


**Stock Market Simulation
An Interactive Qualifying Project
Submitted to the faculty
of the
Worcester Polytechnic Institute
in partial fulfillment of the requirements for
the Degree of Bachelor of Science
completed by**



Maureen M. Toohey

Date: May 7, 2006

Approved:



Professor Dalin Tang,
Project Advisor

Table of Contents

Acknowledgements	3
Abstract	4
1. Introduction	
1.1 Project Objective	5
1.2 Stock Market Overview	
1.2.1 Definition of Stock Market	6
1.2.2 History of the Stock Market	6
1.2.3 NYSE versus NASDAQ versus AMEX	8
1.2.4 Stocks versus Mutual Funds versus Bonds	9
1.2.5 S&P 500 versus Dow 30 versus NASDAQ Composite	10
1.3 How to Invest	
1.3.1 Pre-Investment Considerations	11
1.3.2 Choosing a Broker	12
1.3.3 Trading Strategies	14
2. Day Trading	
2.1 Background	16
2.2 Simulation Goals	17
2.3 Stock Selection	17
2.4 Trading Events and Analysis	18
2.5 Conclusions	22
3. Long Term Trading	
3.1 Background	24
3.2 Simulation Goals	25
3.3 Stock Selection	25
3.4 Trading Events and Analysis	25
3.5 Conclusions	36
4. Conclusions	37
References	39
Appendix	41

Acknowledgements

I would like to take this opportunity to thank Amy Coughlin for her assistance in the preparation of the introductory chapter. More importantly I would like to express my sincere gratitude to Professor Dalin Tang for his understanding and guidance throughout the duration of the project.

Abstract

A six-week stock market simulation was conducted based on research done on the stock market. Research for the stock market and individual companies were done via TV, internet, and newspapers. Different trading methods were used in order to strengthen investment skills, gain a better understanding of the stock market, and obtain better profit. This experience will help in future investments.

1. Introduction

1.1 Project Objective

The objective of this project is to gain experience with the idiosyncrasies of the stock market and gain some basic trading experience. To do so, a six-week stock market simulation will be completed, using three different trading strategies. Between the two members of the group three strategies will be implemented in an attempt to make a profit, while at the same time preparing the participants for future investment possibilities. This simulation will explain and explore each method of trade. Decisions for the number and category of stocks to be traded will be determined based on a \$100,000 budget. As is true for all investors, ultimately a profit is the goal of this simulation. A goal has been set of increasing the investment budget two percent over the six weeks, although a more experienced investor would have the potential of being more successful. This goal will be reached by noticing trends in the market and analyzing these trends in order to determine the most profitable trade options.

1.2 Stock Market Overview

Many investors would agree with Bernard Baruch in his statement that "the main purpose of the stock market is to make fools of as many men as possible [10]." The stock exchange, or stock market, gives every member of society an opportunity to make a fortune, but it can also cause them to lose their entire life's savings. The more knowledge about the stock market a person has, the better the chance of financial success. A brief overview of the history of the stock market and definitions of common terms is necessary in order to adequately prepare for the six-week simulation.

1.2.1 Definition of Stock Market

Without a proper understanding of what the stock market is it is impossible to successfully invest. The stock exchange is “a corporation in the business of bringing buyers and sellers of stocks together [1].” Both the market where trading of stocks is facilitated and the general statement about the price of stocks are referred to as the stock market. In the United States, the New York Stock Exchange (NYSE), National Association of Securities Dealers Automatic Quotation (NASDAQ) and the American Stock Exchange (AMEX) are the three popular stock markets. These stock markets have participants ranging from private investors to large fund traders [1]. Providing a corporation with financial backing, setting prices for investments in corporations, reducing liability for each individual owner of a corporation and creating opportunity for investors’ future wealth are all functions of the stock market [9].

1.2.2 History of the Stock Market

In 1602 the first stock exchange opened in Amsterdam. This exchange opened with Dutch East India Company issuing stock, and similar to today’s market, this exchange offered stocks and bonds. It “pioneered short selling, option trading, debt-equity swaps, merchant banking, unit trusts and other speculative instruments, much as we know them” which are still used in the stock markets globally [1]. In 1790 the United State’s first stock exchange was formed in Philadelphia. Twenty-four New York merchants soon there after met to discuss opening a similar exchange in New York; by

1792 these merchants had reorganized into the New York Stock Exchange on Wall Street, New York City [2].

Over the duration of the United States having a stock exchange, there have been many peaks and lows in the market. The following table displays a few of the worst crashes the United States has seen:

<u>Rank</u>	<u>Dates</u>	<u>Starting DJIA</u>	<u>Ending DJIA</u>	<u>Total Loss</u>
10	1/15/2000 to 10/9/2002	11,792.98	7,286.27	-37.8%
9	11/21/1916 to 12/19/1917	110.15	65.95	-40.1%
8	9/12/1939 to 4/28/1942	155.92	92.92	-40.4%
7	1/11/1973 to 12/06/1974	1051.70	577.60	-45.1%
6	6/17/1901 to 11/9/1903	57.33	30.88	-46.1%
5	11/2/1919 to 8/24/1921	119.62	63.9	-46.6%
4	9/3/1929 to 11/13/1929	381.17	198.69	-47.9%
3	1/19/1906 to 11/15/1907	75.45	38.83	-48.5%
2	3/10/1937 to 3/31/1938	194.40	98.95	-49.1%
1	4/17/1930 to 7/8/1932	294.07	41.22	-86.0%

Table 1.1 Ten Worst Stock Market Crashes of All Time

The most notorious low was the Great Depression which began in 1929. This depression was the result of the largest and fourth largest stock market crashes being so close together in time. “If you had \$1000 on 9/3/1929, it would have gone down to \$108.14 by July 8th, 1932 or an 89.2% loss [14].” In 1987, the greatest single-day loss in

stock market history was recorded. In order to avoid large crashes in the future, the United States government has placed many rules and regulations on the stock market. This is important since, on average in the United States stock market, there are \$2.2 trillion in transactions each day [2].

Today, the stock market is run a little differently since there is a new method of trade, the internet. In the late 1990's the use of internet banking became a popular method of trade. This development allowed for casual and professional investors to participate in the stock market [1]. "Direct interaction with the selling floor of the exchanges gives the modern investor more control than any other generation [9]."

1.2.3 NYSE versus NASDAQ versus AMEX

Though easily confusable, the New York Stock Exchange (NYSE), National Association of Securities Dealers Automatic Quotation (NASDAQ), and American Stock Exchange (AMEX) are three very different entities. NYSE, or the Big Board, is not only the oldest but also the largest stock exchange in the United States. It still uses the trading floor for transactions, and this trading floor is located on Wall Street in New York City. With the use of the trading floor method, brokers are necessary in order to make a deal for the investors on both the purchasing and selling end of stock trade. In today's society, these brokers can be either a person or a website. It is also necessary for the NYSE to have employees to represent the individual corporations; these employees, or specialists, are responsible for the trade of specific stocks. If there is no interest in stock the specialist will buy shares that will be owned by the NYSE. Out of the three exchanges the NYSE has the most stringent requirements in order to have a company's stock on its register.

Even in the case in which a company meets all of the requirements, there is no guarantee that it will be accepted by the NYSE [7]. The AMEX, or the Curb, originated due to these restrictions on the NYSE. Since numerous companies do not meet these requirements, brokers used to meet outside of the NYSE and trade stocks for the not-listed firms. Due to the more lenient regulations, the AMEX has a reputation of representing smaller companies than the NYSE. AMEX is the second largest stock exchange in the United States, and similar to the NYSE, AMEX also uses the trading floor for transactions. In 1998 NASD, the owners of NASDAQ, purchased AMEX [4]. NASDAQ is a very unique exchange in that all transactions are executed via the telecommunications network. NASDAQ has employees, called market makers, whose job is to create, buy and sell prices for stock and send them out electronically. These market makers purchase the stocks themselves, and are then reimbursed from individual shareholders [5].

1.2.4 Stocks versus Mutual Funds versus Bonds

Out of the numerous methods of investing, three are associated with the stock exchange. These methods include stocks, mutual funds, and bonds. Stocks are investments into individual corporations by an individual. The individual purchases a portion of the company, and therefore becomes a part owner. Preferred stock and common stock are the two main types, but there are many different variations a corporation can put on their stock in order to retain control [11]. A mutual fund is an agglomeration of stocks and/or bonds that are managed for the shareholder by a fund manager. These fund managers are paid by a yearly fee, but the shareholder is not responsible for the purchasing or selling of any stock. A mutual fund typically has a

smaller annual return of two percent, but with little or no hassle [12]. A bond is a loan from an individual to a large organization. This loan reduces the debt of the organization, but must be repaid with an additional stipend in the form of interest. Upon “purchasing” the bond, the investor will receive a piece of paper dictating all of the factors of the loan including “how much was lent, the agreed-upon interest rate, how often interest will be paid, and the term of the loan.” There are four genres of bonds, which are sold in \$1000 increments; these types include: U.S. government bonds, corporation bonds, state or local government bonds, and foreign government bonds. Foreign government bonds are typically sold only via mutual funds due to their complexity [13].

1.2.5 S&P 500 versus Dow 30 versus NASDAQ Composite

Due to the enormity of the stock exchange, there are numerous indices to get a broad overview of the performance of the stock market as a whole. It is estimated that seventy percent of the United State’s equity is tracked using the Standard & Poor’s 500. Standard & Poor’s (S&P 500) is known to be one of the best judges of the United States market. S&P 500 is a collection of 500 popular corporations that represent various industries. These corporations are chosen based on their market size, liquidity and sector. This index is a market-value weighted index so it is based on the market value, as well as its performance [8]. Another market-value weighted index is the NASDAQ Composite. This index is used to track technology stocks, so unlike S&P 500 it is not a good representation of the market as a whole [6]. A third popular index of the stock exchange is the Dow 30. The Dow 30, or Dow Jones, consists of 30 stocks that the Dow Jones & Company chooses through the editors of the Wall Street Journal. This is a price-

weighted index which means that it is an average value of the 30 stocks. The Dow 30 is the most widely used indicator of the condition of the stock market [3].

1.3 How to Invest

There is no set path for investing in the stock market; in fact the path for each individual is unique. Personal investment strategies will vary depending on the amount of time and money an individual has to spend, the individual's specific goals, and the amount of risk they want to take. After making the decision to invest, each person should first review their personal financial profile before making broker and investment strategy decisions.

1.3.1 Pre-Investment Considerations

There are many things to consider before deciding to invest in the stock market. You must first analyze your personal financial situation, establish specific short and long term goals, and determine your risk tolerance [15]. Each of these three steps will help determine if it is the right time to invest and what investment strategies to use.

Knowing your personal financial situation is the most important step before investing. First, it is best to have as little debt as possible, especially credit card debt, which generally has large interest rates. If you invest too soon, while carrying large amounts of debt, it is likely that your investment returns will not exceed the amount of interest incurred on those debts [16]. Once your debt is paid off, you should next look to your monthly income and expenses. Analyzing your monthly spending pattern will give an idea of how much extra money you will have to invest. Furthermore, it is best to have

enough money in savings to cover 3 to 6 months of living expenses in case of an emergency. This money should be placed in some sort of low-risk account where it can be easily and quickly accessed when needed.

With little to no debt and emergency funds in place, it's now time to determine your financial goals. Establishing a realistic timeline and goals will help you plan for your financial future. It is important to create a timeline for major expenses such as purchasing a home, marriage, college and retirement [16]. Knowing when you will need money will determine what types of investments you will make, and once you have made your investment decisions, you should periodically revisit your goals and timeline to be sure you are still on track.

Lastly, after outlining your goals, you should determine your risk tolerance, which will also help decide in what specific stocks to invest. How much are you willing to risk in reaching your financial goals? This is determined by several factors including your personality, age, job security and current net worth [15]. Different stock options carry very different levels of risk, and therefore, different levels of returns. It is very important to know how much you are personally willing to risk before making any investment decisions. Now that you've decided to start investing, it's time to choose a broker, do some research, and choose the trading strategies that are right for you.

1.3.2 Choosing a Broker

No matter what market one chooses to invest in, they must go through some sort of stockbroker. There are four main types, and each has certain advantages and

disadvantages: an online discount broker, a discount broker with assistance, a full service broker, and a money manager [17].

Online discount brokers charge small fees for each transaction made, but allow you to have total control over your investments. This is the best choice if you have large amounts of time to spend researching your stocks and want to choose which companies and how much money to invest in each. Once you have made your decisions, the online brokers will purchase and sell the stocks you choose, while generally offering no advice. For an experienced trader with plentiful amounts of time to commit, this form of trading can be highly profitable. However, for those with less time and experience, the risks are much higher. For the inexperienced trader one of the other broker options may be a better choice.

A discount broker with assistance is a variation on the previous option. These online brokers provide more extensive research and information for their customers, thus cutting back on the time commitment for the investor. The brokers may not offer specific stock recommendations, but generally provide investment tips and strategies while still giving you free reign over your investment choices. However, as with the traditional discount broker, investing through an assistance broker still carries a large amount of risk for the personal investor.

For those who wish to invest but want the least amount of hassle, a full service broker is the option to choose. Full service brokers begin by analyzing your personal financial situation and preparing an investment portfolio tailored to your needs and desires. Periodically, the investor will review his or her portfolio and make adjustments if desired. However, the time commitment is minimal as the broker takes care of all the

research and trading details. The risk of investing through a full service broker is smaller for the inexperienced or uninterested investor; however, the fees for this service are generally much higher than investing through a discount broker.

Lastly, the money manager is for those with very large amounts money to invest; they are not for the average investor. Money managers take total responsibility for the investment portfolio leaving very little up to the investor, and in exchange, they obtain a certain percentage of the total assets they handle [17]. This can be very expensive, but really worth the extra cost for those with hefty portfolios.

For the purpose of this stock market simulation, we will be assuming the use of a discount online broker. This will allow us to do all of our own research, and gain the most knowledge from our experience. For our purposes, we will invest in multiples of \$5000 or \$10,000 per stock option and will assume the realistic fee of \$10 for each transaction made.

1.3.3 Trading Strategies

The type of trading strategy an investor uses greatly depends on his or her individual goals and the amount of time they have to spend for research and trading. For those with not much time or interest, long term trading is usually the best strategy to use and the one most used by the typical investor. Generally speaking, the stock market will constantly fluctuate, but there is still a constant upward trend. By investing in stable companies, such as Microsoft, it is possible for long term traders to make more money over periods of months or years than that same amount of money would make sitting in a savings account and collecting interest [22]. The amount of research and risk required for

long term trading is much less than required for other strategies such as day or swing trading, however, the amount of profit possible is generally less.

Day trading, or penny trading, is the extreme opposite of long term trading. Day traders will often make dozens or more trades a day and rarely will hold stocks overnight. By selling all stocks before the end of the day, day traders avoid the usual decrease in stock value that occurs overnight, thus reducing the risk involved. However, this form of trading requires much more time for researching stocks, to find those with large daily fluctuations, and more time for following the daily trends and making sales and purchases as necessary [22]. For the investor looking to make money quickly and having the time to commit, day trading is the strategy to use. However, for those who are looking to make money quickly, but with not as much time to spare, swing trading may be the strategy of choice.

Swing trading is similar to day trading, but generally involves more risk because stocks are held overnight, often for days or weeks. The initial research involved for swing trading can be more intense than for any other strategy. A successful investor will often research past and present stock value and volume trends before proceeding with a purchase or sale of any particular stock. Therefore, they are able to identify and take advantage of long term fluctuations in the market [18].

2. Day Trading

2.1 Background

Day trading is a very complex method that can either be extremely lucrative or can cause for fast loss. In this method a stock trader will have numerous transactions in a small time frame because they can be trading on a minute or hourly basis. Although there are numerous trades in a single day, there is no net change in stock ownership because for each stock sold another is purchased. Although 80 to 90 percent of traders will lose money using this method, it is no more risky than any other. The reason for this is because buying on margin, or using borrowed funds, is a common practice.

With the invention of the Electronic Communication Networks (ECN's) in the 1970s day trading became a very popular practice. This is true because it gave the public a faster method of trading. It is very easy for an investor to make the numerous trades because of the low commission rates. ECN's provide liquidity and small spreads so profit is made at a rapid rate allowing trading by the minute.

The day trading method became very popular with the technical boom known as the "dot-com bubble." From 1997 to 2000 the stock market was rapidly rising, or a bull market as can be seen in figure 2.1. With little original capital a novice investor could make an enormous profit on a daily basis. Sadly in 2000 this bull market changed to a bear market, or a decreasing market. Novice investors no longer were gaining a profit; instead they were losing money at a rapid pace [23].



Figure 2.1 Graph of Stock Market from 1994 until 2004

2.2 Simulation Goals

The goal of a day trader is to make maximum profit each day. Throughout the six week simulation a goal has been set for at least two trades per day. This task will be completed by insuring that the firms invested in have a major event approaching. An example of this would be a merger or a new product coming out onto the market.

2.3 Stock Selection

Several companies were researched as potential stocks for short-term trading. The goal in selection a successful short-term stock is the potential for a rapid financial gain. A good example of a reason for rapid financial gain would be a merger, a new product, an opening of a new branch, or a traditional “hot season.” Typically this “season” would last a few days to a week, but in the case where financial growth is continuous and does not

show sign of stopping a month or so is not unheard of. A few easy methods for an inexperienced trader to use to pick a short-term trade are the news, newspapers, and internet trade sites. These methods help in research of what is going on in the company and how the company has been doing in the stock market. Short-term investing is a difficult method that consists of both a lot of work and luck.

For the simulation, the following stocks were chosen for the simulation based off of the aforementioned reasoning: Cisco, Toll Brothers, Time Warner, Coca-Cola, Adolor Corporation, YM Biosciences Inc., The J. Jill Group, Inc., CancerVax Corporation, Lafarge North America Inc., Google, Gillette, Intel, Kellogg Corp., Maytag, BlackRock, Inc., Capital Southwest Corp., Emerson Electric Co [25].

2.4 Trading Events and Analysis

Date	Order Buy (B)/ Sell (S)	Symbol	Quantity	Price In	Price Out	Trans	Gain/Loss	Broker's Fee	Cash Balance
20-Feb-06	Market Closed- Washington's Birthday Observed								
21-Feb-06	B	TOL	2000	\$30.64		-\$61,280.00		\$10.00	\$38,710.00
	B	CSCO	1450	\$19.71		-\$28,579.50		\$10.00	\$10,120.50
	B	PG	165	\$60.88		-\$10,045.20		\$10.00	\$65.30
22-Feb-06	S	TOL	2000		\$31.10	\$62,200.00	\$920.00	\$10.00	\$62,255.30
	B	CCE	2000	\$19.77		-\$39,540.00		\$10.00	\$22,705.30
	B	YMI	2500	\$5.10		-\$12,750.00		\$10.00	\$9,945.30
	B	LAF	115	\$83.45		-\$9,596.75		\$10.00	\$338.55
23-Feb-06	S	CSCO	1450		\$19.72	\$28,594.00	\$14.50	\$10.00	\$28,922.55
	S	PG	165		\$61.39	\$10,129.35	\$84.15	\$10.00	\$39,041.90
	B	ADLR	1500	\$25.97		-\$38,955.00		\$10.00	\$76.90
	B	CNVX	20	\$2.78		-\$55.60		\$10.00	\$11.30
24-Feb-06	S	YMI	2500		\$5.22	\$13,050.00	\$300.00	\$10.00	\$13,051.30
	S	CNVX	20		\$2.73	\$54.60	-\$1.00	\$10.00	\$13,095.90
	B	JILL	550	\$23.62		-\$12,991.00		\$10.00	\$94.90

Table 2.4.1 Transactions between 2/20/06 – 2/24/06

The simulation began on February 20, 2006. At the end of week one the simulation appears to be going well so far. This is not necessarily true for the stocks

which are owned. Fortunately, during the first week a profit of \$1,317.65 was made. During the first week, the most lucrative stock investment was Toll Brothers Inc. (TOL). Toll Brothers opened on the 21st at \$30.64, and closed on the 22nd at \$32.49. In order to insure a productive simulation, the aforementioned stocks were monitored throughout the week.

Date	Order Buy (B)/ Sell (S)	Symbol	Quantity	Price In	Price Out	Trans	Gain/Loss	Broker's Fee	Cash Balance
27-Feb-06	S	LAF	115		\$82.90	\$9,533.50	-\$63.25	\$10.00	\$9,618.40
	B	GOOG	20	\$384.50		-\$7,690.00		\$10.00	\$1,918.40
28-Feb-06	S	ADLR	1500		\$26.50	\$39,750.00	\$795.00	\$10.00	\$41,658.40
	B	BLK	290	\$142.40		-\$41,296.00		\$10.00	\$352.40
1-Mar-06	S	CCE	2000		\$19.85	\$39,700.00	\$160.00	\$10.00	\$40,042.40
	B	K	890	\$44.32		-\$39,444.80		\$10.00	\$587.60
2-Mar-06	S	JILL	550		\$23.63	\$12,996.50	\$5.50	\$10.00	\$13,574.10
	B	TWX	765	\$17.29		-\$13,226.85		\$10.00	\$337.25
3-Mar-06	S	GOOG	20		\$385.68	\$7,713.60	\$23.60	\$10.00	\$8,040.85
	B	CSWC	80	\$98.47		-\$7,877.60		\$10.00	\$153.25
	Dividends	BLK	290		\$0.42	\$121.80		\$10.00	\$265.05

Table 2.4.2 Transactions between 2/27/06 – 3/3/06

At the end of week two the simulation has maintained its success. Fortunately, during the second week an additional profit of \$920.85 was made. While this is not as substantial as week one, it remains an impressive week. The most lucrative stock investment during the second week was Adolor Corp. (ADLR). Adolor was purchased on the 23rd, and was sold on the 28th. On the 23rd it opened at \$24.40, and closed on the 28th at \$24.09. Monitoring the stocks, which are not currently owned, was a daily task throughout the week.

Date	Order Buy (B)/ Sell (S)	Symbol	Quantity	Price In	Price Out	Trans	Gain/Loss	Broker's Fee	Cash Balance
6-Mar-06	S	TWX	765		\$17.32	\$13,249.80	\$22.95	\$10.00	\$13,504.85
	B	EMR	160	\$83.93		-\$13,428.80		\$10.00	\$66.05
7-Mar-06	S	K	890		\$44.41	\$39,524.90	\$80.10	\$10.00	\$39,580.95
	B	INTC	1995	\$19.83		-\$39,560.85		\$10.00	\$10.10
8-Mar-06	S	INTC	1995		\$20.07	\$40,039.65	\$478.80	\$10.00	\$40,039.75
	B	TOL	1295	\$30.81		-\$39,898.95		\$10.00	\$130.80
9-Mar-06	S	BLK	290		\$135.28	\$39,231.20	-\$1,943.00	\$10.00	\$39,352.00
	B	CSCO	1920	\$20.48		-\$39,321.60		\$10.00	\$20.40
10-Mar-06	S	EMR	160		\$84.13	\$13,460.80	\$32.00	\$10.00	\$13,471.20
	B	PG	215	\$61.56		-\$13,235.40		\$10.00	\$225.80

Table 2.4.3 Transactions between 3/6/06 – 3/10/06

The third week of the simulation was a difficult week. BlackRock Inc. (BLK) was not sold earlier due to hopes that the value of the stock would increase. Sadly, this did not happen. After a \$0.42 dividend on March 3rd, the value of the stock did not return to the purchase value. Regretfully, \$1,943.00 was lost this week on BlackRock. The overall loss this week totaled \$1,329.15. The most lucrative stock investment during the third week was Intel Corp. (INTC). Intel was purchased on the 7th, and was sold on the 8th for a \$478.80 profit.

Date	Order Buy (B)/ Sell (S)	Symbol	Quantity	Price In	Price Out	Trans	Gain/Loss	Broker's Fee	Cash Balance
13-Mar-06	S	CSWC	80		\$96.10	\$7,688.00	-\$189.60	\$10.00	\$7,903.80
	B	JILL	330	\$23.77		-\$7,844.10		\$10.00	\$49.70
14-Mar-06	S	CSCO	960		\$20.94	\$20,102.40	\$441.60	\$10.00	\$20,142.10
	B	TWX	1170	\$17.20		-\$20,124.00		\$10.00	\$8.10
15-Mar-06	S	TOL	1295		\$32.71	\$42,359.45		\$10.00	\$42,357.55
	B	BLK	310	\$136.15		-\$42,206.50		\$10.00	\$141.05
16-Mar-06	S	CSCO	960		\$21.64	\$20,774.40	\$1,113.60	\$10.00	\$20,905.45
	B	ADLR	820	\$25.46		-\$20,877.20		\$10.00	\$18.25
17-Mar-06	S	PG	215		\$59.30	\$12,749.50	-\$485.90	\$10.00	\$12,757.75
	B	CCE	610	\$20.73		-\$12,645.30		\$10.00	\$102.45

Table 2.4.4 Transactions between 3/13/06 – 3/17/06

Again this week loss was experienced. Fortunately the other two sales produced a large enough profit that the simulation sales this week remained in the black. Albeit the losses from Proctor and Gamble Co. (PG) and Capital Southwest Corp. (CSWC) were devastating, a profit was still earned of \$879.70. The most lucrative stock investment during the fourth week was Cisco Systems Inc. (CSCO). Cisco was purchased on the 9th. The purchased stocks were sold half at a time, due to a lack of confidence that the stock would continue to rise. The first half was sold on the 14th for a \$441.60 profit, and the rest was sold on the 16th for a \$1,113.60 profit. Overall Cisco produced a \$1,555.20 profit.

Date	Order Buy (B)/ Sell (S)	Symbol	Quantity	Price In	Price Out	Trans	Gain/Loss	Broker's Fee	Cash Balance
20-Mar-06	S	JILL	330		\$23.78	\$7,847.40	\$3.30	\$10.00	\$7,939.85
	B	GOOG	20	\$342.11		-\$6,842.20		\$10.00	\$1,087.65
21-Mar-06	S	BLK	310		\$138.65	\$42,981.50	\$775.00	\$10.00	\$44,059.15
	B	YMI	7090	\$6.21		-\$44,028.90		\$10.00	\$20.25
22-Mar-06	S	TWX	1170		\$17.15	\$20,065.50	-\$58.50	\$10.00	\$20,075.75
	B	CNVX	7040	\$2.85		-\$20,064.00		\$10.00	\$1.75
23-Mar-06	S	ALDR	820		\$24.62	\$20,188.40	-\$688.80	\$10.00	\$20,180.15
	B	EMR	235	\$84.75		-\$19,916.25		\$10.00	\$253.90
24-Mar-06	S	CEE	610		\$20.78	\$12,675.80	\$30.50	\$10.00	\$12,919.70
	B	LAF	155	\$83.15		-\$12,888.25		\$10.00	\$21.45

Table 2.4.5 Transactions between 3/20/06 – 3/24/06

Again this week loss was experienced in two out of the five sales this week. Ironically the other two sales produced a large enough profit that the simulation sales this week remained in the black. This is ironic due to the fact that BlackRock Inc. produced a \$1,943.00 loss the first time it was purchased during the third week on BlackRock Inc. During the fifth week BlackRock Inc. earned a profit of \$775.00. The overall gain this week was a mere \$61.50. To date this week has been the lowest profit earned. That is ignoring the \$1,329.15 loss in the fourth week.

Date	Order Buy (B)/ Sell (S)	Symbol	Quantity	Price In	Price Out	Trans	Gain/Loss	Broker's Fee	Cash Balance
27-Mar-06	S	GOOG	20		\$369.12	\$7,382.40	\$540.20	\$10.00	\$7,393.85
	B	PG	125	\$58.33		-\$7,291.25		\$10.00	\$92.60
28-Mar-06	S	EMR	235		\$84.97	\$19,967.95	\$51.70	\$10.00	\$20,050.55
	B	K	455	\$43.79		-\$19,924.45		\$10.00	\$116.10
29-Mar-06	S	YMI	7090		\$5.77	\$40,909.30	-\$3,119.60	\$10.00	\$41,015.40
	B	INTC	1075	\$19.51		-\$20,973.25		\$10.00	\$20,032.15
30-Mar-06	B	CSCO	920	\$21.76		-\$20,019.20		\$10.00	\$2.95
31-Mar-06	S	CSCO	920		\$21.98	\$20,221.60	\$202.40	\$10.00	\$20,214.55
	S	CNVX	7040		3.01	\$21,190.40	\$1,126.40	\$10.00	\$41,394.95
	S	LAF	155		83.53	\$12,947.15	\$58.90	\$10.00	\$54,332.10
	S	PG	125		58.3	\$7,287.50	-\$3.75	\$10.00	\$61,609.60
	S	K	455		44.14	\$20,083.70	\$159.25	\$10.00	\$81,683.30
	S	INTC	1075		19.76	\$21,242.00	\$268.75	\$10.00	\$102,915.30

Table 2.4.6 Transactions between 3/27/06 – 3/31/06

This sixth and final week was anticlimactic. For the second time an overall loss was reported. This loss was substantially smaller than last time, but \$715.75 is large enough to make an impact. The reason for this loss was the largest loss on a single stock during this simulation. \$3,119.60 was lost this week on YM BioSciences, Inc. (YMI). The profit off of this simulation was \$2,915.30 after six weeks. Pending the success rate being retained, this six week profit translates into a yearly profit of \$25,265.93. By no means is this a vast sum of money compared to that which is possible. On the other hand this is a substantial amount of money for an inexperienced trader to make in their first year [25].

2.5 Conclusions

A goal was set that there would be a minimal two trades per day. This goal was met, and a profit was achieved. This goal was accomplished by using the following selected companies, Cisco, Toll Brothers, Time Warner, Coca-Cola, Adolor Corporation, YM Biosciences Inc., The J. Jill Group, Inc., CancerVax Corporation, Lafarge North America Inc., Google, Gillette, Intel, Kellogg Corp., Maytag, BlackRock, Inc., Capital Southwest Corp., Emerson Electric Co. When done properly, short term trading is an

excellent way to expand your financial portfolio. After merely working on a simulation for six weeks, it has become clear that not only research is important in short term trading. Luck and time are also important factors. Time is important because without enough of it a loss is eminent. If one has enough time, prices can be checked more frequently and decisions to invest will be well informed [25].

3. Long Term Trading

3.1 Background

Long term trading is extremely different from any other method of trading. This is because an investor picks stocks that they feel will gain a profit in the long run. The basic idea of long term trading is to buy stocks and hold on to them. A long term investor is looking for a company that is a “sure thing.” There are nine factors that any long term investor should follow they are:

1. Do not hold onto stocks that show no promise of rebounding after a loss.
2. Do not rely on somebody else’s “hot tip” rather do research and make informed decisions.
3. “Don’t sweat the small stuff” – stick with the stocks that are going to make a profit even if they have a small phase of non-performance
4. Do not use the price-earnings ratio to make any decisions because these ratios do not show promise
5. Do not take the risk on “penny stocks”
6. Do not change strategies because there is no “perfect strategy”
7. Do not look at the here and now rather to the future
8. Do not be close-minded in your research
9. Do not focus on taxes [24]

3.2 Simulation Goals

In order for a long term investor to make a solid profit, they need to choose companies with a history of prosperity. Companies make a profit for a reason. This reason is a “sustainable competitive advantage” over other firms in a similar field which can come from products, organization, personnel, and demand. Another major factor in a prosperous company is a barrier. This barrier can be either economical or geographical, but something must stand out about this firm [27]! A goal has been set to have no trades necessary in the simulation but to also have a one percent profit on each of the long term investments.

3.3 Stock Selection

Several companies were researched as potential long term investments. This research consisted of their history of success, relevance in today’s society, and potential for continued growth. After initial research the following four stocks were chosen for the simulation: Walt Disney Co., Public Storage, Inc., Lockheed Martin Corporation, Deltic Timber Corporation [25].

3.4 Trading Events and Analysis

Long term investing is both an easy method and a difficult method at the same time. After researching the company, the analysis required is very simplistic. In order to appropriately analyze the stocks an investor owns, they should track them on a daily basis. This task becomes difficult during a difficult time for the company because a true long term investor will hold on to the stock even though it is decreasing in worth. A good

quality for a long term company is if the price does not fluctuate dramatically. It should not take major losses. There was a strong potential for a substantial gain during the simulation due to the short term simulation of what is meant to be long term investing. Since the simulation was only six weeks long, the long term effects on the stock were not very prominent. When purchasing stocks, the \$100,000 was divided evenly amongst the four selected stocks.

Disney was a relatively good investment. It started out strong, but since March 16th the value has been progressively decreasing. Below is a daily tracking of how Disney progressed throughout the simulation. In this table the most pertinent numbers are open and close. This is because in long term trading the highs and lows of each day are not important. Long term trading only is concerned with the quality of the investment over a long period of time not on a day to day basis.

Date	Open	High	Low	Close	Volume	Adj Close*
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	26.51	27.28	26.51	27.16	10,645,700	27.16
22-Feb-06	27.23	27.55	27.15	27.46	10,957,400	27.46
23-Feb-06	27.46	27.78	27.37	27.71	12,840,000	27.71
24-Feb-06	27.71	27.99	27.61	27.98	11,812,900	27.98
27-Feb-06	28	28.49	27.98	28.38	14,670,200	28.38
28-Feb-06	28.46	28.46	27.82	27.99	10,858,400	27.99
1-Mar-06	28	28.18	27.93	28.09	9,096,000	28.09
2-Mar-06	28	28.07	27.74	28.03	9,579,400	28.03
3-Mar-06	27.94	28.44	27.91	28.22	7,872,400	28.22
6-Mar-06	28.15	28.22	27.88	27.88	7,378,700	27.88
7-Mar-06	27.81	28.06	27.75	28.01	7,740,500	28.01
8-Mar-06	27.99	28.15	27.91	28.05	7,260,700	28.05
9-Mar-06	28.13	28.27	27.83	28.09	7,005,500	28.09
10-Mar-06	28.04	28.3	27.94	28.16	8,083,700	28.16
13-Mar-06	28.27	28.62	28.16	28.56	10,409,300	28.56
14-Mar-06	28.46	28.66	28.42	28.66	5,607,500	28.66
15-Mar-06	28.6	28.85	28.55	28.75	6,644,900	28.75
16-Mar-06	28.81	28.85	28.51	28.68	6,014,400	28.68
17-Mar-06	28.79	28.8	28.54	28.64	7,977,100	28.64
20-Mar-06	28.68	28.81	28.52	28.64	6,268,700	28.64
21-Mar-06	28.57	28.63	28.04	28.1	7,682,500	28.1
22-Mar-06	28.11	28.2	27.75	27.79	13,030,400	27.79
23-Mar-06	27.9	27.9	27.41	27.52	12,481,700	27.52
24-Mar-06	27.49	27.68	27.35	27.45	6,916,900	27.45
27-Mar-06	27.4	27.54	27.3	27.34	8,328,300	27.34
28-Mar-06	27.41	27.44	27.06	27.09	12,831,700	27.09
29-Mar-06	27.22	28.12	27.16	27.86	12,855,400	27.86
30-Mar-06	27.68	28.09	27.65	27.87	7,344,900	27.87
31-Mar-06	27.85	28.05	27.69	27.89	7,905,800	27.89

* Close price adjusted for dividends and splits.

Table 3.4.1 Opening and Closing Prices for Walt Disney Co. (DIS)

To begin the simulation, 948 shares of Disney stock were purchased at \$26.51 per share. At the end of the simulation Disney closed at \$27.89 per share. This translates into a total gain of \$1308.24. This correlates to an astounding gain of about 5.2%. For long

term stocks this is a rather significant gain. If six weeks ago one were to invest \$1000 in Disney, it would be worth \$1052 today. In the hypothetical situation were Disney continues to grow at this rapid pace, that same investment would be worth \$1450.67 at the end of a year. This would be a \$450.67 net profit for leaving money alone in the stock market.

Public Storage, Inc. was also a good investment. Over the course of the simulation the stock only had small variations in price over the course of any single day. Due to the nature of Public Storage's business, it was important to also pay attention to the daily highs and lows in order to insure that the stock was stable. If it were to have a large fluctuation on a daily basis, it would be unstable and therefore should be sold. Below is a daily tracking of how Public Storage progressed throughout the simulation.

Date	Open	High	Low	Close	Volume	Adj Close*
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	76.90	77.24	75.94	76.29	453,000	75.83
22-Feb-06	76.54	77.81	76.00	77.45	518,000	76.98
23-Feb-06	77.57	77.99	77.22	77.78	387,500	77.31
24-Feb-06	77.78	77.90	76.97	77.41	430,200	76.94
27-Feb-06	77.66	78.00	77.05	77.89	393,200	77.42
28-Feb-06	77.97	78.37	77.70	78.02	381,000	77.55
1-Mar-06	78.07	78.30	77.28	78.24	396,400	77.77
2-Mar-06	78.06	78.62	77.56	78.27	397,800	77.80
3-Mar-06	78.27	78.61	78.20	78.36	468,500	77.89
6-Mar-06	78.40	79.79	78.25	79.46	687,000	78.98
7-Mar-06	78.86	78.86	77.03	77.17	3,283,100	76.71
8-Mar-06	78.50	80.59	78.39	80.57	1,704,300	80.08
9-Mar-06	80.60	83.54	80.60	82.54	1,565,100	82.04
10-Mar-06	82.50	82.98	81.84	82.98	1,166,900	82.48
13-Mar-06	82.32	82.76	81.53	82.00	832,200	82.00
	\$ 0.50 Dividend					
14-Mar-06	81.96	82.63	81.70	82.06	795,500	82.06
15-Mar-06	81.95	83.56	81.94	83.47	829,800	83.47
16-Mar-06	83.52	84.62	82.88	82.90	1,395,200	82.90
17-Mar-06	82.90	83.00	82.37	82.45	1,322,600	82.45
20-Mar-06	82.40	82.50	80.78	81.61	1,007,000	81.61
21-Mar-06	81.45	82.69	80.25	81.53	837,800	81.53
22-Mar-06	81.65	82.54	81.48	81.90	625,700	81.90
23-Mar-06	81.68	82.15	81.46	81.90	602,100	81.90
24-Mar-06	81.75	81.81	80.94	80.94	539,600	80.94
27-Mar-06	80.90	80.90	79.10	79.10	848,900	79.10
28-Mar-06	78.91	80.42	78.10	80.42	1,041,600	80.42
29-Mar-06	80.50	82.53	80.50	82.29	643,300	82.29
30-Mar-06	82.60	82.64	80.59	81.26	907,300	81.26
31-Mar-06	81.23	81.80	80.38	81.23	906,000	81.23
* Close price adjusted for dividends and splits.						

Table 3.4.2 Opening and Closing Prices for Public Storage Inc. (PSA)

To begin the simulation, 324 shares of Public Storage, Inc. stock were purchased at \$76.90 per share. At the end of the simulation Public Storage, Inc. closed at \$81.23 per share. This translates into a total gain of \$1402.92. This correlates to an astounding gain of about 5.6%. Again for long term stocks this is a rather significant gain. If six weeks ago one were to invest \$1000 in Disney, it would be worth \$1056 today. In the hypothetical situation were Disney continues to grow at this rapid pace, that same investment would be worth \$1487.99 at the end of a year.

Lockheed Martin Corporation was a good investment. Although at first the company did not seem stable, since March 7th the value has been progressively increasing. Below is a daily tracking of how Lockheed Martin Corporation progressed throughout the simulation. Due to the good history of the company and the low risk of the stock, the most pertinent numbers are open and close.

Date	Open	High	Low	Close	Volume	Adj Close*
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	72.5	73.26	71.61	72.98	2,960,200	72.69
22-Feb-06	72.98	73.99	72.88	73.98	2,552,300	73.68
23-Feb-06	73.5	73.81	73.11	73.49	2,120,200	73.19
24-Feb-06	73.49	74.97	73.46	74.58	2,386,000	74.28
27-Feb-06	74.05	74.66	74.05	74.06	2,113,400	74.06
	\$ 0.30 Dividend					
28-Feb-06	73.63	73.76	72.24	72.87	3,020,500	72.87
1-Mar-06	72.68	73.65	72.63	73.33	1,574,400	73.33
2-Mar-06	73.1	73.84	72.78	73.31	2,214,600	73.31
3-Mar-06	73.29	74.37	72.98	73.5	2,144,700	73.5
6-Mar-06	73.7	73.7	72.52	72.69	1,642,500	72.69
7-Mar-06	72.38	73.43	72.25	73.12	2,010,500	73.12
8-Mar-06	73.28	73.5	73.08	73.42	2,004,500	73.42
9-Mar-06	73.43	74.17	73.14	73.59	2,034,400	73.59
10-Mar-06	73.58	74.63	73.23	74.33	2,170,200	74.33
13-Mar-06	74.33	74.95	73.5	73.52	2,128,400	73.52
14-Mar-06	73.52	74.37	73.17	74.07	1,917,900	74.07
15-Mar-06	74.21	74.64	73.82	74.22	1,933,100	74.22
16-Mar-06	74.47	76.03	74.4	75.85	3,812,300	75.85
17-Mar-06	75.95	76.29	75.63	75.95	2,885,300	75.95
20-Mar-06	76.19	76.98	76.01	76.73	2,158,300	76.73
21-Mar-06	76.84	77.78	76.16	76.3	2,721,200	76.3
22-Mar-06	76.3	76.56	75.75	76.5	2,835,700	76.5
23-Mar-06	76.5	76.5	75.6	75.97	1,253,400	75.97
24-Mar-06	75.7	76.32	75.06	75.99	1,987,400	75.99
27-Mar-06	75.5	76.04	75.29	75.93	1,625,400	75.93
28-Mar-06	75.93	76.2	75.45	75.58	1,620,200	75.58
29-Mar-06	75.57	75.98	75.34	75.5	1,477,100	75.5
30-Mar-06	75.3	75.79	75	75.23	1,570,400	75.23
31-Mar-06	75.03	75.54	74.99	75.13	2,164,400	75.13
* Close price adjusted for dividends and splits.						

Table 3.4.3 Opening and Closing Prices for Lockheed Martin Corporation (LMT)

To begin the simulation, 344 shares of Lockheed Martin (LMT) stock were purchased at \$72.50 per share. At the end of the simulation LMT closed at \$75.13 per share. This translates into a total gain of \$904.72. This correlates to an astounding gain of about 3.6%. Even though compared to the other two firms that were invested in during this simulation this stock did not seem to do well, in reality it still was very profitable. If six weeks ago one were to invest \$1000 in Lockheed Martin, it would be worth \$1036 today. In the hypothetical situation were Disney continues to grow at this rapid pace, that same investment would be worth \$1314.391 at the end of a year.

Deltic Timber Corporation was an amazing investment. Although at first the company did not seem stable, since March 7th the value has been progressively increasing. Below is a daily tracking of how Deltic Timber Corporation progressed throughout the simulation.

Date	Open	High	Low	Close	Volume	Adj Close*
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	52.57	52.83	52.4	52.52	33,400	52.44
22-Feb-06	52.62	52.83	52.13	52.43	46,200	52.35
23-Feb-06	52.42	52.72	52.1	52.14	26,100	52.06
24-Feb-06	52.05	52.08	51.55	52.08	31,300	52.01
27-Feb-06	52	52.5	52	52.28	38,200	52.28
	\$ 0.075 Dividend					
28-Feb-06	52.25	52.42	52.2	52.26	31,900	52.26
1-Mar-06	52.26	52.73	52.1	52.62	82,200	52.62
2-Mar-06	52.63	52.74	51.95	52.06	34,300	52.06
3-Mar-06	51.96	52.05	51.39	51.41	52,300	51.41
6-Mar-06	51.45	51.88	51.2	51.71	131,900	51.71
7-Mar-06	51.56	51.71	51.35	51.65	75,700	51.65
8-Mar-06	51.6	52.13	51.19	51.85	53,000	51.85
9-Mar-06	51.87	52.49	51.76	51.85	19,300	51.85
10-Mar-06	51.7	52.72	51.5	52.72	17,800	52.72
13-Mar-06	52.72	52.85	52.44	52.54	31,800	52.54
14-Mar-06	52.6	54.3	52.4	53.74	37,000	53.74
15-Mar-06	53.75	54.52	53.69	54.49	25,000	54.49
16-Mar-06	55.05	55.53	54.95	55.21	64,000	55.21
17-Mar-06	55	55	53.8	54.7	144,600	54.7
20-Mar-06	54.7	55.6	54.51	55.2	64,000	55.2
21-Mar-06	55.05	55.25	53.96	53.96	53,700	53.96
22-Mar-06	53.9	54.63	53.85	54.62	35,700	54.62
23-Mar-06	54.86	55.21	54.86	54.99	33,700	54.99
24-Mar-06	55.1	55.35	55.04	55.18	40,400	55.18
27-Mar-06	55.3	55.66	54.6	55.66	53,900	55.66
28-Mar-06	55.56	57.88	55.43	55.65	95,900	55.65
29-Mar-06	55.9	59.51	55.5	59.2	479,600	59.2
30-Mar-06	59	60.74	58	60.18	166,300	60.18
31-Mar-06	60.18	60.88	59.51	60.6	91,200	60.6

* Close price adjusted for dividends and splits.

Table 3.4.4 Opening and Closing Prices for Deltic Timber Corporation (DEL)

To begin the simulation, 475 shares of Deltic Timber (DEL) stock were purchased at \$52.57 per share. At the end of the simulation DEL closed at \$60.60 per share. This translates into a total gain of \$3814.25. This correlates to an unrealistic gain of about 15.3%. Compared to the other three firms that were invested in during this simulation this stock did outstanding. This percent gain seems unrealistic in a long term investment, because sales will eventually slow down. This firm would be a good candidate for long term trading, because it would be a good stock to hold on to for a long stretch but not for numerous years. If six weeks ago one were to invest \$1000 in Deltic Timber, it would be worth \$1153 today. In the hypothetical situation were Disney continues to grow at this rapid pace, that same investment would be worth \$2323.822 at the end of a year.

The last important information for determining the success of the long term simulation is a table of closing prices, profit, and total money for everyday of the simulation. This is more pertinent for day trading and swing trading, but all successful traders should have this for every stock they own. If they do so they will know if their investment is losing too much money.

Date	adj. close DIS	Profit DIS	adj. close PSA	Profit PSA	adj. close LMT	Profit LMT	adj. close DEL	Profit DEL	Total Money
20-Feb-06	Market Closed- Washington's Birthday Observed								
21-Feb-06	27.16	616	75.83	-347	72.69	65.36	52.44	-61.75	100273.13
22-Feb-06	27.46	218	76.98	143	73.68	240.8	52.35	-128.3	100746.28
23-Feb-06	27.71	237	77.31	-84.2	73.19	-106.64	52.06	-171	100621.4
24-Feb-06	27.98	256	76.94	-272	74.28	271.76	52.01	-19	100857.96
27-Feb-06	28.38	360	77.42	-77.8	74.06	3.44	52.28	133	101276.88
28-Feb-06	27.99	-446	77.55	-136	72.87	-261.44	52.26	4.75	100438.55
1-Mar-06	28.09	85.3	77.77	-97.2	73.33	223.6	52.62	171	100821.27
2-Mar-06	28.03	28.4	77.80	-84.2	73.31	72.24	52.06	-270.8	100566.96
3-Mar-06	28.22	265	77.89	-123	73.5	72.24	51.41	-261.3	100520.27
6-Mar-06	27.88	-256	78.98	188	72.69	-347.44	51.71	123.5	100228.29
7-Mar-06	28.01	190	76.71	-697	73.12	254.56	51.65	42.75	100018.6
8-Mar-06	28.05	56.9	80.08	512	73.42	48.16	51.85	118.75	100754.31
9-Mar-06	28.09	-37.9	82.04	467	73.59	55.04	51.85	-9.5	101228.49
10-Mar-06	28.16	114	82.48	-6.48	74.33	258	52.72	484.5	102078.27
13-Mar-06	28.56	275	82.00	-104	73.52	-278.64	52.54	-85.5	101885.37
14-Mar-06	28.66	190	82.06	32.4	74.07	189.2	53.74	541.5	102838.07
15-Mar-06	28.75	142	83.47	492	74.22	3.44	54.49	351.5	103827.69
16-Mar-06	28.68	-123	82.90	-201	75.85	474.72	55.21	76	104054.29
17-Mar-06	28.64	-142	82.45	-146	75.95	0	54.7	-142.5	103623.79
20-Mar-06	28.64	-37.9	81.61	-256	76.73	185.76	55.2	237.5	103753.17
21-Mar-06	28.1	-446	81.53	25.9	76.3	-185.76	53.96	-517.8	102630.02
22-Mar-06	27.79	-303	81.90	81	76.5	68.8	54.62	342	102818.46
23-Mar-06	27.52	-360	81.90	71.3	75.97	-182.32	54.99	61.75	102408.93
24-Mar-06	27.45	-37.9	80.94	-262	75.99	99.76	55.18	38	102246.33
27-Mar-06	27.34	-56.9	79.10	-583	75.93	147.92	55.66	171	101925.17
28-Mar-06	27.09	-303	80.42	489	75.58	-120.4	55.65	42.75	102033.4
29-Mar-06	27.86	607	82.29	580	75.5	-24.08	59.2	1567.5	104763.5
30-Mar-06	27.87	180	81.26	-434	75.23	-24.08	60.18	560.5	105045.88
31-Mar-06	27.89	37.9	81.23	0	75.13	34.4	60.6	199.5	105317.7

Table 3.4.5 Daily Growth of Assets

At the beginning of the long term investing simulation, approximately \$999,960 was invested into four different stocks. The \$40 dollars was spent on hypothetical broker's fees. Throughout the six week simulation no trading took place, instead the stocks were tracking to insure that profits increased steadily for each of the investments. Afterwards the stocks were sold, brokers were paid transaction fees yet again, and the

profit was counted. By far, Deltic Timber Corporation was the source of the biggest profit. From an original investment of \$24970.75 a profit of \$3814.25 was gained. Between the four stocks the original investment was \$99957.83. The total profit was \$7430.13 before broker's fees were paid, and \$7390.13. This is an enormous profit after only six weeks. Luckily, none of the four stocks lost money. In reality there was a strong chance that at least one of the stocks was to lose money over the long term. Research and close tracking of the stocks will lower the risk of a loss [25].

3.5 Conclusion

A goal was set that each investment had a one percent profit, and that no trades would be necessary due to stable stocks. Both of these goals were accomplished with the four selected companies, Walt Disney Co., Public Storage Inc., Lockheed Martin Corp., and Deltic Timber Corp. No matter how skilled an investor is, there is no fool proof method in predicting a successful stock in the stock market. These four companies were picked due to their history of success, relevance in today's society, and potential for continued growth. These reasons do not guarantee success, rather they are strong indicators of companies that have a higher probability to succeed. Due to the high demand for Disney, Public Storage, Lockheed Martin, and Deltic Timber the stock prices increased. This caused for the long term investment simulation profit [25].

4. Conclusions

The mission of this project was to expose students to the stock market and thereby teach them about investing. Over the course of two terms, research was completed in order to gain a broader understanding of how the stock market works. Once this knowledge was gained the true task began. Two different trading methods were used during the six week simulation. Due to a lack of experience in trading, the long term investing method was more lucrative. This is so because no trades were completed, and the original research was substantial enough to make smart investing decisions. While the day trading method was still profitable, it did earned significantly less in profit.

Method	Profit	Profit (%)
Day Trading	\$2915.30	2.91%
Long Term Investing	\$7390.13	7.39%

Table 4.1 Comparison of Gains and Losses

At the beginning of the project, the goal was to complete a successful simulation. A successful simulation does not mean that a profit was earned, but that was also a goal set. Through earned research and a lot of luck, these goals were met. The knowledge of how to research stocks, how to trade stocks, and how many different methods of trading that exist is critical knowledge for any investor. Therefore it will be useful knowledge not only now, but also throughout an investment career. Typically today's generation invests in the stock market at least once during their lifetime. The knowledge gained from this

project will be useful in the future for all participants in the simulation. Based off to the experience of this project, it is fair to say that a future profit on personal investments is likely. Knowledge of how the stock market works is what separates a novice investor from an expert. This knowledge is earned over time, and even the average person who trades online has some knowledge of how the stock market works. If they did not then there would be no profit possible.

References

1. *Answers.com*. 28 January 2006 <<http://www.answers.com/topic/market-1>>
2. *CapWeb*. 28 January 2006 <<http://www.capweb.net/index/Articles/Finance/Stock+Market>>
3. *investorwords.com*. 28 January 2006 <<http://www.investorwords.com/1563/Dow.html>>
4. *investorwords.com*. 28 January 2006 <<http://www.investorwords.com/199/AMEX.html>>
5. *investorwords.com*. 28 January 2006 <<http://www.investorwords.com/3189/Nasdaq.html>>
6. *investorwords.com*. 28 January 2006
<http://www.investorwords.com/3190/Nasdaq_Composite_Index.html>
7. *investorwords.com*. 28 January 2006 <<http://www.investorwords.com/3370/NYSE.html>>
8. *investorwords.com*. 28 January 2006 <http://www.investorwords.com/4378/SP_500.html>
9. *SuperiorInvestor.net*. 28 January 2006
<<http://stock-market.superiorinvestor.net/what-is-the-stock-market.html>>
10. *The Motley Fool*. 28 January 2006 <<http://www.fool.com/school/basics/basics01.htm>>
11. *The Motley Fool*. 28 January 2006 <<http://www.fool.com/school/basics/basics03.htm>>
12. *The Motley Fool*. 28 January 2006 <<http://www.fool.com/school/basics/basics04.htm>>
13. *The Motley Fool*. 28 January 2006 <<http://www.fool.com/school/basics/basics05.htm>>
14. Woodard, Dustin. 28 January 2006
<<http://mutualfunds.about.com/cs/history/a/marketcrash.htm>>
15. *investorguide.com*. 27 January 2006 <<http://www.investorguide.com/igup1-principles-of-investing.htm>>
16. *investorguide.com*. 27 January 2006 <<http://www.investorguide.com/igup2-introduction-to-investing-basics.htm>>
17. *stocks.about.com*. 27 January 2006
<<http://stocks.about.com/od/findingabroker/a/Choosebroker.htm>>
18. *daytraders.com*. 4 February 2006 <http://www.daytraders.com/swing_trading.html>

19. *investopedia.com*. 4 February 2006
<<http://www.investopedia.com/articles/technical/04/080404.asp>>
20. *investopedia.com*. 4 February 2006
<<http://www.investopedia.com/articles/trading/02/101602.asp>>
21. *investorguide.com*. 4 February 2006 <<http://www.investorwords.com/5258/volume.html>>
22. *investorguide.com*. 4 February 2006 <<http://www.investorguide.com/igup1-trading-stocks.htm>>
23. *answers.com*. 4 February 2006 <<http://www.answers.com/Day%20Trading>>
24. *investopedia.com*. 4 February 2006 <<http://www.investopedia.com/articles/00/082100.asp>>
25. *finance.yahoo.com*. 13 February 2006 to 15 April 2006
<<http://finance.yahoo.com/q/pr?s=AAPL>>

Appendix: Opening and Closing Prices of Selected Companies

Date	Open	High	Low	Close	Volume	Adj Close*
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	19.71	19.9	19.45	19.58	47,666,600	19.58
22-Feb-06	19.57	19.93	19.57	19.67	57,719,700	19.67
23-Feb-06	19.62	19.85	19.56	19.72	48,143,700	19.72
24-Feb-06	19.7	19.91	19.68	19.85	37,444,900	19.85
27-Feb-06	19.85	20	19.83	19.97	55,854,400	19.97
28-Feb-06	19.96	20.4	19.86	20.24	137,099,808	20.24
1-Mar-06	20.38	21.12	20.34	21.06	160,237,696	21.06
2-Mar-06	20.93	21.06	20.7	20.88	69,236,400	20.88
3-Mar-06	20.7	21.33	20.66	21.04	76,428,600	21.04
6-Mar-06	20.97	21.48	20.88	21.05	85,155,104	21.05
7-Mar-06	20.93	20.98	20.68	20.87	47,523,100	20.87
8-Mar-06	20.71	20.99	20.68	20.86	54,435,200	20.86
9-Mar-06	20.9	20.91	20.44	20.44	45,597,800	20.44
10-Mar-06	20.53	20.88	20.32	20.82	48,463,600	20.82
13-Mar-06	20.87	21.15	20.81	20.86	46,526,400	20.86
14-Mar-06	20.82	21.25	20.77	21.25	54,956,400	21.25
15-Mar-06	21.19	21.5	21.16	21.44	48,514,600	21.44
16-Mar-06	21.49	21.69	21.24	21.25	55,426,200	21.25
17-Mar-06	21.44	21.68	21.15	21.62	62,104,500	21.62
20-Mar-06	21.62	21.74	21.43	21.68	34,525,500	21.68
21-Mar-06	21.55	21.85	21.28	21.41	49,441,900	21.41
22-Mar-06	21.24	21.5	21.23	21.42	35,794,900	21.42
23-Mar-06	21.29	21.49	21.21	21.41	37,038,000	21.41
24-Mar-06	21.34	21.5	21.24	21.36	34,047,900	21.36
27-Mar-06	21.29	21.85	21.25	21.69	53,091,400	21.69
28-Mar-06	21.61	21.9	21.31	21.33	54,353,600	21.33
29-Mar-06	21.4	21.88	21.28	21.57	58,304,500	21.57
30-Mar-06	21.6	22	21.55	21.97	54,944,600	21.97
31-Mar-06	21.95	22	21.67	21.67	54,881,800	21.67

* Close price adjusted for dividends and splits.

Table A.1 Opening and Closing Prices for Cisco Systems Inc. (CSCO)

Date	Open	High	Low	Close	Volume	Adj Close*
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	30.64	31.15	30.06	30.77	6,521,600	30.77
22-Feb-06	31	32.74	30.8	32.49	7,219,600	32.49
23-Feb-06	33.1	34.09	32.12	33.54	7,752,300	33.54
24-Feb-06	33.45	33.55	32.75	33.34	2,891,600	33.34
27-Feb-06	32.9	33.1	32.21	32.65	3,590,200	32.65
28-Feb-06	32	32.9	32	32.33	2,349,100	32.33
1-Mar-06	32.04	33	31.89	32.9	3,272,300	32.9
2-Mar-06	32.78	33.75	32.61	33.52	3,598,400	33.52
3-Mar-06	32.9	33.41	32.68	33	3,076,000	33
6-Mar-06	32.83	33.15	32.65	32.77	2,567,700	32.77
7-Mar-06	32.4	32.55	31.14	31.33	4,104,900	31.33
8-Mar-06	31	31.57	30.63	31.26	3,475,800	31.26
9-Mar-06	31.3	31.64	30.61	30.79	2,671,800	30.79
10-Mar-06	30.68	31.8	30.51	31.39	2,320,000	31.39
13-Mar-06	31.3	31.9	31.25	31.65	1,761,700	31.65
14-Mar-06	31.59	33.37	31.55	33.35	3,871,800	33.35
15-Mar-06	33.35	33.75	32.67	32.89	3,040,100	32.89
16-Mar-06	33.69	34.91	33.34	34.18	5,118,800	34.18
17-Mar-06	35.25	35.57	34.69	34.99	3,804,800	34.99
20-Mar-06	34.87	35	33.43	33.52	3,410,700	33.52
21-Mar-06	33.35	33.68	32.79	32.87	3,942,200	32.87
22-Mar-06	32.87	33.55	32.81	33.1	1,895,000	33.1
23-Mar-06	33.35	34.87	33.25	34.46	4,167,000	34.46
24-Mar-06	34.02	35.19	33.5	34.35	4,238,600	34.35
27-Mar-06	35.68	36.05	35.06	35.3	5,494,000	35.3
28-Mar-06	35.71	35.85	34.57	34.95	3,588,100	34.95
29-Mar-06	34.94	35.22	34.54	35.05	1,895,000	35.05
30-Mar-06	34.81	35.34	34	34.83	2,854,900	34.83
31-Mar-06	34.42	34.92	34.31	34.63	1,762,200	34.63

* Close price adjusted for dividends and splits.

Table A.2 Opening and Closing Prices for Toll Brothers Inc. (TOL)

Date	Open	High	Low	Close	Volume	Adj Close*
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	19.58	19.79	19.56	19.68	873,900	19.62
22-Feb-06	19.75	19.77	19.58	19.62	838,800	19.56
23-Feb-06	19.62	19.69	19.5	19.65	941,100	19.59
24-Feb-06	19.63	19.74	19.52	19.58	581,000	19.52
27-Feb-06	19.65	19.79	19.56	19.75	721,600	19.69
28-Feb-06	19.66	19.73	19.57	19.65	1,265,700	19.59
1-Mar-06	19.7	20.09	19.7	19.95	1,957,900	19.89
2-Mar-06	19.82	19.82	19.46	19.47	2,640,400	19.41
3-Mar-06	19.38	19.69	19.29	19.53	2,271,500	19.47
6-Mar-06	19.48	19.87	19.48	19.6	1,772,100	19.54
7-Mar-06	19.59	19.79	19.56	19.79	1,185,100	19.73
8-Mar-06	19.8	20	19.74	19.89	1,932,100	19.83
9-Mar-06	19.85	20	19.74	19.9	907,700	19.84
10-Mar-06	19.96	20.23	19.95	20.22	1,003,000	20.16
13-Mar-06	20.21	20.35	20.09	20.2	982,100	20.14
14-Mar-06	20.14	20.36	20.07	20.32	1,766,400	20.26
15-Mar-06	20.21	20.31	19.98	20.23	1,099,100	20.23
	\$0.06 Dividend					
16-Mar-06	20.73	20.89	20.57	20.69	2,639,700	20.69
17-Mar-06	20.8	20.85	20.69	20.76	1,451,400	20.76
20-Mar-06	20.73	20.78	20.53	20.72	1,307,100	20.72
21-Mar-06	20.66	20.86	20.52	20.75	1,271,800	20.75
22-Mar-06	20.77	20.93	20.71	20.86	1,000,100	20.86
23-Mar-06	20.78	20.82	20.63	20.79	1,034,700	20.79
24-Mar-06	20.71	20.8	20.52	20.73	682,600	20.73
27-Mar-06	20.62	20.66	20.41	20.59	1,374,300	20.59
28-Mar-06	20.54	20.66	20.38	20.6	1,140,100	20.6
29-Mar-06	20.64	20.65	20.37	20.44	1,121,200	20.44
30-Mar-06	20.38	20.4	20.14	20.27	913,700	20.27
31-Mar-06	20.23	20.4	20.18	20.34	1,094,400	20.34
* Close price adjusted for dividends and splits.						

Table A.3 Opening and Closing Prices for Coca-Cola Enterprises Inc. (CCE)

<u>Date</u>	<u>Open</u>	<u>High</u>	<u>Low</u>	<u>Close</u>	<u>Volume</u>	<u>Adj Close*</u>
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	25.47	25.5	24.77	25.06	681,600	25.06
22-Feb-06	25.14	25.94	24.92	25.87	516,000	25.87
23-Feb-06	25.73	25.97	25.4	25.86	368,500	25.86
24-Feb-06	25.98	27.14	25.65	26.53	1,006,300	26.53
27-Feb-06	26.53	27.45	26.53	27.2	712,900	27.2
28-Feb-06	27.18	27.51	26.32	27.44	1,233,600	27.44
1-Mar-06	27.72	27.8	26.84	27.25	805,900	27.25
2-Mar-06	27.35	27.57	26.75	27.45	656,100	27.45
3-Mar-06	27.4	27.45	26.58	26.85	542,200	26.85
6-Mar-06	26.86	27.32	26.38	26.59	561,200	26.59
7-Mar-06	26.37	26.5	25.49	26.31	802,700	26.31
8-Mar-06	25.99	26.2	25.09	26.04	543,500	26.04
9-Mar-06	25.9	26.09	25.31	25.43	492,200	25.43
10-Mar-06	26.05	26.98	25.75	25.96	967,400	25.96
13-Mar-06	26	26.77	25.72	25.87	501,600	25.87
14-Mar-06	26.01	26.18	25.44	26	255,800	26
15-Mar-06	26.08	26.1	25.54	25.57	423,300	25.57
16-Mar-06	25.52	25.9	25.26	25.4	279,900	25.4
17-Mar-06	25.59	25.71	24.34	25.05	946,700	25.05
20-Mar-06	25	25.5	24.85	25.09	415,400	25.09
21-Mar-06	25.05	25.46	23.74	24.07	613,200	24.07
22-Mar-06	24.19	24.52	23.52	24.28	552,800	24.28
23-Mar-06	24.4	24.62	23.8	24.61	299,300	24.61
24-Mar-06	24.5	24.56	23.91	23.98	350,200	23.98
27-Mar-06	23.85	24.39	23.52	24	420,700	24
28-Mar-06	24.1	24.87	23.9	24.09	487,600	24.09
29-Mar-06	24.16	24.5	23.88	24.22	341,400	24.22
30-Mar-06	24.24	24.5	23.84	24.09	331,200	24.09
31-Mar-06	24.28	24.29	23.5	23.8	1,167,400	23.8

* Close price adjusted for dividends and splits.

Table A.4 Opening and Closing Prices for Adolor Corp. (ADLR)

<u>Date</u>	<u>Open</u>	<u>High</u>	<u>Low</u>	<u>Close</u>	<u>Volume</u>	<u>Adj Close*</u>
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	5.13	5.23	5	5.15	569,900	5.15
22-Feb-06	5.15	5.65	5.1	5.48	646,900	5.48
23-Feb-06	5.54	5.65	5.25	5.29	532,500	5.29
24-Feb-06	5.23	5.34	5.22	5.25	345,100	5.25
27-Feb-06	5.33	5.51	5.25	5.34	297,400	5.34
28-Feb-06	5.42	5.42	5.15	5.2	239,500	5.2
1-Mar-06	5.19	5.38	5.11	5.35	294,000	5.35
2-Mar-06	5.55	5.89	5.37	5.68	1,150,500	5.68
3-Mar-06	5.7	5.74	5.55	5.61	368,400	5.61
6-Mar-06	5.6	5.6	5.51	5.57	288,900	5.57
7-Mar-06	5.61	5.61	5.34	5.48	319,300	5.48
8-Mar-06	5.36	5.53	5.34	5.41	245,500	5.41
9-Mar-06	5.41	5.64	5.4	5.46	352,900	5.46
10-Mar-06	5.51	5.79	5.51	5.66	452,000	5.66
13-Mar-06	5.66	5.85	5.66	5.77	575,100	5.77
14-Mar-06	6	6.2	5.94	6.19	1,192,100	6.19
15-Mar-06	6.23	6.43	6.22	6.25	1,075,600	6.25
16-Mar-06	6.5	6.5	6.25	6.25	811,400	6.25
17-Mar-06	6.26	6.3	5.9	6.2	687,500	6.2
20-Mar-06	6.34	6.35	6.21	6.3	413,200	6.3
21-Mar-06	6.25	6.34	6.15	6.19	309,000	6.19
22-Mar-06	6.13	6.17	5.95	6.02	899,800	6.02
23-Mar-06	6.01	6.1	5.93	5.98	228,700	5.98
24-Mar-06	6.08	6.08	5.92	5.98	415,300	5.98
27-Mar-06	6	6	5.92	5.93	170,400	5.93
28-Mar-06	6.02	6.09	5.49	5.67	881,100	5.67
29-Mar-06	5.77	5.77	5.01	5.4	1,461,200	5.4
30-Mar-06	5.41	5.48	5.13	5.38	503,400	5.38
31-Mar-06	5.52	5.55	5.43	5.51	400,700	5.51
* Close price adjusted for dividends and splits.						

Table A.5 Opening and Closing Prices for YM BioSciences Inc. (YMI)

<u>Date</u>	<u>Open</u>	<u>High</u>	<u>Low</u>	<u>Close</u>	<u>Volume</u>	<u>Adj Close*</u>
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	23.66	23.66	23.62	23.63	332,900	23.63
22-Feb-06	23.68	23.68	23.6	23.61	667,400	23.61
23-Feb-06	23.61	23.74	23.6	23.63	274,800	23.63
24-Feb-06	23.6	23.64	23.59	23.63	697,800	23.63
27-Feb-06	23.66	23.71	23.59	23.61	407,700	23.61
28-Feb-06	23.66	23.66	23.6	23.63	339,900	23.63
1-Mar-06	23.61	23.67	23.61	23.63	333,800	23.63
2-Mar-06	23.6	23.65	23.6	23.62	498,900	23.62
3-Mar-06	23.6	23.64	23.6	23.62	528,800	23.62
6-Mar-06	23.61	23.64	23.61	23.61	435,300	23.61
7-Mar-06	23.65	23.72	23.64	23.7	242,900	23.7
8-Mar-06	23.73	23.77	23.69	23.75	208,600	23.75
9-Mar-06	23.73	23.76	23.7	23.73	294,000	23.73
10-Mar-06	23.86	23.86	23.73	23.77	328,800	23.77
13-Mar-06	23.8	23.8	23.73	23.74	411,800	23.74
14-Mar-06	23.75	23.81	23.74	23.77	130,700	23.77
15-Mar-06	23.78	23.81	23.77	23.77	108,400	23.77
16-Mar-06	23.85	23.86	23.77	23.77	247,800	23.77
17-Mar-06	23.76	23.89	23.76	23.78	338,600	23.78
20-Mar-06	23.76	23.8	23.76	23.78	285,500	23.78
21-Mar-06	23.77	23.85	23.77	23.8	121,900	23.8
22-Mar-06	23.79	23.81	23.77	23.79	212,600	23.79
23-Mar-06	23.8	23.86	23.76	23.83	331,700	23.83
24-Mar-06	23.83	23.84	23.77	23.78	255,800	23.78
27-Mar-06	23.83	23.86	23.8	23.81	312,500	23.81
28-Mar-06	23.78	23.87	23.78	23.81	190,300	23.81
29-Mar-06	23.83	23.87	23.8	23.84	152,200	23.84
30-Mar-06	23.81	23.92	23.81	23.9	153,500	23.9
31-Mar-06	23.91	23.93	23.88	23.91	104,100	23.91

* Close price adjusted for dividends and splits.

Table A.6 Opening and Closing Prices for The J. Jill Group Inc. (JILL)

<u>Date</u>	<u>Open</u>	<u>High</u>	<u>Low</u>	<u>Close</u>	<u>Volume</u>	<u>Adj Close*</u>
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	2.72	2.88	2.68	2.71	187,800	2.71
22-Feb-06	2.71	2.81	2.6	2.66	122,000	2.66
23-Feb-06	2.64	2.8	2.6	2.62	85,200	2.62
24-Feb-06	2.69	2.73	2.5	2.54	125,300	2.54
27-Feb-06	2.52	2.72	2.5	2.58	191,800	2.58
28-Feb-06	2.65	2.72	2.52	2.59	120,800	2.59
1-Mar-06	2.63	2.87	2.63	2.71	367,000	2.71
2-Mar-06	2.74	2.87	2.72	2.76	187,300	2.76
3-Mar-06	2.73	2.84	2.7	2.73	111,700	2.73
6-Mar-06	2.75	3.17	2.71	3.1	465,300	3.1
7-Mar-06	3.05	3.34	3.04	3.22	282,700	3.22
8-Mar-06	3.25	3.28	3.06	3.16	171,600	3.16
9-Mar-06	3.15	3.34	3.13	3.18	203,000	3.18
10-Mar-06	3.18	3.27	3.11	3.23	211,600	3.23
13-Mar-06	3.21	3.32	2.91	3.1	246,100	3.1
14-Mar-06	2.96	3.17	2.96	3.15	268,600	3.15
15-Mar-06	2.92	3.09	2.75	2.85	517,000	2.85
16-Mar-06	2.71	3.01	2.71	2.93	161,700	2.93
17-Mar-06	2.92	3.05	2.82	2.95	287,300	2.95
20-Mar-06	2.92	2.98	2.8	2.87	128,600	2.87
21-Mar-06	2.85	2.89	2.74	2.85	175,900	2.85
22-Mar-06	2.82	3.01	2.72	2.93	133,700	2.93
23-Mar-06	3.04	3.05	2.91	2.97	84,400	2.97
24-Mar-06	3.06	3.15	2.82	2.9	280,300	2.9
27-Mar-06	2.87	3	2.83	3	104,300	3
28-Mar-06	3.03	3.03	2.91	2.95	112,200	2.95
29-Mar-06	2.83	3	2.82	2.98	146,800	2.98
30-Mar-06	2.88	3.01	2.88	2.97	25,800	2.97
31-Mar-06	2.89	3.02	2.78	2.83	218,500	2.83

* Close price adjusted for dividends and splits.

Table A.7 Opening and Closing Prices for CancerVax Corp. (CNVX)

<u>Date</u>	<u>Open</u>	<u>High</u>	<u>Low</u>	<u>Close</u>	<u>Volume</u>	<u>Adj Close*</u>
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	82.27	82.65	82.1	82.5	437,200	82.5
22-Feb-06	82.5	83.57	82.45	82.52	363,700	82.52
23-Feb-06	82.6	82.9	82.52	82.65	519,400	82.65
24-Feb-06	82.4	83	82.4	82.8	401,900	82.8
27-Feb-06	82.5	82.97	82.5	82.75	248,500	82.75
28-Feb-06	82.8	83.06	82.8	82.87	547,200	82.87
1-Mar-06	82.8	82.96	82.49	82.89	183,800	82.89
2-Mar-06	82.64	83.2	82.51	83	179,100	83
3-Mar-06	82.55	82.99	82.53	82.91	568,500	82.91
6-Mar-06	82.81	83	82.5	82.71	363,400	82.71
7-Mar-06	82.6	82.77	82.49	82.77	430,800	82.77
8-Mar-06	82.6	82.82	82.49	82.61	450,900	82.61
9-Mar-06	82.25	82.85	81.95	82.68	311,400	82.68
10-Mar-06	82.52	82.93	82.52	82.8	270,000	82.8
13-Mar-06	82.55	82.94	82.5	82.75	447,400	82.75
14-Mar-06	82.51	83.19	82.4	83.19	719,800	83.19
15-Mar-06	83.3	83.9	83.1	83.82	703,500	83.82
16-Mar-06	83.65	84.2	83.55	84	584,200	84
17-Mar-06	84.04	84.27	83.84	84.14	399,400	84.14
20-Mar-06	84.04	84.04	83.75	83.89	218,200	83.89
21-Mar-06	83.76	83.9	83.71	83.82	135,900	83.82
22-Mar-06	83.7	83.97	83.7	83.73	246,700	83.73
23-Mar-06	83.53	84.08	83.53	83.91	405,200	83.91
24-Mar-06	83.5	83.86	83.15	83.81	377,500	83.81
27-Mar-06	83.31	83.73	83.28	83.42	82,900	83.42
28-Mar-06	83.43	83.61	83.3	83.45	174,100	83.45
29-Mar-06	83.5	83.94	83.41	83.9	90,400	83.9
30-Mar-06	84	84.07	83.61	83.8	419,000	83.8
31-Mar-06	83.7	84.05	83.41	84	143,900	84

* Close price adjusted for dividends and splits.

Table A.8 Opening and Closing Prices for Lafarge North America Inc. (LAF)

Date	Open	High	Low	Close	Volume	Adj Close*
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	366.44	373.54	365.11	366.59	8,686,000	366.59
22-Feb-06	367.15	368.95	363.86	365.49	6,476,200	365.49
23-Feb-06	365.61	381.24	365.39	378.07	12,551,600	378.07
24-Feb-06	377.3	380.07	373.49	377.4	6,484,300	377.4
27-Feb-06	381.27	391.7	380.28	390.38	10,212,200	390.38
28-Feb-06	393.2	397.54	338.51	362.62	39,437,600	362.62
1-Mar-06	368.56	369.45	361.3	364.8	12,061,200	364.8
2-Mar-06	364.28	381.1	362.2	376.45	18,330,300	376.45
3-Mar-06	384.3	387.24	375.76	378.18	11,962,000	378.18
6-Mar-06	380.91	383.4	367.14	368.1	8,939,700	368.1
7-Mar-06	365.02	368.45	358.15	364.45	10,378,800	364.45
8-Mar-06	353.93	360.03	350.54	353.88	11,745,600	353.88
9-Mar-06	355.39	358.53	341.5	343	13,910,400	343
10-Mar-06	343.5	344.5	331.55	337.5	19,325,600	337.5
13-Mar-06	340.93	346.1	335.45	337.06	13,642,400	337.06
14-Mar-06	337.14	352.37	332.62	351.16	18,450,700	351.16
15-Mar-06	350.77	352.3	340.53	344.5	12,768,800	344.5
16-Mar-06	348.61	348.75	337.9	338.77	10,016,700	338.77
17-Mar-06	338.8	341.78	334.93	339.79	8,551,700	339.79
20-Mar-06	342.34	350.09	341.54	348.19	10,407,600	348.19
21-Mar-06	350.01	351.66	339.08	339.92	9,831,100	339.92
22-Mar-06	339.75	344.1	337.5	340.22	7,596,000	340.22
23-Mar-06	342.35	345.75	340.2	341.89	7,434,700	341.89
24-Mar-06	368.62	370.09	362.51	365.8	15,180,600	365.8
27-Mar-06	367.09	371.71	365	369.69	7,023,700	369.69
28-Mar-06	371.71	377.86	371.17	377.2	8,945,800	377.2
29-Mar-06	379.94	399	379.51	394.98	19,027,500	394.98
30-Mar-06	389.19	393.5	383.61	388.44	14,711,700	388.44
31-Mar-06	388.74	391.87	384.03	390	36,521,400	390
* Close price adjusted for dividends and splits.						

Table A.9 Opening and Closing Prices for Google Inc. (GOOG)

<u>Date</u>	<u>Open</u>	<u>High</u>	<u>Low</u>	<u>Close</u>	<u>Volume</u>	<u>Adj Close*</u>
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	60.88	61	60.69	60.88	6,770,600	60.88
22-Feb-06	61	62	60.98	61.94	8,974,000	61.94
23-Feb-06	61.85	62.09	61.39	61.48	7,110,800	61.48
24-Feb-06	61.32	61.73	61.06	61.5	5,610,800	61.5
27-Feb-06	61.68	61.89	61.35	61.35	6,723,100	61.35
28-Feb-06	61	61.21	59.85	59.93	14,458,000	59.93
1-Mar-06	60.11	60.46	60.02	60.11	9,155,200	60.11
2-Mar-06	59.99	60.02	59.36	59.55	10,876,800	59.55
3-Mar-06	59.3	60.16	59.3	59.67	7,797,900	59.67
6-Mar-06	59.55	59.96	59.5	59.67	4,553,300	59.67
7-Mar-06	59.56	60.56	59.42	60.3	7,366,400	60.3
8-Mar-06	60.25	61.33	60.23	61.07	8,680,200	61.07
9-Mar-06	61.5	62	61.1	61.4	7,114,000	61.4
10-Mar-06	61.45	62.44	61.45	62.25	8,506,900	62.25
13-Mar-06	62.11	62.5	61.8	61.98	5,956,100	61.98
14-Mar-06	60.09	60.68	59.6	60.01	18,234,500	60.01
15-Mar-06	60.51	60.51	59.77	59.9	9,813,600	59.9
16-Mar-06	59.8	59.86	59	59.39	12,489,800	59.39
17-Mar-06	59.39	59.4	58.85	59.1	17,418,000	59.1
20-Mar-06	59.38	59.38	58.71	59.18	7,027,800	59.18
21-Mar-06	59.21	59.72	58.94	59.03	6,909,400	59.03
22-Mar-06	58.7	59.6	58.7	59.49	5,849,700	59.49
23-Mar-06	59.26	59.4	58.44	58.65	9,166,500	58.65
24-Mar-06	58.56	58.95	57.98	58.74	8,870,500	58.74
27-Mar-06	58.38	58.62	58.26	58.29	8,040,400	58.29
28-Mar-06	58	58.28	57.5	57.53	14,113,000	57.53
29-Mar-06	57.44	57.98	57	57.74	12,430,600	57.74
30-Mar-06	57.53	58.1	57.4	57.63	8,419,500	57.63
31-Mar-06	57.63	58.3	57.58	57.63	11,176,100	57.63
* Close price adjusted for dividends and splits.						

Table A.10 Opening and Closing Prices for Procter and Gamble Co. (PG)

<u>Date</u>	<u>Open</u>	<u>High</u>	<u>Low</u>	<u>Close</u>	<u>Volume</u>	<u>Adj Close*</u>
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	20.66	20.75	20.5	20.62	67,212,800	20.62
22-Feb-06	20.42	20.45	19.9	20.15	138,566,496	20.15
23-Feb-06	20.18	20.49	19.88	20.29	85,297,296	20.29
24-Feb-06	20.19	20.53	20.13	20.36	73,154,000	20.36
27-Feb-06	20.47	20.79	20.43	20.52	87,156,896	20.52
28-Feb-06	20.55	21.01	20.5	20.6	93,248,096	20.6
1-Mar-06	20.73	21	20.67	20.8	80,722,800	20.8
2-Mar-06	20.68	20.84	20.38	20.49	86,237,800	20.49
3-Mar-06	19.97	20.48	19.86	20.32	202,812,000	20.32
6-Mar-06	20.43	20.56	20.23	20.3	81,728,304	20.3
7-Mar-06	20.15	20.2	19.83	20.06	90,707,504	20.06
8-Mar-06	20.01	20.19	19.82	20.01	82,850,000	20.01
9-Mar-06	20.05	20.16	19.73	19.75	69,718,304	19.75
10-Mar-06	19.83	20.02	19.78	19.85	61,506,700	19.85
13-Mar-06	19.95	20.5	19.69	19.73	80,524,704	19.73
14-Mar-06	19.73	19.9	19.64	19.76	69,318,400	19.76
15-Mar-06	19.79	19.97	19.73	19.92	69,788,800	19.92
16-Mar-06	20.05	20.08	19.64	19.65	66,058,200	19.65
17-Mar-06	19.75	19.77	19.4	19.54	110,821,296	19.54
20-Mar-06	19.45	19.95	19.45	19.62	58,650,100	19.62
21-Mar-06	19.79	20.32	19.6	19.78	123,961,296	19.78
22-Mar-06	19.66	20.04	19.6	19.98	84,910,704	19.98
23-Mar-06	19.98	20.16	19.69	19.7	84,336,400	19.7
24-Mar-06	19.75	19.82	19.31	19.6	60,424,100	19.6
27-Mar-06	19.62	19.92	19.62	19.75	60,280,300	19.75
28-Mar-06	19.75	19.86	19.56	19.58	72,692,200	19.58
29-Mar-06	19.61	19.96	19.51	19.82	78,986,304	19.82
30-Mar-06	19.9	20.03	19.65	19.7	70,641,696	19.7
31-Mar-06	19.78	19.88	19.35	19.46	87,499,200	19.46
* Close price adjusted for dividends and splits.						

Table A.11 Opening and Closing Prices for Intel Corp. (INTC)

Date	Open	High	Low	Close	Volume	Adj Close*
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	44.67	44.94	44.6	44.75	1,794,500	44.47
22-Feb-06	44.8	44.97	44.64	44.96	1,659,100	44.68
23-Feb-06	45	45.24	44.96	45.1	1,663,500	44.82
24-Feb-06	45.15	45.15	44.81	44.93	1,022,200	44.65
27-Feb-06	44.63	44.89	44.51	44.58	1,171,800	44.58
	\$0.278 Dividend					
28-Feb-06	44.45	44.58	44.15	44.31	1,056,800	44.31
1-Mar-06	44.24	44.45	44.21	44.32	785,100	44.32
2-Mar-06	44.32	44.33	44.03	44.27	776,600	44.27
3-Mar-06	44.27	44.42	44.11	44.23	841,500	44.23
6-Mar-06	44.21	44.5	44.12	44.21	1,053,000	44.21
7-Mar-06	44.21	44.56	44.16	44.5	1,346,100	44.5
8-Mar-06	44.53	45.23	44.5	44.95	2,295,300	44.95
9-Mar-06	44.96	45.21	44.96	45.14	1,294,500	45.14
10-Mar-06	45.05	45.28	44.95	45.28	981,600	45.28
13-Mar-06	45.26	45.41	45.05	45.31	1,286,900	45.31
14-Mar-06	45.31	45.6	45.26	45.58	1,571,100	45.58
15-Mar-06	45.46	45.78	45.15	45.7	1,865,300	45.7
16-Mar-06	45.73	45.73	44.83	45.2	1,818,600	45.2
17-Mar-06	45.45	45.48	45.08	45.48	1,819,900	45.48
20-Mar-06	45.49	45.54	45.22	45.29	582,000	45.29
21-Mar-06	45.48	45.54	45.1	45.16	1,135,800	45.16
22-Mar-06	45.21	45.41	45.12	45.4	708,400	45.4
23-Mar-06	45.26	45.38	44.82	45	836,200	45
24-Mar-06	45.77	45.77	44.7	44.98	734,400	44.98
27-Mar-06	44.88	44.98	44.51	44.63	795,100	44.63
28-Mar-06	44.51	45.27	43.79	43.83	1,796,200	43.83
29-Mar-06	43.95	44.62	43.86	44.22	1,980,800	44.22
30-Mar-06	44.18	44.39	44	44.18	644,000	44.18
31-Mar-06	44.3	44.38	43.98	44.04	1,213,400	44.04
* Close price adjusted for dividends and splits.						

Table A.12 Opening and Closing Prices for Kellogg Co. (K)

<u>Date</u>	<u>Open</u>	<u>High</u>	<u>Low</u>	<u>Close</u>	<u>Volume</u>	<u>Adi Close*</u>
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	148.5	149.42	144.96	145.27	209,700	144.84
22-Feb-06	143.75	146.8	143.1	144.42	266,100	143.99
23-Feb-06	144.2	144.2	140.29	141.8	473,600	141.38
24-Feb-06	144.5	144.5	142.35	143.5	247,000	143.08
27-Feb-06	143.39	144.49	142.24	143.5	168,400	143.08
28-Feb-06	143.25	143.76	141.07	142.1	184,400	141.68
1-Mar-06	142.35	144.19	141	142.61	204,500	142.19
2-Mar-06	142.84	143.66	141.15	142.5	108,900	142.08
3-Mar-06	142.08	142.6	140.35	141.35	122,800	141.35
	\$0.42 Dividend					
6-Mar-06	141.15	141.6	137.34	137.53	205,900	137.53
7-Mar-06	137.3	137.3	135.26	136.35	110,300	136.35
8-Mar-06	135	135.5	133.05	133.72	132,200	133.72
9-Mar-06	133.4	135.3	130.85	132.05	394,400	132.05
10-Mar-06	131.9	133.28	131.82	132.25	195,500	132.25
13-Mar-06	132.25	135.04	132.25	134.25	235,400	134.25
14-Mar-06	134.4	138.2	134.29	137.56	482,800	137.56
15-Mar-06	137	139.51	136.1	138.82	554,200	138.82
16-Mar-06	140.9	141.84	138.94	139.99	267,400	139.99
17-Mar-06	140	141.15	139.85	140.46	219,600	140.46
20-Mar-06	140	140.83	139.61	139.99	236,100	139.99
21-Mar-06	139.74	140	138.65	139.45	178,000	139.45
22-Mar-06	139.49	140.42	138.44	139.69	172,100	139.69
23-Mar-06	139.53	139.7	138.06	138.89	71,600	138.89
24-Mar-06	139	140	138.76	139.45	115,200	139.45
27-Mar-06	139.25	139.8	138.29	139.6	109,000	139.6
28-Mar-06	137	140.15	137	138.1	181,400	138.1
29-Mar-06	138.02	139.98	138.02	139.7	196,600	139.7
30-Mar-06	139.8	140.48	138.83	139.75	123,400	139.75
31-Mar-06	139.99	140.89	139.57	140	145,000	140

* Close price adjusted for dividends and splits.

Table A.13 Opening and Closing Prices for BlackRock Inc. (BLK)

<u>Date</u>	<u>Open</u>	<u>High</u>	<u>Low</u>	<u>Close</u>	<u>Volume</u>	<u>Adj Close*</u>
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	95.48	96	95.25	95.5	600	95.5
22-Feb-06	95.5	98.41	95.5	98.14	700	98.14
23-Feb-06	98.15	98.15	94.9	94.9	1,300	94.9
24-Feb-06	94.91	96.06	94.91	96	1,400	96
27-Feb-06	97.89	97.89	96.45	96.45	600	96.45
28-Feb-06	96.45	97.89	94.28	96.35	2,600	96.35
1-Mar-06	96.73	97.99	96.22	97.99	1,400	97.99
2-Mar-06	97.03	99.01	96.5	98.66	1,000	98.66
3-Mar-06	98.89	98.89	98.44	98.44	300	98.44
6-Mar-06	95.34	97.98	95.34	97.98	2,900	97.98
7-Mar-06	95.46	96.01	94.08	96	1,300	96
8-Mar-06	92.89	97.3	92.89	95.61	4,400	95.61
9-Mar-06	96.33	97.85	94.09	94.09	2,400	94.09
10-Mar-06	94.3	95.66	94.3	95.66	1,800	95.66
13-Mar-06	95.19	96.15	94.23	94.25	1,800	94.25
14-Mar-06	94.63	95.07	93.5	94	7,000	94
15-Mar-06	94.1	95	92.72	95	16,300	95
16-Mar-06	94.73	94.73	93.37	93.37	3,900	93.37
17-Mar-06	93.84	94.45	92.98	92.98	23,100	92.98
20-Mar-06	93.57	94.74	93.35	94.74	3,500	94.74
21-Mar-06	93.71	94.29	92.96	92.96	6,000	92.96
22-Mar-06	94	94	93.74	93.74	1,000	93.74
23-Mar-06	94	94.32	93.64	93.64	17,000	93.64
24-Mar-06	93.38	94.99	93.38	94.27	800	94.27
27-Mar-06	93.68	94.83	93.43	94.83	9,200	94.83
28-Mar-06	94.5	94.75	94.11	94.63	2,200	94.63
29-Mar-06	92.84	94.75	92.84	94.72	1,800	94.72
30-Mar-06	94.03	95.3	94.02	95.3	9,100	95.3
31-Mar-06	94.74	95.5	94.43	95.5	2,800	95.5

* Close price adjusted for dividends and splits.

Table A.14 Opening and Closing Prices for Capital Southwest Corp. (CSWC)

<u>Date</u>	<u>Open</u>	<u>High</u>	<u>Low</u>	<u>Close</u>	<u>Volume</u>	<u>Adj Close*</u>
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	81.9	82.66	81.31	81.95	1,829,100	81.95
22-Feb-06	82.93	83.87	82.3	83.43	1,564,600	83.43
23-Feb-06	83.4	83.52	82.88	83.16	1,420,900	83.16
24-Feb-06	83	83.38	82.36	82.8	757,900	82.8
27-Feb-06	83.05	83.9	83.03	83.28	1,378,400	83.28
28-Feb-06	82.37	83.53	81.53	81.81	1,689,300	81.81
1-Mar-06	81.81	84.2	81.8	84.06	1,823,200	84.06
2-Mar-06	84.06	84.23	82.98	83.39	1,147,200	83.39
3-Mar-06	82.8	84.75	82.8	83.43	1,247,700	83.43
6-Mar-06	83.25	84.14	82.68	82.85	1,291,000	82.85
7-Mar-06	82.85	84.06	82.85	83.6	1,454,900	83.6
8-Mar-06	83.6	84.14	82.41	83.12	1,270,800	83.12
9-Mar-06	83.12	84.46	83.02	83.81	1,249,000	83.81
10-Mar-06	84	84.99	83.88	84.5	918,300	84.5
13-Mar-06	84.65	84.76	84.05	84.41	793,100	84.41
14-Mar-06	84.47	85.66	84.44	85.42	1,109,600	85.42
15-Mar-06	85.2	85.54	84.53	85.31	968,900	85.31
16-Mar-06	85.48	85.54	84.63	85.08	958,300	85.08
17-Mar-06	85.6	86.03	85.39	85.67	1,217,100	85.67
20-Mar-06	85.67	85.98	85.27	85.64	710,200	85.64
21-Mar-06	85.5	85.77	84.69	84.78	941,400	84.78
22-Mar-06	84.78	85.7	84.67	85.56	988,500	85.56
23-Mar-06	85.25	85.34	84.45	84.73	1,040,500	84.73
24-Mar-06	84.56	85.5	84.21	85.31	759,500	85.31
27-Mar-06	85.31	85.31	84.45	84.57	1,225,000	84.57
28-Mar-06	84.6	85.7	84.47	85.1	1,178,400	85.1
29-Mar-06	85.1	85.9	84.81	85.12	1,051,700	85.12
30-Mar-06	84.8	85.29	83.32	83.89	1,592,400	83.89
31-Mar-06	83.8	84.46	83.49	83.63	1,214,600	83.63

* Close price adjusted for dividends and splits.

Table A.15 Opening and Closing Prices for Emerson Electric Co. (EMR)

<u>Date</u>	<u>Open</u>	<u>High</u>	<u>Low</u>	<u>Close</u>	<u>Volume</u>	<u>Adj Close*</u>
20-Feb-06	Market Closed- Washington's Birthday Observed					
21-Feb-06	18.17	18.19	17.63	17.64	47,108,400	17.59
22-Feb-06	17.65	17.74	17.32	17.43	44,242,000	17.38
23-Feb-06	17.37	17.44	17.16	17.32	41,058,000	17.27
24-Feb-06	17.22	17.33	17.08	17.27	38,212,700	17.27
	\$0.05 Dividend					
27-Feb-06	17.34	17.45	17.3	17.31	26,654,800	17.31
28-Feb-06	17.29	17.37	17.26	17.31	21,061,700	17.31
1-Mar-06	17.39	17.45	17.32	17.41	24,156,000	17.41
2-Mar-06	17.26	17.43	17.2	17.36	22,871,900	17.36
3-Mar-06	17.28	17.52	17.27	17.43	24,617,200	17.43
6-Mar-06	17.38	17.45	17.19	17.24	25,368,400	17.24
7-Mar-06	17.16	17.35	17.15	17.21	16,375,800	17.21
8-Mar-06	17.18	17.32	17.16	17.27	19,942,100	17.27
9-Mar-06	17.25	17.3	17.13	17.14	22,133,600	17.14
10-Mar-06	17.19	17.25	17.09	17.2	19,544,300	17.2
13-Mar-06	17.17	17.22	17.12	17.13	15,052,400	17.13
14-Mar-06	17.1	17.31	17.1	17.27	19,361,000	17.27
15-Mar-06	17.21	17.25	17.11	17.19	24,585,100	17.19
16-Mar-06	17.15	17.21	17.11	17.11	22,662,900	17.11
17-Mar-06	17.15	17.17	16.96	17.07	37,716,600	17.07
20-Mar-06	17.07	17.16	17.03	17.15	20,714,000	17.15
21-Mar-06	17.09	17.15	17.05	17.06	18,780,500	17.06
22-Mar-06	17.01	17.15	16.82	17.12	16,276,200	17.12
23-Mar-06	17.08	17.14	17.02	17.09	19,008,400	17.09
24-Mar-06	17.06	17.1	16.94	17	23,000,500	17
27-Mar-06	16.98	17.05	16.9	16.93	18,189,000	16.93
28-Mar-06	16.89	16.9	16.71	16.74	25,656,100	16.74
29-Mar-06	16.8	16.88	16.56	16.79	31,813,900	16.79
30-Mar-06	16.76	16.92	16.74	16.85	19,497,400	16.85
31-Mar-06	16.81	16.94	16.69	16.79	28,537,900	16.79

* Close price adjusted for dividends and splits.

Table A.16 Opening and Closing Prices for Time Warner Inc. (TWX)