

02E0181

Project Number: 49-DZT-0111

STOCK TRADING PATTERN

An Interactive Qualifying Project

Submitted to the Faculty

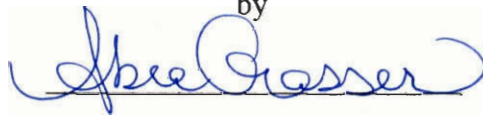
of the

Worcester Polytechnic Institute

in partial fulfillment of the requirements for the

Degree of Bachelor of Science

by



Abra Kate Gasser



Michael James Vaites

Date: July 12, 2002

Approved:



Advisor: Professor Dalin Tang

Acknowledgments

We would like to take this opportunity to express our gratitude for everything our advisor, Dalin Tang, has done for us. He has been very helpful with any ideas, suggestions, and corrections. We would like to thank him for his patience and all of his guidance.

Abstract

For this Interactive Qualifying Project, basic stock market concepts are discussed along with a six week stock portfolio simulation. The initial investment budget was five-hundred thousand dollars. In addition to the simulation and information on the stock market, a review of investment sites on the World Wide Web has been included.

Table of Contents

Chapter 1: Introduction.....	1
1-1: Goal and Purpose.....	1
1-2: Project Methodology.....	2
1-3: The Stock Market.....	2
1-3-1: Background Information.....	3
1-3-2: Great Market Crash.....	4
1-3-3: Major Stock Exchanges.....	5
1-3-4: Basic Functions of the Stock Market.....	6
 Chapter 2: Web Site Rankings.....	 9
2-1: Introduction.....	9
2-2: Kiplinger.com.....	10
2-3: TheMotleyFool.com.....	11
2-4: VirtualStockExchange.com.....	12
2-5: MainExchange.com.....	13
 Chapter 3: Stock Selection Process.....	 15
3-1: Introduction.....	15
3-2: Company Histories.....	15

3-2-1: PepsiCo.....	16
3-2-2: Intel Corporation.....	17
3-2-3: Cisco Systems Incorporated.....	17
3-2-4: Amgen, Incorporated.....	18
3-2-5: General Motors Corporation.....	18
3-2-6: AOL-Time Warner, Incorporated.....	19
3-3: Company Financial Information.....	20
3-3-1: Introduction.....	20
3-3-2: P/E and PEG Ratios.....	20
3-3-3: Historical Performance Charts.	22

Chapter 4: The Simulation.....25

4-1: Introduction	25
4-2: Trading Methods.....	25
4-3: Week #1.....	26
4-4: Week #2.	31
4-5: Week #3.....	34
4-6: Week #4.....	37
4-7: Week #5.....	40
4-8: Week #6.....	42

Chapter 5: Analysis of results.....45

Chapter 6: Summaries and Conclusion.....49

6-1: Trading with a trend.....49

6-2: Cutting Losses Short.....50

6-3: Letting Profits Run.....52

6-4: Market Security.....53

6-5: Conclusion.....54

Bibliography.....56

Chapter 1: Introduction

1-1: Goal and Purpose

The objective of this project is to analyze the best ways to make a profit through short-term stock investments. By collecting real time stock quotes and company information we will be simulating the actual investment process. We will be investing our imaginary budget of \$500,000.00, over a six week period, in several companies in which we have researched. We will be disregarding any applicable taxes, but will include a twenty dollar charge for each transaction made. Our main goal is to learn about the stock market and develop the best way to profit short term. We realize that we are only beginning investors ourselves but through library and online resources we hope to gain the appropriate knowledge needed to start our simulation. We also hope to provide amateur investors with comprehensible information on the best ways to participate in short-term investments. As part of our analysis we will be evaluating the informational resources that we have used.

Following is a summarized outline of our goals for this project:

- I. To obtain knowledge about the stock market
 - a. Stock history
 - b. Learn efficient strategies for short term gain
 - c. How to make transactions
- II. Develop trading strategies for beginning investors

III. Make a profit of 5% or more on initial investment of \$500,000

1-2: Project Methodology

The first thing that we are going to do to get this project rolling is choose six companies to invest in. To make our decision we will use online investment resources to find information on a company's background and for current financial information such as P/E ratios. We would like to find companies that are well known and substantially established in their sector of the market. The main site we will use for financial information will be TheMotleyFool.com.

To do our six week market simulation we have chosen Virtual Stock Exchange, an online site which provides all of the necessary tools to complete our simulation. Because their web site takes a while to load in order to find current stock prices, we have decided to use AOL instant messenger to acquire the current stock prices. In order to track our progress we will be keeping our own transaction diary throughout the entire simulation.

1-3: The Stock Market

The following section provides a comprehensive look at the origin of the stock market in the United States, its continuing development and how the stock market works. It will give brief overview of stock exchanges, and tell about the great crash of 1929.

1-3-1: Background Information

Wall Street, in New York, is the center of the United States economy. Stock exchanges in general trade almost every major company in the United States. What is stock a stock exchange? To put it simply lets say you found out today that the Pepsi Corporation was going to double their profits from last year with a new advertising campaign. One might say that they wished that they own the company. If you don't already know, you can buy the company. You may not own all of the company but you can buy a portion of it through a brokerage firm. Brokerage firms are companies that relay messages from stock holders to people down on the floor of a stock exchange. Because not everyone can fit on the floor at a stock exchange, people pay transaction fees and just trade through stock brokers. They may want to buy, sell, short their stock or more.

When most people hear the word stock they think of Wall Street. There are two different kinds of stocks, blue chips and penny stocks. Wall Street mostly only deals with blue chips though. If you can't guess from the name penny stocks aren't worth much. Actually most shares are under \$5 and should be avoided because they are extremely risky. Blue chips are more expensive like comparing pennies to chips at a casino. Blue chips are more reliable because they have a good reputation and have been around for a long time.

Bonds are another way to invest your money. Bonds are like a loan to a company allowing them to borrow it, and then give it back at a later point with some money earned in interest. Options are ways of controlling when to buy and sell your stock. You can

inform your broker that you want to buy at a set price and sell at a different set price. This works great for people who can't watch the market all day long. Similar to options are futures which are only dealt with in the food and textile types of markets.

1-3-2: Great Market Crash of 1929 and founding of the SEC

Throughout the 1920's the US stock market seemed to be the primary interest of most investors. The market exploded toward the end of the decade and peaked in August of 1929. Stocks began to drop in value but people accepted it and assumed it would rise again. On Oct 24th, or "Black Thursday," millions of shares were traded and a panic struck out across all of the market. That Tuesday, "Black Tuesday," an estimate of about 16 million shares were traded, prices dropped and the market crashed.

As a result of the market crash of October 24, 1929 the Securities and Exchange Commission (SEC) was formed. This agency was created for the primary interest of protecting investors, be they individuals or large corporations. To do this the SEC administers federal securities laws. These laws regulate the activities of investment firms, financial advisors, and public companies. The main concern of the SEC is to ensure that the investor has access to the appropriate general and financial information to make an informed investment. It is the responsibility of public companies and investment firms to provide this information to investors. Each year between 400-500 civil enforcement actions are brought against individuals and companies that infringe on these security laws. Common violations of these laws include accounting fraud,

providing false, misleading, or inadequate information about securities and the companies that issue them, and insider trading.

1-3-3: Major Stock Exchanges of the United States

There are two major stock exchanges in the United States: the New York Stock Exchange (NYSE) and the American Stock Exchange (AMEX). The New York Stock Exchange started in 1792, when 24 brokers met under a buttonwood tree on what is now 68 Wall Street and signed the Buttonwood Agreement to formalize trading. Trading continued outside on Wall Street until some members of the group decided they wanted to move indoors in 1817. That group evolved into the New York Stock & Exchange Board. Other traders who stayed outside were later the organizers of what is now known as the American Stock Exchange.

The New York Stock & Exchange Board shortened its name to the New York Stock Exchange, NYSE, in 1863. Trading hours were flexible until 1873. Then they were 10 a.m. to 3 p.m. weekdays and 10 a.m. to noon Saturday. The schedule has been adjusted three times since then. Now, the market is open 9:30 a.m. to 4 p.m. weekdays. Today more than 3,000 companies list their stocks with the NYSE, which is similar to a private club. Companies must meet various standards for earnings and market capitalization as well as pay annual dues that start at \$50,000 to be part of the exchange.

Trading on the American Stock Exchange, founded as the New York Curb Exchange, didn't move indoors until 1921. Its name was changed from Curb Exchange to American Stock Exchange in 1953. This exchange also has listing requirements.

Some companies who aren't quite big enough for either market may prefer to sell their stock on an over the counter (OTC) market. One example of an OTC market is NASDAQ. NASDAQ, the National Association of Securities Dealers Automated Quotation, began in 1971. It was formed after the Securities and Exchange Commission, the stock market policing agency, decided that the over-the-counter securities industry needed to be automated. The commission proposed automation as the solution and put the National Association of Securities Dealers Inc. in charge of making the change, thus creating the first electronic stock market. In 1990, the exchange, which includes many technology stocks, such as Microsoft and Intel, formally adopted the moniker Nasdaq. In 1998, the AMEX merged with the Nasdaq stock market.

1-3-4: Basic Functions of the Stock Market

It is important before someone invests in stock that they understand the basic transactions that occur. When one decides to invest in the stock market, they have decided that they want to own a portion of a company. Whether they are buying one share or five thousand, they are intending that the companies they invest in will succeed in making profit and in return the value of each share will increase.

You will need to do and know a few things before you begin trading. To begin a portfolio you need to contact a stock broker who will be handling all of your transactions.

Research a variety of companies you wish to invest in and find out what stock exchange they are traded on. You will also need to know their ticker symbol. A ticker symbol is basically an abbreviation of that company's name used in trading. Then after you have decided which ones to trade, figure out the volume of shares you wish to own. The following is a brief example of a few simple transactions.

- John Doe decides that he wants to buy shares of Pepsi Co. By doing research he finds out that Pepsi is sold under the ticker symbol PEP.
- John has \$5000 he wishes to invest in stock, and each share of Pepsi currently costs \$50.
- John buys 100 shares of Pepsi. The next day the price of each share goes up \$7 to \$57.
- John decides to sell because he doesn't think that it will keep going up. So John sells 100 of his shares for \$57 each.
- John now has \$5700 minus \$20 for each transaction he made through his broker. John now has \$5660. John has made a large profit of %13.2. Imagine if John bought and sold 1000 shares. Instead of making \$660 profit he made \$6960.

In this case John had made a decent profit off of his investment. Trading stock isn't quite as easy as the example above. Many people spend their entire lives deciding when they are going to buy and sell their shares. There is a lot of risk involved in trading stock, but with smart investing through a little research and maybe a little luck you are on your way to making money. There are also other ways of investing in stock.

Lets say our friend John thinks that a stock will decrease in value. He can do what is called a short sell. Shorting is basically being able to sell stock at any time whether you own it or not, only agreeing to buy it back by a certain date. The following is a brief example of how to short stock.

- John found out that K-mart jumped up from \$10 to \$30. John has a hunch that that stock will be dropping soon because they just released some bad news about the company.
- John short sells 100 shares of K-mart for the price of \$30. So now instead of John owning stock he owns \$3000. However he must also buy back 100 shares to replace the ones that he shorted.
- John buys to cover 100 shares at \$15 each. Now john has completed his short sell and has $\$3000 - \$1500 = \$1500$ left in his account. After transfer fees he is left with \$1460 of profit.

Chapter 2: Web site Rankings

2-1: Introduction

For our entire project the internet has been our number one provider of information and assistance. Since there are so many investment sites out there we wanted to share with you the sites that are free or fairly inexpensive as well as useful. Out of the many sites that we visited we have chosen four to evaluate. To do this we decided to first judge each site in four different categories and we have shown the results in the following table. Each site will get a ranked on a scale from 1 to 5, with 5 being the highest, for each category.

Site Name	User Friendly	Help	Content	Research Tools	Total
The Motley Fool.com	3	4	5	5	17
Kiplinger.com	4	5	5	5	19
Virtual Stock Exchange	5	4	3	4	16
Main Exchange	4	3	4	3	14

Our numerical ratings are a quick way to look at our evaluations of each site, however, we have written a small description of each site highlighting some of their best features as well as the bad.

2-2: Kiplinger.com

User Friendly	Help	Content	Research Tools	Total
4	5	5	5	19

At first we were a little skeptical about this site because of the all the services it boasted. We thought that with so many options they were probably lacking in valuable content.

Not only does this site provide help with investing in the stock market, it also provides resources on other financial concerns such as running a small business, paying for college, managing daily finances, taxes, and planning for retirement as well as many other topics.

At the top of the main page you find a stock quote search box which allows you to enter the ticker symbol for a company or simply the company name. Along with a current quote you are provided with basic information such as the stocks highs, lows, earnings per share, and P/E ratios. There are also obvious links to which provide links which provide company profiles, quick charts, analyst ratings, company news, SEC filings, and interactive charts.

There are four main resource categories on this site; Investing, Managing, Spending, and Tools. Within each of these categories there are even more specific categories that make it seem impossible not to find what you are looking for.

This site did a great job in all areas but one feature that really stood out was an amazing section called “ More Calculators”. This section provides three lists of financial

questions concerning investing, managing, and spending. Under the investing list you find questions like “How much risk can I take?” or “What is my return is I sell now?”. After choosing a question you are provided with either a personal questionnaire which gives you an answer after submitting answers to all of the questions. You will also find specially designed calculators which simply have you enter some basic financial information into several different fields and then you are given a concise answer to your questions along with links to more resources if you still have questions.

Finally one of the best things about this site is that it is completely free and there are no hassles like remembering a username and password for registration. We strongly recommend this site to all levels of investors, and especially the beginners.

2-3: TheMotleyFool.com

User Friendly	Help	Content	Research Tools	Total
3	4	5	5	17

The first thing we noticed about this site was its annoying advertisements and frequent prompts for special offers on some of their extended services. There is no question that this can be very frustrating at times but its ability to provide a wealth of information and assistance in a very approachable way.

Our favorite part of The Motley Fool is their adequately named Fool’s School. Not only does this section provide you with step by step easy to understand information

on your investment questions and more importantly tells you which are the most valuable questions you should be asking. One of these questions deals with valuation of a prospective stock. The Motley Fool provides a specific section on exactly how to value a stock and gives specific tools and calculators to make it even easier. Throughout the information provided there are many links to their Glossary of Financial Terms so that you can be sure you understand everything.

Most of the information that a beginning investor will need is provided free of charge, but there are fees for other services they provide like newsletters and portfolio management. Overall this site is an excellent resource for the beginning investor despite its annoying advertisements.

2-4: VirtualStockExchange.com

User Friendly	Help	Content	Research Tools	Total
5	4	3	4	16

Virtual Stock Exchange was the site that we used to conduct our actual simulation. For this purpose the site was very helpful. After a very easy and non-committal registration you can immediately start building your portfolio with an initial budget of \$500,000. The site provides real-time quotes but a transaction is delayed twenty minutes from the time that you execute your order.

Midway through our simulation Virtual Stock Exchange reformatted their

entire site. In our opinion the site became worse. The original site had a very fun and casual ... The main problem that we found with the new site was the opening page. There were several paragraphs of very small text which can seem very overwhelming at first and the overall appearance of the site was very cold and businesslike which can be very intimidating to the beginning investor.

Another flaw that we found with this site were its lack of in-depth content and intimidating opening page. Like most other sites it provided stock performance information, historical charts and company profiles. However, its beginning investor guide does not give you any actual tips or investment information. They do give you suggestions on how to find answers to some of the questions you might have. The most common suggestions were to look for books at your local library or to read The Wall Street Journal.

2-5: MainExchange.com

User Friendly	Help	Content	Research Tools	Total
3	4	4	3	14

The opening page of the Main Exchange site loads with a task bar that provides easy access to key features such as their simple stock quotes and portfolio tracking, just to name a few. The page also has links to headlines from current articles pertaining to the stock market, investment strategies, and alternative investing. The site provides the

standard access to quarterly reports and company profiles, but also provides suggestions from market expert and their analysis.

We thought that the sites best feature was its extensive glossary which provided pages of definitions for confusing financial terms. Not only did they give definitions, but they definitions they gave were very easy to understand so that you would not need to get a definition on a definition.

The biggest problem with this site was its difficult navigation. Section headings and links are very vague and left you guessing and searching for a long time for answers to your questions which can be a big test of patience. Also, the user must search through several pages to gain all of the information that is often displayed on only one screen on many other sites.

Chapter 3: Stock Selection Process

3-1: Introduction

When deciding which stocks to invest in for our simulation we looked at several different factors. First, we wanted companies that seemed to be strongly established in their sectors of the market so we looked at their company histories. Then we looked at things like each companies' price to earnings(P/E) ratio, and its P/E in ratio to its company growth rate (PEG). We also looked at each companies' historical stock performance charts.

3-2: Company Histories

For each of the six companies that we have to decided to invest in we have researched their company histories to give us the story behind all the numbers and lines on their financial charts. In these backgrounds we have provided information on each company such as the following: historical business activities, management information and important financial data.

3-2-1: PepsiCo

PepsiCo is a global leader in convenient foods and beverages, with profits of about \$27 billion and over 143,000 employees. PepsiCo World Headquarters is located in Purchase, New York, with Steven S. Reinemund acting as the current Chairman of the Board and Chief Executive Officer.

The company consists of the snack businesses of Frito-Lay North America and Frito-Lay International; the beverage businesses of Pepsi-Cola North America, Gatorade/Tropicana North America and PepsiCo Beverages International; and Quaker Foods North America, manufacturer and marketer of ready-to-eat cereals and other food products. PepsiCo brands are available in nearly 200 countries and territories. Many of PepsiCo's brand names are over 100-years-old, but the corporation is fairly young. PepsiCo was founded in 1965 through the merger of Pepsi-Cola and Frito-Lay. Tropicana was acquired in 1998 and PepsiCo merged with The Quaker Oats Company, including Gatorade, in 2001. PepsiCo's success is the result of a diverse amount of widely accepted food and beverage products, dynamic investment activity, and their interest in the global economy.

PepsiCo (ticker symbol: PEP) shares are traded principally on the New York Stock Exchange in the United States. The company is also listed on the Amsterdam, Chicago, Swiss and Tokyo stock exchanges.

3-2-2: Intel Corporation

For over 30 years, the Intel Corporation has developed technology to facilitate the computer and Internet revolution that has helped to change the world. Founded in 1968, by Andrew S. Grove, Robert Noyce, and Gordon Moore, to build semiconductor memory products, Intel introduced the world's first microprocessor in 1971. Today, Intel supplies chips, boards, systems, software, networking and communications equipment, and services that provide the foundation for most computer and Internet activity. The Intel Corporation employs over 80,000 people and has 45 worldwide offices. Andrew S. Grove was named Chairman of the Board of Intel Corporation in May 1997. From 1987 to 1998 he served as the company's CEO, and from 1979 to 1997 he served as President.

3-2-3: Cisco Systems Incorporated

Cisco Systems Inc. is engaged in networking for the Internet. Cisco Internet Protocol (IP)-based networking solutions are installed at corporations, public institutions and telecommunication companies, and are found in a growing number of medium-sized commercial enterprises. The company provides a broad line of solutions for transporting data, voice and video within buildings, across campuses or around the world. Cisco solutions are designed to allow networks, both public and private, to operate with flexibility, security, and performance.

3-2-4: Amgen, Incorporated

Amgen, Inc. is a global biotechnology company that discovers, develops, manufactures and markets human therapeutics based on advances in cellular and molecular biology. The company manufactures and markets human therapeutic products, including Epogen, Neupogen, Aranesp, Neulasta and Kineret. Amgen focuses its research and development efforts on human therapeutics delivered in the form of proteins, monoclonal antibodies and small molecules in the therapeutic areas of nephrology, cancer, inflammation and neurology and metabolism

. The company is headed by Chairman of the Board and Chief Executive Officer and President, Kevin W. Sharer and has research facilities in the United States, and has clinical development staff in the United States, the European Union, Canada, Australia and Japan.

In 1992, the company was listed in the Fortune 500's list at #427 and hit a \$3 billion revenue mark at the end of 1999.

3-2-5: General Motors Corporation

Founded in 1908, GM today has manufacturing operations in more than 30 countries and its vehicles are sold in about 200 countries. General Motors (NYSE: GM), the world's largest vehicle manufacturer, designs, builds and markets cars and trucks worldwide; with additional interests in communications services, locomotives, finance

and insurance. GM's automotive business designs, manufactures, and markets vehicles primarily in North America under the Chevrolet, Pontiac, GMC, Oldsmobile, Buick, Cadillac, Saturn and Hummer brands, and outside North America under the Opel, Vauxhall, Holden, Isuzu, Saab, Buick, Chevrolet, GMC and Cadillac brands. It employs about 362,000 people globally. GM has been the world's automotive sales leader since 1931. In 2001, GM set industry sales records in the United States - its largest market - for total trucks and for sport utility vehicles. In 2001, GM earned \$1.5 billion on sales of \$177.3 billion, excluding special items. GM sold more than 1 million SUVs - a first for any automaker. GM also sold more full-size pickup trucks than any other manufacturer since 1978. In 2001, GM sold more than 8.5 million cars and trucks - more than any other automaker and 15.1 percent of the world vehicle market.

. GM's communications services relate to its Hughes Electronics Corporation subsidiary, which includes digital entertainment, information and communications services, and satellite-based private business networks. GM also is engaged in the design, manufacturing and marketing of locomotives and heavy-duty transmissions. GM's financing and insurance operations are conducted primarily through General Motors Acceptance Corporation, which provides a broad range of financial services.

3-2-6: AOL-Time Warner, Incorporated

AOL-Time Warner, Inc. is an integrated, Internet-powered media and communications company. The Company was formed in connection with the merger of America Online, Inc. and Time Warner Inc. on January 11, 2001 (the Merger). As a result

of the Merger, America Online and Time Warner each became wholly owned subsidiaries of AOL Time Warner. The Company's fundamental business areas are comprised of America Online, consisting of interactive internet services; cable television systems; interests in filmed entertainment and television production; broadcast television networks; recorded music and music publishing; and magazine publishing, book publishing and direct marketing.

3-3: Company Financial Information

3-3-1: Introduction

In the following section we have provided a glance at the most crucial financial information that aided in our stock selections. First you will find information on each companies' Price to Earnings ratio (P/E), and then a PEG scale and results table. The final thing in this section is a historical performance stock chart for each company.

3-3-2: P/E and PEG Ratios

The Price-to-Earnings ratio and PEG, P/E in ratio to the company's growth rate, are two important numbers to look at when investing in a company. The P/E ratio simply shows you the relationship between a stock price and its company's earnings (profit) per share of stock. The PEG ratio is a company's P/E in ratio to its company growth rate. We have provided a common PEG scale which can tell you whether or not a company's stock is over, under, or fairly valued, based on its individual PEG.

P/E Ratios:

Company	P/E Ratio
PEP	32.14
INTC	71.15
GM	18.88
AMGN	33.84
CSCO	91.13
AOL	28.37

PEG VALUE SCALE

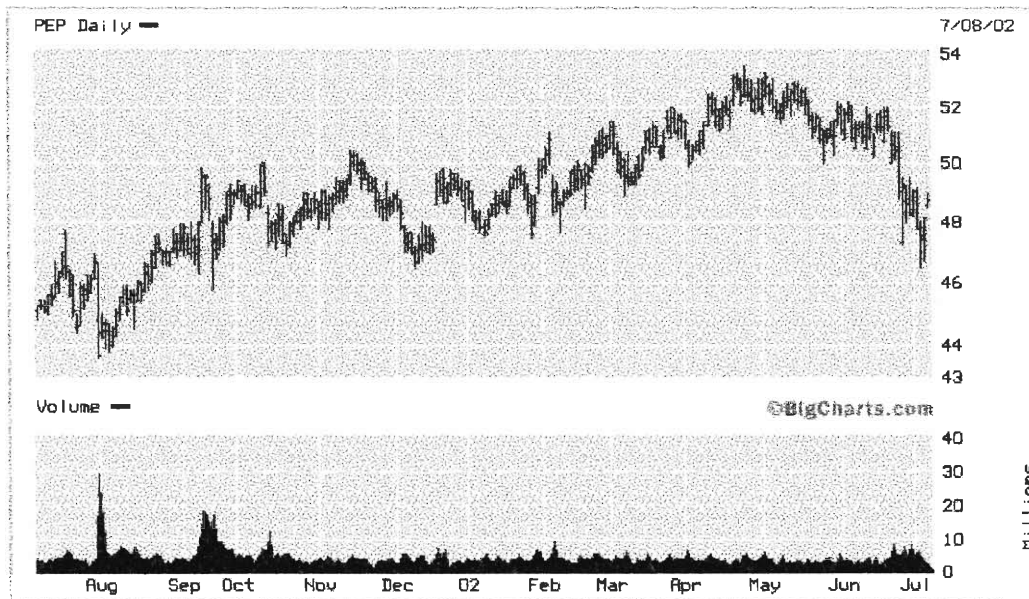
.50 OR LESS	UNDervalUED
.50 - 1.00	FAIRLY VALUED
1.00 – 1.30	HIGHLY VALUED
1.30 OR MORE	POTENTIALLY OVERVALUED

INDIVIDUAL PEGS

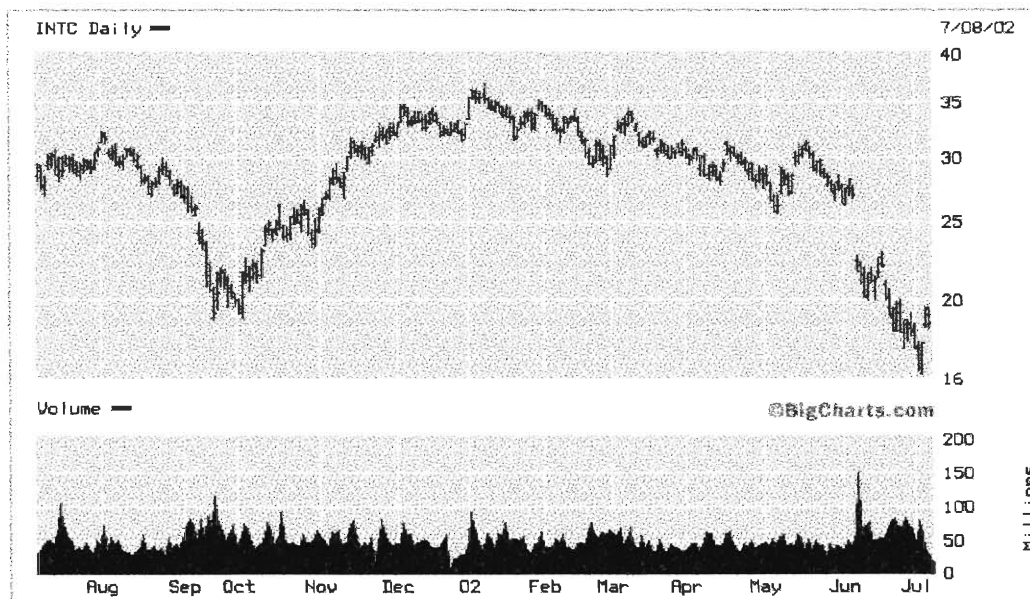
Company	PEG Ratio
PEP	1.425
AMGN	1.827
CSCO	.977
AOL	1.360
INTC	1.204
GM	.312

3-3-3: Historical Performance Stock Charts

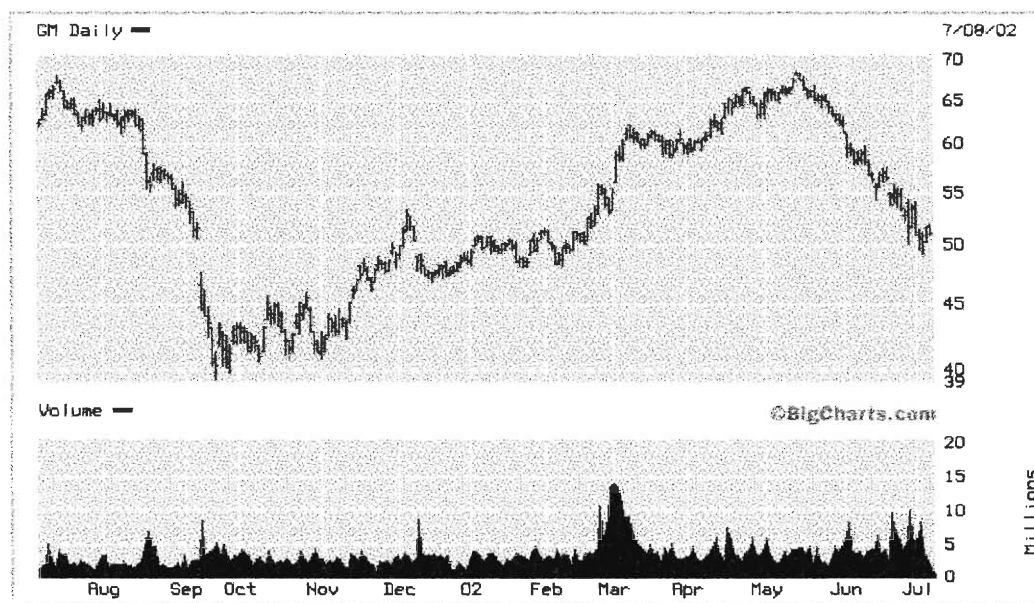
PEP



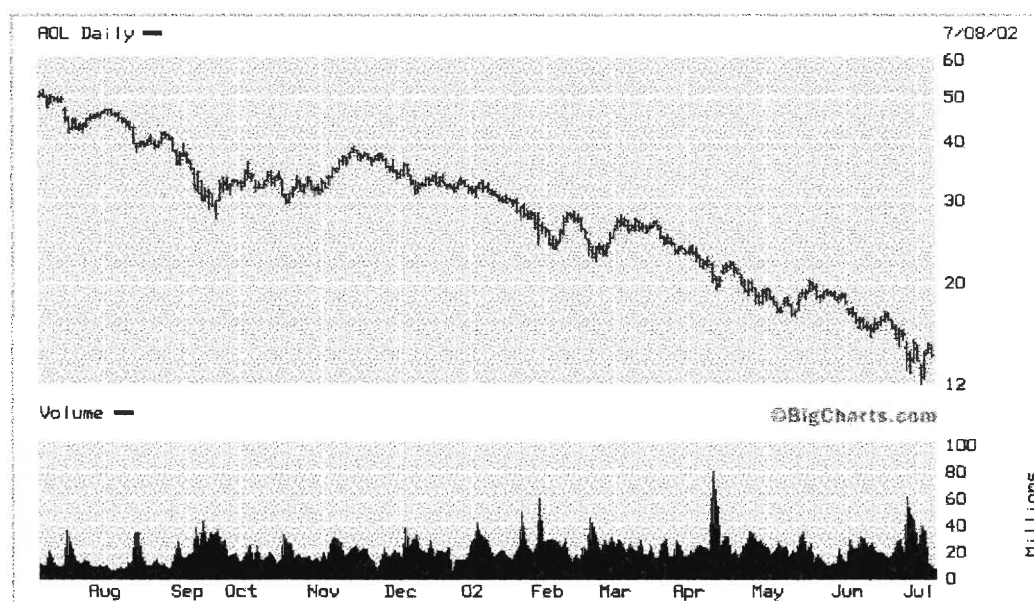
INTC



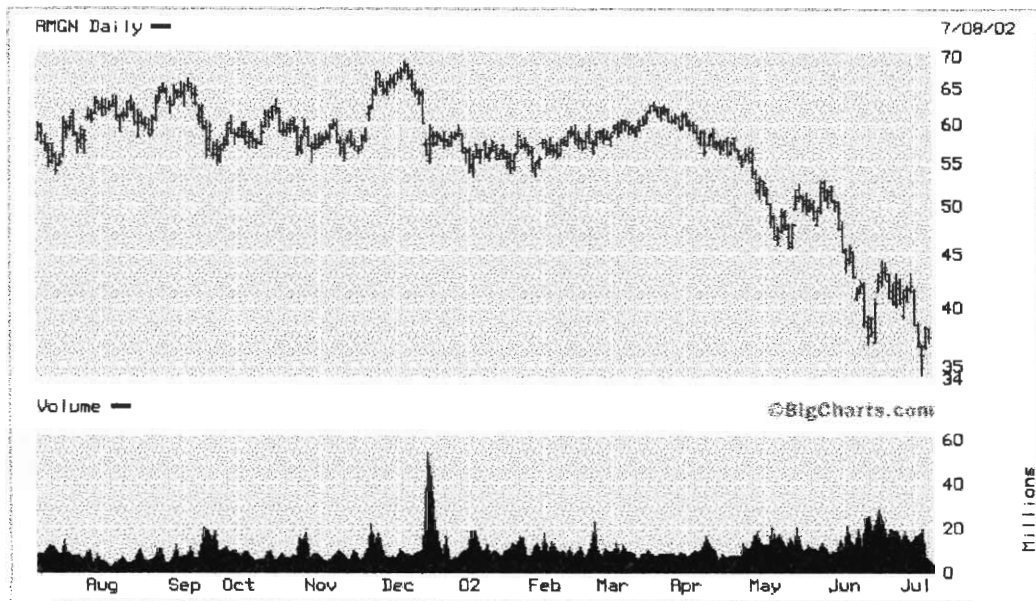
GM



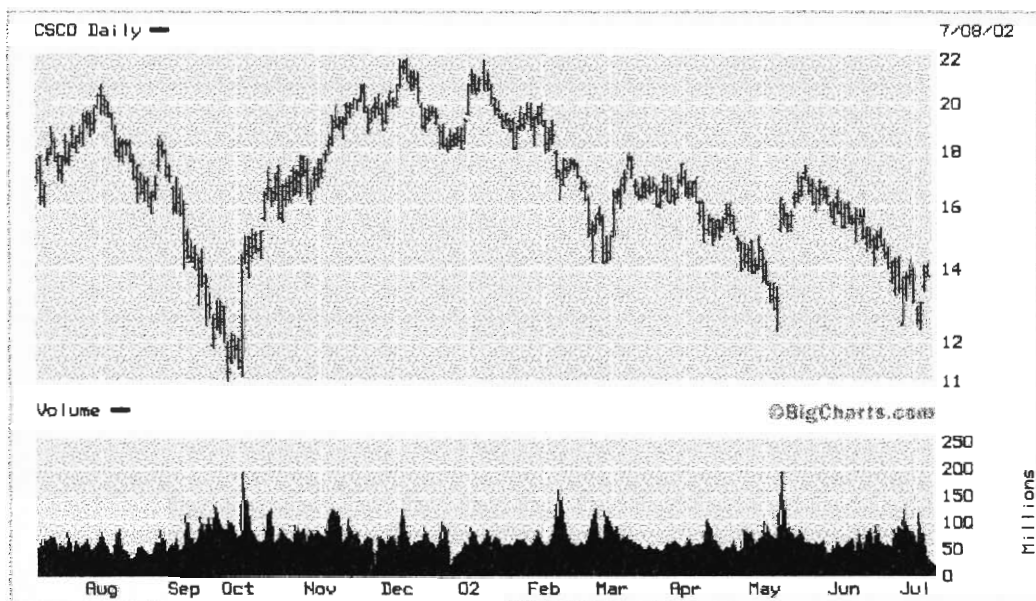
AOL



AMGN



CSCO



Chapter 4: The Simulation

4-1: Introduction

We have devised a plan for trading our companies stocks using the tunnel method found below. The simulation will be 6 weeks long starting the 15th of April and ending the 24th of May. We will be trading 6 companies chosen for popularity and regularity. Stocks we will be trading are: AOL, AMGN, CSCO, GM, INTC, and PEP. Because these are not penny stocks we are not worried and must make the assumption that these companies will not crash. During this period we plan to follow as close as possible to our strategy as possible. We will be updating weekly our trading strategy and our progress in order to document the success or failure of our strategy for pattern analysis and stock trading. Once again we plan to make a %5 gain on our initial investment.

4-2: Trading Methods

:

We have decided to try a method of trading that is new to us but simple to understand. The method we will use is called tunnel trading. We plan on making certain predictions each week for what we think will be the stock price average. By gathering and analyzing past stock prices for the past year and comparing them to the current price we can calculate good times to buy, sell, short sell, and Cover. The upper and lower bounds are only guidelines that do not necessarily have to be followed for every

transaction however should be used as a base for our decision making. The guidelines will be recalculated each week because prices fluctuate rapidly and price changes are bound to occur week to week. One thing we have noticed while making our first guideline is that AOL should not be bought unless price patterns change dramatically. AOL seems to be dropping at a pretty steady rate, so we plan on taking advantage of this by making multiple short sells and capitalizing on the price that we cover with. PEP on the other hand is the opposite of that. PEP has been rising for this past year with small accounts of dramatic rising and falling. We also plan to capitalize on PEP too by buying below our recommended guideline predicted for the week and selling for profit.

4-3: Week #1

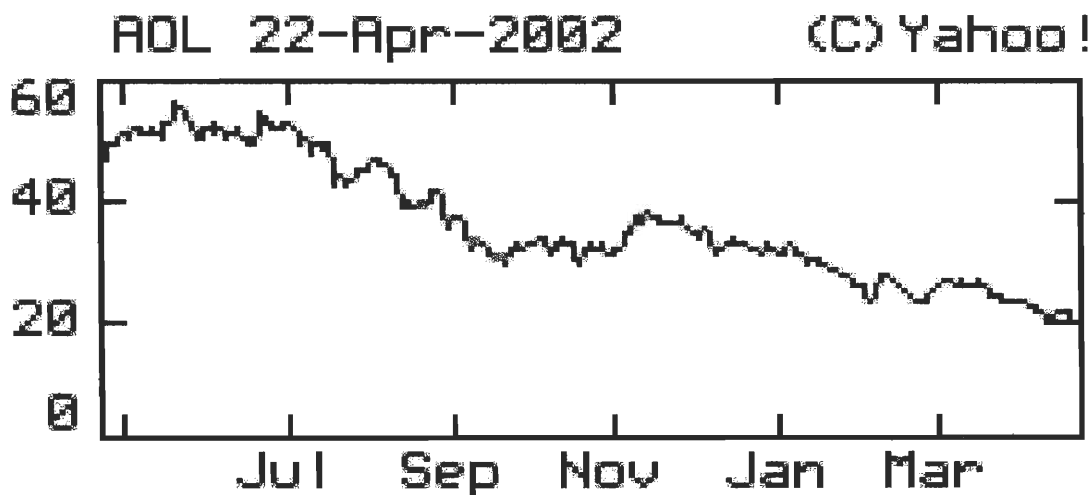
Ticker	Buy	Sell	Short	Cover
AOL	Don't	Don't	\$21+	\$19-
AMGN	\$56-	\$58+	\$58+	\$56-
CSCO	\$16-	\$17+	\$19+	\$17-
GM	\$60-	\$64+	\$68+	\$64-
INTC	\$28-	\$29+	\$32+	\$30-
PEP	\$52-	\$53+	Don't	Don't

The Above is a set of price guidelines for the trading of each company for the week of 4/15-4/19.

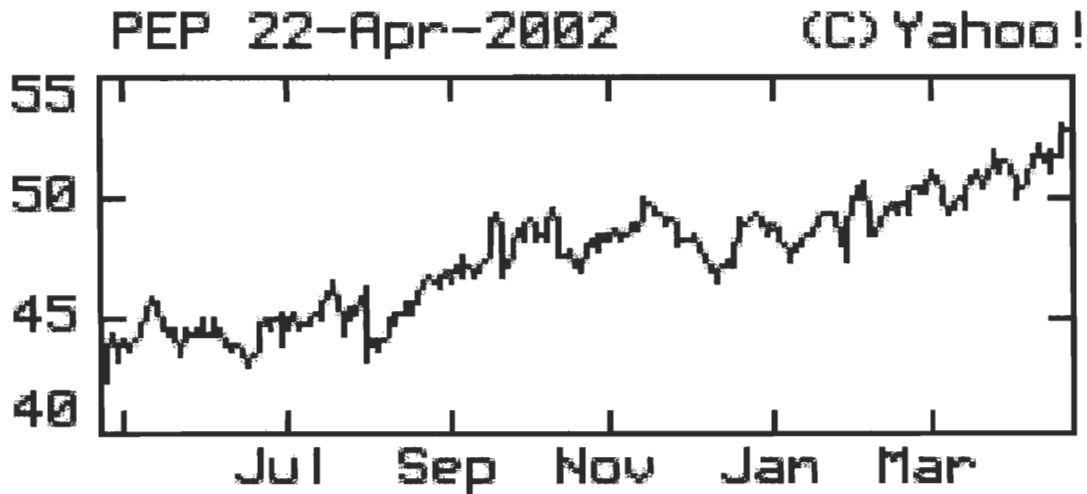
4/15/02

We now have a portfolio set up with our account totaling 500,000. There was no fee charged to us for setting up our account, but then again our account is imaginary.

Each transaction costs us \$29.95. After reviewing companies past stock histories and changing around our numbers for our trading guide we are now ready to trade. Today was frustrating for us trying to maneuver around and trade using Virtual Stock Exchange. We thought we had placed a few orders, however we realized we had misinterpreted a command and had not actually executed the trades. We started off our day shorting AOL and buying GM. We are feeling some trepidation about buying GM at its current price, but have decided to go with it. The orders take 15-20 min. to go through, we now realize this and have taken note that it may affect our performance. We have decided to start with mainly AOL because it seems to have a definite pattern. There seems to be a distinct and almost linear drop in the prices. This tells us it is a good time to short unless we hear any information on the news about AOL.



We would also like to point out that if you look at Pepsi's one year graph it is quite the opposite slope. Our predictions for this stock are that it will continue to increase or may hover at a high for a while.



Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
4/15	AOL	Short	4,000	21.150	11:10am	84,600	584,570.05
4/15	GM	Buy	3,000	61.320	3:20pm	183,960	400,580.1

4/16/02

Since the price of AMGN is within the shorting boundaries we previously set we have decided to short sell a small amount of AMGN. Once again a little upset about price change due to transfer time delay.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
4/16	AMGN	Short	1,000	57.430	11:30am	57,430	457,980.15

4/17/02

Our trading activity today does not really follow the price guidelines that we set up for the week. After watching the market for most of day we noticed that INTC was beginning to drop and showed signs of continual loss. We made one of our first tough investment decisions when we shorted INTC, holding our breath, crossing our fingers, and only shorting a thousand.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
4/17	INTC	Short	1000	30.940	2:10pm	30,940	488,890.20

4/18/02

We watched CSCO for the first half of the day and saw it first rise and then start to fall. We were very excited when it began falling into our range of buying the stock. We did become a little greedy though and delayed buying the stock for several hours hoping that it would continue to fall. When we checked on the price later it had begun to rise again so we jumped at the chance to buy it before it rose out of our buying boundaries.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
4/18	CSCO	Buy	6000	15.650	2:30pm	93,900	394,960.25

4/19/2002

Today we again ignored our weekly boundaries based on some outside information. Gatorade a company owned by PepsiCo has just introduced a new line of fitness water. We felt that a development of this kind might make the price of PEP rise within the next few days so we decided to buy PEP at a higher price than set out in our weekly guidelines.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
4/19	PEP	Buy	5000	53.000	3:20pm	265,000	129,930.30

Week Summary:

Currently we are investing our money in 6 different companies. Some of the stocks are doing good and some we are currently losing money on. At this point in time we are up \$7,030.30 total in our investment; however we won't see any money until we sell or buy to cover our stock.

Ticker	Trans. Type	# of Shares	Buy/Short Price	Cur. Price
AOL	Short	4,000	21.150	20.930
GM	Buy	3,000	61.320	65.350
AMGN	Short	1,000	57.430	56.820
INTC	Short	1,000	30.940	30.100
CSCO	Buy	6,000	15.650	15.260
PEP	Buy	5,000	53.000	53.120

After looking at what has happened for the past week, we have revised our trading guidelines and posted them bellow.

4-4: Week #2

Ticker	Buy	Sell	Short	Cover
AOL	Don't	Don't	\$20+	\$19-
AMGN	\$54-	\$55+	\$56+	\$55-
CSCO	\$14-	\$16+	\$18+	\$15-
GM	\$63-	\$65+	\$69+	\$65-
INTC	\$27-	\$29+	\$32+	\$29-
PEP	\$52-	\$53+	Don't	Don't

The chart above is our guidelines for the week of 4/22 through 4/26/2002.

4/22/02

We have been waiting for GM to rise to or above our sell point with no avail. And after watching the stock's price rise today and then begin to fall we decided to sell a little below our sell point. We may have jumped the gun somewhat, but we were pleased with making some profit.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
4/22	GM	Sell	3000	64.88	3:20pm	194,640	324,540.35

4/23/02

AOL came well within and met our cover point several times today. We ended up having to cover it at a price a little higher than anticipated. This was mainly due to the twenty minute delay on actual prices from VSE. However, we were still able to realize a profit.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
4/23	AOL	Cover	3000	19.50	2:40pm	58,500	529,780.40

4/24/02

We are cutting our first loss today with PEP. Our earlier decision to buy at a price slightly higher than our guidelines proved to be premature. We have decided to sell now before we lose too much.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
4/24	PEP	Sell	5000	52.76	2:50pm	263,800	588,310.45

4/25/02

Today was an easy day of trading in terms of making tough investment decisions. We really didn't have to make too many decisions because our weekly guidelines

provided all of the answers for today's transactions. First we covered INTC and then we shorted a lot of AOL.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
4/25	INTC	Cover	1,000	28.76	9:40am	28,760	500,990.50
4/25	AOL	Short	10,000	20.08	9:50am	200,800	701760.55

4/26/02

Another day passed using our trading guidelines Amgn was above our shorting point so we shorted a few thousand shares.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
4/26	AMGN	Short	4,000	55.07	2:00pm	220,280	922,010.60

Week Summary:

Today is a great day for us. We had no idea that we would be doing so well in such a short period of time. Right now our investments have made a total of \$37,830.60. If we sold now we would realize a 7.6% gain on our initial investment which is more than our original goal. We hope to still see improvement and have now changed our project goal to a 15% gain on our original investment.

Ticker	Trans. Type	# of Shares	Buy/Short Price	Cur. Price
AOL	Short	1,000	21.150	18.72

AOL	Short	10,000	20.080	18.72
AMGN	Short	1,000	57.430	53.84
AMGN	Short	4,000	55.070	53.84
CSCO	Buy	6,000	15.650	13.91

4-5: Week #3

Ticker	Buy	Sell	Short	Cover
AOL	Don't	Don't	\$20+	\$18-
AMGN	\$53-	\$54+	\$56+	\$55-
CSCO	\$14-	\$16+	\$18+	\$15-
GM	\$64-	\$65+	\$68+	\$65-
INTC	\$29-	\$30+	\$32+	\$29-
PEP	\$52-	\$53+	Don't	Don't

We have made a few changes due to price changes, but the above is the new guidelines for the week of 4/29 through 5/3/2002.

4/29/02

Setting out trading price guidelines for every week has really taken a lot of the guess work out of our investments. AOL reached its covering point fairly late in the day but we decided to cover it now instead of waiting for it to keep falling. We have started to realize that its often best to take the first best thing with short term trading because your next chance may not come around for awhile. We also decided to buy CSCO today

because its price has fallen into our buying range and we are hoping to lower the overall buy price of the 9,000 shares we now own.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
4/29	AOL	Cover	4,000	17.93	3:00pm	71,720	850,260.65
4/29	CSCO	Buy	3000	13.93	3:10pm	41,790	808,440.7

4/30/02

We bought both GM and INTC today with prices well within the buying range.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
4/30	GM	Buy	5000	63.24	1:00pm	316,200	492210.75
4/30	INTC	Buy	1000	28.25	1:30pm	28,250	463,930.8

5/3/02

AOL seems to be on the rise for now so we have decided to cover another large amount of the shorted stock so that we are able to make some profit in the event that AOL's price continues to rise. We may have made a mistake in our estimates for trading boundaries. We say this because we have not made our boundaries close enough together so that we would be trading at least once every day.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
5/3	AOL	Cover	4,000	18.12	3:00pm	72,480	391,420.85

Week summary:

Another week goes by and we have done a great job for predicting good buy, sell short, and cover prices. Once again we will update our predictions for next week. Our profit is now up a little over 13% and we have made a profit of \$65,710.90. One thing we would like you to see is the two purchases of CSCO below. The first purchase was for 6,000 shares at \$15.65 and the second was for 3,000 shares at \$13.93. We had realized that our stock was doing badly and decided the best was to profit off of this was to buy more at the lower price.

One or two things may happen by doing this. We are either going to continue to lose more money if prices continue to drop, or we will gain money if we sell all 9,000 shares above \$15.076.

Ticker	Trans. Type	# of Shares	Buy/Short Price	Cur. Price
AOL	Short	3,000	20.080	18.05
GM	Buy	5,000	63.240	65.68
CSCO	Buy	3,000	13.930	13.14
CSCO	Buy	6,000	15.650	13.14
INTC	Buy	1,000	28.250	25.56
AMGN	Short	1,000	57.430	48.80
AMGN	Short	4,000	55.070	48.80

4-6: Week #4

Ticker	Buy	Sell	Short	Cover
AOL	Don't	Don't	\$21+	\$19-
AMGN	\$49-	\$51+	\$53+	\$52-
CSCO	\$13-	\$16+	\$18+	\$15-
GM	\$64-	\$65+	\$68+	\$66-
INTC	\$27-	\$29+	\$31+	\$29-
PEP	\$52-	\$53+	Don't	Don't

The chart above is our guidelines for the week of 5/6 through 5/10/2002

5/6/02

INTC is well below our buy guideline which made us decide to buy. We are just hoping that the price will not continue to drop.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
5/6	INTC	Buy	3000	26.09	12:00pm	78,270	313,120.90

5/7/02

We are very excited that AMGN has gone down so much! We covered the stock we had previously shorted and then bought more of the stock at this low price since we are anticipating a rise.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
5/7	AMGN	Cover	5000	46.20	1:20pm	231,000	82,090.95
5/7	AMGN	Buy	1000	46.31	1:30pm	46,310	37,751

5/8/02

GM's price had raised above our sell guidelines so we decided to sell. We are also at a point where we need to sell in order to afford other stocks. Before this trade we only had \$37,751 in our account, which isn't enough to do some of the large scale purchases we have been doing. I had a thought today, about how close the boundaries are together and how much that affects the amount of return. Of course the boundaries are also affected if you make them too close. If there are close boundaries, there is a chance of under or over estimating. However, boundaries that are closer and well estimated, gives the trader more chances to trade in a day.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
5/8	GM	Sell	5000	65.90	12:40pm	329,500	365,221.05

5/9/02

Our stocks are not exactly fluctuating as much as we would like, but we decided to trade some AOL. We think tomorrow we may end up covering AOL.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
5/9	AOL	Short	5000	18.40	9:30am	92,000	457,191.10

5/10/02

Today we wanted to cover some of AOL's shares and buy GM. Probably a good thing we shorted yesterday because we wouldn't have been able to make our purchases otherwise.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
5/10	GM	Buy	5000	66.4	1:30pm	332,000	125,161.15
5/10	AOL	Cover	6000	17.1	3:50pm	102,600	22,531.20

Week summary:

This week has been the most successful week yet realizing a 22% gain on our investment. Currently our entire investment is worth \$612051.2. Listed below is a table of all stock owned or shorted.

Ticker	Trans. Type	# of Shares	Buy/Short Price	Cur. Price
AOL	Short	2,000	18.400	16.98
GM	Buy	5,000	66.400	66.20

CSCO	Buy	3,000	13.930	15.42
CSCO	Buy	6,000	15.650	15.42
INTC	Buy	1,000	28.250	27.01
INTC	Buy	3,000	26.090	27.01
AMGN	Buy	1,000	46.310	45.66

4-7: Week #5

Ticker	Buy	Sell	Short	Cover
AOL	Don't	Don't	\$19+	\$17-
AMGN	\$49-	\$51+	\$54+	\$52-
CSCO	\$14-	\$16+	\$18+	\$15-
Gm	\$63-	\$65+	\$69+	\$65-
INTC	\$27-	\$29+	\$32+	\$29-
PEP	\$51-	\$52+	Don't	Don't

The chart above is our guidelines for the week of 5/13 through 5/17/2002

5/13/02

We are once again doing some trading in order to accommodate for other trades we would like to do. I wouldn't classify this as necessarily a bad thing, but sometimes we would like to hold out for longer than we could do to the funds in our account.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
5/13	CSCO	Sell	9000	15.35	11:10am	138,150	160,651.25

5/14/02

Today we covered all of our AOL shares we had left.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
5/14	AOL	Cover	2000	17.31	3:50pm	34,620	126,001.30

5/15/02

Prices went up over night and we predict a drop again in AOL so we did one last short.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
5/15	AOL	Short	5000	18.9	9:10am	94,500	220,471.35

5/16/02

Today we sold all of our Amgn shares. It seemed like a pretty good time to sell.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
5/16	AMGN	Sell	1000	49.59	12:30pm	49,590	270,031.40

Week summary:

This week we were kind of disappointed with the amount of trading we have done. We feel that the quality of our trading exceeds the amount of trading so it makes it alright. We think our limited amount of trading is do to a combination of bad predictions and limited time to trade.

Ticker	Trans. Type	# of Shares	Buy/Short Price	Cur. Price
INTC	Buy	1,000	28.250	31.20
INTC	Buy	3,000	26.090	31.20
AOL	Short	5,000	18.900	19.98
GM	Buy	5,000	66.400	65.99

4-8: Week #6

Ticker	Buy	Sell	Short	Cover
AOL	Don't	Don't	\$21+	\$19-
AMGN	\$54-	\$55+	\$56+	\$55-
CSCO	\$17-	\$19+	\$20+	\$18-
GM	\$63-	\$65+	\$67+	\$65-
INTC	\$28-	\$30+	\$32+	\$30-
PEP	\$51-	\$52+	Don't	Don't

The chart above is our guidelines for the week of 5/20 through 4/24/2002.

5/21/02

We are now down to the final week of trading. It seem pretty obvious to us that this week we will have to start to get rid of everything we own and cover everything we have shorted. Today we sold all of the shares of INTC.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
5/21	INTC	Sell	4000	30.1	10:10am	120,400	390,401.45

5/22/02

Today we finished trading two more of the companies and we decided to try making a quick one day profit.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
5/22	GM	Sell	5000	64.95	9:00am	324,750	715,121.50
5/22	AOL	Cover	5000	18.41	9:20am	92,050	623,041.55
5/22	Amgn	Buy	5000	48.25	11:30am	241,250	381,761.6

5/24/02

Today is the last day of our simulation. We have sold everything we have owned and closed our account.

Date	Ticker	Trans. Type	# of shares	Stock Price	Time	Trans. Price	Tot. Cash
------	--------	-------------	-------------	-------------	------	--------------	-----------

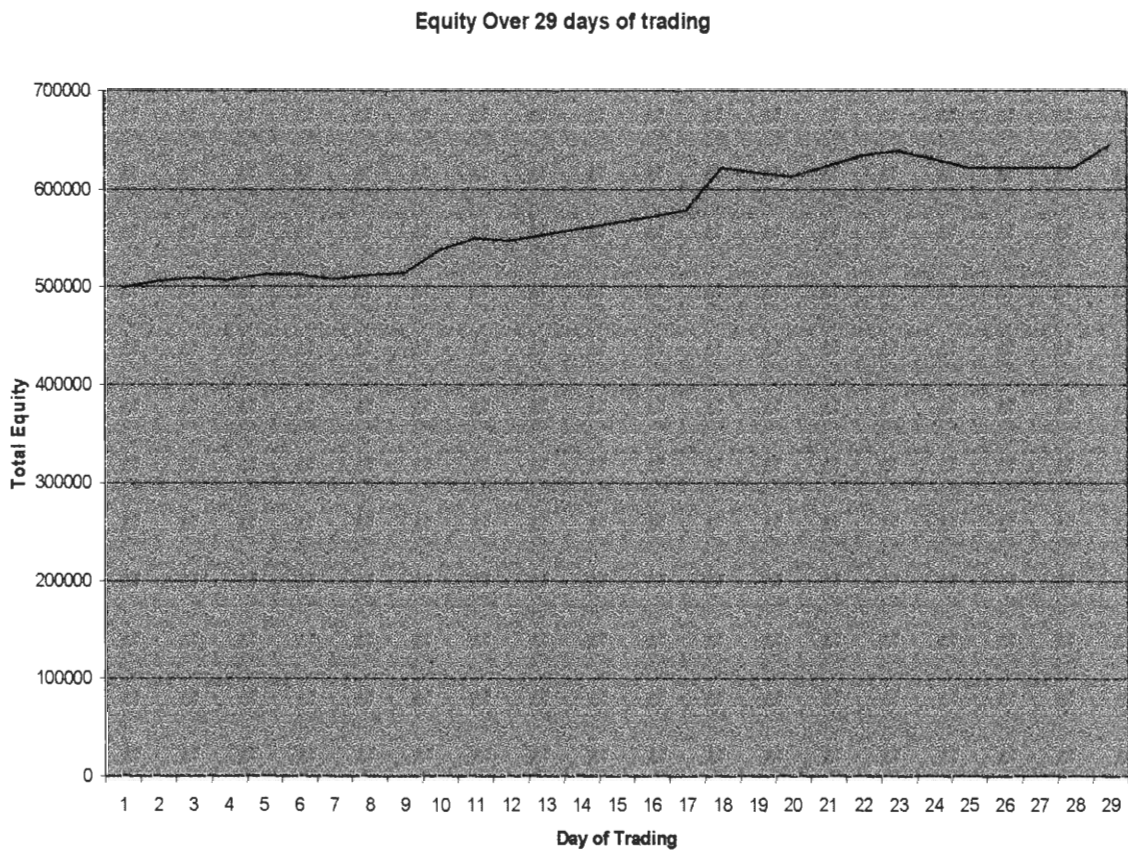
5/24	Amgn	Sell	5000	52.63	11:20am	263,150	644,881.65
------	------	------	------	-------	---------	---------	------------

Week summary:

This week our main focus was to try and close our account and finish our transactions with the most amount of money possible. We did, however, end up trading Amgen one last time during the week. We ended finishing our transactions for our simulation and made \$144,881.65. That is a lot of money considering we are only beginning investors.

Chapter 5: Analysis of Results

Shown below is a graph of the current equity of our stocks totaled at the end of each trading day. Our stock simulation lasted for six weeks, but there was one holiday restricting us from trading. Therefore, we only ended up trading for 29 days. If you look at the first eight days you will notice that we did not profit much, however the ninth until the eleventh is when we profited the most. We think that it may have taken us a few days before we had really gotten into the swing of trading.



We think that the main reason we were so successful was because we had made fairly good estimates in our trading guidelines prior to each week of trading. That was not the only reason that we profited as much as we did. We made some basic assumptions for short term trading in order to do this. What goes up must come down. Also what goes down must come up. After we made these assumptions, it was a lot easier to gain off of our investments, and also to lose less or to quickly recover from our temporary losses. An example is provided below.

- On 4/18 we bought 6,000 shares of CSCO at \$15.650.
- By 4/29 the price had dropped to \$13.93 leaving us with a \$10,320 loss.
- Assuming that the price would incline, on that day we decided to buy 3,000 shares of CSCO to lower the combined price of the 9,000 shares.
- Between the two times we bought, we owned 9,000 shares at an averaged buy price of 15.08.
- By 5/13 each of our 9,000 shares was worth \$15.35.
- We ended up selling all 9,000 shares at this price making a profit of \$2,430 compared to a loss of \$10,320 had we sold on 4/29 taking the loss.

There were many factors that helped us do as well as we had hoped. Cutting losses, buying and selling according to price guidelines, examining past stock prices for different companies were all major contributions to our success. Most of the

trading that we dealt with in our simulation was with AOL. Due to AOL's past stock price patterns we were able to capitalize on their linearly poor performance.

We don't recommend finding a company that is not doing to well and trying the same strategy. We watched our stock prices on an hourly basis to catch any large changes in our stocks. At any point in time our highly predictable company AOL may have taken a sudden turn and skyrocketed. Then again the stock market is nothing but a risk unless properly studied.

The following is a list of all of our transactions that have taken place during the course of our stock simulation.

Date	Stock	Type	#Shares	Price	Time	Cost+	Cash
15th	AOL	short	4000	21.15	11:10	84600	584600
15th	GM	buy	-3000	61.32	15:20	-183960	400640
16th	AMGN	short	1000	57.43	11:30	57430	458070
17th	INTC	short	1000	30.94	14:10	30940	489010
18th	CSCO	buy	-6000	15.65	14:30	-93900	395110
19th	PEP	buy	-5000	53	15:20	-265000	130110
22nd	GM	sell	3000	64.88	15:20	194640	324750
23rd	AOL	cover	-3000	19.5	14:40	-58500	266250
24th	PEP	sell	5000	52.76	14:50	263800	530050
25th	INTC	cover	-1000	28.76	9:40	-28760	501290
25th	AOL	short	10000	20.08	9:50	200800	702090
26th	AMGN	short	4000	55.07	14:00	220280	922370
29th	AOL	cover	-4000	17.93	15:00	-71720	850650
29th	CSCO	buy	-3000	13.93	15:10	-41790	808860
30th	GM	buy	-5000	63.24	13:00	-316200	492660

30th	INTC	buy	-1000	28.25	13:30	-28250	464410
3rd	AOL	cover	-4000	18.12	15:00	-72480	391930
6th	INTC	buy	-3000	26.09	12:00	-78270	313660
7th	AMGN	cover	-5000	46.2	13:20	-231000	82660
7th	AMGN	buy	-1000	46.31	13:30	-46310	36350
8th	GM	sell	5000	65.9	12:40	329500	365850
9th	AOL	short	5000	18.4	9:30	92000	457850
10th	GM	buy	-5000	66.4	1:30	-332000	125850
10th	AOL	cover	-6000	17.1	15:50	-102600	23250
13th	CSCO	sell	9000	15.35	11:10	138150	161400
14th	AOL	Cover	-2000	17.31	3:50	-34620	126780
15th	AOL	short	5000	18.9	9:10	94500	221280
16th	AMGN	sell	1000	49.59	12:30	49590	270870
21st	INTC	sell	4000	30.1	10:10	120400	391270
22nd	GM	sell	5000	64.95	9:00	324750	716020
22nd	AOL	cover	-5000	18.41	9:20	-92050	623970
22nd	AMGN	buy	-5000	48.25	11:30	-241250	382720
24th	AMGN	sell	5000	52.63	11:20	263150	645870

Chapter 6: Summaries and Conclusion

6-1: Trading with a trend

Trading with the trend is hard to do because a logical give-up exit point will be farther away, potentially causing a larger loss if you are wrong. This is a good example of why so few traders are successful. They can't bring themselves to trade in a psychologically difficult way.

You can define the concept of trend only in relation to a particular time frame. When you determine the trend, it must be, for example, the two-week trend or the six-month trend or the hourly trend. So an important part of a trading plan is deciding what time frame to use for making these decisions.

Do you want to be a long-term trader, also called a position trader? They hold positions for weeks or months. Do you want to be a short-term trader who holds positions only for a few days? There are even very short-term traders called day traders. They watch the markets during the day and always enter and exit their positions on the same day.

While it is perhaps easier psychologically to keep the time frame short, the best results come from longer-term trading. The longer you hold a trade, the greater your profit can be.

Day trading has great attraction because you can start each day fresh and sleep comfortably every night with no open positions. However, it is the most difficult kind of trading there is.

For the greatest chance of success, your time frame to measure trends should be at least four weeks. Thus, you should only enter trades in the direction of the price trend for the last four weeks or more. A good example of a trend-following entry rule would be to buy whenever today's closing price is higher than the closing price of 25 market days ago, and sell whenever today's closing price is lower than the closing price of 25 market days ago.

When you trade in the direction of this long a trend, you are truly following the markets rather than predicting them. Most unsuccessful traders spend their entire careers looking for better ways to predict the markets.

If you are following market trends rather than trying to anticipate them, the next important part of the plan is how to exit trades that don't work out. Here is where the second cardinal principle comes in. It is Cut Losses Short.

6-2: Cutting Losses Short

This is another sensible-sounding concept that is much easier to acknowledge than actually to execute when real money is on the line. No one wants to exit a trade with a loss. They don't want to lose money. More importantly, they don't want to admit they

were wrong. You can always think of many reasons to hold on to a losing trade. You can hope that the market will suddenly turn around and give you a profit instead of a loss.

This is another example where successful traders have learned to do the hard thing. If there is one thing consistent in the stories of how good traders turned themselves around from being bad traders, it is their attitude about losses. Professional traders accept that losses are part of the game. Since the markets are mostly random, the best trading methods will always have numerous losses. Professionals do not equate losses with being wrong.

It is precisely because correct trading methods invariably generate many losses that it is important to keep the individual losses small in relation to the overall size of the account. In order to keep trading, you must preserve your capital. If you can keep trading in the direction of the trend, the big profits will come. However, if you take too many large losses, your capital will be wiped out before you can enjoy the big profitable trades.

The laws of probability insure that regardless of your approach, you will inevitably suffer some long strings of consecutive losses. If you are risking too high a percentage of your account on each trade, before long one of these unavoidable losing streaks will blow you away. Keeping losses to about one percent of your account size is optimal. With smaller accounts, the percentage will have to be larger. Five percent on one trade is probably the highest prudent level of risk.

Because of the randomness in commodity price action, you must allow the market a certain amount of leeway before giving up on a trade. In general, you must be willing to risk between \$500 and \$1,000 to trade most markets. For smaller accounts, the Mid

America Exchange offers trading with smaller sized contracts that allow you to trade with lower risk.

While there are more sophisticated ways to decide when to exit a losing trade, getting out after a loss of a predetermined dollar amount is as good a way as any. The important thing is to respect your plan. You can place a stop-loss order with your broker that instructs him in advance to exit a trade if the market hits your loss limit. You should always do this to guard against inattention or changing your mind at the crucial moment.

6-3: Letting Profits Run

The next part of the plan involves a more pleasant alternative: when to exit a trade that is profitable. The cardinal principle involved is Let Profits Run. In other words, stay with your profitable trades as long as possible because the trend is likely to continue and make your profits even larger.

Again, this is easy to understand but not so easy to do when real money is involved. The difficulty is that although your profit may become much larger if you stay with a trade, it may also decrease and even disappear. Human nature is such that it values a sure profit much more highly than the probability of a much higher profit. Thus, traders are inclined to take their profits too soon. This can be fatal to long-term success because big profits are necessary to overcome the inevitable collection of small losses.

There is a good way to let profits run while still guarding against the possibility that prices will turn around and take away much of your accumulated profits before the

trend actually reverses. It is called a trailing stop. You include in your plan a method for moving an exit point along some distance behind your trade. As long as the trend keeps moving in your favor, you stay in the trade. If the market reverses direction by the amount of your trailing stop, you exit the trade at that point. You would also offset your trade and reverse position if the trend reversed.

One way to set a trailing stop is to protect a certain percentage of the accumulated profit. That will always insure that you keep some profit on a good trade.

6-4: Market Security

Another trading plan consideration is the markets you trade. There are about forty futures markets with sufficient liquidity to allow prudent speculation. However, it is important to select a good universe of markets that are appropriate for your account size, risk level and trading style.

It also important that your market universe be diversified. There are always a number of big market moves every year, but no one knows in advance where they will be. If you trade a diversified portfolio, there is a greater chance that you will catch some of the truly big moves that make for successful trading. It is similar to the phrase “Don’t keep all your eggs in one basket.”

Another consideration in choosing a market to trade is its historical propensity to have more big trending moves. Since the trend is your edge in trading, you can maximize your edge by selecting the trendiest markets.

The biggest risks to commodity traders come from surprise events that move the markets too quickly to exit at their pre-determined give-up point. While you can never eliminate these risks entirely, you can guard against them by advance planning. Pay attention to the risk of surprise events such as crop reports, freezes, floods, currency interventions and wars. Most of the time there is some manifestation of the potential. Don't overtrade in markets where these kinds of events are possible.

Although the commodity markets appear complex from the outside, making money trading is quite simple. You use an historically proven plan that trades with the trend, cuts losses short and will let profits run. You trade your system in a carefully-selected group of markets. You start with sufficient capital and pay close attention to managing risk.

6-4: Conclusion

In conclusion we have come up with four very simple tips for other beginning investors such as ourselves:

- Seek reliable information on investing from either a professionals, online resources or books and magazines.

- Develop a detailed plan of investment action.
- Execute the plan of action as closely as possible, deviating only when appropriate.
- Try to keep a relaxed and rational attitude when making investment decisions.

Bibliography

1. Virtual Exchange.com <http://www.virtualexchange.com>
2. The Motley Fool.com <http://www.themotleyfool.com>
3. Kiplinger.com <http://www.kiplinger.com>
4. The Main Exchange.com <http://www.themainexchange.com>
5. Yahoo.com <http://www.finance.yahoo.com>
6. AOL Instant Messenger stock quotes.
7. Sereny, Andrea Ruth; Terry, David Gerry; “Stock Market Simulation.” Worcester Polytechnic Institute: IQP #49-DZT-9901
8. Cerro, Gino; Leandro, Jason; Chawla, Harish; Yeh, Hengyu; “Analysis Of The Stock Market.” Worcester Polytechnic Institute: IQP # 49-DZT-9701
9. Big Charts.com <http://www.bigcharts.com>