money into this stock and I am glad that I looked into why the price was dropping. When I found out it was due to the price of commodities dropping, I knew that it wasn't a fluke and investing would be a bad idea. It makes sense that the price of the stock would drop when the price of commodities due to my initial research proving it was a good time to buy these stocks in fertilizer. When the prices of food are high, all the companies that contribute to the production of that food will charge more for their service or product. Therefore, when I found out the commodities prices were dropping, the price of the fertilizer stocks would drop as well. I made a solid amount of profit off of this stock and risking all that I made in four weeks was not worth losing in one week.

## Potash Inc. (POT)



Figure 5.5.3 Potash Corporation Week 5

As I realized last week, Potash and Mosaic have very similar price changing patterns. When I noticed that I was not going to invest in Mosaic, it was almost a no brainer to not invest in Potash. The price is dropping due to both the strike of workers that they are facing and also the drop in price of commodities. I had the same mentality thinking that it was not smart to risk all that I have made in four weeks on two companies. My initial thought was that they would perform the same way that they had in the first four weeks but when I saw the drop in price of commodities, I knew that they would definitely not perform the same way with the same pattern. I feel that I made enough money off of this stock and did not need to reinvest in the company this final week.



**Week 5 Trading Summary**

Date	Symbol	Action	Price	Shares	Net Costs/Proceeds	Profit/Loss	Total Cash	Total Profit
8/7/2008	HNZ	Sell	51.87	408	21152.96	1481.44	121239.86	21239.86

Table 5.5.1 Week 5 Trading Summary

## **6. Simulation 2 (Corey Graves)**

In this section of the paper, I will be outlining what my portfolio is looking like each week. I will cover what I purchased and what I sold for the week and summarize my findings. This is basically the summary of my action in the stock market for the week. There will be five of these summaries for each week of simulation.

### ***6.1 Weekly Summary 1***

#### ***Week of 7/7/2008-7/11/2008***

##### **Weekly Summary of Portfolio 2 by Corey Graves**

This week was the first week of our simulation. As Mark mentioned, we decided to use a total of \$100,000.00 to invest during our five-week simulation period. I decided to invest in three companies this week but more importantly keep an eye out for better opportunities than I may have found during my research period. I figured that I may experience a little crash and burn investing for the first time. I decided to purchase 500 shares of CSX and 350 shares of Eli Lilly and Co. on Monday, July 7, 2008. The total investment rounded to 51.03% of my total equity, which gave me a little less than half of my \$100,000.00 to hold on to for purchases later in the week.

On Friday, July 11, 2008 when the market closed for the week, I had increased 3.26 points on my CSX investment of 500 shares, and I had also increased 0.69 points on my 350 shares I had purchased that Monday. I had also begun researching two additional companies that I think would be quite profitable during this time period. Insteel Products, Inc. (IIN), which started at \$18.24 per share Friday morning, July 11, 2008. I later purchased 500 shares of the company for \$19.07 per share totaling approximately

8% of my total portfolio. With all the construction in Central Massachusetts alone I figured this company would remain profitable for our five-week simulation period.

### CSX Corporation (CSX)

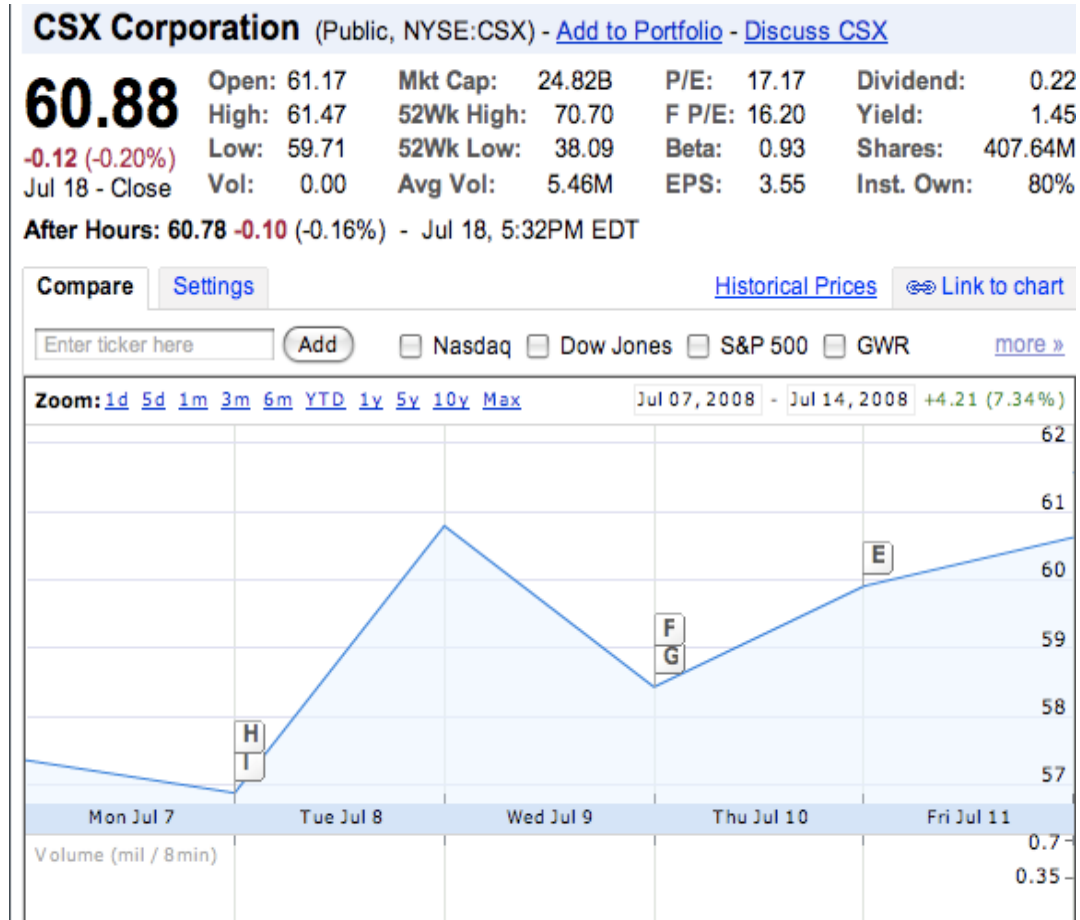


Figure 6.1.1 CSX Corporation Week 1

This week CSX grew considerably from my Tuesday morning purchase at \$56.88 per share. Although Tuesday afternoon the company peaked for the week at \$60.79 I decided to hold on to all 500 of my shares purchased earlier that day. Although I saw the opportunity to make a quick cash out, I figured the company would continue to have an upward trend due to both a reflection of the price of oil and also Corporate America's attempt to continue the "green" craze.

### *Eli Lilly & Co. (LLY)*

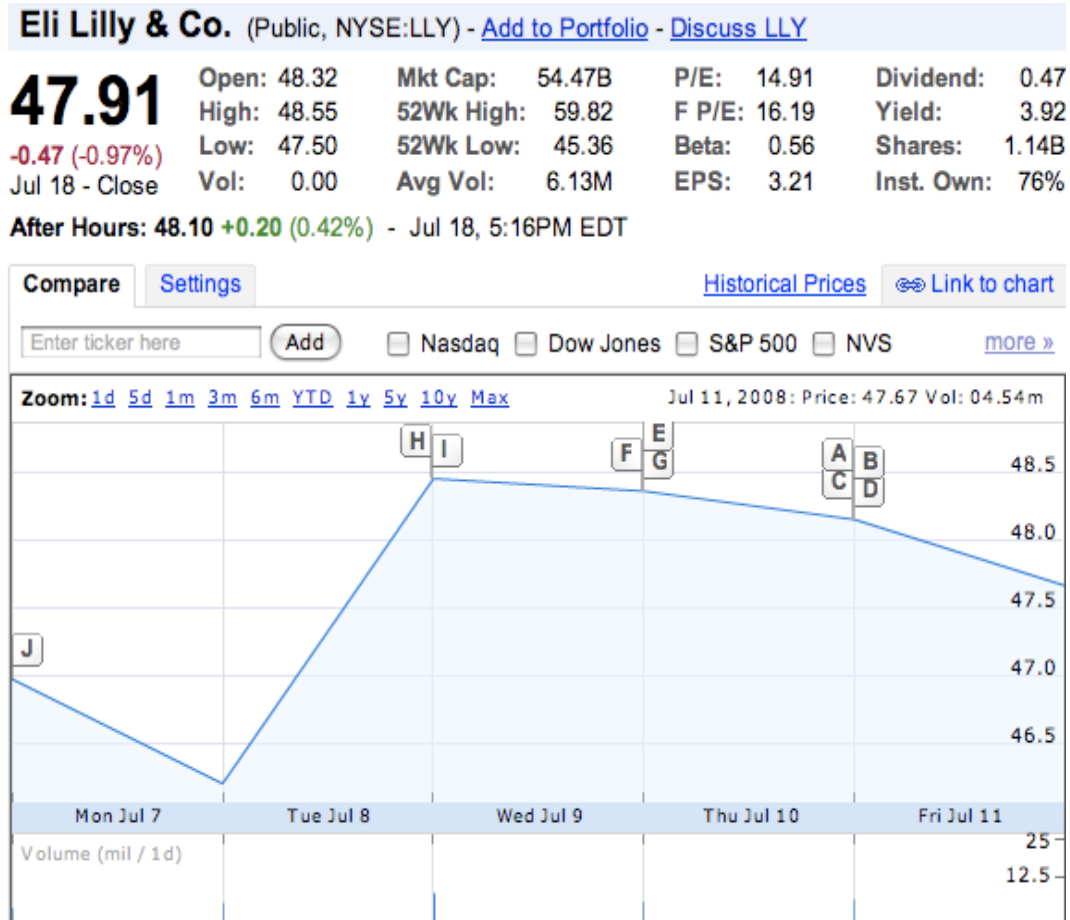


Figure 6.1.2 Eli Lilly & Company Week 1

Eli Lilly & Co. reached their weekly low of \$46.21 per share on Tuesday morning, July 8, 2008, when I purchased 350 shares of the company. Like CSX, LLY rose to a weekly high that afternoon \$48.46, but like I previously stated with CSX I felt I shouldn't rush to a decision on my first day of trading. The company slowly declined for the remainder of the week, however the company seems to have a track record of periodically spiking and then show a steady decline. Therefore I chose to hold on to all 350 shares in hopes of catching the next cycle's high.

*Insteel Industries, Inc. (IIN)*



Figure 6.1.3 Insteel Industries Week 1

At the beginning of the week I had my eye on Insteel Industries, Inc. however I decided to hold back on purchasing the stock Tuesday morning in hopes that I would see the price fall slightly before I invested into the company. Wednesday showed positive signs for a downward trend that I hoped would allow me to buy at a lower price that would soon rise, but Thursday showed signs of an upward trend so I bought my shares Friday morning in attempt to purchase the stock at the lowest price possible before an upward trend. I feel this stock will be fairly steady and a good one to keep a constant eye on in hopes of a large increase during this years construction season.

### Week 1 Trading Summary

Date	Symbol	Action	Price	Shares	Net Costs/Proceeds	Profit/Loss	Total Cash	Total Profit
7/8	CSX	Buy	\$56.88	500	\$28,450.00		\$71,550.00	
7/8	LLY	Buy	\$46.21	350	\$16,183.50		\$55,366.50	
7/11	IIIN	Buy	\$19.07	500	\$9,545.00		\$45,821.50	

Table 6.1.1 Week 1 Trading Summary

## ***6.2 Weekly Summary 2***

***Week of 7/14/2008-7/18/2008***

### **6.2 Weekly Summary of Portfolio 2 by Corey Graves**

This week I saw a steady decline in all of my stocks. CSX saw some high points on both Wednesday and Thursday, however I could not see any signs of continuing trends and therefore held on to my shares for another week. Eli Lilly and Company saw its fair shares of ups and downs with a marginal downward trend. The company (LLY) had not been rising as I had thought it would have due to the article in Time Magazine and therefore I decided to sell all 350 shares of the company Friday, July 18, morning when I noticed that the price began to fall in hopes of making some profit off of the company after its poor performance for the past week and a half. This proved to be a smart move, for the company continued to fall for the remainder of the day.

Insteel Industries, Inc. showed little fluctuation from Monday through until Wednesday. However I was not looking to hold on to the company for too long of a period of time and decided I should take the first chance I get to make some profit off of my purchase late last week. Monday afternoon the company closed at \$20.00 a share and I decided to sell the shares first thing Tuesday morning before the stock began to see any fluctuation. I think that in today's market it is far smarter to take a profit when you can get it rather than anticipating a larger pay out. So I decided to take what I could get and begin to make add some capital to my portfolio.

Monday I decided to continue my search for profitable companies and decided to try and find alternative energy companies. Through my research I found Evergreen Solar, Inc. located right here in Central Massachusetts. The company has recently



opened a new factory and production should begin soon. The company is also back ordered for the next five years once production starts due to the rise in oil prices.

I have begun to also research more industries in hopes of finding more profitable companies to continue using my short hold swing trading method. I have begun to look into the oil industry, specifically the maintenance of oil lines and machinery. Some companies I plan on taking a closer look at this upcoming week are Superior Well Services, Inc., Complete Production Services, Inc., and Teekay Tankers Ltd.

### CSX Corporation (CSX)



Figure 6.2.1 CSX Corporation Week 2

CSX Corporation saw a downward trend on Monday morning, which terminated on Tuesday for the weeks low of \$57.89. This low soon bounced back to an oscillating pattern of ups and downs with little sign of a soon-to-be trend. As a result I felt far less than confident in any trading regarding my 500 shares of CSX. I am hoping that the stock will continue to rise with my prediction that economical/environmentally friendly alternatives will soon become more popular as the United States grows ever more conscious of our nations oil problem.

### *Eli Lilly & Co. (LLY)*



Figure 6.2.2 Eli Lilly & Company Week 2

Eli Lilly & Co. has been showing few signs of positive trends since I bought shares in the company. This week I decided that I would need to take advantage of any sort of high I could in order to finally make a marginal profit and cash out. I found this opportunity Friday morning when the market opened with LLY selling for \$48.38. Thursday clued me in that I could possibly find this opportunity when the day showed nothing but upward trends, which I hoped would continue, however early Friday morning when the market opened I saw no signs of a continuing upward trend and decided to sell all of my remaining stock in the company.

*Insteel Industries, Inc. (IIN)*



Figure 6.2.3 Insteel Industries Week 2

Insteel Industries reached \$20.00 Monday afternoon and I decided that the stock had risen enough from its original \$16.73. I again wanted to flip my shares quickly in order to make small yet continuous profits in our market today rather than trying to hold on to anything for too long of a period of time. This proved to be a smart decision because as predicted the company's stock fell considerably on Thursday morning, July 17, 2008, and would have resulted in a net loss for the first week having invested in the company. And with a five-week simulation period I feel that in order to make a profit, one must watch for any opportunity to make a profit rather than relying of a steady increase in market value.

*Evergreen Solar, Inc (ESLR)*

Figure 6.2.4 Evergreen Solar Inc. Week 2

I purchased stock in Evergreen Solar Tuesday morning for \$9.16 per share. I decided to buy 2,184 shares of the company because I thought that it would soon jump in price and I would make a considerable amount of money. For the remainder of Tuesday the stock price continued to climb and on through until Wednesday when it closed at \$10.37 per share. Thursday showed signs of a declining stock price and I decided to sell half (1092 shares) of my shares in order to make a profit but also give myself the opportunity to potentially buy the shares back for an even lower price than my initial investment.

### Week 2 Trading Summary

Date	Symbol	Action	Price	Shares	Net Costs/Proceeds	Profit/Loss	Total Cash	Total Profit
7/15	IIIN	Sell	\$20.00	500	\$9,990.00	\$445.00	\$55,811.50	\$445.00
7/15	ESLR	Buy	\$9.16	2,184	20,015.44		\$35,796.06	
7/17	ESLR	Sell	\$10.37	1092	\$11,314.04	\$1,311.32	\$47,110.10	\$1,756.32
7/18	LLY	Sell	\$48.38	350	\$16,923.00	\$739.50	\$64,033.10	\$2,495.82

Table 6.2.1 Week 2 Trading Summary

### ***6.3 Weekly Summary 3***

***Week of 7/21/2008-7/25/2008***

#### **6.3 Weekly Summary of Portfolio 2 by Corey Graves**

Week three proved fairly profitable as I continued to try my method of taking advantage of a clear opportunity rather than waiting for stock prices to continue to follow any sort of trend. I decided to rid my portfolio of half of my shares in CSX when the company reached \$65.04 per share a full 12.5% increase in price since my initial purchase of \$56.88.

Evergreen Solar continued to show a downward trend, however I think that shares will increase with production, so I am hoping that the new factory in Central Massachusetts. I decided however, in order to neutralize any severe loss in the industry I decide to invest in Superior Well Services, Inc. and Complete Production Services, Inc., both of which pertain to the oil industry. I figured that by owning stock on both sides of the energy crisis I could eliminate any major loss and if I act quick enough I hope to potentially cash out in a profitable position regardless of which company that may be.

I purchased shares in both of these companies Monday morning, however I quickly sold off my shares when I saw a chance to continue making a daily profit and keep my portfolio growing. I feel its better to make a profit every day than wait out the falls in the market as your portfolio slowly dwindles down. Therefore I sold my shares of Complete Production Services, Inc. (CPX) Tuesday morning when the price of its stock had a quick spike resulting in a \$2.58 increase per share. My shares of Superior Well Services, Inc. (SWSI) were sold soon after on Tuesday afternoon when I figured the price would fall like that of CPX, for both companies are a part of the same industry.

### CSX Corporation (CSX)



Figure 6.3.1 CSX Corporation Week 3

As you can see in the figure above, CSX Corporation saw a steady climb until the market closed Wednesday, July 23, 2008, afternoon. Although I believe that CSX will continue to climb throughout the rest of the summer the company did begin to fall Thursday morning and therefore I decided to cash in on half of my shares making a 12.5% profit on my that portion of my initial investment. I feel that by holding on to the second half of my 500 shares I can still make an even greater profit if the company continues to do well for the remaining two-week period of the simulation.



*Evergreen Solar, Inc. (ESLR)*



Figure 6.3.2 Evergreen Solar Inc. Week 3

Evergreen Solar, Inc. showed a fairly steady decline for the whole week. Although production at the new factory has only just begun and hopefully once the company begins selling their new inventory of products the price of the company's stock will begin to increase. As of right now the company is spending its own money to get their new factory up and running and therefore they are most likely losing money that they will soon gain back once production is in full swing. Therefore I plan to wait until I see an upward trend before I sell my remaining shares of ESLR.

*Superior Well Services, Inc. (SWSI)*



Figure 6.3.3 Superior Well Services Inc. Week 3

Superior Well Services, Inc. had a promising upswing Monday and Tuesday followed by a fairly rapid drop in price Wednesday into Thursday where it bottomed out for the week. I thought the company would continue to climb from its performance Monday I thought that the company would mirror the actions of CPX, which spiked early Tuesday morning and began to oscillate in a fairly unpredictable manner. Therefore I felt it would be safest to sell my shares that afternoon before I saw any signs of decline.

*Complete Production Services, Inc. (CPX)*



Figure 6.3.4 Complete Production Services Inc. Week 3

Complete Production Services, Inc. had a rather unpredictable course of action for this past week. The company looked to be heading slightly upward on Monday and early Tuesday, but when I noticed the price beginning to fall again I decided to cash out in hopes of avoiding any tremendous drop in price due to the constant societal pressure on the oil industry and our current decrease in the price of oil.

### Week 3 Trading Summary

Date	Symbol	Action	Price	Shares	Net Costs/Proceeds	Profit/Loss	Total Cash	Total Profit
7/21	SWSI	Buy	\$29.74	475	\$14,136.50		\$49,896.55	
7/21	CPX	Buy	\$32.35	430	\$13,920.50		\$35,976.05	
7/22	CPX	Sell	\$33.05	430	\$14,201.50	\$281	\$50,177.55	\$2776.82
7/22	SWSI	Sell	\$35.90	475	\$17,042.50	\$2,906	\$67,220.05	\$5,682.82
7/24	CSX	Sell	\$65.04	250	\$16,250.00	\$2,020.00	\$83,470.05	\$7,702.82

Table 6.3.1 Week 3 Trading Summary

#### ***6.4 Weekly Summary 4***

##### ***Week of 7/28/2008-8/1/2008***

###### Weekly Summary of Portfolio 2 by Corey Graves

This week I was finally able to cash out on my shares of CSX Corporation mid Wednesday when the price of the companies shares rose to \$67.00 per share. Although the company continued to rise until the market closed Wednesday afternoon at a price of \$68.66, approximately 19.7% of my initial investment, I didn't want to take the risk of waiting to see how the stock continued to perform and therefore cashed out at the lower price of \$67.00.

I also found an opportunity to make only a small return on my investment in Evergreen Solar, Inc. With only one more week left in our simulation and the ever-fluctuating price per share of ESLR, I figured I should just try and make a very marginal profit rather than risk holding the shares for an additional week. Therefore I sold my shares late Thursday afternoon when I noticed that the stock price was falling.

I kept an eye on all of the companies that composed my former portfolio. This week Insteel Industries, Inc. underwent a steady climb from Monday through until Thursday afternoon. Monday afternoon I noticed that the company began to climb again, and although I had previously cashed out my shares of Insteel Industries, I decided to keep my eyes on its performance in hopes of spotting another opportunity to make a reasonable profit off of the company before the end of the five-week simulation period. When the company continued to rise with the market on Tuesday morning, I decided to make another purchase of Insteel Industries, Inc. stock, which Tuesday morning opened

at \$16.61. I purchased 1,000 shares and sold them later that afternoon right before IIIN closed for the day at the price of \$17.49 per share.

This week my primary goal was to finish strong in my remaining weeks of the simulation period. I have been searching for any given opportunity to make a profit in the current market. Although I have had the opportunity to make larger return percentages, I have tried to take as little risk as possible. For I am not a long-term investor, and although better opportunities are destined to come I have to work with my situation. If the market fell on the final day of the simulation, my entire portfolio could fall victim to market fluctuations and therefore I think it is safer to bank small profits when given an investment deadline.

## CSX Corporation (CSX)



Figure 6.4.1 CSX Corporation Week 4

CSX Corporation saw a slight decrease in stock value Monday which then saw a climb through until Wednesday afternoon. I sold off the remaining 250 shares of the company forty-minutes before the market closed at a price of \$67.00 per share. This was \$10.12 per share more than I paid just four weeks earlier. I decided to cash out with my shares while CSX Corporation remained a profitable investment for me. The company became my bread and butter over the past four weeks and I was glad to have made such a profitable investment. I'm sure that shares of CSX will most likely continue to climb, however I decided it would be in my best interest to cash out and make my profit.

### *Evergreen Solar, Inc (ESLR)*



Figure 6.4.2 Evergreen Solar Inc. Week 4

Evergreen Solar, Inc. was not nearly as profitable of an investment as I had thought when I first heard about their new manufacturing plant in Marlborough Massachusetts. I decided that I needed to cash out of the company the first chance I got to make a marginal profit. I took advantage of the market increase Tuesday through Wednesday and when I saw the shares falling Thursday morning I decided to get ride of my remaining shares of ESLR before it became a completely non-profitable investment.



### Insteel Industries, Inc. (IIN)



Figure 6.4.3 Insteel Industries Inc. Week 4

This week in an attempt to make more money I decided to try and flip some shares of Insteel Industries during the market's climb from Tuesday through Wednesday afternoon. Although my profit was very marginal, I decided that making any sort of profit could only benefit my portfolio and therefore flipped my shares in a single day as a sure-fire way to make an additional profit for this forth week of simulation. The shares however continued to rise until Wednesday afternoon, but to minimize the risk of my investment I decided to make a smaller profit on Tuesday rather than risk holding the shares until Wednesday afternoon.

### Week 4 Trading Summary

Date	Symbol	Action	Price	Shares	Net Costs/Proceeds	Profit/Loss	Total Cash	Total Profit
7/29	IIIN	Buy	\$16.61	240	\$3,996.40		\$79,473.65	
7/29	IIIN	Sell	\$17.49	240	\$4,207.60	\$211.20	\$83,681.25	\$7,914.30
7/30	CSX	Sell	\$67.00	250	\$16,740.00	\$2,520.00	\$100,421.25	\$10,434.30
7/31	ESLR	Sell	\$9.45	1092	\$10,319.40	\$316.68	\$110,740.65	\$10,750.98

Table 6.4.1 Week 4 Trading Summary

## ***6.5 Weekly Summary 5***

### ***Week of 8/4/2008-8/8/2008***

#### Weekly Summary of Portfolio 2 by Corey Graves

This week marked the final week of our simulation period. As of last week I had cashed out of the market entirely and I decided I would use this final week of simulation to watch my six previously owned stocks in an attempt to make a safe and final investment for my last week. Most of my companies saw downward trends for the beginning of the week except for Eli Lilly and Company (LLY) which displayed promising upward trends for this final week on Monday, August 4, 2008. However Superior Well Services, Inc. (SWSI) dropped Monday morning but began to climb early Tuesday. I felt that the shares were at a low for the week early Tuesday and that the company could fair profitable for me if the trend continued.

I decided to day trade on Wednesday, August 6, 2008 and purchase 500 shares of Superior Well Services, Inc. in order to make my final profit in the market before cashing out and ending my simulation. I figured that I have been doing fairly well in my trading and I saw no benefit to risking what I have already earned in a last-ditch attempt to boost my portfolio earnings.

I purchased the shares on Wednesday morning for a price of \$27.40 per share. The stock price continued to rise throughout the day and I decided to cash out before the closing of the market in order to avoid losing any profit. I cashed out Wednesday afternoon at a stock price of \$28.63 making only a 4.48% profit on my investment, however eliminating the risk of compromising the earnings from my previous four weeks of simulation.

### *Superior Well Services, Inc. (SWSI)*



Figure 6.5.1 Superior Well Services, Inc. Week 5

Superior Wells dropped \$3.75 on Monday, August 4, 2008. Early Tuesday morning the stock price began to rise, which remained constant for all of Tuesday. I felt that the shares were at a low and would continue to rise for a few days and therefore took the opportunity to purchase 500 shares Wednesday morning in an attempt to make a final profit in my five-week simulation.

**Week 5 Trading Summary**

Date	Symbol	Action	Price	Shares	Net Costs/Proceeds	Profit/Loss	Total Cash	Total Profit
8/6	SWSI	Buy	\$27.40	150	\$4,110.00		\$106,630.65	
8/6	SWSI	Sell	\$28.63	150	\$4,294.50	\$184.50	\$110,935.48	\$10,935.48

Table 6.5.1 Week 5 Trading Summary

## 7. Conclusion

In this chapter we will each give a short overview of our portfolios and the progress that we each made over the five-week simulation period. Our research and dedication to specifics really paid off in the end and we were both successful investors. Using the method of swing trading was perfect for the short time period of investing and also with the way the market has been fluctuating so much recently. We did however find very different stocks and found a way to make money in the difficult market.

### *7.1 Portfolio 1 Conclusion (Mark Cirillo)*

I found this project to be an interesting and tough task, which made me appreciate the work that goes into investing every day. It kept me busy with both research and current events in both the stocks that I chose and also the entire market itself. I used the swing trading method and it proved to be the perfect method for our simulation. I was able to make money off of all the stocks that I researched and knew when to back out of certain stocks due to my research and new knowledge of the stock market. I did however use a different method for one of my stocks.

H.J. Heinz turned out to be a stock that fit the buy and hold method more than the swing trading method. It gradually grew at a slow rate but instead of trading it from day to day and generating small returns, I decided to use the buy and hold method and see what that would get me. I found that this was the right move and I made over a thousand dollars when I finally sold the stock in the end of the five-week simulation. Not only did I stray from the swing trading method for one stock, I also stopped trading two of my stocks about halfway through the simulation.

The Boston Beer Company made me some profit but I found that it was not worth putting the money into that stock. When I realized how much money I was making off of my two fertilizer stocks, I knew it would make more sense to invest more money into them and not into The Boston Beer Company. The same thing happened with Apple when it did not do what I had thought it would. I thought with the release of the new iPhone 3G the stock would show an increase in price and I could capitalize off of this. The stock did not grow very much at all and in fact it did drop significantly in price over the five-week period. I also decided to drop this stock and invest more into my two big fertilizer companies that were making me the most money. So with a few weeks left to trade I was left with Heinz as a safe stock to hold onto and two fertilizer companies which I were trading a few times a week.

The Mosaic Company and Potash Corporation were the two stocks that were best suited for this simulation. My research showed me that with food prices rising, the best place to invest is the direct source of food, which is fertilizer. The farmers need fertilizer to grow the crop then sell it. With food prices so high, fertilizer prices were high and the companies in this field were doing very well. I started off investing about \$20,000 dollars in each of my five companies and by the end I was investing almost \$40,000 in each of the two fertilizer companies. This was the smartest move and it showed me a great deal of profit.

After completing this simulation I now have a great deal of knowledge about both investing and the stock market. I am comfortable trading day to day and also with my ability to choose stocks and when to buy and sell them. I was hesitant at first but after much research and practice, I was able to understand when to make certain decisions to

benefit my portfolio. The following are charts showing my profit increase over the five-week period and how each company contributed to my total profit.

### Profit vs. Time

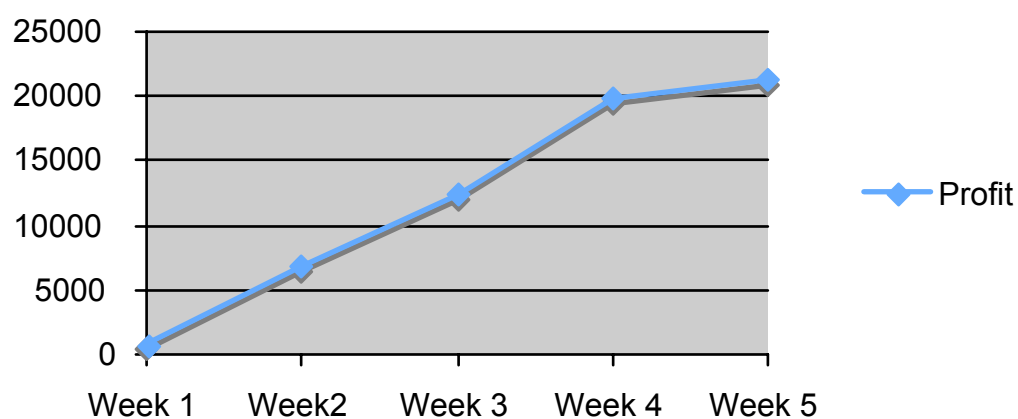


Figure 7.1.1 Profit vs. Time

### Company Contribution

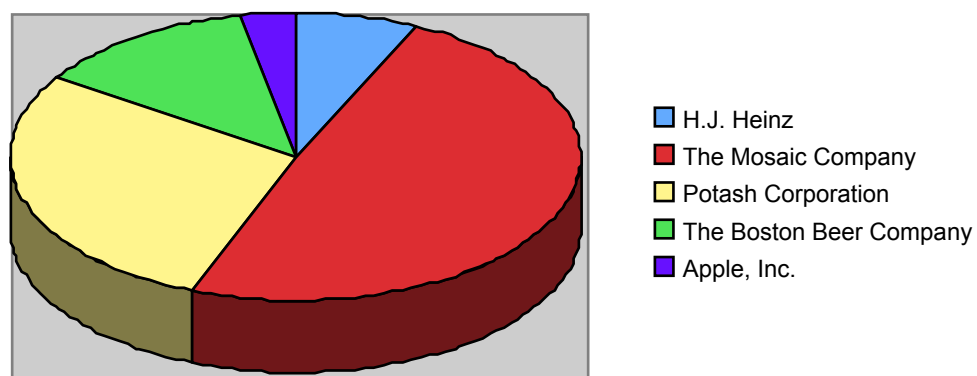


Figure 7.1.2 Company Contribution



## ***7.2 Portfolio 2 Conclusion (Corey Graves)***

This project proved to be a strong intellectual challenge that was not only interesting, but also fun to partake in. Prior to this project, I had no previous experience with trading in the stock market although I had acquired a thorough understanding of the market itself and the investment tools that can be used. This project allowed me to find an investment method that interested me and test my ability to apply the concepts of this method to our current market. I, like Mark, chose to use the swing trading method to invest in the market, however I used more of a day-trading strategy.

This project made me come to the realization that regardless of the market, an investor can be capable of making money if the individual understands the principles and concepts of different investment methods and can decisively choose which method or strategy is appropriate for the current market. I compiled my portfolio with companies from several industries, however most pertained to the current energy crisis. CSX Corporation has been regarded as a very economical and environmentally safe solution to industrial transportation and therefore I thought that the company would be reliable and fairly stable, which in our five-week simulation period proved true. Evergreen Solar is on the opposite end of the energy spectrum from that of Superior Well Services, Inc. and Complete Production Services, Inc. but I saw an opportunity in investing in both ends of the energy sector in order to gain leverage over market fluctuation.

During my simulation period I decided to attempt to adapt a day-trading mentality with most of my investments in order to lose as little money as possible. I invested in Eli Lilly & Company in hopes of making a large return based on my research however I was soon faced with a struggling stock that saw poor performance more much

of our simulation period. This investment made me rethink my investment strategy. In a five-week simulation period one wrong move could cost you your entire portfolio and therefore I decided to try and spend more time analyzing and reading the market in order to find opportunities to flip shares quickly and cash out before losing any of my initial investment. I began using this strategy in my later weeks of investing and it proved successful. Although I found myself cashing out of investments which continued to perform well I think that in a short investment period it is better to make a consistent profit rather than waiting for a large cash out.

The completion of this project has left me with a great deal of knowledge in the stock market and the remarkable experience of attempting to become a successful investor. I have realized that in order to become and remain a successful investor, one must not only spend a great deal of time researching and analyzing the market on a daily basis but also trust your knowledge and dare to follow your instincts. Although investing can be risky, with thorough research and understanding you can limit these risks and make your portfolio work for you.

### Profit vs. Time

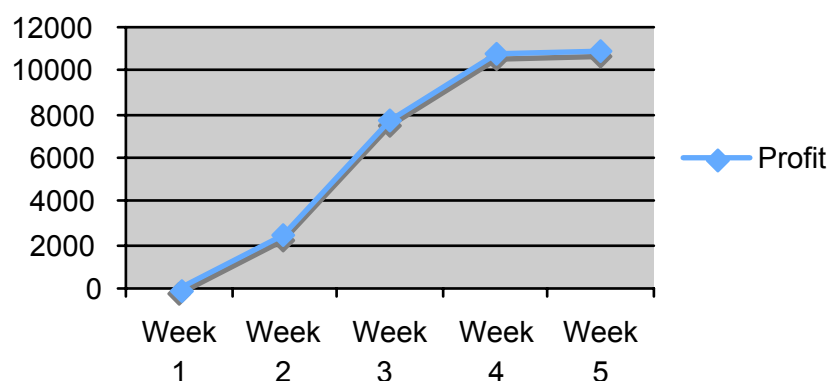


Figure 7.2.1 Profit vs. Time

## Company Contribution

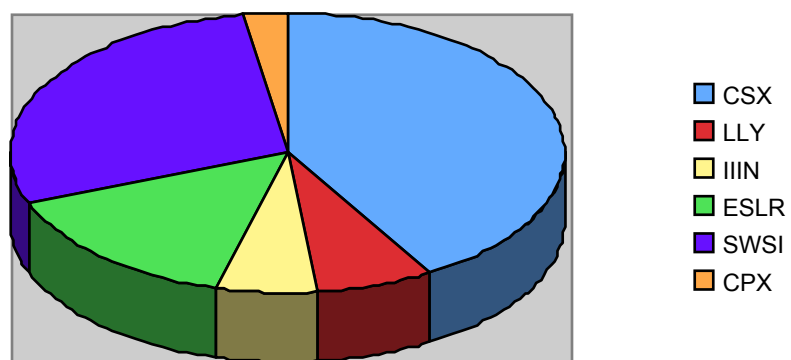


Figure 7.2.2 Company Contribution

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<<http://www.reuters.com/finance/stocks/companyProfile?symbol=CPX.N&rpc=66>>