Project Number: DZT0415-49

# Stock Market Simulation 

An Interactive Qualifying Project Report<br>Submitted to the faculty of the<br>Worcester Polytechnic Institute<br>in partial fulfillment of the requirements for the Degree of Bachelor of Science by

Zijing Yin

Date:
20 August 2005

Approved by:

Professor Dalin Tang
Project Advisor


#### Abstract

Using the trading methods learned from selected stock market trading books and the information from the Internet, a short-term stock market trading simulation was performed to investigate the effects of trading strategies. During the process of conducting this project, considerable big progress has been made in the art of trading stocks. Experience learned will also be helpful to other investors to have successful stock investment.


## Acknowledgement

First and foremost, I offer my appreciation and gratitude to Dalin Tang, Professor, Mathematical Science Department, Worcester Polytechnic Institute. He gave me advices for not only how to write a project, but also how to be a good student and person.

My deep thank-you goes to my parents. They gave me the best support. They have been extremely helpful, understanding, and patient.

## Table of Contents

Chapter 1. Introduction
1.1 Objectives of This IQP ..... 5
1.2 The Stock Market ..... 5
Chapter 2. Stock Market Trading Method
2.1 Trading Methods Overview ..... 10
2.2 Short-Term Trading Method ..... 13
2.3 Stock Market Risks ..... 18
2.4 Analysis before investment ..... 20
Chapter 3. Selected Companies
3.1 Selecting Methods ..... 24
3.2 Selected Companies Overview ..... 26
Chapter 4. Trading Simulation
4.1 Trading Diary ..... 40
4.2 Trading Results ..... 43
Chapter 5. Analysis
5.1 Fundamental Analysis ..... 45
5.2 Analysis for the Reasons to Get Profit ..... 46
5.3 Analysis for the Reasons to Lose Money ..... 49
Chapter 6. Conclusions
6.1 How Much I have reached the Goals ..... 54
6.2 Summary of the Whole Project ..... 55
References ..... 57

## Chapter 1: Introduction

### 1.1 Objectives of This IQP

In this project, I will first make a rough portrait of the stock market. After the introduction of the short-term trading methods, I will select several companies and use these methods to practice simulated market investment. I will start the simulation with $\$ 100,000.00$, since I'm doing this project individually, only the short-term investment will be experienced. In about one month, I will trade 10 stocks selected from different industries. No matter it will be a profitable investment or not, an analysis will be made for the whole process. Since only one trade method will be use, the analysis will with regard to the reasons for making or losing money. In the last chapter I will summarize everything I have learned and experienced and write the conclusion.

### 1.2 The Stock Market

### 1.2.1 Overview of the stock market

To understand how the stock market works, first we have to know what is a stock. Actually, the word stock originally came from the word livestock. But, instead of trading animals, we trade pieces of paper, shares of stock, which represent the ownership in a corporation. So when you purchase stock, you become a partial owner in a corporation, the more shares you own, therefore, the more of the corporation you control. And you are commonly referred to as an investor or a shareholder.

Stocks can be classified by size, or the nature of their business - sector. A sector is an official group of companies involved in the same industry. No matter how the economy is, there are always well doing sectors and struggling sector.

Stocks can be roughly separated into three types. The first type of stocks is called the income stocks, which include stocks of corporations that give money back to shareholders in the form of dividends. They may not rise or fall as quickly as other stocks, but since dividends are considered taxable income, people invest in income stocks need to report the money they received. The second type is the value stocks, usually old fashioned companies sell value stocks, and they are always at a reasonable price compared with their true value, so investors should find whose price is a bargain compared to its true value. The last type is the growth stocks, they are stocks of a bunch of aggressive companies, always from high-tech industries, so the price of the growth stocks can be very high, and this is always chosen by the short-term traders ([1], page 30)

The stock market is a market of stocks. It's just like any kind of market, for instance, a flea market. Companies issue stocks to make money for its financial success, Investors try to buy stocks at a low price and sell them at a higher price also because they are seeking gains. ([2], page 9)

The history of the stock markets began under a buttonwood tree in New York. In 1972, 24 brokers and merchants on the Wall Street formed the first
stock exchange New York Stock Exchange (NYSE), even until now, the Wall Street was always the center and symbol for the U.S. stock exchanges. Interestingly however, the New York Stock Exchange (NYSE) is not the most modern or efficient. After NYSE, two more stock exchanges, American Stock Exchange (ASEX) and National Association of Securities Dealers Automated Quotation System (Nasdaq) were created. As you can see there are many reasons why listing a company on the stock exchange might be more trouble than it is worth. Being responsible to thousands of shareholders and being required to constantly disclose all the business activities can lead very large businesses to remain as private companies.

As technology developed, most stock exchanges began to use computers to replace floor traders. The NYSE is one of the only stock exchanges in the world that still functions on an open-outcry trading system. Computer systems have allowed market access for many more individual investors. There is a common misconception that trading through the Internet means that you are placing your orders directly into the stock exchange, unfortunately your order must first be processed and authorized through your stockbrokers computer system

Well, excepted investing stocks, people also have other choices, which may have less profit but in a lower risk. They are bonds, mutual funds and real estate. A bond is a fixed income investment issued by a corporation or the government that gives you a regular or fixed rate of interest for a specific
period, this is more likely lending than investing, but there's also existing risks, the corporation may go out of business and the country may be destroyed by the war or other disasters; Mutual funds are investing companies pool investor's money and use it to invest in an assortment of stocks, bonds, and cash. People invest in mutual funds are actually buy hundreds of stocks instead of buying only one of them, so it can reduces the risk a little bit ([1], page 22)

Nearly everyone connected to Wall Street says that the average yearly return on the stock market for the last 60 years is 11 percent. The one fact they forgot to tell is that the stocks in nearly all the stock indexes are routinely shifted to make room for more profitable companies. The indexes remove companies that have gone bankrupt, most major indexes make dozens of changes to their listing each year.

There is a controversial trading strategy that works: When the U.S. markets are up a lot, you move your money from a mutual fund money market account into an international fund. More often than not, the foreign markets will follow the U.S. markets.

### 1.2.2 Nasdaq

Since I will do most of the trades through the Nasdaq stock market, here I introduce it for emphasis. The National Association of Securities Dealers Automated Quotations (NASDAQ) system is also known as the over-the
-counter market where, via online computer transactions, OTC, and specific New York Stock Exchange- listed securities can be bought and sold through licensed securities brokers and dealers. It features the internationally acclaimed Nasdaq overview and the worldwide Nasdaq network of Nasdaq performance data. There are quotes, charts, graphs, ticker search services, and features such as the 10 most active share volumes, polling volumes, and most active advanced performances.

At the Nasdaq market, the computerized stock exchange, buyers and sellers are matched with the help of an intermediary called a market maker. Unlike the arrangement at the NYSE, where only one specialist is assigned to a stock, at the Nasdaq you can have multiple market makers for a stock. The more popular the stock, the more market will be assigned to the stock [3].

## Chapter 2: Stock Market Trading Method

This quote from Hugh Johnson is more accurate than many advisors want the public to know: "The most intelligent way to begin managing money is to confess you don't have a clue where the markets are going." In this chapter, we will discuss the short term trading method. In order to be successful in the simulation, we should understand some basic market trading method. Many of the following strategies are popular with aggressive short-term traders who want to make money quickly. We can primarily use technical analysis to look for profitable trading opportunities.

### 2.1 Trading Methods Overview

There are three steps to every investment in the stock market. First you must decide what to buy. Next, you must monitor your investment. Finally, you must decide when to sell. Most people have no problem with stage one and can buy stocks with reasonable confidence, but the next two steps are trickier. When you invest in a company to earn a stock of the profits through dividends it is called "investing for yield", and it is possibly the easiest type of investment to plan. You can choose which stock to purchase by looking at the historical dividend yield and projected dividend payments. It is important to keep in mind why you bought a stock to help you decide when to sell. This basic principle can be applied to nearly every method of share investment. You might look at
factors such as the projected earnings and market share of a company and would therefore sell that stock if the company failed to meet its earnings targets, or lost a large portion of its market share. Too many investors are given advice to buy a stock and then fail to track it using the same criteria.

The most important intention for short-term traders is to profit as soon as possible. Successful short-term trading requires exceptional discipline. You must be capable of controlling your emotions to develop a comprehensive trading plan.

To finding out how the stock market is performing each day, we need to get advices from the indexes. The most popular index is the Dow Jones Industrial Average (DJIA). It was originally called Dow Jones Transportation Average which was created in 1884, which was just an average of the closing price of 12 railroad stocks, but by 1928, the DJIA was increased to 30 stocks, and this number remained until today. The Dow 30 are all the biggest and most popular companies, so any movement in these 30 companies may cause changes in the stock market. The second important index is the Nasdaq Composite Index, which including more than 5000 stocks. The Nasdaq Composite measures the performance of all stocks trading on the Nasdaq. The third one is called the S\&P500. As showed on the name, it contains 500 stocks. These are the stocks selected by Standard \& Poor's Corporation to represent the overall stock market. These three indexes are the most popular indexes that the investors can use them as references. ([1], page 10)

As a matter of fact, nothing has a greater effect on investing and economics than government. Government actions usually manifest themselves as taxes, laws, or regulations. They can also take on a more ominous appearance, such as war or the threat of war. Government can willfully cause a company to go bankrupt, disrupt an entire industry, or even cause a depression. So every single government action should be noticed, and be considered as a factor to affect how the market will perform in the future.

There is another thing you can do with stocks to make money compounding. Compounding earnings are the money from the savings or investments, which means interest, dividends, or capital gains. They can also be called as "the earnings that are earned on earnings".

Losing (a little) money can be educational. One of the worst things that happened to many people during the last bull market was that they got the idea that it was easy to beat the market. Before they had a chance to cash in their winnings, most of their profits had disappeared. Losing money has a number of benefits: It forces you to analyze what you did wrong; It tests your character; It forces you to be disciplined; It forces you to take action.

The market doesn't always go up. If you want to get really picky, of the original Dow 12 stocks in 1896, only General Electric remains in the index ([1], page 176). As many people have learned the hard way, buy and hold fails miserably in a bear market. In addition, even if the market goes up, that doesn't mean that your stocks will.

Volume refers to how much stock is bought and sold. It can be seen as the bottom part in every figure I will show when introducing a stock. Volume is certainly important to watch because the stocks that you're investing in are somewhere in that activity. It is far in excess of that stock's normal range is a sign that something is going on with that stock. It may be negative or positive, but something newsworthy is happening with that company. If the news is positive, the increased volume is a result of more people buying the stock. If the news is negative, the increased volume is probably a result of more people selling the stock.

Once you're a regular stockholder, the company will send you its annual report. It can help you keep track of the company's progress. As an investor, you don't need to read the annual report like a novel. Instead, approach it like a newspaper and jump around to the relevant sections to get the answers you need to decide whether or not you should buy or hold on to the stock.

### 2.2 Short-term Trading Method

Short-term trading can take several forms.

What may happen is, you buy a stock because you read about it on a newspaper and sell it at a higher price after one week, and this can be considered a short-time trade.

There is also anther way, which I respect more is "technical analysis". Technical traders use the historical and current price of a stock to make buy and sell decisions. A large number of US investors will consider the technical
viewpoint before buying a stock. Traders typically choose to analyze the market once a day, after the market is closed.

Day trading is an extreme trading strategy that involves constantly moving into and out of stocks. Day traders can trade from their home or at a day trading firm, which provides high-speed telephone lines and customized trading software. Day-trading the local markets is difficult due to the low levels of volatility and liquidity. It takes an incredible amount of discipline, trading capital, and knowledge to become a successful day trader. But, a short-term online trader can use more short-term strategies. Swing trading involves buying a stock early in the week and selling it after a few days. Position trading is to buy stock and hold it for a few months.

With market timing, you predict in advance where a stock or the market is headed. This is a risky strategy that can cost you if you make the wrong bet. You have to know not only when to get into the market, but also when to get out. Market timing is done strictly with mechanical systems that react to existing trends in the markets. The chief advantage of timing is that you don't leave your wealth completely exposed to the risk of the market all the time. The chief disadvantages of timing are that 1 ) it is rare when "everything goes right," 2) timing requires you to buy and sell when your emotions are telling you to do the opposite, 3) timing requires constant attention to your portfolio and 4) unless you do it in a tax-sheltered account, timing subjects most if not all of your profits to income taxes, at ordinary income rates, every year. ([1], page

A very effective, but rather risky, trading strategy is to short the rallies. That means, to do the opposite of buy and hold. When the market or your stock goes up a lot, you sell short. It can only be used when stocks go down faster than they go up.

Trading exchange-traded funds (ETFs) has recently become popular with traders and investors. Like mutual funds, ETFs are baskets of securities. Like stocks, ETFs trade on an exchange. Unlike regular mutual funds, ETFs can be bought and sold throughout the trading day. They can also be sold short and bought on margin. Anything you might do with a stock, you can do with an ETF. The most common ETFs are index funds, such as the stocks that make up the Nasdaq 100 (QQQ), the S\&P 500 (SPY), and the Dow Jones Industrial Average (DIA). ETFs rely on an arbitrage mechanism to keep the prices at which they trade roughly in line with the net asset values of their underlying portfolios. The advantage of trading ETFs is that they are cheap, liquid, and tax-friendly. The disadvantages of trading ETFs are they are relatively new, they haven't much of a track record. Theoretically, ETFs should perform better than similar funds. Because investors do not buy or sell stocks directly from the ETF, ETFs shouldn't suffer from having to keep cash on hand to meet redemptions, or from being forced to sell stocks into a declining market for the same purpose.

There is a wise old saying: Buy on the rumor and sell on the news.

Trading on news is a method to play and win. In reality, news is coming at you from lots of different directions: newspapers, magazines, the Internet, television, and friends. The hard part is figuring out which information is valuable and which should be ignored. Most of what people tell you about the market is useless. Some people deliberately try to influence the direction of stocks by spreading false information about companies. So many people lost money by trading on tips and rumors that they stop listening, at least temporarily.

Although options are rather difficult to understand, with a little practice, they begin to make more sense. Think of an option as a contract that gives you the right, but not the obligation, to purchase or sell an item. The wonderful part about options is that you don't have to own the stock to trade them. There are two most important types of options, the call and the put. A call option gives you the right to buy a stock at a specified price, a put option allows you the right to sell a stock at a specified price. There is a catch, however. When you buy an option, you also have to specify an expiration date, usually from one to three months from the date of purchase. To make money on options, you have to be right about both.the timing and the price direction of the underlying stock. Risk? Sure, but the businessman's risk, not the crapshooter's. ([1], page 81)

If you feel like you just don't have a taste for this sort of thing, asset allocation in investing is a mighty task. This is a term that describes the diversification of your investment dollars in order to mitigate risk as well as take
advantage of market cycles and trends. If you are saving but want things laid out for you and monitored, life-cycle funds are available that take the hassle out of it. Once a set of asset classes has been defined, it is important to determine the exposures of each component of an investor's overall portfolio to movements in their returns. Such information can be aggregated to determine the investor's overall effective asset mix. If it does not conform to the desired mix, appropriate alterations can then be made. Since markets are forever changing and time marches on, you'll need to reevaluate your initial strategy at least once a quarter. As with diversification, the correct asset allocation depends on your age, your risk tolerance, and when you'll need the money

An intricate part of a short-term trading plan is "capital management". Short-term traders must always be aware of their current market position, and understand how this relates to their current level of risk. On the other hand, allowing profits to accumulate is almost as important as controlling your losses. You must first decide what to buy, you must closely track that trade with a strategy capable of giving you a signal to sell at an appropriate time, and you must sell according to your plan. To become a short-term trader, make sure you have an effective plan and that you are aware of the risk inherent to all stock market investing. [4]

### 2.3 Stock market risk

Stock markets have been volatile in recent years. The Dow Jones Industrial Average of major corporate stocks was as high as 12,000 in 1999, but fell below 8,000 last year, a five-year low. The average share price of tech-heavy NASDAQ stocks fell about 40 percent and is near a six-year low.

Before start the investment, we have to have a clear idea of the risks first. Most peoples' attitude to risk is defined by two of the basest human emotions, greed and fear. Risk is what distinguishes an "investment" from "savings." The stock market as a whole will rise and fall over time based upon investors' collective view of how desireable it is to own an investment in stock.

There are two factors, which define risk: currency and time. As soon as you overrule a single 'base' currency approach and invest in assets denominated in a second, you are increasing your risk. In the lower risk categories, investing in a second currency will raise the risk factor to the next level. After all, if you are a US Dollar investor and invest in a Euro bank deposit, you stand to lose if the Euro weakens. For time, the longer the term of an investment, the less risk is involved.

Start-ups can be risky business. In recent years, investors have lost a lot of money by investing in brand-new companies offering growth opportunities in high-tech and Internet businesses. Pets.com and eToys.com are examples of Internet start-ups that went bankrupt within three years of going public. However, investors found more assured opportunities for growth in
well-established private companies that went public. Keep in mind that a stock offering doesn't always have to be in first-time situations. Many companies issue stock in secondary offerings to gain the capital they need for expansion or other purposes.

There are all kinds of risk. If you want to survive as a trader or investor, you must develop a healthy respect for risk and how to manage it. The greater return you want, the more risk you need to tolerate, the goal for the investors is learning how to recognize and minimize risk. The most obvious risk is the financial risk, which means an investor may loses money if the company whose stock he purchases loses money or goes belly up. The next one coming up is the interest rate risk, which refers to the fact that interest rates change on a regular basis, causing some challenging moments. Except these two main risks, there are also market risk, inflation risk, tax risk, political and government risks and personal risks.

To deal with all above, investors have to gain knowledge to be familiar with the stock market, so they can avoid the biggest and the most expensive mistakes. If you don't understand stocks, then don't invest. When choosing investments, take into account your investment goals and when you'll need money to fulfill them. You can reduce the risk with proper diversification. Diversification is the most important tool for reducing investment risk. Owning other companies helps to reduce business risk. Owning companies that are affected by different types of regulation reduces regulatory risks. Owning
companies in different industries reduces industry risk. "Don't have all your eggs in one basket"; understanding this saying may avoid the worst result that may happen. You can also reduce the risk by being patient, and jumping in gradually.

### 2.4 Analysis before investment

Income statement: Learning how a company makes money. The top line of the income statement gives the company's sales or revenue, it can tells you if the company's revenue is increasing when compared to that in earlier years. The next section of the income statement gives operating expenses. The nest few sections describe the company's income. No matter how you think a corporation is or how much you love its managers, if the company isn't earning money, eventually its stock price will fall. That's where EPS (Earnings per share) comes in. You can find it at the bottom of the statement.

When you divide the stock price by the company's earnings per share, you end up with a P/E ratio (The Price/Earnings Ratio), many people use the P/E ratio to get a quick indication of whether the stock price is reasonable given the company's earnings. For example, a stock that sells for $\$ 20$ a share and earned $\$ 2$ last year has a trailing P/E of 10 (\$20 divided by \$2). The great thing about the P/E is that you can easily and quickly compare individual stocks with one another.

The key to technical analysis is the stock chart. One of the best reasons
for looking at a chart is that it keeps your emotions out of the decision-making process. By reading a stock chart, you can receive clues about how the market will behave in the future and when you should buy or sell. The first decision you make when looking at a chart is which time frame you'd like to see. You can select a short time frame - for example, minutes, hours, or a daily chart. Others prefer a longer time frame - weeks, months, or years. There are line, bar and candlestick charts.

If you understand support and resistance, you will have a better idea of when to buy or sell a stock. When a stock price is falling, there will be certain places on the way down when buyers will step in and prevent the stock from falling further. Support is the price level at which a stock's price has stopped falling and either is moving sideways or has reverse direction. The demand for the stock is thought to be strong enough to prevent from dropping further. The buyers are in control. When a stock's price is rising, there will be certain places on the way up when sellers step in and prevent the stock from rising further. Resistance is the price level at which a stock's price has stopped rising and either is moving sideways or has reversed direction. The stock can't go any higher. This is the point at which people sold their shares of stock. (Information above are referenced from Understanding Stocks, by Michael Sincere, page 116)

One of the simplest but most valuable technical indicators for both investors and traders is the moving average (MA). A moving average is the
average price of a stock for a special period. When plotted on a chart, it is displayed as a line that moves forward with each trading day. When moving averages are put on a chart, they give technicians a lot of clues about where is headed. If the stock price rises above the moving average, this is seen as a bullish sign. Conversely, this is seen as bearish and is a signal to sell.


Figure 2.1 The Vol + MA of Yahoo over the past year

One of the problems with technical analysis is that it is extremely difficult to read the signals correctly. If all it took to be successful in the market were sophisticated oscillators and indicators, then most people would use only technical analysis. After all, technical analysis is most useful for short-term decisions.

Sentiment analysis involves studying psychological clues to help you determine where the market is headed. Understanding where the crowds are investing their money will help you decide how to invest. Sentiment analysts
use a number of tools to determine market psychology. For example, when the market was going into the stratosphere, every psychological indicator showed that people were gorging on stocks.

Nevertheless, there are some important psychological indicators that you should look at if you want to be ready when the market reverses. The Chicago Board Options Exchange Volatility Index (VIX) is an index that measures the volatility of the U.S. stock market by tracking S\&P 100 option contracts. The VIX usually stays in a range between 20 and 30 . Historically, when the VIX is well above 30, option traders are bearish. The media is another psychological indicator to choose. Many people use the media as a contrarian indicator. In other words, by the time something is reported in the media, you'd better do the opposite. You can also use Mutual Fund Redemptions or Capitulation to help.

## Chapter 3: Selected Companies

Webster's Dictionary defines a company as "a number of persons united for the same purpose; either in private partnership or a business concern". This definition cuts to the chase: A company is unified by a central purpose. If this purpose tangibly relates to the present and future needs of the consumer, then the company's stock has a good chance of surviving. Successful investors strive to combine the details with the big picture to create a whole vision of the company in question from the top down and the bottom up. ([5], page 60)

### 3.1 Selecting Methods

There are a few ways to select a stock, ranging from the obvious to balance sheet detective work. Companies have values the same way many things have value, such as eggs or elephant-foot umbrella stands. We can find thousands of companies that have value, but probably only a handful of them are at a truly good price. Generally value investors don't look at companies that everyone is talking about because by that point, the stock of those companies will have ceased to be a bargain. A company's net income is the whole point of investing in stock. As it profits, the company becomes more valuable, and in turn, its stock price will become more valuable. To discover a company's net income, look at its income statement. It reports in detail a
simple accounting equation:

Equation 3.1: $\quad$ Sales - expenses $=$ net profit

The information you glean should give you a strong idea about the company's current financial strength and whether or not it's successfully increasing sales, holding down expenses and ultimately maintaining profitability. Try to determine whether the company uses its gains wisely, either reinvesting it for continued growth or paying down debt.

When we read about a company, either from the company's literature (annual report) or from media source, be sure to get answers to: Is the company making more net income than the prior year? Are the company's sales greater than the year before? Is the company issuing press releases on new products, services, inventions, or business deals? Knowing how the company is doing, no matter what is happening with the general economy, is obviously important.

Companies that have established a strong niche are consistently profitable. They should have one or more of the following characteristics: A strong brand; High barriers to entry; Research \& develop new products.

When a company goes public, it means that it undergoes an initial public offering (IPO). The IPO is the process by which a private firm seeks the assistance of an investment banking firm to gain financing by issuing stock that is purchased by the public. IPOs generate a lot of excitement, and many investors consider the IPO to be that proverbial ground-floor opportunity. But
because a company's going public is frequently an unproven enterprise, investing in an IPO can be risky. There are two types of IPOs: Start-up IPO is a company that didn't exist before the IPO. In other words, the entrepreneurs get together and create a business plan; A private company that decides to go public, which is a company that already exists and is seeking expansion capital. Obviously, the second type is less risky. Because it's already a proven business, which is a safer bet than a brand-new start-up. For investors, the lesson is clear: Wait until a track record appears before you invest in a company. (Information above are referenced from Stock Investing for Dummies, by Paul Mladjenovic, page 10)

There's a multitude of magazines, newsletters, and web sites touting stocks that outperform or somehow enrich the pockets of anyone owning them. But never follow it blindly. Always research it before putting money.

### 3.2 Selected Companies

Some parts of the introductions of the companies are referenced from Yahoo Finance. [6]

### 3.2.1 Interoil Corporation

The first stock I chose was from the Oil \& Gas industry. The price of crude oil is the engine that drives the energy industry. After I saw the news that the price of one barrel of oil reaches $\$ 60$, I decided to choose one stock from Oil \&

Gas Refining \& Marketing Industry. A reviving global economy, increasing demand for energy, and political turmoil in oil-producing regions, have seen oil prices soar, and the industry has rebounded.

Interoil Corporation is a Canadian company fully integrated niche oil and gas with its principle assets covering refining, petroleum exploration licenses, and retail and commercial distribution assets. InterOil conducts its operations through three major segments: Upstream, Midstream, and Downstream. The Upstream includes the exploration and production of crude oil and natural gas. It owns approximately eight million acres of exploration licenses. The majority of these licenses are located onshore in the eastern Papuan Basin. The Midstream includes the refining of crude oil. The Downstream segment includes distribution of refined products in PNG. The corporation also has a strategic alliance with Shell Overseas Holdings Limited (Shell) to purchase all of Shell's PNG retail and commercial distribution assets in PNG. The acquisition includes all BP's distribution assets, as well as commercial and retail operations in PNG.


Figure 3.1 Basic chart of Interoil Corp stock over past year.

### 3.2.2 British American Tobacco

I chose British American Tobacco PLC as one of my stocks to trade. Despite the health problems, lawsuits, and rising prices associated with cigarettes, there's still something seductive about tobacco -- the profits. British American Tobacco PLC produces tobacco products throughout the world. The company's portfolio includes approximately 300 brands, including Pall Mall, Kent, Dunhill, and Lucky Strike. Its international brand portfolio includes Rothmans, Kool, Benson \& Hedges, State Express 555, Peter Stuyvesant, Viceroy, and John Player Gold Leaf. The company has 87 factories in 66 countries. Announcing the 2004 results, Chairman, Jan du Plessis commented: "2004 has been a good year for the Group, with all regions apart from America-Pacific achieving organic growth at comparable rates of exchange. This demonstrates the fundamental strength provided by British American Tobacco's successful strategy and geographical diversity." As everybody
knows, tobacco industry is the industry that can make profit easily, since cigarettes cost a few but sell high.


Figure 3.2 Basic chart of British American Tobacco PLC over past year

### 3.2.3 Ford Motor Corporation

I chose Ford Motor Company as one of the stocks to trade. It engages in the manufacture and distribution of automobiles, as well as in financing and renting vehicles and equipment. It operates in two sectors, Automotive and Financial Services. Automotive sector sells cars and trucks. It primarily sells Ford, Lincoln, and Mercury brand vehicles, and related service parts in North America, including the United States, Canada, and Mexico; and Ford-brand vehicles and related service parts in South America. Automotive sector also sells Ford-brand vehicles and related service parts in Europe and Turkey, as well as in Asia Pacific and Africa. In addition to producing and selling cars and trucks, Ford Motor provides retail customers with a range of after-the-sale
vehicle services and products. Financial Services sector primarily includes vehicle-related financing, leasing, and insurance. Since this is an old developed company, the type of its stock is kind of conservative. The range of the price of one stock is about $\$ 6$ in the past year, so this stock will be less profitable and less risky.


Figure 3.3 Basic chart of Ford Motor Company over past year

### 3.2.4 Dell Incorporation

The fourth stock I chose to trade was the DELL Inc. Dell, Inc. and its subsidiaries engage in the design, development, manufacture, marketing, sale, and support of a range of computer systems and services worldwide. The company provides products and services that enable customers to build their information-technology and Internet infrastructures. It offers a range of products, including enterprise systems, which include servers, storage, workstations, and networking products; client systems, such as notebook and desktop computer systems; printing and imaging systems; and software and
peripherals, including titles, monitors, plasma and LCD televisions, MP3 players, handholds, and notebook accessories. The company also offers various services, including information technology management services; professional services in technology consulting, application development, solutions integration, and infrastructure design; deployment services; support services; and training and certification services. In addition, it offers a range of financing alternatives, asset management services, and other customer financial services for its business and consumer customers in the United States. The company's customers include large corporate, government, healthcare, and education accounts, as well as small-to-medium businesses and individual customers. Dell markets and sells its products and services directly to its customers. Most of the analysts estimate this stock is the aggressive growth type, because it has the characteristic that the shareholders prefer reinvest their profits for future growth to pay out dividends.


Figure 3.4 Basic chart of Dell over past year

### 3.2.5 Time Warner Incorporation

Time Warner, Inc. operates as a media and entertainment company. It operates in five segments: America Online, Inc. (AOL), Cable, Filmed Entertainment, Network, and Publishing. AOL segment provides interactive services, Web brands, Internet technologies, and e-commerce services in the United States and Europe. Cable segment offers video, high-speed data, and digital phone services. Its video products include digital video, video-on-demand, subscription-video-on-demand, and digital video recorders. The company's digital phone services consist of easy-to-use package of video, high-speed data, and voice services. Filmed Entertainment segment comprises Warner Bros. Entertainment Group, which operates in film, television, and home video businesses, combined with a film library and global distribution infrastructure; and New Line Cinema Corporation that creates and distributes theatrical motion pictures. The company's Turner networks include TBS, TNT, CNN, CNN Headline News, and Cartoon Network channels. It publishes approximately 130 magazines, including People, Sports Illustrated, In Style, Southern Living, Time, Entertainment Weekly, Fortune, Real Simple, What's on TV, and Cooking Light. The company's films include The Lord of the Rings trilogy, the Harry Potter series, Million Dollar Baby, and The Polar Express. Before I bought this stock, there's a news that XM satellite and Warner made a deal, the service will offer live music and comedy through satellite, Internet and third-party channels including video on demand, wireless and HDTV.


Figure 3.5 Basic chart of Time Warner over past year

### 3.2.6 Bank of America Corporation

Then I chose BAC. Banking has never been considered sexy, but the industry has virtually been the embodiment of the hedonistic mantra "bigger, faster, more" -- as in bigger corporations produced by mergers and acquisitions, faster transactions via ATMs and the Internet, and more products, such as insurance and securities. Bank of America Corporation operates as a bank holding company that provides a diversified range of banking and no banking financial services and products in the United States and in selected international markets. The company operates in four segments: Global Consumer and Small Business Banking, Global Business and Financial Services, Global Capital Markets and Investment Banking, and Global Wealth and Investment Management. It offers deposit products, including savings accounts, money market savings accounts, certificate of deposits and IRAs, regular and interest checking accounts, and various business checking options.

BAC is a conservative income stock, the solid company always offers slow but steady growth. The characteristics of this type of companies are: regularly pay out dividends to their shareholders; do not offer dramatic returns.


Figure 3.6 Basic chart of Bank of America over the past year

### 3.2.7 Verizon Communications

The need for mobility, in the workplace as well as in our everyday lives, has driven rapid growth in the wireless communications services industry. More recently, the promise of the mobile Internet has added to imaginative ways that consumers and professionals alike utilize these services, which increasingly are being personalized to appeal to the individual user while fitting on smaller devices. Verizon Communications, Inc. provides communications services primarily in the United States. The company operates through three segments: Domestic Telecom, Domestic Wireless, and Information Services. The Domestic Telecom segment provides local telephone services in 29 states
and the District of Columbia. Its services include voice and data transport, enhanced and custom calling features, network access, directory assistance, private lines, public telephones, digital channel service, and integrated services digital network. The Domestic Telecom segment also provides long distance services, customer premises equipment distribution, data solutions and systems integration, Internet access services, and inventory management services. Verizon provided wireline and wireless communication services to approximately 45.5 million voice and data customers in the United States, as of April 27, 2005. In addition, the company offers wireline and wireless communication services in the Americas and Europe.


Figure 3.7 Basic chart of Verizon Communications, Inc. over the past year

### 3.2.8 Denny's Corporation

The restaurant industry is a classic mature market. Companies face stiff competition and low profit margins. There are about 8 million restaurants in the
world and some 300,000 restaurant companies. Denny's Corporation, or Denny's, is America's largest family-style restaurant chain in terms of market share and number of units. Not like the fast food sector, Denny's is a family restaurant included in full-service restaurants. Denny's Corporation, through its wholly owned subsidiaries, Denny's Holdings, Inc. and Denny's, Inc., operates a restaurant chain. The company, through its restaurants, offers traditional American-style food, such as breakfast items, appetizers, sandwiches, dinner entrees, and desserts. Denny's restaurants generally are open 24 hours a day, 7 days a week. This "always open" operating platform is a distinct competitive advantage. As of December 29, 2004, the company's restaurant chain consisted of 553 company owned units and 1,050 franchised and licensed units, with operations in the United States, Canada, Guam, New Mexico, and Puerto Rico. Denny's Corporation is headquartered in Spartanburg, South Carolina.


Figure 3.8 Basic chart of Denny's Corp. over the past year

### 3.2.9 Thomas Nelson, Incorporation

Everybody needs to read books, so I would like to see how the publishing industry acts in the stock market. It's a Brave New World for the publishing industry as it attempts to keep pace with the arrival of the digital age. Thomas Nelson, Inc. engages in the publication, production, and distribution of Christian and inspirational Bibles and books in the United States and internationally. It sells hardcover and trade paperback books emphasizing Christian, inspirational, and family value themes. The company publishes books under several imprints. It offers inspirational, trade, gift, children's, and reference books. Thomas Nelson distributes its books primarily through Christian bookstores, general bookstores, mass merchandisers, and direct sales to consumers, churches, and ministries. Nelson Thomas distributes its products internationally in South America, Europe, Australia, New Zealand, Africa, the Far East, Mexico, and Canada.


Figure 3.9 Basic chart of Thomas Nelson, Inc. over the past year

### 3.2.10 Northwest Airlines

Pummeled by poor profits and scarred from a terrorist attack against the US, the airline industry finds itself on a bumpy course. In an effort to head off a drop in the number of passengers and rising costs for security, companies laid off staff and trimmed services. Northwest Airlines Corporation, through its subsidiary, Northwest Airlines, Inc., engages in the commercial transportation of passengers and cargo. It operates domestic and international route networks and directly serves approximately 750 cities in 120 countries in the continents of North America, Asia, and Europe. The company's subsidiary, MLT, Inc., is a vacation wholesale company that develops and markets Worry-Free Vacations, which features air transportation, hotel accommodations, and car rentals; markets and supports Northwest's WorldVacation packages; and offers leisure fares to various domestic and international destinations. In addition, through its subsidiary, Orbitz, Inc., the company allows travelers to purchase airline, hotel, car rental, and other travel related services online. It has domestic and international alliance with Continental Airlines, Inc. and Delta Air Lines, Inc. It's at the $4^{\text {th }}$ position on the Top Airlines Ranked By Revenue Passenger Miles on Yahoo Finance.


Figure 3.10 Basic chart of Northwest Airlines over the past year

## Chapter 4: Trading Simulation

### 4.1 Trading Diary

I started the trading process on July $5^{\text {th }}, 2005$. I bought 500 shares of the IOC stock, and I put about 14,500 dollars into it. At the beginning, I planned to invest roughly 40,000 dollars in each stock, but I couldn't because in the game there's a Diversification Rule, which limits the percentage of any one security in the portfolio to $25 \%$. The price grew over 1 dollar later in the day, so I decided to sell 300 shares and leave the rest to make a longer observation. Because it was my first trade, I didn't have many experience, the 300 shares were sold separately, 200 stocks were sold at the price 29,74 dollars; the other 200 shares were sold at 30.52 dollars. In this first trade, I made a profit of 300 dollars.

On July $6^{\text {th }}$, I bought 500 shares of the BTI stock, the price is 38.46 dollars per share. The price started to drop in the day so I decided to hold it and to see if it had a chance to grow in the future.

On July $8^{\text {th }}$, I bought another 500 shares of IOC stocks because it seemed that the oil price would continue growing. I bought 500 shares of the F stock, because it is an old company, I considered it as a conservative stock. So I put only 5,000 dollars just to see how the auto industry would act in the stock market. After a weekend, it slowly grows 0.4 dollar and I started to worry if it's already an upper limit of this stock. So on July $11^{\text {th }}$, I sold all the 500 shares and made a profit of 160 dollars.

After one day, on July $13^{\text {th }}$, I bought 1200 shares of the TWX stock, which cost me 20,000 dollars.

On July $14^{\text {th }}$, the next day, I sold all of the TWX stock and made over 400 dollars. Then I bought 4000 shares of NWAC stock. Once again I put roughly 20,000 dollars. Actually, the price of this stock surprised me, it's even less than 4 dollars per share.

On July $14^{\text {th }}$, both of the TNM and the NWAC had grown after on day, so I sold both of them. Because NWAC was a cheap stock, so $\$ 0.60$ more per stock could made a big profit, I got about 2500 dollars from the two stocks.

I bought 500 shares of TNM shares on July $26^{\text {th }}$. I put only 10,000 dollars, because I thought paper production might not have much potential as other stocks.

In the next week, August $1^{\text {st }}$, I sold out all of the BTI stock and made more than 700 dollars. This stock has finally gone up after half a month. Then I bought 500 shares of DELL stocks, BAC stocks and VZ stocks, each of them cost me 20,000 dollars.

On August $2^{\text {nd }}, 1$ sold out DENN, more than 400 dollars profits is already a not bad result for the restaurants industry.

On August $3^{\text {rd }}$, I bought 500 shares of DELL, as usual I put 20,000 dollars.
On August $8^{\text {th }}$, I sold the VZ stock, and I lost 500 dollars, the market didn't go well since the beginning of this month, and the Telecom Industry becomes more and more competitive may be another reason of losing money.

This is the last week of my stock trading; I was still in a bad time of the market. The number of the Nasdaq index is always in a red color, so I had to sell the rest of my stock, including the first stock IOC I bought long time ago. I sold the BAC stocks on August $11^{\text {th }}$, which took me 500 dollars. The DELL stock made me lose 400 dollars. And on August $12^{\text {th }}$, I lost 2,835 dollars from the IOC stock, and 1,000 dollars from the TNM stock.

| Stocks, Date | Trade Type | Symbol | Quantity | Price | Total Cash Value | Balance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8/12/2005 | Sell Market | IOC | 700 | \$25.10 | \$17550.01 | \$98,959.23 |
| 8/12/2005 | Sell Market | TNM | 500 | \$19.95 | \$9955.01 | \$98,927.73 |
| 8/11/2005 | Sell Market | DELL | 500 | \$39.86 | \$19910.01 | \$97,664.14 |
| 8/11/2005 | Sell Market | BAC | 500 | \$42.83 | \$21395.01 | \$97,925.13 |
| 8/8/2005 | Sell Market | $\underline{\mathrm{V}}$ | 500 | \$33.32 | \$16640.01 | \$97,814.02 |
| 8/3/2005 | Buy Market | DELL | 500 | \$40.63 | \$20,334.99 | \$98,150.74 |
| 8/2/2005 | Sell Market | DENN | 2000 | \$5.95 | \$11,880.01 | \$98,917.73 |
| 8/1/2005 | Buy Market | $\underline{\mathrm{V}}$ | 500 | \$33.99 | \$17,014.99 | \$97,664.14 |
| 811/2005 | Buy Market | BAC | 500 | \$43.72 | \$21,879.99 | \$97,684.13 |
| 8/1/2005 | Sell Market | BTI | 500 | \$40.07 | \$20,015.01 | \$98,704.12 |
| 8/1/2005 | Buy Market | DENN | 2000 | \$5.70 | \$11,419.99 | \$100,919.11 |
| 7/26/2005 | Buy Market | TNM | 500 | \$21.71 | \$10874.99 | \$100,105.06 |
| 7/14/2005 | Sell Market | NWAC | 4000 | \$5.18 | \$20700.01 | \$101,092.00 |


| $7 / 14 / 2005$ | Sell Market | TWX | 1200 | $\$ 16.62$ | $\$ 19,924.01$ | $\$ 99,864.09$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $7 / 13 / 2005$ | Buy Market | NWAC | 4000 | $\$ 4.63$ | $\$ 18519.99$ | $\$ 99,903.15$ |
| $7 / 13 / 2005$ | Buy Market | TWX | 1200 | $\$ 16.25$ | $\$ 19,519.99$ | $\$ 99,912.08$ |
| $7 / 11 / 2005$ | Sell Market | E | 500 | $\$ 10.76$ | $\$ 5,360.01$ | $\$ 99,810.07$ |
| $7 / 8 / 2005$ | Buy Market | E | 500 | $\$ 10.36$ | $\$ 5,199.99$ | $\$ 99,949.06$ |
| $7 / 8 / 2005$ | Buy Market | IOC | 500 | $\$ 29.35$ | $\$ 14,694.99$ | $\$ 99,969.05$ |
| $7 / 6 / 2005$ | Buy Market | $\underline{\text { BTI }}$ | 500 | $\$ 38.46$ | $\$ 19,249.99$ | $\$ 100,610.00$ |
| $7 / 5 / 2005$ | Sell Market | $\underline{\text { IOC }}$ | 100 | $\$ 30.52$ | $\$ 3,032.01$ | $\$ 100,162.00$ |
| $7 / 5 / 2005$ | Sell Market | $\underline{\text { IOC }}$ | 200 | $\$ 29.74$ | $\$ 5,928.01$ | $\$ 100,056.00$ |
| $7 / 5 / 2005$ | Market Open Buy | $\underline{\text { IOC }}$ | 500 | $\$ 29.26$ | $\$ 14,649.99$ | $\$ 99,980.01$ |

Table 4.1: Table of the Trade History

### 4.2 Trading Result

The majority of my trades have gone fine. The first half part of the trades went well, half of the stocks were profitable. After about three weeks, I started to lose money, the analysis will be given in the next chapter.

The industries that made profits were: Restaurants, Auto Manufacturers, Cigarettes, Entertainment - Diversified, Major Airlines.

The industries that lost money were: Oil \& Gas Refining \& marketing, Money Center Banks, Telecom Services - Domestic, Publishing - Books, Personal Computers.

The final balance showed that I lost some money, a little more than 1,000
dollars. Little does one think, more than half of the money I have lost were from the oil industry. The final balance contained a 19,99 dollars fees each time I bought or sold stocks. But what I have learned from the short term trading simulation was more important and valuable.

## Chapter 5: Analysis

### 5.1 Fundamental Analysis

When you buy a stock, you are not simply buying a piece of paper; rather, you are buying a piece of a corporation. So, you need to study the corporation to decide whether it is a worthwhile investment. By using fundamental analysis, you should be able to pick out stocks that offer you the best chance for profits. Nevertheless, fundamental analysis is merely a tool to help you find and evaluate which stocks offer good value. The more methods we learn, however, the better.

Learning everything you can about the industry. The first thing an investor has to determine when engaging in fundamental analysis is what industry to look at.

Identify the leading company. Once you have identified the industry you want to invest in, you want to choose companies that are stronger and more profitable in their competition. Choose the stores that have name brand recognition and that advertise heavily. If you are too lazy to do all the researches, the financial newspaper Investor's Business Daily rates the relative strength of stocks in leading industries.

The Balance Sheet. This is a report of the financial condition of a business, including items that only an accountant could love. But, you shouldn't waste plenty of dollars investing in a company unless you know a few facts about it. You can find the balance sheet at the back of a company's
annual report.

### 5.2 Analysis for the Reasons to Get Profit

On the first trade, I made a profit of about 1 dollar per share of IOC stock in one day. The reasons of the fast growing of IOC might be multiple, but I think a very important reason should be the fast growing of the price of oil in those days. As an investor, this is a really lucky phenomena and I should have sold them all or at least most of them. But as I saw it grew a lot when I just began to trade, even with plenty of knowledge, I started make'light of the risk in stock market more or less. And the fact was that, after July $5^{\text {th }}$, the price of IOC started to drop, I put myself in a much more difficult position.

I think the trade of $F$ stock was more successful. Ford is a really old company, its stock should be more conservative. This stock can be profitable, but most of the time investors will not earn a lot or lose a lot. Starting on the today I sole the stocks, the automaker says that it will offer a brand-new hybrid vehicle, the company's second, almost exclusively online. This news was considered as "an Internet-friendly approach to tapping into the craze that led to success for its Ford Escape hybrid."

I decided to buy stocks from TIME WARNER because I wanted to see how the entertainment business performs in the stock market. Everything went all right in this trade. I think because the entertainment companies always have many profitable movies come out for the summer vacation, and now it's the
best time for people to go to cinema to pass time.

The NWAC made me more than 2,000 dollars surprised me. Then I realized that now every industry is somehow related to the oil price. Airline stocks were helped by crude oil prices, which fell below \$59 a barrel after Hurricane Dennis caused less damage in the Gulf of Mexico than expected. After this trade, the price of the NWAC stock fall again after the price of the crude oil reached its new high. From the chart of NWAC we can see how the airlines are influenced after the news of the change of the crude oil per barrel came out. By the news in August $12^{\text {th }}$, Crude oil rose above $\$ 66$ a barrel for the first time after a fire at a Sunoco Inc. pipeline in Texas and a power failure at ConocoPhillips's Illinois refinery raised concern about shortages in U.S. fuel supplies. The short-term traders need to be really careful these days if they plan to invest in the industries that depend on oil a lot.


Figure 5.1: Overview of NWAC over last 3 months

Although London got attacked by the terrorists last month, this tobacco company from Britain performed well. Conditions in Canada and Japan remained very difficult, but profit was also boosted by the sale of brands in Malta, Cyprus and Lithuania. On July $28^{\text {th }}$, British American Tobacco PLC posted a 37 percent rise in quarterly earnings. After this news came out, the price finally grew up twenty days after I had bought it, and I sold it on August $1^{\text {st }}$ when it rose above my buy price.


Figure 5.2: Overview of BTI over last three months

Denny's is a company that is more close to people's normal life. I have stayed in USA for less than one year, but I already tried the T-bone in Denny's as breakfast. As the nation's largest full-service, family-style restaurant chain, said Thursday that sales at stores open at least one year, or same-store sales, rose 1.6 percent in July. Guest check averages rose 4.3 percent, helping to
offset a 2.6 percent decline in monthly guest counts.

| Date | Open | High | Low | Close | Volume | Adj Close* |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2-Aug-05 | 5.69 | 5.98 | 5.62 | 5.86 | 772,700 | 5.86 |
| 1-Aug-05 | 5.65 | 5.74 | 5.60 | 5.70 | $1,138,400$ | 5.70 |

Table 5.1 Table of the historical prices of DENN during the trade process

### 5.3 Analysis for the Reasons to Lose Money

The reason I decided to buy TNM stocks was very simple. I like to read books, so I was curious how the paper production would perform. Since I was not familiar with the US market, I chose a stock that had the lowest point from the Analyst Opinion in Yahoo Finance.com (as the mean recommendation index goes from 1.0 to 5.0 , it means the analysts recommend from strong buy to strong sell). From the news on August $9^{\text {th }}$, Thomas Nelson, Inc. a said second-quarter net income declined to $\$ 700,000$, or 5 cents a share, from $\$ 1.9$ million, or 12 cents a share, in the year-earlier quarter. Revenue for the period declined $7 \%$ to $\$ 45.6$ million due to the absence of major releases and a slowdown in the book retailing market. And I think this is the reason for losing money.


Figure 5.3: Overview of TNM over last three months

Verizon Wireless is one of the best Telecom companies in US. It made me lost almost 500 dollars. From the analysis by London Marketwatch, it may because it had a flaw in its online billing system that could have allowed customers to view account information on other customers, If I have enough time I would choose not to sell the stocks this early.

| Date | Open | High | Low | Close | Volume | Adj Close* |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- |

Table 5.2: The historical prices of VZ during the days of tading

In the last term of my previous school year, I took a course called Macroeconomics. To pass this course, I have to know the basic knowledge of economics, and I also need to read Wall Street Journal to use the academic knowledge in the realistic life. There was an article in the journal which introduced the DELL Inc, and it gave me an impression that it was always a profitable company. So, when I decided to invest in the personal PC industry, I chose DELL without much consideration. The result proved that I was wrong. Dell Inc. shares slumped as much as $9 \%$ Friday as Wall Street took the No. 1 personal-computer company to task for missing sales expectations for the second quarter and issuing a weak forecast for the third quarter. From a conference call with reporters, Chief Executive Kevin Rollins said Dell felt the impact of its own aggressive pricing in the consumer market and weak sales to the federal government. So I think I had over confidence of this stock, it proved too good at that game this time around, slashing prices on low-end PC's too much in response to sluggish sales. And the high crude price also had bad effect to the whole market. Luckily, I sold all the stocks on Thursday, the later index showed that there was a big drop on Friday, 2.94 dollars per share (7.43\%).


Figure 5.4: Overview of DELL over last five days

I put IOC as the last stock to analysis in this chapter. From the process of this stock, I had several things need to introspect.

1. When I bought IOC on July $5^{\text {th }}$, it grew up for almost 3 dollars per share in one day, this was an amazing growth but I decided to sell only 300 shares when I could get more than one dollar per stock. After the stock reached its peak, I thought it would grow more so I bought another 500 shares. This decision became the main reason that after all the investment completed, my balance was less than 100,000 dollars. Greed is one of the worst weaknesses for human being. I missed the best time of this stock in three months. In the table below, I showed the historical prices on the days I bought or sell the IOC stocks.

| Date | Open | High | Low | Close | Volume | Adj Close* |
| ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| 12-Aug-05 | 24.99 | 25.15 | 24.10 | 24.26 | 151,800 | 24.26 |
| 8-Jul-05 | 29.90 | 30.24 | 27.71 | 28.75 | 335,900 | 28.75 |
| 5-Jul-05 | 29.26 | 32.07 | 29.10 | 31.60 | 698,800 | 31.60 |

Table 5.3: The historical prices of IOC on the days of trading
2. Even the oil price continued growing, it still cannot guarantee that the oil industry would grow. This is the first stock I bought, and it is also the one made me lose the most money. All the news and indexes showed that it would perform well. So no matter how the price was falling, I still feel confident of making profit from this stock. Now I deeply understand that invest in stock market is risky, nobody can make sure how it would perform, and all the evidence can only show us the company's current situation.


Figure 5.5: Overview of IOC over last five days

## Chapter 6: Conclusions

### 6.1 How much I have reached the goals

This is an IQP written during the summer vacation and outside USA. Because of the limit of time and the number of people, I could only complete the short-time trades. After learning the basic ideas about what are the normal trading methods, I started my trades last more than one month. When the simulation was done, I concluded how the short-term trading had performed.

The most important goal of this project is to find out how the market works and teach students about it.

Even it's just a simulation, getting profits during the process can still bring me a lot of fun. Gaining money always made me feel that what I did was a successful trade, and it also made me ignore to think more about why it happened. Losing money always depressed me in the beginning, but the experience and the analysis after the depression were more useful.

Besides the knowledge I got from the trades, the experience of writing this long project would also be a treasure to me. This is the longest literal product I have ever made. After this summer, I have a much better idea about how to plan everyday. A plan less life would make me cannot have a serious work time or a happy playtime, especially when writing a project, to plan carefully will make many good effects. So this project and my advisor gave me a good lesson of how to be a better student.

I feel that my goal was met. I got many learning experiences.

### 6.2 Summary of the whole project

After reading three books and a three-week trading simulation, this project was finally completed. I've learned a lot from interviewing the trades in many kinds of industries.

I think there is nothing wrong with or unusual about making mistakes. Actually, the biggest mistake we can make is not recognizing that we made one. To invest in the stock market, for a variety of reasons, sometimes I hold onto my losing stock too long. For example, the IOC stock had dropped more than 4 dollars a share when I finally decided to sell it. And this example also taught me not to let the winning stocks turn into losers. Trillions of dollars would have been saved in the market if people had sold some of their stocks on the way up.

Most experienced investors and traders know that we learn more from our losers than from our winners. One of the worst things that happened to many novice investors in the late 1990s was that they made money in the market too quickly and easily. It is worth losing a little money in the market today to protect us from losing a fortune tomorrow.

If I become an investor, I can learn a lot by looking at a stock chart, using technical indicators, and looking at stock patterns. Both technical and fundamental analysis can be used. Overall, from this project I gained both
knowledge and interest of investing in the stock market, this may be the base for my earning money if I can invest in the future.

## References

1. Michael Sincere, Understanding Stocks, The McGraw-Hill.
2. Paul Mladjenovic, Stock Investing for Dummies, Wiley Publishing Inc.
3. http://www.nasdaq.com
4. http://www.sharechat.co.nz/
5. George A. Fontanills, Tom Gentile, The Stock Market Course, Wiley Trading.
6. http://finance.yahoo.com/
7. http://www.Zacks.com
