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**A STUDY ON EQUITY SHARE PRICE BEHAVIOUR FOR  
SELECTED INDUSTRIES IN KARVY STOCK BROKING  
LIMITED, TIRUPUR FOR THE STUDY PERIOD 2002-2006**

By

**S.Bharani Priya**  
71205631007

Of  
Department of Management Studies  
**Kumaraguru College of Technology**  
COIMBATORE.

A PROJECT REPORT  
Submitted to the

**FACULTY OF MANAGEMENT STUDIES**

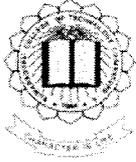
In the partial fulfillment of the requirements  
For the award of the degree

Of

**MASTER OF BUSINESS ADMINISTRATION**

June, 2007.

# ***CERTIFICATES***



**KCT Business School  
Department of Management Studies  
Kumaraguru College of Technology  
Coimbatore – 641006.**

**BONAFIDE CERTIFICATE**

Certified that this project report titled “A Study on Equity Share Price Behaviour For Selected Industries in Karvy Stock Broking Limited, Tirupur for the study period 2002-2006” is the bonafide work of S.BHARANI PRIYA. (Reg no: 71205631007) who carried this research under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

  
**Project Guide**

  
**Director**

Evaluated and Viva Voce conducted on 03.07.2007.

  
**INTERNAL EXAMINER**

  
**EXTERNAL EXAMINER**

Date: 20/04/2007

**PROJECT COMPLETION CERTIFICATE**

This is to certify that Mr.**S.Bharanipriya** (Roll No. **71205631007**) a student of KCT Business School, Kumaraguru College of Technology, had undergone a project between 18/01/2007 and 20/04/2007 entitled “**A Study on Equity Share Price Behavior**”

During the tenure her performance was good.

Name and Designation

Of the organizational Guide: Mr.S.P.Chidambaram,  
Branch Head,  
Tirupur.

Postal address

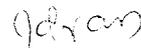
: Karvy Stock Broking Ltd,  
254, Avinashi Road,  
RCR complex,  
Tirupur - 641603

Phone No.

: 0422-4291000

Email-Id

: chidambaramsp@karvy.com

  
Signature of the  
Organizational Guide



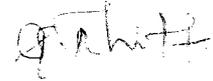
## DECLARATION

I, hereby declare that this project report entitled "A Study on Equity Share Price Behaviour For Selected Industries in Karvy Stock Broking Limited, Tirupur for the study period 2002-2006" as has been undertaken for academic purpose submitted to Anna University in partial fulfillment of the requirements for the award of the degree of Master of Business Administration. The project report is the record of the original work done by me under the guidance of Miss.S.Sangeetha during the academic year 2006 – 2007.

I, also declare hereby, that the information given in this report is correct to best of my knowledge and belief.

**Date :** 01.06.2007

**Place:** Coimbatore



**S.Bharani Priya.**

# ***EXECUTIVE SUMMARY***

## EXECUTIVE SUMMARY

This analysis on Equity Share Price Behaviour studies the behaviour of selected sectors like information technology, bank and pharmaceuticals. This project aims at finding out the risk, return and the money flow of selected equity shares.

Equity market is often considered the main engine driving the economy. Equity markets allow savers to acquire stake in firm and sell it, if they need access to their savings or if they want to alter their portfolio. At the same time, it allows firms to raise permanent capital for asset creation. By incorporating information about future earnings potential in current stock prices, the equity market also serves as a barometer to the state of the economy. This makes the equity market an important constituent of financial markets.

Volatile markets are characterized by wide price fluctuations and heavy trading. For getting higher returns, every person is interested in investing in shares hence prediction and planning is very important to know the stock returns in future.

The study is aimed at ascertaining the behaviour of stock returns. Simple moving average model is used to analyze the stock price behaviour of the selected companies. Beta calculation is used to find out the market risk in the shares. Money flow index is used to find out the money flow with regard to buying and selling of shares. The stock exchanges are increasing their operations through out the country to attract a larger share of the market. The trend analysis shows the clear picture of the share prices in future.

The investment will become attractive only when they are being offered a return commensurate with risk attached to the investment. The study will be useful to various investors, individuals, FIIs in identifying the behaviour of stock returns and timing of purchase and sale of stocks.

# ***ACKNOWLEDGEMENT***

## ACKNOWLEDGEMENT

At the very outset I submit my project at the gracious feet of God, The Almighty who is the author of all knowledge and wisdom for guiding me to bring out my project successfully.

I take immense pleasure in expressing my sincere gratitude to our beloved correspondent **Prof.Dr.K.Arumugam,B.E.,M.S.,M.I.E..** the prime guiding spirit of Kumaraguru College of Technology

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# ***INTRODUCTION***

## **CHAPTER - 1**

### **INTRODUCTION**

#### **1. INTRODCUTION TO THE INDUSTRY**

##### **INDUSTRY PROFILE**

##### **STOCK EXCHANGE**

The stock exchange or secondary market is a highly organized market for the purchase and sale of second hand quoted of listed securities. The securities contracts (Regulation) Act 1956 defines a stock exchange as "an association, organization or not, established for the purpose of assisting, regulating and controlling business in buying, selling and dealing in securities".

Of all the modern service institutions, stock exchange plays a crucial agents and facilitators of entrepreneurial progress. After the industrial resolution, as the size of the business enterprises grew, it was no longer possible for individual person or even partnerships to raise such huge amount for undertaking these ventures. Such huge requirements of capital can be met only large number of individuals.

These investors could be expected to participate actively only if investment is liquid or they could sell a part of their stake whenever they wish to generate cash. This liquidity can be achieved through shares and debentures representing smallest units of ownership and lending represented by the public. The institution where these securities are traded is known as stock exchange. This stock exchange is one of the most important institutions in the capital market.

##### **BOMBAY STOCK EXCHANGE**

The origin of the Bombay stock exchange date back to 1875. it was organized under the name of " the native stock and shares brokers association" as a voluntary and non-profit making association. It was recognized on a permanent basis in 1957. this premier stock exchange is the oldest stock exchange in Asia.

## **NATIONAL STOCK EXCHANGE**

The National Stock Exchange of India Limited has genesis in the report of the High Powered Study Group on Establishment of New Stock Exchanges, which recommended promotion of a National Stock Exchange by financial institutions (FIs) to provide access to investors from all across the country on an equal footing. Based on the recommendations, NSE was promoted by leading Financial Institutions at the behest of the Government of India and was incorporated in November 1992 as a tax-paying company unlike other stock exchanges in the country.

Trading on NSE is characterized by four key innovations.

- The physical floor was replaced by anonymous, computerized order- matching with strict prime-time priority.
- The limitations of being on Mumbai and the limitations of India's Public telecom network were avoided by using satellite communications. Now NSE has a network of over 2000 satellite terminals all over the country. On a typical day almost over 3500 traders login to the trading computer over this network. This is larger than the capacity of the largest trading floors in the world.
- Brokers do not own NSE. It is a limited liability company and brokers or franchisees. Therefore NSEs' staff is free of pressures from brokers and is able to perform its regulatory and enforcement functions more effectively.

## INTRODUCTION TO THE PROJECT

In the wake of the introduction of new economic policy in the middle of the year 1991, the Indian Capital Market has witnessed a tremendous growth. There was an explosion of investor interest during the nineties and an equity cult emerged in the country. To experience sustained growth statutory legislations have helped the capital market. Foreign Exchange regulation act is one such legislation in this direction.

An important recent development has been the entry of Foreign Institutional Investors as participants in the primary and secondary markets for industrial securities. In the past several years, investments in developing countries have increased remarkably. Among the developing countries India has received considerable capital inflows in recent years. The liberalization policy of the Government of India has now started yielding results and the country is poised for a big leap in the industrial and economic growth. The Economy of the country is mainly based on the development of the corporate sectors. Funds may be raised through securities market for financing corporate growth.

Generally, the security prices reflect the performance of a company. Both economic and non-economic factors invariably affect stock return behavior. As Cootner (1964) says that “the prices of securities are typically very sensitive, responsive to all events, both real and imagined”. Again a major factor responsible for stock return fluctuations is speculative purchase and sale by foreign institutional investors. Indian financial institutions also play a major role in equity market leading to stock return fluctuations. Many theories have come up which have empirically verified the investors’ behavior at the international as well as at the Indian context. In the present project, it is attempted to test the equity price movements taking pharmaceuticals, IT and banking industries as sample sectors.

## **1.1 BACKGROUND OF THE STUDY**

The Background of this project is to analyze the stock price behaviour for the selected industries and to enable the investors to make appropriate and profitable investments. Industries were chosen based on the past performance of the industry in the economy and a growing one. Three sectors were selected and five companies from each sectors based upon the market capitalization were selected. The stocks are large cap stocks, which is included on the Nifty stock in National Stock Exchange. The period of analysis is about three years. The period is selected based on the boom of the economy in the past decade. The period is from 2004-2006 and daily price fluctuations have been taken for the analysis. Various parameters used are correlation, variance, beta and covariance. With the help of these tools and also with the use of other tools (which is mentioned in the methodology) a number of interpretations were formed and based upon the effect of fluctuations and their impact on their respective share prices were highlighted .

## **1.2 REVIEW OF LITERATURE**

The purpose of the chapter is to review the various studies conducted and made to consolidate the views and studies to determine the effectiveness of different factors, which influence the equity price.

D. Sarkar (1969) studies the share price behavior using the time series data. He found that the retained earnings had no effect on share price while the influence of dividend was very much significant.

Prof. Leopold A. Bernstein (1975) in his article had defended the function and value of fundamental investment analysis as the basis of successful investment in equity shares. He had argued that even though psychological and other factors accounted 50% of price changes the other 50% of it was only due to fundamental factors.

Balasubramaniam. K. (1994) examined the behavior of stock returns in India. He took the daily and weekly prices of 90 shares listed in BSE. He applied auto correlation analysis; runs test and filter techniques for the study. He concluded that

share price behavior is not random and hence random walk hypothesis cannot be established for Indian stock market.

Ritter (1988) analyzed the buy/ sell details of NSE stocks over a period of 15 years from Dec 17, 1970 to Dec 16, 1985. Ritter proposed the “parking- the – proceeds” hypothesis i.e., the individual investors who sell the stocks prior to the late December for tax loss selling and they buy the shares in early January, mostly small stocks. He concluded that the ratio of stock purchases to sales by individual investor displays a seasonal pattern, with individuals having a below-normal and buy/sell ratio in late December and above normal ratio in early January.

Prakash.L. Dheeriyia studied the early movement of stock market indices of major rational stock exchanges of 16 countries over the period of 1987 crash. He used time series of daily stock market indices at closing time. He found evidence of co-integration between stock indices of some small European countries.

Eugene F. Fama studied, “the Behavior of stock market prices”. The main objective of the theory is to find answer to the question: to what extent can be used to make meaningful predictions concerning the future prices of stocks?

Chan and Chen (1991) examined the difference in structural characteristics that lead firms of different size to react differently to the same economic news. By using time series analysis they found that return difference between small and large firms could be captured by the responses of high leverage firms and marginal firms to economic views.

### **1.3 OBJECTIVES OF THE STUDY**

#### **PRIMARY OBJECTIVE**

To analyse the stock price behaviour of selected industries listed in NSE, Delhi.

#### **SECONDARY OBJECTIVES**

- ✓ To predict the day-to-day fluctuations in the Stock Market using Technical Analysis.
- ✓ To study the price movements in the stock market.
- ✓ To analyze the average return and the risk involved in the selected industries.
- ✓ To analyze the future trend of the share price
- ✓ To recapitulate the key findings and offer suggestions to investors.

#### 1.4 SCOPE OF THE STUDY

A better understanding of the stock market trend will facilitate allocation of financial resources to the most profitable investment opportunity. The behavior of stock returns will enable the investors to make appropriate investment decisions. The fluctuations of stock returns are due to several economic and non-economic factors. The study is aimed at ascertaining the behavior of stock returns.

The study on fluctuations in equity market helps in understanding the behavior of equity market. It helps investors to be aware about deviations in the returns of the stocks. The simple moving average model indicates the buy and sell signal to the investors. This helps the investors in taking good decisions when investing in equity shares.

The study also helps the customers to ascertain the risk and return of the stocks. This will help the investors viz, individuals, FIIs in identifying the stocks which would yield them higher return and lesser risk.

Also the money flow index helps the people to know about the money flow in and out of a security. When the money flow is higher then it is recommended to buy and if money flow is less then the security can be sold.

The conclusions that are to be provided based on the analysis of the data would be of immense use to the investors on one hand and the officials of the stock market to understand the responsiveness of market price of the sample industries to different situation on the other.

## 1.5 RESEARCH METHODOLOGY

### 1.5.1 RESEARCH DESIGN

This project analyses the equity market and its fluctuations in India. The project aims to analyze the average return of the selected sectors for the study. It also measures the risk involved in investing in the stocks. Hence the study in this project is a descriptive study.

### 1.5.2 METHODOLOGY

#### Data and Sources of Data

Main objective of this analysis is to predict the future price movements using technical analysis. Source of data collected is Secondary. Print media and internet has been used for data collection. The data was obtained from the national stock exchange website ([www.nseindia.com](http://www.nseindia.com)). For the purpose of this study the daily closing prices of 15 companies included in National Stock Exchange has been taken and their price movements are computed and studied. The sectors selected are as follows:

- Information technology
- Bank
- Pharmaceuticals

Secondly, In the above mentioned sector five companies in each sector is taken as follows:

#### Information technology

- Infosys technologies
- Tata consultancy services
- Wipro
- Satyam computers
- HCL technologies

### Bank

- ICICI
- SBI
- PNB
- UTI
- HDFC

### Pharmaceuticals

- Dr.Reddys laboratories
- Ranbaxy
- Sun Pharma
- Cipla
- Glaxo

The purpose of this analysis is to take the three years solid data from the National Stock Exchange Website and to predict the market trends in each of the above-mentioned companies.

### **Time Period Covered**

The daily share prices of above mentioned companies and NIFTY were taken for a period of three years from 1st January 2004 to 31<sup>st</sup> December 2006. The closing prices of share prices were taken and the future price movements were analyzed.

### **Method of Sampling**

Since for the purpose of this analysis three sectors are taken and The companies chosen are the top 5 companies in each sector. Therefore the sampling technique used is the stratified random sampling. Each sector is considered as a stratum and the companies for the analysis are taken from each strata based on the market capitalization.

### **1.5.3 TOOLS USED FOR ANALYSIS**

#### **TECHNICAL ANALYSIS**

“Technical analysis refers to the study of the stock market itself rather than those external factors which are reflected in the market. It involves the examination of volume and price traded in the market”,

Technical approach to investment is essentially a reflection of the idea that the stock market moves in trend, which is determined by changing attitude of investors to a variety of economic, monetary, political and psychological forces.

Hence technical analysis involves a study of action of the market. In simple words, it is an art that helps to invest/trade along with the direction of trend and make the gain out of it.

#### **ASSUMPTIONS OF TECHNICAL ANALYSIS**

The main assumptions of technical analysis are as follows:

- All historic price and volume patterns exhibited by a stock represent the total market perception of what is known or knowable about the individual stocks.
- The market does not move in a random manner.
- The market value of the security is related to demand and supply factors.

##### **1.5.3.1 SIMPLE MOVING AVERAGE**

In technical analysis the moving average is one of the key trend lines that are plotted on a chart reflecting the closing prices over weeks. When the moving average moves above or below the daily chart it may generate a buy or sell signal.

A moving average is an indicator that shows the average value a security's price over a period of time. When calculating a moving average, a mathematical

analysis of the security's average value over a predetermined time period is made. As the security's price changes, its average price moves up or down.

We can interpret a moving average by comparing the relationship between the moving averages of the security's price with the security's price itself.

**Buy signal:** When the security's price rises above its moving average.

**Sell signal:** When the security's price falls below its moving average.

### 1.5.3.2 BETA

The degrees to which different portfolios are affected by these systematic risks as compared to the effect on the market as a whole is different and is measured by Beta. The Beta factor describes the movement in a stock's or a portfolio's returns in relation to that of the market return.

The main purpose of using Slope or Beta is to predict the change in the market. Beta is a measure of the market or non-diversible risk associated with any given security in the market. The formula for predicting Beta is as follows:

$$\text{Market Value of Beta} = \frac{P1 - P0}{P0} * 100$$

Where,

P1 Today's Close.

P0 Previous Close.

$$\text{Beta} = \frac{\text{Cov}(x, y)}{\text{var}(x)}$$

Where,

X Market Value of Nifty

Y Market Value of the Company.

The analysis is done based on the following rule:

- If the beta is 1 the company will move along with the market.
- If the beta is >1 the share is more volatile than the market.
- If the beta is <1 the share is less volatile than the market.

### 1.5.3.3 MONEY FLOW INDEX

#### Money Flow Index

Money Flow Index Measures the strength of money flowing into and out of the stock. Money Flow Index is an momentum indicator that measures the strength of money in and out of a security. The formula for calculating the Money Flow Index is as follows:

$$\text{Average Price of the day} = \frac{\text{Days High} + \text{Days Low} + \text{Close}}{3}$$

$$\text{Money Flow} = \text{Avg Price} \times \text{Days Volume.}$$

If the price was up in a particular day it is “Positive Money Flow” and it can be concluded that the stock position is good during the particular day and this is the signal to buy the particular stock and on the other hand if the price was low in the particular day it can be concluded that the stock position is not satisfactory and this is the signal to sell the particular stock.

### 1.5.3.4 TREND ANALYSIS

The trend analysis is used to project the future price for the particular scrip and this is done by fitting the linear trend by least squares method. The equation used for estimation is

$$Y = a + bX$$

Where, Y = Estimated value of the dependent variable.

X = Independent variable (time in trend analysis)

a = Y- intercept (the value of Y when X = 0)

b = slope of the trend line

## **FACTORS AFFECTING STOCK PRICES**

Stocks are affected by the following factors. They are as follows:

- Inflation.
- Interest Rates.
- Deflation.

### **INFLATION**

An increase in the cost of goods and services over a period of time. Decreases the purchasing power of the dollar. Usually measured by the Consumer Price Index.

### **INTEREST RATES**

A fee paid to a lender to borrow its money or a penalty charged for late payments. Usually shown as an annual percentage rate.

### **DEFLATION**

A drop in the cost of goods and services over time. Usually caused by a shrinking supply of money or credit, or reduced spending by consumers or government. Boosts purchasing power of the dollar.

## **1.6 LIMITATIONS OF THE STUDY**

The main limitations of the study are as follows:

- ✓ Prediction of price movements is based on some assumptions. Assuming that the trend will continue in future.
- ✓ There is no guarantee that what has worked for over a hundred and fifty years in the past may continue to work in the future.
- ✓ The study is confined to 3 years only and hence the changes taken place before and after these periods have not been taken into considerations.

## 1.7 CHAPTER SCHEME

The chapter scheme includes an overall view of the project work.

The report of the project work is organized into five chapters. The first chapter is the executive summary of the project.

The research methodology adopted for the study is prescribed in the second chapter. It includes introduction, statement of problem, objectives of the study, scope of the study, limitations of the study, data collection, tools of analysis and the chapter scheme.

The third chapter explains the profile of the company. It includes the history, mission, structure, quality policy, hierarchy of executives, product profile, market potential of the firm, description of various functional areas.

The micro macro analysis is described in the chapter four, the prevailing economic scenario with the industry. The analysis and interpretation of the data are discussed in chapter five.

The last chapter contains a summary of the findings. It also gives some suggestions for the investors to invest in the securities which will yield the best returns in the future.

# ***ORGANIZATION PROFILE***

## **CHAPTER - 2**

### **ORGANIZATIONAL PROFILE**

#### **2.1 HISTORY OF THE ORGANIZATION**

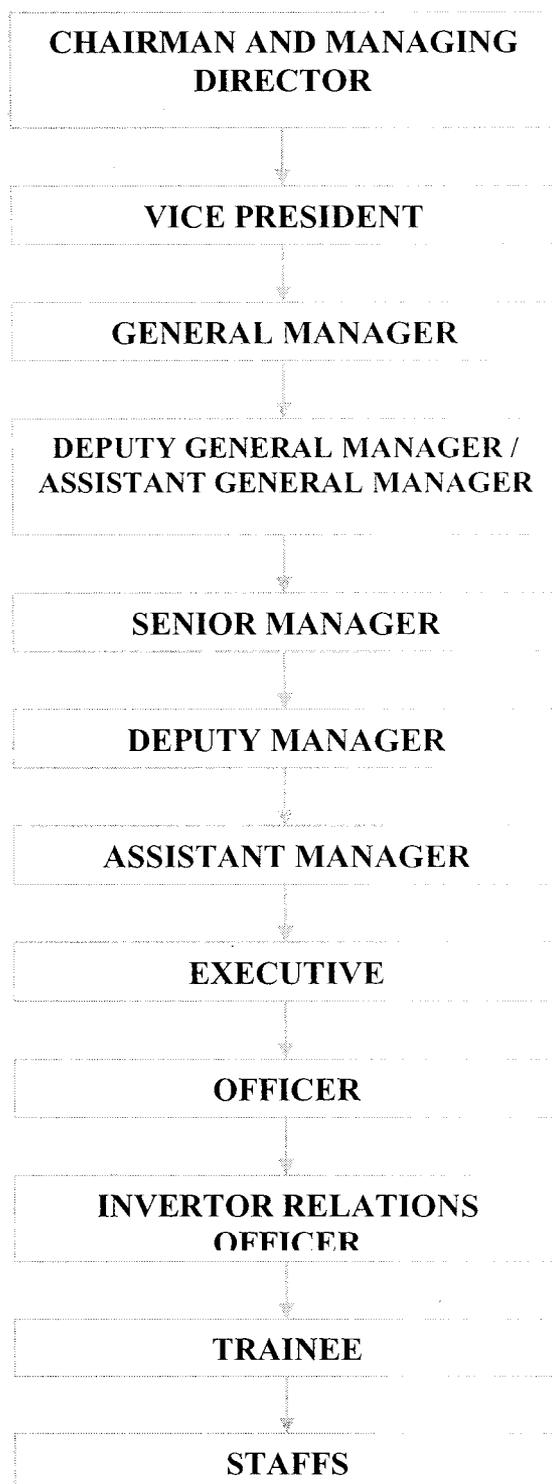
The Karvy was established on a modest scale in 1981. It began with the vision and enterprise of a small group of practicing Chartered Accountants who founded the flagship company Karvy Consultants Limited. It was started with consulting and financial accounting automation, and carved inroads into the field of registry and share accounting by 1985. Thus over the last 20 years Karvy has traveled the success route, towards building a reputation as an integrated financial services provider, offering a wide spectrum of services.

The highly qualified manpower, cutting-edge technology, comprehensive infrastructure and total customer-focus has secured for the position of an emerging financial services giant enjoying the confidence and support of an enviable clientele across diverse fields in the financial world. The values and vision of Karvy is to attain total competence in its servicing as a great financial enterprise, which stands solid on its fortresses of financial strength.

KARVY, is a premier integrated financial services provider, and ranked among the top five in the country in all its business segments, services over 16 million individual investors in various capacities, and provides investor services to over 300 corporates, comprising the who is who of Corporate India.

KARVY covers the entire spectrum of financial services such as Stock broking, Depository Participants, Distribution of financial products - mutual funds, bonds, fixed deposit, equities, Insurance Broking, Commodities Broking, Personal Finance Advisory Services, Merchant Banking & Corporate Finance, placement of equity, IPOs, among others. Karvy has a professional management team and ranks among the best in technology, operations and research of various industrial segments.

## 2.2 ORGANIZATIONAL STRUCTURE



## **2.3 PRODUCTS PROFILE AND MARKET POTENTIAL**

### **STOCK BROKING SERVICES**

It is an undisputed fact that the stock market is unpredictable and yet enjoys a high success rate as a wealth management and wealth accumulation option. The difference between unpredictability and a safety anchor in the market is provided by in-depth knowledge of market functioning and changing trends, planning with foresight and choosing one & request options with care. This is what they provide in their Stock Broking services.

They offer services that are beyond just a medium for buying and selling stocks and shares. Instead they provide services, which are multi dimensional and multi-focused in their scope. There are several advantages in utilizing our Stock Broking services, which are the reasons why it is one of the best in the country.

They offer trading on a vast platform. National Stock Exchange, Bombay Stock Exchange and Hyderabad Stock Exchange. The highly skilled research team, comprising of technical analysts as well as fundamental specialists, secure result-oriented information on market trends, market analysis and market predictions. This crucial information is given as a constant feedback to our customers, through daily reports delivered thrice daily; The Pre-session Report, where market scenario for the day is predicted, The Mid-session Report, timed to arrive during lunch break, where the market forecast for the rest of the day is given and The Post-session Report, the final report for the day, where the market and the report itself is reviewed. To add to this repository of information, we publish a monthly magazine &ldquo; Karvy; The Finapolis & rdquo;, which analyzes the latest stock market trends and takes a close look at the various investment options, and products available in the market, while a weekly report, called &ldquo; Karvy Bazaar Baatein&rdquo;, keeps you more informed on the immediate trends in the stock market. In addition, our specific industry reports give comprehensive information on various industries. Besides this, they also offer special portfolio analysis packages that provide daily technical advice on scrips for successful portfolio management and provide customized advisory services to help you make the right financial moves that are specifically suited to your portfolio.

Stock Broking services are widely networked across India, with the number of their trading terminals providing retail stock broking facilities. Their services have increasingly offered customer oriented convenience, which they provide to a spectrum of investors, high- networth or otherwise, with equal dedication and competence.

Their foray into commodities broking has been path breaking and they are in the process of converting existing traders in commodities into the more organized mainstream of trading in commodity futures, both as a trading and risk hedging mechanism.

In the future, their focus will be on the emerging businesses and to meet this objective, they have enhanced their manpower and revitalized their knowledge base with enhances focus on Futures and Options as well as the commodities business.

### **MERCHANT BANKING**

Recognized as a leading merchant banker in the country, they are registered with SEBI as a Category I merchant banker. This reputation was built by capitalizing on opportunities in corporate consolidations, mergers and acquisitions and corporate restructuring, which have earned them the reputation of a merchant banker. Raising resources for corporate or Government Undertaking successfully over the past two decades have given them the confidence to renew our focus in this sector. Their financial advice and assistance in restructuring, divestitures, acquisitions, demergers, spin-offs, joint ventures, privatization and takeover defense mechanisms have elevated our relationship with the client to one based on unshakable trust and confidence.

### **MUTUAL FUND SERVICES**

They have attained a position of immense strength as a provider of across-the-board transfer agency services to AMCs, Distributors and Investors. Nearly 40% of the top-notch AMCs including prestigious clients like Deutsche AMC and UTI swear by the quality and range of services that they offer. Besides providing the entire back office processing, they provide the link between various Mutual Funds and the investor, including services to the distributor, the prime channel in this operation.

Carrying the 'limitless' ideology forward, they have explored new dimensions in every aspect of Mutual Fund servicing right from volume management, cost effective pricing, delivery in the least turnaround time, efficient back-office and front-office operations to customized service. they have been with the AMCs every step of the way, helping them serve their investors better by offering them a diverse and customized range of services. The 'first to market' approach that is our anthem has earned us the reputation of an innovative service provider with a visionary bent of mind.

Their service enhancements such as 'Karvy Converz', a full-fledged call center, a top-line website ([www.karvymfs.com](http://www.karvymfs.com)), the 'm-investor' and many more, creating a galaxy of customer advantages.

In their voyage towards becoming the largest transaction-processing house in the Indian Corporate segment, they have mobilized funds for numerous corporate, Karvy has emerged as the largest transaction-processing house for the Indian Corporate sector. With an experience of handling over 700 issues, Karvy today, has the ability to execute voluminous transactions and hard-core expertise in technology applications have gained us the No.1 slot in the business. Karvy is the first Registry Company to receive ISO 9002 certification in India that stands testimony to its stature.

Karvy has the backing of skilled human resources complemented by requisite technological packages to ensure a faster processing capability. Karvy has the benefit of a good synergy between depositories and registry that enables faster resolution to related customer queries. Apart from its unique investor servicing presence in all the phases of a public Issue, it is actively coordinating with both the main depositories to develop special models to enable the customer to access depository (NSDL, CDSL) services during an IPO.

Karvy has been a customer centric company since its inception. Karvy offers a single platform servicing multiple financial instruments in its bid to offer complete financial solutions to the varying needs of both corporate and retail investors where an extensive range of services are provided with great volume-management capability.

Today, Karvy is recognized as a company that can exceed customer expectations which is the reason for the loyalty of customers towards Karvy for all his financial needs. An opinion poll commissioned by “The Merchant Banker Update” and conducted by the reputed market research agency, MARG revealed that Karvy was considered the “Most Admired” in the registrar category among financial services companies.

### **DEPOSITORY PARTICIPANT SERVICE OFFERED BY KARVY**

Depository Participant (DP) is an organization that acts as an Agent of the Depository and interacts with the investor. A DP is responsible for maintaining clients' securities account and operating it only under clients' written instructions. The Depositories Acts mandates that investors can use Depository facilities only through DP's. The distribution channel and geographical spread of the DP's offices allows client to access the Depository at a low cost.

The various kinds of DP services offered by Karvy are as follows:

1. Converting the client's physical holdings into electronic holding. That is dematerialization of securities. The method was introduced to avoid the unnecessary problems due to safety constraints the 'Demat' service was started [Currently Karvy Stock Broking is not providing Demat service due to some problem].
2. Tracking of clients' holding in electronic form and maintaining their accounts as holdings.
3. Transferring the shares in the electronic form from one account to another.
4. Facilitate pledge of client electronic securities.
5. Give electronic credit of new share allotments such as public issues, bonus, rights etc.
6. Convert clients electronic holding into physical holding (which is called "rematerialisatoin of securities")

## **ADVISORY SERVICE**

### **Portfolio advisory service**

A research team accomplishes advisory service to the client to choose the best portfolio that will give good return, which is always keen to maintain the investor interest towards investment.

### **Mutual Fund Advisory Service**

The way in which to get a nominal return that is assured by the fund managers classified and advised to spend it through Karvy.

### **Tax Advisory**

The most recent way to invest and also to avoid a great margin of money going into the tax can be given advice to manage it efficiently by investing it in various means.

### **Retirement advisory**

There is a great possibility of lack of mismanagement of funds after the clients' retirement. That is managed in a manner so as to get a fixed return with the advice of the research team.

## **2.4 COMPETITIVE STRENGTH OF THE COMPANY**

- It is placed among top 5 stock brokers in India (4% of NSE volumes)
- India's No. 1 Registrar & Securities Transfer Agents
- It is placed among the top 3 Depository Participants
- Largest Network of Branches & Business Associates
- Among top 10 Investment bankers
- Largest Distributor of Financial Products
- Adjudged as one of the top 50 IT uses in India by MIS Asia
- Full Fledged IT driven operations

## 2.5 FUTURE PLANS

### Vision 2008

- To increase the network from 640 branches to 750 numbers.
- To double the Future & Options cash volumes (around 6%)
- Activate BSE so as to reach 5% share
- To reach the No.1 position in all activities
- Look at over 12 lac accounts by 2008
- To achieve over 250,000 applications per month
- Achieve over Rs. 10,000 cr of equity assets under advise
- To achieve 1% share of the market (3 lac policies)
- To reach at least 5% market share
- Establish specialized commodity branches where necessary
- To contribute 10% of our overall revenues
- Provide IPO funding both for retail and HNI category
- 25% of the revenues through this business
- Reach top 10 institutional brokers in the country
- Maximise earnings for each relationship built both domestic and international
- Evolve as a top research house for Mid cap securities
- To Position our self as a 'knowledge driven broker'
- Evolve into top 5 merchant bankers in the country
- Gain expertise corporate finance and M&A
- To start real estate investment banking

## **2.6 DESCRIPTION OF VARIOUS FUNCTIONAL AREAS**

### **2.6.1 KARVY CONSULTANTS LIMITED**

As the flagship company of the Karvy Group, Karvy Consultants Limited has always remained at the helm of organizational affairs, pioneering business policies, work ethic and channels of progress.

Having emerged as a leader in the registry business, the first of the businesses that they ventured into, they have now transferred this business into a joint venture with Computer share Limited of Australia, the world's largest registrar. With the advent of depositories in the Indian capital market and the relationships that they have created in the registry business, they believe that they were best positioned to venture into this activity as a Depository Participant. they were one of the early entrants registered as Depository Participant with NSDL (National Securities Depository Limited), the first Depository in the country and then with CDSL (Central Depository Services Limited). Today, they service over 6 lakhs customer accounts in this business spread across over 250 cities/towns in India and are ranked amongst the largest Depository Participants in the country. With a growing secondary market presence, they have transferred this business to Karvy Stock Broking Limited (KSBL), their associate and a member of NSE, BSE and HSE.

#### **IT enabled services**

Their Technology Services division forms the ideal platform to unleash their technology initiatives and make their presence felt on the Internet. Their past achievements include many quality websites designed, developed and deployed by them. They also possess our own web hosting facilities with dedicated bandwidth and a state-of-the-art server farm (data center) with services functioning on a variety of operating platforms such as Windows, Solaris, Linux and Unix. The corporate website of the company, "www.karvy.com", gives access to in-depth information on financial matters including Mutual Funds, IPOs, Fixed Income Schemes, Insurance, Stock Market and much more. A link called 'Resource Center', devoted solely to research conducted by their team of experts on various financial aspects like 'Sector Research', deals exclusively with in-depth analysis of the key sectors of the Indian economy.

Besides, a host of other links like 'My Portfolio' which acts as a personalized and customized financial measure, makes this site extremely informative about investment options, market trends, news as also about their company and each of the services offered here.

### **2.6.2 KARVY GLOBAL SERVICES LIMITED**

The specialist Business Process Outsourcing unit of the Karvy Group. The legacy of expertise and experience in financial services of the Karvy Group serves us well as they enter the global arena with the confidence of being able to deliver and deliver well. Here they offer several delivery models on the understanding that business needs are unique and therefore only a customized service could possibly fit the bill. Their service matrix has permutations and combinations that create several options to choose from.

Be it in re-engineering and managing processes or delivering new efficiencies, their service meets up to the most stringent of international standards. Their outsourcing models are designed for the global customer and are backed by sound corporate and operations philosophies, and domain expertise. Providing productivity improvements, operational cost control, cost savings, improved accountability and a whole gamut of other advantages.

They operate in the core market segments that have emerging requirements for specialized services. Their wide vertical market coverage includes Banking, Financial and Insurance Services (BFIS), Retail and Merchandising, Leisure and Entertainment, Energy and Utility and Healthcare. Their horizontal offerings do justice to their stance as a comprehensive BPO unit and include a variety of services in Finance and Accounting Outsourcing Operations, Human Resource Outsourcing Operations, Research and Analytics Outsourcing Operations and Insurance Back Office Outsourcing Operations.

### **2.6.3 KARVY COMTRADE LIMITED**

Karvy Commodities, they are focused on taking commodities trading to new dimensions of reliability and profitability. They have made commodities trading, an essentially age-old practice, into a sophisticated and scientific investment option. There they enable trade in all goods and products of agricultural and mineral origin

that include lucrative commodities like gold and silver and popular items like oil, pulses and cotton through a well-systematized trading platform. Their technological and infrastructural strengths and especially their street-smart skills make them an ideal broker. Their service matrix is holistic with a gamut of advantages, the first and foremost being their legacy of human resources, technology and infrastructure that comes from being part of the Karvy Group.

Their wide national network, spanning the length and breadth of India, further supports these advantages. Regular trading workshops and seminars are conducted to hone trading strategies to perfection. Every move made is a calculated one, based on reliable research that is converted into valuable information through daily, weekly and monthly newsletters, calls and intraday alerts. A dedicated team committed to giving hassle-free service while the brokerage rates offered are extremely competitive provides further, personalized service here. Their commitment to excel in this sector stems from the immense importance that commodity broking has to a cross-section of investors & ndash farmers, exporters, importers, manufacturers and the Government of India itself.

#### **2.6.4 Karvy Insurance Broking Private Limited**

Karvy Insurance Broking Pvt. Ltd., they provide both life and non-life insurance products to retail individuals, high net-worth clients and corporates. With the opening up of the insurance sector and with a large number of private players in the business, they are in a position to provide tailor made policies for different segments of customers. In their journey to emerge as a personal finance advisor, they will be better positioned to leverage their relationships with the product providers and place the requirements of their customers appropriately with the product providers. With Indian markets seeing a sea change, both in terms of investment pattern and attitude of investors, insurance is no more seen as only a tax saving product but also as an investment product. By setting up a separate entity, they would be positioned to provide the best of the products available in this business to our customers. Their wide national network, spanning the length and breadth of India, further supports these advantages. A dedicated team committed in giving hassle-free service to the clients provides further, personalized service here.

# ***MACRO-MICRO ANALYSIS***

## CHAPTER - 3

### MACRO-MICRO ANALYSIS

India's economy is on the fulcrum of an ever-increasing growth curve. With positive indicators such as a stable 8 per cent annual growth, rising foreign exchange reserves of close to US\$ 166 billion, a booming capital market with the popular "Sensex" index topping the majestic 13,000 mark, the Government estimating FDI flow of US\$ 12 billion in this fiscal, and a more than 22 per cent surge in exports, it is easy to understand why India is a leading destination for foreign investment.

- The economy has grown by 8.9 per cent for the April-July quarter of '06-07, the highest first-quarter growth rate since '00-01.
- The growth rate has been spurred by the manufacturing sector, which has logged an 11.3 per cent rise in Q1 '06-07, according to the GDP data released by the Central Statistical Organization. It was 10.7 per cent in the corresponding period of the last fiscal year. The GDP numbers come just weeks after the monthly IIP growth figures have touched 12.4 per cent.
- Agriculture, which accounts for nearly a quarter of the GDP, has also grown by a healthy 3.4 per cent, unchanged from the corresponding period of last fiscal.
- Other propellers of GDP growth for the first quarter this fiscal have been the trade, hotels, transport and communications sector which grew by 9.5 per cent and construction, which grew by 13.2 per cent. In the corresponding period of last fiscal, these sectors grew by 11.7 per cent and 12.4 per cent, respectively.
- Electricity also grew by 5.4 per cent this first quarter as opposed to 7.4 per cent in the same period last year. The overall growth in this sector was fuelled by growth in July and August. The services sector also grew by 10.6 per cent in the first quarter of '06-07. It was only 9.8 per cent last year in the same period.

- There has been exceptional growth rate in some specific industries, like commercial vehicles at 36 per cent, telephone connections, by 48.9 per cent and passenger growth in civil aviation by 32.2 per cent.
- India has more billionaires than China. This year there were 15 billionaires in China but last year in India, there were 20 billionaires, according to the Forbes magazine.
- India has emerged as the world's fastest growing wealth creator, thanks to a buoyant stock market and higher earnings.
- A number of Indian companies surpassed last year's net profit in just six months of the current fiscal, reflecting an accelerated growth in corporate earnings.
- Forty-four per cent of Top 100 Fortune 500 companies are present in India.

With its manufacturing and services sector on a searing growth path, India's economy may soon touch the coveted 10 per cent growth figure.

That India has the potential to become a leading player in the agriculture sector is proved by the fact that it already has the makings of one. It is the largest producer of milk, fruits, pulses, cashew nuts, coconuts and tea in the world, second largest producer of rice and wheat in the world, and fourth largest in coarse grains. India is also one of the largest producers of cotton, sugar, sugarcane, peanuts, jute, tea and an assortment of spices.

India is poised to become the world's food basket on the back of a number of Government initiatives and investment opportunities across various areas of agriculture. According to the Economic Survey 2004-05, the growth rate in the agriculture and allied sector was 9.6 per cent in 2003-04 and is estimated to grow 1.1 per cent in the current year. The 'State of the Economy' report states that the year 2004-05 witnessed strong industrial growth, with the index of industrial production rising by 8 per cent in 2004-05, compared with 7 per cent in 2003-04. India's total grain stocks grew by 7.3 per cent to 23.6 million tonnes (mt) as on November 1, 2004,

according to the Food Ministry. Rice stocks nearly doubled to 11 mt from 5.7 mt. The current level of food grain stocks is well above the minimum buffer requirement of 18.1 mt, including 6.5 mt of rice and 11.6 mt of wheat.

The export figures have caught the fancy of leading industrialists like Sunil Bharti Mittal and Gautam Thapar to name a few. They are now betting that after software, IT-enabled services and generic drugs, western countries will soon start sourcing farm produce from supplier countries like India.

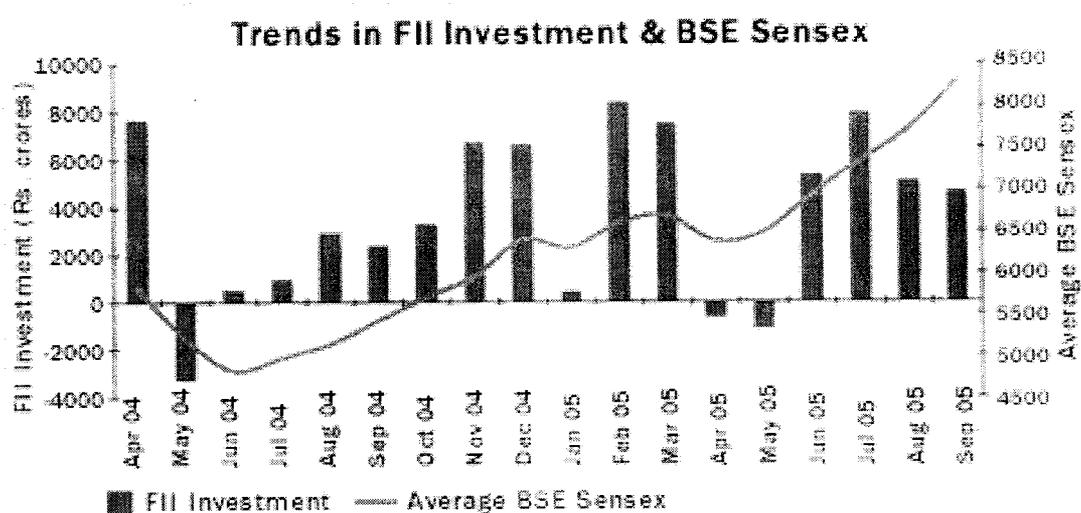
- Thapar's closely held farm business venture, Global Green, has emerged as one of the top 10 gherkin suppliers in the world in the last three years. His company has become the fourth largest buyer of glass containers, used for packaging gherkins, in the country after the UB Group, Coca-Cola and Pepsi.
- Mittal has set up FieldFresh Foods Pvt Ltd -- a 50:50 joint venture with the Rothschilds -- to invest US\$ 50 million in global distribution of fresh fruit and vegetables.
- Miller & Smith Foods Inc, a global supplier of frozen fruit and concentrates that imports for around US\$ 30 million from India, has plans to expand its basket of products.

India's external sector has strengthened over the years with the capital account surplus doubling in size from US\$ 6.5 billion in April-June 2005 to US\$ 12.9 billion in July-September 2005. This was augmented mainly by the large capital flows in 2004-2005 by way of foreign direct investments (FDI), global depository receipts (GDRs) and foreign exchange reserves. In terms of foreign trade, exports of merchandise and services have posted robust growth.

In 2004-05, earnings from invisibles crossed US\$ 30 billion. In the first half of 2005-06, invisibles grew by 31 per cent. Traditionally, private transfers, comprising mainly remittances from Indians working abroad, have been the main source of invisible earnings. Over time, however, services exports – captured by net non-factor services, and including software and IT-enabled services – have emerged as another key component of invisibles. Such exports, after growing by 71.3 per cent in 2004-05,

increased further by 75.3 per cent in the first half of 2005-06. In addition to software and IT-enabled services, of late, business services, including professional services, have come to play a key role in enlarging services exports. The foreign trade scenario is booming. According to the Commerce & Industry Minister Kamal Nath, India's external trade will touch US\$ 500 billion in three years. Indian exports are growing at one of the fastest rates in the world. India's total external trade, including goods and services, grew by 44.2 per cent to US\$ 268 billion in 2004-05. Growth was 41.5 per cent in the first half of 2005-06, with value of such trade at US\$ 163 billion.

In terms of foreign exchange earnings, foreign tourists have been a major source of earnings in India. Earnings netted were nearly US\$ 5.1 billion till November 2005, as against US\$ 4.3 billion during the corresponding last year. Foreign direct investment (FDI) inflows into India during the first half of fiscal year 2005-06 were higher by 35 per cent to its corresponding period the previous year. Net FDI into India picked up on the back of sustained growth in economic activity and positive investment climate, with inflows going into the manufacturing as well as the services sectors. The FDI scenario in India has changed drastically in the last decade. For the first time in 15 years, the government has simplified and rationalised FDI procedures, while liberalising existing sectors such as retail, television, diamond and coal mining, airports, wholesale and export trading, and opening new ones such as power trading, processing and warehousing of coffee and rubber to foreign investment.



Over a somewhat longer horizon, in the six years between 2000-01 and 2005-06 (AE), on average, services with a share of 52 per cent of GDP, contributed 65 per cent to GDP growth and increased its share in GDP from 49.8 per cent to 54.1 per cent. During the same reference period, on an average, with a share of 25.8 per cent of GDP, industry, by contributing 28 per cent of GDP growth, increased its share in GDP from 25.9 per cent to 26.2 per cent.

As many as 18 service sector segments of the Indian economy are projected to clock “excellent growth” levels of 20-60 per cent in 2005-06 over the previous year. The growth in the services sector continued to be broad based in 2005-06. Trade, hotels, transport and communication services continued to lead by growing at double-digit rates for the third successive year. The progress in expanding the railway passenger network, production and sale of commercial vehicles and the addition to existing telephone connections, particularly mobiles were the catalysts for this impressive growth.

Financial services (comprising banking, insurance and real estate services) have also maintained the momentum with the Indian financial markets having matured considerably.

- India's IT market had a turnover of US\$ 16.2 billion in 2004-05. IT companies are expected to account for 8-10 per cent of GDP by 2008 from 1.4 per cent in 2001.
- An all-time high of 4.7 million new users signed up for mobile services in January 2006, taking the total cellular subscriber base in India to around 80 million.

Deloitte's study in India suggests that local manufacturers are enjoying average sales growth of 15 per cent, compared with 7 per cent for their global peers. They are delivering gross profits (earnings before interest and tax) averaging 16 per cent, compared with an 8 per cent global average. India has displaced the US to become the second-most attractive destination for foreign direct investment (FDI) among manufacturing investors, as per A T Kearney's latest FDI Confidence Index rankings.

- Sun Pharma emerged the highest bidder for acquiring the assets of Able Labs in the US with US\$ 23 million. The pharma sector's overseas acquisitions calendar year 2005 was worth an all-time high of US\$ 400 million as compared to US\$ 155 million in 2004.
- Mahindra & Mahindra Ltd (M&M) has said that it would be acquiring an 88.41-per cent equity stake in Plexion Technologies (India) Ltd.
- Continental Engine, based at Gurgaon in NCR, has acquired the European operations of the Netherlands-based Vege Motors for an undisclosed amount. The company is planning to acquire within a year the US operations of Vege as well.
- Sundram Fasteners (SFL) is acquiring German-based Peiner Umformtechnik for a consideration of US\$ 16 million. Peiner is a subsidiary of Textron Deutschland Beteiligungs, Bonn.

India's telecommunications story in many ways epitomises the new India. The image of young Indians with slick mobile phones has become a metaphor for economic growth in country. With rapid growth in the telecommunication sector, tele-density levels have surpassed all targets set by the Government. The total number of telephones (basic and mobile) rose from 22.8 million in 1999 to more than 125 million at the end of December 2005.

While 21.83 million telephones were added during 12 months of 2004-05, the first nine months of 2005-06 saw an addition of 27.47 million phones. Overall, tele-density has risen from a mere 2.32 in 1999 to 11.32 in December 2005.

The FDI scenario in the sector has also been on a roll. The Government allows 74 per cent of FDI in the sector and the total FDI approved up to September 2005 was US\$ 9.3 billion. Some of the major investors are Hutchison, Singtel, AT&T and Distacom. Telecom major Vodafone has announced its entry into the sector with the acquisition of 10 per cent shares in Bharti Televentures for a consideration of 1.5 billion.

The agenda for having world renowned Telecom and IT companies set up their R&D/manufacturing base in India, has been aggressively pursued to ensure timely delivery, high quality, cost effective supplies and very good after sale services.

**KARVY**, is a premier integrated financial services provider, and ranked among the top five in the country in all its business segments, services over 16 million individual investors in various capacities, and provides investor services to over 300 corporates, comprising the who is who of Corporate India. KARVY covers the entire spectrum of financial services such as Stock broking, Depository Participants, Distribution of financial products - mutual funds, bonds, fixed deposit, equities, Insurance Broking, Commodities Broking, Personal Finance Advisory Services, Merchant Banking & Corporate Finance, placement of equity, IPOs, among others. Karvy has a professional management team and ranks among the best in technology, operations and research of various industrial segments.

Thus over the last 20 years Karvy has traveled the success route, towards building a reputation as an integrated financial services provider, offering a wide spectrum of services. And karvy have made this journey by taking the route of quality service, path breaking innovations in service, versatility in service and finally...totality in service. The highly qualified manpower, cutting-edge technology, comprehensive infrastructure and total customer-focus has secured for us the position of an emerging financial services giant enjoying the confidence and support of an enviable clientele across diverse fields in the financial world.

Karvy's values and vision of attaining total competence in our servicing has served as the building block for creating a great financial enterprise, which stands solid on the fortresses of financial strength - the various companies. With the experience of years of holistic financial servicing behind us and years of complete expertise in the industry to look forward to, Karvy have now emerged as a premier integrated financial services provider.

*ANALYSIS  
AND  
INTERPRETATION*

## CHAPTER - 4

### ANALYSIS AND INTERPRETATION

TABLE 4.1

**TABLE SHOWING THE AVERAGE RETURN OF HDFC AND NIFTY  
DURING THE STUDY PERIOD (2004 – 2006)**

MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN	MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN
04-Jan	-0.002915856	-0.0016	05-Jul	0.004935163	0.0021
04-Feb	0.0044937	-0.0001	05-Aug	-0.003924373	0.0014
04-Mar	0.000701809	-0.0006	05-Sep	0.003409274	0.0042
04-Apr	-5.2225E-05	0.0008	05-Oct	-0.005929658	-0.0045
04-May	-0.000788468	-0.0082	05-Nov	0.006418784	0.0057
04-Jun	0.002536995	0.0008	05-Dec	0.001556579	0.0031
04-Jul	0.000709249	0.0038	06-Jan	0.003794704	0.0029
04-Aug	-0.000835198	0	06-Feb	-0.001620777	0.0013
04-Sep	0.004161317	0.0031	06-Mar	0.0023287	0.0047
04-Oct	0.001666974	0.0012	06-Apr	0.003847581	0.0026
04-Nov	0.009145157	0.0046	06-May	-0.004494615	-0.0063
04-Dec	0.00212321	0.0027	06-Jun	0.003526816	0.0013
05-Jan	0.004661066	-0.0005	06-Jul	0.000197157	0.0004
05-Feb	0.002093241	0.0011	06-Aug	0.003250692	0.0038
05-Mar	-0.003238775	-0.0014	06-Sep	0.004077339	0.0024
05-Apr	-0.000743088	-0.0033	06-Oct	0.004454927	0.0022
05-May	0.000428278	0.0042	06-Nov	0.005008163	0.0025
05-Jun	0.007394345	0.0027	06-Dec	-0.00228167	0.0003

#### BETA CALCULATION FOR HDFC FOR THREE YEARS

$$\text{COV (HDFC, NIFTY)} = 0.00000651$$

$$\text{VAR (NIFTY)} = 0.00000912$$

$$\text{BETA} = 0.71391564$$

#### INTERPRETATION

BETA= 0.7139 the beta value is less than 1, that is security's price will be less volatile than the market, and therefore buying the share is less risky.

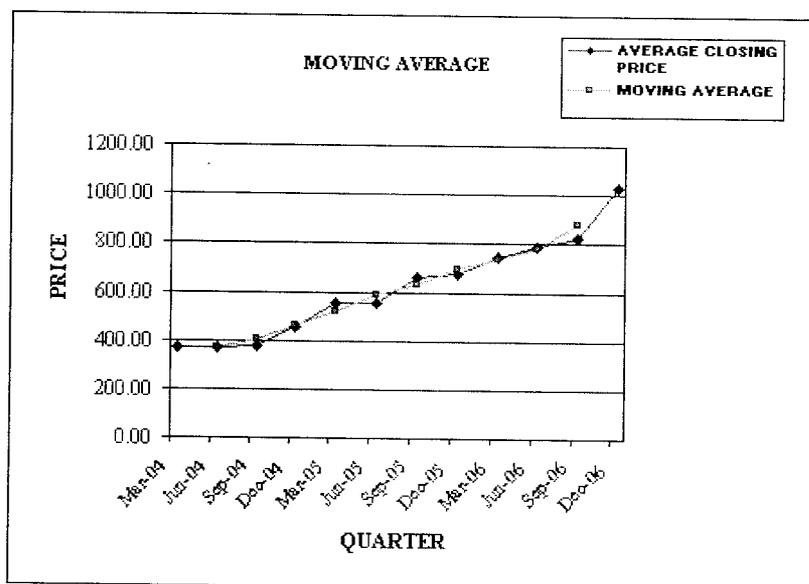
TABLE 4.2

TABLE SHOWING THREE DAY MOVING AVERAGE FOR HDFC

QUARTER	AVERAGE CLOSING PRICE	MOVING AVERAGE
Mar-04	367.25	
Jun-04	369.96	371.35
Sep-04	376.85	401.35
Dec-04	457.23	462.12
Mar-05	552.27	521.88
Jun-05	556.13	590.48
Sep-05	663.05	632.39
Dec-05	677.99	695.36
Mar-06	745.03	736.90
Jun-06	787.69	784.39
Sep-06	820.46	880.37
Dec-06	1032.97	

CHART 4.1

CHART SHOWING THE THREE DAY MOVING AVERAGE FOR HDFC



### INTERPRETATION

The average closing price as on the 4th quarter is 1032.97 which is greater than the moving average. Hence the security price is trading above the moving average. This shows the buy signal for investors.

TABLE 4.3

TABLE SHOWING THE MONEY FLOW INDEX FOR HDFC DURING THE STUDY PERIOD (JANUARY 2007 – MARCH 2007)

Date	High	Low	Close	Total traded Quantity	Average price in Rs	Money flow in Rs
2-Jan-07	1639.7	1610	1619.55	37659	1623.0833	61123695.25
3-Jan-07	1620	1590	1608	167408	1606	268857248
4-Jan-07	1619.7	1570	1578.7	292036	1589.4667	464181487.5
5-Jan-07	1638	1553.1	1618.15	428976	1603.0833	687684276
8-Jan-07	1618	1577.15	1595.05	347582	1596.7333	554995765.5
9-Jan-07	1623	1516.1	1562.4	626774	1567.1667	982259320.3
10-Jan-07	1565	1520	1528.25	279817	1537.75	430288591.8
11-Jan-07	1568	1514.3	1522.55	333706	1534.95	512222024.7
12-Jan-07	1594.8	1531.35	1578.7	300596	1568.2833	471419696.9
15-Jan-07	1625.95	1581.25	1596.5	558773	1601.2333	894725953.4
16-Jan-07	1596.05	1558	1559.6	265449	1571.2167	417077893
17-Jan-07	1570	1533.3	1546.5	622409	1549.9333	964692456.1
18-Jan-07	1615	1548	1599.5	364170	1587.5	578119875
19-Jan-07	1616	1591	1600.15	186721	1602.3833	299198618.4
22-Jan-07	1619	1576	1611.85	324375	1602.2833	519740656.3
23-Jan-07	1618.8	1592	1602.55	322051	1604.45	516714727
24-Jan-07	1651.1	1590	1641.1	318883	1627.4	518950194.2
25-Jan-07	1704.7	1645	1686.75	1220057	1678.8167	2048252026
29-Jan-07	1690.1	1651.05	1669.55	442731	1670.2333	739464073.9
31-Jan-07	1686	1640.25	1673.85	362492	1666.7	604165416.4
1-Feb-07	1690.55	1648.6	1674.95	181307	1671.3667	303030476.2
2-Feb-07	1760	1666	1743.65	793462	1723.2167	1367306943
5-Feb-07	1828	1728	1820.35	796411	1792.1167	1427261427
6-Feb-07	1828	1788.5	1797.1	451719	1804.5333	815141992.8
7-Feb-07	1813	1775.35	1803.05	267488	1797.1333	480711601.1
8-Feb-07	1820	1763.1	1806.95	254129	1796.6833	456589338.8
9-Feb-07	1825	1791	1816.75	515233	1810.9167	933044026.9
12-Feb-07	1821	1711	1758.95	433031	1763.65	763715123.2
13-Feb-07	1777.7	1700	1723.55	732897	1733.75	1270660174
14-Feb-07	1736.4	1629	1683.05	714070	1682.8167	1201648897
15-Feb-07	1734.95	1676.1	1692.5	342320	1701.1833	582349078.7
19-Feb-07	1724	1682.05	1695.85	272138	1700.6333	462806954.1
20-Feb-07	1701	1648	1653	132695	1667.3333	221246796.7

Date	High	Low	close	Total traded quantity	Average price in Rs	Money flow in Rs
21-Feb-07	1689.8	1655	1672.8	343641	1672.5333	574751027.2
22-Feb-07	1700	1650	1662.05	385939	1670.6833	644781855
23-Feb-07	1678	1585.2	1603.9	456022	1622.3667	739834892.1
26-Feb-07	1629.7	1570	1606.35	545761	1602.0167	874318218
27-Feb-07	1650	1581.05	1605.95	374346	1612.3333	603570534
28-Feb-07	1624.8	1447	1507.25	1858609	1526.35	2836887847
1-Mar-07	1524.9	1470	1511.35	498521	1502.0833	748820085.4
2-Mar-07	1582	1490.05	1533.85	671727	1535.3	1031302463
5-Mar-07	1514.7	1470	1497.2	511074	1493.9667	763527520.2
6-Mar-07	1534.8	1480.1	1492	236787	1502.3	355725110.1
7-Mar-07	1554	1495.9	1532.55	388088	1527.4833	592797951.9
8-Mar-07	1565	1511.2	1546.8	159693	1541	246086913
9-Mar-07	1593.85	1521.1	1563.65	215478	1559.5333	336045123.6
12-Mar-07	1615	1550	1582.5	312929	1582.5	495210142.5
13-Mar-07	1610.25	1575.4	1605.3	98294	1596.9833	156973879.8
14-Mar-07	1595	1541.6	1556	261375	1564.2	408842775
15-Mar-07	1585	1500.25	1512.85	550221	1532.7	843323726.7
16-Mar-07	1573.8	1496	1504.15	334355	1524.65	509774350.8
19-Mar-07	1549.75	1505	1534.1	188442	1529.6167	288244023.9
20-Mar-07	1577.9	1544	1567.25	196024	1563.05	306395313.2
21-Mar-07	1588	1525	1545.5	340407	1552.8333	528595336.5
22-Mar-07	1584	1550.1	1574	262535	1569.3667	412013677.8
23-Mar-07	1612	1560.1	1593.9	412185	1588.6667	654824570
26-Mar-07	1611	1557	1574.05	325490	1580.6833	514496618.2
28-Mar-07	1579	1501.15	1518.4	496939	1532.85	761732946.2
29-Mar-07	1579.1	1519	1537.85	923637	1545.3167	1427311650
30-Mar-07	1539.95	1501.25	1519.8	314837	1520.3333	478657185.7

## INTERPRETATION

The above-predicted table shows the analysis of Money Flow Index of HDFC. The money flow index on 19<sup>th</sup> March 2007 is Rs.288244023.9 and as on 20<sup>th</sup> March 2007 is Rs.306395313.2. So it shows the Positive Money flow over the day. Hence, it can be concluded that the investors can purchase the securities. The money flow as on 12<sup>th</sup> March 2007 is Rs.495210142.5 and the money flow of the concern as on 13<sup>th</sup> March 2007 was Rs.156973879.8. The value remains negative and it can be concluded that it is not a good sign for the public to Purchase.

TABLE 4.4

**TABLE SHOWING AVERAGE RETURN OF ICICI AND NIFTY DURING  
THE STUDY PERIOD (2004 - 2006)**

MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN
05-Jan	-0.001384649	-0.0005
05-Feb	0.002829755	0.0011
05-Mar	0.001623379	-0.0014
05-Apr	-0.0039665	-0.0033
05-May	0.003955186	0.0042
05-Jun	0.003779031	0.0027
05-Jul	0.011261554	0.0021
05-Aug	-0.004517486	0.0014
05-Sep	0.008697416	0.0042
05-Oct	-0.008662549	-0.0045
05-Nov	0.003730594	0.0057
05-Dec	0.00397865	0.0031
06-Jan	0.002188414	0.0029
06-Feb	0.000772221	0.0013
06-Mar	-0.001689088	0.0047
06-Apr	0.000473124	0.0026
06-May	-0.00302119	-0.0063
06-Jun	-0.003295984	0.0013
06-Jul	0.005621332	0.0004
06-Aug	0.003492374	0.0038
06-Sep	0.00735233	0.0024
06-Oct	0.004932452	0.0022
06-Nov	0.004743131	0.0025
06-Dec	0.001243016	0.0003

**BETA CALCULATION FOR ICICI FOR THREE YEARS**

$$\text{COV (ICICI, NIFTY)} = 0.00000747$$

$$\text{VAR (NIFTY)} = 0.00000835$$

$$\text{BETA} = 0.89436723$$

**INTERPRETATION**

BETA= 0.89436 the beta value is less than 1, that is security's price will be less volatile than the market, and therefore buying the share is less risky.

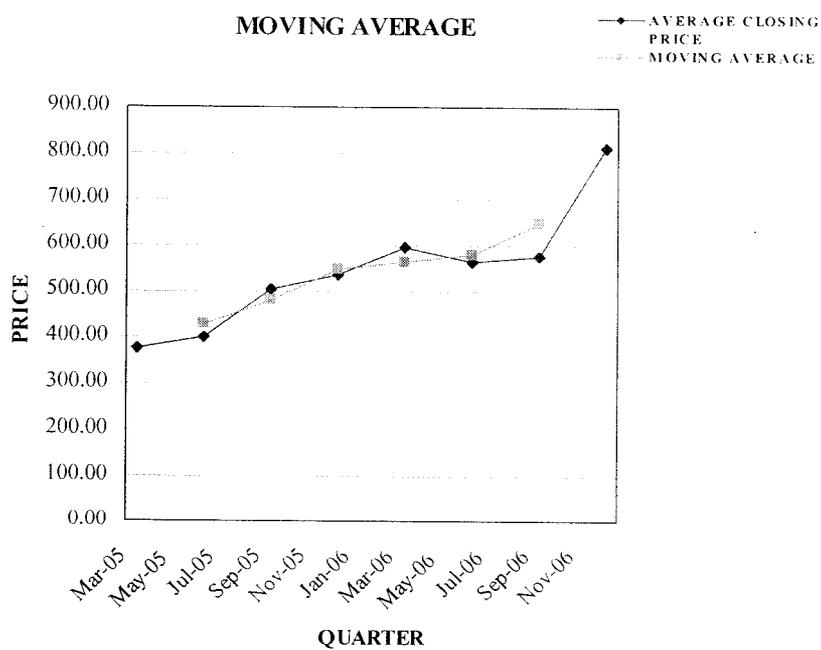
TABLE 4.5

TABLE SHOWING THREE DAY MOVING AVERAGE FOR ICICI

DATE	AVERAGE CLOSING PRICE	MOVING AVERAGE
Mar-05	374.05	
Jun-05	400.44	426.44
Sep-05	504.84	480.43
Dec-05	536.00	546.15
Mar-06	597.60	565.39
Jun-06	562.58	578.63
Sep-06	575.70	649.87
Dec-06	811.33	

CHART 4.2

CHART SHOWING THE THREE DAY MOVING AVERAGE FOR ICICI



### INTERPRETATION

The average closing price as on 4th quarter 2006 is 811.33 which is greater than the moving average. Hence the security's price is trending up. This shows the buy signal for the investors.

TABLE 4.6

TABLE SHOWING THE MONEY FLOW INDEX FOR ICICI DURING THE  
STUDY PERIOD (JANUARY 2007 – MARCH 2007)

Date	High	Low	Close	Total traded quantity	Average price in Rs	Money flow in Rs
2-Jan-07	906.5	888	897.45	345636	897.32	310144943.4
3-Jan-07	909.75	886.35	894.55	473971	896.88	425096690.4
4-Jan-07	909	886	890.5	1093166	895.17	978565764.3
5-Jan-07	919	890	910.1	1977554	906.37	1792389027
8-Jan-07	917	897.55	906.3	1143112	906.95	1036745428
9-Jan-07	918	903.2	912.35	1977216	911.18	1801606266
10-Jan-07	915	872.2	883.85	1415339	890.35	1260147079
11-Jan-07	909.95	872.2	892.35	2245257	891.50	2001646616
12-Jan-07	979.8	911	972.3	2195695	954.37	2095498118
15-Jan-07	984	955	957.85	660076	965.62	637380386.9
16-Jan-07	969.95	949.1	960.05	1392225	959.70	1336118333
17-Jan-07	993.9	953	986.85	989916	977.92	968055355
18-Jan-07	995	960.3	971.25	1195056	975.52	1165797046
19-Jan-07	992	954.15	985.4	1012846	977.18	989736230.4
22-Jan-07	998.9	965	977.2	994572	980.37	975045236.4
23-Jan-07	979.9	955.1	964.3	1465696	966.43	1416497471
24-Jan-07	999	968.3	974.55	770851	980.62	755909338.1
25-Jan-07	1000	968.4	991.45	1021034	986.62	1007369162
29-Jan-07	991.45	950.3	955.95	598108	965.90	577712517.2
31-Jan-07	977	931.2	941.1	2110099	949.77	2004101694
1-Feb-07	957	942.35	952.55	811547	950.63	771483629.8
2-Feb-07	963.5	941.05	944.9	1668291	949.82	1584570597
5-Feb-07	959.65	938.15	946.8	689275	948.20	653570555
6-Feb-07	976.5	946.5	957.9	1179342	960.30	1132522123
7-Feb-07	989.9	960	983.15	1918719	977.68	1875899588
8-Feb-07	1005	980.05	999.7	1758208	994.92	1749270443
9-Feb-07	1010	981.85	996.15	1155686	996.00	1151063256
12-Feb-07	990.1	936.55	966.15	1453769	964.27	1401820988
13-Feb-07	988.9	946	955.9	1525859	963.60	1470317732
14-Feb-07	945	891.25	914.4	3141929	916.88	2880782335
15-Feb-07	954.7	917.8	949.6	1459905	940.70	1373332634
19-Feb-07	985.9	944.3	980.2	1794315	970.13	1740724792
20-Feb-07	987.8	965.1	969.45	934396	974.12	910210716.9

Date	High	Low	Close	Total traded quantity	Average price in Rs	Money flow in Rs
21-Feb-07	987	962.3	969.3	826372	972.87	803949773.1
22-Feb-07	982	938.2	946.2	2005395	955.47	1916088076
23-Feb-07	954.8	892.55	907	1795316	918.12	1648309542
26-Feb-07	923.45	876	904	1591987	901.15	1434619085
27-Feb-07	904	855.6	875.8	2534492	878.47	2226466739
28-Feb-07	859	801.5	829.5	3052888	830.00	2533897040
1-Mar-07	858.5	824	855.35	1081867	845.95	915205388.7
2-Mar-07	859	835.2	842.9	1781591	845.70	1506691509
5-Mar-07	855.5	793.25	821.55	2084550	823.43	1716487955
6-Mar-07	858.9	830	847.9	1509544	845.60	1276470406
7-Mar-07	882.5	818	828.65	1738837	843.05	1465926533
8-Mar-07	868.85	824	863	1526232	851.95	1300273352
9-Mar-07	878.7	846	858.6	1549962	861.10	1334672278
12-Mar-07	879.7	855.6	868.7	1680876	868.00	1459000368
13-Mar-07	881	866.35	877.6	1112065	874.98	973038340.6
14-Mar-07	849.8	817.05	829.4	1031681	832.08	858444565.4
15-Mar-07	852.4	815.1	823.9	1700382	830.47	1412110572
16-Mar-07	830	801.1	810	1245172	813.70	1013196456
19-Mar-07	828	798.5	822.55	933246	816.35	761855372.1
20-Mar-07	835.95	820.15	824	924571	826.70	764342845.7
21-Mar-07	874.7	826	870.55	2193939	857.08	1880388551
22-Mar-07	990	878	899.6	2276034	922.53	2099717233
23-Mar-07	917	870	891.6	2255056	892.87	2013464334
26-Mar-07	907.2	870	875.7	1517051	884.30	1341528199
28-Mar-07	870	851.5	857.85	1060252	859.78	911586998.7
29-Mar-07	868.7	837	855.3	2528223	853.67	2158259701
30-Mar-07	863.55	803.65	853.35	1217042	840.18	1022538404

## INTERPRETATION

The above-predicted table shows the analysis of Money Flow Index of ICICI. The money flow index of the company as on 02<sup>nd</sup> Jan 2007 is Rs.310144943.4 and the money flow as on 03<sup>rd</sup> Jan 2007 is Rs.425096690.4. So it shows the Positive Money flow over the day. So, it can be concluded that the investors can purchase the securities. The money flow as on 20<sup>th</sup> Feb 2007 is Rs.910210716.9 and as on 21<sup>st</sup> Feb 2007 is Rs.803949773.1. hence it shows a negative money flow and it can be concluded that it is not a good sign to Purchase.

TABLE 4.7

**TABLE SHOWING THE AVERAGE RETURN OF PNB AND NIFTY  
DURING THE PERIOD (2004 - 2006)**

MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN	MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN
04-Jan	0.004552592	-0.0016	05-Jul	0.005683926	0.0021
04-Feb	0.001491115	-0.0001	05-Aug	-0.002601481	0.0014
04-Mar	0.015281023	-0.0006	05-Sep	0.005623289	0.0042
04-Apr	0.005275991	0.0008	05-Oct	-0.004937242	-0.0045
04-May	-0.014038198	-0.0082	05-Nov	0.003963952	0.0057
04-Jun	0.004021537	0.0008	05-Dec	0.003178347	0.0031
04-Jul	-0.001539456	0.0038	06-Jan	0.000312099	0.0029
04-Aug	-0.000247801	0	06-Feb	-0.002553045	0.0013
04-Sep	-0.000728431	0.0031	06-Mar	0.003666763	0.0047
04-Oct	-0.002714821	0.0012	06-Apr	-0.004474964	0.0026
04-Nov	0.017978068	0.0046	06-May	-0.00249923	-0.0063
04-Dec	0.00682428	0.0027	06-Jun	-0.008838913	0.0013
05-Jan	0.001411251	-0.0005	06-Jul	0.007791953	0.0004
05-Feb	0.005472533	0.0011	06-Aug	0.010785719	0.0038
05-Mar	-0.006293066	-0.0014	06-Sep	0.005127443	0.0024
05-Apr	-0.006261219	-0.0033	06-Oct	-0.000139233	0.0022
05-May	0.004369087	0.0042	06-Nov	0.002828068	0.0025
05-Jun	-0.000149617	0.0027	06-Dec	-0.002732255	0.0003

**BETA CALCULATION FOR PNB FOR THREE YEARS**

$$\text{COV (PNB, NIFTY)} = 0.00000958$$

$$\text{VAR (NIFTY)} = 0.00000912$$

$$\text{BETA} = 1.049868189$$

**INTERPRETATION**

BETA=1.049 the beta value is greater than 1, that is security's price will be more volatile than the market, and therefore buying the share is more risky.

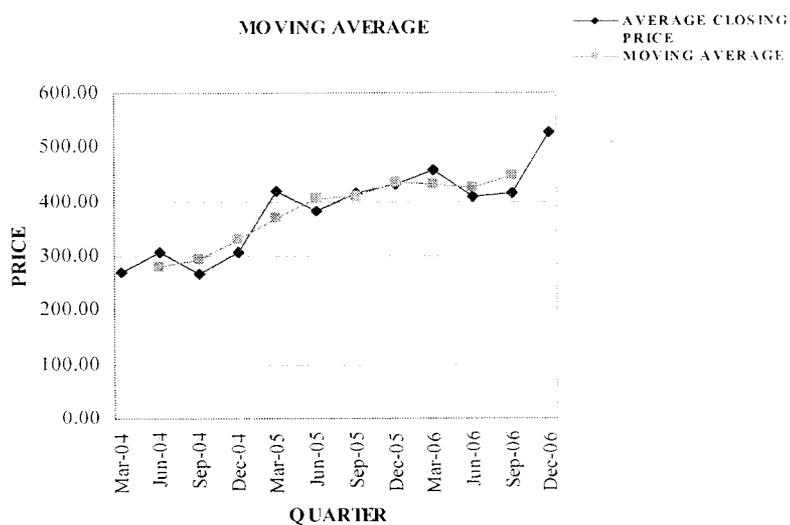
TABLE 4.8

TABLE SHOWING THREE DAY MOVING AVERAGE FOR PNB

QUARTER	AVERAGE CLOSING PRICE	MOVING AVERAGE
Mar-04	270.02	
Jun-04	306.21	280.72
Sep-04	265.94	293.16
Dec-04	307.34	330.56
Mar-05	418.41	369.16
Jun-05	381.73	405.23
Sep-05	415.55	409.87
Dec-05	432.34	434.84
Mar-06	456.63	432.28
Jun-06	407.88	426.10
Sep-06	413.79	449.70
Dec-06	527.44	

CHART 4.3

CHART SHOWING THE THREE DAY MOVING AVERAGE FOR PNB



### INTERPRETATION

The average closing price as on 4th quarter 2006 is 527.44. Hence the security's price is trending up. Is greater than the moving average hence the security's price is trending up. This shows the buy signal for the investors.

TABLE 4.9

TABLE SHOWING THE MONEY FLOW INDEX FOR PNB DURING  
THE STUDY PERIOD (JANUARY 2007 – MARCH 2007)

Date	High	Low	Close	Total Traded Quantity	Average price in Rs	Money flow in Rs
2-Jan-07	512.8	503.5	511.6	181484	509.30	92429801.2
3-Jan-07	521	508.3	515.6	320559	514.97	165077199.7
4-Jan-07	523.45	508	510.85	410828	514.10	211206674.8
5-Jan-07	514.8	504.25	511.55	244874	510.20	124934714.8
8-Jan-07	514.4	502.1	510.8	487833	509.10	248355780.3
9-Jan-07	513.9	493.35	496.15	648162	501.13	324815583.6
10-Jan-07	510	484.05	488.25	556877	494.10	275152925.7
11-Jan-07	496	480	485.7	827043	487.23	402962917.7
12-Jan-07	518.95	492	516	761443	508.98	387561796.3
15-Jan-07	533	514.5	519.25	337196	522.25	176100611
16-Jan-07	525.9	514.35	517.25	511889	519.17	265755705.8
17-Jan-07	530.5	516.85	525.1	454759	524.15	238361929.9
18-Jan-07	544.8	522	525.4	580803	530.73	308251512.2
19-Jan-07	528.7	516.05	518.55	238735	521.10	124404808.5
22-Jan-07	530	515.5	528	498612	524.50	261521994
23-Jan-07	529.6	503	516.1	671004	516.23	346394631.6
24-Jan-07	520.9	510.25	512.1	285185	514.42	146703917.1
25-Jan-07	518.6	508.1	513.05	537180	513.25	275707635
29-Jan-07	519.85	504.2	505.15	230888	509.73	117691309.9
29-Jan-07	560	560	560	168200	560.00	94192000
31-Jan-07	521	494.5	507.15	1069666	507.55	542908978.3
1-Feb-07	532.9	496.6	528.25	820409	519.25	425997373.3
2-Feb-07	534.95	515.05	517.4	696509	522.47	363902735.5
5-Feb-07	529.3	515.1	521.85	276976	522.08	144604553.3
6-Feb-07	529.95	518.1	520.55	404131	522.87	211306628.9
7-Feb-07	526	515	518.4	639505	519.80	332414699
8-Feb-07	525.5	512	516.4	342571	517.97	177440359
9-Feb-07	521.9	501.5	505.45	498715	509.62	254153475.9
12-Feb-07	510	485	491.5	452543	495.50	224235056.5
12-Feb-07	543.75	543.75	543.75	42879	543.75	23315456.25
13-Feb-07	505	480	484.2	551779	489.73	270224568.9
14-Feb-07	478.7	432.3	461.55	898293	457.52	410984019.1
15-Feb-07	474	460	465.85	651344	466.62	303927966.1
19-Feb-07	474	465	467.4	480935	468.80	225462328
20-Feb-07	472	462.4	467.65	358534	467.35	167560864.9
21-Feb-07	471	460.35	466.5	275986	465.95	128595676.7
22-Feb-07	470	441	446.9	1025942	452.63	464375547.3
23-Feb-07	464	432	434.75	475223	443.58	210801002.4
26-Feb-07	460.95	437	457.45	246232	451.80	111247617.6

Date	High	Low	Close	Total Traded Quantity	Average price in Rs	Money flow in Rs
27-Feb-07	467	440.25	449	448572	452.08	202791925
28-Feb-07	442	405	424	491565	423.67	208259705
1-Mar-07	449.8	415	443.25	484996	436.02	211466339.3
2-Mar-07	460	423	427.25	583836	436.75	254990373
5-Mar-07	420	380.35	412.65	530291	404.33	214414327.7
6-Mar-07	434	415	427.3	417933	425.43	177802629.3
7-Mar-07	438	415	426.05	707018	426.35	301437124.3
8-Mar-07	508	508	508	514385	508.00	261307580
8-Mar-07	441.9	417	437.4	453357	432.10	195895559.7
9-Mar-07	441.9	425.15	430.65	669284	432.57	289509948.9
9-Mar-07	510	510	510	1500000	510.00	765000000
12-Mar-07	436.9	422.35	432.6	898625	430.62	386962902.1
13-Mar-07	440.3	427.1	439.2	479459	435.53	208820376.5
14-Mar-07	432.2	420	428.45	336665	426.88	143716677.4
14-Mar-07	498	490	490	204220	492.67	100612386.7
15-Mar-07	510	510	510	21019	510.00	10719690
15-Mar-07	437.7	417.1	421.6	541244	425.47	230281280.5
16-Mar-07	424.7	412.5	418.1	422146	418.43	176639957.9
19-Mar-07	429.7	418	424.45	309444	424.05	131219728.2
20-Mar-07	438.85	423.8	435.95	419336	432.87	181516576.5
21-Mar-07	455	430.15	451.45	624644	445.53	278299723.5
21-Mar-07	530.75	523	530.75	783400	528.17	413765766.7
22-Mar-07	488.9	458	482.95	1310601	476.62	624654280
22-Mar-07	569	541.75	569	637800	559.92	357114850
23-Mar-07	488	464	480.4	746211	477.47	356290878.8
26-Mar-07	494.95	470	474.95	941669	479.97	451969731
28-Mar-07	475	460.1	464.75	541510	466.62	252677591.2
28-Mar-07	547.5	547.5	547.5	20772	547.50	11372670
29-Mar-07	480	448.1	474.4	1766638	467.50	825903265
30-Mar-07	568	568	568	623237	568.00	353998616
30-Mar-07	480	468.5	474.2	658055	474.23	312071616.2

### INTERPRETATION

The above-predicted table shows the analysis of Money Flow Index of PNB. The money flow index as on 05<sup>th</sup> Jan 2007 the Money Flow is Rs.144604553.3 and the money flow as on 06<sup>th</sup> Jan 2007 is Rs.211306628.9. So it shows the Positive Money flow over the day. Hence it can be concluded that the investors can purchase the securities. The money flow as on 11<sup>th</sup> Jan 2007 the Money flow is Rs.402962917.7 and the money flow on 12<sup>th</sup> Jan 2007 is Rs.387561796.3. This shows a Negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

TABLE 4.10

**TABLE SHOWING AVERAGE RETURN FOR SBIN AND NIFTY  
DURING THE STUDY PERIOD (2004 - 2006)**

MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN	MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN
04-Jan	0.003487247	-0.0016	05-Jul	0.008169971	0.0021
04-Feb	-0.000850009	-0.0001	05-Aug	-0.000107824	0.0014
04-Mar	0.001902477	-0.0006	05-Sep	0.007909609	0.0042
04-Apr	0.003049601	0.0008	05-Oct	-0.004299908	-0.0045
04-May	-0.013636354	-0.0082	05-Nov	0.004361243	0.0057
04-Jun	-0.003194621	0.0008	05-Dec	0.000742456	0.0031
04-Jul	0.001492797	0.0038	06-Jan	0.000318174	0.0029
04-Aug	0.000210556	0	06-Feb	0.000521463	0.0013
04-Sep	0.002633679	0.0031	06-Mar	0.006940149	0.0047
04-Oct	-0.00210892	0.0012	06-Apr	-0.003121002	0.0026
04-Nov	0.008640173	0.0046	06-May	0.006517137	-0.0063
04-Dec	0.009293946	0.0027	06-Jun	-0.010880537	0.0013
05-Jan	-0.000367352	-0.0005	06-Jul	0.005127594	0.0004
05-Feb	0.00522951	0.0011	06-Aug	0.010037807	0.0038
05-Mar	-0.003761167	-0.0014	06-Sep	0.009369678	0.0024
05-Apr	-0.005506199	-0.0033	06-Oct	0.014825501	0.0022
05-May	0.006297764	0.0042	06-Nov	0.000718227	0.0025
05-Jun	0.000827957	0.0027	06-Dec	-0.002401549	0.0003

**BETA CALCULATION FOR SBIN FOR THREE YEARS**

$$\text{COV (SBIN, NIFTY)} = 0.00000911$$

$$\text{VAR (NIFTY)} = 0.00000912$$

$$\text{BETA} = 0.99882264$$

**INTERPRETATION**

BETA= 0.99882 the beta value is less than 1, that is security's price will be less volatile than the market, and therefore buying the share is less risky.

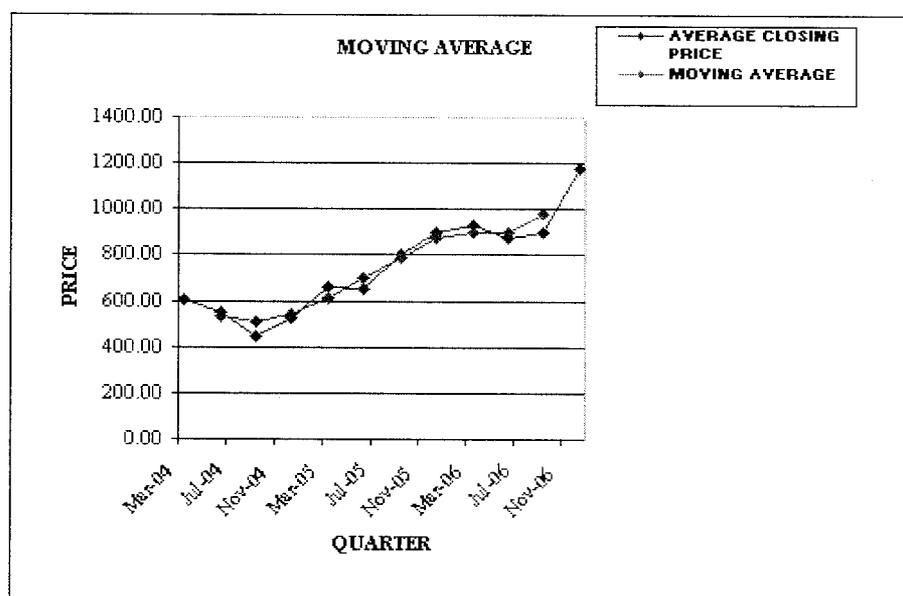
TABLE 4.11

TABLE SHOWING THREE DAY MOVING AVERAGE FOR SBIN

QUARTER	AVERAGE CLOSING PRICE	MOVING AVERAGE
Mar-04	604.82	
Jun-04	545.08	533.01
Sep-04	449.13	506.86
Dec-04	526.37	544.55
Mar-05	658.14	611.04
Jun-05	648.61	703.47
Sep-05	803.64	783.98
Dec-05	899.69	877.31
Mar-06	928.60	900.79
Jun-06	874.08	899.72
Sep-06	896.49	981.93
Dec-06	1175.24	

CHART 4.4

CHART SHOWING THE THREE DAY MOVING AVERAGE FOR SBIN



### INTERPRETATION

The average closing price for the 4<sup>th</sup> quarter 2006 is 1174.24 175.24 which is greater than the moving average. Hence the security's price is trending up. This is a buy signal for the investors.

TABLE 4.12

TABLE SHOWING THE MONEY FLOW INDEX FOR SBIN DURING THE  
STUDY PERIOD (2004 – 2006)

Date	High	Low	Close	Total Traded Quantity	Average price in Rs	Money flow in Rs
2-Jan-07	1260	1243	1253.55	408144	1252.18	511071114.4
3-Jan-07	1269.9	1237.1	1264.85	682554	1257.28	858163768.3
4-Jan-07	1280	1237.25	1243	654440	1253.42	820286003.3
5-Jan-07	1257.85	1233.1	1244.1	696227	1245.02	866814218.8
8-Jan-07	1248.8	1207.05	1213.7	874701	1223.18	1069919685
9-Jan-07	1222.4	1171.1	1174.9	1503471	1189.47	1788328639
10-Jan-07	1176	1132.85	1136.4	971222	1148.42	1115367532
11-Jan-07	1159	1132	1147.45	1749734	1146.15	2005457624
12-Jan-07	1236.25	1160	1225.45	1926908	1207.23	2326227568
15-Jan-07	1235	1209.1	1222.25	803861	1222.12	982411925.8
16-Jan-07	1255	1204.1	1209.8	1149226	1222.97	1405465090
17-Jan-07	1234	1213.1	1222.55	710615	1223.22	869236111.6
18-Jan-07	1254	1224	1229	1233707	1235.67	1524450616
19-Jan-07	1282.25	1210	1220.3	683057	1237.52	845294421.8
22-Jan-07	1232	1218	1224.55	373526	1224.85	457513321.1
23-Jan-07	1231.75	1167	1174.05	2165026	1190.93	2578401631
24-Jan-07	1185	1149.05	1172.55	1138549	1168.87	1330811974
25-Jan-07	1180.95	1162.5	1176.45	844471	1173.30	990817824.3
29-Jan-07	1190	1151	1156.15	557183	1165.72	649517509.5
31-Jan-07	1180	1132.8	1140.45	1762083	1151.08	2028304373
1-Feb-07	1230	1135.7	1203	2491197	1189.57	2963444911
2-Feb-07	1217.45	1173.15	1181.05	1941456	1190.55	2311400441
5-Feb-07	1206.95	1170.35	1197.05	1262870	1191.45	1504646462
6-Feb-07	1210	1190.25	1196.5	961322	1198.92	1152544968
7-Feb-07	1203.8	1185.35	1195.05	1116846	1194.73	1334333144
8-Feb-07	1218.9	1192	1205.25	1034407	1205.38	1246856958
9-Feb-07	1214.7	1179.15	1199.65	1017998	1197.83	1219391938
12-Feb-07	1203.8	1172	1183.7	1135384	1186.50	1347133116
13-Feb-07	1199.5	1158.1	1173.4	1246945	1177.00	1467654265
14-Feb-07	1159.95	1085.2	1102.3	2204801	1115.82	2460153702
15-Feb-07	1149	1110.55	1122.6	1107289	1127.38	1248339164
19-Feb-07	1139	1120.15	1132.1	832242	1130.42	940780227.5
20-Feb-07	1144.8	1105	1107.75	668308	1119.18	747959175.1

Date	High	Low	Close	Total Traded Quantity	Average price in Rs	Money flow in Rs
21-Feb-07	1118	1090.6	1105.9	828526	1104.83	915383142.3
22-Feb-07	1112	1070	1078.05	1482241	1086.68	1610726591
23-Feb-07	1135	1041	1058.2	1413837	1078.07	1524210542
26-Feb-07	1105.9	1042.1	1088.4	877062	1078.80	946174485.6
27-Feb-07	1149	1062	1069.15	1015137	1093.38	1109933877
28-Feb-07	1098	971.5	1041.85	1790460	1037.12	1856915907
1-Mar-07	1061	1016	1055.65	1108823	1044.22	1157851457
2-Mar-07	1074.4	991.05	1004.9	1648832	1023.45	1687497110
5-Mar-07	1003	955	962.55	1655430	973.52	1611588696
6-Mar-07	999	965	988.05	1122601	984.02	1104658094
7-Mar-07	1001.7	944.35	964.4	1311136	970.15	1271998590
8-Mar-07	1011	963.1	999.3	2387409	991.13	2366240640
9-Mar-07	1024	975	982.65	1722523	993.88	1711986901
12-Mar-07	1001	970.15	974.2	1313835	981.78	1289901306
13-Mar-07	989.5	966.15	980.4	999334	978.68	978031530.2
14-Mar-07	970	942.05	948	883408	953.35	842197016.8
15-Mar-07	964.7	917.75	922.1	1760770	934.85	1646055835
16-Mar-07	929.75	898.1	913.6	1815542	913.82	1659072539
19-Mar-07	929.9	907.1	926.5	876028	921.17	806967792.7
20-Mar-07	960	930	952.35	1011387	947.45	958238613.2
21-Mar-07	988.35	946.15	982.95	1126518	972.48	1095519980
22-Mar-07	1035	992	1029.4	2518005	1018.80	2565343494
23-Mar-07	1042.85	1013	1026.2	1326523	1027.35	1362803404
26-Mar-07	1039.85	1008	1013.65	1078620	1020.50	1100731710
28-Mar-07	1009.7	967.3	973.65	934898	983.55	919518927.9
29-Mar-07	1001	956.15	985.65	1727324	980.93	1694389689
30-Mar-07	1003	986.35	994.45	1291367	994.60	1284393618

### INTERPRETATION

The above-predicted table shows the analysis of Money Flow Index of SBIN. The money flow as on 19<sup>th</sup> March 2007 is Rs.806967792.7 and the money flow as on 20<sup>th</sup> March 2007 is Rs.958238613.2. So it shows the Positive Money flow over the day. Hence, it can be concluded that the investors can purchase the securities. The money flow as on 13<sup>th</sup> March 2007 is Rs.978031530.2 and the money flow as on 14<sup>th</sup> March 2007 is Rs.842197016.8. This shows a negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

TABLE 4.13

TABLE SHOWING THE AVERAGE RETURN OF UTI AND NIFTY DURING  
THE STUDY PERIOD (2004 – 2006)

MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN	MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN
30-Jan-04	0.010196872	-0.0016	29-Jul-05	0.003443997	0.0021
27-Feb-04	-0.007720846	-0.0001	31-Aug-05	-0.002220381	0.0014
31-Mar-04	0.00332599	-0.0006	30-Sep-05	0.003208501	0.0042
30-Apr-04	0.002833337	0.0008	31-Oct-05	-0.004961204	-0.0045
31-May-04	-0.015029147	-0.0082	30-Nov-05	0.006466044	0.0057
30-Jun-04	0.008901655	0.0008	30-Dec-05	0.003072901	0.0031
30-Jul-04	-0.00052348	0.0038	31-Jan-06	0.00858114	0.0029
31-Aug-04	-0.003197242	0	28-Feb-06	-0.001229833	0.0013
30-Sep-04	0.00448798	0.0031	31-Mar-06	0.003974815	0.0047
29-Oct-04	0.008753476	0.0012	29-Apr-06	-0.000905667	0.0026
30-Nov-04	0.004513269	0.0046	31-May-06	-0.008603237	-0.0063
31-Dec-04	0.005353708	0.0027	30-Jun-06	-0.001671388	0.0013
31-Jan-05	0.006145057	-0.0005	31-Jul-06	0.005527661	0.0004
28-Feb-05	0.008465497	0.0011	31-Aug-06	0.00640361	0.0038
31-Mar-05	-0.000591613	-0.0014	29-Sep-06	0.005310801	0.0024
29-Apr-05	-0.001457682	-0.0033	31-Oct-06	0.007093482	0.0022
31-May-05	0.00216234	0.0042	30-Nov-06	0.004048383	0.0025
30-Jun-05	0.001397287	0.0027	29-Dec-06	-0.000241603	0.0003

#### BETA CALCULATION FOR UTI FOR THREE YEARS

$$\text{COV (UTI, NIFTY)} = 0.00000993$$

$$\text{VAR (NIFTY)} = 0.00000912$$

$$\text{BETA} = 0.08855173$$

#### INTERPRETATION

BETA= 0.088551 the beta value is less than 1, that is security's price will be less volatile than the market, and therefore buying the share is less risky.

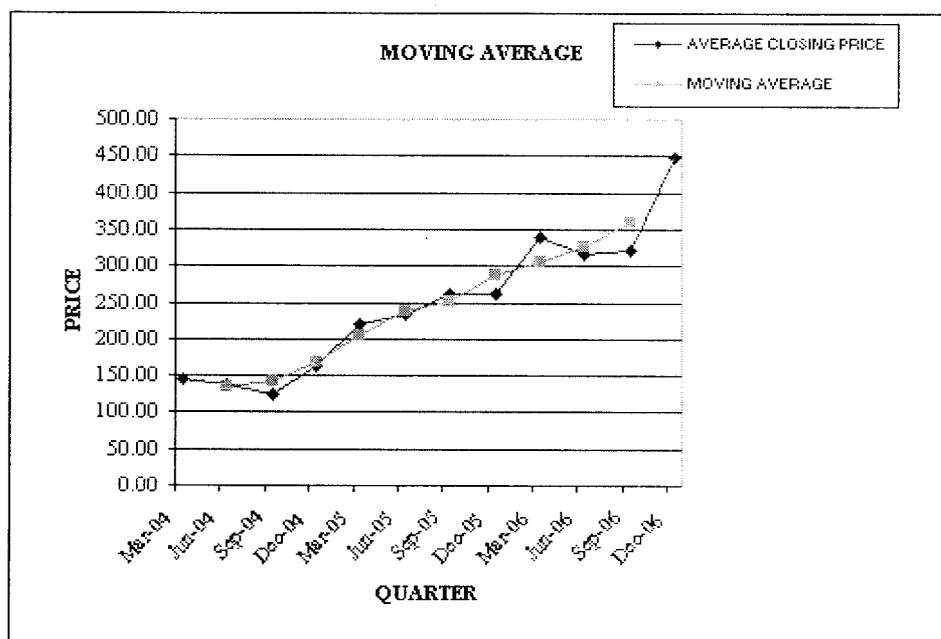
TABLE 4.14

TABLE SHOWING THREE DAY MOVING AVERAGE FOR UTI

QUARTER	AVERAGE CLOSING PRICE	MOVING AVERAGE
Mar-04	144.85	
Jun-04	137.00	135.43
Sep-04	124.44	141.33
Dec-04	162.57	169.36
Mar-05	221.07	205.46
Jun-05	232.74	238.45
Sep-05	261.54	252.34
Dec-05	262.75	287.87
Mar-06	339.32	306.07
Jun-06	316.16	325.24

CHART 4.5

CHART SHOWING THE THREE DAY MOVING AVERAGE FOR UTI



### INTERPRETATION

The average closing price for the 4th quarter 2006 is 447.74 which is greater than the moving average. Hence the security's price is trending up. This is the buy signal for the investors.



TABLE 4.15

P-1943

**TABLE SHOWING THE MONEY FLOW INDEX FOR UTI BANK DURING  
THE STUDY PERIOD (JANUARY 2007 – MARCH 2007)**

Date	High	Low	Close	Total Traded quantity	Average price in Rs	Money flow in Rs
2-Jan-07	471.8	461.3	467.9	181426	467.00	84725942.00
3-Jan-07	477.95	465.3	474.65	245834	472.63	116189342.87
4-Jan-07	485	469.1	474.25	313550	476.12	149286380.83
5-Jan-07	480.75	466.3	472.85	254825	473.30	120608672.50
8-Jan-07	472	459	465.55	496519	465.52	231137869.82
9-Jan-07	475	460.05	467.25	1086719	467.43	507968684.57
10-Jan-07	472	455.2	461.6	352622	462.93	163240477.87
11-Jan-07	484	458	478.55	1101571	473.52	521612228.02
12-Jan-07	502	484.9	499.8	1154720	495.57	572240741.33
15-Jan-07	543	502	533.3	970334	526.10	510492717.40
16-Jan-07	562.85	501.1	551.15	1170697	538.37	630264241.57
17-Jan-07	564.9	541.25	547.6	805259	551.25	443899023.75
18-Jan-07	556	538.25	546.95	1887707	547.07	1032701576.13
19-Jan-07	547.1	530.5	535.25	458794	537.62	246655300.97
22-Jan-07	553.9	530	546.35	352476	543.42	191541333.00
23-Jan-07	548	505	509.15	883364	520.72	459982357.53
24-Jan-07	520	505	509.05	744847	511.35	380877513.45
25-Jan-07	518.7	512.35	514.35	413093	515.13	212797974.07
29-Jan-07	522.5	501	504	294666	509.17	150034105.00
31-Jan-07	539.5	504	534.6	1093289	526.03	575106456.97
1-Feb-07	547.4	530.4	542.15	496986	539.98	268364156.90
2-Feb-07	615	543.2	587.75	2128312	581.98	1238642112.13
5-Feb-07	600	559.9	564.8	1434267	574.90	824560098.30
6-Feb-07	571.9	545.3	547.65	1242440	554.95	689492078.00
7-Feb-07	566	547	552.85	684041	555.28	379836566.62
8-Feb-07	569.85	532.25	564.1	859541	555.40	477389071.40
9-Feb-07	582	542	573.3	1869043	565.77	1057442227.97
12-Feb-07	575	549.5	553.85	623474	559.45	348802529.30
13-Feb-07	553	498.6	518	1152239	523.20	602851444.80
14-Feb-07	526	476.65	520.75	1366473	507.80	693894989.40
15-Feb-07	549	521	546.55	1046920	538.85	564132842.00

Date	High	Low	Close	Total Traded Quantity	Average price in Rs	Money flow in Rs
19-Feb-07	564	535.1	547.55	1244264	548.88	682955771.87
20-Feb-07	552	525	531.7	805370	536.23	431866239.67
21-Feb-07	542.4	511.3	536.45	556864	530.05	295165763.20
22-Feb-07	540	514	519.6	1017474	524.53	533699028.80
23-Feb-07	527.7	481.1	490.95	1682661	499.92	841190278.25
26-Feb-07	504.05	484.15	495.45	575413	494.55	284570499.15
27-Feb-07	502	483.1	487.65	723324	490.92	355091807.00
28-Feb-07	486.9	415	460.7	709959	454.20	322463377.80
1-Mar-07	492	457	484.75	397400	477.92	189924083.33
2-Mar-07	488	462.25	470.2	660004	473.48	312500893.93
5-Mar-07	465	432.2	446.6	815248	447.93	365176754.13
6-Mar-07	469	420.2	431.1	1178189	440.10	518520978.90
7-Mar-07	458	396.25	415.35	1387033	423.20	586992365.60
8-Mar-07	450	412.05	436.1	863747	432.72	373757722.68
9-Mar-07	467.9	427	456.4	967997	450.43	436018115.37
12-Mar-07	472.95	451	459.05	641141	461.00	295566001.00
13-Mar-07	501.2	457.1	493.6	1090008	483.97	527527538.40
14-Mar-07	485	463.5	472.8	1304939	473.77	618236600.23
15-Mar-07	496.4	465.05	469.3	549148	476.92	261897833.67
16-Mar-07	477	436.5	448.7	685452	454.07	311240904.80
19-Mar-07	475.5	442.1	470.05	520700	462.55	240849785.00
20-Mar-07	481	458.5	462.8	454288	467.43	212349354.13
21-Mar-07	485	463	481.1	676557	476.37	322289202.90
22-Mar-07	508.9	485.1	503.9	885384	499.30	442072231.20
23-Mar-07	530	491.55	524.65	995365	515.40	513011121.00
26-Mar-07	544	516.8	519.55	621965	526.78	327640795.92
28-Mar-07	524	486	495.35	780328	501.78	391555584.93
29-Mar-07	515.15	473.15	480	1359849	489.43	665555428.90
30-Mar-07	494.5	482.5	490.4	691505	489.13	338238145.67

### INTERPRETATION

The above-predicted table shows the analysis of Money Flow Index for UTI. The money flow as on 20<sup>th</sup> March 2007 is Rs.212349354.13 and the money flow as on 21<sup>st</sup> March 2007 is Rs.322289202.90. So it shows the Positive Money flow over the day. Hence, it can be concluded that the investors can purchase the securities. The money flow as on 23<sup>rd</sup> March 2007 is Rs.513011121.00 and the money flow as on 26<sup>th</sup> March 2007 is Rs.327640795.92. This shows a negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

TABLE 4.16

**TABLE SHOWING THE AVERAGE RETURN FOR INFOSYS AND NIFTY  
DURING THE STUDY PERIOD (2004 - 2006)**

MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN	MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN
30-Jan-04	-0.003609308	-0.0016	29-Jul-05	-0.001770323	0.0021
27-Feb-04	-0.001346799	-0.0001	31-Aug-05	0.00220195	0.0014
31-Mar-04	-0.000790349	-0.0006	30-Sep-05	0.002821269	0.0042
30-Apr-04	0.002364735	0.0008	31-Oct-05	0.000300899	-0.0045
31-May-04	0.00126066	-0.0082	30-Nov-05	0.003212712	0.0057
30-Jun-04	0.002843287	0.0008	30-Dec-05	0.005110239	0.0031
30-Jul-04	-0.029304271	0.0038	31-Jan-06	-0.001812751	0.0029
31-Aug-04	0.000709555	0	28-Feb-06	-0.000857368	0.0013
30-Sep-04	0.00342911	0.0031	31-Mar-06	0.002515023	0.0047
29-Oct-04	0.006074039	0.0012	29-Apr-06	0.003924178	0.0026
30-Nov-04	0.006109993	0.0046	31-May-06	-0.003718572	-0.0063
31-Dec-04	-0.001114963	0.0027	30-Jun-06	0.002956747	0.0013
31-Jan-05	-0.000381247	-0.0005	31-Jul-06	-0.01991602	0.0004
28-Feb-05	0.00408359	0.0011	31-Aug-06	0.00400094	0.0038
31-Mar-05	0.000444081	-0.0014	29-Sep-06	0.001209184	0.0024
29-Apr-05	-0.008716324	-0.0033	31-Oct-06	0.006395245	0.0022
31-May-05	0.008146859	0.0042	30-Nov-06	0.001864206	0.0025
30-Jun-05	0.002159353	0.0027	29-Dec-06	0.001486064	0.0003

**BETA CALCULATION FOR INFOSYS FOR THREE YEARS**

$$\text{COV (INFOSYS, NIFTY)} = 0.00000328$$

$$\text{VAR (NIFTY)} = 0.00000912$$

$$\text{BETA} = 0.35952382$$

**INTERPRETATION**

BETA= 0.35952 the beta value is less than 1, that is security's price will be less volatile than the market, and therefore buying the share is less risky.

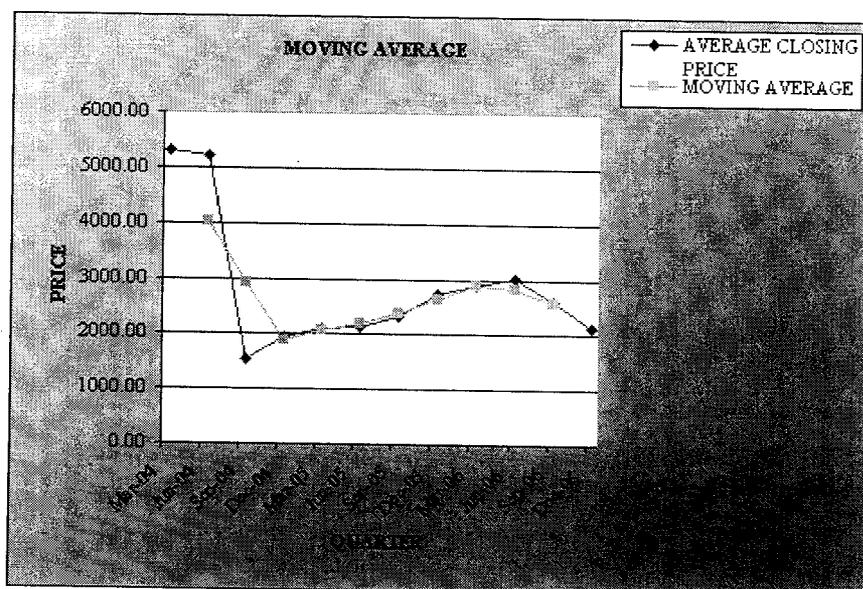
TABLE 4.17

TABLE SHOWING THREE DAY MOVING AVERAGE FOR INFOSYS

QUARTER	AVERAGE CLOSING PRICE	MOVING AVERAGE
Mar-04	5308.12	
Jun-04	5224.37	4024.47
Sep-04	1540.94	2908.71
Dec-04	1960.84	1872.34
Mar-05	2115.25	2072.92
Jun-05	2142.68	2197.76
Sep-05	2335.34	2401.06
Dec-05	2725.16	2645.82
Mar-06	2876.97	2875.49
Jun-06	3024.33	2834.56
Sep-06	2602.38	2585.12
Dec-06	2128.64	

CHART 4.6

CHART SHOWING THE THREE DAY MOVING AVERAGE FOR INFOSYS



### INTERPRETATION

The average closing price for the 4th quarter 2006 is 2128.64 which is lesser than the moving average. Hence the security's price is trending down. It is a sell signal for the investor.

TABLE 4.18

TABLE SHOWING THE MONEY FLOW INDEX FOR INFOSYS DURING  
THE STUDY PERIOD (JANUARY 2007 – MARCH 2007)

Date	High	Low	Close	Total Traded quantity	Average price in Rs	Money flow in Rs
2-Jan-07	2297	2238.1	2272.65	1078733	2269.25	2447914860
3-Jan-07	2320	2272.65	2311.35	1361157	2301.33	3132475976
4-Jan-07	2325	2275.05	2285.3	1097133	2295.12	2518048234
5-Jan-07	2305	2255.55	2275.05	877744	2278.53	1999968962
8-Jan-07	2280	2192.5	2205.6	2310171	2226.03	5142517652
9-Jan-07	2235.45	2173.4	2190.1	1677051	2199.65	3688925232
10-Jan-07	2200	2153.4	2164.45	1894898	2172.62	4116886976
11-Jan-07	2214.9	2095.15	2183	4261526	2164.35	9223433798
12-Jan-07	2231.7	2200	2223.4	1729086	2218.37	3835746746
15-Jan-07	2247.55	2230	2242.95	1266845	2240.17	2837943941
16-Jan-07	2250	2216.1	2222.2	639226	2229.43	1425111752
17-Jan-07	2245	2197.15	2205.45	1100425	2215.87	2438395077
18-Jan-07	2233	2206	2224.15	988269	2221.05	2194994862
19-Jan-07	2238	2185	2202.35	1443893	2208.45	3188765496
22-Jan-07	2260	2204.4	2254	1215174	2239.47	2721341667
23-Jan-07	2248	2220.15	2235.15	863396	2234.43	1929200802
24-Jan-07	2257	2201	2234.05	457610	2230.68	1020783000
25-Jan-07	2254.7	2221.4	2241	849794	2239.03	1902717092
29-Jan-07	2255	2212.35	2244.4	818864	2237.25	1832003484
31-Jan-07	2255	2221.35	2247.3	1146388	2241.22	2569303892
1-Feb-07	2275	2238.35	2268.95	420908	2260.77	951574776.1
2-Feb-07	2280	2242.1	2265.55	1230365	2262.55	2783762331
5-Feb-07	2276.4	2235	2269.3	912384	2260.23	2062200730
6-Feb-07	2286.95	2260	2272.95	820118	2273.30	1864374249
7-Feb-07	2370	2255.55	2357.05	1812308	2327.53	4218207280
8-Feb-07	2380	2333.6	2373.7	821431	2362.43	1940575975
9-Feb-07	2398	2338	2361.25	788101	2365.75	1864449941
12-Feb-07	2369.7	2311.1	2351.25	608511	2344.02	1426359926
13-Feb-07	2358.5	2276.6	2304.2	945127	2313.10	2186173264
14-Feb-07	2315	2261.7	2284.65	1205275	2287.12	2756604540
15-Feb-07	2415	2295	2382.95	1247356	2364.32	2949144580
19-Feb-07	2400	2362.95	2376.1	385831	2379.68	918155600.2
20-Feb-07	2387.8	2351	2359.95	308990	2366.25	731147587.5
21-Feb-07	2372	2302.1	2310.9	1168590	2328.33	2720867050
22-Feb-07	2335	2270	2287.5	1298600	2297.50	2983533500

Date	High	Low	Close	Total Traded quantity	Average price in Rs	Money flow in Rs
23-Feb-07	2311	2212.2	2237.7	1444897	2253.63	3256268042
26-Feb-07	2247	2155	2218.15	1458781	2206.72	3219116346
27-Feb-07	2230	2165.25	2187	1119612	2194.08	2456522029
28-Feb-07	2180	2050	2077.55	3125049	2102.52	6570467607
1-Mar-07	2184.95	2076	2159.15	1704332	2140.03	3647327291
2-Mar-07	2179	2075	2093.5	1521013	2115.83	3218210006
5-Mar-07	2077.9	2000	2007.15	1743846	2028.35	3537130034
6-Mar-07	2153.7	2013	2114.45	1819108	2093.72	3808696738
7-Mar-07	2167.4	2050.3	2085.35	1283784	2101.02	2697251580
8-Mar-07	2146	2081.25	2135.75	1532651	2121.00	3250752771
9-Mar-07	2150	2096.35	2120.95	1010651	2122.43	2145039371
12-Mar-07	2143.95	2100	2115.3	1133243	2119.75	2402191849
13-Mar-07	2129.95	2069.8	2105.05	1433228	2101.60	3012071965
14-Mar-07	2089.7	2012.25	2020	2001160	2040.65	4083667154
15-Mar-07	2104.9	2036	2079.4	2143630	2073.43	4444673896
16-Mar-07	2105	2025	2047.45	945972	2059.15	1947898244
19-Mar-07	2091.75	2047.2	2087.25	682727	2075.40	1416931616
20-Mar-07	2108.7	2050	2055.9	672323	2071.53	1392739505
21-Mar-07	2100	2048.35	2093.95	1157339	2080.77	2408152413
22-Mar-07	2145	2100	2119.05	996793	2121.35	2114546831
23-Mar-07	2135	2081	2092.6	1359660	2102.87	2859183692
26-Mar-07	2105	2040.2	2058.15	1993575	2067.78	4122281159
28-Mar-07	2030	1988	1992.05	2684238	2003.35	5377468197
29-Mar-07	2029	1959.1	1990.7	3240899	1992.93	6458895647
30-Mar-07	2029.7	1995	2018.65	1811694	2014.45	3649566978

### INTERPRETATION

The above-predicted table shows the analysis of Money Flow Index of INFOSYS. The money flow index 27<sup>th</sup> Day of FEB 2007 is Rs.2456522029 and the money flow as on 28<sup>th</sup> FEB 2007 is Rs.6570467607. So it shows the Positive Money flow over the day. Hence, it can be concluded that the investors can purchase the securities. The money flow as on 22<sup>nd</sup> March 2007 is Rs.2408152413 and the money flow as on 23<sup>rd</sup> March 2007 is Rs.2114546831. This shows a negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

TABLE 4.19

**TABLE SHOWING THE AVERAGE RETURN OF HCL TECH AND NIFTY  
DURING THE STUDY PERIOD (2004 - 2006)**

MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN
05-Jan	-0.002902334	-0.0005
05-Feb	0.001302127	0.0011
05-Mar	0.004507715	-0.0014
05-Apr	-0.005008408	-0.0033
05-May	0.004494098	0.0042
05-Jun	0.002540768	0.0027
05-Jul	0.00186672	0.0021
05-Aug	0.006012675	0.0014
05-Sep	5.05169E-05	0.0042
05-Oct	-0.003645314	-0.0045
05-Nov	0.010003235	0.0057
05-Dec	0.002717739	0.0031
06-Jan	0.007679132	0.0029
06-Feb	-0.001335411	0.0013
06-Mar	0.00325463	0.0047
06-Apr	-0.006654882	0.0026
06-May	-0.005613885	-0.0063
06-Jun	0.000771762	0.0013
06-Jul	0.001965111	0.0004
06-Aug	0.005243126	0.0038
06-Sep	-0.00258467	0.0024
06-Oct	0.006309755	0.0022
06-Nov	0.000720669	0.0025
06-Dec	0.001109582	0.0003

**BETA CALCULATION FOR HCL TECH FOR THREE YEARS**

$$\text{COV (HCL, NIFTY)} = 0.00000721$$

$$\text{VAR (NIFTY)} = 0.00000835$$

$$\text{BETA} = 0.86300164$$

**INTERPRETATION**

BETA= 0.86300 the beta value is less than 1, that is security's price will be less volatile than the market, and therefore buying the share is less risky.

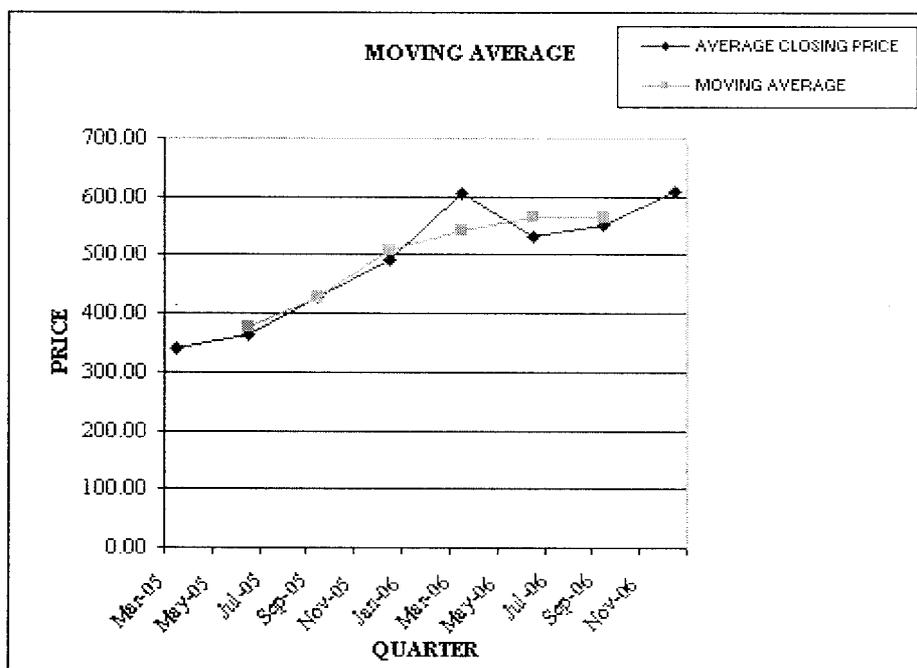
TABLE 4.20

TABLE SHOWING THREE DAY MOVING AVERAGE FOR HCL TECH

QUARTER	AVERAGE CLOSING PRICE	MOVING AVERAGE
Mar-05	339.96	
Jun-05	364.14	377.04
Sep-05	427.03	427.33
Dec-05	490.84	507.93
Mar-06	605.93	543.30
Jun-06	533.13	564.07
Sep-06	553.13	565.46
Dec-06	610.10	

CHART 4.7

CHART SHOWING THE THREE DAY MOVING AVERAGE FOR HCL TECH



### INTERPRETATION

The average closing price for the 4th quarter 2006 is 610.10 which is greater than the moving average. Hence the security's price is trending up. This is a buy signal for the investors.

**TABLE 4.21**  
**TABLE SHOWING THE MONEY FLOW INDEX FOR HCL**  
**TECHNOLOGIES DURING THE STUDY PERIOD (JANUARY 2007 –**  
**MARCH 2007)**

Date	High	Low	Close	Total Traded quantity	Average Price in Rs	Money flow in Rs
2-Jan-07	648.3	637.65	639.25	322049	641.73	206669578.3
3-Jan-07	645	629	632.15	515221	635.38	327362836.4
4-Jan-07	637	618	620.5	455921	625.17	285026611.8
5-Jan-07	630	614.9	616.75	413362	620.55	256511789.1
8-Jan-07	624	600	601.1	489960	608.37	298075332
9-Jan-07	609.95	593.15	600.05	352767	601.05	212030605.4
10-Jan-07	600.05	578	588.95	393268	589	231634852
11-Jan-07	611.7	580	608.9	361559	600.2	217007711.8
12-Jan-07	635	610	631.85	358531	625.62	224302969.1
15-Jan-07	643.9	625.15	629.45	268982	632.83	170220775.7
16-Jan-07	661	637	639.4	710574	645.8	458888689.2
17-Jan-07	650.95	642.1	646.05	388944	646.37	251400436.8
18-Jan-07	668.85	645.5	654.6	564668	656.32	370601019.5
19-Jan-07	664	636.5	660.65	452896	653.72	296065663.5
22-Jan-07	670	653.75	663.5	523499	662.42	346774462.6
23-Jan-07	666	654.95	659.85	190094	660.27	125512731.7
24-Jan-07	664.85	655	660.85	1522619	660.23	1005283818
25-Jan-07	670.5	655	664.85	356651	663.45	236620106
29-Jan-07	667.9	655	661.3	999082	661.4	660792834.8
31-Jan-07	661	646	648.5	200427	651.83	130644999.5
1-Feb-07	655	642.05	651.05	150135	649.37	97492664.5
2-Feb-07	660	644.55	654.3	139148	652.95	90856686.6
5-Feb-07	659.4	640	651.2	203725	650.2	132461995
6-Feb-07	659.2	644.7	656.55	369070	653.48	241181093.8
7-Feb-07	675.2	658	668.2	467122	667.13	311632656.9
8-Feb-07	673.8	660.25	662.45	224736	665.5	149561808
9-Feb-07	669	656	659.8	363998	661.6	240821076.8
12-Feb-07	662	634.1	642.5	243431	646.2	157305112.2
13-Feb-07	666.05	601.25	652.15	284874	639.82	182267133.1
14-Feb-07	665	647.5	662.3	207323	658.27	136473820.1
15-Feb-07	685	649.05	674.95	637216	669.67	426722314.7
19-Feb-07	696	675.55	692.4	808387	687.98	556156782.9
20-Feb-07	714.8	685.5	693.6	1157051	697.97	807583029.6
21-Feb-07	712.9	679.75	698	1140111	696.88	794524354.1

Date	High	Low	Close	Total Traded quantity	Average Price in Rs	Money flow in Rs
22-Feb-07	704.85	673	681.1	837112	686.32	574523917.5
23-Feb-07	694	650	660.85	888412	668.28	593710932.7
26-Feb-07	678.8	651	666.4	921256	665.4	613003742.4
27-Feb-07	684	660	663.75	668362	669.25	447301268.5
28-Feb-07	672.5	578.05	600.85	1215455	617.13	750097795.7
1-Mar-07	638.9	576	632.65	906807	615.85	558457091
2-Mar-07	644.9	620	631.95	725638	632.28	458808813.4
5-Mar-07	625.7	529.8	608.2	912326	587.9	536356455.4
6-Mar-07	634	618	625.6	1201245	625.87	751819204
7-Mar-07	639.85	608.75	620.05	759726	622.88	473220663.3
8-Mar-07	634	613	631.15	984211	626.05	616165296.6
9-Mar-07	635	619	624.65	1077730	626.22	674892488.2
12-Mar-07	643.9	626	639.9	1665893	636.6	1060507484
13-Mar-07	655	639.5	641.15	1203215	645.22	776334371.6
14-Mar-07	640	620	630.6	1309722	630.2	825386804.4
15-Mar-07	320	299	309.8	2499232	309.6	773762227.2
16-Mar-07	314.8	295.3	298.9	1041388	303	315540564
19-Mar-07	306.45	298.6	303.35	931427	302.8	282036095.6
20-Mar-07	307.8	298.5	301.6	906007	302.63	274187918.4
21-Mar-07	304.45	295.55	297.05	884320	299.02	264426418.7
22-Mar-07	304	294.95	296.1	1380042	298.35	411735530.7
23-Mar-07	306	297.1	303	1575708	302.03	475916339.6
26-Mar-07	305.9	289	300.6	1431370	298.5	427263945
28-Mar-07	305.8	283.1	287.4	1757177	292.1	513271401.7
29-Mar-07	307.9	284	300.4	4679709	297.43	1391901447
30-Mar-07	302.8	284	291.4	729909	292.73	213668694.6

### INTERPRETATION

The above-predicted table shows the analysis of Money Flow Index of HCL. The money flow as on 9<sup>th</sup> March 2007 is Rs.674892488.2 and the money flow as on 12<sup>th</sup> March 2007 is Rs.1060507484. So it shows the Positive Money flow over the day. Hence, it can be concluded that the investors can purchase the securities. The money flow as on 20<sup>th</sup> March 2007 is Rs.274187918.4 and the money flow as on 21<sup>st</sup> March 2007 is Rs.264426418.7. This shows a negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

TABLE 4.22

TABLE SHOWING THE AVERAGE RETURN FOR SATYAM AND NIFTY  
DURING THE STUDY PERIOD (2004 – 2006)

MONTH	AVG MKT RET	AVG NIFTY RET	MONTH	AVG MKT RET	AVG NIFTY RET
04-Jan	-0.007549833	-0.0016	05-Jul	0.001322052	0.0021
04-Feb	-0.000945564	-0.0001	05-Aug	0.000983085	0.0014
04-Mar	-0.00195981	-0.0006	05-Sep	0.002813814	0.0042
04-Apr	0.004619264	0.0008	05-Oct	0.003970407	-0.0045
04-May	-0.000350888	-0.0082	05-Nov	0.004173101	0.0057
04-Jun	-0.000891064	0.0008	05-Dec	0.005724873	0.0031
04-Jul	0.004837156	0.0038	06-Jan	0.000732102	0.0029
04-Aug	0.00016064	0	06-Feb	0.001705153	0.0013
04-Sep	0.004982899	0.0031	06-Mar	0.004611565	0.0047
04-Oct	-0.000133562	0.0012	06-Apr	-0.005518346	0.0026
04-Nov	0.007568015	0.0046	06-May	-0.00388657	-0.0063
04-Dec	-0.002330252	0.0027	06-Jun	0.001774429	0.0013
05-Jan	0.000751051	-0.0005	06-Jul	0.003318368	0.0004
05-Feb	-0.00008650	0.0011	06-Aug	0.003215367	0.0038
05-Mar	-0.000144021	-0.0014	06-Sep	0.000669733	0.0024
05-Apr	-0.000710549	-0.0033	06-Oct	-0.021290192	0.0022
05-May	0.005903914	0.0042	06-Nov	237640.6311	0.0025
05-Jun	0.005216602	0.0027	06-Dec	0.002751239	0.0003

#### BETA CALCULATION FOR SATYAM FOR THREE YEARS

$$\text{COV (SATYAM, NIFTY)} = 9.33645490$$

$$\text{VAR (NIFTY)} = 0.00000912$$

$$\text{BETA} = 1.023194061$$

#### INTERPRETATION

BETA=1.02319 the beta value is greater than 1, that is security's price will be more volatile than the market, and therefore buying the share is more risky.

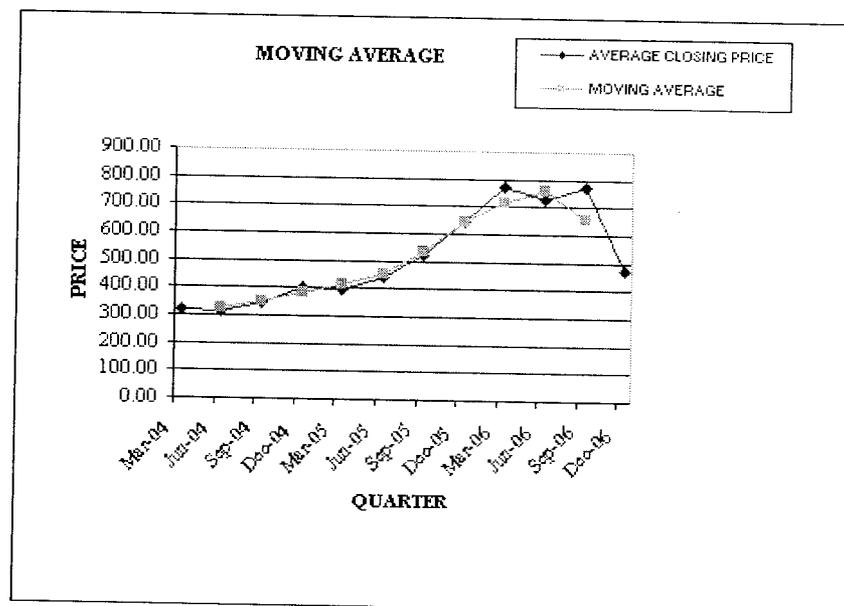
TABLE 4.23

TABLE SHOWING THREE DAY MOVING AVERAGE FOR SATYAM

QUARTER	AVERAGE CLOSING PRICE	MOVING AVERAGE
Mar-04	322.19	
Jun-04	311.87	326.07
Sep-04	344.15	353.07
Dec-04	403.20	381.45
Mar-05	397.00	413.98
Jun-05	441.75	453.02
Sep-05	520.31	535.30
Dec-05	643.86	644.73
Mar-06	770.01	713.51
Jun-06	726.66	756.55
Sep-06	772.98	656.53
Dec-06	469.95	

CHART 4.8

CHART SHOWING THE THREE DAY MOVING AVERAGE FOR SATYAM



### INTERPRETATION

The average closing price for the 4th quarter 2006 is 469.95 which is lesser than the moving average. Hence it is trending down and it is a sell signal for the investors.

TABLE 4.24

TABLE SHOWING THE MONEY FLOW INDEX FOR SATYAM DURING  
THE STUDY PERIOD (JANUARY 2007 – MARCH 2007)

Date	High	Low	Close	Total Traded quantity	Average price in Rs	Money flow in Rs
2-Jan-07	510.9	482.35	508.45	2553787	500.57	1278340646
3-Jan-07	517	505.1	515.15	3066594	512.42	1571373876
4-Jan-07	525	500	501.85	3358318	508.95	1709215946
5-Jan-07	511.8	495.2	501.05	2991490	502.68	1503772165
8-Jan-07	503.2	480.15	486.25	2770215	489.87	1357035988
9-Jan-07	494	462.15	467.7	4409708	474.62	2092920912
10-Jan-07	469.9	455.7	464.2	5038327	463.27	2334088955
11-Jan-07	487.45	454	480.55	6215030	474.00	2945924220
12-Jan-07	500.5	485.1	496.5	4076274	494.03	2013815232
15-Jan-07	505	485	501.05	2333268	497.02	1159673084
16-Jan-07	550	502.2	506.9	2204177	519.70	1145510787
17-Jan-07	513.8	505.5	508.2	2006589	509.17	1021688233
18-Jan-07	518.5	508.05	514.75	3538547	513.77	1817987497
19-Jan-07	519.9	477.3	489.1	11977888	495.43	5934244978
22-Jan-07	489.1	464.65	472.3	6677423	475.35	3174113023
23-Jan-07	480.1	466.8	471.25	4291343	472.72	2028589358
24-Jan-07	477.5	468.35	470.5	2951569	472.12	1393484918
25-Jan-07	478	469.2	475.35	5225100	474.18	2477655335
29-Jan-07	477	462	465.15	4205061	468.05	1968178801
31-Jan-07	475.45	464.15	472.45	2741063	470.68	1290172670
1-Feb-07	478.1	469	473.9	3278670	473.67	1552996690
2-Feb-07	493	475	490.65	4554755	486.22	2214597794
5-Feb-07	495.5	485.35	489.95	1767409	490.27	866501719.1
6-Feb-07	494.5	482.35	490.65	1857079	489.17	908421144.2
7-Feb-07	495	483.05	490.15	3405459	489.40	1666631635
8-Feb-07	495	479.1	485.85	4943087	486.65	2405553289
9-Feb-07	487.5	466.5	468.8	4429020	474.27	2100536552
12-Feb-07	475	460.25	463.3	1807458	466.18	842606795.3
13-Feb-07	474	448.35	459.8	3410959	460.72	1571485661
14-Feb-07	470	449.1	464.85	3258761	461.32	1503320762
15-Feb-07	488	468	485.6	3024021	480.53	1453142891
19-Feb-07	491	479.25	481.8	1373167	484.02	664635714.1
20-Feb-07	487	475.25	477.7	1228779	479.98	589793440.4

Date	High	Low	Close	Total Traded quantity	Average price in Rs	Money flow in Rs
21-Feb-07	478	461	462.15	2751061	467.05	1284883040
22-Feb-07	470.35	455.05	458.95	3253789	461.45	1501460934
23-Feb-07	469.2	440	449.9	4295171	453.03	1945855635
26-Feb-07	468.9	450	459.15	4609560	459.35	2117401386
27-Feb-07	505	440	449.05	3494455	464.68	1623814998
28-Feb-07	449.45	405.1	414.4	6460929	422.98	2732865285
1-Mar-07	440	415	435.85	4657458	430.28	2004026553
2-Mar-07	443.6	423.2	427.3	3041748	431.37	1312108696
5-Mar-07	423.8	410	414.15	2320031	415.98	965094228.8
6-Mar-07	439.75	417	433.6	3073945	430.12	1322154977
7-Mar-07	446.25	424	430.1	3887324	433.45	1684960588
8-Mar-07	448.9	431	445.8	2090390	441.90	923743341
9-Mar-07	448.7	435	439.05	1325891	440.92	584607440.1
12-Mar-07	450	439	441.85	2472629	443.62	1096899435
13-Mar-07	458.95	442	454.7	3505223	451.88	1583951853
14-Mar-07	442	411.1	431	3422492	428.03	1464940659
15-Mar-07	459	432.1	434.95	2328327	442.02	1029159339
16-Mar-07	446	425.35	429.6	1474942	433.65	639608598.3
19-Mar-07	437.5	430.2	433.15	1956616	433.62	848421307.9
20-Mar-07	448.5	435.35	445.15	3945121	443.00	1747688603
21-Mar-07	457.85	437.05	451.35	3259767	448.75	1462820441
22-Mar-07	469.85	457	467.05	3546642	464.63	1647888095
23-Mar-07	466.9	458.3	464.55	1475381	463.25	683470248.3
26-Mar-07	474.7	460	472	2899254	468.90	1359460201
28-Mar-07	469.7	450	455.7	5243624	458.47	2404026817
29-Mar-07	467.4	454.6	461.1	3527061	461.03	1626092690
30-Mar-07	472	456	470.35	2711610	466.12	1263926615

## INTERPRETATION

The above-predicted table shows the analysis of Money Flow Index for SATYAM. The money flow index as on 8<sup>th</sup> Jan 2007 is Rs.1357035988 and the money flow as on 9<sup>th</sup> Jan 2007 is Rs.2092920912. So it shows the Positive Money flow over the day. Hence, it can be concluded that the investors can purchase the securities. The money flow as on 14<sup>th</sup> Feb 2007 is Rs.1503320762 and the money flow as on 15<sup>th</sup> Feb 2007 is Rs.1453142891. This shows the negative and it can be concluded that it is not a good sign to Purchase.

TABLE 4.25

TABLE SHOWING THE AVERAGE RETURN FOR TCS AND NIFTY  
DURING THE STUDY PERIOD (2004 - 2006)

MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN	MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN
31-Aug-04	0.000160827	0	30-Nov-05	0.004164281	0.0057
30-Sep-04	0.001812958	0.0031	30-Dec-05	0.005259846	0.0031
29-Oct-04	0.006012461	0.0012	31-Jan-06	-0.000885539	0.0029
30-Nov-04	0.004947208	0.0046	28-Feb-06	0.001011912	0.0013
31-Dec-04	0.002147422	0.0027	31-Mar-06	0.005566618	0.0047
31-Jan-05	-0.001297834	-0.0005	29-Apr-06	0.002166152	0.0026
28-Feb-05	0.003078714	0.0011	31-May-06	-0.004452031	-0.0063
31-Mar-05	0.001745044	-0.0014	30-Jun-06	-0.000496469	0.0013
29-Apr-05	-0.011267873	-0.0033	31-Jul-06	-0.019412822	0.0004
31-May-05	0.007672939	0.0042	31-Aug-06	0.002951783	0.0038
30-Jun-05	0.000863397	0.0027	29-Sep-06	0.00127019	0.0024
29-Jul-05	-0.003196554	0.0021	31-Oct-06	0.0032086	0.0022
31-Aug-05	0.004755286	0.0014	30-Nov-06	0.00452982	0.0025
30-Sep-05	0.002698384	0.0042	29-Dec-06	0.001116574	0.0003
31-Oct-05	-0.002666505	-0.0045			

#### BETA CALCULATION FOR TCS FOR THREE YEARS

$$\text{COV (TCS, NIFTY)} = 0.00000775$$

$$\text{VAR (NIFTY)} = 0.00000744$$

$$\text{BETA} = 1.041808125$$

#### INTERPRETATION

BETA=1.041808 the beta value is greater than 1, that is security's price will be more volatile than the market, and therefore buying the share is more risky.

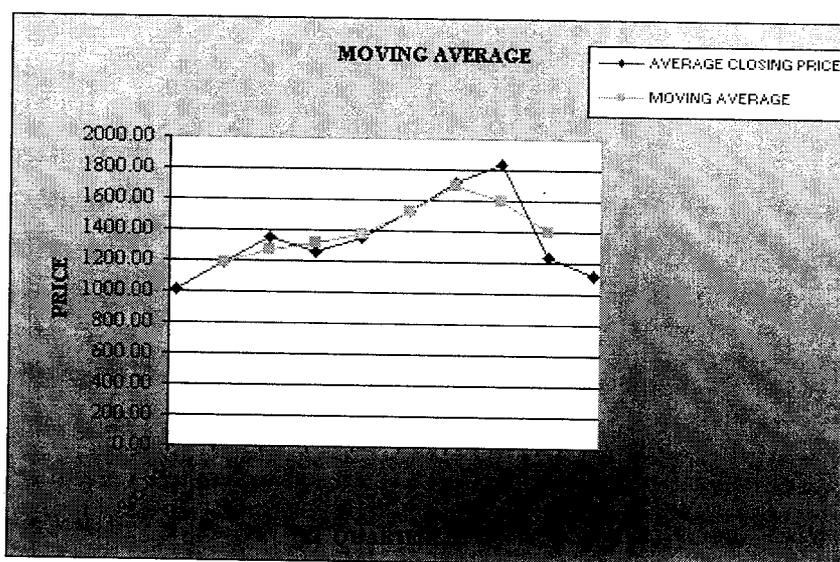
TABLE 4.26

TABLE SHOWING THREE DAY MOVING AVERAGE FOR TCS

QUARTER	AVERAGE CLOSING PRICE	MOVING AVERAGE
Sep-04	1006.26	
Dec-04	1193.27	1185.07
Mar-05	1355.67	1268.00
Jun-05	1255.07	1319.99
Sep-05	1349.23	1379.21
Dec-05	1533.32	1534.89
Mar-06	1722.13	1697.86
Jun-06	1838.14	1598.24
Sep-06	1234.46	1395.66
Dec-06	1114.39	

CHART 4.9

CHART SHOWING THE THREE DAY MOVING AVERAGE FOR TCS



### INTERPRETATION

The average closing price for the 4th quarter 2006 is 1114.39 which is lesser than the moving average. Hence the security's price is trending down. This is a sell signal for the investors.

TABLE 4.27

TABLE SHOWING THE MONEY FLOW INDEX FOR TCS DURING THE  
STUDY PERIOD (JANUARY 2007 – MARCH 2007)

Date	High	Low	Close	Total Traded Quantity	Average price in Rs	Money flow in Rs
2-Jan-07	1258	1216	1248.5	386265	1240.83	479290487.5
3-Jan-07	1288	1239.15	1280.15	1096243	1269.10	1391241991
4-Jan-07	1285	1250.1	1259.05	992675	1264.72	1255452617
5-Jan-07	1268.6	1253.1	1263	679685	1261.57	857467939.8
8-Jan-07	1259	1215	1243.8	1237973	1239.27	1534178673
9-Jan-07	1261.85	1225.25	1256.4	1005142	1247.83	1254249692
10-Jan-07	1255	1230	1235.4	732857	1240.13	908840394.3
11-Jan-07	1298	1198.9	1277.65	1850166	1258.18	2327848025
12-Jan-07	1329	1290.15	1323.95	1543937	1314.37	2029299328
15-Jan-07	1368	1300.05	1326.35	3063958	1331.47	4079557945
16-Jan-07	1388.95	1319	1324.1	1906491	1344.02	2562355679
17-Jan-07	1335	1300	1304.65	658457	1313.22	864696706.7
18-Jan-07	1325.95	1305	1315.45	679954	1315.47	894456821.9
19-Jan-07	1326.5	1292.15	1298.15	720514	1305.60	940703078.4
22-Jan-07	1322.4	1290.05	1313.45	795239	1308.63	1040676263
23-Jan-07	1313.95	1300	1302.7	781038	1305.55	1019684161
24-Jan-07	1314	1298.15	1307.15	588787	1306.43	769210963
25-Jan-07	1369	1302.9	1315.45	1388494	1329.12	1845470517
29-Jan-07	1315	1291	1297.75	745581	1301.25	970187276.3
31-Jan-07	1313.9	1272	1277.9	1216482	1287.93	1566747717
1-Feb-07	1295	1275	1292.05	464976	1287.35	598586853.6
2-Feb-07	1307	1295.05	1300.5	1068654	1300.85	1390158556
5-Feb-07	1313.9	1294	1305.8	752684	1304.57	981926456.9
6-Feb-07	1313.9	1290.05	1298.4	852991	1300.78	1109556476
7-Feb-07	1312.4	1295.2	1306.3	649996	1304.63	848006448.1
8-Feb-07	1314.9	1297.35	1304.5	662506	1305.58	864956791.8
9-Feb-07	1317.45	1283.15	1287.4	498340	1296.00	645848640
12-Feb-07	1298.7	1250	1255.8	446597	1268.17	566359428.8
13-Feb-07	1284.9	1235	1252.9	1032588	1257.60	1298582669
14-Feb-07	1267	1240	1260.75	784469	1255.92	985227691.6
15-Feb-07	1300	1225.1	1292.25	918389	1272.45	1168604083
19-Feb-07	1318.7	1295.2	1309.8	1184674	1307.90	1549435125
20-Feb-07	1323.8	1295	1299.55	1350037	1306.12	1763305826

Date	High	Low	Close	Total Traded Quantity	Average price in Rs	Money flow in Rs
21-Feb-07	1311.75	1280	1283.85	984547	1291.87	1271903451
22-Feb-07	1312.4	1286	1294.3	1734778	1297.57	2250990107
23-Feb-07	1299.5	1273	1277.35	791922	1283.28	1016260304
26-Feb-07	1293.85	1232.5	1286.1	1169421	1270.82	1486119697
27-Feb-07	1294.2	1254	1264.15	1177492	1270.78	1496337209
28-Feb-07	1244.95	1172	1193.4	2336989	1203.45	2812449412
1-Mar-07	1268	1190.4	1254.65	1964641	1237.68	2431603422
2-Mar-07	1260	1201	1208.55	1327938	1223.18	1624311629
5-Mar-07	1199	1150	1155.55	1280220	1168.18	1495531667
6-Mar-07	1335	1161.1	1197.25	905980	1231.12	1115367078
7-Mar-07	1224.7	1157.4	1191.8	1110158	1191.30	1322531225
8-Mar-07	1229.7	1190	1218.4	568747	1212.70	689719486.9
9-Mar-07	1233	1198	1212.15	808037	1214.38	981266665.5
12-Mar-07	1253.7	1211	1235	909234	1233.23	1121297677
13-Mar-07	1268.9	1200.1	1265.4	508022	1244.80	632385785.6
14-Mar-07	1241.9	1205	1213.55	956237	1220.15	1166752576
15-Mar-07	1251	1228	1234.3	955822	1237.77	1183084611
16-Mar-07	1257.85	1215.15	1237.65	1056071	1236.88	1306236619
19-Mar-07	1264.75	1201.8	1260.9	303424	1242.48	376999262.9
20-Mar-07	1276.5	1248	1253	693898	1259.17	873733231.7
21-Mar-07	1269.4	1240	1267	492509	1258.80	619970329.2
22-Mar-07	1307	1277	1303.05	1031398	1295.68	1336365199
23-Mar-07	1320	1280	1288.2	1316324	1296.07	1706043659
26-Mar-07	1298.7	1255.25	1261.35	1524684	1271.77	1939042288
28-Mar-07	1269.9	1194.05	1201	2204512	1221.65	2693142085
29-Mar-07	1256.8	1188.95	1248.35	2566656	1231.37	3160494643
30-Mar-07	1254.8	1220.25	1233.85	701764	1236.30	867590833.2

### INTERPRETATION

The above-predicted table shows the analysis of Money Flow Index for TCS. The money flow index as on 1<sup>st</sup> March 2007 is Rs.1357035988 and the money flow as on 2<sup>nd</sup> March 2007 is Rs.2092920912. So it shows the Positive Money flow over the day. Hence, it can be concluded that the investors can purchase the securities. The money flow as on 12<sup>th</sup> March 2007 is Rs.1121297677 and the money flow as on 13<sup>th</sup> March 2007 is Rs.632385785.6. This shows the negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

TABLE 4.28

**TABLE SHOWING THE AVERAGE RETURN OF WIPRO AND NIFTY  
DURING THE STUDY PERIOD (2004 - 2006)**

MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN	MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN
04-Jan	-0.005801802	-0.0016	05-Jul	-0.001877317	0.0021
04-Feb	-0.003375831	-0.0001	05-Aug	-0.023181998	0.0014
04-Mar	-0.002792796	-0.0006	05-Sep	0.0010214	0.0042
04-Apr	0.006735833	0.0008	05-Oct	-0.000616744	-0.0045
04-May	0.001927257	-0.0082	05-Nov	0.007692563	0.0057
04-Jun	-0.02814436	0.0008	05-Dec	0.004250188	0.0031
04-Jul	0.001377422	0.0038	06-Jan	0.006984128	0.0029
04-Aug	0.002748087	0	06-Feb	-0.000820117	0.0013
04-Sep	0.001518834	0.0031	06-Mar	0.00353134	0.0047
04-Oct	0.005030735	0.0012	06-Apr	-0.001822498	0.0026
04-Nov	0.00777362	0.0046	06-May	-0.00749482	-0.0063
04-Dec	-0.000943345	0.0027	06-Jun	0.006441181	0.0013
05-Jan	-0.002847396	-0.0005	06-Jul	-0.001677682	0.0004
05-Feb	-0.000302412	0.0011	06-Aug	0.002587634	0.0038
05-Mar	-0.00166479	-0.0014	06-Sep	0.000656421	0.0024
05-Apr	-0.002754145	-0.0033	06-Oct	0.001434863	0.0022
05-May	0.005876971	0.0042	06-Nov	0.005019686	0.0025
05-Jun	0.003044105	0.0027	06-Dec	0.000661207	0.0003

**BETA CALCULATION FOR WIPRO FOR THREE YEARS**

$$\text{COV (WIPRO, NIFTY)} = 0.00000624$$

$$\text{VAR (NIFTY)} = 0.00000914$$

$$\text{BETA} = 0.68315061$$

**INTERPRETATION**

BETA= 0.683150 the beta value is less than 1, that is security's price will be less volatile than the market, and therefore buying the share is less risky.

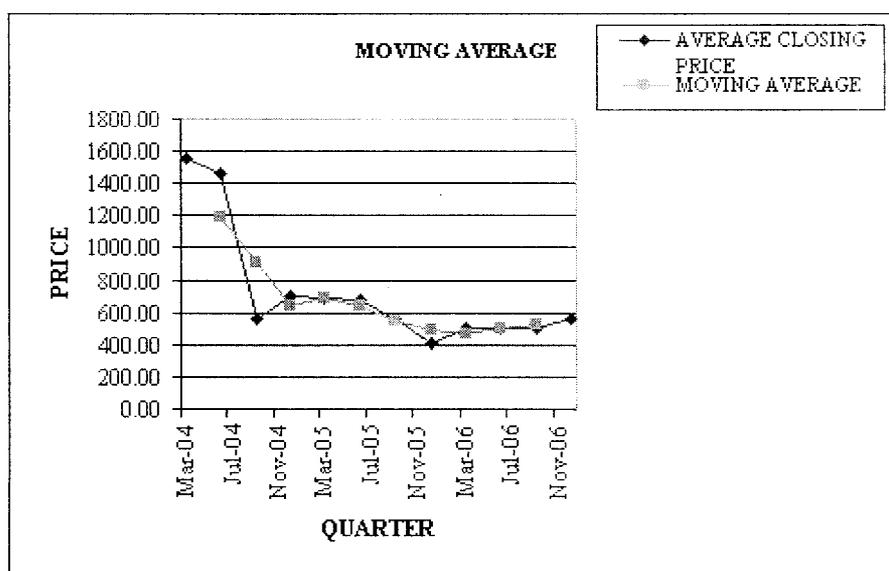
TABLE 4.29

TABLE SHOWING THREE DAY MOVING AVERAGE FOR WIPRO

QUARTER	AVERAGE CLOSING PRICE	MOVING AVERAGE
Mar-04	1557.71	
Jun-04	1462.43	1191.87
Sep-04	555.47	906.43
Dec-04	701.38	647.81
Mar-05	686.58	689.80
Jun-05	681.44	642.40
Sep-05	559.19	551.73
Dec-05	414.57	493.93
Mar-06	508.03	473.15
Jun-06	496.85	502.87
Sep-06	503.73	520.21
Dec-06	560.05	

CHART 4.10

CHART SHOWING THE THREE DAY MOVING AVERAGE FOR WIPRO



### INTERPRETATION

The average closing price for the 4th quarter 2006 is 560.05 which is greater than the moving average. Hence the security's price is trending up. This is buy signal for the investors

TABLE 4.30

**TABLE SHOWING THE MONEY FLOW INDEX FOR WIPRO DURING  
THE STUDY PERIOD (JANUARY 2007 – MARCH 2007)**

<b>Date</b>	<b>High</b>	<b>Low</b>	<b>Close</b>	<b>Total Traded Quantity</b>	<b>Average price in Rs</b>	<b>Money flow in Rs</b>
2-Jan-07	614.8	602.3	611.55	480419	609.55	292839401.5
3-Jan-07	621.85	607.1	620.2	1086155	616.38	669487839.4
4-Jan-07	622	605	606.5	863442	611.17	527706969
5-Jan-07	610	595	598.05	623652	601.02	374825246.2
8-Jan-07	598.5	576	578.5	834500	584.33	487626166.7
9-Jan-07	586.5	570	579.9	670706	578.80	388204632.8
10-Jan-07	596	561.35	590.05	1374429	582.47	800559078.2
11-Jan-07	622	580	619.55	1720336	607.18	1044559347
12-Jan-07	629.5	620	626.45	872842	625.32	545802650
15-Jan-07	633.5	622	626.95	565914	627.48	355101603.1
16-Jan-07	638.75	625.2	636.9	852119	633.62	539916800.4
17-Jan-07	652.1	631.5	633.9	1783976	639.17	1140257993
18-Jan-07	648	635	641.6	942177	641.53	604437951.4
19-Jan-07	643	614.5	620.65	823438	626.05	515513359.9
22-Jan-07	628.95	612	621.75	691159	620.90	429140623.1
23-Jan-07	625.05	615.6	620.75	422265	620.47	262001357
24-Jan-07	635	617	632.9	401092	628.30	252006103.6
25-Jan-07	675	631.1	651.3	1322409	652.47	862827792.2
29-Jan-07	652.85	623.05	630.3	649524	635.40	412707549.6
31-Jan-07	638.7	610	613.25	697694	620.65	433023781.1
1-Feb-07	627.5	618.15	622.3	781386	622.65	486529992.9
2-Feb-07	650	626	643.1	1501095	639.70	960250471.5
5-Feb-07	646.9	631	633.85	437484	637.25	278786679
6-Feb-07	640.15	626.25	634.8	399707	633.73	253307649.5
7-Feb-07	646	631.15	642.8	580920	639.98	371779118
8-Feb-07	644.9	633.25	635.45	310592	637.87	198116283.7
9-Feb-07	647.85	635	643.1	514200	641.98	330107830
12-Feb-07	648	626	630.4	518543	634.80	329171096.4
13-Feb-07	649	624	637.8	694255	636.93	442194151.3
14-Feb-07	654	625.35	650.2	700222	643.18	450371120
15-Feb-07	683.25	650	677	1122207	670.08	751972207.3
19-Feb-07	691	676.65	681.25	748895	682.97	511470321.8
20-Feb-07	683.25	661.15	664.25	394072	669.55	263850907.6
21-Feb-07	677.5	656.1	668.4	912134	667.33	608697422.7

Date	High	Low	Close	Total Traded Quantity	Average price in Rs	Money flow in Rs
22-Feb-07	681.95	641.25	649.85	1449993	657.68	953636229.6
23-Feb-07	667	620	623.3	953452	636.77	607126451.9
26-Feb-07	627.9	593.5	613.6	1302198	611.67	796511110
27-Feb-07	619.8	567.55	604.55	1043427	597.30	623238947.1
28-Feb-07	595.9	549.75	562.4	2287608	569.35	1302449615
1-Mar-07	599	540	591.5	2258957	576.83	1303041696
2-Mar-07	592.55	567	574.2	1115775	577.92	644824968.8
5-Mar-07	570	527.15	536.95	1431910	544.70	779961377
6-Mar-07	582.45	540	578.3	1515921	566.92	859400880.3
7-Mar-07	591.7	543.35	553.85	2267483	562.97	1276517346
8-Mar-07	581	555	572.5	1455921	569.50	829147009.5
9-Mar-07	584.9	561.65	565.65	806081	570.73	460057296.1
12-Mar-07	590	568.35	571.8	1158625	576.72	668198347.9
13-Mar-07	585.95	571.35	583.9	566519	580.40	328807627.6
14-Mar-07	575	550	555.25	1483791	560.08	831046609.3
15-Mar-07	597.7	558.4	562.3	828761	572.80	474714300.8
16-Mar-07	597.7	556.05	565.25	646295	573.00	370327035
19-Mar-07	581	565	578.25	467617	574.75	268762870.8
20-Mar-07	587	570.6	573.4	650467	577.00	375319459
21-Mar-07	590	550.25	581.75	458992	574.00	263461408
22-Mar-07	599.8	588	594.7	561513	594.17	333632307.5
23-Mar-07	609.5	591.2	597.3	935734	599.33	560816577.3
26-Mar-07	604.7	540.1	581.7	709950	575.50	408576225
28-Mar-07	583.7	555	559.1	1420962	565.93	804169761.2
29-Mar-07	581.45	555	565.9	2276242	567.45	1291653523
30-Mar-07	579.7	556.5	559.4	715385	565.20	404335602

## INTERPRETATION

The above-predicted table shows the analysis of Money Flow Index for WIPRO. The money flow index as on 21<sup>st</sup> March 2007 is Rs.263461408 and the money flow as on 22<sup>nd</sup> March 2007 is Rs.333632307.5. So it shows the Positive Money flow over the day. Hence, it can be concluded that the investors can purchase the securities. The money flow as on 29<sup>th</sup> March 2007 the Money flow is Rs.1291653523 and the money flow as on 30<sup>th</sup> March 2007 is Rs.404345602. This shows the negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

TABLE 4.31

TABLE SHOWING THE AVERAGE RETURN FOR DR.REDDY AND NIFTY  
DURING THE STUDY PERIOD (2004 - 2006)

MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN	MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN
04-Jan	-0.001096076	-0.0016	05-Jul	0.005436854	0.0021
04-Feb	-0.005909299	-0.0001	05-Aug	-0.001914701	0.0014
04-Mar	-0.010045165	-0.0006	05-Sep	0.003075004	0.0042
04-Apr	-0.005488176	0.0008	05-Oct	-0.002269068	-0.0045
04-May	-0.003158446	-0.0082	05-Nov	0.006375659	0.0057
04-Jun	-0.00357357	0.0008	05-Dec	0.00322352	0.0031
04-Jul	0.001691778	0.0038	06-Jan	0.007062225	0.0029
04-Aug	-0.003237667	0	06-Feb	0.00853884	0.0013
04-Sep	0.002123223	0.0031	06-Mar	0.00408649	0.0047
04-Oct	0.001027766	0.0012	06-Apr	0.000527388	0.0026
04-Nov	0.002906253	0.0046	06-May	-0.001614748	-0.0063
04-Dec	0.003758174	0.0027	06-Jun	-0.002438539	0.0013
05-Jan	-0.00826783	-0.0005	06-Jul	0.004978211	0.0004
05-Feb	-0.001009786	0.0011	06-Aug	-0.020926357	0.0038
05-Mar	0.001333278	-0.0014	06-Sep	0.000723703	0.0024
05-Apr	-0.007301056	-0.0033	06-Oct	0.00133334	0.0022
05-May	0.005953534	0.0042	06-Nov	0.000233022	0.0025
05-Jun	0.001737002	0.0027	06-Dec	0.003989595	0.0003

#### BETA CALCULATION FOR DR.REDDY FOR THREE YEARS

$$\text{COV (DR.REDDY, NIFTY)} = 0.00000541$$

$$\text{VAR (NIFTY)} = 0.00000912$$

$$\text{BETA} = 0.59254097$$

#### INTERPRETATION

BETA = 0.59254 the beta value is lesser than 1, that is security's price will be less volatile than the market, and therefore buying the share is less risky.

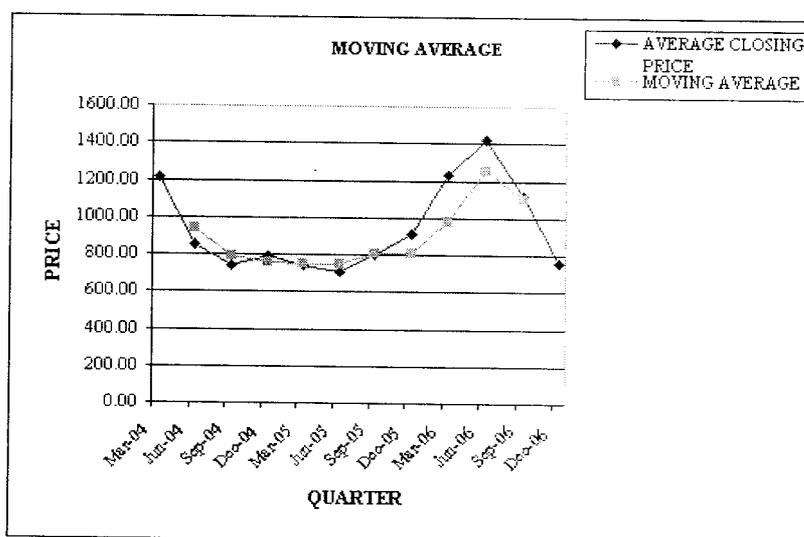
TABLE 4.32

TABLE SHOWING THREE DAY MOVING AVERAGE FOR DR.REDDY

QUARTER	AVERAGE CLOSING PRICE	MOVING AVERAGE
Mar-04	1214.92	
Jun-04	853.03	936.02
Sep-04	740.10	795.46
Dec-04	793.25	758.87
Mar-05	743.27	747.08
Jun-05	704.73	748.43
Sep-05	797.28	804.39
Dec-05	911.18	804.39
Mar-06	1227.07	978.51
Jun-06	1419.32	1255.96
Sep-06	1121.50	1098.98
Dec-06	756.12	

CHART 4.11

CHART SHOWING THE THREE DAY MOVING AVERAGE FOR DRREDDY



### INTERPRETATION

The average closing price for the 4th quarter 2006 is 756.12 which is greater than the moving average which is lesser than the moving average. Hence the security's price is trending down this is a sell signal for the investor.

TABLE 4.33

**TABLE SHOWING THE MONEY FLOW INDEX FOR DRREDDY DURING  
THE STUDY PERIOD (JANUARY 2007 – MARCH 2007)**

Date	High	Low	Close	Total Traded quantity	Average price in Rs	Money flow in Rs
2-Jan-07	813.9	805	807.4	149614	808.77	121002816.1
3-Jan-07	817.9	798	809.05	666728	808.32	538927354.5
4-Jan-07	834.9	811.1	828.1	1134811	824.70	935878631.7
5-Jan-07	830	801.4	810.4	617391	813.93	502515114.6
8-Jan-07	818.9	800.1	812.2	472816	810.40	383170086.4
9-Jan-07	813.5	795.05	798.15	363017	802.23	291224338
10-Jan-07	798	772	774.95	314396	781.65	245747633.4
11-Jan-07	795.9	770.25	791.9	294762	786.02	231687844.7
12-Jan-07	814.8	792	809.45	480730	805.42	387187954.2
15-Jan-07	812.9	802	803.9	296215	806.27	238828280.7
16-Jan-07	811.8	803.2	808.8	149810	807.93	121036492.7
17-Jan-07	819.9	806.3	815.35	253284	813.85	206135183.4
18-Jan-07	824.8	808.5	815.8	214586	816.37	175180857.5
19-Jan-07	824.9	807.1	811.5	401853	814.50	327309268.5
22-Jan-07	827	803	810.05	998294	813.35	811962424.9
23-Jan-07	830	767	771.25	1423610	789.42	1123821461
24-Jan-07	779.45	758.25	762.9	781712	766.87	599468875.7
25-Jan-07	775	760.15	763.7	770843	766.28	590684143.5
29-Jan-07	775	749.5	751.8	529268	758.77	401590916.1
31-Jan-07	759.95	734.15	743.05	548920	745.72	409338792.7
1-Feb-07	752	740	743.8	379188	745.27	282596176.8
2-Feb-07	755	744	745.65	317283	748.22	237396428.7
5-Feb-07	754.8	746	750.3	263263	750.37	197543779.8
6-Feb-07	757.75	747	750.3	248367	751.68	186693334.5
7-Feb-07	753	742.8	745.95	354910	747.25	265206497.5
8-Feb-07	750.05	738.5	741.55	381662	743.37	283714808.7
9-Feb-07	744.8	729	731.65	358118	735.15	263270447.7
12-Feb-07	748	712.05	725.2	567145	728.42	413117870.4
13-Feb-07	748	720	726.25	450740	731.42	329678748.3
14-Feb-07	733.5	706.25	719.9	380843	719.88	274162528.3
15-Feb-07	743.6	722.5	738.4	472809	734.83	347435813.5
19-Feb-07	748	728	730.85	271306	735.62	199577215.4
20-Feb-07	735	723.1	729.2	383017	729.10	279257694.7

Date	High	Low	Close	Total Traded quantity	Average price in Rs	Money flow in Rs
21-Feb-07	743.75	724.6	729.5	625104	732.62	457961608.8
22-Feb-07	734.9	686.1	706.35	1197410	709.12	849103387.8
23-Feb-07	717	662.6	681.55	850697	687.05	584471373.9
26-Feb-07	706	675.1	689.3	963601	690.13	665013170.1
27-Feb-07	699	682.45	693.25	579538	691.57	400789162.9
28-Feb-07	690	606	676.9	1401616	657.63	921749402.1
1-Mar-07	680	648.2	661.75	805777	663.32	534485313.7
2-Mar-07	671.9	648.55	660.1	976759	660.18	644840012.5
5-Mar-07	662.5	601	617.5	542525	627.00	340163175
6-Mar-07	642.5	617.1	622.55	1572197	627.38	986370194.5
7-Mar-07	641.9	625	635.25	1362472	634.05	863875371.6
8-Mar-07	679.5	638.5	668.55	940046	662.18	622482793.8
9-Mar-07	682	656	660	786176	666.00	523593216
12-Mar-07	678	655.2	658.4	493330	663.87	327505342.7
13-Mar-07	667.95	651.2	661	576325	660.05	380403316.3
14-Mar-07	656	627	648.45	535760	643.82	344931217.3
15-Mar-07	680	655	672.45	1289991	669.15	863197477.7
16-Mar-07	690	673	683.6	608406	682.20	415054573.2
19-Mar-07	692.85	670.4	677.25	297246	680.17	202176821
20-Mar-07	687	678.1	682.4	175874	682.50	120034005
21-Mar-07	682.4	661.95	679.2	185754	674.52	125294168.9
22-Mar-07	693.6	679.15	682	283838	684.92	194405376.8
23-Mar-07	693	682	686.3	171779	687.10	118029350.9
26-Mar-07	691.9	675	682.15	207356	683.02	141627603.9
28-Mar-07	708.4	654.9	692.15	1186972	685.15	813253865.8
29-Mar-07	715.35	689	706.5	727186	703.62	511660189.4
30-Mar-07	734.4	710	728.25	666788	724.22	482898982.7

## INTERPRETATION

The above-predicted table shows the analysis of Money Flow Index for DRREDDY. The money flow for 23<sup>rd</sup> March 2007 is Rs.118029350.9 and the money flow of 26<sup>th</sup> March 2007 is Rs.141627603.9. So it shows the Positive Money flow over the day. So, it can be concluded that the investors can purchase the securities. The money flow for 06<sup>th</sup> March 2007 the Money flow is Rs.986370194.5 and the money flow of 07<sup>th</sup> March is Rs.863875371.6. This shows the negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

TABLE 4.34

TABLE SHOWING THE AVERAGE RETURN FOR CIPLA AND NIFTY  
DURING THE STUDY PERIOD (2004 - 2006)

MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN	MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN
04 - Jan	-0.005578815	-0.0016	05 - Jul	0.003700506	0.0021
04 - Feb	-4.99139E-05	-0.0001	05 - Aug	0.000834443	0.0014
04 - Mar	-0.000677989	-0.0006	05 - Sep	0.005194243	0.0042
04 - Apr	0.007890127	0.0008	05 - Oct	-0.00234876	-0.0045
04 - May	-0.045593698	-0.0082	05 - Nov	0.005006515	0.0057
04 - Jun	-0.004148521	0.0008	05 - Dec	0.005608858	0.0031
04 - Jul	0.007523715	0.0038	06 - Jan	-0.0006004	0.0029
04 - Aug	-0.002048719	0	06 - Feb	0.012286691	0.0013
04 - Sep	0.010199659	0.0031	06 - Mar	0.008397663	0.0047
04 - Oct	-0.002895129	0.0012	06 - Apr	-0.033362503	0.0026
04 - Nov	-0.000196625	0.0046	06 - May	-0.005109485	-0.0063
04 - Dec	0.005938436	0.0027	06 - Jun	-0.002124601	0.0013
05 - Jan	-0.005000514	-0.0005	06 - Jul	0.004425201	0.0004
05 - Feb	-0.004675098	0.0011	06 - Aug	0.00292995	0.0038
05 - Mar	-0.000485769	-0.0014	06 - Sep	0.002283051	0.0024
05 - Apr	0.001804562	-0.0033	06 - Oct	-2.95813E-05	0.0022
05 - May	0.004242486	0.0042	06 - Nov	-0.001144532	0.0025
05 - Jun	0.003605628	0.0027	06 - Dec	-0.000563859	0.0003

#### BETA CALCULATION FOR CIPLA FOR THREE YEARS

$$\text{COV (CIPLA, NIFTY)} = 0.00001675$$

$$\text{VAR (NIFTY)} = 0.00000912$$

$$\text{BETA} = 1.83598922$$

#### INTERPRETATION

BETA=1.83598 the beta value is greater than 1, that is security's price will be more volatile than the market, and therefore buying the share is more risky.

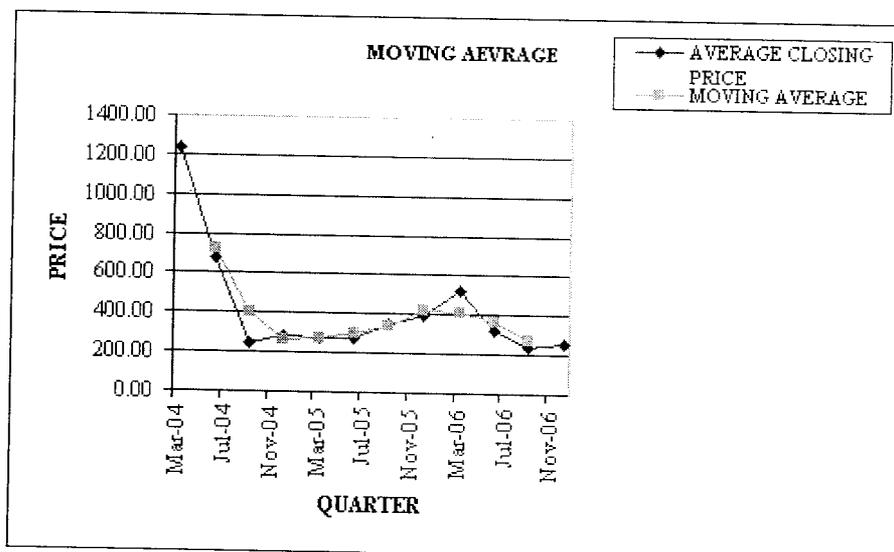
TABLE 4.35

## TABLE SHOWING THREE DAY MOVING AVERAGE FOR CIPLA

QUARTER	AVERAGE CLOSING PRICE	MOVING AVERAGE
Mar-04	1231.37	
Jun-04	678.02	718.83
Sep-04	247.10	403.62
Dec-04	285.74	268.77
Mar-05	273.48	278.27
Jun-05	275.58	297.77
Sep-05	344.26	339.16
Dec-05	397.63	422.22
Mar-06	524.79	414.42
Jun-06	320.85	361.87
Sep-06	239.97	272.52
Dec-06	256.75	

CHART 4.12

## CHART SHOWING THE THREE DAY MOVING AVERAGE FOR CIPLA



## INTERPRETATION

The average closing price for the 4th quarter 2006 is 256.75 which is lesser than the moving average. Hence the security's price is trending down which is a sell signal for the investors.

TABLE 4.36

TABLE SHOWING THE MONEY FLOW INDEX FOR CIPLA DURING THE STUDY PERIOD (JANUARY 2007 – MARCH 2007)

Date	High	Low	Close	Total Traded Quantity	Average price in Rs	Money flow in Rs
2-Jan-07	254.8	250.75	251.5	218029	252.35	55019618.15
3-Jan-07	258.55	249.5	257.85	877596	255.30	224050258.8
4-Jan-07	259.4	252.1	255.15	675088	255.55	172518738.4
5-Jan-07	260	252.05	253.6	485228	255.22	123838272.7
8-Jan-07	253.6	245.05	247.55	574365	248.73	142863721
9-Jan-07	251.45	242.3	244.1	581021	245.95	142902115
10-Jan-07	245.25	231.1	242.8	1095221	239.72	262542727.4
11-Jan-07	247.7	241.7	246.7	562074	245.37	137914223.8
12-Jan-07	256.95	247	255.2	959213	253.05	242728849.7
15-Jan-07	260	255	258	900079	257.67	231920355.7
16-Jan-07	259.8	255.45	258.85	548586	258.03	141553474.2
17-Jan-07	262.5	255.9	261.05	826563	259.82	214754843.5
18-Jan-07	261.9	258	259.6	429742	259.83	111661296.3
19-Jan-07	259.6	250.2	252.55	728297	254.12	185072406
22-Jan-07	255.8	252	254.9	220586	254.23	56080314.07
23-Jan-07	256.95	253.55	254.75	293804	255.08	74944503.67
24-Jan-07	254.5	246.05	246.8	1407677	249.12	350675802
25-Jan-07	251	239.55	243.9	1722547	244.82	421708214.7
29-Jan-07	251.9	245.5	248.6	1812011	248.67	450586735.3
31-Jan-07	248.5	242.05	246.3	693149	245.62	170248946.9
1-Feb-07	248.75	243.85	247	255265	246.53	62931331.33
2-Feb-07	252.7	246.15	249.85	839338	249.57	209470786.9
5-Feb-07	252	246.95	248.45	405070	249.13	100916439.3
6-Feb-07	251.85	246	250.15	656367	249.33	163654172
7-Feb-07	259.4	247.65	257.5	1319482	254.85	336269987.7
8-Feb-07	260	253.55	257.1	693483	256.88	178144224.7
9-Feb-07	255.9	251.5	252.5	477806	253.30	121028259.8
12-Feb-07	255	246.15	248.35	594455	249.83	148514674.2
13-Feb-07	251.7	241.05	243.55	819069	245.43	201026834.9
14-Feb-07	246.8	231.4	244	520840	240.73	125383549.3
15-Feb-07	267	238	256.65	1030747	253.88	261689484.2
19-Feb-07	259	253	255.5	807529	255.83	206592835.8
20-Feb-07	256.5	250.05	254.65	860174	253.73	218254816.3
21-Feb-07	257.5	249.6	254.4	980154	253.83	248795757

Date	High	Low	Close	Total traded quantity	Average price in Rs	Money flow in Rs
22-Feb-07	255.85	245	247.7	1055138	249.52	263274516.6
23-Feb-07	250.05	240	241.9	687757	243.98	167801245.4
26-Feb-07	246.5	235.4	245	510684	242.30	123738733.2
27-Feb-07	246.9	238.05	239.65	497377	241.53	120133124.7
28-Feb-07	239.8	220.1	231.95	1185786	230.62	273462014.7
1-Mar-07	236.05	225	229.7	1464477	230.25	337195829.3
2-Mar-07	232.9	223.65	225.2	535489	227.25	121689875.3
5-Mar-07	223.95	215	217.2	660679	218.72	144501508.6
6-Mar-07	224.7	216	221.85	399245	220.85	88173258.25
7-Mar-07	235.5	222.1	231.55	1435391	229.72	329733235.9
8-Mar-07	238	226.95	236.55	519542	233.83	121486237.7
9-Mar-07	237.1	226.6	229.15	463407	230.95	107023846.7
12-Mar-07	234	228.05	232.35	707948	231.47	163866363.7
13-Mar-07	237.55	227.7	236.55	715607	233.93	167404330.9
14-Mar-07	238	226.1	230.6	802567	231.57	185847765
15-Mar-07	235.95	226.05	227.6	412758	229.87	94879305.6
16-Mar-07	231.95	220.65	222.95	354289	225.18	79779977.98
19-Mar-07	227	223.5	224.85	322058	225.12	72500623.43
20-Mar-07	231.4	180.25	230.5	700836	214.05	150013945.8
21-Mar-07	233.05	229	232.5	363724	231.52	84208168.0
22-Mar-07	239	232	235.3	1320258	235.43	310832741.8
23-Mar-07	243.9	232.25	240.95	893603	239.03	213600903.8
26-Mar-07	244.45	235	237.3	685423	238.92	163758978.4
28-Mar-07	246.75	228	234.2	1129768	236.32	266983007.9
29-Mar-07	243.55	232	236.4	1299874	237.32	308481764.8
30-Mar-07	238.45	234.1	236.8	1030531	236.45	243669055

## INTERPRETATION

The above-predicted table shows the analysis of Money Flow Index for CIPLA. The money flow index as on 26<sup>th</sup> March 2007 is Rs.163758978.4 and the money flow as on 28<sup>th</sup> March 2007 is Rs.266983007.9. So it shows the Positive Money flow over the day. Hence, it can be concluded that the investors can purchase the securities. The money flow as on 22<sup>nd</sup> March 2007 is Rs.310832741.8 and the money flow as on 23<sup>rd</sup> March 2007 is Rs.213600903.8. This shows the negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

TABLE 4.37

TABLE SHOWING THE AVERAGE RETURN FOR GLAXO AND NIFTY  
DURING THE STUDY PERIOD (2004 - 2006)

MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN	MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN
30-Jan-04	0.00241429	-0.0016	29-Jul-05	0.004795	0.0021
27-Feb-04	-0.000915336	-0.0001	31-Aug-05	-1.5796E-05	0.0014
31-Mar-04	0.000663779	-0.0006	30-Sep-05	0.000509287	0.0042
30-Apr-04	0.005044605	0.0008	31-Oct-05	0.001322387	-0.0045
31-May-04	-0.004133499	-0.0082	30-Nov-05	0.008815144	0.0057
30-Jun-04	-0.0008817	0.0008	30-Dec-05	0.00209815	0.0031
30-Jul-04	0.00058214	0.0038	31-Jan-06	0.006929854	0.0029
31-Aug-04	-0.000281144	0	28-Feb-06	0.001525489	0.0013
30-Sep-04	0.005627235	0.0031	31-Mar-06	0.004641929	0.0047
29-Oct-04	6.19214E-05	0.0012	29-Apr-06	-0.001406482	0.0026
30-Nov-04	0.004824048	0.0046	31-May-06	-0.009178758	-0.0063
31-Dec-04	0.001880445	0.0027	30-Jun-06	-0.002938994	0.0013
31-Jan-05	-0.004462118	-0.0005	31-Jul-06	-0.001649303	0.0004
28-Feb-05	0.002255827	0.0011	31-Aug-06	0.008984116	0.0038
31-Mar-05	-0.000999736	-0.0014	29-Sep-06	0.001029302	0.0024
29-Apr-05	-0.000333473	-0.0033	31-Oct-06	-0.003345397	0.0022
31-May-05	0.002839109	0.0042	30-Nov-06	0.000932805	0.0025
30-Jun-05	0.002622307	0.0027	29-Dec-06	-0.000132721	0.0003

#### BETA CALCULATION FOR GLAXO FOR THREE YEARS

$$\text{COV (GLAXO, NIFTY)} = 0.00000696$$

$$\text{VAR (NIFTY)} = 0.00000912$$

$$\text{BETA} = 0.76291744$$

#### INTERPRETATION

BETA = 0.76291 the beta value is lesser than 1, that is security's price will be less volatile than the market, and therefore buying the share is less risky.

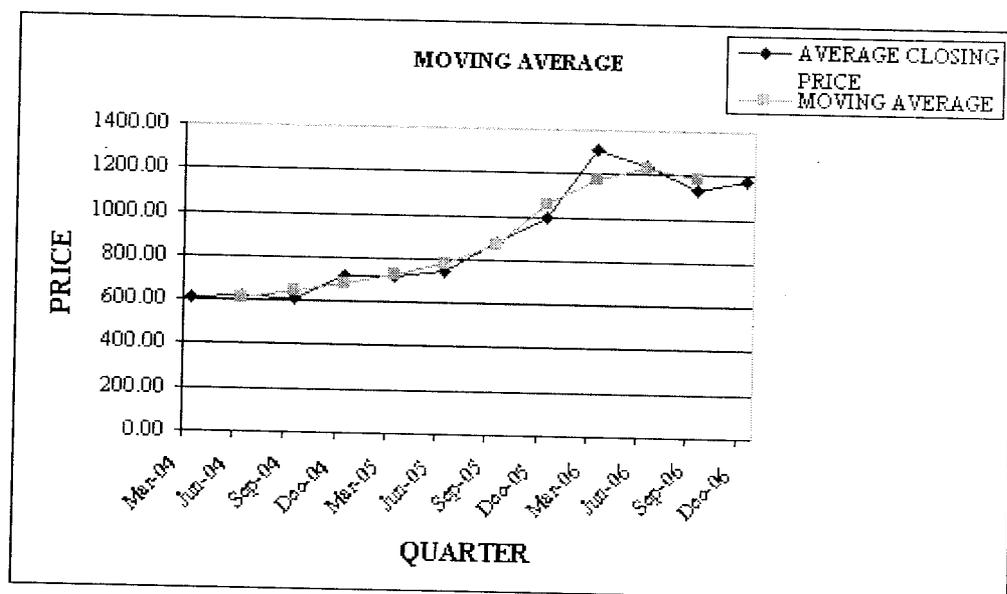
TABLE 4.38

TABLE SHOWING THREE DAY MOVING AVERAGE FOR GLAXO

QUARTER	AVERAGE CLOSING PRICE	MOVING AVERAGE
Mar-04	607.37	
Jun-04	619.64	612.46
Sep-04	610.37	649.37
Dec-04	718.09	680.87
Mar-05	714.16	726.11
Jun-05	746.08	778.60
Sep-05	875.55	871.89
Dec-05	994.04	1059.30
Mar-06	1308.31	1179.08
Jun-06	1234.90	1225.92
Sep-06	1134.55	1181.38
Dec-06	1174.70	

CHART 4.13

CHART SHOWING THE THREE DAY MOVING AVERAGE FOR GLAXO



### INTERPRETATION

The average closing price for the 4th quarter 2006 is 1174.70 which is lesser than the moving average. Hence the security's price is trending down which is a sell signal for the investors.

TABLE 4.39

TABLE SHOWING THE MONEY FLOW INDEX FOR GLAXO DURING  
THE STUDY PERIOD (2004 - 2006)

Date	High	Low	Close	Total Traded quantity	Average price in Rs	Money flow in Rs
2-Jan-07	1172.55	1155.05	1160.35	21699	1162.65	25228342.35
3-Jan-07	1184.9	1145	1176.05	46433	1168.65	54263925.45
4-Jan-07	1199	1158	1178.6	103211	1178.533333	121637603.9
5-Jan-07	1189	1150	1160.1	70373	1166.366667	82080721.43
8-Jan-07	1167	1139	1150.15	53250	1152.05	61346662.5
9-Jan-07	1170	1140	1156.7	57934	1155.566667	66946599.27
10-Jan-07	1150	1135	1139.65	57315	1141.55	65427938.25
11-Jan-07	1180	1110	1158.4	27592	1149.466667	31716084.27
12-Jan-07	1170	1152	1166.45	48839	1162.816667	56790803.18
15-Jan-07	1188.35	1152.5	1169.45	32715	1170.1	38279821.5
16-Jan-07	1174	1127.95	1146.9	16983	1149.616667	19523939.85
17-Jan-07	1165	1141	1155.15	32577	1153.716667	37584627.85
18-Jan-07	1168.9	1143	1156.6	33857	1156.166667	39144334.83
19-Jan-07	1168	1141.05	1146.45	16832	1151.833333	19387658.67
22-Jan-07	1160	1140.25	1149.35	37343	1149.866667	42939470.93
23-Jan-07	1157.7	1138.3	1143.1	10940	1146.366667	12541251.33
24-Jan-07	1159	1133	1138.75	24152	1143.583333	27619824.67
25-Jan-07	1140	1120	1129.65	77807	1129.883333	87912832.52
29-Jan-07	1164.6	1130	1161.65	97944	1152.083333	112839650
31-Jan-07	1187	1142.2	1167.75	104773	1165.65	122128647.5
1-Feb-07	1174	1150	1162.25	90073	1162.083333	104672332.1
2-Feb-07	1194.95	1165	1188.45	75180	1182.8	88922904
5-Feb-07	1225	1172	1214.55	65273	1203.85	78578901.05
6-Feb-07	1241	1195.1	1198.9	92911	1211.666667	112577161.7
7-Feb-07	1209.85	1182.3	1189.9	40830	1194.016667	48751700.5
8-Feb-07	1195	1162	1172.8	33175	1176.6	39033705
9-Feb-07	1193	1158.1	1165.1	92151	1172.066667	108007115.4
12-Feb-07	1164.6	1110	1125.8	23772	1133.466667	26944769.6
13-Feb-07	1135.05	1094	1105.65	39098	1111.566667	43460033.53
14-Feb-07	1114.85	1070.95	1094.85	27299	1093.55	29852821.45
15-Feb-07	1150	1109.95	1132.6	57480	1130.85	65001258
19-Feb-07	1155.9	1134	1148.35	59366	1146.083333	68038383.17
20-Feb-07	1159.4	1141	1147.95	42024	1149.45	48304486.8
21-Feb-07	1164.9	1143	1151.85	117726	1153.25	135767509.5

Date	High	Low	Close	Total Traded quantity	Average price in Rs	Money flow in Rs
22-Feb-07	1183.9	1145	1158.9	109280	1162.6	127048928
23-Feb-07	1169	1130.1	1152.1	74748	1150.4	85990099.2
26-Feb-07	1189.8	1154	1180.35	44108	1174.716667	51814402.73
27-Feb-07	1198	1123.55	1179.65	81400	1167.066667	94999226.67
28-Feb-07	1194	1062.45	1161.1	95128	1139.183333	108368232.1
1-Mar-07	1168	1126	1152.85	58224	1148.95	66896464.8
2-Mar-07	1157.25	1125	1139.25	70211	1140.5	80075645.5
5-Mar-07	1178	1120	1128	35073	1142	40053366
6-Mar-07	1160	1126	1135.45	39378	1140.483333	44909952.7
7-Mar-07	1194	1125	1175.45	83759	1164.816667	97563879.18
8-Mar-07	1172	1148	1160.1	16425	1160.033333	19053547.5
9-Mar-07	1170	1154.1	1163.4	14160	1162.5	16461000
12-Mar-07	1177	1160	1165.3	18786	1167.433333	21931402.6
13-Mar-07	1187	1159.25	1180.25	21565	1175.5	25349657.5
14-Mar-07	1180	1148	1169.85	69067	1165.95	80528668.65
15-Mar-07	1183.9	1160	1174.3	48148	1172.733333	56464764.53
16-Mar-07	1180	1157.2	1172.4	45955	1169.866667	53761222.67
19-Mar-07	1185	1158	1160.25	35572	1167.75	41539203
20-Mar-07	1177.75	1152.1	1164.35	25933	1164.733333	30205029.53
21-Mar-07	1170	1150.05	1158.95	38849	1159.666667	45051890.33
22-Mar-07	1160	1138	1142.7	32159	1146.9	36883157.1
23-Mar-07	1145	1127.35	1128.3	68600	1133.55	77761530
26-Mar-07	1135	1111	1123.1	72087	1123.033333	80956103.9
28-Mar-07	1127.9	1084	1096.2	59654	1102.7	65780465.8
29-Mar-07	1111	1075	1081.6	81607	1089.2	88886344.4
30-Mar-07	1140	1083	1119.9	57695	1114.3	64289538.5

## INTERPRETATION

The above-predicted table shows the analysis of Money Flow Index. The money flow as on 22<sup>nd</sup> Day of March 2007 is Rs.36883157.1 and the money flow as on 23<sup>rd</sup> March 2007 is Rs.77761530. So it shows the Positive Money flow over the day. So, it can be concluded that the investors can purchase the securities. The money flow as on 14<sup>th</sup> March 2007 is Rs.80528668.65 and the money flow as on 15<sup>th</sup> March 2007 is Rs.56464764.53. This shows a negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

TABLE 4.40

TABLE SHOWING THE AVERAGE RETURN FOR RANBAXY AND NIFTY  
DURING THE STUDY PERIOD (2004 - 2006)

MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN	MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN
04-Jan	-0.005122966	-0.0016	05-Jul	-0.030029162	0.0021
04-Feb	-0.002870943	-0.0001	05-Aug	0.005659024	0.0014
04-Mar	0.000165979	-0.0006	05-Sep	-0.003097251	0.0042
04-Apr	0.006229759	0.0008	05-Oct	-0.016223314	-0.0045
04-May	-0.003114707	-0.0082	05-Nov	0.004887275	0.0057
04-Jun	-0.003644658	0.0008	05-Dec	-0.002467005	0.0031
04-Jul	0.001685879	0.0038	06-Jan	0.00493572	0.0029
04-Aug	0.000882666	0	06-Feb	0.004255913	0.0013
04-Sep	0.006018993	0.0031	06-Mar	0.002775017	0.0047
04-Oct	0.000360569	0.0012	06-Apr	0.002587733	0.0026
04-Nov	0.001189152	0.0046	06-May	-0.005730889	-0.0063
04-Dec	0.004867665	0.0027	06-Jun	-0.005626128	0.0013
05-Jan	-0.007283568	-0.0005	06-Jul	0.002533154	0.0004
05-Feb	-0.002834653	0.0011	06-Aug	0.00399248	0.0038
05-Mar	-0.000468333	-0.0014	06-Sep	0.003795055	0.0024
05-Apr	-0.004873727	-0.0033	06-Oct	-0.004664521	0.0022
05-May	0.008602287	0.0042	06-Nov	-0.00348514	0.0025
05-Jun	-0.001595562	0.0027	06-Dec	0.003129655	0.0003

#### BETA CALCULATION FOR RANBAXY FOR THREE YEARS

$$\text{COV (RANBAXY, NIFTY)} = 0.00000743$$

$$\text{VAR (NIFTY)} = 0.00000912$$

$$\text{BETA} = 0.81437233$$

#### INTERPRETATION

BETA = 0.814372 the beta value is lesser than 1, that is security's price will be less volatile than the market, and therefore buying the share is less risky.

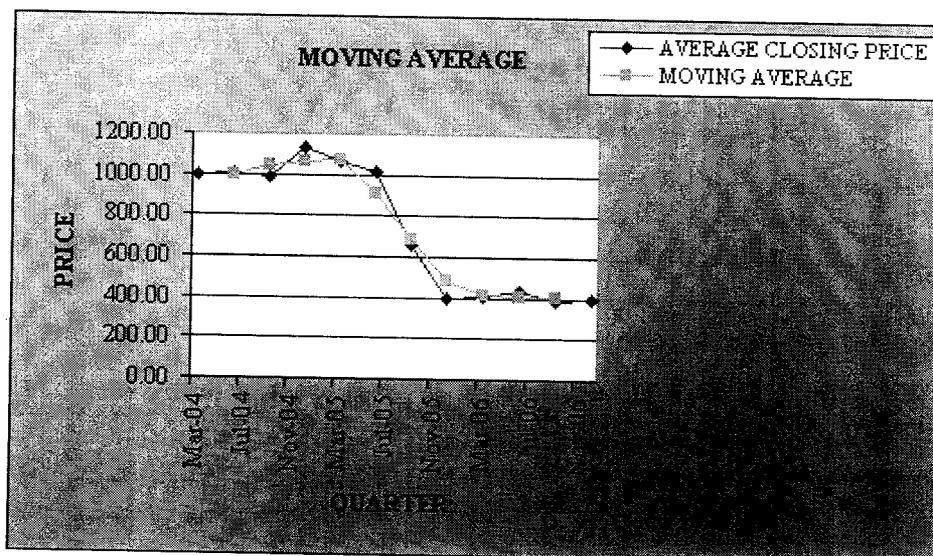
TABLE 4.41

TABLE SHOWING THREE DAY MOVING AVERAGE FOR RANBAXY

QUARTER	AVERAGE CLOSING PRICE	MOVING AVERAGE
Mar-04	996.99	
Jun-04	1002.67	995.42
Sep-04	986.61	1041.83
Dec-04	1136.22	1061.56
Mar-05	1061.85	1070.16
Jun-05	1012.40	909.28
Sep-05	653.58	686.69
Dec-05	394.09	485.81
Mar-06	409.77	412.62
Jun-06	433.98	410.30
Sep-06	387.15	405.96
Dec-06	396.74	

CHART 4.14

CHART SHOWING THE THREE DAY MOVING AVERAGE FOR RANBAXY



### INTERPRETATION

The average closing price for the 4th quarter 2006 is 396.74 which is lesser than the moving average. Hence the security's price is trending down which is a sell signal for the investors.

TABLE 4.42

**TABLE SHOWING THE MONEY FLOW FOR RANBAXY DURING THE  
STUDY PERIOD (JANUARY 2007 – MARCH 2007)**

Date	High	Low	Close	Total Traded Quantity	Average price in Rs	Money flow in Rs
2-Jan-07	401	391	399.15	414305	397.05	164499800.3
3-Jan-07	415	383.35	412.1	2099462	403.48	847097926
4-Jan-07	420.1	411.35	413.2	1208054	414.88	501201470.4
5-Jan-07	419	411	413.8	983146	414.60	407612331.6
8-Jan-07	421	405.25	418.8	2288581	415.02	949799258
9-Jan-07	435	415	416.8	1569558	422.27	662772024.8
10-Jan-07	417.85	410.2	411.15	518991	413.07	214377882.4
11-Jan-07	417.9	411.1	416.4	395958	415.13	164375364.4
12-Jan-07	422.9	416.1	421.25	590829	420.08	248197415.8
15-Jan-07	431.5	424.05	430.4	927606	428.65	397618311.9
16-Jan-07	433.5	423.6	429.65	798989	428.92	342699698.6
17-Jan-07	437.8	429.15	432.3	805604	433.08	348893665.7
18-Jan-07	444.9	425.15	430.4	3914355	433.48	1696807653
19-Jan-07	433.8	413.2	414.5	2777032	420.50	1167741956
22-Jan-07	417.8	402	404.55	1068022	408.12	435877578.6
23-Jan-07	409.5	398	399.45	1086333	402.32	437049871.5
24-Jan-07	409.5	399	400.8	658686	403.10	265516326.6
25-Jan-07	402.05	396	397.3	1234138	398.45	491742286.1
29-Jan-07	406.45	400	402.4	495285	402.95	199575090.8
31-Jan-07	410.85	401.25	408.95	1206481	407.02	491057875
1-Feb-07	411.8	405.05	411.2	666598	409.35	272871891.3
2-Feb-07	416	411.5	413.05	723305	413.52	299098672.6
5-Feb-07	416	409	414.7	394205	413.23	162898646.2
6-Feb-07	421.8	412	420.05	1483774	417.95	620143343.3
7-Feb-07	426	417.3	419.3	738329	420.87	310738065.1
8-Feb-07	422.6	411.05	420.95	696657	418.20	291341957.4
9-Feb-07	424.05	414.4	416.75	870006	418.40	364010510.4
12-Feb-07	417.5	401.65	409.15	598101	409.43	244882486.1
13-Feb-07	416	403.25	411.5	542207	410.25	222440421.8
14-Feb-07	416.9	402.25	415.45	381213	411.53	156881856.6
15-Feb-07	422.8	388.1	393.35	4619378	401.42	1854295319
19-Feb-07	399.9	387.65	391.6	1647509	393.05	647553412.5
20-Feb-07	402.9	385	395.5	1015986	394.47	400772610.8
21-Feb-07	401	381.5	382.7	1651444	388.40	641420849.6

Date	High	Low	Close	Total Traded Quantity	Average price in Rs	Money flow in Rs
22-Feb-07	388.9	364.6	367.45	2675132	373.65	999563071.8
23-Feb-07	373.8	351	356.55	1959948	360.45	706463256.6
26-Feb-07	365	343.15	351.35	1398611	353.17	493942784.8
27-Feb-07	356.8	343.6	351.6	644578	350.67	226032018.7
28-Feb-07	344.8	325.25	337.85	1618213	335.97	543665627.6
1-Mar-07	345	337.4	342.75	1125149	341.72	384482165.8
2-Mar-07	359.8	341.25	347.3	1174815	349.45	410539101.8
5-Mar-07	345.5	317.6	320.7	1139553	327.93	373697413.8
6-Mar-07	333.95	320.05	322.3	1858600	325.43	604850393.3
7-Mar-07	328.9	304.5	307.25	1513640	313.55	474601822
8-Mar-07	331.9	309.2	328.45	2364554	323.18	764184443.6
9-Mar-07	335.9	322	326.05	629527	327.98	206474363.9
12-Mar-07	331.25	322.5	323.75	708550	325.83	230869208.3
13-Mar-07	325	317.2	320.7	697500	320.97	223874250
14-Mar-07	316.5	307.2	312.25	759013	311.98	236799405.8
15-Mar-07	320.55	309.7	311.2	1494220	313.82	468911139.7
16-Mar-07	318.45	311	316.25	834380	315.23	263024388.7
19-Mar-07	319.5	315.65	316.95	407922	317.37	129460845.4
20-Mar-07	343	318.15	336.35	2374663	332.50	789575447.5
21-Mar-07	341.9	330.4	331.55	713984	334.62	238910946.1
22-Mar-07	339.95	332.5	333.2	814069	335.22	272889496.6
23-Mar-07	338.9	329	330.15	680391	332.68	226354745.9
26-Mar-07	333.8	325.25	327.05	509321	328.70	167413812.7
28-Mar-07	342.5	325.25	338.9	1979809	335.55	664324910
29-Mar-07	348.4	336.95	345.05	2017331	343.47	692885954.1
30-Mar-07	355	343.65	351.9	1318614	350.18	461756645.9

## INTERPRETATION

The above-predicted table shows the analysis of Money Flow Index for RANBAXY. The money flow as on 26<sup>th</sup> March 2007 is Rs.167413812.7 and the money flow as on 28<sup>th</sup> March 2007 is Rs.664324910. So it shows the Positive Money flow over the day. Hence, it can be concluded that the investors can purchase the securities. The money flow as on 26<sup>th</sup> March 2007 is Rs.468911139.7 and the money flow as on 28<sup>th</sup> March 2007 is Rs.263024388.7 This shows the negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

TABLE 4.43

**TABLE SHOWING THE AVERAGE RETURN FOR SUN PHARMA AND  
NIFTY DURING THE STUDY PERIOD (2004 – 2006)**

MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN	MONTH	AVERAGE MARKET RETURN	AVERAGE NIFTY RETURN
30-Jan-04	0.001384119	-0.0016	29-Jul-05	0.00337625	0.0021
27-Feb-04	21.53428647	-0.0001	31-Aug-05	0.000498674	0.0014
31-Mar-04	0.000266031	-0.0006	30-Sep-05	0.003195059	0.0042
30-Apr-04	0.007519112	0.0008	31-Oct-05	-0.004987446	-0.0045
31-May-04	-0.02296598	-0.0082	30-Nov-05	0.005110219	0.0057
30-Jun-04	-0.002147757	0.0008	30-Dec-05	0.001358234	0.0031
30-Jul-04	-0.001235226	0.0038	31-Jan-06	0.001071757	0.0029
31-Aug-04	0.004520695	0	28-Feb-06	0.006055817	0.0013
30-Sep-04	0.004756486	0.0031	31-Mar-06	0.004779756	0.0047
29-Oct-04	0.001866117	0.0012	29-Apr-06	0.000724889	0.0026
30-Nov-04	0.006111662	0.0046	31-May-06	-0.003058609	-0.0063
31-Dec-04	0.005065462	0.0027	30-Jun-06	-0.00045293	0.0013
31-Jan-05	-0.005434139	-0.0005	31-Jul-06	0.001894235	0.0004
28-Feb-05	-0.002045139	0.0011	31-Aug-06	0.005003951	0.0038
31-Mar-05	-0.00092157	-0.0014	29-Sep-06	0.001201492	0.0024
29-Apr-05	0.00358333	-0.0033	31-Oct-06	18.63497588	0.0022
31-May-05	0.00241282	0.0042	30-Nov-06	0.005305285	0.0025
30-Jun-05	0.004641392	0.0027	29-Dec-06	-0.001475795	0.0003

**BETA CALCULATION FOR SUN PHARMA FOR THREE YEARS**

$$\text{COV (SUN PHARMA, NIFTY)} = 0.00014526$$

$$\text{VAR (NIFTY)} = 0.00000912$$

$$\text{BETA} = 0.091972756$$

**INTERPRETATION**

BETA = 0.091972 the beta value is lesser than 1, that is security's price will be less volatile than the market, and therefore buying the share is less risky.

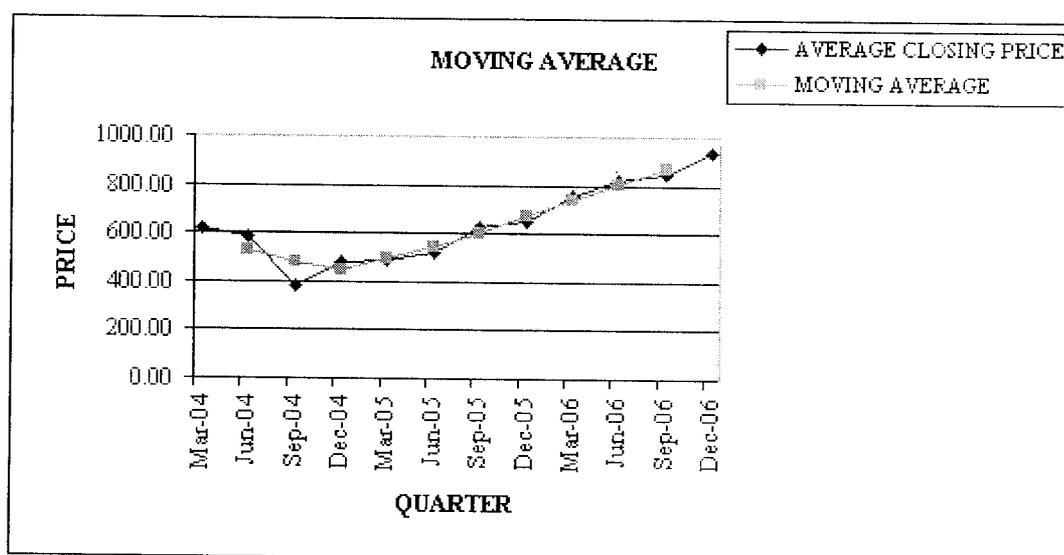
TABLE 4.44

## TABLE SHOWING THREE DAY MOVING AVERAGE FOR SUN PHARMA

DATE	AVERAGE CLOSING PRICE	MOVING AVERAGE
Mar-04	617.54	
Jun-04	586.00	527.26
Sep-04	378.25	481.69
Dec-04	480.82	447.79
Mar-05	484.30	494.13
Jun-05	517.27	543.28
Sep-05	628.27	599.33
Dec-05	652.45	678.75
Mar-06	755.53	743.29
Jun-06	821.90	808.02
Sep-06	846.64	868.73
Dec-06	937.65	

CHART 4.15

## CHART SHOWING THE THREE DAY MOVING AVERAGE FOR SUN PHARMA



## INTERPRETATION

The average closing price for the 4th quarter 2006 is 937.65 which is greater than the moving average. Hence the security's price is trending down this is a buy signal for the investors.

TABLE 4.45

**TABLE SHOWING THE MONEY FLOW INDEX FOR SUN PHARMA  
DURING THE STUDY PERIOD (JANUARY 2007 – MARCH 2007)**

Date	High	Low	Close	Total Traded quantity	Average price in Rs	Money flow in Rs
2-Jan-07	994.5	979	985.55	188966	986.35	186386614.1
3-Jan-07	1002	980.25	991.75	377123	991.33	373854600.7
4-Jan-07	998.8	981.05	987.1	168287	988.98	166433038.2
5-Jan-07	989.6	973.2	980.9	142543	981.23	139867943
8-Jan-07	998.8	963	988.7	153043	983.50	150517790.5
9-Jan-07	1003.8	975	985.65	208546	988.15	206074729.9
10-Jan-07	985	962	979.15	140181	975.38	136730211.1
11-Jan-07	1029.35	962.05	1013.2	326364	1001.53	326864424.8
12-Jan-07	1045.8	1015	1030.4	375661	1030.40	387081094.4
15-Jan-07	1053	1031	1045.95	174989	1043.32	182568940.2
16-Jan-07	1048.8	1020.55	1036.85	115317	1035.40	119399221.8
17-Jan-07	1050.25	1020	1044.4	239830	1038.22	248995503.2
18-Jan-07	1062.9	1040.15	1047.85	289379	1050.30	303934763.7
19-Jan-07	1050	1023	1027.95	181923	1033.65	188044709
22-Jan-07	1073.7	1030	1059.8	176270	1054.50	185876715
23-Jan-07	1080.8	1037	1047.35	308782	1055.05	325780449.1
24-Jan-07	1079.8	1011.35	1021.35	273598	1037.50	283857925
25-Jan-07	1046	1026.1	1039.7	122498	1037.27	127063092.1
29-Jan-07	1037	1007.7	1020.65	263554	1021.78	269295084.6
31-Jan-07	1037.9	1016	1030.55	201752	1028.15	207431318.8
1-Feb-07	1055	1024	1045.7	183594	1041.57	191225390.6
2-Feb-07	1049	1023	1043.8	127462	1038.60	132382033.2
5-Feb-07	1059.9	1035.1	1052.85	195203	1049.28	204823254.5
6-Feb-07	1069.8	1031	1037.65	187770	1046.15	196435585.5
7-Feb-07	1053	1027.3	1048.4	175079	1042.90	182589889.1
8-Feb-07	1049.9	1026.05	1047.4	138573	1041.12	144270659.9
9-Feb-07	1059	1030	1034.5	92189	1041.17	95984113.83
12-Feb-07	1040	999	1012.35	69913	1017.12	71109677.52
13-Feb-07	1030	990.15	1015	106330	1011.72	107575833.2
14-Feb-07	1029	991	1020.35	98201	1013.45	99521803.45
15-Feb-07	1036	1016.3	1031	130474	1027.77	134096828.1
19-Feb-07	1044.95	1025	1035.25	124570	1035.07	128938254.7
20-Feb-07	1043	1028	1029.7	126332	1033.57	130572544.1
21-Feb-07	1029	1011	1017.95	374431	1019.32	381663758.8

Date	High	Low	Close	Total Traded quantity	Average price in Rs	Money flow in Rs
22-Feb-07	1047.75	958	1004.75	910296	1003.50	913482036
23-Feb-07	1016.05	970	974.15	221354	986.73	218417370.3
26-Feb-07	999	950.05	982.45	65524	977.17	64027868.67
27-Feb-07	993	945.1	953.6	186312	963.90	179586136.8
28-Feb-07	955	900	929.3	545422	928.10	506206158.2
1-Mar-07	960	899.05	955.25	403789	938.10	378794460.9
2-Mar-07	1000	938	969.05	241118	969.02	233647360.6
5-Mar-07	953.9	914	942	119698	936.63	112113136.7
6-Mar-07	964.85	935.1	948	144745	949.32	137408840.9
7-Mar-07	962	935	948.9	99308	948.63	94206879.07
8-Mar-07	974.95	942	966.95	68692	961.30	66033619.6
9-Mar-07	990	929.95	984.5	196683	968.15	190418646.5
12-Mar-07	1020	981	1012.5	199087	1004.50	199982891.5
13-Mar-07	1040	1010.15	1020.9	141566	1023.68	144918754.8
14-Mar-07	1039.8	966	1002.1	232796	1002.63	233409029.5
15-Mar-07	1028	1000	1011.9	162361	1013.30	164520401.3
16-Mar-07	1024	998.1	1012.4	118784	1011.50	120150016
19-Mar-07	1029.8	996.1	1004.95	121851	1010.28	123104034.5
20-Mar-07	1019	987.05	991.1	178915	999.05	178745030.8
21-Mar-07	1023	991	1016.45	268982	1010.15	271712167.3
22-Mar-07	1042	1020	1030.4	317483	1030.80	327261476.4
23-Mar-07	1040	1019	1030.25	134286	1029.75	138281008.5
26-Mar-07	1038.75	1005	1014.9	88901	1019.55	90639014.55
28-Mar-07	1029.8	980	999.3	211681	1003.03	212323099
29-Mar-07	1029.8	988	1014.05	319986	1010.62	323383184.7
30-Mar-07	1064.5	990	1056.45	386785	1036.98	401089598.6

## INTERPRETATION

The above-predicted chart shows the analysis of Money Flow Index for SUN PHARMA. The money flow as on 05<sup>th</sup> March is Rs.112113136.7 and the money flow as on 06<sup>th</sup> Feb is Rs.137408840.9. So it shows the Positive Money flow over the day. Hence, it can be concluded that the investors can purchase the securities. The money flow as on 09<sup>th</sup> Feb 2007 is Rs.95984113.83 and the money flow as on 12<sup>th</sup> Feb is Rs.71109677.52 This shows the negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

TABLE 4.46

TABLE SHOWING THE TREND ANALYSIS FOR HDFC

year	closing price(Y)	x	xy	x <sup>2</sup>	y=a+bx
2004	392.82	-1	-392.82	1	390.38
2005	612.36	0	0	0	617.24
2006	846.54	1	846.54	1	844.1
2007		2			1070.96
2008		3			1297.82
<b>total</b>	<b>1851.72</b>	<b>0</b>	<b>453.72</b>	<b>2</b>	

$$a = 1851.72/3$$

$$b = 453.72/2$$

$$a = 617.24$$

$$b = 226.86$$

TABLE 4.47

TABLE SHOWING THE TREND ANALYSIS FOR INFOSYS

year	closing price(Y)	X	xy	x <sup>2</sup>	y=a+bx
2004	3508.57	-1	-3508.57	1	3257.32
2005	2329.6	0	0	0	2832.08
2006	2658.08	1	2658.08	1	2406.84
2007					1981.6
2008					1556.36
<b>TOTAL</b>	<b>8496.25</b>	<b>0</b>	<b>-850.49</b>	<b>2</b>	

$$a = 8496.25/3$$

$$b = -850.49/2$$

$$a = 2832.08$$

$$b = -425.24$$

TABLE 4.48

TABLE SHOWING THE TREND ANALYSIS FOR DR. REDDY

year	closing price(Y)	x	xy	x <sup>2</sup>	y=a+bx
2004	900.325	-1	-900.325	1	824.81
2005	789.115	0	0	0	940.14
2006	1131	1	1131	1	1055.47
2007					1170.8
2008					1286.13
<b>Total</b>	<b>2820.44</b>	<b>0</b>	<b>230.675</b>	<b>2</b>	

$$a=2820.44/3$$

$$b=230.675/2$$

$$a=940.14$$

$$b=115.33$$

CHART4.16 - SHOWING THE TREND ANALYSIS FOR HDFC

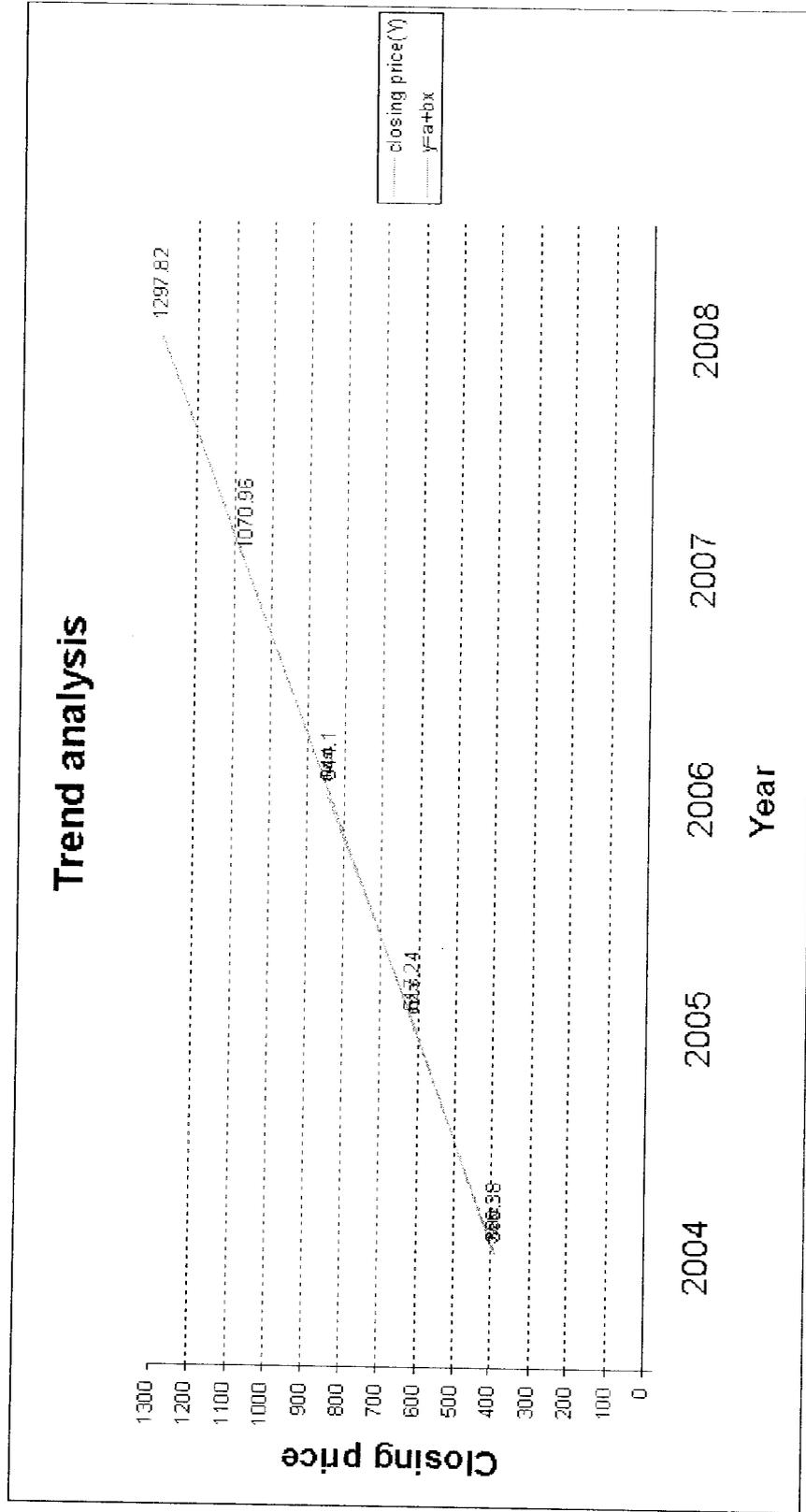


CHART 4.17 SHOWING THE TREND ANALYSIS FOR INFOSYS

### Trend analysis

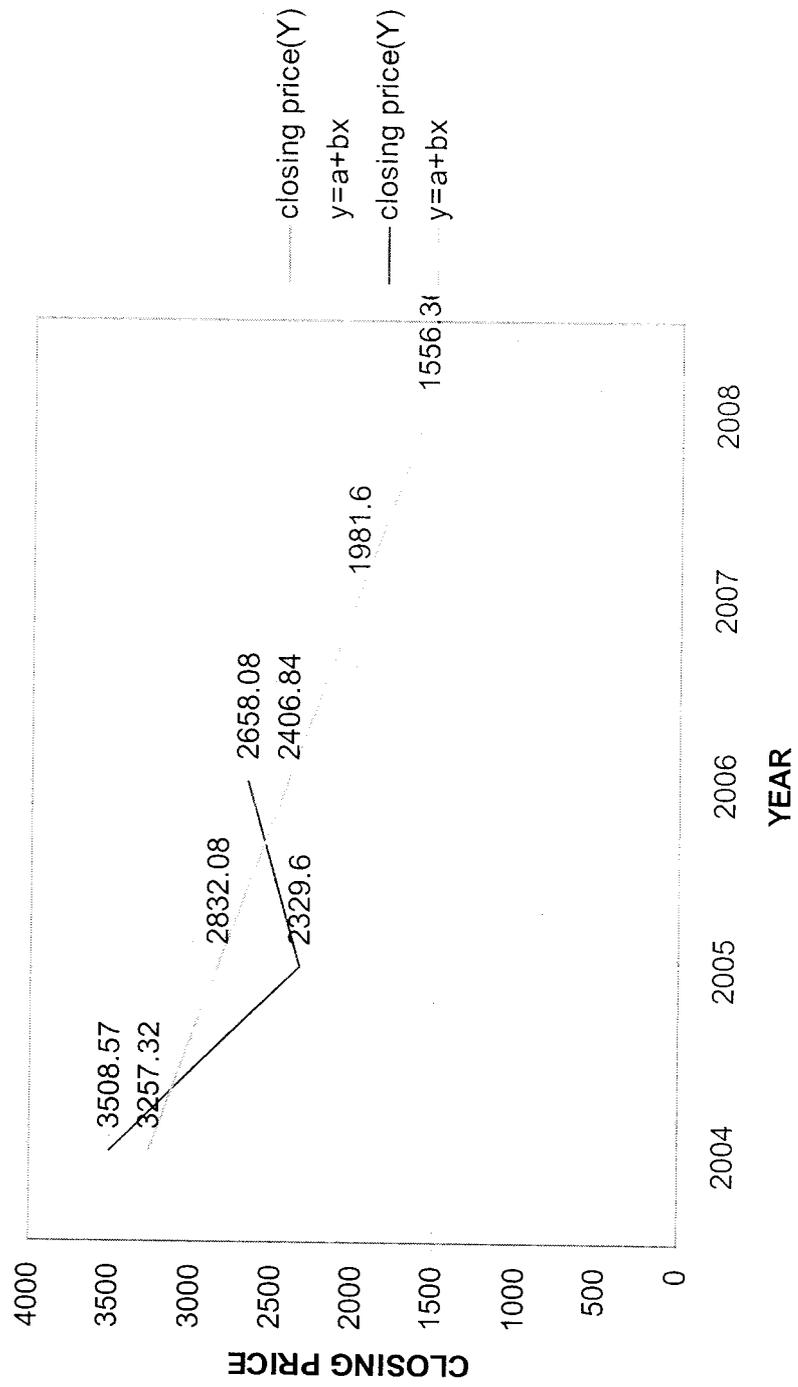
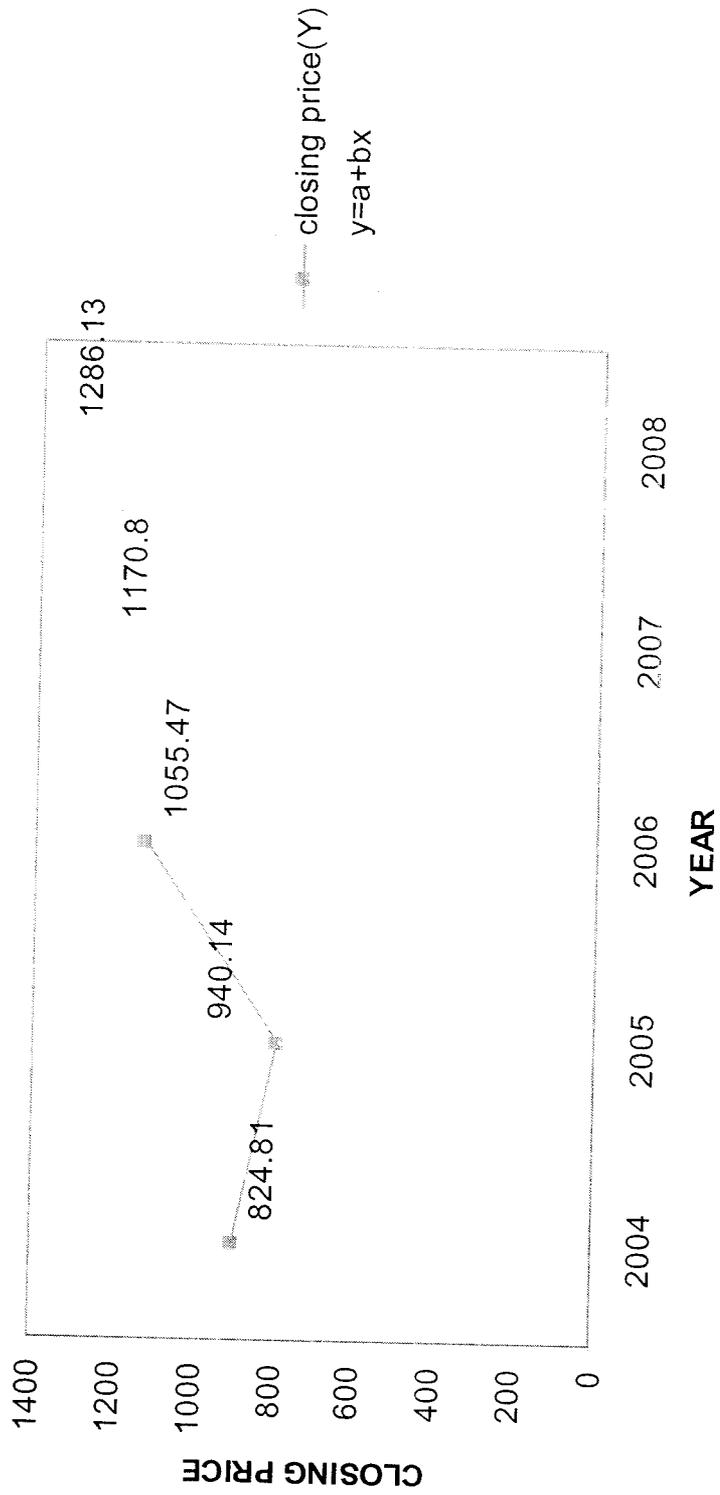


CHART 4.18 - SHOWING THE TREND ANALYSIS FOR DR EDDY

TREND ANALYSIS



***FINDINGS, SUGGESTIONS  
AND CONCLUSION***

## CHAPTER - 5

### FINDINGS, SUGGESTIONS AND CONCLUSION

#### 5.1 FINDINGS

Price fluctuation is a statistical measure of the tendency of market or security to rise or fall sharply within a short period of time. Generally higher the fluctuation of a security, greater is its price swings. Larger fluctuations mean returns fluctuate in a wide range.

From the analysis, the researcher has found that

##### **HDFC**

The average closing price is Rs.1032.97 which is greater than the moving average and hence it shows a buy signal for the investors, BETA = 0.7139 which is lesser than 1 and hence it is less risky, the money flow index as on 19<sup>th</sup> march 2007 is Rs.288244023.9 and the money flow of 20<sup>th</sup> March 2007 is Rs.306395313.2. So it shows the Positive Money flow over the day. So, it can be concluded that the investors can purchase the securities.

##### **ICICI**

The average closing price is Rs.811.33 which is greater than the moving average and hence it shows a buy signal for the investors, BETA= 0.89436, the beta value is less than 1, hence it is less risky. The Money Flow Index as on 02<sup>nd</sup> Jan 2007 is 310144943.4 and the money flow as on 03<sup>rd</sup> Jan 2007 is Rs.425096690.4. So it shows the Positive Money flow over the day. So, it can be concluded that the investors can purchase the securities.

##### **PNB**

The average closing price is Rs.527.4 which is greater than the moving average and hence it shows a buy signal for the investors, Beta= 1.049 which is greater than 1 and hence it is more risky, the money flow index as on 05th Jan 2007 the Money Flow is Rs.144604553.3 and the money flow as on 06<sup>th</sup> Jan 2007 is 211306628.9. So it shows the Positive Money flow over the day. So, it can be concluded that the investors can purchase the securities

**SBIN**

The average closing price is Rs.1175.24 which is greater than the moving average and hence it shows a buy signal for the investors,  $BETA=0.99882$  which is less than 1 and hence it is less risky, the money flow index as on 19<sup>th</sup> March 2007 is Rs.806967792.7 and the money flow as on 20<sup>th</sup> March is Rs.958238613.2. So it shows the Positive Money flow over the day. So, it can be concluded that the investors can purchase the securities.

**UTI**

The average closing price is Rs.447.74 which is greater than the moving average and hence it shows a buy signal for the investors,  $BETA=0.08855$  which is less than 1 and hence it is less risky, the money flow index as on 2<sup>nd</sup> January is Rs.48829485.9 and on 3<sup>rd</sup> Jan 2007 is Rs.79463225.33 which shows a positive money flow over the day and hence shows a positive sign for purchase of shares.

**HCL TECH**

The average closing price is Rs.610.15 which is greater than the moving average and hence it shows a buy signal for the investors,  $BETA=0.08630$  which is less than 1 and hence it is less risky, the money flow as on the 9<sup>th</sup> March 2007 the Money Flow is Rs.674892488.2 and the money flow as on 12<sup>th</sup> march 2007 is Rs.1060507484. So it shows the Positive Money flow over the day. So, it can be concluded that the investors can purchase the securities.

**INFOSYS**

The average closing price is Rs.2128.24 which is lesser than the moving average and hence it shows a sell signal for the investors,  $BETA=0.3595$  which is less than 1 and hence it is less risky. The money flow index as on 27<sup>th</sup> FEB 2007 is Rs.2456522029 and the money flow as on 28<sup>th</sup> FEB 2007 is Rs.6570467607. So it shows the Positive Money flow over the day. So, it can be concluded that the investors can purchase the securities.

**SATYAM**

The average closing price is Rs.469.95 which is lesser than the moving average and hence it shows a sell signal for the investors, BETA=1023194 which is greater than 1 and hence it is more risky, the money flow as on 14<sup>th</sup> Feb 2007 the Money flow is Rs.1503320762 and the money flow of 15<sup>th</sup> Feb 2007 is Rs.1453142891. This shows a negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

**TCS**

The average closing price is Rs.1114.39 which is lesser than the moving average and hence it shows a buy signal for the investors, BETA=1.0418 which is greater than 1 and hence it is more risky, the money flow index as on 12<sup>th</sup> March 2007 is Rs.1121297677 and the money flow as on 13<sup>th</sup> March 2007 is Rs.632385785.6. This shows a negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

**WIPRO**

The average closing price is 560.5 which is greater than the moving average and hence it shows the buy signal for the investors., beta is 0.6831 which is less than 1, hence the scrip is less risky and the money flow as on the 21<sup>st</sup> March 2007 is 263461408 and the money flow of 22<sup>nd</sup> day of March 2007 is Rs.333632307.5. So it shows the Positive Money flow over the day. So, it can be concluded that the investors can purchase the securities.

**CIPLA**

The average closing price is Rs.256.75, which are lesser than the moving average, and hence it shows the sell signal for the investors. Beta is 1.8359, which says that the scrip is more risky, the money flow index as on 22<sup>nd</sup> March 2007 is Rs.310832741.8 and the money flow as on 23<sup>rd</sup> March 2007 is Rs.213600903.8. This shows a negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

**DR.REDDY**

The average closing price is Rs.756.12 which is lesser than the moving average, hence it shows the sell signal for the investors and the beta is 0.5925 which is less than 1, scrip is less risky, the money flow index as on 06<sup>th</sup> March 2007 is Rs.986370194.5 and the money flow as on 07<sup>th</sup> March 2007 is Rs.863875371.6. This shows a negative money flow over the day and it can be concluded that it is not a good sign to Purchase.

**GLAXO**

The average closing price is Rs.1174.70 which is lesser than the moving average, hence it shows the sell signal for the investors, beta is 0.763 which is less than 1 and the scrip is less risky, the money flow index as on 22<sup>nd</sup> March 2007 is Rs.36883157.1 and the money flow as on 23<sup>rd</sup> March 2007 is Rs.77761530. So it shows the Positive Money flow over the day. So, it can be concluded that the investors can purchase the securities.

**RANBAXY**

The average closing price is Rs.396.74 which is lesser than the moving average, hence it shows the sell signal for the investors, beta is 0.8143 which is less than 1, the scrip is less risky, the money flow index as on 26<sup>th</sup> March 2007 is Rs.167413812.7 and the money flow as on 28<sup>th</sup> March 2007 is Rs.664324910. So it shows the Positive Money flow over the day. So, it can be concluded that the investors can purchase the securities.

**SUN PHARMA**

The average closing price is Rs.937.65 which is greater than the moving average and hence it shows the buy signal for the investors, beta is -15.919 which says that the scrip is less risky, the money flow index as on 05<sup>th</sup> March 2007 is Rs.112113136.7 and the money flow for 06<sup>th</sup> Feb 2007 is Rs.137408840.9. So it shows the Positive Money flow over the day. So, it can be concluded that the investors can purchase the securities.

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## 5.2. SUGGESTIONS

- ✓ Wide price fluctuations and heavy trading characterize volatile markets. They often result from an imbalance of trade orders in one direction. Wide price fluctuations are a daily occurrence on the world's stock markets as investors react to economic, business and political events. Markets have been showing extremely erratic movements, which are in no way tandem with the information that is fed to the markets. Market watchers see high volatility as a sign of investor nervousness, which, in the counter-intuitive world of markets, is of course bullish.
- ✓ The present study on the simple moving average model applied on selected company scrip's would help the investors to take investment decision. It is suggested that the investors can invest in the shares that earns higher average returns. Also, the investors can invest in the companies which involves less risk and which moves along with the market.
- ✓ The trend analysis projects the clear picture of the future share prices and how the present and past prices have been deviated from the original trend. Thus the trend analysis applied on the selected company scrip will help the investors to take investment decisions based on the projected prices and their future returns. As per the study the trend analysis suggests that the investors can prefer banking sectors to invest because the trend reveals a good performance in the future than the IT and pharmaceuticals sectors
- ✓ The money flow index suggests that the investor should have an careful notice on the money flow position of the day. This will be very helpful for the investors who invest in the short term basis.
- ✓ Then the BETA calculation suggests the investors to invest in the securities that yields high returns bearing less risk.

### 5.3 CONCLUSION

In India most of the industries require huge amount of investments. Funds are raised mostly through the issue of share. An investor is satisfied from the reasonable return from investment in shares. Besides the investors are motivated to buy the shares from the stock market either for speculation or investments. Speculation involves higher risks to get return on the other hand investment involves no such risks and returns will be fair.

An investor can succeed in his investment only when he is able to select the right shares. The investors should keenly watch the situations like market price, economy, company progress, returns, and the risk involved in a share before taking decision on a particular share. This study made will help the investors know the behavior of share prices and thus can succeed.

To overcome the problems the above said recommendations has to be taken into consideration by the investors in order to avoid risk and yield high returns

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