

ENTERED

Project Number: DZT0102<sup>549</sup>

01A013I

## STOCK MARKET ANALYSIS

An Interactive Qualifying Project Report submitted to the Faculty of the Worcester

Polytechnic Institute in partial fulfillment of the Requirements for the Degree of

Bachelor of Science

By

  
GAURAV RAO

Date: 28<sup>th</sup> August, 2001

Approved by:

  
Prof. DALIN TANG

## **Abstract**

The project is developed to provide an insight to anyone who intends to understand and make an initial entry into the US stock market. It involves an exercise of investing some imaginary money in some widely held US stocks in different sectors. At the end of the holding period, the performances of the stocks are analyzed and a general judgment of the present market condition is reached. Based on the past and present trends, a future prediction of the market condition is reached. I believe this project could be a good “stepping-stone” for someone who wants to be a real stock market investor in the future.

## **Acknowledgments**

My infinite appreciation goes to my advisor Prof. Dalin Tang for all his guidance in this project. I would also like to extend my gratefulness to my father for pushing me to be more curious about the current and future world issues and market conditions.

## TABLE OF CONTENTS

|   |    |
|---|----|
| 1. A Statement of Specific objectives.....    | 1  |
| 2. Stocks Chosen.....                         | 2  |
| 3. Stock and Market Performance Analysis..... | 28 |
| 4. Conclusion.....                            | 57 |
| 5. Epilogue.....                              | 61 |
| Information Resources.....                    | 63 |
| Glossary.....                                 | 64 |

## **CHAPTER 1:**

### **A STATEMENT OF SPECIFIC OBJECTIVES**

1. To analyze the stock market and to understand its co-relation with the financial market condition of USA based on a study of some specifically chosen stocks.
2. To draw reasonably accurate reasons as to why the values of the selected stocks fluctuated with respect to the market as a whole and also with respect to sectors, institutions, companies etc.
3. To generally predict future market conditions with respect to market as a whole and also with respect to sectors, institutions, companies etc.

**CHAPTER 2:**  
**STOCKS CHOSEN**

## 1. STOCKS CHOSEN

In this chapter I have given details of the stocks chosen for the project. I chose the following twelve stocks from various sectors of the market. By choosing the stocks from a wide number of sectors the performance of the portfolio gave a broader and a more accurate picture of the performance of the economy and the stock market as a whole.

| <b>NAME OF COMPANY</b> | <b>TICKET SYMBOL</b> | <b>INDUSTRY</b>                      | <b>SECTOR</b> |
|------------------------|----------------------|--------------------------------------|---------------|
| Pfizer                 | PFE                  | Major Drugs                          | Healthcare    |
| Johnson & Johnson      | JNJ                  | Major Drugs                          | Healthcare    |
| Exxon Mobil Corp       | XOM                  | Oil-Gas<br>Integrated                | Energy        |
| Texaco Inc.            | TX                   | Oil-Gas<br>Integrated                | Energy        |
| Oracle Corp            | ORCL                 | Software &<br>Programming            | Technology    |
| Microsoft Corp         | MSFT                 | Software &<br>Programming            | Technology    |
| EMC Corp               | EMC                  | Computer<br>Storage                  | Technology    |
| Lucent Technologies    | LU                   | Communication<br>Equipment           | Technology    |
| Nortel Networks        | NT                   | Communication<br>Equipment           | Technology    |
| Wal-Mart Stores Inc.   | WMT                  | Retail<br>(Department &<br>Discount) | Services      |
| K Mart Corp            | KM                   | Retail<br>(Department &<br>Discount) | Services      |
| Network Appliance Inc. | NTAP                 | Data Storage                         | Technology    |

Against each stock I have presented a gridline chart for a five-year period for each company. This was mainly because the market condition rapidly changed in the last five years. During the mid-1990s the US economy experienced very rapid growth particularly in the computer and hi-tech industry. Hence the overall market grew very rapidly. I also chose 1-year charts because in the last one year the dot-com or rather hi-tech bubble “burst” so the market changed dramatically again. During this past one-year period, the market turned bearish and there was more contraction than expansion. This is quite evident in the charts presented. I also included the closing prices, PE and the well-known economic indicator Dow Jones Industrial Average for the four-week period. This was done to be able to judge the market condition in the four-week period when in comparison with the 5-year and 1-year periods. With the 5-year, 1-year and 4-week periods one would be able to generally understand how the US economy has performed

in the past, how it is performing in the present and how it may perform in the near future. The details mentioned above are presented below sector-wise and stock-wise:

## **BIOTECH SECTOR**

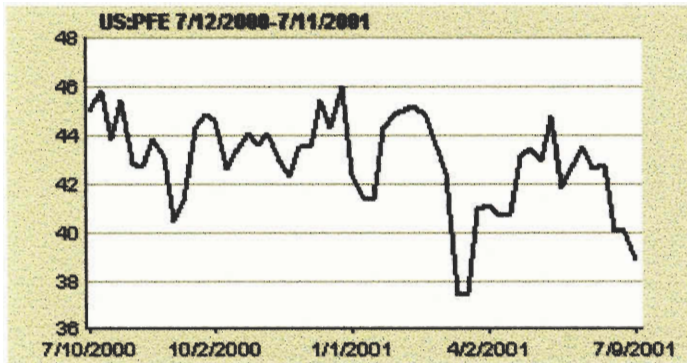
The Biotech Industry is predicted to be the leading industry of the 21st century. Rapid Research and development of biotechnology is taking place. Numerous startups with emphasis on research are springing up in the major economies of the world i.e. US and Europe. The coming Biotech boom is predicted to replicate the software and computer technology boom of the 1990s. Most startups and other heavy weights of the biotech industry are involved intensely in research to come up with new products. They also hope to deliver the product to the market as soon as possible. Very rapid expansion and development of this industry is predicted. This translates into large rises of stock prices of the companies that are predicted to be successful. Hence the investors have a good opportunity to invest in "fruitful" biotech companies in the hope of good capital gains on their investments. This is the main reason as to why I chose biotech stocks.

### **Pfizer Inc.**

This a drug manufacturing company. Pfizer, which in 2000 merged with former rival Warner-Lambert, is now a card-carrying member of the establishment, firmly ensconced as one of the top five drugmakers in the world (Merck is #1). The contention-fraught merger created a company whose products include such prescription drugs as impotence treatment Viagra, cardiovascular drug Norvasc, and cholesterol-lowering Lipitor, as well as such consumer brands as Visine, BenGay, Listerine, Certs, Dentyne, Efferdent, and Zantac (which are united under the Warner-Lambert nameplate). Pfizer also has units that make animal health products.







Initial Investment: \$21605.00

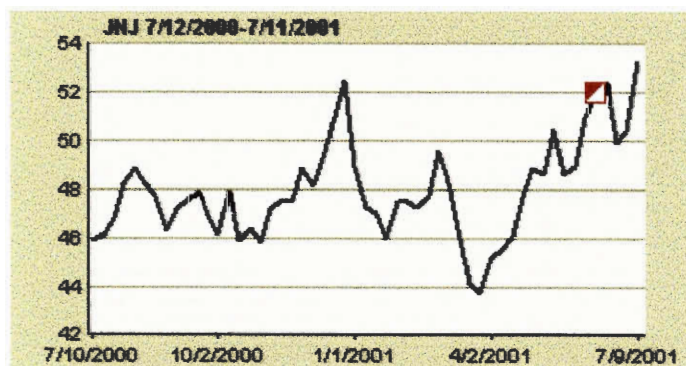
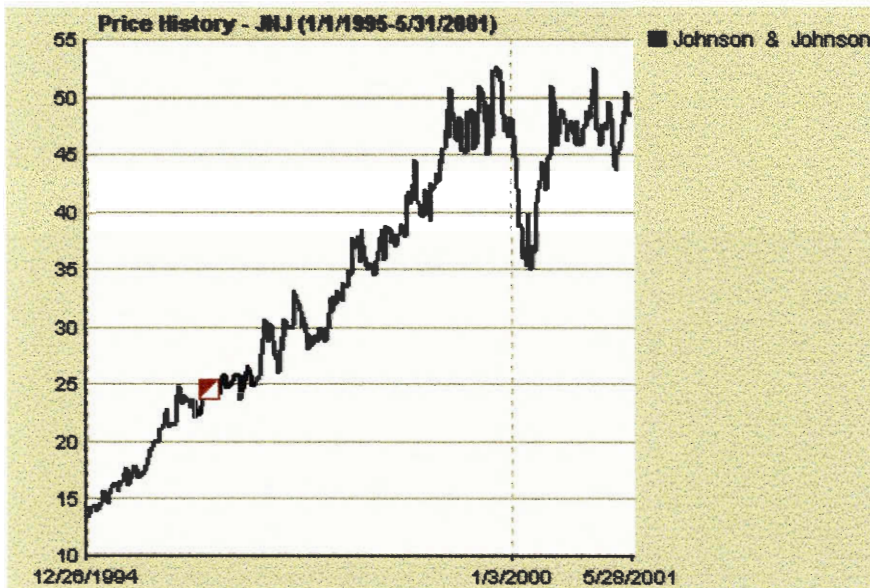
Number of Shares: 500

Stock beta: 0.7

| Days       | Close | P/E   | DJIA     |
|------------|-------|-------|----------|
| 06/12/2001 | 43.21 | 44    | 10977.00 |
| 06/13/2001 | 43.11 | 44    | 10922.09 |
| 06/14/2001 | 42.93 | 44    | 10948.38 |
| 06/15/2001 | 42.66 | 46    | 10871.62 |
| 06/18/2001 | 42.63 | 46    | 10623.64 |
| 06/19/2001 | 44.00 | 47    | 10596.67 |
| 06/20/2001 | 44.50 | 47.80 | 10647.33 |
| 06/21/2001 | 44.87 | 48.40 | 10715.43 |
| 06/22/2001 | 42.79 | 47    | 10604.59 |
| 06/25/2001 | 42.04 | 46.50 | 10504.22 |
| 06/26/2001 | 42.21 | 45.70 | 10472.48 |
| 06/27/2001 | 41.57 | 45    | 10434.84 |
| 06/28/2001 | 42.15 | 45.20 | 10566.21 |
| 07/02/2001 | 40.05 | 44    | 10502.40 |
| 07/03/2001 | 40.90 | 44    | 10593.72 |
| 07/05/2001 | 39.76 | 44    | 10479.86 |
| 07/06/2001 | 40.55 | 44.70 | 10208.64 |

## Johnson & Johnson

One of the world's largest, most diversified health care product makers, the company operates in three sectors: Consumer products (Tylenol and Motrin analgesics, Reach toothbrushes, Band-Aid bandages); professional products (ACUVUE contact lenses, surgical instruments, joint replacements); and pharmaceuticals (Ergamisol cancer treatment, Ortho-Novum oral contraceptives). The company, which has announced its intention to buy ALZA Corp. and the diabetes-care businesses of Inverness Medical Technology, expands its product line by acquiring or partnering with smaller firms that develop new technologies to which J&J adds the marketing muscle.



Initial Investment: \$51005.00

Number of Shares: 500

Stock beta: 0.6

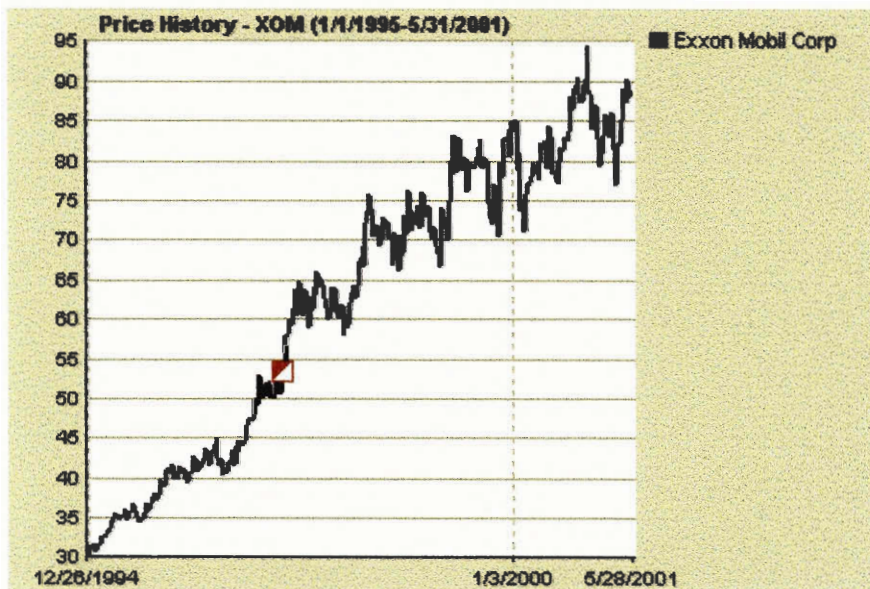
| Days       | Close  | P/E   | DJIA     |
|------------|--------|-------|----------|
| 06/12/2001 | 102.01 | 29    | 10977.00 |
| 06/13/2001 | 101.37 | 29    | 10922.09 |
| 06/14/2001 | 101.80 | 29    | 10948.38 |
| 06/15/2001 | 50.71  | 14    | 10871.62 |
| 06/18/2001 | 52.04  | 30    | 10623.64 |
| 06/19/2001 | 53.28  | 29.60 | 10596.67 |
| 06/20/2001 | 53.61  | 30.30 | 10647.33 |
| 06/21/2001 | 53.02  | 30.50 | 10715.43 |
| 06/22/2001 | 52.39  | 30    | 10604.59 |
| 06/25/2001 | 51.60  | 29.80 | 10504.22 |
| 06/26/2001 | 51.11  | 29.30 | 10472.48 |
| 06/27/2001 | 50.70  | 29    | 10434.84 |
| 06/28/2001 | 52.20  | 28.80 | 10566.21 |
| 07/02/2001 | 50     | 28    | 10502.40 |
| 07/03/2001 | 51.19  | 29    | 10593.72 |
| 07/05/2001 | 50.91  | 29    | 10479.86 |
| 07/06/2001 | 52.42  | 29.60 | 10208.64 |

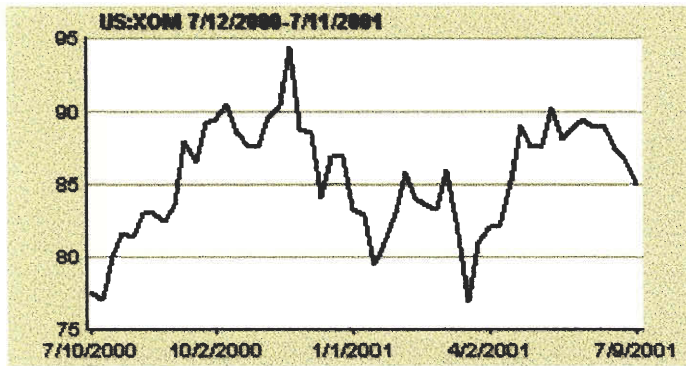
## OIL (ENERGY) SECTOR

The main reason as to why I chose the Oil Stocks was that the Oil industry seems to have been pretty stable in the last five years. The prices have barely dropped. They also seem to be hardly affected by the present economic slowdown the country is in. The U.S. economic slowdown as been confirmed by the present Federal Reserve chairman Alan GreenSpan. I am hoping the oil stocks are going to remain stable and continue to rise in the near future.

### **Exxon Mobil Corp**

Exxon Mobil is the world's largest integrated oil company (ahead of Royal Dutch/Shell). Exxon Mobil engages in oil and gas exploration, production, supply, transportation, and marketing around the world. It has proved reserves of just less than 21 billion barrels of oil equivalent. Exxon Mobil's refineries can handle more than 6 million barrels per day, and the company operates more than 40,000 service stations in 118 countries under the Exxon, Esso, and Mobil brands (including more than 16,000 in the US). Exxon Mobil also produces and sells petrochemicals, and it has interests in coal mining, minerals, and electric power generation.





**Exxon Mobil Corp**

Initial Investment: \$44695.00  
 Number of Shares: 500

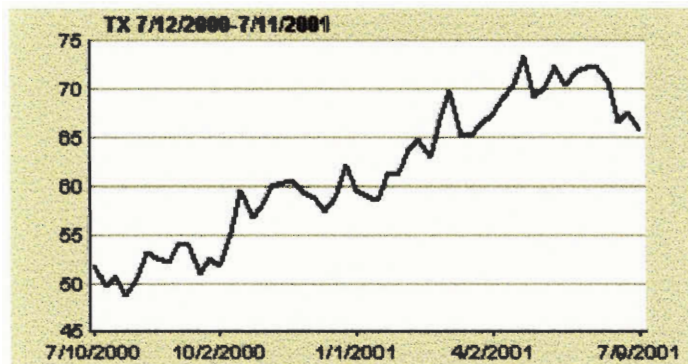
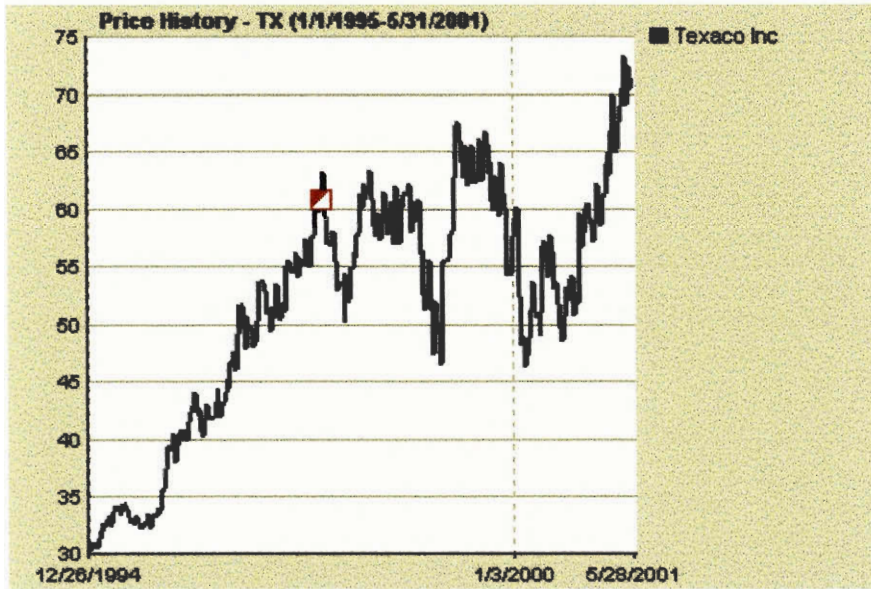
Stock beta: 0.4

| Days       | Close | P/E   | DJIA     |
|------------|-------|-------|----------|
| 06/12/2001 | 89.39 | 16    | 10977.00 |
| 06/13/2001 | 89.70 | 16    | 10922.09 |
| 06/14/2001 | 90.12 | 16    | 10948.38 |
| 06/15/2001 | 89.98 | 16    | 10871.62 |
| 06/18/2001 | 89.90 | 16    | 10623.64 |
| 06/19/2001 | 88.37 | 17.30 | 10596.67 |
| 06/20/2001 | 87.73 | 17.20 | 10647.33 |
| 06/21/2001 | 88.41 | 17.10 | 10715.43 |
| 06/22/2001 | 88.91 | 16    | 10604.59 |
| 06/25/2001 | 88.52 | 17.30 | 10504.22 |
| 06/26/2001 | 88.56 | 17.30 | 10472.48 |
| 06/27/2001 | 87.22 | 16    | 10434.84 |
| 06/28/2001 | 86.82 | 17.00 | 10566.21 |
| 07/02/2001 | 87.35 | 16    | 10502.40 |
| 07/03/2001 | 87.70 | 16    | 10593.72 |
| 07/05/2001 | 87.00 | 17    | 10479.86 |
| 07/06/2001 | 86.10 | 16.90 | 10208.64 |



## Texaco Inc.

The #2 US integrated oil company (after Exxon Mobil), Texaco has reserves of 4.9 billion barrels of oil equivalent. With a refining capacity of 3.1 million barrels per day, the company and its affiliates market fuel and lubricants at more than 39,000 gas stations worldwide. Two joint ventures hold Texaco's US refineries and service stations: Equilon (44%, with Shell) and Motiva (33%, with Shell and Saudi Aramco). Texaco owns half of Caltex, its international refining and marketing joint venture with Chevron. ChevronTexaco would be the world's fourth-largest integrated oil company, behind Exxon Mobil, Royal Dutch/Shell, and BP.



Initial Investment: \$36125.00

Number of Shares: 500

Stock beta: 0.3

| Days       | Close | P/E   | DJIA     |
|------------|-------|-------|----------|
| 06/12/2001 | 72.25 | 14    | 10977.00 |
| 06/13/2001 | 73.10 | 14    | 10922.09 |
| 06/14/2001 | 73.20 | 14    | 10948.38 |
| 06/15/2001 | 72.70 | 14    | 10871.62 |
| 06/18/2001 | 72.58 | 14    | 10623.64 |
| 06/19/2001 | 71.46 | 14    | 10596.67 |
| 06/20/2001 | 70.75 | 13.90 | 10647.33 |
| 06/21/2001 | 69.70 | 13.80 | 10715.43 |
| 06/22/2001 | 70.80 | 14    | 10604.59 |
| 06/25/2001 | 70.93 | 13.80 | 10504.22 |
| 06/26/2001 | 70.30 | 13.80 | 10472.48 |
| 06/27/2001 | 67.90 | 13    | 10434.84 |
| 06/28/2001 | 65.75 | 13.20 | 10566.21 |
| 07/02/2001 | 66.60 | 13    | 10502.40 |
| 07/03/2001 | 67.44 | 13    | 10593.72 |
| 07/05/2001 | 13.20 | 13.20 | 10479.86 |
| 07/06/2001 | 67.21 | 13.10 | 10208.64 |

## SOFTWARE AND TELECOMMUNICATION SECTOR

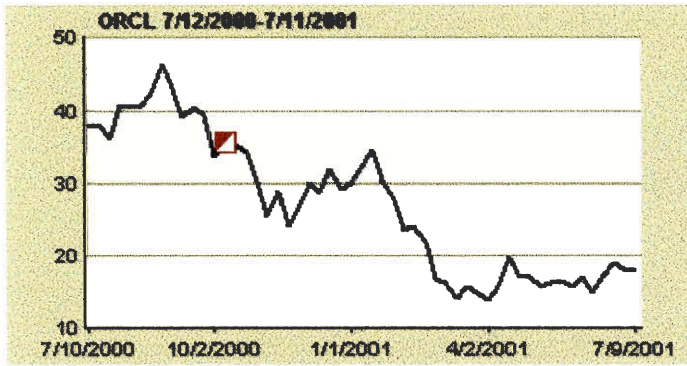
The software and telecom companies contributed significantly in the economic boom of the 1990s. Numerous startups had a lot of products being delivered to the market at rapid speed. There was fierce competition among companies but yet this sector of the economy registered phenomenal growth. Recently, the U.S economy has drastically slowed down due to inflation, excess product inventory, lack of demand of products of certain tech companies, rising energy costs etc which has very adversely affected the performance of the sector. The Federal Reserve has however, made many interest rate cuts and the government made major tax cuts. Industry pundits, especially Federal Reserve Chairman Alan Greenspan predict there would be a "re-bounce" in the economy. This means that economic prosperity and growth will eventually happen again. This is expected to result in the rebound of stock price in this sector.

### **Oracle Corp**

The world's second-largest independent software company is driven to displace #1. Oracle has ventured into new markets in hopes of unseating Microsoft, but databases remain its cash cow. Its Web-based Oracle9i database management system software, which is used by more than 8,500 companies to store and access data across numerous platforms, has been strengthened by an application server for running e-commerce applications that tie into its databases. Oracle is also taking aim at Siebel Systems in the customer relationship management software front with its Oracle 11i suite. Consulting and support services account for more than half of sales. Larry Ellison owns 24% of Oracle.







Initial Investment: \$8505.00

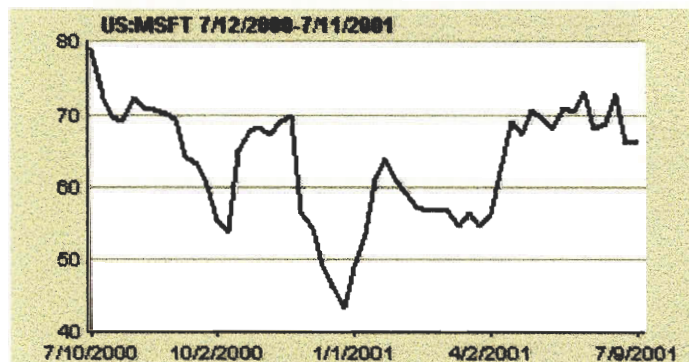
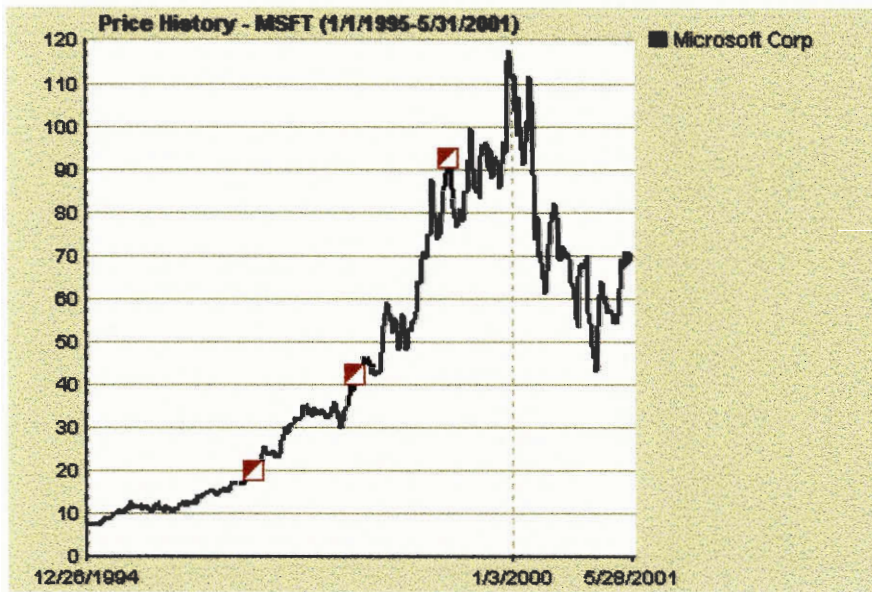
Number of Shares: 500

Stock beta: 1.8

| Days       | Close | P/E   | DJIA     |
|------------|-------|-------|----------|
| 06/12/2001 | 17.01 | 15    | 10977.00 |
| 06/13/2001 | 16.19 | 15    | 10922.09 |
| 06/14/2001 | 16.14 | 15    | 10948.38 |
| 06/15/2001 | 15.50 | 14    | 10871.62 |
| 06/18/2001 | 15    | 14    | 10623.64 |
| 06/19/2001 | 16.76 | 13.30 | 10596.67 |
| 06/20/2001 | 17.52 | 38.20 | 10647.33 |
| 06/21/2001 | 17.90 | 39.80 | 10715.43 |
| 06/22/2001 | 17.48 | 39    | 10604.59 |
| 06/25/2001 | 17.77 | 39.70 | 10504.22 |
| 06/26/2001 | 18.44 | 40.40 | 10472.48 |
| 06/27/2001 | 18.04 | 40    | 10434.84 |
| 06/28/2001 | 19.18 | 41.00 | 10566.21 |
| 07/02/2001 | 19    | 42    | 10502.40 |
| 07/03/2001 | 19.58 | 44    | 10593.72 |
| 07/05/2001 | 18.93 | 44.90 | 10479.86 |
| 07/06/2001 | 17.89 | 43.00 | 10208.64 |

## Microsoft Corp

The world's #1 software company provides a variety of software and services, including its Windows operating systems and Office software suite. Although momentarily slowed by an antitrust investigation, the company continues to expand its empire, which includes enterprises such as travel services (Expedia), interactive television (WebTV), and video game consoles (Xbox). Microsoft is targeting services for future growth, including its .NET initiative, a plan to extend its software applications into Web-based services for businesses and consumers. Chairman Bill Gates, one of the world's richest men, owns 14% of Microsoft.



Initial Investment: \$36595.00

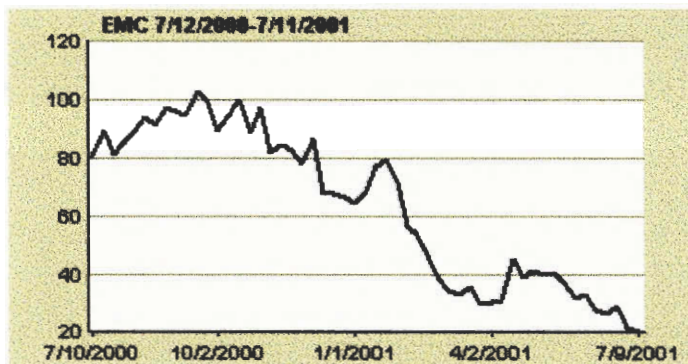
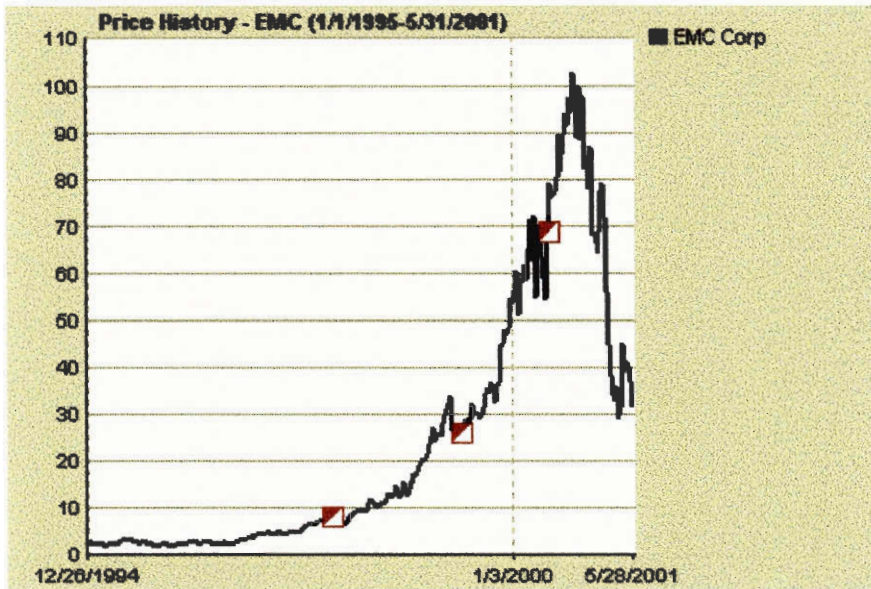
Number of Shares: 500

Stock beta: 1.8

| Days       | Close | P/E   | DJIA     |
|------------|-------|-------|----------|
| 06/12/2001 | 73.19 | 40    | 10977.00 |
| 06/13/2001 | 72.12 | 40    | 10922.09 |
| 06/14/2001 | 72.08 | 40    | 10948.38 |
| 06/15/2001 | 70.69 | 39    | 10871.62 |
| 06/18/2001 | 68.02 | 38    | 10623.64 |
| 06/19/2001 | 67.32 | 37    | 10596.67 |
| 06/20/2001 | 69.41 | 37.20 | 10647.33 |
| 06/21/2001 | 69.84 | 38.30 | 10715.43 |
| 06/22/2001 | 68.83 | 38    | 10604.59 |
| 06/25/2001 | 68.85 | 38    | 10504.22 |
| 06/26/2001 | 70.14 | 38.00 | 10472.48 |
| 06/27/2001 | 71.14 | 39    | 10434.84 |
| 06/28/2001 | 72.74 | 39.30 | 10566.21 |
| 07/02/2001 | 73    | 40    | 10502.40 |
| 07/03/2001 | 70.60 | 39    | 10593.72 |
| 07/05/2001 | 68.51 | 38.90 | 10479.86 |
| 07/06/2001 | 65.17 | 36.30 | 10208.64 |

## EMC Corp

The hands-down leader in the data storage market has its hands full trying to stay a step ahead. EMC makes redundant array of independent disks (RAID) memory systems that banks, manufacturers, Internet providers, retailers, and government agencies use to store and retrieve data. Other products manage remote data and share information across networks of different computers. Storage hardware accounts for about 70% of sales. EMC continues to boost its presence in software and build on its reputation for superior service to maintain its lead in a highly competitive sector characterized by rapidly changing technology.



Initial Investment: \$16675.00

Number of Shares: 500

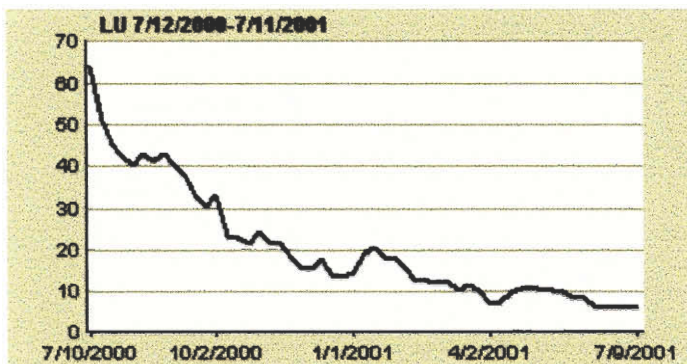
Stock beta: 1.9

| Days       | Close | P/E   | DJIA     |
|------------|-------|-------|----------|
| 06/12/2001 | 33.35 | 41    | 10977.00 |
| 06/13/2001 | 31.91 | 40    | 10922.09 |
| 06/14/2001 | 31.74 | 39    | 10948.38 |
| 06/15/2001 | 30.30 | 37    | 10871.62 |
| 06/18/2001 | 27.77 | 34    | 10623.64 |
| 06/19/2001 | 26.67 | 33.70 | 10596.67 |
| 06/20/2001 | 27.15 | 32.50 | 10647.33 |
| 06/21/2001 | 27.11 | 33.10 | 10715.43 |
| 06/22/2001 | 26.41 | 32    | 10604.59 |
| 06/25/2001 | 28.35 | 32.20 | 10504.22 |
| 06/26/2001 | 28.30 | 34.60 | 10472.48 |
| 06/27/2001 | 28.20 | 34    | 10434.84 |
| 06/28/2001 | 29.45 | 34.40 | 10566.21 |
| 07/02/2001 | 29.05 | 35    | 10502.40 |
| 07/03/2001 | 30.60 | 37    | 10593.72 |
| 07/05/2001 | 30.03 | 38.60 | 10479.86 |
| 07/06/2001 | 21.31 | 27.20 | 10208.64 |



## Lucent Technologies

The company is one of North America's top makers of telecom equipment and software. The storied Bell Laboratories develops many of Lucent's products, but the company has become a force in the broadband networking market through acquisitions. Most of Lucent's customers are telecom providers such as AT&T (12% of sales). Lucent, itself a spinoff from AT&T, has spun off its enterprise networks (Avaya) business and its microelectronics (Agere Systems) unit. It is also selling noncore businesses to focus on high-growth areas, including fiber optics, and cutting costs through layoffs and other restructuring.



Initial Investment: \$4120.00

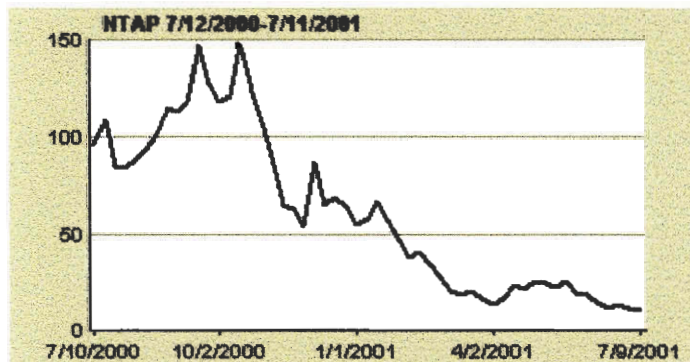
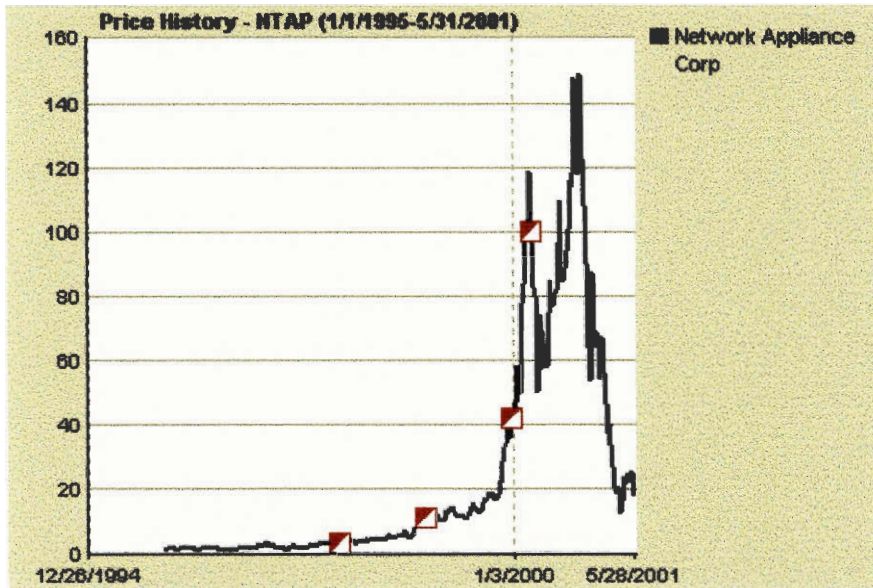
Number of Shares: 500

Stock beta: 2.1

| Days       | Close | P/E | DJIA     |
|------------|-------|-----|----------|
| 06/12/2001 | 8.24  | dd  | 10977.00 |
| 06/13/2001 | 8.04  | dd  | 10922.09 |
| 06/14/2001 | 7.94  | dd  | 10948.38 |
| 06/15/2001 | 7.24  | dd  | 10871.62 |
| 06/18/2001 | 6.31  | Dd  | 10623.64 |
| 06/19/2001 | 5.50  | dd  | 10596.67 |
| 06/20/2001 | 5.31  | dd  | 10647.33 |
| 06/21/2001 | 5.62  | dd  | 10715.43 |
| 06/22/2001 | 5.99  | Dd  | 10604.59 |
| 06/25/2001 | 5.85  | dd  | 10504.22 |
| 06/26/2001 | 6.00  | dd  | 10472.48 |
| 06/27/2001 | 5.87  | dd  | 10434.84 |
| 06/28/2001 | 5.76  | dd  | 10566.21 |
| 07/02/2001 | 6.20  | dd  | 10502.40 |
| 07/03/2001 | 6.66  | dd  | 10593.72 |
| 07/05/2001 | 6.30  | dd  | 10479.86 |
| 07/06/2001 | 6.02  | dd  | 10208.64 |

## Network Appliances Inc.

The company's NetApp file servers store and deliver files over high-traffic, data-intensive networks typically used by Internet service providers (ISPs) and corporate intranets. Unlike general-purpose servers, file servers are more specialized, a feature that devotees say gives them more speed and ease-of-use. The company's NetCache Web caching appliances are designed to ease Internet bandwidths by storing information physically closer to users. Customers include Yahoo!, Motorola, Siemens, Cisco, and Texas Instruments. Almost a third of sales come from outside the US.





Initial Investment: \$9355.00

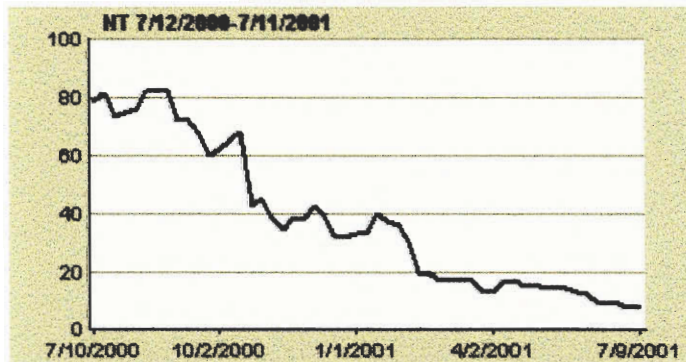
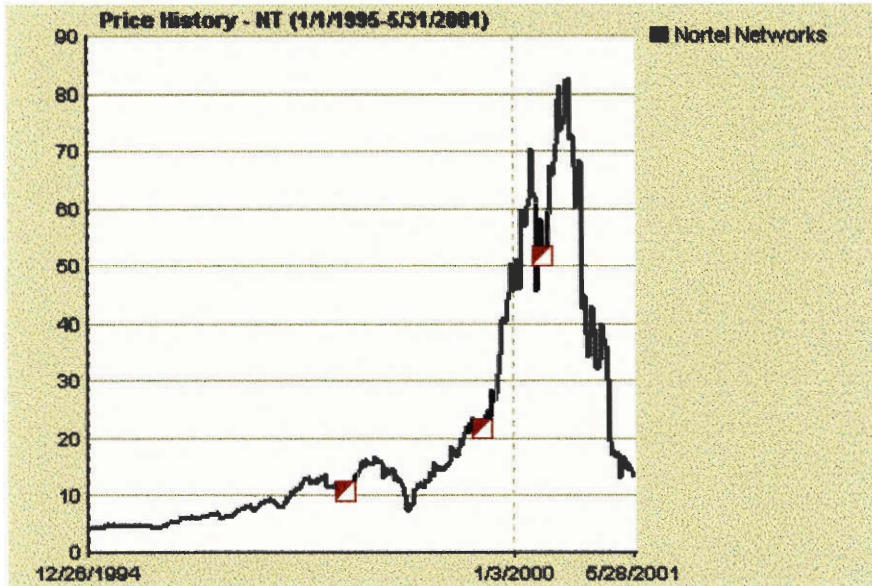
Number of Shares: 500

Stock beta: 1.9

| Days       | Close | P/E   | DJIA     |
|------------|-------|-------|----------|
| 06/12/2001 | 18.71 | ..    | 10977.00 |
| 06/13/2001 | 17.84 | ..    | 10922.09 |
| 06/14/2001 | 17.75 | ..    | 10948.38 |
| 06/15/2001 | 16.73 | ..    | 10871.62 |
| 06/18/2001 | 14.74 | ..    | 10623.64 |
| 06/19/2001 | 13.29 | 64.40 | 10596.67 |
| 06/20/2001 | 12.00 | 63.30 | 10647.33 |
| 06/21/2001 | 11.08 | 57.10 | 10715.43 |
| 06/22/2001 | 11.33 | 54    | 10604.59 |
| 06/25/2001 | 11.68 | 54    | 10504.22 |
| 06/26/2001 | 12.38 | 55.60 | 10472.48 |
| 06/27/2001 | 12.64 | 60    | 10434.84 |
| 06/28/2001 | 13.15 | 61    | 10566.21 |
| 07/02/2001 | 13.70 | 65    | 10502.40 |
| 07/03/2001 | 13.34 | 64    | 10593.72 |
| 07/05/2001 | 12.67 | 62.70 | 10479.86 |
| 07/06/2001 | 10.61 | 55.40 | 10208.64 |

## Nortel Networks

Nortel Networks makes switching, wireless, and optical network systems for telephone carriers and other communications service providers (about 80% of sales). The company has become the world's #2 telecom equipment maker (behind Lucent) by pushing fiber-optic systems for high-capacity data and voice networks and gobbling up businesses that specialize in computer telephony, customer relationship management software, and Internet software and services. Its corporate communications equipment includes interactive voice response telephone systems and data networking switches and routers.



Initial Investment: \$6265.00

Number of Shares: 500

Stock beta: 2.1

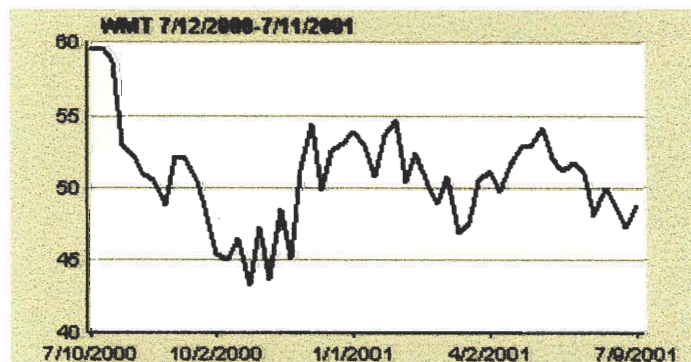
| Days       | Close | P/E | DJIA     |
|------------|-------|-----|----------|
| 06/12/2001 | 12.53 | dd  | 10977.00 |
| 06/13/2001 | 12.04 | dd  | 10922.09 |
| 06/14/2001 | 11.80 | dd  | 10948.38 |
| 06/15/2001 | 11.05 | dd  | 10871.62 |
| 06/18/2001 | 9.86  | Dd  | 10623.64 |
| 06/19/2001 | 8.37  | dd  | 10596.67 |
| 06/20/2001 | 8.01  | dd  | 10647.33 |
| 06/21/2001 | 8.45  | dd  | 10715.43 |
| 06/22/2001 | 8.75  | dd  | 10604.59 |
| 06/25/2001 | 9.01  | dd  | 10504.22 |
| 06/26/2001 | 8.35  | dd  | 10472.48 |
| 06/27/2001 | 8.42  | dd  | 10434.84 |
| 06/28/2001 | 8.30  | dd  | 10566.21 |
| 07/02/2001 | 9.09  | dd  | 10502.40 |
| 07/03/2001 | 9.10  | dd  | 10593.72 |
| 07/05/2001 | 8.60  | dd  | 10479.86 |
| 07/06/2001 | 7.90  | dd  | 10208.64 |

## MAJOR RETAIL SECTOR

The major retail companies were not drastically affected by the recent economic downturn. They seem to have bounced back up since the beginning of the year. These stocks seem to hold good promise in the near future.

### **Wal-Mart Stores Inc.**

Bigger than Sears, Kmart, and J. C. Penney combined, it is the world's #1 retailer, with more than 4,150 stores, including discount stores (Wal-Mart), combination discount and grocery stores (Wal-Mart Supercenters and ASDA in the UK), and membership-only warehouse stores (Sam's Club). Most of its stores are in the US, but Wal-Mart is expanding internationally; it is the #1 retailer in Canada and Mexico, and it also has operations in South America, Asia, and Europe. Subsidiary McLane Company is the #1 US convenience store distributor. Founder Sam Walton's heirs own about 38% of Wal-Mart.



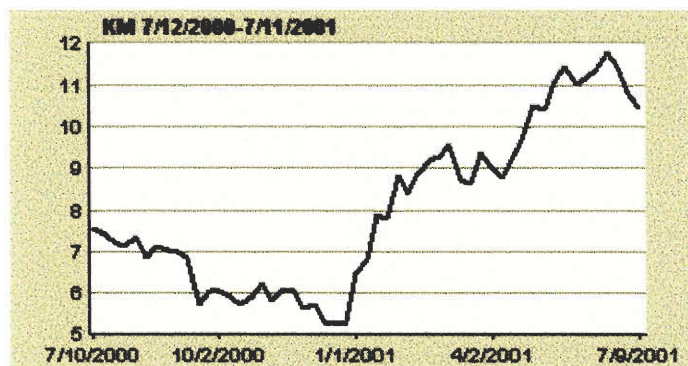
Initial Investment: \$25510.00  
Number of Shares: 500

Stock beta: 0.9

| Days       | Close | P/E   | DJIA     |
|------------|-------|-------|----------|
| 06/12/2001 | 51.02 | 36    | 10977.00 |
| 06/13/2001 | 50.23 | 36    | 10922.09 |
| 06/14/2001 | 50.57 | 35    | 10922.09 |
| 06/15/2001 | 50.15 | 35    | 10871.62 |
| 06/18/2001 | 48.15 | 34    | 10623.64 |
| 06/19/2001 | 48.86 | 34.20 | 10596.67 |
| 06/20/2001 | 49.80 | 34.40 | 10647.33 |
| 06/21/2001 | 50.45 | 35.10 | 10715.43 |
| 06/22/2001 | 49.98 | 35    | 10604.59 |
| 06/25/2001 | 49.00 | 35.20 | 10504.22 |
| 06/26/2001 | 49.10 | 34.50 | 10472.48 |
| 06/27/2001 | 48.50 | 34    | 10434.84 |
| 06/28/2001 | 49.37 | 34.20 | 10566.21 |
| 07/02/2001 | 48.80 | 34    | 10502.40 |
| 07/03/2001 | 49.75 | 35    | 10593.72 |
| 07/05/2001 | 48.60 | 34.70 | 10479.86 |
| 07/06/2001 | 47.51 | 34    | 10208.64 |

## K Mart Corp

Kmart is the #2 discount retailer in the US, behind Wal-Mart. The company sells name-brand and private-label general merchandise (including its popular Martha Stewart Everyday label and Route 66 clothing) primarily to low- and mid-income families in more than 2,100 discount stores (including more than 100 Super Kmart Centers). It has Kmart stores in all 50 states, Puerto Rico, the US Virgin Islands, and Guam. Kmart's diversification into specialty retailing brought it close to bankruptcy, but the company has shed its excess and has converted most of its old stores to the Big Kmart format, which features a grocery section, as well as an expanded selection of merchandise.



Initial Investment: \$5600.00

Number of Shares: 500

Stock beta: 0.9

| Days       | Close | P/E | DJIA     |
|------------|-------|-----|----------|
| 06/12/2001 | 11.20 | dd  | 10977.00 |
| 06/13/2001 | 10.88 | dd  | 10922.09 |
| 06/14/2001 | 10.81 | dd  | 10948.38 |
| 06/15/2001 | 11.40 | dd  | 10871.62 |
| 06/18/2001 | 11.36 | dd  | 10623.64 |
| 06/19/2001 | 11.65 | dd  | 10596.67 |
| 06/20/2001 | 11.37 | dd  | 10647.33 |
| 06/21/2001 | 11.40 | dd  | 10715.43 |
| 06/22/2001 | 11.80 | dd  | 10604.59 |
| 06/25/2001 | 11.23 | dd  | 10504.22 |
| 06/26/2001 | 10.94 | dd  | 10472.48 |
| 06/27/2001 | 10.77 | dd  | 10434.84 |
| 06/28/2001 | 11.00 | dd  | 10566.21 |
| 07/02/2001 | 11.47 | dd  | 10502.40 |
| 07/03/2001 | 11.62 | dd  | 10593.72 |
| 07/05/2001 | 11.43 | dd  | 10479.86 |
| 07/06/2001 | 10.60 | dd  | 10208.64 |

**CHAPTER 3:**

**STOCK AND MARKET PERFORMANCE ANALYSIS**



### 3. STOCK AND MARKET PERFORMANCE ANALYSIS

In this chapter I have presented an analysis of the performance of each of the chosen stocks for the chosen four-week period. The analysis covers the following:

- 1) Some specific aspects of the company having a bearing on the company's stock value and its movement.
- 2) A numerical and graphical analysis of the growth in the period
- 3) Performance analysis with relation to the beta of the stock
- 4) Analysis using other values (e.g. payout ratio and debt-equity ratio)
- 5) Future prediction

In addition to the twelve stocks, I have also included the performance analysis of the well-known economic indicator Dow Jones Industrial Average (DJIA). The value of the Dow Jones Industrial Average (DJIA) is a pretty good indicator of how well the US economy is doing.

After the trading period (four weeks), I have plotted a chart for that time period and see if the market has dramatically changed in that period or not. And if it did, I have tried to give an accurate reason as to why that happened. Sometimes, only an individual company stock price dramatically changes due to some important news (ex. Earning Warnings, introduction of new products etc.). At other times, the entire market or sector was doing poorly so all stocks in the economy or sector would end up not performing well. The ultimate goal is to understand the underlying reasons for the behavior of the stock in a particular manner. With all this information he/she should be able to generally predict the future performance of the stock and the economy. It is usually more comforting to visualize stock performance on chart rather than just digits in a tabular form.

Before I present the performance analysis of the chosen stocks, it is necessary to briefly explain the movement of the Dow Jones Industrial Average (DJIA) in the recent past:

In 1998, the DJIA was in the 7000 to 9000 range. Nearing the millennium (end 1999, beginning 2000), the DJIA index fluctuated around the 9000 to 11000 range. As of now it is still in that range. This clearly indicates that the US economy is still doing relatively well but certain Industry "gurus" predict that the country is nearing a recession. This prediction could be justified in some ways because during these seven weeks the market fell by a staggering 7%. Whether this is just a minor stock market fluctuation or the beginning of a serious downturn is yet to be seen. There was a time not long ago, when the economy was continually growing till a point that the DJIA reached 11,000. This caused the values of most stocks to go up. The increased value of the stock does not necessarily mean the company is doing very well. We could compare the market situation to the analogy of the boat and tidal rise. If the tide rises then all the boats will rise with it. Therefore unless the stock has significantly "out-performed" the market, a stock increase does not mean the company is doing very well. On the other hand, if the tide falls the boats will go down with it. This means unless the stock has significantly "under-performed" the market, a stock decrease does not necessarily mean the company is doing very poorly. In this project, I have used this as the primary analogy to compare the DJIA

In this chapter I have presented an analysis of the performance of each of the chosen stocks for the chosen four-week period. The analysis covers the following:

- 1) Some specific aspects of the company having a bearing on the company's stock value and its movement.
- 2) A numerical analysis of the growth in the period
- 3) A graphical analysis
- 4) Performance analysis with relation to the beta of the stock
- 5) Analysis using other values (e.g. payout ratio and debt-equity ratio)
- 6) Future prediction

In addition to the twelve stocks, I have also included the performance analysis of the well-known economic indicator Dow Jones Industrial Average (DJIA). The value of the Dow Jones Industrial Average (DJIA) is a pretty good indicator of how well the US economy is doing.

After the trading period (four weeks), I have plotted a chart for that time period and see if the market has dramatically changed in that period or not. And if it did, I have tried to give an accurate reason as to why that happened. Sometimes, only an individual company stock price dramatically changes due to some important news (ex. Earning Warnings, introduction of new products etc.). At other times, the entire market or sector was doing poorly so all stocks in the economy or sector would end up not performing well. The ultimate goal is to understand the underlying reasons for the behavior of the stock in a particular manner. With all this information he/she should be able to generally predict the future performance of the stock and the economy. It is usually more comforting to visualize stock performance on chart rather than just digits in a tabular form.

Before I present the performance analysis of the chosen stocks, it is necessary to briefly explain the movement of the Dow Jones Industrial Average (DJIA) in the recent past:

In 1998, the DJIA was in the 7000 to 9000 range. Nearing the millennium (end 1999, beginning 2000), the DJIA index fluctuated around the 9000 to 11000 range. As of now it is still in that range. This clearly indicates that the US economy is still doing relatively well but certain Industry "gurus" predict that the country is nearing a recession. This prediction could be justified in some ways because during these seven weeks the market fell by a staggering 7%. Whether this is just a minor stock market fluctuation or the beginning of a serious downturn is yet to be seen. There was a time not long ago, when the economy was continually growing till a point that the DJIA reached 11,000. This caused the values of most stocks to go up. The increased value of the stock does not necessarily mean the company is doing very well. We could compare the market situation to the analogy of the boat and tidal rise. If the tide rises then all the boats will rise with it. Therefore unless the stock has significantly "out-performed" the market, a stock increase does not mean the company is doing very well. On the other hand, if the tide falls the boats will go down with it. This means unless the stock has significantly "under-performed" the market, a stock decrease does not necessarily mean the company is doing very poorly. In this project, I have used this as the primary analogy to compare the DJIA

curves, Closing price curves and P/E curves to come to a certain conclusion of how well the company is doing with respect to the economy. Other performance indicators I used were Relative Strength, Payout ratio etc.

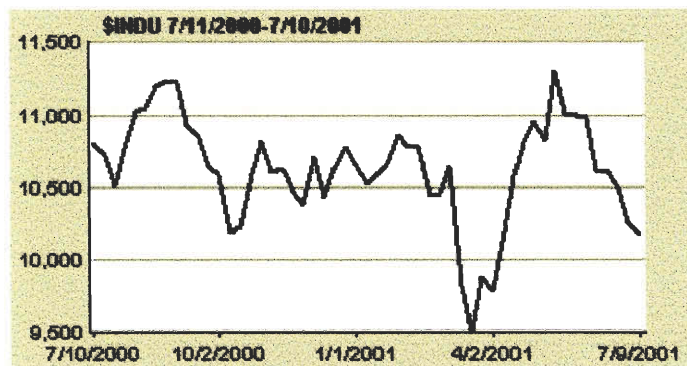
DJIA

DJIA value of January 18,2000: 10977

DJIA value of February 18,2000: 10208

%Growth = -7.005%

As we can see through the specified time frame (Jun 12 '00 - Jul 6 '00), the market has "gone down".



## PERFORMANCE ANALYSIS OF CHOSEN STOCKS

### Pfizer:

1. It is one of the largest biotech companies in the world. It is constantly involved in a lot of research and markets a lot of its own products. More research means more growth opportunities in the upcoming biotech boom. Good investment opportunity.
2. It has a very high success rate with its products. Gives confidence to the consumers that it will maintain good profitability margin.
3. Comparison with other competitors in its industry shows that it has a possibility of higher percentage rise in stock price than its competitors.
4. Over the past twelve months its sales and income have doubled, and its percentages higher than its competitors including the leading drug manufacturer of the world, Merck.
5. The P/E ratio of the Pfizer is almost double that of its competitors.
6. Pfizer has a higher net profit margin than its competitors.
7. Pfizer has a much lower debt/equity ratio when in comparison to its competitors. This shows that even though Pfizer has a large income it is easily able to pay of

its debt. Merck being the largest drug manufacturer (bigger income), still has a much higher debt/equity ratio, which shows that Pfizer has better overall financial health.

Initial Investment: \$21605.00  
Number of shares: 500

Net worth after specified time period = number of shares \* final market value of stock  
=  $500 * \$40.55$   
= \$20275.00

%growth = -6.156%

#### *Numerical Analysis:*

Both the DJIA and Pfizer had very similar growth rates. Hence from this we can say, that Pfizer didn't do particularly bad as compared to the market. The growth rates of both values (DJIA & Pfizer) went down almost the same (-7% approx. (DJIA) & -6% approx. (Pfizer)). But there was a loss of money from the initial investment and hence we can say there was a downward performance. The stocks did not perform well, irrespective of how bad the economy is in the specified time frame.

#### *Graphical Analysis:*

I used the graph by comparing the closing & P/E with the DJIA. The shapes of all 3 series on the Y-axis (DJIA, closing prices, P/E) are very similar. What I mean from this is that, the rate of growth at any sub-interval seems to be very similar for all of the corresponding sub-intervals of the other 2 series.

#### *Performance analysis with relation to the Beta of the stock:*

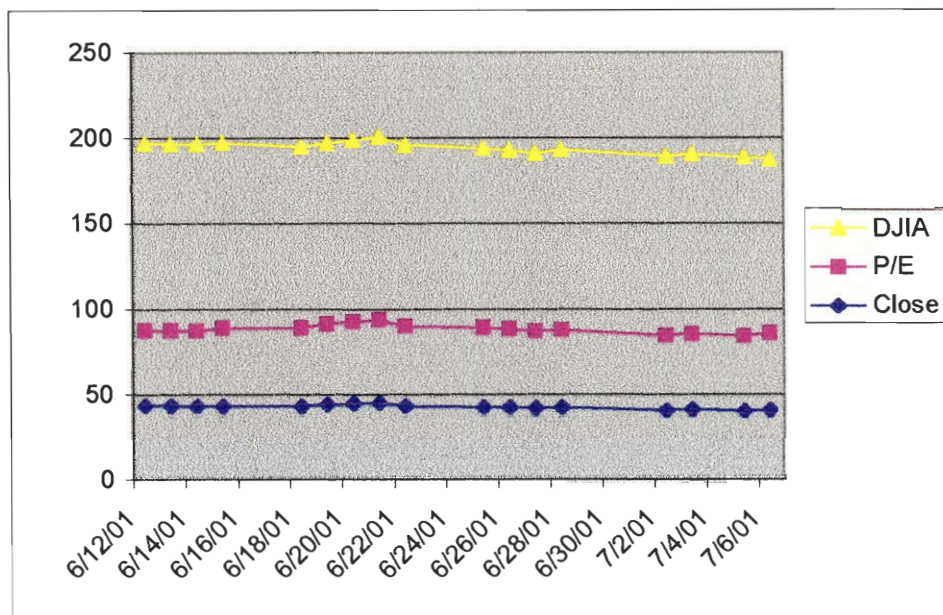
Stock beta: 0.7

This value indicates this stock to be a medium risk stock. For example if the market went down by 10% then the value of the stock will approximately go down by 7%. So it is still pretty risky. The growth rates obtained for the project in this specified time period clearly justifies this beta concept. Clearly, the market went down 7% and the stock too went down approximately 7%. This shows that it was a risky stock and it moved or "flowed" with the market.

#### *Analysis using other values:*

Pfizer Payout ratio: 51% (3)  
Debt-Equity ratio: 0.11 (3)

The debt-equity ratio is also pretty good. Hence it means the company is doing reasonably well independently. Hence the company's failure to maintain a positive growth rate is not due to internal financial problems but due to the economy as whole itself during the project time frame.



**Future Predictions:**

Biotech is predicted by most industry ‘gurus’ to be the next boom after the high-tech and software boom of the 1990s. The Governments of developed countries such as in US and Europe are easing policies to allow for products to reach faster by minimizing the time before they get approved. In the US, that agency is primarily the FDA (Federal Drug Administration). For this reason the biotech companies are involved in a lot of research and preparing to market a lot of new potent products in the next few years.

In order to get an accurate price target for the next year or two, we must multiply the current P/E ratios with the analyst earnings estimate.

| Fiscal Year | Est Low/High Price Range | Avg. Est. Price | % Change for Average |
|-------------|--------------------------|-----------------|----------------------|
| 12/2001     | \$53.59-\$56.13          | \$54.86         | 45.90%               |
| 12/2002     | \$65.83-\$68.36          | \$67.10         | 78.45%               |

Pfizer current price: \$37.60  
 Pfizer current multiple (P/E): 42.20  
 Pfizer average 12/2001 estimate: \$1.30  
 Pfizer low 12/2001 estimate: \$1.27

|                                  |        |
|----------------------------------|--------|
| Pfizer high 12/2001 estimate:    | \$1.33 |
| Pfizer average 12/2002 estimate: | \$1.59 |
| Pfizer low 12/2002 estimate:     | \$1.56 |
| Pfizer high 12/2002 estimate:    | \$1.62 |

### **Johnson & Johnson**

The P/E ratio, net profit margin percentage and debt-equity ratio of Johnson & Johnson are not as good as Pfizer's. I wanted to observe in practical terms to see if that would make a difference in the performance of a stock in a four-week period.

Initial Investment: \$51005

Number of shares: 500

Net worth after specified time period = number of shares \* final market value of stock  
= 500\*\$52.42\*2 [stock-split]  
= \$52420

% growth = 2.70%

#### *Numerical Analysis:*

Both the DJIA and JNJ had very similar growth rates. But eventually the stock outperformed the market. Though the market went down by 7%, the JNJ stock went up by approximately 3%. This was unusual because I expected the Pfizer stock to do much better than the JNJ stock. Pfizer has a better financial health than Johnson & Johnson.

But I am concluding that this was mainly due to the stock-split that infused confidence in the investors.

#### *Graphical Analysis:*

I used the graph by comparing the closing & P/E with the DJIA. The shapes of all 3 series on the Y-axis (DJIA, closing prices, P/E) are very similar until the very end. What I mean from this is that, the rate of growth at any sub-interval seems to be very similar for all of the corresponding sub-intervals of the other 2 series. Towards the end, the stock outperformed the market. The DJIA edged lower while the stock went up. In market terminology its called "beating the market".

#### *Performance analysis with relation to the Beta of the stock:*

Stock beta: 0.6

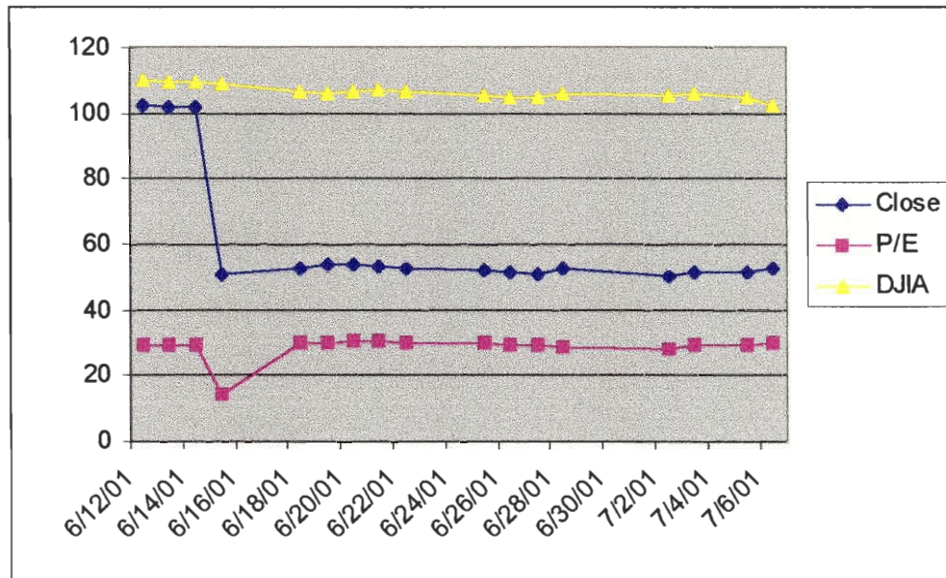
This value indicates this stock to be a medium risk stock. For example if the market went down by 10% then the value of the stock will approximately go down by 6%. The stock almost behaved in a cyclical manner. But this was a unique situation because during the four-week period there was a stock-split. Stock-splits are usually done to enhance trading appeal. The company's decision of executing a stock-split was definitely a payoff.



*Analysis using other values:*

Debt-Equity ratio: 0.08

The debt-equity ratio is also pretty good. Hence it means the company is doing reasonably well independently. Hence the company's failure to maintain a positive growth rate is not due to internal financial problems but due to the economy as whole itself during the project time frame.



Future Predictions:

JNJ is also a big biotech industry just like Pfizer.

| Fiscal Year | Est Low/High Price Range | Avg. Est. Price | % Change for Average |
|-------------|--------------------------|-----------------|----------------------|
| 12/2001     | \$56.85-\$59.28          | \$58.06         | 9.89%                |
| 12/2002     | \$64.75-\$67.18          | \$66.27         | 25.42%               |

|   |         |
|---|---------|
| Johnson & Johnson current price:            | \$52.84 |
| Johnson & Johnson current multiple (P/E):   | 30.40   |
| Johnson & Johnson average 12/2001 estimate: | \$1.91  |
| Johnson & Johnson low 12/2001 estimate:     | \$1.87  |
| Johnson & Johnson high 12/2001 estimate:    | \$1.95  |
| Johnson & Johnson average 12/2002 estimate: | \$2.18  |
| Johnson & Johnson low 12/2002 estimate:     | \$2.13  |
| Johnson & Johnson high 12/2002 estimate:    | \$2.21  |

## Exxon-Mobil Corp

1. It is the largest oil company in the world. It has a very large market capitalization.
2. The company stock is characterized by its stability and lower stock beta. The stock price of this company has constantly been rising in the last five years. This shows the company has been performing relatively well. Choosing a low risk and stable stock could be good contributor for portfolio diversification or rather lowering the overall risk of the portfolio.

Initial Investment: \$44695.00

Number of shares: 500

Net worth after specified time period = number of shares \* final market value of stock  
=  $500 * \$86.1$   
= \$43050.00

%growth = -3.68%

### *Numerical Analysis:*

In this case the market went down about 7%, and the stock only went down (-3.68% which is approx. -4%). This shows that stock has not significantly under-performed and that the value as merely gone down because of the present market condition.

### *Graphical Analysis:*

I used the graph by comparing the closing & P/E with the DJIA. The shapes of all 3 series on the Y-axis (DJIA, closing prices, P/E) are very similar. What I mean from this is that, the rate of growth at any sub-interval seems to be very similar for all of the corresponding sub-intervals of the other 2 series.

### *Performance analysis with relation to the Beta of the stock:*

Stock beta: 0.4

This value indicates this stock to be relatively low risk. For example if the market went down by 10% then the value of the stock will approximately go down by 4%. So it is a low risk stock. The market went down by about 7%, while the stock went down only about -3.68%.

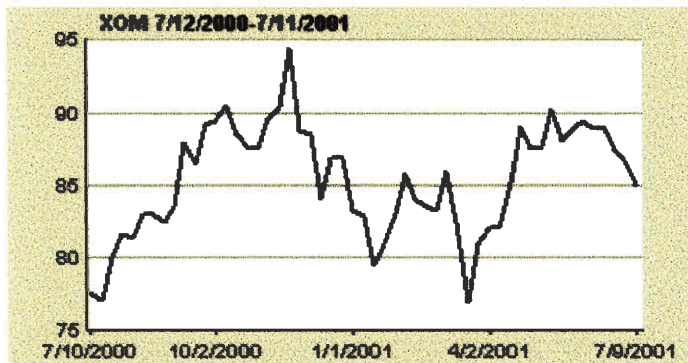


*Analysis using other values:*

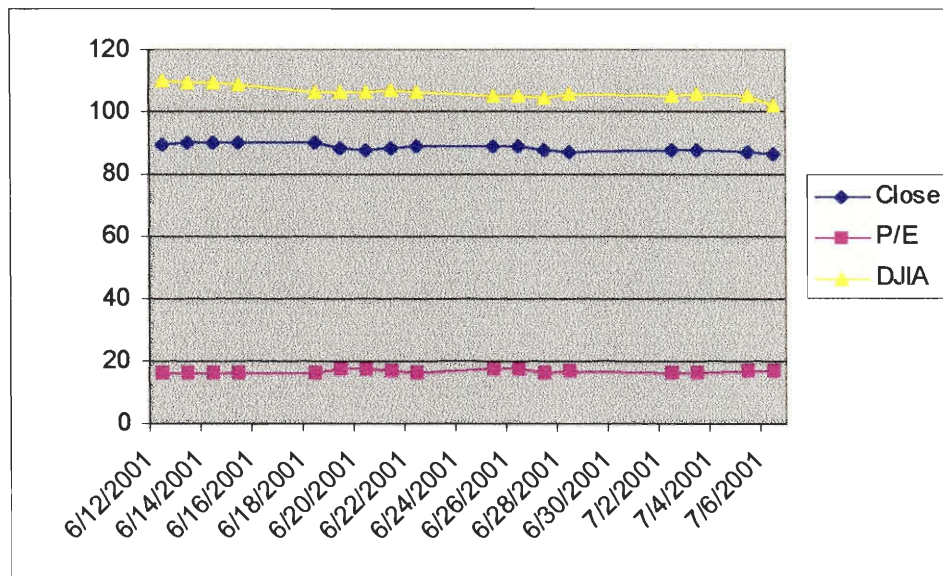
Debt-Equity ratio: 0.47

The debt-equity ratio is actually not very low. Due to the downturn of the market, the company could possibly be having difficulty in paying off some debt.

The Relative strength of the stock has been decreasing in the three or four months. This means the stock is getting weaker and is lot more susceptible to the ups and downs of the market.



This could be the reason as to why even though the stock is low risk, it performed quite poorly and almost replicated the performance of the market.



### Future Predictions:

| Fiscal Year | Est Low/High Price Range | Avg. Est. Price | % Change for Average |
|-------------|--------------------------|-----------------|----------------------|
| 12/2001     | \$71.38-\$91.63          | \$83.00         | -2.87%               |
| 12/2002     | \$57.27-\$92.96          | \$74.87         | -12.39%              |

Exxon Mobil current price: \$85.45

Exxon Mobil current multiple (P/E): 16.60

Exxon Mobil average 12/2001 estimate: \$5.00

Exxon Mobil low 12/2001 estimate: \$4.30

Exxon Mobil high 12/2001 estimate: \$5.52

Exxon Mobil average 12/2002 estimate: \$4.51

Exxon Mobil low 12/2002 estimate: \$3.45

Exxon Mobil high 12/2002 estimate: \$5.60

### Texaco

1. It is one of the largest oil companies in the world. It has a very large market capitalization.
2. The company stock is characterized by its stability and lower stock beta. The stock price of this company has constantly been rising in the last five years. This shows the company has been performing relatively well. Choosing a low risk and stable stock could be good contributor for portfolio diversification or rather lowering the overall risk of the portfolio.
3. I wanted it to be in comparison with Exxon-Mobil and see their performance. I would expect similar performance from the both of them. If the performance was significantly different, it would be interesting to know why.

Initial Investment: \$36125.00

Number of shares: 500

Net worth after specified time period = number of shares \* final market value of stock

= 500\*\$67.21

= \$33605.00

%growth = -6.98%

*Numerical Analysis:*

In this case both the market and the stock equally went down about 7%. This shows that the stock has not significantly under-performed and that the value as merely gone down because of the present market condition.

*Graphical Analysis:*

I used the graph by comparing the closing & P/E with the DJIA. The shapes of all 3 series on the Y-axis (DJIA, closing prices, P/E) are very similar. What I mean from this is that, the rate of growth at any sub-interval seems to be very similar for all of the corresponding sub-intervals of the other 2 series.

*Performance analysis with relation to the Beta of the stock:*

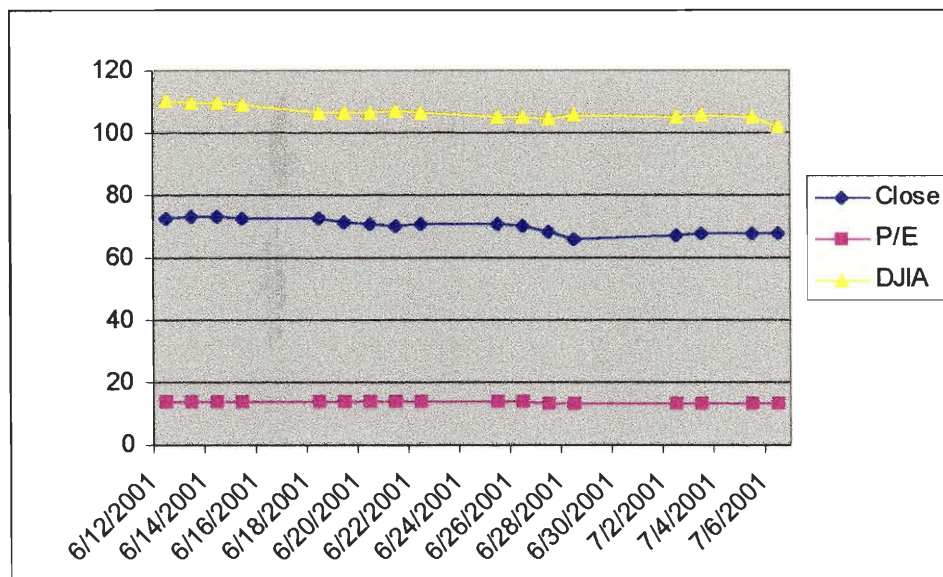
Stock beta: 0.3

This was an unusual circumstance because the stock behaved like a high risk one. Both the stock and market went down about 7% irrespective of the stock beta being about 0.3 This demonstrates that analysis can only go so far in predicting the performance of stocks and the market as a whole.

*Analysis using other values:*

Debt-Equity ratio: 0.10

The debt-equity ratio is also pretty good. Hence it means the company is doing reasonably well independently. Hence the company's failure to maintain a positive growth rate is not due to internal financial problems but due to the economy as whole during the project time frame.



Future Predictions:

| Fiscal Year | Est Low/High Price Range | Avg. Est. Price | % Change for Average |
|-------------|--------------------------|-----------------|----------------------|
| 12/2001     | \$57.60-\$76.93          | \$62.46         | -6.35%               |
| 12/2002     | \$32.00-\$60.80          | \$45.70         | -31.49%              |

Texaco current price: \$66.70

Texaco current multiple (P/E): 12.80

Texaco average 12/2001 estimate: \$4.88

Texaco low 12/2001 estimate: \$4.50

Texaco high 12/2001 estimate: \$6.01

Texaco average 12/2002 estimate: \$3.57

Texaco low 12/2002 estimate: \$2.50

Texaco high 12/2002 estimate: \$4.75

## Oracle Corp

1. It is the second largest software company in the world. It has a very large market capitalization. During this recent economic downturn where the market has been bearish, the tech stocks have been 'hit' the hardest. Due to the Fed's (Federal Reserve Board) recent interest rate cuts, the economy is poised to bounce back and do well again. In the hope of the battered tech stocks to do better, I invested in Oracle.
2. Oracle and Microsoft are constantly battling it out to dominate the software industry. Recently both Microsoft and Oracle are trying to capitalize on the medium and small business industry. Both companies have acquired competitors

in that industry. It would be interesting to see how the companies perform and why. Also to see which one is going to beat each other.

3. Even though the present economic downturn exists, Oracle is still growing. One of its main branches, Oracle Japan has indicated a significant profit. Oracle also gave an earning forecast saying that it has been profitable and that it will continue to be even more profitable in the near future.

Initial Investment: \$8505.00

Number of shares: 500

Net worth after specified time period = number of shares \* final market value of stock  
=  $500 * \$17.89$   
= \$8945.00

%growth = 4.92%

#### *Numerical Analysis:*

This scenario shows that the stock has “beat” the market. Even though the general market went down 7%, the stock went up almost 5%. Considering this to be a very high-risk stock I was not expecting such a performance. High-risk stocks are generally very susceptible to the market “flows”.

#### *Graphical Analysis:*

I used the graph by comparing the closing & P/E with the DJIA. The stock performed quite differently. The stock kept on rising while the DJIA kept on falling. The stock behaved in a very stable manner.

#### *Performance analysis with relation to the Beta of the stock:*

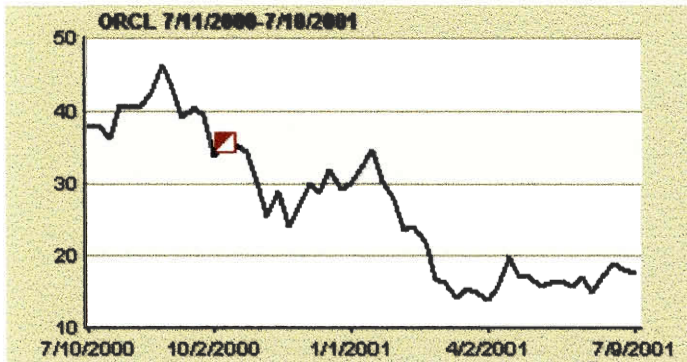
Stock beta: 1.8

The stock did not behave the way it should in relation to the stock beta. The Stock should have gone drastically down in the four-week period. But in fact the stock went by about approximately 5%.

#### *Analysis using other values:*

##### Relative Strength:

The Relative strength of the company during the four-week period has been rising. This sends confidence to the investors that the stock is not going to be as volatile. This could be one of the reasons that the stock price has not gone down even though the market was bearish.



P/E Ratio:

Even though the P/E ratio is well below industry average, during the four-week period the ratio has been rising at a slow rate. This also shows that the analysts and investors are more confident about the company's earnings and performance.

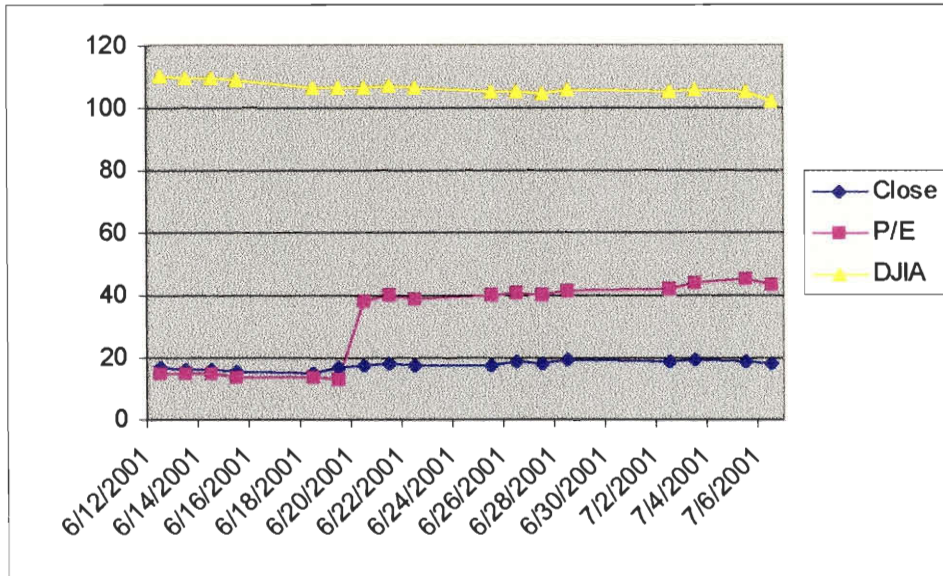
| Price Ratios          | Company | Industry |
|-----------------------|---------|----------|
| Current P/E Ratio     | 40.0    | 56.8     |
| P/E Ratio 5-Year High | 105.6   | 128.9    |
| P/E Ratio 5-Year Low  | 5.9     | 25.0     |

Debt-Equity ratio: 0.06

The debt-equity ratio is also pretty good. Hence it means the company is doing reasonably well independently.

All these factors (Relative strength, P/E, Debt-Equity, company profitability margin) collectively might have caused the stock to stay strong and continue to go up.





Future Predictions:

| Fiscal Year | Est Low/High Price Range | Avg. Est. Price | % Change for Average |
|-------------|--------------------------|-----------------|----------------------|
| 5/2002      | \$18.81-\$23.72          | \$20.45         | 4.02%                |
| 5/2003      | \$23.31-\$28.63          | \$24.95         | 26.90%               |

Oracle current price: \$19.66  
 Oracle current multiple (P/E): 40.90  
 Oracle average 5/2002 estimate: \$0.50  
   Oracle low 5/2002 estimate: \$0.46  
   Oracle high 5/2002 estimate: \$0.58  
 Oracle average 5/2003 estimate: \$0.61  
   Oracle low 5/2003 estimate: \$0.57  
   Oracle high 5/2003 estimate: \$0.70

**Microsoft Corp**

1. Microsoft is the largest software company in the world. I wanted Oracle and Microsoft in comparison because they are fierce competitors of each other.
2. Microsoft recently won the antitrust court battle. Microsoft was about to be split up because it had a monopoly over the software market. Microsoft is now as strong as ever.
3. Microsoft also won a court case against AOL, that it would not include AOL Internet software package in its latest Windows XP.



4. As mentioned before, Microsoft is also competing with Oracle in a bid to capitalize on small business industry software.

Initial Investment: \$36595.00

Number of shares: 500

Net worth after specified time period = number of shares \* final market value of stock  
=  $500 * \$17.89$   
= \$32585.00

%growth = -10.96%

#### *Numerical Analysis:*

This situation shows how a typical high-risk stock will behave in an economic downturn. When the market went down 7%, the stock went down approximately 11%. Oracle's performance was actually extraordinary compared to Microsoft's typical high risk stock performance. The stock is very susceptible to market changes.

#### *Graphical Analysis:*

I used the graph by comparing the closing & P/E with the DJIA. The shapes of all 3 series on the Y-axis (DJIA, closing prices, P/E) are very similar. What I mean from this is that, the rate of growth at any sub-interval seems to be very similar for all of the corresponding sub-intervals of the other 2 series. The P/E, closing price and DJIA all flowed together in a similar fashion.

#### *Performance analysis with relation to the Beta of the stock:*

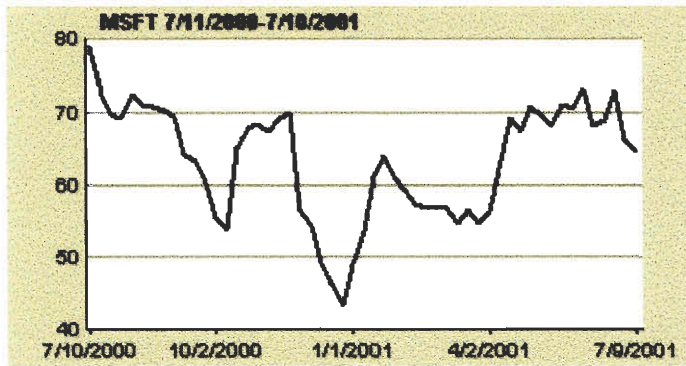
Stock beta: 1.8

The stock behaved in a typical manner with respect to its stock beta. The market went down by about 7% and the stock went down by about 11%.

#### *Analysis using other values:*

Relative Strength:

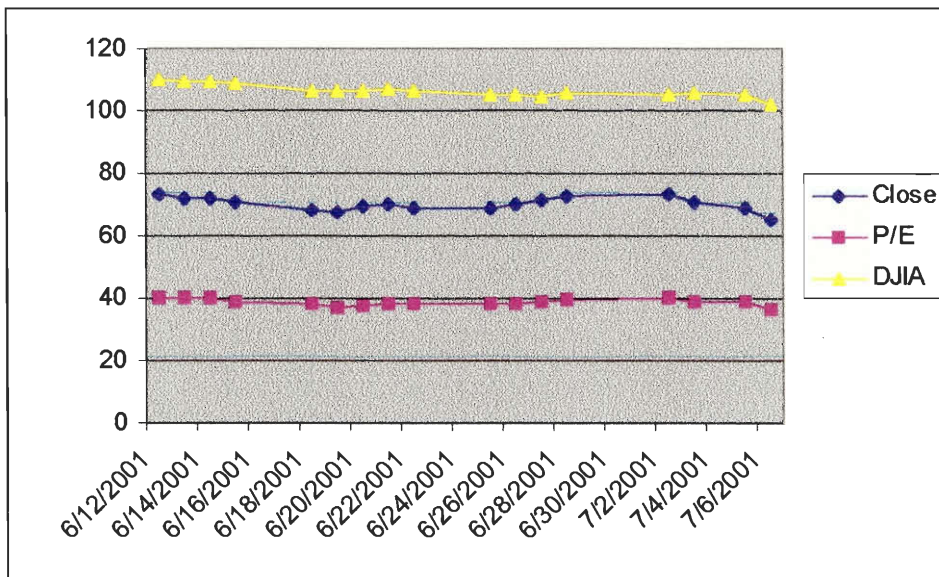
Even though the relative strength of the stock was constantly rising during four-week period just like Oracle, it failed to maintain a positive growth rate.



P/E Ratio:

When in comparison with Oracle every other trend is almost similar. But the P/E ratio constantly fell during the four-week period. This could mean that the investors and analysts are temporarily losing confidence in the stock. This could be one of the reasons as to why the stock performed poorly during the four-week period.

| Price Ratios          | Company | Industry |
|-----------------------|---------|----------|
| Current P/E Ratio     | 35.6    | 56.8     |
| P/E Ratio 5-Year High | 70.6    | 128.9    |
| P/E Ratio 5-Year Low  | 20.4    | 25.0     |



### Future Predictions:

| Fiscal Year | Est Low/High Price Range | Avg. Est. Price | % Change for Average |
|-------------|--------------------------|-----------------|----------------------|
| 6/2001      | \$61.29-\$66.43          | \$65.69         | -8.25%               |
| 6/2002      | \$69.00-\$74.13          | \$71.20         | -0.56%               |

|                                    |         |
|------------------------------------|---------|
| Microsoft current price:           | \$71.60 |
| Microsoft current multiple (P/E):  | 36.70   |
| Microsoft average 6/2001 estimate: | \$1.79  |
| Microsoft low 6/2001 estimate:     | \$1.67  |
| Microsoft high 6/2001 estimate:    | \$1.81  |
| Microsoft average 6/2002 estimate: | \$1.94  |
| Microsoft low 6/2002 estimate:     | \$1.88  |
| Microsoft high 6/2002 estimate:    | \$2.02  |

### EMC Corp

This is the leading company in Data Storage. This is the industry that has been hit the hardest in the technology sector. The Feds (Federal Reserve Board) made a series of interest rate cuts in the past year to cause the economy to bounce back up. In the hope of these battered tech stocks to shoot back and generate profit, I specifically decided to choose this stock.

Initial Investment: \$16675.00  
Number of shares: 500

Net worth after specified time period = number of shares \* final market value of stock  
= 500\*\$21.31  
= \$10655

% growth = -36.1%

#### *Numerical Analysis:*

The EMC stock basically tumbled 36% in just four weeks.

#### *Graphical Analysis:*

I used the graph by comparing the closing & P/E with the DJIA. The Closing price basically magnified the "flow" and performance of the DJIA. It didn't seem as "bad" initially but towards the end of the four-week period the stock crashed.

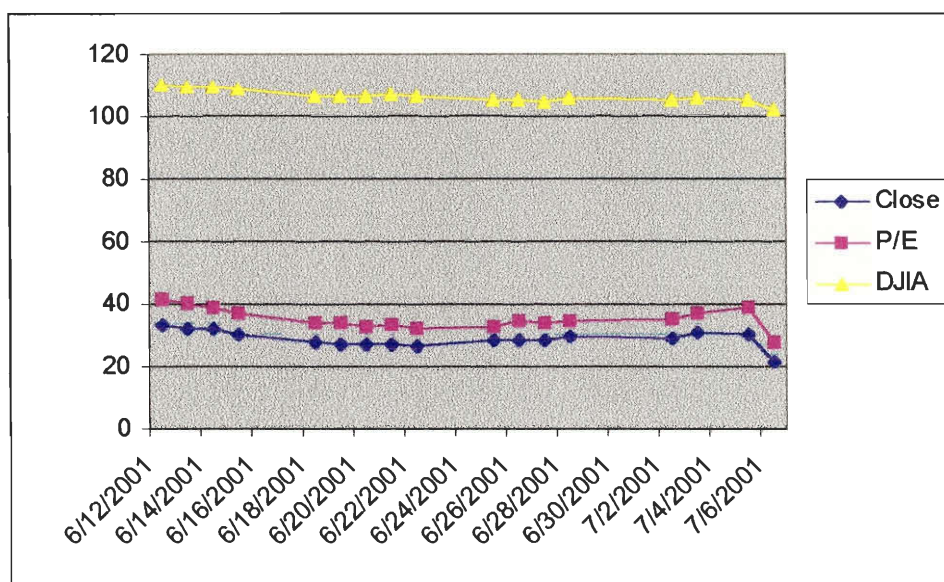
*Performance analysis with relation to the Beta of the stock:*

Stock beta: 1.9

This value indicates this stock to be of very high-risk stock. For example if the market went down by 10% then the value of the stock will approximately go down by approximately 20%. The stock has definitely under-performed the market.

Earnings Report:

On July 6th the company made an announcement on its latest earnings. It mentioned that the company earnings will fall as much as 76 percent below estimates as cost cutting failed to jump-start demand. Stock price on that day fell by about 10 points! This shows the company is financially doing quite poorly.



Future Predictions:

| Fiscal Year | Est Low/High Price Range | Avg. Est. Price | % Change for Average |
|-------------|--------------------------|-----------------|----------------------|
| 12/2001     | \$7.44-\$22.32           | \$13.39         | -37.74%              |
| 12/2002     | \$7.44-\$29.76           | \$18.10         | -15.83%              |

EMC current price: \$21.51  
 EMC current multiple (P/E): 24.80  
 EMC average 12/2001 estimate: \$0.54

|                               |        |
|-------------------------------|--------|
| EMC low 12/2001 estimate:     | \$0.30 |
| EMC high 12/2001 estimate:    | \$0.90 |
| EMC average 12/2002 estimate: | \$0.73 |
| EMC low 12/2002 estimate:     | \$0.30 |
| EMC high 12/2002 estimate:    | \$1.20 |

### **Network Appliance Inc.**

During the tech boom of the 1990s, the Dot-Com's were huge customers for networking companies such as NTAP. They bought the routers and IP's from them. But since the Dot-Com crash, there has been very low demand and too much inventory. This has resulted in large losses. Even the large number of job cuts has not been able to help these companies stay profitable. In the hope that the interest cuts will make these companies profitable again, I chose this stock. I believed that with the interest cuts other companies once again be able to invest in the Networking products that these companies have to offer. I thought that the bounce back in stock price would result in a capital gain.

Initial Investment: \$9355.00  
 Number of shares: 500

Net worth after specified time period = number of shares \* final market value of stock  
 = 500\*\$10.61  
 = \$5305

% growth = -42.99%

#### *Numerical Analysis:*

The NTAP stock gradually tumbled 43% in just four weeks!

#### *Graphical Analysis:*

I used the graph by comparing the closing & P/E with the DJIA. The Closing price basically magnified the "flow" and performance of the DJIA. The stock literally tumbled over the four-week period.

#### *Performance analysis with relation to the Beta of the stock:*

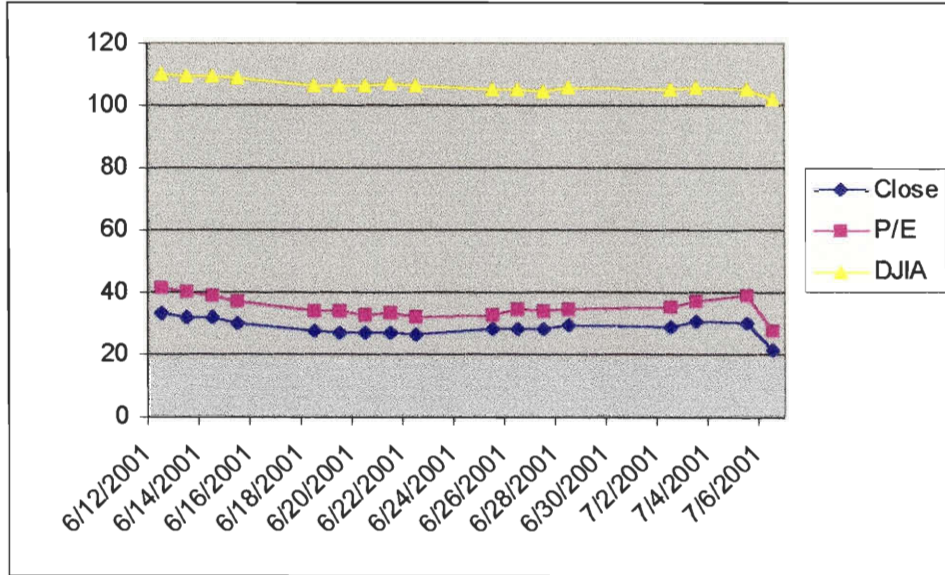
Stock beta: 1.9

This value indicates the stock to be of very high-risk stock. For example if the market went down by 10% then the value of the stock will approximately go down by approximately 20%. The stock has definitely under-performed the market.



Earnings Report:

Analysts mentioned that they lowered profit estimates on NTAP. NTAP also confirmed this by saying that its first fiscal quarter profit went “flat” compared to its fourth quarter.



Future Predictions:

| Fiscal Year | Est Low/High Price Range | Avg. Est. Price | % Change for Average |
|-------------|--------------------------|-----------------|----------------------|
| 4/2002      | \$1.04-\$11.98           | \$8.86          | -22.98%              |
| 4/2003      | \$18.23-\$28.65          | \$22.92         | 99.34%               |

Network Appliance current price: \$11.50

Network Appliance current multiple (P/E): 52.10

Network Appliance average 4/2002 estimate: \$0.17

Network Appliance low 4/2002 estimate: \$0.02

Network Appliance high 4/2002 estimate: \$0.23

Network Appliance average 4/2003 estimate: \$0.44

Network Appliance low 4/2003 estimate: \$0.35

Network Appliance high 4/2003 estimate: \$0.55

## Nortel Networks

This company is very similar to NTAP and is classified in the same industry. This is also a company that has been hit hard since the Dot-Com crash.

Initial Investment: \$6265.00

Number of shares: 500

Net worth after specified time period = number of shares \* final market value of stock  
=  $500 * \$7.9$   
= \$3950

% growth = -36.95%

### *Numerical Analysis:*

The NT stock gradually tumbled 37% in just four weeks!

### *Graphical Analysis:*

I used the graph by comparing the closing & P/E with the DJIA. The Closing price basically magnified the “flow” and performance of the DJIA. The stock literally tumbled over the four-week period.

### *Performance analysis with relation to the Beta of the stock:*

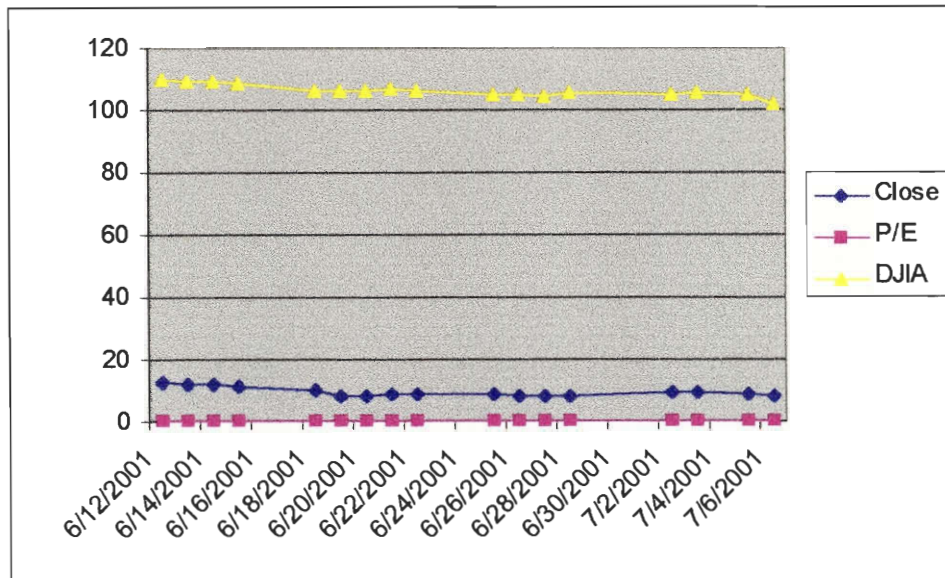
Stock beta: 2.1

This value indicates this stock to be of extremely high-risk stock. For example if the market went down by 10% then the value of the stock will approximately go down by approximately 20%. The stock has definitely under-performed the market.

### *Earnings Report:*

Nortel Networks during the four-week period said that it would cut another 10,000 jobs and reported a staggering \$19.2 billion second-quarter loss. This definitely might have caused an impression on the investors and analysts to cause stock price to drop so drastically in the four-week period. The reasons behind to this huge job cuts is the same as NTAP (drastic loss of demand and accumulation of huge inventory).





Future Predictions:

| Fiscal Year | Est Low/High Price Range | Avg. Est. Price | % Change for Average |
|-------------|--------------------------|-----------------|----------------------|
| 12/2001     | NA                       | NA              | NA                   |
| 12/2002     | NA                       | NA              | NA                   |

Nortel Networks current price: \$8.22

Nortel Networks current multiple (P/E): NA

Nortel Networks average 12/2001 estimate: \$-0.63

Nortel Networks low 12/2001 estimate: \$-1.00

Nortel Networks high 12/2001 estimate: \$0.30

Nortel Networks average 12/2002 estimate: \$0.10

Nortel Networks low 12/2002 estimate: \$-0.25

Nortel Networks high 12/2002 estimate: \$0.57

## Lucent Technologies

This company is a manufacturer of telecom equipment hardware and software. It is also investing in growth industries like fiber optics. It is involved in corporate restructuring to set up an environment for future growth industries. It is hoped that the interest rate cuts will fuel its recovery.

Initial Investment: \$4120.00

Number of shares: 500

Net worth after specified time period = number of shares \* final market value of stock  
= 500\*\$6.02  
= \$3010

% growth = -26.94%

*Numerical Analysis:*

The LU stock gradually tumbled 27% in just four weeks!

*Graphical Analysis:*

I used the graph by comparing the closing & P/E with the DJIA. The Closing price basically magnified the “flow” and performance of the DJIA. The stock literally tumbled over the four-week period.

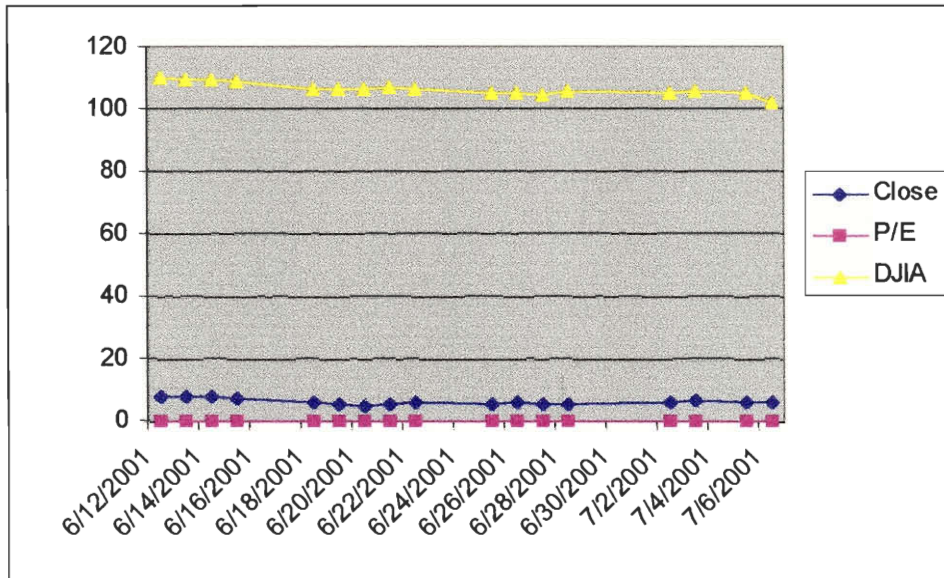
*Performance analysis with relation to the Beta of the stock:*

Stock beta: 2.1

This value indicates this stock to be of extremely high-risk stock. For example if the market went down by 10% then the value of the stock will approximately go down by 20%. The stock more or less behaved in relation with the stock beta.

*Earnings Report:*

The analysts and brokerage firms a number of times, downgraded the stock from buy to hold or neutral. This clearly means analysts and brokerage firms are losing confidence in the stock. These influential analysts and brokerage firms will send a wave of pessimism to the investors. This causes the investors to liquidate or not buy the stock at all. This has definitely caused a drop in stock price over the four-week period.



Future Predictions:

| Fiscal Year | Est Low/High Price Range | Avg. Est. Price | % Change for Average |
|-------------|--------------------------|-----------------|----------------------|
| 9/2001      | NA                       | NA              | NA                   |
| 9/2002      | NA                       | NA              | NA                   |

Lucent current price: \$6.86  
 Lucent current multiple (P/E): NA

Lucent average 9/2001 estimate: \$-1.05  
     Lucent low 9/2001 estimate: \$-1.42  
     Lucent high 9/2001 estimate: \$-0.77

Lucent average 9/2002 estimate: \$-0.04  
     Lucent low 9/2002 estimate: \$-0.81  
     Lucent high 9/2002 estimate: \$0.35

## **Wal-Mart Corp.**

This is successful nation-wide discount store chain. It has performed very well in the past five years. But since the downturn it has a temporary slowdown because the American public is not spending more money because of the fear of the job cuts etc. But since the interest cuts, the corporation is beginning to perform better and sales is picking up. I believe it's a good investment.

Initial Investment: \$25510.00

Number of shares: 500

Net worth after specified time period = number of shares \* final market value of stock  
=  $500 * \$6.02$   
= \$3010

% growth = -6.88%

### *Numerical Analysis:*

The stock went down by about 7% over the four-week period.

### *Graphical Analysis:*

I used the graph by comparing the closing & P/E with the DJIA. The stock price imitated the "flow" or movement of the market.

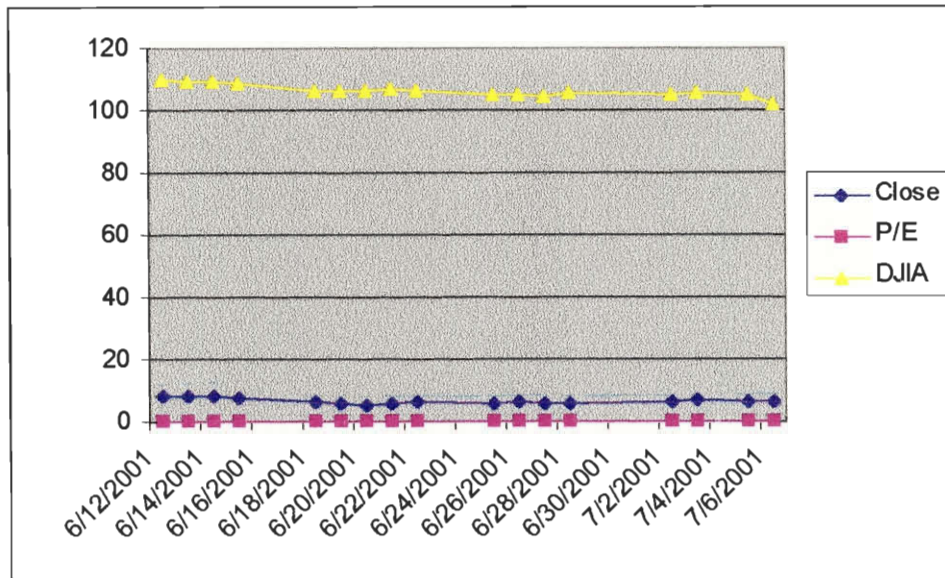
### *Performance analysis with relation to the Beta of the stock:*

Stock beta: 0.9

This value indicates this stock to be quite a risky stock. For example if the market went down by 10% then the value of the stock will approximately go down by 9%. The stock behaved in relation with the stock beta. The stock has not changed much with relation to the market because the stock will be inevitably be effected by the ups and downs of the market as whole.

### *Earnings Report:*

Reports say that in the month of June most departmental stores are going at a loss. This is mainly because the market is doing poorly. There are a lot of job cuts and the American people are more concerned on saving rather than spend it on stores like Gap Inc, Sears etc. Though Wal-Mart is still ahead of most stores, it's not doing as well as its previous quarters. People are willing to buy things at discount stores to save money because they are afraid of the present situation where their job security is threatened.



Future Predictions:

| Fiscal Year | Est Low/High Price Range | Avg. Est. Price | % Change for Average |
|-------------|--------------------------|-----------------|----------------------|
| 1/2002      | \$51.26-\$55.04          | \$52.98         | 2.17%                |
| 1/2003      | \$56.07-\$63.64          | \$60.54         | 16.77%               |

Wal-Mart current price: \$51.85  
 Wal-Mart current multiple (P/E): 34.40  
 Wal-Mart average 1/2002 estimate: \$1.54  
 Wal-Mart low 1/2002 estimate: \$1.49  
 Wal-Mart high 1/2002 estimate: \$1.60  
 Wal-Mart average 1/2003 estimate: \$1.76  
 Wal-Mart low 1/2003 estimate: \$1.63  
 Wal-Mart high 1/2003 estimate: \$1.85

## **K Mart Corp.**

1. In many respects the general characteristics and the stock movements of the company are quite comparable to Wal-Mart.
2. In the last few months of this year, the KM stock has noticeably shot up. I believed this could be a good capital gain opportunity.

Initial Investment: \$5600.00

Number of shares: 500

Net worth after specified time period = number of shares \* final market value of stock  
= 500\*\$10.6  
= \$5300

% growth = -5.36%

### *Numerical Analysis:*

The stock went down by about approximately 5% over the four-week period.

### *Graphical Analysis:*

I used the graph by comparing the closing & P/E with the DJIA. The stock price imitated the “flow” or movement of the market.

### *Performance analysis with relation to the Beta of the stock:*

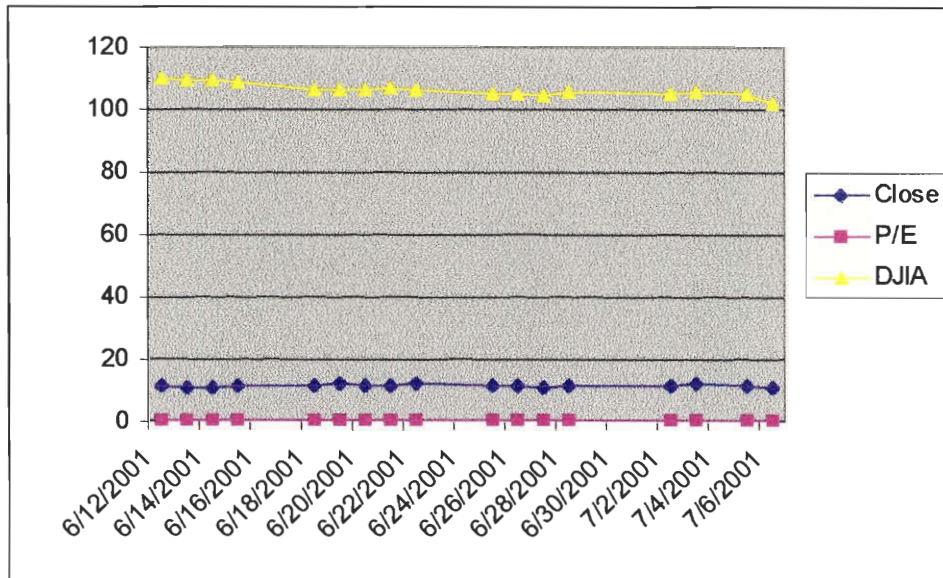
Stock beta: 0.9

This value indicates this stock to be quite a risky stock. For example if the market went down by 10% then the value of the stock will approximately go down by 9%. The stock behaved in relation with the stock beta. The stock has not changed much with relation to the market because the stock will usually be effected by the ups and downs of the market as whole.

### *Earnings Report:*

Both K Mart and Wal-Mart fall under the same category. K Mart had an identical performance to Wal-Mart in the four-week period due to the same reasons as Wal-Mart.





Future Predictions:

| Fiscal Year | Est Low/High Price Range | Avg. Est. Price | % Change for Average |
|-------------|--------------------------|-----------------|----------------------|
| 1/2002      | NA                       | NA              | NA                   |
| 1/2003      | NA                       | NA              | NA                   |

Kmart current price: \$11.23  
 Kmart current multiple (P/E): NA  
 Kmart average 1/2002 estimate: \$0.51  
     Kmart low 1/2002 estimate: \$0.34  
     Kmart high 1/2002 estimate: \$0.76  
 Kmart average 1/2003 estimate: \$0.65  
     Kmart low 1/2003 estimate: \$0.45  
     Kmart high 1/2003 estimate: \$0.77



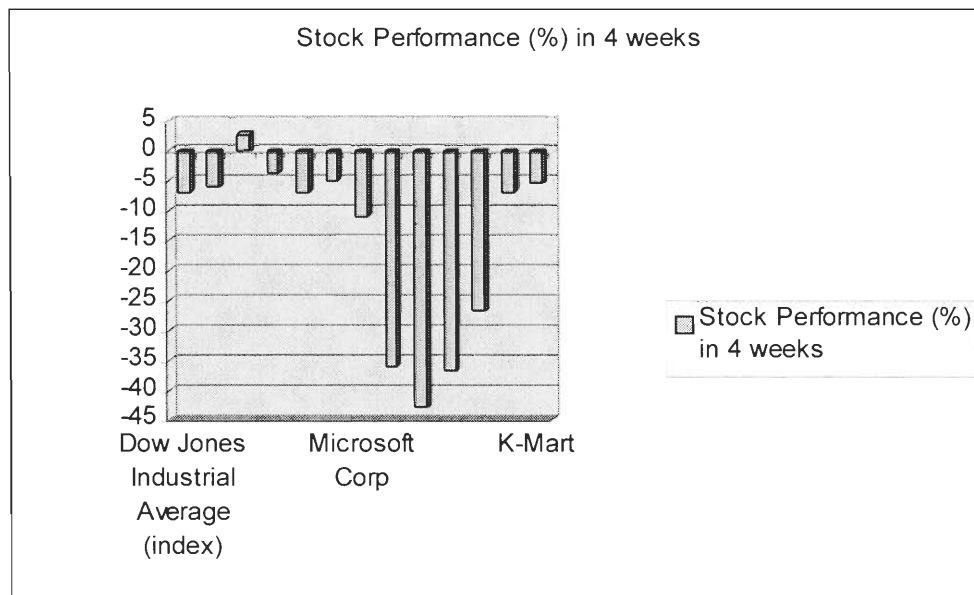
**CHAPTER 4:**  
**CONCLUSION**

#### 4. CONCLUSION

##### MARKET CONDITION:

##### PRESENT

| Company or Index                     | Stock Performance (%) in 4 weeks |
|--------------------------------------|----------------------------------|
| Dow Jones Industrial Average (index) | -7.005                           |
| Pfizer                               | -6.156                           |
| Johnson & Johnson                    | +2.70                            |
| Exxon Mobil Corp                     | -3.68                            |
| Texaco Corp                          | -6.98                            |
| Oracle Corp                          | -4.92                            |
| Microsoft Corp                       | -10.96                           |
| EMC                                  | -36.1                            |
| Network Appliances                   | -42.99                           |
| Nortel Networks                      | -36.95                           |
| Lucent Technologies                  | -26.94                           |
| Wal-Mart                             | -6.88                            |
| K-Mart                               | -5.36                            |



In general we can see the stocks have performed very poorly. The stocks chosen were the mostly the widely held ones. This means that investors during a down market still had confidence in these companies. Irrespective of this, these companies were not able to perform. My assumption initially was that, if the Federal Reserve Board has come up with a lot of interest rate cuts the market and stocks would improve in a matter of four weeks. But this was not the case. The market is still doing poorly. In

described as “market momentum”. This means that it takes time before the interest rate cuts comes into effect. It does not change the market instantly. Besides, the investors (or rather the market) are very sensitive to news and alerts from analysts and earning forecasts. This played a huge role in the stock price change during the four-week period. For example many of the companies gave out earning warnings during the four-week period. This had drastic effects on the stock price because it affected investor confidence. Analysts’ comments and recommendations also affect the stock price because they are supposedly good predictors of stock price trends. Many investors are very skeptical of analysts’ predictions but nevertheless such predictions do affect the stock price especially if he/she is an influential analyst.

As we can see the computer networking and telecommunication sector was hit pretty hard during the four-week period. In general, these companies are not getting enough demand as expected when the companies first started. They have large inventory just “lying around”. Many parts of their businesses are really not profitable. This resulted in large job cuts and corporate re-structuring. These companies posted major negative profit and earning warnings. The result was Investors lost confidence in these companies and stock price dropping huge percentages (ex. 20% or higher) in just a few weeks.

Most of the other company stocks (other than computer networks and telecommunication), did reasonably okay considering the market condition. Their stock prices performed according the “tide rise and fall” analogy. The market went down about 7% (Dow Jones Industrial Average). The other stocks also went down about the same unlike the hard hit sectors that went down about 20% or more below.

## **FUTURE**

Analysts, Industry ‘gurus’ and investors believe that computer networks and biotech are the future of the technology.

Data of human genome has been discovered recently. The Biotech boom is very close and this may replicate the performance of the high tech boom in the 1990s. So investing in ‘fruitful’ biotech industries may be a good idea. Both bio tech stocks (Pfizer and Johnson & Johnson) have very positive prospects and I believe it would be the same for some other biotech industries that come up with revolutionary or rather ‘evolutionary’ products that would call for huge demand and rise in stock price.

Also, the amount of data, distances and speed at which this data has to be handled as drastically increased. This calls for large increases in computer networking technology. There is a huge possibility that these beaten up stocks that I just invested in would perform extremely well because of the rising demand of high performance computer networks (ex. Nortel networks) and data storage (ex. EMC). What this means is that, it is a good time to just ‘hold’ these stocks for now and keep them. They are long-term investments because there is a good possibility that these stock prices would rise.

In fact, based on the experience that I gained in the project, I believe now that the portfolio I used for the four-week period is the classic portfolio for a more long-term approach. The Mistake that I made was that I over-estimated the speed of market recovery.

Therefore, despite the fact that my portfolio did not perform satisfactorily during the chosen four weeks, I believe it would be a great one for the future market conditions characterized by factors like:

- 1) Better overall market condition, therefore stocks other than computer networks and biotech would rise automatically ('Tide rise and fall, Boats rise and fall' analogy) and generate reasonable profits.
- 2) Computer Networks and Telecommunications demand increasing rapidly because of advanced technological developments like Nano-technology and biotech and P2P networking. Hence these beaten stocks would do a whole lot better which will result in steep increases of stock prices. Huge Capital gain.
- 3) A lot of Biotech development. Many startups with unique and evolutionary products. Many companies going IPO, huge stocks price increases and a lot of capital gain for investors.

**CHAPTER 5:**

**EPILOGUE**

## **5. EPILOGUE**

I believe doing this project has opened up a world of opportunity for me. The Stock Market is a huge place for investment opportunity. The more one learns about it, the greater one chances of succeeding in it. "A little knowledge is very dangerous" applies very well in this scenario. Without knowing much about the market, a person can be exposing him/her to very large risk. But with very good knowledge coupled with good intuition the stock market has no limits for capital gain.

This being an IQP and not an MQP, I am aware of its rudimentary style. The stock market has a lot more to offer than just a few stocks. It offers other investment opportunities and securities such as Bonds, Mutual Funds, Calls, Warrants, commodities etc. Each of them have associated risks with them but the more one knows, the better his chances of being able to generate profit.

I have realized that this IQP (doing it with the guidance of my advisor: Prof. Dalin Tang) is of a lot of value to me. It has provided me a very good introduction to this major area of investment. I am looking forward to further my knowledge of the Stock Market and hoping to gain a lot of practical experience in the Stock Market!

### **Information Resources**

- 1) Website: [moneycentral.msn.com](http://moneycentral.msn.com)
- 2) Website: [www.cnnfn.com](http://www.cnnfn.com)
- 3) Book: “The Coming Internet Depression” by Michael Mandel
- 4) Book: “Fundamentals of Investing” by L.Gitman and M.Joehnk
- 5) Magazine: “BusinessWeek”
- 5) Magazine: “Technology Review”
- 6) Magazine: “Future of Software”
- 7) Newspaper: “Wall Street Journal”



## **GLOSSARY**

### **BOND**

A document recording a loan and specifying the date of maturity and the rate of interest to be paid.

### **CALLS**

An instalment called up by a company on contributing or partly paid shares. A legal liability for shareholders of other than a "No Liability" company.

### **CAPITAL GAIN/LOSS**

Profit/loss made on the sale of a capital asset.

### **CLOSING PRICE**

The price of a share or security at the end of a day's stock market trading.

### **COMPANY**

A separate legal entity, incorporated under the Companies Act 1965, carrying on a business or trade. A company may be private or public, limited by shares or unlimited, or limited by guarantee.

### **DEBT/EQUITY RATIO**

The relationship between a company's borrowing and its shareholders' capital funds.

### **EARNINGS PER SHARE**

The amount of a company's annual profits or earning attributable to each ordinary share of that company.

### **EQUITY**

Another name for the ordinary shares of a company.

### **GROWTH STOCKS**

Shares of companies with good prospects for increasing profits and capital size. Likely to bring shareholders future capital gains through a share price rise, high dividends, share bonuses or rights issues.

### **INSIDER TRADING/ DEALING**

Insider trading or dealing is the purchase or sale of a company's securities effected by or on behalf of a person with knowledge of relevant but non-public material information regarding that company. The insider is in a position to make massive gains by selling or buying securities before information that might affect the price of the company's securities (price-sensitive information) is made public.

Insider trading is an offence under the Companies Act 1965 and the Securities Industry Act 1983.

#### MARKET CAPITALIZATION

The total value of a listed company's shares based on current market price.

#### MERGER

In general terms, the amalgamation of two business enterprises into a new entity.

#### OPTION

Right to take up or sell shares at an agreed price at or before a specified future date. Prefixed with terms of "call" or "put".

#### PORTFOLIO

A selection of securities held by an investor.

#### PRICE EARNINGS RATIO

The relationship between the price of a share and the earnings of the company attributable to that share, the result being expressed as the current share price divided by the latest available figure of earnings per share.

#### PRIVATE COMPANY

A company in which the number of its members is restricted to 50.

#### RESERVES

The accumulated capital of the company which belongs to the shareholders, and is represented by various company assets. "Secret Reserves" are those created by understating assets as a result of unnecessarily writing off investment, plant and machinery in the Profit and Loss account or making excessive provisions for contingencies.

#### SECURITIES

The generic term for any instrument traded on a stock exchange.

#### SECURITIES INDUSTRY ACT 1983

The Act of Parliament governing the business of dealing in securities, stock exchanges and related matters in Malaysia.

#### SECURITIES COMMISSION

Established by the Ministry of Finance to streamline the activities relating to equity and futures markets.

#### SECURITIES COMMISSION ACT 1993

The Act of Parliament under which the Securities Commission was established on 1 March 1993

## SECURITIES INDUSTRY (CENTRAL DEPOSITORIES) ACT 1991

The Act of Parliament which governs the activities relating to the Central Depository

### SHARE

In relation to a company, a security representing a portion of the holder's capital in that company.

There are basically two types of shares, namely ordinary shares and preference shares.

Ordinary shares give holders the rights of ownership of the company, such as the right to share in the profits of the company by way of dividend, the right to vote in general meeting and to elect and dismiss directors.

Preference Shares have a preferential position over ordinary shares, in regard to the payment of dividends and the division of the company's assets. Some preference shares may have a cumulative entitlement in that dividends not paid can be carried forward and must be paid prior to an ordinary dividend payment or distribution on liquidation. Some preference shares are "participating" with ordinary shares in all dividend above a set rate, in addition to their own preferential dividend rate.

Other preference shares are redeemable at a certain date.

### SHARE SPLIT

When a company reduces the paid or face value of its shares, and issues further shares in the same proportion i.e. 100,000 RM 2 ordinary shares would be split into 200,000 RM 1 ordinary shares.

### STOCKBROKER

An agent who buys and sells shares on behalf of his clients and is paid brokerage or commission for his services.

### STOCK EXCHANGE

An organisation providing the market-place or facility for the buying and selling of stocks and shares.