

**AN ANALYTICAL STUDY OF INTRINSIC VALUE ON FUTURE RETURNS  
W.S.R.T. SELECT S&P NIFTY SCRIPS**

**A PROJECT REPORT**

Submitted

by

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**Anna University-Coimbatore**

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**MASTER OF BUSINESS ADMINISTRATION**



**KCT BUSINESS SCHOOL**

**DEPARTMENT OF MANAGEMENT STUDIES**

**KUMARAGURU COLLEGE OF TECHNOLOGY**

**COIMBATORE**

**JULY 2008**



**KCT BUSINESS SCHOOL  
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**BONAFIDE CERTIFICATE**

Certified that this project titled “AN ANALYTICAL STUDY OF INTRINSIC VALUE ON FUTURE RETURNS W.S.R.T. SELECT S&P NIFTY SCRIPS” is the bonafide work of **Mr. R.VIJAY ANANDH** who carried out this project 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.

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**To whom so ever it may concern**

This is to certify that R.Vijay Anandh a student of Kumaraguru College of Technology - Business School, Coimbatore has undergone a training on the basics of fundamental analysis and valuation of stocks at Irevna, The Oval, No. 10 & 12(57 & 58), Venkat Narayana Road, T.Nagar, Chennai – 600017 from 16<sup>th</sup> June 2008 to 11<sup>th</sup> July 2008.

**For Irevna**

A handwritten signature in black ink, appearing to read "S. Anandh", written over a faint horizontal line.

**HR Manager**

# *DECLARATION*

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## DECLARATION

I hereby declare that the dissertation entitled “**AN ANALYTICAL STUDY OF INTRINSIC VALUE ON FUTURE RETURNS W.S.R.T. SELECT S&P NIFTY SCRIPS**” submitted for the **MASTER OF BUSINESS ADMINISTRATION** degree is my original work and the dissertation has not formed the basis for the reward of any Degree, Associateship, Fellowship or any other similar titles.

 / 23/10/08  
R.VIJAY ANANDH

# *ACKNOWLEDGEMENT*

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## *EXECUTIVE SUMMARY*

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## EXECUTIVE SUMMARY

The past decade has witnessed multiple growths in the amount of International trade and business due to the wave of globalization and liberalization all over the world. As a result, the demand for the International money and financial instruments has increased significantly at the global level. The Indian equity market is gaining momentum with the increasing inflow of capital from both the foreign as well as domestic investors. Most of the retail investors who invest in the equities do not invest based on calculating the return from the securities. They tend to invest in the securities which are mostly traded rather than investing in securities which give higher returns.

The return analysis is one technique which is followed by most of the institutional investors to analyze the value of the stock. The earnings potential or intrinsic value of an investment is influenced by various company specific factors. The dynamics of the intrinsic value notwithstanding to the dividend paying capacity alone is a different dimension to be explored by retail investors. In this project an approach to assess the intrinsic value through the growth in asset and EPS and recommending a cut off rate for rate of return is taken as a research problem to be pursued with.

The main objective of this project is to analyze the return from the securities in the next five years. The S&P nifty index 50 stocks are grouped into six homogeneous groups. The grouping is done through stratified sampling where we divide the population into relatively homogeneous groups called strata. From the six stratas the highest market capitalization of each strata is chosen. Thus the sample size constitutes of six companies.

The calculation of the future income statement for the six chosen companies is made in the analysis which enables the investors to make the investment decisions. With the recent fall in the securities market the investors must proceed with some basic analysis such as fundamental analysis and technical analysis before entering in to a long term investment with the securities market. An analysis on the future return plays a very important role in the investment decisions. The analysis could also help the investors for planning a best suitable investment avenue and invest in a profit yielding securities. The minimum return that can be expected from the security is analyzed and given which would enable the investors to know about the returns he can expect by investing in the security.

# *INTRODUCTION*

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# CHAPTER 1

## INTRODUCTION

### 1.1 INTRODUCTION

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.

The securities are selected from the S&P Nifty index by dividing the stocks into 6 homogeneous sections and then by choosing the maximum market capitalisation from each homogeneous groups as on 30<sup>th</sup> June 2008. Thus the six stocks are selected and the analysis is carried on.

### 1.2 NATIONAL STOCK EXCHANGE

NSE is incorporated in the year 1992, and was given recognition as a stock exchange in April 1993. NSE was setup with the following objectives:

- Establishing a national wide trading facility for all types of securities
- Ensuring equal access to all over the country through an appropriate communication network
- Providing a fair, efficient and transparent securities market using electronic trading system

- Enabling shorter settlement cycles and the book entry settlements and
- Meeting the international benchmarks and standards.

Within a short span of life, above objectives have been realized and the exchange has played a leading role as a change agent in transforming the Indian Capital Markets to its present form.

it was sponsored by the Industrial Development Bank of India (IDBI) and co-sponsored by other term leading institutions like Industrial Finance Corporation of India(IFCI) all insurance companies, selected commercial banks and Financial Institutions. NSE trading is split into two broad categories Wholesale debt market segment (WDMS) Capital Market Segment (CMS). NSE allows trading members to trade from their offices through a communication network called NSEAT (National Stock Exchange Automated Trading). It also enables Wire Free trading through Wireless Application Protocol (WAP) platform.

### **1.3 S&P CNX Nifty:**

The S&P CNX Nifty index based upon solid economic research. It was designed not only as a barometer of market movement but also to be a foundation of the new world of financial products based on the index like Index Future, Index options and Index funds. A trillion calculations were expanded to evolve the rules inside this index. The results of this work are remarkably simple:

- The correct size to use is fifty,
- The stock considered for the S&P CNX Nifty must be liquid by the 'Impact Cost' criterion,
- The largest fifty stocks that meet the criterion go into the index.

The S&P CNX Nifty index is a contrast to the Adhoc method that have gone into index construction in the preceding years , where indexes were made out of intuitions and lack of scientific basis. The research that led up to S&P CNX Nifty is well respected internationally as a pioneering effort in better understanding how to make a stock market index.

## **1.4 Return**

The gain or loss of a security in a particular period is known as return. The return consists of the income and the capital gains relative on an investment. It is usually quoted as a percentage. Most of the investors expect maximum return at a minimum risk. In this project an attempt is made to forecast the return of securities for a period of five years. The risk-free interest rate is the interest rate that it is assumed can be obtained by investing in financial instruments with no default risk. However, the financial instrument can carry other types of risk, e.g. market risk (the risk of changes in market interest rates), liquidity risk (the risk of being unable to sell the instrument for cash at short notice without significant costs) etc.

## **1.5 Statement of the Problem**

The prosperity of an investment depends on the stable growth in its earnings potential. The earnings potential or intrinsic value of an investment is influenced by various company specific factors. The dynamics of the intrinsic value notwithstanding to the dividend paying capacity alone is a different dimension to be explored by retail investors. The approach to assess the intrinsic value through the growth in asset and EPS and recommending a cut off rate for rate of return is taken as a research problem to be pursued with.

## **1.6 Objectives of the Study**

### **Primary Objective**

- To analyze the future return of selected individual securities which are listed in S&P Nifty

### **Secondary Objectives**

- To analyze the yearly returns of selected securities
- To provide information to the investor about the minimum return he can expect

## **1.7 Need for the study**

Investment in equity has gained momentum among the investors as the returns are high when compared to other investment avenues. It is necessary for investors to know the minimum return they can expect from the investment and the future growth prospects of the companies they are investing in. In order to do so an analysis on the future returns is very much essential.

## **1.8 Scope of the study**

This study would give the investors a method to analysis the earnings potential of securities. The project is carried based on the growth of the assets and the EPS. The assumption of the fundamental analysis where the asset growth gets reflected in the price of the stock is used for the future analysis. This will be helpful for investors to choose a method of analysing and selecting of scrips for long term investment.

## **1.9 Limitations**

- Revenues are forecasted based on the past performance of financial variables.
- Inflationary effect is not taken into account
- Equity shares are assumed to be constant from 2008

## **1.10 Company Profile**

### **1.10.1 Market Leaders in Offshore Investment Research**

Irevna offers investment research services to the world's leading investment banks and financial institutions. Founded in 2001, Irevna pioneered the 'outsourced research' concept, where the firm helps large financial institutions to carry out investment research, at a time when accepted wisdom did not consider this possible.

They continue to be the market leaders in the industry, being the largest pure-play provider of equity, credit and derivatives research services. Being the most experienced player in this industry, Irevna's activities span the entire value chain of investment research. They obviously are experts in building financial models and drafting investment reports-but several of our clients see a lot of value in using Irevna as an 'intellectual partner'- helping them to generate investment ideas and converting

ideas to structured investment products.

In May 2005, Irevna became a part of CRISIL, India's leading Ratings, Research, Risk and Policy advisory company. CRISIL's majority shareholder is Standard & Poor's, the world's foremost provider of Independent credit ratings, Indices, Risk evaluation, Investment research, Data and Valuations.

### **1.10.2 Management**

G V Mani, Senior Director, Off shoring Operations

Mani is the business head for CRISIL-Irevna group's off-shoring business. In this role he provides strategic leadership to the business, especially its growth into new verticals and geographies.

Chris Graham, Director, Global Business Development

Chris Graham heads Irevna's business development and relationship responsibilities. Chris has been with the group for over 4 years, and spearheaded development of the North American client base, global credit research client base, and the Western Hemisphere Research Delivery Center in Buenos Aires, Argentina.

Ravishankar G, Director of Global Delivery

Ravishankar G leads delivery operations of Irevna, which are spread across three locations, namely Buenos Aires, Chennai and Mumbai. Ravi has over 13 years experience in investment research across different asset classes and has been instrumental in managing the growth of outsourced investment research operations at Irevna, over the last couple of years.

### **1.10.3 Services**

#### **Equity Research**

Irevna works closely with firms in sell-side research (investment banks and independent research houses), as well as buy-side research (hedge funds and large institutional investors). Irevna's professionals (usually finance MBAs, CPAs and CFAs) perform financial modeling and valuation, write initiation reports and earnings

review/preview notes, and undertake thematic research. Leveraging its considerable experience in this domain, Irevna provides sector expertise and thought leadership in this area.

### **Quantitative Research**

Irevna provides quantitative research services in the areas of portfolio selection and asset allocation strategies, and pricing and analyzing derivatives and structured products. These teams, including people with advanced degrees in econometrics, mathematics and computational finance, work across areas such as advanced statistical analysis, portfolio optimization, and simulation.

### **Credit Research**

Irevna has a strong pedigree in outsourced credit research. Its parent company, CRISIL, is the market leader in domestic credit ratings and has more than a decade's experience in providing credit research services for international financial markets. The CRISIL-Irevna group is the market leader in outsourced credit research services in India. Its activities range from financial analysis and modeling to authoring credit reports.

#### **1.10.4 Social Responsibility**

As a socially responsible organization, they actively participate in several voluntary programmes. They encourage their employees to contribute towards enriching the quality of lives of the communities they live and work in. Some of their activities include spending time at orphanages and old age homes. They have also been organizing blood donation camp once every six months in association with the Jeevan Blood Bank.

They also extended their support during the Tsunami relief program. Their employees collected cash, food, clothing, and other basic life support material and distributed them directly to the victims. Across Irevna, several of their employees also contributed to the Prime Minister's National Relief Fund. Apart from these contributions, a number of their employees' participated in rescue operations at Nagapattinam (a devastated coastal town in Tamil Nadu)

## 1.11 Review of Literature

*Li Jun and Xu Jiuping(2007)*<sup>1</sup> The future returns of each securities cannot be correctly reflected by the securities data in the past, therefore the statistical techniques and the experts' judgement and experience are combined together to estimate the security returns in the future. The returns of each securities are assumed to be fuzzy random variables, then following the ideas of mean variance model a new portfolio selection model in a hybrid uncertain environment is proposed. Moreover, the -mean variance efficient frontiers and -mean variance efficient portfolios are defined, and the properties of -mean variance efficient portfolios located on different -mean variance efficient frontiers are discussed. On the basis of the results, they have concluded that the proposed model can provide the more flexible results.

*Lehavy Reuven and Sloan Richard (2008)*<sup>2</sup> has said that investment fundamentals, such as earnings and cash flows, can explain only a small proportion of the variation in stock returns. We find that investor recognition of a firm's stock can explain relatively more of the variation in stock returns. Consistent with Merton's theoretical analysis, we show that (i) contemporaneous stock returns are positively related to changes in investor recognition, (ii) future stock returns are negatively related to changes in investor recognition, (iii) the above relations are stronger for stocks with greater idiosyncratic risk and (iv) corporate investment and financing activities are both positively related to changes in investor recognition. They have suggested that investors and managers who are concerned with firm valuation should consider investor recognition in addition to accounting information and related investment fundamentals

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<sup>1</sup> *Li Jun and Xu Jiuping*, A novel portfolio selection model in a hybrid uncertain environment, *Omega*; Apr2009, Vol. 37 Issue 2, p439-449, 11p.

<sup>2</sup> *Lehavy Reuven and Sloan Richard*, Review of Accounting Studies, Investor recognition and stock returns., Sep2008, Vol. 13 Issue 2/3, p327-361, 35p.

*Albuquerque Rui , De Francisco Eva, Marques Luis B.(2008)*<sup>3</sup> have presented a model of equity trading with informed and uninformed investors where informed investors trade on firm-specific and marketwide private information. The model is used to identify the component of order flow due to marketwide private information. Estimated trades driven by marketwide private information display little or no correlation with the first principal component in order flow. Indeed, we find that co-movement in order flow captures variation mostly in liquidity trades. Marketwide private information obtained from equity market data forecasts industry stock returns, and also currency returns.

*Stein Michael, Branke Jürgen, Schmeck Hartmut(2008)*<sup>4</sup> have dealt with the efficient implementation of parametric quadratic programming that is specialized for large-scale mean-variance portfolio selection with a dense covariance matrix. Their aim is to calculate the whole Pareto front of solutions that represent the trade-off between maximizing expected return and minimizing variance of return. They have described and compared in a uniform framework several techniques to speed up the necessary matrix operations, namely the initial matrix decomposition, the solution process in each iteration, and the matrix updates. Techniques considered include appropriate ordering of the matrix rows and columns, reducing the size of the system of linear equations, and dividing the system into two parts. Regarding implementation, they have suggested to simultaneously use two different matrix representations that are specifically adapted to certain parts of the algorithm and propose a technique that prevents algorithm stalling due to numerical errors. Finally, they have analyzed and compared the runtime of these algorithm variants on a set of benchmark problems. They have demonstrated, the most sophisticated variant is several orders of magnitude faster than the standard implementation on all tested problem instances.

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<sup>3</sup> ALBUQUERQUE RUI , DE FRANCISCO EVA, MARQUES LUIS B. Marketwide Private Information in Stocks: Forecasting Currency Returns. *Journal of Finance*; Oct2008, Vol. 63 Issue 5, p2297-2343, 47p

<sup>4</sup> Stein Michael, Branke Jürgen, Schmeck Hartmut, Efficient implementation of an active set algorithm for large-scale portfolio selection, *Computers & Operations Research*; Dec2008, Vol. 35 Issue 12, p3945-3961, 17p.

*Pisedtasalasai Anirut, Gunasekarage Abeyratna (2008)*<sup>5</sup> have examined the causal and dynamic relationships among stock returns, return volatility and trading volume for five emerging markets in South-East Asia—Indonesia, Malaysia, Philippines, Singapore and Thailand. They have found strong evidence of asymmetry in the relationship between the stock returns and trading volume; returns are important in predicting their future dynamics as well as those of the trading volume, but trading volume has a very limited impact on the future dynamics of stock returns. However, the trading volume of some markets seems to contain information that is useful in predicting future dynamics of return volatility.

*Kolari James W, Moorman Ted C, Sorescu Sorin M(2008)*<sup>6</sup> they have examined the relation between the cross-section of US stock returns and foreign exchange rates during the period from 1973 to 2002. They have found that stocks that are most sensitive to foreign exchange risk (in absolute value) have lower returns than others. This implies a non-linear, negative premium for foreign exchange risk. Sensitivity to foreign exchange generates a cross-sectional spread in stock returns unexplained by existing asset-pricing models. Consequently, we form a zero-investment factor related to foreign exchange-sensitivity and show that it can reduce mean pricing errors for exchange-sensitive portfolios. One possible explanation for their findings includes Johnson's option-theoretic model in which expected returns are decreasing in idiosyncratic cash flow volatility.

*Durbach Ian N, Stewart Theodor J(2008)*<sup>7</sup> conducted a simulation study examining the impact of a simplification strategy that replaces distributional attribute evaluations with their expected values and uses those expectations in an additive value model. Several alternate simplified forms and approximation approaches are investigated, with results showing that in general the simplified models are able to provide acceptable performance that is fairly robust to a variety of internal and external environmental

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<sup>5</sup> *Pisedtasalasai Anirut, Gunasekarage Abeyratna (2008)*<sup>5</sup>, Causal and Dynamic Relationships among Stock Returns, Return Volatility and Trading Volume: Evidence from Emerging markets in South-East Asia, *Asia-Pacific Financial Markets*; Dec2008, Vol. 14 Issue 4, p277-297, 21p.

<sup>6</sup> *Kolari James W, Moorman Ted C, Sorescu Sorin M(2008)*<sup>6</sup>, Foreign exchange risk and the cross-section of stock returns, *Journal of International Money & Finance*; Nov2008, Vol. 27 Issue 7, p1074-1097, 24p

<sup>7</sup> *Durbach Ian N, Stewart Theodor J(2008)*<sup>7</sup>, Using expected values to simplify decision making under uncertainty, *Omega*; Apr2009, Vol. 37 Issue 2, p312-330, 19p

changes, including changes to the distributional forms of the attribute evaluations, errors in the assessment of the expected values, and problem size. Certain of the simplified models are shown to be highly sensitive to the form of the underlying preference functions, and in particular to extreme non-linearity in these preferences.

*Edirisinghe N. C. P., X. Zhang (2008)*<sup>8</sup> Fundamental analysis is an approach for evaluating a firm for its investment-worthiness whereby the firm's financial statements are subject to detailed investigation to predict future stock price performance. They have proposed an approach to combine financial statement data using Data Envelopment Analysis to determine a relative financial strength (RFS) indicator. Such an indicator captures a firm's fundamental strength or competitiveness in comparison to all other firms in the industry/market segment. By analysing the correlation of the RFS indicator with the historical stock price returns within the industry, a well-informed assessment can be made about considering the firm in an equity portfolio. They have tested the proposed indicator with firms from the technology sector, using various US industries and report correlation analyses. Their preliminary computations using RFS indicator-based stock selection within mean-variance portfolio optimization demonstrate the validity of the proposed approach.

*Anandarajan Asoka Becchetti Leonardo Hasan Iftekhar(2008)*<sup>9</sup> The stock market is driven by analyst's forecasts. Investors rely on such forecasts to determine where they should invest. However, research in the academic literature shows us that analysts' forecasts are biased. It is important to understand why such forecasts are biased and the sources of such bias. They have examined analyst's earnings forecast bias and the determination of such bias. In particular they examined the influence of stock market movement on earnings forecast bias with particular reference to the "high growth" era in the period 1995 to 2000. Their results using a large sample of S&P stocks show that forecast bias was accentuated during this period and overstated earnings. While they would expect stock prices to decline if actual reported earnings were less than forecast, this not the case. They discuss the reasons in the paper. The net effect was that

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<sup>8</sup> *Edirisinghe N. C. P., X. Zhang (2008)*<sup>8</sup>, Portfolio selection under DEA-based relative financial strength indicators: case of US industries, Journal of the Operational Research Society; Jun2008, Vol. 59 Issue 6, p842-856, 15p

<sup>9</sup> *Anandarajan Asoka Becchetti Leonardo Hasan Iftekhar(2008)*<sup>9</sup>, The dynamics of the analysts' earnings forecast bias and the stock market boom, Journal of Theoretical Accounting Research; Fall2008, Vol. 4 Issue 1, p1-37, 37p

analysts' forecast bias and increases in stock prices tended to "feed off" each other. Analysts continued to provide higher valuations and stock prices continued to rise. They have found that this was particularly accentuated in the tech companies. They have also found evidence of analysts' "herd behavior" with respect to overvaluation.

# *RESEARCH METHODOLOGY*

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## **CHAPTER 2**

### **RESEARCH METHODOLOGY**

#### **2.1 RESEARCH DESIGN**

The research is of analytical in nature as the study was done to find out the future return that is expected from the selected individual securities that are listed in the S&P Nifty.

#### **2.2 DATA COLLECTION METHOD**

Secondary data collection method was used to collect various data pertaining to the analysis. The secondary data was obtained from the company websites and the NSE website.

#### **2.3 SOURCES OF DATA COLLECTION**

Historical data for the market index & company index are collected from the internet and from the company websites and the NSE website.

#### **2.4 VARIABLES FOR THE STUDY**

- Revenues
- Expenses
- EPS
- MPS
- Operating Profit Margin
- Assets

## 2.5 SAMPLE DESIGN

Probabilistic sampling technique is used since every scrip has equal chance of getting selected in the sample. The S&P nifty index 50 stocks are grouped into six homogeneous groups. The grouping is done through stratified sampling where we divide the population into relatively homogeneous groups called strata. From the six stratas the highest market capitalisation of each strata is chosen. Thus the sample size constitutes of six companies.

### Stratified sampling

In order to use stratified sampling, we divide the population into relatively homogeneous groups, called strata. In our project the 50 nifty stocks are grouped into 6 stratas. The six strata are given below.

#### Strata 1

Company	Industry	Market cap in Rs.crores
RELIANCE	Refineries	310,542
ONGC	Oil Exploration	218,860
RPL	Refineries	70,740
CAIRN	Oil Exploration	47,077
GAIL	Gas	33,429
BPCL	Refineries	10,946

#### Strata 2

Company	Industry	Market cap in Rs.crores
LT	Engineering	85,871
BHEL	Electrical Equipment	83,603
NTPC	Power	44,213
POWERGRID	Power	39,184
SUZLON	Electrical Equipment	32,669
TATAPOWER	Power	23,263
RELINFRA	Power	22,897
ABB	Electrical Equipment	18,562
SIEMENS	Electrical Equipment	18,478

**Strata 3**

<b>Company</b>	<b>Industry</b>	<b>Market cap in Rs.crores</b>
INFOSYSTCH	Computers - Software	100,109
TCS	Computers - Software	79,483
WIPRO	Computers - Software	63,237
SUNPHARMA	Pharmaceuticals	30,494
SATYAMCOMP	Computers - Software	28,252
RANBAXY	Pharmaceuticals	19,407
CIPLA	Pharmaceuticals	18,659
HCLTECH	Computers - Software	15,536
DRREDDY	Pharmaceuticals	9,748
ZEEL	Media & Entertainment	9,459

**Strata 4**

<b>Company</b>	<b>Industry</b>	<b>Market cap in Rs.crores</b>
HEROHONDA	Automobiles - 2 and 3 wheelers	96,548
SBIN	Banks	89,128
ICICIBANK	Banks	74,756
HDFC	Finance – Housing	66,607
TATAMOTORS	Automobile - 4 wheelers	56,984
HDFCBANK	Banks	54,249
MARUTI	Automobile - 4 wheelers	18,768
PNB	Banks	15,157
M&M	Automobile - 4 wheelers	14,220

**Strata 5**

<b>Company</b>	<b>Industry</b>	<b>Market cap in Rs.crores</b>
DLF	Construction	84,065
SAIL	Steel & Steel Products	64,476
STER	Metals	44,472
TATASTEEL	Steel & Steel Products	43,897
UNITECH	Construction	25,812
NATIONALUM	Aluminium	24,935
HINDALCO	Aluminium	21,449
GRASIM	Cement & Cement Products	17,767
AMBUJACEM	Cement & Cement Products	12,226
ACC	Cement & Cement Products	10,553

## Strata 6

Company	Industry	Market cap in Rs.crores
BHARTIARTL	Telecommunication – Services	158,962
RCOM	Telecommunication – Services	81,570
ITC	Cigarettes	71,121
HINDUNILVR	Diversified	53,467
IDEA	Telecommunication – Services	21,715
TATACOMM	Telecommunication – Services	11,815

From the grouped strata the stocks are ranked based on the highest market capitalized stock within the strata. From each of the strata the highest market capitalised stock is chosen and the analysis is carried on.

## 2.6 SAMPLE SIZE

The sample size consists of 50 stocks which formulate the S&P Nifty index. The 50 stocks are formulated to form 6 strata. From each strata the highest market capitalisation stock is picked and the analysis is carried on. The market capitalisation is calculated on the 30<sup>th</sup> June 2008.

The six sample companies fact sheet is given below in the below tables.

Fact Sheet of RIL	
Name	Reliance industries limited
Age	56 years
Debt-Equity mix	44.22%
promoter's holdings	53.20%
product line	Exploration and production of oil and gas, petrochemicals, petroleum refining, textiles and retail

Fact Sheet of L & T	
Name	Larsen & Tubro
Age	80 years
Debt-Equity mix	37.60%
promoter's holdings	21%
product line	Engineering equipments, infrastructure developments and capital goods etc.

Fact Sheet of INFOSYS	
Name	Infosys
Age	56 years
Debt-Equity mix	0.00%
promoter's holdings	21.76%
product line	Buisness consulting services and outsourcing services and IT solution services

Fact Sheet of HERO HONDA	
Name	Hero Honda
Age	24 years
Debt-Equity mix	4.42%
promoter's holdings	54.96%
product line	Two wheelers and automobile products

Fact Sheet DLF	
Name	DLF
Age	62 years
Debt-Equity mix	74.00%
promoter's holdings	88.24%
product line	Residential appartments, shopping malls, office space and other things related to construction

Fact Sheet BHARTI AIRTEL	
Name	Bharti Airtel
Age	16 years
Debt-Equity mix	32.85%
promoter's holdings	66.50%
product line	telecommunication services & insurance services

## 2.7 Tools used

2.7.a Trend analysis

2.7.b comparative statement analysis

2.7.c cash flow statement analysis

## 2.8 Assumptions

### 2.8.1 Income Statement

1. Revenues are forecasted based on the previous four year data
2. Expenses are forecasted as a percentage of revenues
3. Depreciation is forecasted as a percentage of fixed assets
4. Interest Expenses is forecasted as a percentage of long term debt
5. Other income is forecasted based on the previous four year data
6. Income tax expense is forecasted based on an assumed tax rate of 33%
7. Weighted average shares has been assumed to be constant from 2008

### 2.8.2 Balance Sheet

8. Cash flows from the cash flow statement
9. Current Asset is forecasted as a percentage of revenues
10. Fixed Asset is forecasted as a percentage of revenues
11. Accumulated depreciation is forecasted based on the previous four year data
12. Investments is forecasted based on the previous four year data
13. Current Liabilities is forecasted as a percentage of revenues
14. Equity has been assumed to be constant from 2008
15. Debt is forecasted as a percentage of equity

### **2.8.3 Cash Flow Statement**

16. Net Cash used in Investing Activity is assumed based on the previous four year data

***ANALYSIS AND INTERPRETATION***

## CHAPTER 3

### Analysis and Interpretation

#### 3.1 Analysis of future return of RIL

##### 3.1.1 Income Statement

Income in Rs. Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
Revenues	73,164	89,124	110,886	139,269	158,130	180,138	202,145	224,153	246,161
Expenses	60,352	74,825	92,676	115,963	132,829	151,316	169,802	188,289	206,775
EBITDA	12,812	14,299	18,210	23,306	25,301	28,822	32,343	35,864	39,386
Depreciation	3,724	3,401	4,009	4,847	4,169	5,202	6,194	7,147	8,061
EBIT	9,088	10,898	14,201	18,459	21,132	23,620	26,149	28,718	31,325
Interest	1,469	877	1,114	1,077	1,436	1,733	2,037	2,374	2,745
Other Income	1,450	683	193	895	931	968	1,007	1,047	1,089
Total Other Income	(19)	(194)	(921)	(182)	(505)	(765)	(1,030)	(1,327)	(1,656)
EBT	9,069	10,704	13,280	18,277	20,627	22,855	25,119	27,391	29,669
Tax	1,497	1,635	2,372	3,552	5,371	5,809	6,252	6,665	7,046
Misc	0	0	0	4,733	0	0	0	0	0
EAT	7,572	9,069	10,908	19,458	15,256	17,046	18,867	20,726	22,623
Tax Rate	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%
<b>Operating and Profitability Indicators</b>									
EBITDA Margin	17.5%	16.0%	16.4%	16.7%	16.0%	16.0%	16.0%	16.0%	16.0%
Operating Margin	12.4%	12.2%	12.8%	13.3%	13.4%	13.1%	12.9%	12.8%	12.7%
Net Margin	10.3%	10.2%	9.8%	14.0%	9.6%	9.5%	9.3%	9.2%	9.2%
ROA		11%	11%	15%	9%	9%	9%	8%	8%
<b>% of Revenues</b>									
Expenses	82.5%	84.0%	83.6%	83.3%	84.00%	84.00%	84.00%	84.00%	84.00%
EBITDA	17.5%	16.0%	16.4%	16.7%	16.0%	16.0%	16.0%	16.0%	16.0%
Depreciation	-5.1%	-3.8%	-3.6%	-3.5%	-2.6%	-2.9%	-3.1%	-3.2%	-3.3%
EBIT	12.4%	12.2%	12.8%	13.3%	13.4%	13.1%	12.9%	12.8%	12.7%
Interest	-2.0%	-1.0%	-1.0%	-0.8%	-0.9%	-1.0%	-1.0%	-1.1%	-1.1%
EBT	12.4%	12.0%	12.0%	13.1%	13.0%	12.7%	12.4%	12.2%	12.1%
EAT	10.3%	10.2%	9.8%	14.0%	9.6%	9.5%	9.3%	9.2%	9.2%

<b>% Growth</b>									
Revenues		21.8%	24.4%	25.6%	13.54%	13.92%	12.22%	10.89%	9.82%
Expenses		24.0%	23.9%	25.1%	14.5%	13.9%	12.2%	10.9%	9.8%
EAT		19.8%	20.3%	78.4%	-21.6%	11.7%	10.7%	9.9%	9.2%
Other Income		-52.9%	-71.7%	363.7%	4%	4%	4%	4%	4%
Total Other Income		921.1%	374.7%	-80.2%	177.4%	51.5%	34.7%	28.8%	24.8%
<b>EPS(Rs)</b>	<b>54.32</b>	<b>65.06</b>	<b>78.25</b>	<b>133.82</b>	<b>104.994</b>	<b>117.3132</b>	<b>129.846</b>	<b>142.6428</b>	<b>155.699</b>
Equity Capital	1393	1393	1393	1453	1453	1453	1453	1453	1453
Dividend	10%	10%	10%	10%	10%	10%	10%	10%	10%
Retained Earnings	7,433	8,930	10,769	19,313	15,110	16,900	18,721	20,581	22,478

### 3.1.2 Balance Sheet

Balance Sheet in Rs. Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Assets</b>									
Cash	3,609	2,146	1,834	4,278	(3,094)	(4,636)	(2,546)	3,193	12,596
Other Current Assets	25,210	22,550	28,376	38,918	47,439	54,041	60,644	67,246	73,848
Fixed Assets	55,125	84,970	99,532	104,229	130,060	154,857	178,663	201,517	223,456
Revaluation Reserve	2,729	4,650	2,651	871	0	0	0	0	0
Accumulated Depreciation	24,872	29,253	35,872	42,345	49,967	58,961	69,574	82,098	96,875
Capital Work in Progress	4,829	6,957	7,528	23,005	22,847	22,946	22,082	19,773	15,356
Investments	17,051	5,846	16,251	22,063	28,682	37,286	48,472	63,014	81,918
<b>Total Assets</b>	<b>78,223</b>	<b>88,566</b>	<b>114,998</b>	<b>149,277</b>	<b>175,967</b>	<b>205,534</b>	<b>237,741</b>	<b>272,645</b>	<b>310,300</b>
<b>Liabilities</b>									
Current Liabilities	21,765	21,548	25,858	32,221	36,370	41,432	46,493	51,555	56,617
Equity	1,393	1,393	1,393	1,453	1,453	1,453	1,453	1,453	1,453
Reserves & Surplus	36,281	43,760	59,861	79,710	94,820	111,721	130,442	151,023	173,500
Total Equity	37,674	45,153	61,254	81,163	96,273	113,174	131,895	152,476	174,953
Debt	18,784	21,865	27,886	35,893	43,323	50,928	59,353	68,614	78,729
<b>Total Liabilities</b>	<b>78,223</b>	<b>88,566</b>	<b>114,998</b>	<b>149,277</b>	<b>175,966</b>	<b>205,533</b>	<b>237,741</b>	<b>272,645</b>	<b>310,299</b>
<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% Growth</b>									
Current Assets		-10.6%	25.8%	37.2%	21.9%	13.9%	12.2%	10.9%	9.8%
<b>Total Assets</b>		<b>13.2%</b>	<b>29.8%</b>	<b>29.8%</b>	<b>17.9%</b>	<b>16.8%</b>	<b>15.7%</b>	<b>14.7%</b>	<b>13.8%</b>
Current Liabilities		-1.0%	20.0%	24.6%	12.9%	13.9%	12.2%	10.9%	9.8%
Total Liabilities		13.2%	29.8%	29.8%	17.9%	16.8%	15.7%	14.7%	13.8%
Accumulated Depreciation		17.6%	22.6%	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%
Investments		-65.7%	178.0%	35.8%	30%	30%	30%	30%	30%

### 3.1.3 Cash Flow Statement

Cash Flows in Rs Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
PBT	9,069	10,704	14,520	23,010	20,627	22,855	25,119	27,391	29,669
Net Cash Flow Operating Activity	17,288	10,301	16,870	17,426	15,053	20,707	23,520	26,332	29,143
Net Cash Used in Investing Activity	(8,162)	(12,130)	(18,567)	(23,955)	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)
Net Cash Used in Financial Activity	(5,741)	366	306	8,973	7,575	7,750	8,570	9,407	10,260
Net Increase in cash & equivalent	3,385	(1,463)	(1,391)	2,444	(7,372)	(1,542)	2,090	5,739	9,403
Cash & Equivalent Beginning of the year	224	3,609	3,225	1,834	4,278	(3,094)	(4,636)	(2,546)	3,193
Cash & Equivalent End Of the year	3,609	2,146	1,834	4,278	(3,094)	(4,636)	(2,546)	3,193	12,596

### 3.1.4 Workings

Workings	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Depreciation</b>									
Fixed Assets	55,125	84,970	99,532	104,229	130,060	154,857	178,663	201,517	223,456
As a % of revenues	75.34%	95.34%	89.76%	74.84%	82.25%	85.97%	88.38%	89.90%	90.78%
Depreciation	3,724	3,401	4,009	4,847	4,169	5,202	6,194	7,147	8,061
as a % of fixed assets		6.17%	4.72%	4.87%	4%	4%	4%	4%	4%
Net Purchases		33,246	18,571	9,544	30,000	30,000	30,000	30,000	30,000
<b>Interest</b>									
Debt	18,784	21,865	27,886	35,893	43,323	50,928	59,353	68,614	78,729
as a % of equity	49.86%	48.42%	45.53%	44.22%	45%	45%	45%	45%	45%
Interest	1,469	877	1,114	1,077	1,436	1,733	2,037	2,374	2,745
as a % of previous years debt		4.67%	5.09%	3.86%	4%	4%	4%	4%	4%
<b>Current Assets</b>	25,210	22,550	28,376	38,918	47,439	54,041	60,644	67,246	73,848
as a % of revenues	34.46%	25.30%	25.59%	27.94%	30%	30%	30%	30%	30%
<b>Current Liabilities</b>	21,765	21,548	25,858	32,221	36,370	41,432	46,493	51,555	56,617
as a % of revenues	29.75%	24.18%	23.32%	23.14%	23%	23%	23%	23%	23%
<b>Tax</b>									
Provision for income tax	1,497	1,635	2,372	3,552					
Tax Shield on Interest Expense	485	289	368	355					
Net Tax on EBIT	1,982	1,924	2,740	3,907					

### 3.1.5 Trend Analysis on Revenues

X	y	X-x	X	Xy	x^2	
2005	73,164	(2)	-3	(219,492)	9	
2006	89,124	(1)	-1	(89,124)	1	
2007	110,886	1	1	110,886	1	
2008	139,269	2	3	417,807	9	
8026	412,443			220,077	20	
	b=	11003.9	11003.9	11003.9	11003.9	11003.9
	a=	103111	103111	103111	103111	103111
	y=	158130	180138	202145	224153	246161
	year	2009	2010	2011	2012	2013
	% of increase in revenues	13.54%	13.92%	12.22%	10.89%	9.82%

### 3.1.6 Formulae Used

#### Income Statement

EBITDA = Revenues – Expenses

EBIT = EBITDA – Depreciation

EBT = EBIT – Interest + Other Income

EAT = EBT – Tax + Miscellaneous expenses

#### Balance Sheet

Total Assets = Cash + Other Current Assets + Fixed Assets – Revaluation Reserve – Accumulated Depreciation + Capital Work in Progress + Investments

Total Liabilities = Current Liabilities + Equity + Reserves & Surplus + Debt – Miscellaneous expenses

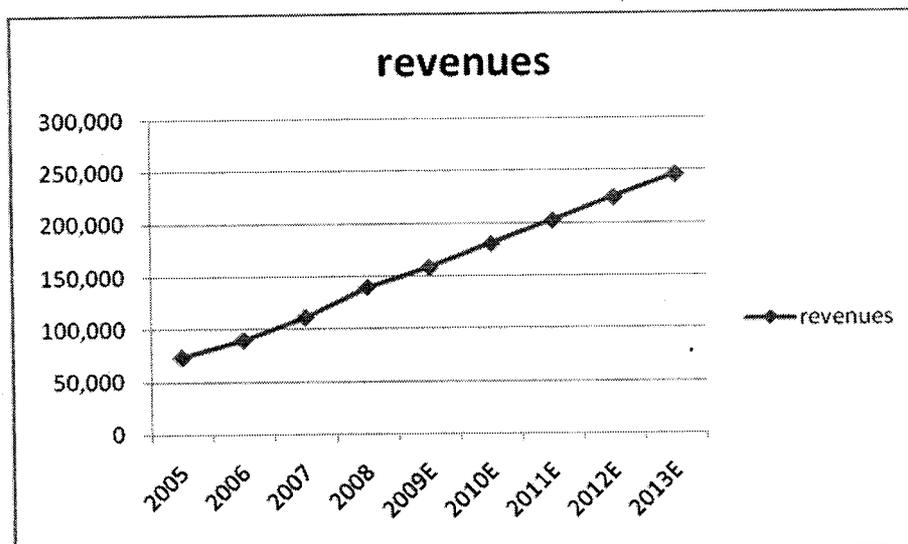
#### Cash Flow

Net Cash Flow Operating Activity = Diff in Current Assets + Diff in Current liabilities + Depreciation + EAT

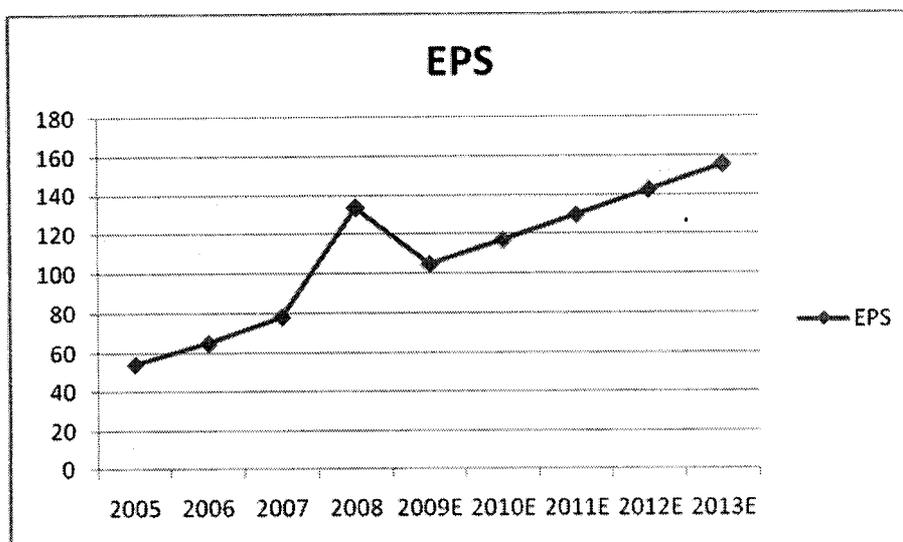
Net Cash used in Financing Activity = Equity \* Dividend Payout Ratio + Diff in debt

Net increase (decrease) in cash = Net Cash Flow Operating Activity + Net Cash used in Investing Activity + Net Cash used in Financing Activity

### 3.1.1 Revenues Chart



### 3.1.2 EPS Chart



### 3.1.7 Interpretation

- Revenue in the year 2006 – 07 has grown about 24.4 percent while compared to previous year's growth of 21.8 percent.
- Earnings per share has grown up around 20 percent .
- The P/E ratio for the company is very attractive where it is around 13 times of the earnings potential
- The EBITDA has shown a strong growth over the years and is expected to continue due to the strong demand.
- The return received from the stock year on year has substantially increased by on average.
- The cash flow statement suggest that the net cash flow in investing activity is to be high
- The revenue growth has showed a strong upward movement which indicates a strong demand for the products.
- The net profit margin has increased from 9.8% to 14% in the year 08, which shows an effective operation in the previous year.
- The EBITDA margin has been maintained in a consistent percentage.
- The tax that is to be paid is effectively managed.
- Return on the assets is high which enables the firm to go for further expansion plans.

### 3.1.8 Inference

The top line growth of the Reliance in dustries is to grow atleast at a rate 13 % year on year. The investor can expect a return of 21% as a minimum return from his investment made in the RIL.

#### The revenue drivers:

- The Group exports products in excess of US\$ 20 billion to 108 countries in the world.
- The demand for refined oil and the petrochemicals products is very high.

- Their exploration of oil in the Godavari basin which they have contracted under NELP.

### **Constraints**

- The fluctuating oil price is a great concern for the organization. The fluctuations in the oil prices would certainly affect RIL
- The restrictions imposed on the export of oil to other countries.
- The non availability of the government subsidies to the refined petrol, which led to close the petrol bunks.

### **Things to watch in future:**

- The implementation of the windfall tax, which would affect the profitability of the industry.
- The allocation of the oil exploration basins by the NELP-Vii.

## 3.2 Analysis of future return of L&T

### 3.2.1 Income Statement

Income in Rs. Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
Revenues	13,362	14,883	17,900	25,187	27,456	31,305	35,154	39,004	42,853
Expenses	12,551	13,926	16,154	22,373	24,161	27,549	30,936	34,323	37,710
EBITDA	811	957	1,746	2,814	3,295	3,757	4,219	4,680	5,142
Depreciation	94	114	170	211	293	378	456	529	597
EBIT	717	843	1,576	2,603	3,002	3,379	3,762	4,151	4,545
Interest	53	75	34	122	179	223	276	337	405
Other Income	622	545	462	587	704	845	1,014	1,217	1,461
Total Other Income	569	470	428	465	525	622	738	880	1,055
EBT	1,286	1,313	2,004	3,068	3,527	4,001	4,500	5,031	5,600
Tax	302	371	601	982	985	1,097	1,209	1,323	1,443
Misc	0	70	0	87	0	0	0	0	0
EAT	984	1,012	1,403	2,173	2,542	2,904	3,292	3,708	4,158
Tax Rate	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%
<b>Operating and Profitability Indicators</b>									
EBITDA Margin	6.1%	6.4%	9.8%	11.2%	12.0%	12.0%	12.0%	12.0%	12.0%
Operating Margin	5.4%	5.7%	8.8%	10.3%	10.9%	10.8%	10.7%	10.6%	10.6%
Net Margin	7.4%	6.8%	7.8%	8.6%	9.3%	9.3%	9.4%	9.5%	9.7%
ROA		8%	9%	10%	9%	8%	8%	8%	8%
<b>% of Revenues</b>									
Expenses	93.9%	93.6%	90.2%	88.8%	88.00%	88.00%	88.00%	88.00%	88.00%
EBITDA	6.1%	6.4%	9.8%	11.2%	12.0%	12.0%	12.0%	12.0%	12.0%
Depreciation	-0.7%	-0.8%	-0.9%	-0.8%	-1.1%	-1.2%	-1.3%	-1.4%	-1.4%
EBIT	5.4%	5.7%	8.8%	10.3%	10.9%	10.8%	10.7%	10.6%	10.6%
Interest	-0.4%	-0.5%	-0.2%	-0.5%	-0.7%	-0.7%	-0.8%	-0.9%	-0.9%
EBT	9.6%	8.8%	11.2%	12.2%	12.8%	12.8%	12.8%	12.9%	13.1%
EAT	7.4%	6.8%	7.8%	8.6%	9.3%	9.3%	9.4%	9.5%	9.7%
<b>% Growth</b>									
Revenues		11.4%	20.3%	40.7%	9.01%	14.02%	12.30%	10.95%	9.87%
Expenses		11.0%	16.0%	38.5%	8.0%	14.0%	12.3%	10.9%	9.9%
EAT		2.8%	38.6%	54.9%	17.0%	14.2%	13.4%	12.7%	12.1%
Other Income		-12.4%	-15.2%	27.1%	20%	20%	20%	20%	20%
Total Other Income		-17.4%	-8.9%	8.6%	13.0%	18.5%	18.6%	19.3%	19.9%

<b>EPS(Rs)</b>	<b>75.74</b>	<b>73.66</b>	<b>49.53</b>	<b>74.34</b>	<b>43.83</b>	<b>50.07</b>	<b>56.75</b>	<b>63.93</b>	<b>71.68</b>
<b>Equity Capital</b>	<b>25</b>	<b>27</b>	<b>56</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>58</b>
<b>Dividend</b>	<b>41%</b>	<b>34%</b>	<b>30%</b>	<b>26%</b>	<b>25%</b>	<b>25%</b>	<b>25%</b>	<b>25%</b>	<b>25%</b>
<b>Retained Earnings</b>	<b>974</b>	<b>1,003</b>	<b>1,386</b>	<b>2,158</b>	<b>2,528</b>	<b>2,889</b>	<b>3,277</b>	<b>3,694</b>	<b>4,143</b>

### 3.2.2 Balance Sheet

Balance Sheet in Rs. Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Assets</b>									
Cash	827	583	1,094	964	3,147	5,781	9,025	12,912	17,484
Other Current Assets	8,133	9,084	10,953	15,531	16,748	19,096	21,444	23,792	26,140
Fixed Assets	2,106	2,300	2,876	4,188	5,395	6,517	7,561	8,532	9,435
Revaluation Reserve	31	29	28	26	0	0	0	0	0
Accumulated Depreciation	1,089	982	1,122	1,242	1,366	1,503	1,653	1,818	2,000
Capital Work in Progress	66	286	471	699	564	457	358	268	187
Investments	960	1,919	3,104	6,922	7,130	7,344	7,564	7,791	8,024
<b>Total Assets</b>	<b>10,972</b>	<b>13,161</b>	<b>17,348</b>	<b>27,036</b>	<b>31,617</b>	<b>37,692</b>	<b>44,299</b>	<b>51,477</b>	<b>59,270</b>
<b>Liabilities</b>									
Current Liabilities	5,817	7,121	9,542	13,928	15,101	17,218	19,335	21,452	23,569
Equity	25	27	56	58	58	58	58	58	58
Reserves & Surplus	3,312	4,583	5,683	9,470	11,998	14,887	18,164	21,858	26,001
Total Equity	3,337	4,610	5,739	9,528	12,056	14,945	18,222	21,916	26,059
Debt	1,858	1,452	2,077	3,583	4,461	5,530	6,742	8,109	9,642
Miscellaneous	40	22	10	3	0	0	0	0	0
<b>Total Liabilities</b>	<b>10,972</b>	<b>13,161</b>	<b>17,348</b>	<b>27,036</b>	<b>31,617</b>	<b>37,692</b>	<b>44,299</b>	<b>51,476</b>	<b>59,270</b>
<b>Difference</b>	<b>0</b>								
<b>% Growth</b>									
Current Assets		11.7%	20.6%	41.8%	7.8%	14.0%	12.3%	10.9%	9.9%
<b>Total Assets</b>		<b>20.0%</b>	<b>31.8%</b>	<b>55.8%</b>	<b>16.9%</b>	<b>19.2%</b>	<b>17.5%</b>	<b>16.2%</b>	<b>15.1%</b>
Current Liabilities		22.4%	34.0%	46.0%	8.4%	14.0%	12.3%	10.9%	9.9%
Total Liabilities		20.0%	31.8%	55.8%	16.9%	19.2%	17.5%	16.2%	15.1%
Accumulated Depreciation		-9.8%	14.3%	10.7%	10.0%	10.0%	10.0%	10.0%	10.0%
Investments		99.9%	61.8%	123.0%	3%	3%	3%	3%	3%

### 3.2.3 Cash Flow Statement

Cash Flows in Rs Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
PBT	1,286	1,383	2,005	3,155	3,527	4,001	4,500	5,031	5,600
Net Cash Flow Operating Activity	112	1,369	2,130	1,945	2,791	3,051	3,517	4,006	4,524
Net Cash Used in Investing Activity	236	(1,326)	(1,588)	(5,241)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)
Net Cash Used in Financial Activity	104	(287)	(31)	3,166	892	1,084	1,227	1,381	1,547
Net Increase in cash & equivalent	452	(244)	511	(130)	2,183	2,634	3,244	3,887	4,571
Cash & Equivalent Beginning of the year	375	827	583	1,094	964	3,147	5,781	9,025	12,912
Cash & Equivalent End Of the year	827	583	1,094	964	3,147	5,781	9,025	12,912	17,484

### 3.2.4 Workings

Workings	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Depreciation</b>									
Fixed Assets	2,106	2,300	2,876	4,188	5,395	6,517	7,561	8,532	9,435
As a % of revenues	15.76%	15.45%	16.07%	16.63%	19.65%	20.82%	21.51%	21.87%	22.02%
Depreciation	94	114	170	211	293	378	456	529	597
as a % of fixed assets		5.41%	7.39%	7.34%	7%	7%	7%	7%	7%
Net Purchases		308	746	1,523	1,500	1,500	1,500	1,500	1,500
<b>Interest</b>									
Debt	1,858	1,452	2,077	3,583	4,461	5,530	6,742	8,109	9,642
as a % of equity	55.68%	31.50%	36.19%	37.60%	37.00%	37.00%	37.00%	37.00%	37.00%
Interest	53	75	34	122	179	223	276	337	405
as a % of previous years debt		4.04%	2.34%	5.87%	5.0%	5.0%	5.0%	5.0%	5.0%
Current Assets	8,133	9,084	10,953	15,531	16,748	19,096	21,444	23,792	26,140
as a % of revenues	60.87%	61.04%	61.19%	61.66%	61%	61%	61%	61%	61%
Current Liabilities	5,817	7,121	9,542	13,928	15,101	17,218	19,335	21,452	23,569
as a % of revenues	43.53%	47.85%	53.31%	55.30%	55%	55%	55%	55%	55%
<b>Tax</b>									
Provision for income tax	302	371	601	982					
Tax Shield on Interest Expense	17	25	11	40					
Net Tax on EBIT	319	396	612	1,022					

### 3.2.5 Trend Analysis on Revenues

X	Y	X-x	x	Xy	x <sup>2</sup>		
2005	13,362	(2)	-3	(40,086)	9		
2006	14,883	(1)	-1	(14,883)	1		
2007	17,900	1	1	17,900	1		
2008	25,187	2	3	75,561	9		
8026	71,332			38,492	20		
		b=	1924.6	1924.6	1924.6	1924.6	1924.6
		a=	17833	17833	17833	17833	17833
		y=	27456	31305.2	35154.4	39003.6	42852.8
		year	2009	2010	2011	2012	2013
% of increase in revenues			9.01%	14.02%	12.30%	10.95%	9.87%

### 3.2.6 Formulae Used

#### Income Statement

EBITDA = Revenues – Expenses

EBIT = EBITDA – Depreciation

EBT = EBIT – Interest + Other Income

EAT = EBT – Tax + Miscellaneous expenses

#### Balance Sheet

Total Assets = Cash + Other Current Assets + Fixed Assets – Revaluation Reserve – Accumulated Depreciation + Capital Work in Progress + Investments

Total Liabilities = Current Liabilities + Equity + Reserves & Surplus + Debt – Miscellaneous expenses

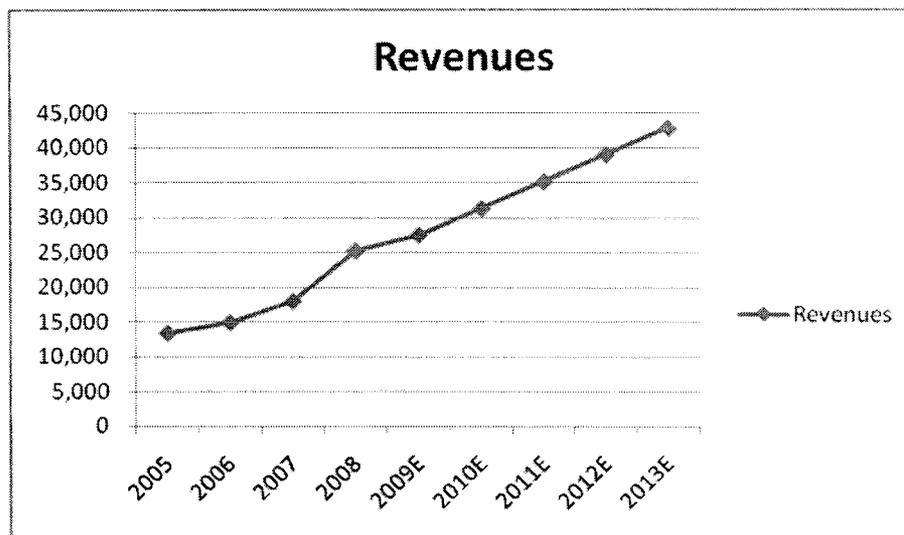
#### Cash Flow

Net Cash Flow Operating Activity = Diff in Current Assets + Diff in Current liabilities + Depreciation + EAT

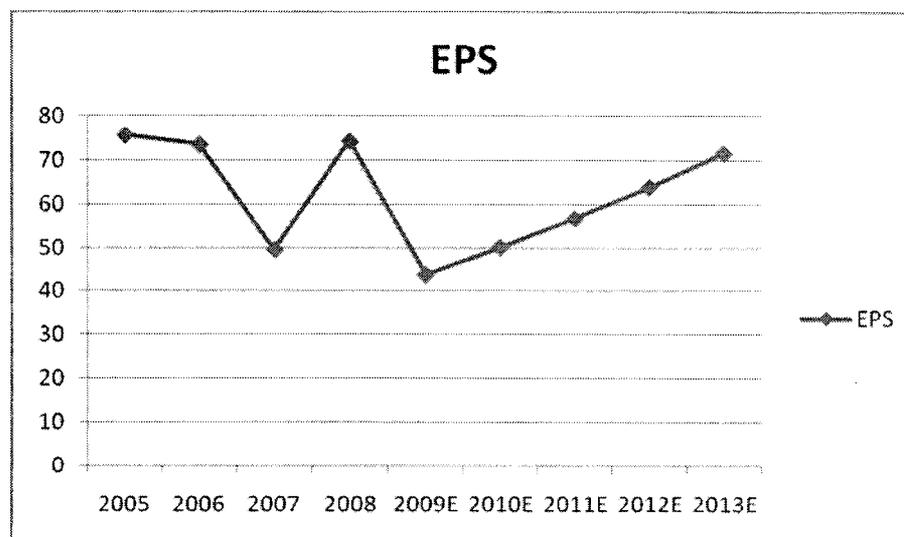
Net Cash used in Financing Activity = Equity \* Dividend Payout Ratio + Diff in debt

Net increase (decrease) in cash = Net Cash Flow Operating Activity + Net Cash used in Investing Activity + Net Cash used in Financing Activity

### 3.2.1 Revenues Chart



### 3.2.2 EPS Chart



### **3.2.8 Interpretation**

- Revenue in the year 2007- 08 has grown about 40% year on year ,the order book of the L&T is very strong.
- The EPS has grown up around 40%.
- The EBITDA has grown substantially year on year.
- The operating profit margin has increased to about 12% in the year 08 and is to improve in the future.
- The net profit margin has grown up thanks to the efficient management.
- The net profit percentage has shown an upward trend year on year.
- The dividend pay out ratio is about 25% on average.

### **3.2.9 Inference**

The revenue growth for L&T is strong at around 12% on an average in the next 5 years. The investor can expect an average return of from the security would be 18% on his investment. But there is a great amount of volatility in the stock prices because of the slowdown in the growth of the capital goods sector.

#### **The revenue drivers:**

- The demand for the infrastructure development and capital goods is high.
- The order book of L&T is very strong that it would generate a substantial amount in the future.

#### **Constraints:**

- The slowdown in the economy due to the raising global factors.
- The increasing raw material cost is another constraint which would affect the profit margin of the company.

### 3.3 Analysis of future return of INFOSYS

#### 3.3.1 Income Statement

Income in Rs. Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
Revenues	6,859	9,028	13,149	15,648	18,793	21,842	24,891	27,939	30,988
Expenses	4,534	6,039	8,926	10,685	12,779	14,852	16,926	18,999	21,072
EBITDA	2,325	2,989	4,223	4,963	6,014	6,989	7,965	8,941	9,916
Depreciation	268	409	469	546	631	697	753	802	844
EBIT	2,057	2,580	3,754	4,417	5,383	6,293	7,212	8,139	9,073
Interest	0	0	0	0	0	0	0	0	0
Other Income	127	144	375	683	820	984	1,180	1,416	1,700
Total Other Income	127	144	375	683	820	984	1,180	1,416	1,700
EBT	2,184	2,724	4,129	5,100	6,202	7,276	8,392	9,555	10,772
Tax	325	303	352	630	2,047	2,401	2,769	3,153	3,555
Misc	45	0	6	0	0	0	0	0	0
EAT	1,904	2,421	3,783	4,470	4,156	4,875	5,623	6,402	7,217
Tax Rate	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%
<b>Operating and Profitability Indicators</b>									
EBITDA Margin	33.9%	33.1%	32.1%	31.7%	32.0%	32.0%	32.0%	32.0%	32.0%
Operating Margin	30.0%	28.6%	28.5%	28.2%	28.6%	28.8%	29.0%	29.1%	29.3%
Net Margin	27.8%	26.8%	28.8%	28.6%	22.1%	22.3%	22.6%	22.9%	23.3%
ROA		31%	34%	30%	22%	20%	19%	18%	17%
<b>% of Revenues</b>									
Expenses	66.1%	66.9%	67.9%	68.3%	68.00%	68.00%	68.00%	68.00%	68.00%
EBITDA	33.9%	33.1%	32.1%	31.7%	32.0%	32.0%	32.0%	32.0%	32.0%
Depreciation	-3.9%	-4.5%	-3.6%	-3.5%	-3.4%	-3.2%	-3.0%	-2.9%	-2.7%
EBIT	30.0%	28.6%	28.5%	28.2%	28.6%	28.8%	29.0%	29.1%	29.3%
Interest	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
EBT	31.8%	30.2%	31.4%	32.6%	33.0%	33.3%	33.7%	34.2%	34.8%
EAT	27.8%	26.8%	28.8%	28.6%	22.1%	22.3%	22.6%	22.9%	23.3%
<b>% Growth</b>									
Revenues		31.6%	45.6%	19.0%	20.10%	16.22%	13.96%	12.25%	10.91%
Expenses		33.2%	47.8%	19.7%	19.6%	16.2%	14.0%	12.2%	10.9%
EAT		27.2%	56.3%	18.2%	-7.0%	17.3%	15.3%	13.9%	12.7%
Other Income		13.4%	160.4%	82.1%	20%	20%	20%	20%	20%
Total Other Income		13.4%	160.4%	82.1%	20.0%	20.0%	20.0%	20.0%	20.0%

<b>EPS(Rs)</b>	<b>70.38</b>	<b>87.72</b>	<b>66.14</b>	<b>78.15</b>	<b>72.65</b>	<b>85.23</b>	<b>98.30</b>	<b>111.92</b>	<b>126.18</b>
Equity Capital	135	138	286	286	286	286	286	286	286
Dividend	50%	50%	50%	50%	50%	50%	50%	50%	50%
Retained Earnings	1,837	2,352	3,640	4,327	4,013	4,732	5,480	6,259	7,074

### 3.3.2 Balance Sheet

Balance Sheet in Rs. Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Assets</b>									
Cash	1,679	3,768	5,643	7,704	10,921	15,292	20,467	26,470	33,330
Other Current Assets	2,086	2,337	3,397	4,622	5,262	6,116	6,969	7,823	8,677
Fixed Assets	2,182	2,837	3,889	4,508	4,977	5,380	5,727	6,025	6,282
Revaluation Reserve	0	0	0	0	0	0	0	0	0
Accumulated Depreciation	1,005	1,275	1,739	1,837	2,204	2,645	3,174	3,809	4,571
Capital Work in Progress	317	571	957	1,260	1,245	1,294	1,420	1,641	1,976
Investments	1,328	876	839	964	1,060	1,166	1,283	1,411	1,553
<b>Total Assets</b>	<b>6,587</b>	<b>9,114</b>	<b>12,986</b>	<b>17,221</b>	<b>21,261</b>	<b>26,603</b>	<b>32,692</b>	<b>39,561</b>	<b>47,246</b>
<b>Liabilities</b>									
Current Liabilities	1,346	2,217	1,824	3,731	3,759	4,368	4,978	5,588	6,198
Equity	135	138	286	286	286	286	286	286	286
Reserves & Surplus	5,106	6,759	10,876	13,204	17,217	21,949	27,428	33,687	40,761
Total Equity	5,241	6,897	11,162	13,490	17,503	22,235	27,714	33,973	41,047
Debt	0	0	0	0	0	0	0	0	0
Miscellaneous	0	0	0	0	0	0	0	0	0
<b>Total Liabilities</b>	<b>6,587</b>	<b>9,114</b>	<b>12,986</b>	<b>17,221</b>	<b>21,261</b>	<b>26,603</b>	<b>32,692</b>	<b>39,561</b>	<b>47,245</b>
<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% Growth</b>									
Current Assets		12.0%	45.4%	36.1%	13.8%	16.2%	14.0%	12.2%	10.9%
<b>Total Assets</b>		<b>38.4%</b>	<b>42.5%</b>	<b>32.6%</b>	<b>23.5%</b>	<b>25.1%</b>	<b>22.9%</b>	<b>21.0%</b>	<b>19.4%</b>
Current Liabilities		64.7%	-17.7%	104.6%	0.7%	16.2%	14.0%	12.2%	10.9%
Total Liabilities		38.4%	42.5%	32.6%	23.5%	25.1%	22.9%	21.0%	19.4%
Accumulated Depreciation		26.9%	36.4%	5.6%	20.0%	20.0%	20.0%	20.0%	20.0%
Investments		-34.0%	-4.2%	14.9%	10%	10%	10%	10%	10%

### 3.3.3 Cash Flow Statement

Cash Flows in Rs Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
PBT	2,184	2,724	4,129	5,100	6,202	7,276	8,392	9,555	10,772
Net Cash Flow Operating Activity	1,359	2,237	3,256	3,816	4,174	5,328	6,132	6,960	7,817
Net Cash Used in Investing Activity	(939)	(392)	(1,065)	(978)	(1,100)	(1,100)	(1,100)	(1,100)	(1,100)
Net Cash Used in Financial Activity	(580)	244	(316)	(777)	143	143	143	143	143
Net Increase in cash & equivalent	(160)	2,089	1,875	2,061	3,217	4,371	5,175	6,003	6,860
Cash & Equivalent Beginning of the year	1,839	1,679	3,768	5,643	7,704	10,921	15,292	20,467	26,470
Cash & Equivalent End Of the year	1,679	3,768	5,643	7,704	10,921	15,292	20,467	26,470	33,330

### 3.3.4 Workings

Workings	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Depreciation</b>									
Fixed Assets	2,182	2,837	3,889	4,508	4,977	5,380	5,727	6,025	6,282
As a % of revenues	31.81%	31.42%	29.58%	28.81%	26.48%	24.63%	23.01%	21.57%	20.27%
Depreciation	268	409	469	546	631	697	753	802	844
as a % of fixed assets		18.74%	16.53%	14.04%	14%	14%	14%	14%	14%
Net Purchases		1,064	1,521	1,165	1,100	1,100	1,100	1,100	1,100
<b>Interest</b>									
Debt	0	0	0	0	0	0	0	0	0
as a % of equity	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Interest	0	0	0	0	0	0	0	0	0
as a % of previous years debt		0.00%	0.00%	0.00%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Current Assets</b>	2,086	2,337	3,397	4,622	5,262	6,116	6,969	7,823	8,677
as a % of revenues	30.41%	25.89%	25.83%	29.54%	28%	28%	28%	28%	28%
Current Liabilities	1,346	2,217	1,824	3,731	3,759	4,368	4,978	5,588	6,198
as a % of revenues	19.62%	24.56%	13.87%	23.84%	20%	20%	20%	20%	20%
<b>Tax</b>									
Provision for income tax	325	303	352	630					
Tax Shield on Interest Expense	0	0	0	0					
Net Tax on EBIT	325	303	352	630					

### 3.3.5 Trend Analysis on Revenues

X	Y	X-X	x	xy	x^2	
2005	6,859	(2)	-3	(20,577)	9	
2006	9,028	(1)	-1	(9,028)	1	
2007	13,149	1	1	13,149	1	
2008	15,648	2	3	46,944	9	
8026	44,684			30,488	20	
	b=	1524.4	1524.4	1524.4	1524.4	1524.4
	a=	11171	11171	11171	11171	11171
	y=	18793	21841.8	24890.6	27939.4	30988.2
	Year	2009	2010	2011	2012	2013
% of increase in revenues		20.10%	16.22%	13.96%	12.25%	10.91%

### 3.3.6 Formulae Used

#### Income Statement

EBITDA = Revenues – Expenses

EBIT = EBITDA – Depreciation

EBT = EBIT – Interest + Other Income

EAT = EBT – Tax + Miscellaneous expenses

#### Balance Sheet

Total Assets = Cash + Other Current Assets + Fixed Assets – Revaluation Reserve – Accumulated Depreciation + Capital Work in Progress + Investments

Total Liabilities = Current Liabilities + Equity + Reserves & Surplus + Debt – Miscellaneous expenses

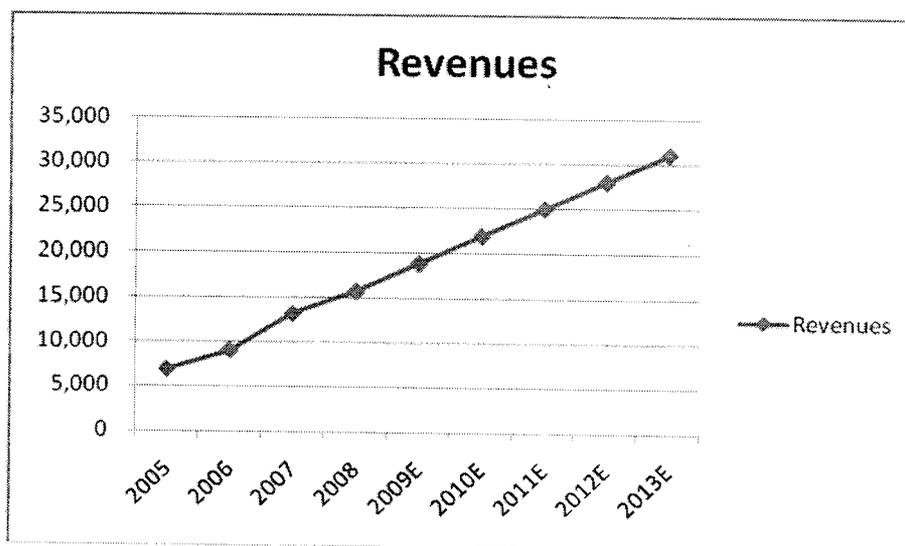
#### Cash Flow

Net Cash Flow Operating Activity = Diff in Current Assets + Diff in Current liabilities + Depreciation + EAT

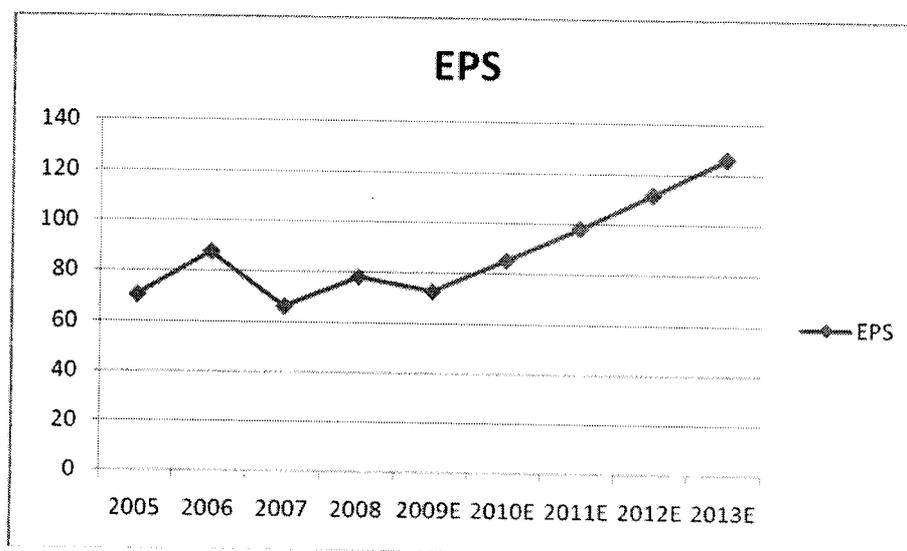
Net Cash used in Financing Activity = Equity \* Dividend Payout Ratio + Diff in debt

Net increase (decrease) in cash = Net Cash Flow Operating Activity + Net Cash used in Investing Activity + Net Cash used in Financing Activity

### 3.3.1 Revenues Chart



### 3.3.2 EPS Chart



### 3.3.7 Interpretation

- The profit margin for the computer sector is the maximum when compared with many other business or sector.
- The profit margin is about 30 % which is among the industry best.
- The net profit is around 22% on an average.
- The P/E ratio is about 14 times which is a attractive avenue for investment for investors who look for earnings from dividend.
- There is no debt in the balance sheet of the company.
- The most of the expenses are made on the salary to the employees.
- The return on the asset growth is very high to an average of 30%.
- A substantial proportionate of the earnings is retained in order for the future investment(as the return on the assets is high and a the great level of growth prospect).

### 3.3.8 Inference

The revenue growth of INFOSYS is expected to be high. The top line growth would be 20% on an average year on year. The investor can expect a return which is not less than 20%.

#### **The revenue drivers:**

- The strong demand for the IT and the IT enabled services.
- The increasing usage of technology in every section of the industries which drives the IT industry

#### **Constraints:**

- The recent melt down of the financial majors who contribute to 30 % of the revenues to the industry
- The slowdown of the U.S economy which has impacted the future growth.
- The fluctuations in the currency market affects the revenues realized.
- The lack of skilled resources is another major constraints.

### 3.4 Analysis of future return of HERO HONDA

#### 3.4.1 Income Statement

Income in Rs. Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
Revenues	8,596	10,086	11,542	10,331	11,804	12,470	13,136	13,802	14,468
Expenses	7,432	8,718	10,369	8,982	10,151	10,724	11,297	11,870	12,443
EBITDA	1,164	1,368	1,173	1,349	1,653	1,746	1,839	1,932	2,026
Depreciation	89	114	139	160	155	167	177	187	196
EBIT	1,075	1,254	1,034	1,189	1,498	1,579	1,662	1,745	1,829
Interest	(1)	(6)	(23)	(35)	1	2	2	3	3
Other Income	141	152	189	185	222	266	320	384	460
Total Other Income	142	158	212	220	221	265	318	381	457
EBT	1,217	1,412	1,246	1,409	1,718	1,844	1,979	2,126	2,287
Tax	406	440	388	442	566	607	651	699	751
Misc	0	0	0	0	0	0	0	0	0
EAT	811	972	858	967	1,153	1,237	1,328	1,427	1,535
Tax Rate	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%
<b>Operating and Profitability Indicators</b>									
EBITDA Margin	13.5%	13.6%	10.2%	13.1%	14.0%	14.0%	14.0%	14.0%	14.0%
Operating Margin	12.5%	12.4%	9.0%	11.5%	12.7%	12.7%	12.7%	12.6%	12.6%
Net Margin	9.4%	9.6%	7.4%	9.4%	9.8%	9.9%	10.1%	10.3%	10.6%
ROA		27%	21%	21%	20%	17%	16%	14%	13%
<b>% of Revenues</b>									
Expenses	86.5%	86.4%	89.8%	86.9%	86.00%	86.00%	86.00%	86.00%	86.00%
EBITDA	13.5%	13.6%	10.2%	13.1%	14.0%	14.0%	14.0%	14.0%	14.0%
Depreciation	-1.0%	-1.1%	-1.2%	-1.5%	-1.3%	-1.3%	-1.3%	-1.4%	-1.4%
EBIT	12.5%	12.4%	9.0%	11.5%	12.7%	12.7%	12.7%	12.6%	12.6%
Interest	0.0%	0.1%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
EBT	14.2%	14.0%	10.8%	13.6%	14.6%	14.8%	15.1%	15.4%	15.8%
EAT	9.4%	9.6%	7.4%	9.4%	9.8%	9.9%	10.1%	10.3%	10.6%
<b>% Growth</b>									
Revenues		17.3%	14.4%	-10.5%	14.26%	5.64%	5.34%	5.07%	4.83%
Expenses		17.3%	18.9%	-13.4%	13.0%	5.6%	5.3%	5.1%	4.8%
EAT		19.9%	-11.7%	12.7%	19.2%	7.3%	7.4%	7.4%	7.6%
Other Income		7.8%	24.3%	-2.1%	20%	20%	20%	20%	20%
Total Other Income		11.3%	34.2%	3.8%	0.3%	20.0%	19.9%	20.0%	20.0%

<b>EPS(Rs)</b>	<b>40.58</b>	<b>48.64</b>	<b>42.96</b>	<b>48.47</b>	<b>28.81</b>	<b>30.93</b>	<b>33.21</b>	<b>35.68</b>	<b>38.38</b>
Equity Capital	40	40	40	40	40	40	40	40	40
Dividend	25%	30%	32%	49%	30%	30%	30%	30%	30%
Retained Earnings	801	960	845	947	1,141	1,225	1,316	1,415	1,523

### 3.4.2 Balance Sheet

Balance Sheet in Rs. Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Assets</b>									
Cash	18	160	38	15	1,221	2,452	3,789	5,239	6,810
Other Current Assets	538	662	877	928	944	998	1,051	1,104	1,157
Fixed Assets	1,104	1,472	1,800	1,938	2,083	2,216	2,339	2,452	2,556
Revaluation Reserve	0	0	0	0	0	0	0	0	0
Accumulated Depreciation	429	522	635	782	938	1,126	1,351	1,622	1,946
Capital Work in Progress	40	44	190	408	412	441	501	599	743
Investments	2,026	2,061	1,973	2,566	2,694	2,829	2,970	3,119	3,275
<b>Total Assets</b>	<b>3,297</b>	<b>3,877</b>	<b>4,243</b>	<b>5,073</b>	<b>6,416</b>	<b>7,810</b>	<b>9,299</b>	<b>10,891</b>	<b>12,595</b>
<b>Liabilities</b>									
Current Liabilities	1,602	1,683	1,608	1,955	2,125	2,245	2,365	2,484	2,604
Equity	40	40	40	40	40	40	40	40	40
Reserves & Surplus	1,453	1,969	2,430	2,946	4,087	5,312	6,628	8,043	9,566
Total Equity	1,493	2,009	2,470	2,986	4,127	5,352	6,668	8,083	9,606
Debt	202	185	165	132	165	214	267	323	384
Miscellaneous	0	0	0	0	0	0	0	0	0
<b>Total Liabilities</b>	<b>3,297</b>	<b>3,877</b>	<b>4,243</b>	<b>5,073</b>	<b>6,416</b>	<b>7,810</b>	<b>9,299</b>	<b>10,891</b>	<b>12,595</b>
<b>Difference</b>	<b>0</b>	<b>0</b>							
<b>% Growth</b>									
Current Assets		23.0%	32.5%	5.8%	1.8%	5.6%	5.3%	5.1%	4.8%
<b>Total Assets</b>		<b>17.6%</b>	<b>9.4%</b>	<b>19.6%</b>	<b>26.5%</b>	<b>21.7%</b>	<b>19.1%</b>	<b>17.1%</b>	<b>15.6%</b>
Current Liabilities		5.1%	-4.5%	21.6%	8.7%	5.6%	5.3%	5.1%	4.8%
Total Liabilities		17.6%	9.4%	19.6%	26.5%	21.7%	19.1%	17.1%	15.6%
Accumulated Depreciation		21.7%	21.6%	23.1%	20.0%	20.0%	20.0%	20.0%	20.0%
Investments		1.7%	-4.3%	30.1%	5%	5%	5%	5%	5%

### 3.4.3 Cash Flow Statement

Cash Flows in Rs Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
PBT	1,217	1,412	1,246	1,410	1,718	1,844	1,979	2,126	2,287
Net Cash Flow Operating Activity	746	936	625	1,211	1,461	1,470	1,572	1,681	1,798
Net Cash Used in Investing Activity	(562)	(323)	(273)	(781)	(300)	(300)	(300)	(300)	(300)
Net Cash Used in Financial Activity	(203)	(471)	(474)	(432)	45	61	65	69	73
Net Increase in cash & equivalent	(19)	142	(122)	(2)	1,206	1,231	1,337	1,450	1,571
Cash & Equivalent Beginning of the year	37	18	160	17	15	1,221	2,452	3,789	5,239
Cash & Equivalent End Of the year	18	160	38	15	1,221	2,452	3,789	5,239	6,810

### 3.4.4 Workings

Workings	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Depreciation</b>									
Fixed Assets	1,104	1,472	1,800	1,938	2,083	2,216	2,339	2,452	2,556
As a % of revenues	12.84%	14.59%	15.60%	18.76%	17.65%	17.77%	17.81%	17.76%	17.66%
Depreciation	89	114	139	160	155	167	177	187	196
as a % of fixed assets		10.33%	9.44%	8.89%	8%	8%	8%	8%	8%
Net Purchases		482	467	298	300	300	300	300	300
<b>Interest</b>									
Debt	202	185	165	132	165	214	267	323	384
as a % of equity	13.53%	9.21%	6.68%	4.42%	4.00%	4.00%	4.00%	4.00%	4.00%
Interest	(1)	(6)	(23)	(35)	1	2	2	3	3
as a % of previous years debt		-2.97%	-12.43%	-21.21%	1.0%	1.0%	1.0%	1.0%	1.0%
Current Assets	538	662	877	928	944	998	1,051	1,104	1,157
as a % of revenues	6.26%	6.56%	7.60%	8.98%	8%	8%	8%	8%	8%
Current Liabilities	1,602	1,683	1,608	1,955	2,125	2,245	2,365	2,484	2,604
as a % of revenues	18.64%	16.69%	13.93%	18.92%	18%	18%	18%	18%	18%
<b>Tax</b>									
Provision for income tax	406	440	388	442					
Tax Shield on Interest Expense	(0)	(2)	(8)	(12)					
Net Tax on EBIT	406	438	380	430					

### 3.4.5 Trend Analysis on Revenues

X	Y	X-x	X	Xy	x^2	
2005	8,596	(2)	-3	(25,788)	9	
2006	10,086	(1)	-1	(10,086)	1	
2007	11,542	1	1	11,542	1	
2008	10,331	2	3	30,993	9	
8026	40,555			6,661	20	
	b=	333.05	333.05	333.05	333.05	333.05
	a=	10138.8	10138.8	10138.8	10138.8	10138.8
	y=	11804	12470.1	13136.2	13802.3	14468.4
	Year	2009	2010	2011	2012	2013
% of increase in revenues		14.26%	5.64%	5.34%	5.07%	4.83%

### 3.4.6 Formulae Used Income Statement

EBITDA = Revenues – Expenses

EBIT = EBITDA – Depreciation

EBT = EBIT – Interest + Other Income

EAT = EBT – Tax + Miscellaneous expenses

### Balance Sheet

Total Assets = Cash + Other Current Assets + Fixed Assets – Revaluation Reserve – Accumulated Depreciation + Capital Work in Progress + Investments

Total Liabilities = Current Liabilities + Equity + Reserves & Surplus + Debt – Miscellaneous expenses

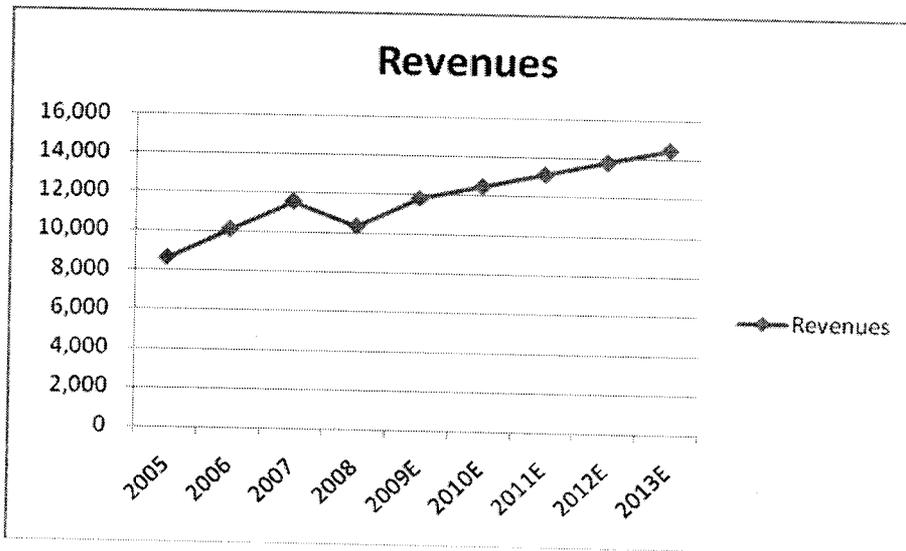
### Cash Flow

Net Cash Flow Operating Activity = Diff in Current Assets + Diff in Current liabilities + Depreciation + EAT

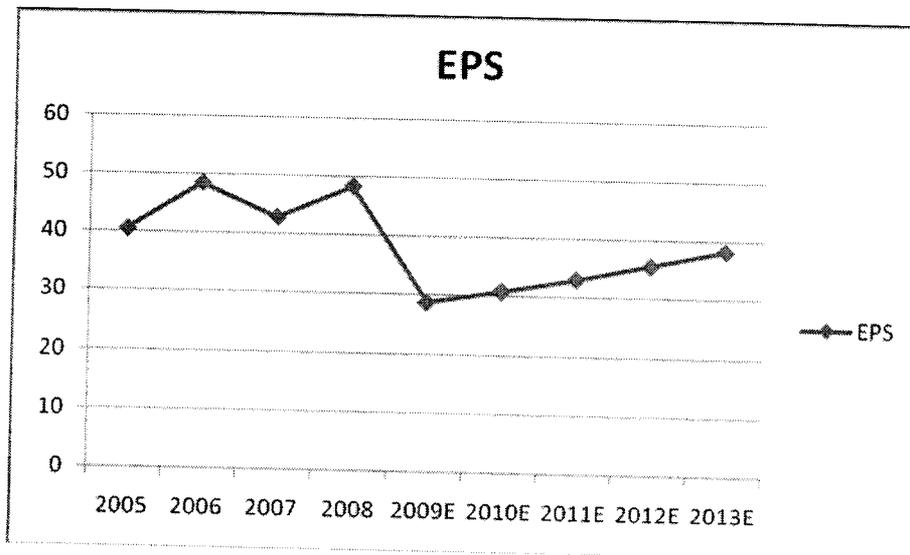
Net Cash used in Financing Activity = Equity \* Dividend Payout Ratio + Diff in debt

Net increase (decrease) in cash = Net Cash Flow Operating Activity + Net Cash used in Investing Activity + Net Cash used in Financing Activity

### 3.4.1 Revenues Chart



### 3.4.2 EPS Chart



### 3.4.7 Interpretation

- Revenue in the year 2007 -08 has shown a negative growth compared the previous year's revenue.
- The return on asset is very high around 20% on an average.
- The revenue has come down due to the decline in sales of the 2 wheeler.
- The sales came down due to the interest rate factor and various other factors
- In spite of the low revenue generated in the year 08 the EPS has remained the same level as the previous years. This is due to the fact that the profit margin has improved.
- The dividend payout ratio has been around 35 % on an average.

### 3.4.8 Inference

The revenue growth in the previous year has shown a negative growth this is mainly due the interest rate factor. The investor can expect a minimum return of 24% on an average. But the revenue is affected by the higher interest rate and also the increasing input cost.

#### Revenue drivers:

- The increasing per capita income of the individuals.
- The development in the infrastructure such as the roads etc.

#### Constraints:

- The interest rate is one major factor. Higher interest rate would mean that the customer has to pay more monthly Emi's. In India most of the two wheeler sales is done through bank loans.
- The increasing input cost is another constraint which affects the margins.



### 3.5 Analysis of future return of DLF

#### 3.5.1 Income Statement

Income in Rs. Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
Revenues	703	917	1,133	5,532	5,747	7,217	8,688	10,158	11,628
Expenses	288	349	443	2,451	2,299	2,887	3,475	4,063	4,651
EBITDA	415	568	690	3,081	3,448	4,330	5,213	6,095	6,977
Depreciation	5	7	9	25	107	240	363	478	584
EBIT	410	561	681	3,056	3,341	4,091	4,849	5,617	6,393
Interest	246	278	356	447	587	329	419	541	707
Other Income	90	167	296	525	919	1,608	2,814	4,924	8,617
Total Other Income	(156)	(111)	(60)	78	332	1,279	2,394	4,383	7,910
EBT	254	450	621	3,134	3,672	5,369	7,244	10,000	14,302
Tax	120	189	213	543	625	1,443	1,971	2,759	4,013
Misc	0	0	0	0	0	0	0	0	0
EAT	134	261	408	2,591	3,048	3,927	5,273	7,241	10,290
Tax Rate	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%
<b>Operating and Profitability Indicators</b>									
EBITDA Margin	59.0%	61.9%	60.9%	55.7%	60.0%	60.0%	60.0%	60.0%	60.0%
Operating Margin	58.3%	61.2%	60.1%	55.2%	58.1%	56.7%	55.8%	55.3%	55.0%
Net Margin	19.1%	28.5%	36.0%	46.8%	53.0%	54.4%	60.7%	71.3%	88.5%
ROA		7%	5%	15%	12%	13%	13%	14%	16%
<b>% of Revenues</b>									
Expenses	41.0%	38.1%	39.1%	44.3%	40.00%	40.00%	40.00%	40.00%	40.00%
EBITDA	59.0%	61.9%	60.9%	55.7%	60.0%	60.0%	60.0%	60.0%	60.0%
Depreciation	-0.7%	-0.8%	-0.8%	-0.5%	-1.9%	-3.3%	-4.2%	-4.7%	-5.0%
EBIT	58.3%	61.2%	60.1%	55.2%	58.1%	56.7%	55.8%	55.3%	55.0%
Interest	-35.0%	-30.3%	-31.4%	-8.1%	-10.2%	-4.6%	-4.8%	-5.3%	-6.1%
EBT	36.1%	49.1%	54.8%	56.7%	63.9%	74.4%	83.4%	98.4%	123.0%
EAT	19.1%	28.5%	36.0%	46.8%	53.0%	54.4%	60.7%	71.3%	88.5%
<b>% Growth</b>									
Revenues		30.4%	23.6%	388.3%	3.89%	25.58%	20.37%	16.92%	14.47%
Expenses		21.2%	26.9%	453.3%	-6.2%	25.6%	20.4%	16.9%	14.5%
EAT		94.8%	56.3%	535.0%	17.6%	28.8%	34.3%	37.3%	42.1%
Other Income		85.6%	77.2%	77.4%	75%	75%	75%	75%	75%
Total Other Income		-28.8%	-45.9%	-	325.2%	285.5%	87.2%	83.1%	80.5%

<b>EPS(Rs)</b>	<b>67.00</b>	<b>14.11</b>	<b>2.68</b>	<b>15.24</b>	<b>17.93</b>	<b>23.10</b>	<b>31.02</b>	<b>42.59</b>	<b>60.53</b>
Equity Capital	4	37	305	340	340	340	340	340	340
Dividend	0%	0%	0%	0%	0%	0%	0%	0%	0%
Retained Earnings	134	261	408	2,591	3,048	3,927	5,273	7,241	10,290

### 3.5.2 Balance Sheet

Balance Sheet in Rs. Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Assets</b>									
Cash	5	46	25	984	3,409	4,660	7,822	13,714	23,763
Other Current Assets	1,705	3,046	9,417	17,362	17,241	21,652	26,063	30,474	34,885
Fixed Assets	98	109	365	1,534	3,427	5,187	6,824	8,346	9,762
Revaluation Reserve	0	0	0	0	0	0	0	0	0
Accumulated Depreciation	27	29	37	59	74	92	115	144	180
Capital Work in Progress	406	456	665	1,781	1,520	1,221	879	488	41
Investments	173	1,397	769	1,840	2,116	2,433	2,798	3,218	3,701
<b>Total Assets</b>	<b>2,360</b>	<b>5,025</b>	<b>11,204</b>	<b>23,442</b>	<b>27,639</b>	<b>35,061</b>	<b>44,271</b>	<b>56,096</b>	<b>71,971</b>
<b>Liabilities</b>									
Current Liabilities	1,346	1,367	3,783	3,787	8,621	10,826	13,031	15,237	17,442
Equity	4	37	305	340	340	340	340	340	340
Reserves & Surplus	380	607	346	10,928	13,976	17,902	23,175	30,416	40,706
Total Equity	384	644	651	11,268	14,316	18,242	23,515	30,756	41,046
Debt	630	3,014	6,770	8,387	4,703	5,992	7,724	10,103	13,483
Miscellaneous	0	0	0	0	0	0	0	0	0
<b>Total Liabilities</b>	<b>2,360</b>	<b>5,025</b>	<b>11,204</b>	<b>23,442</b>	<b>27,639</b>	<b>35,061</b>	<b>44,271</b>	<b>56,096</b>	<b>71,971</b>
<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% Growth</b>									
Current Assets		78.7%	209.2%	84.4%	-0.7%	25.6%	20.4%	16.9%	14.5%
<b>Total Assets</b>		<b>112.9%</b>	<b>123.0%</b>	<b>109.2%</b>	<b>17.9%</b>	<b>26.9%</b>	<b>26.3%</b>	<b>26.7%</b>	<b>28.3%</b>
Current Liabilities		1.6%	176.7%	0.1%	127.6%	25.6%	20.4%	16.9%	14.5%
Total Liabilities		112.9%	123.0%	109.2%	17.9%	26.9%	26.3%	26.7%	28.3%
Accumulated Depreciation		7.4%	27.6%	59.5%	25.0%	25.0%	25.0%	25.0%	25.0%
Investments		707.5%	-45.0%	139.3%	15%	15%	15%	15%	15%

### 3.5.3 Cash Flow Statement

Cash Flows in Rs Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
PBT	97	347	620	3,117	3,672	5,369	7,244	10,000	14,302
Net Cash Flow Operating Activity	550	(64)	(2,626)	(1,505)	8,110	1,961	3,430	5,513	8,669
Net Cash Used in Investing Activity	(579)	(2,146)	(628)	(6,482)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)
Net Cash Used in Financial Activity	24	2,251	3,233	8,946	(3,684)	1,290	1,732	2,379	3,380
Net Increase in cash & equivalent	(5)	41	(21)	959	2,425	1,251	3,162	5,892	10,049
Cash & Equivalent Beginning of the year	10	5	46	25	984	3,409	4,660	7,822	13,714
Cash & Equivalent End Of the year	5	46	25	984	3,409	4,660	7,822	13,714	23,763

### 3.5.4 Workings

Workings	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Depreciation</b>									
Fixed Assets	98	109	365	1,534	3,427	5,187	6,824	8,346	9,762
As a % of revenues	13.94%	11.89%	32.22%	27.73%	59.62%	71.87%	78.55%	82.16%	83.95%
Depreciation	5	7	9	25	107	240	363	478	584
as a % of fixed assets		7.14%	8.26%	6.85%	7%	7%	7%	7%	7%
Net Purchases		18	265	1,194	2,000	2,000	2,000	2,000	2,000
<b>Interest</b>									
Debt	630	3,014	6,770	8,387	4,703	5,992	7,724	10,103	13,483
as a % of equity	164.06%	468.01%	1039.94%	74.43%	32.85%	32.85%	32.85%	32.85%	32.85%
Interest	246	278	356	447	587	329	419	541	707
as a % of previous years debt		44.13%	11.81%	6.60%	7.0%	7.0%	7.0%	7.0%	7.0%
<b>Current Assets</b>	1,705	3,046	9,417	17,362	17,241	21,652	26,063	30,474	34,885
as a % of revenues	242.53%	332.17%	831.16%	313.85%	300%	300%	300%	300%	300%
<b>Current Liabilities</b>	1,346	1,367	3,783	3,787	8,621	10,826	13,031	15,237	17,442
as a % of revenues	191.47%	149.07%	333.89%	68.46%	150%	150%	150%	150%	150%
<b>Tax</b>									
Provision for income tax	120	189	213	543					
Tax Shield on Interest Expense	81	92	117	148					
Net Tax on EBIT	201	281	330	691					

### 3.5.5 Trend Analysis on Revenues

X	Y	X-x	X	Xy	x^2
2005	703	(2)	-3	(2,109)	9
2006	917	(1)	-1	(917)	1
2007	1,133	1	1	1,133	1
2008	5,532	2	3	16,596	9
8026	8,285			14,703	20
	b=	735.15	735.15	735.15	735.15
	a=	2071.25	2071.25	2071.25	2071.25
	y=	5747	7217.3	8687.6	10157.9
	Year	2009	2010	2011	2012
	% of increase in revenues	3.89%	25.58%	20.37%	16.92%

### 3.5.6 Formulae Used

#### Income Statement

EBITDA = Revenues – Expenses

EBIT = EBITDA – Depreciation

EBT = EBIT – Interest + Other Income

EAT = EBT – Tax + Miscellaneous expenses

#### Balance Sheet

Total Assets = Cash + Other Current Assets + Fixed Assets – Revaluation Reserve – Accumulated Depreciation + Capital Work in Progress + Investments

Total Liabilities = Current Liabilities + Equity + Reserves & Surplus + Debt – Miscellaneous expenses

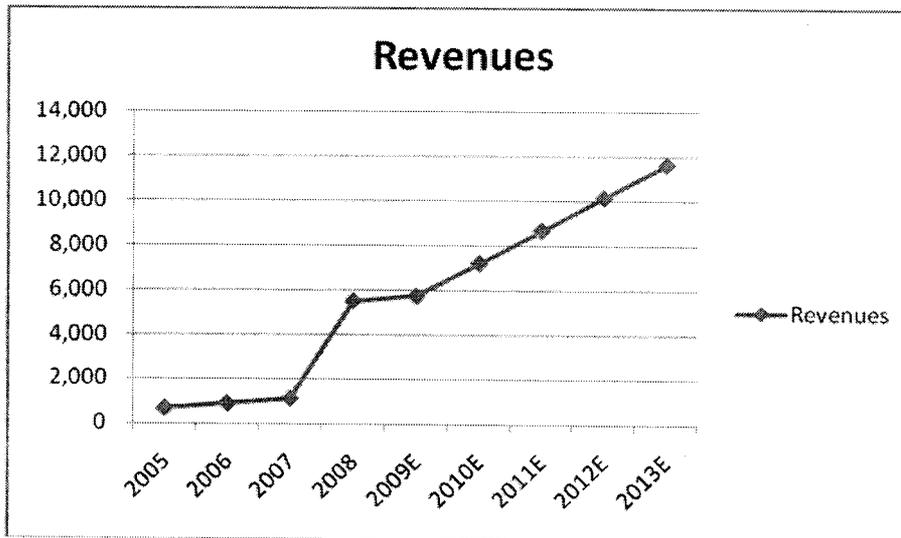
#### Cash Flow

Net Cash Flow Operating Activity = Diff in Current Assets + Diff in Current liabilities + Depreciation + EAT

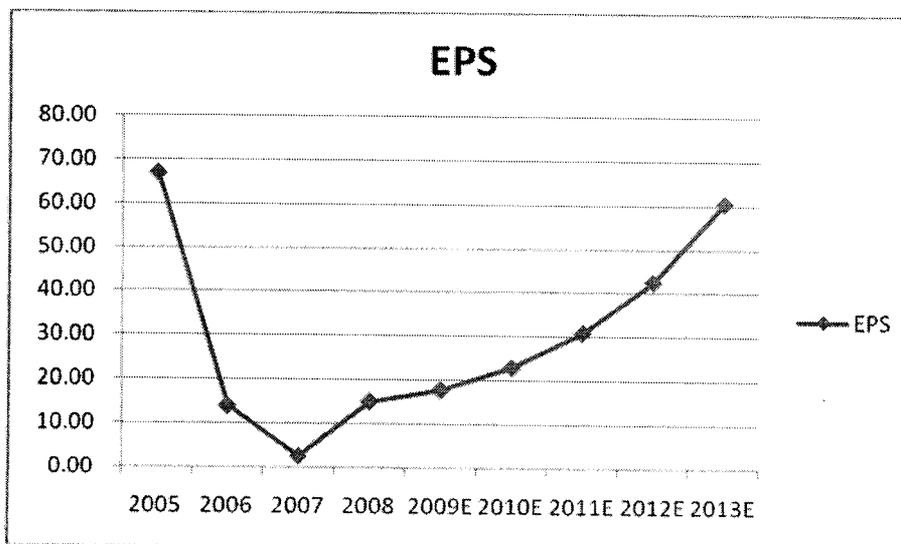
Net Cash used in Financing Activity = Equity \* Dividend Payout Ratio + Diff in debt

Net increase (decrease) in cash = Net Cash Flow Operating Activity + Net Cash used in Investing Activity + Net Cash used in Financing Activity

### 3.5.1 Revenues Chart



### 3.5.2 EPS Chart



### **3.5.7 Interpretation**

- The operating profit is around 50 % on an average. This is mainly due to the fact that they are more towards the premium apartments and commercial complex.
- Revenue in the year 2007 – 08 has grown about 350 percent while compared to previous years revenue generated.
- Earnings per share have grown up around 7 times in the previous year.
- The return received from the stock year on year has substantially increased.
- The earnings after tax has grown substantially year on year.

### **3.5.8 Inference**

The top line growth for the DLF construction is very strong. The investor can expect a minimum return of 29 % on an average for the next few years. The earnings potential and the land bank of DLF is very good.

#### **Revenue drivers:**

- The nationwide housing shortage is estimated at 22.4 million residential units and continues to increase. Rapid population growth and the growth of India's middle class is creating the demand for housing.
- Residential market is 80% of the total real estate market
- Gap between supply and demand in residential market is 41 billion sq.ft.
- Office space demand of 66 million sq.ft. for IT industry over next 5 years
- Organized retail space demand of 40 million sq.ft. over next 3-4 years

#### **Constrains:**

- Input cost increase is a major concern
- Mortgage interest rate hike
- High price and buyer anticipate the price will fall in future
- Income levels have not risen in proportion to the increase in property prices.

### 3.6 Analysis of future return of Bharti Airtel

#### 3.6.1 Income Statement

Income in Rs. Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
Revenues	7,903	11,228	17,794	25,703	30,649	36,645	42,642	48,638	54,635
Expenses	5,115	7,347	10,678	15,202	18,389	21,987	25,585	29,183	32,781
EBITDA	2,788	3,881	7,116	10,501	12,259	14,658	17,057	19,455	21,854
Depreciation	1,019	1,432	2,353	3,280	3,374	3,569	3,741	3,892	4,025
EBIT	1,769	2,449	4,763	7,221	8,886	11,089	13,316	15,564	17,829
Interest	246	225	256	484	597	787	1,030	1,333	1,709
Other Income	41	61	93	235	434	801	1,479	2,731	5,043
Total Other Income	(205)	(164)	(163)	(249)	(163)	14	449	1,398	3,335
EBT	1,564	2,285	4,600	6,972	8,723	11,103	13,765	16,962	21,164
Tax	353	273	568	728	2,282	2,877	3,512	4,264	5,275
Misc	0	0	0	0	0	0	0	0	0
EAT	1,211	2,012	4,032	6,244	6,441	8,226	10,253	12,698	15,889
Tax Rate	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%
<b>Operating and Profitability Indicators</b>									
EBITDA Margin	35.3%	34.6%	40.0%	40.9%	40.0%	40.0%	40.0%	40.0%	40.0%
Operating Margin	22.4%	21.8%	26.8%	28.1%	29.0%	30.3%	31.2%	32.0%	32.6%
Net Margin	15.3%	17.9%	22.7%	24.3%	21.0%	22.4%	24.0%	26.1%	29.1%
ROA		12%	17%	18%	14%	14%	14%	14%	14%
<b>% of Revenues</b>									
Expenses	64.7%	65.4%	60.0%	59.1%	60.00%	60.00%	60.00%	60.00%	60.00%
EBITDA	35.3%	34.6%	40.0%	40.9%	40.0%	40.0%	40.0%	40.0%	40.0%
Depreciation	-12.9%	-12.8%	-13.2%	-12.8%	-11.0%	-9.7%	-8.8%	-8.0%	-7.4%
EBIT	22.4%	21.8%	26.8%	28.1%	29.0%	30.3%	31.2%	32.0%	32.6%
Interest	-3.1%	-2.0%	-1.4%	-1.9%	-1.9%	-2.1%	-2.4%	-2.7%	-3.1%
EBT	19.8%	20.4%	25.9%	27.1%	28.5%	30.3%	32.3%	34.9%	38.7%
EAT	15.3%	17.9%	22.7%	24.3%	21.0%	22.4%	24.0%	26.1%	29.1%
<b>% Growth</b>									
Revenues		42.1%	58.5%	44.4%	19.24%	19.57%	16.36%	14.06%	12.33%
Expenses		43.6%	45.3%	42.4%	21.0%	19.6%	16.4%	14.1%	12.3%
EAT		66.1%	100.4%	54.9%	3.2%	27.7%	24.6%	23.8%	25.1%
Other Income		48.8%	52.5%	152.7%	85%	85%	85%	85%	85%

Total Other Income		-20.0%	-0.6%	52.8%	-34.7%	-	3073.9%	211.3%	138.5%
EPS(Rs)	<b>6.52</b>	<b>10.62</b>	<b>21.27</b>	<b>32.9</b>	<b>33.95</b>	<b>43.36</b>	<b>54.05</b>	<b>66.94</b>	<b>83.76</b>
Equity Capital	1853	1893	1895	1897	1897	1897	1897	1897	1897
Dividend	0%	0%	0%	0%	0%	0%	0%	0%	0%
Retained Earnings	1,211	2,012	4,032	6,244	6,441	8,226	10,253	12,698	15,889

### 3.6.2 Balance Sheet

Balance Sheet in Rs. Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Assets</b>									
Cash	384	307	779	488	9,896	21,132	35,233	52,732	74,604
Other Current Assets	2,102	3,032	4,628	7,951	7,969	9,528	11,087	12,646	14,205
Fixed Assets	13,240	17,951	26,509	28,115	29,741	31,172	32,432	33,540	34,515
Revaluation Reserve	2	2	2	2	0	0	0	0	0
Accumulated Depreciation	3,475	4,945	7,204	9,085	11,356	14,195	17,744	22,180	27,725
Capital Work in Progress	994	2,341	2,375	2,751	3,377	4,327	5,703	7,640	10,312
Investments	932	720	706	10,953	12,596	14,485	16,658	19,157	22,030
<b>Total Assets</b>	<b>14,175</b>	<b>19,404</b>	<b>27,791</b>	<b>41,171</b>	<b>52,222</b>	<b>66,449</b>	<b>83,368</b>	<b>103,535</b>	<b>127,941</b>
<b>Liabilities</b>									
Current Liabilities	4,708	7,273	11,043	14,362	16,857	20,155	23,453	26,751	30,049
Equity	1,853	1,893	1,895	1,897	1,897	1,897	1,897	1,897	1,897
Reserves & Surplus	2,675	5,437	9,515	18,283	24,724	32,950	43,203	55,901	71,789
Total Equity	4,528	7,330	11,410	20,180	26,621	34,847	45,100	57,798	73,686
Debt	4,994	4,809	5,341	6,629	8,745	11,447	14,815	18,986	24,205
Miscellaneous	55	8	3	0	0	0	0	0	0
<b>Total Liabilities</b>	<b>14,175</b>	<b>19,404</b>	<b>27,791</b>	<b>41,171</b>	<b>52,222</b>	<b>66,449</b>	<b>83,368</b>	<b>103,535</b>	<b>127,941</b>
<b>Difference</b>	<b>0</b>	<b>0</b>							
<b>% Growth</b>									
Current Assets		44.2%	52.6%	71.8%	0.2%	19.6%	16.4%	14.1%	12.3%
<b>Total Assets</b>		<b>36.9%</b>	<b>43.2%</b>	<b>48.1%</b>	<b>26.8%</b>	<b>27.2%</b>	<b>25.5%</b>	<b>24.2%</b>	<b>23.6%</b>
Current Liabilities		54.5%	51.8%	30.1%	17.4%	19.6%	16.4%	14.1%	12.3%
Total Liabilities		36.9%	43.2%	48.1%	26.8%	27.2%	25.5%	24.2%	23.6%
Accumulated Depreciation		42.3%	45.7%	26.1%	25.0%	25.0%	25.0%	25.0%	25.0%
Investments		-22.7%	-1.9%	1451.4%	15%	15%	15%	15%	15%

### 3.6.3 Cash Flow Statement

Cash Flows in Rs Crores	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
PBT	1,564	2,286	4,601	6,972	8,723	11,103	13,765	16,962	21,164
Net Cash Flow Operating Activity	3,006	4,547	8,107	10,459	12,292	13,534	15,733	18,328	21,652
Net Cash Used in Investing Activity	(2,330)	(5,000)	(7,975)	(11,648)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
Net Cash Used in Financial Activity	(423)	376	340	898	2,116	2,702	3,368	4,171	5,219
Net Increase in cash & equivalent	253	(77)	472	(291)	9,408	11,236	14,101	17,500	21,872
Cash & Equivalent Beginning of the year	131	384	307	779	488	9,896	21,132	35,233	52,732
Cash & Equivalent End Of the year	384	307	779	488	9,896	21,132	35,233	52,732	74,604

### 3.6.4 Workings

Workings	2005	2006	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Depreciation</b>									
Fixed Assets	13,240	17,951	26,509	28,115	29,741	31,172	32,432	33,540	34,515
As a % of revenues	167.53%	159.88%	148.98%	109.38%	97.04%	85.07%	76.06%	68.96%	63.17%
Depreciation	1,019	1,432	2,353	3,280	3,374	3,569	3,741	3,892	4,025
as a % of fixed assets		10.82%	13.11%	12.37%	12%	12%	12%	12%	12%
Net Purchases		6,143	10,911	4,886	5,000	5,000	5,000	5,000	5,000
Interest									
Debt	4,994	4,809	5,341	6,629	8,745	11,447	14,815	18,986	24,205
as a % of equity	110.29%	65.61%	46.81%	32.85%	32.85%	32.85%	32.85%	32.85%	32.85%
Interest	246	225	256	484	597	787	1,030	1,333	1,709
as a % of previous years debt		4.51%	5.32%	9.06%	9.0%	9.0%	9.0%	9.0%	9.0%
Current Assets	2,102	3,032	4,628	7,951	7,969	9,528	11,087	12,646	14,205
as a % of revenues	26.60%	27.00%	26.01%	30.93%	26%	26%	26%	26%	26%
Current Liabilities	4,708	7,273	11,043	14,362	16,857	20,155	23,453	26,751	30,049
as a % of revenues	59.57%	64.78%	62.06%	55.88%	55%	55%	55%	55%	55%
Tax									
Provision for income tax	353	273	568	728					
Tax Shield on Interest Expense	81	74	84	160					
Net Tax on EBIT	434	347	652	888					

### 3.6.5 Trend Analysis on Revenues

X	Y	X-x	X	xy	x^2	
2005	7,903	(2)	-3	(23,709)	9	
2006	11,228	(1)	-1	(11,228)	1	
2007	17,794	1	1	17,794	1	
2008	25,703	2	3	77,109	9	
8026	62,628			59,966	20	
	b=	2998.3	2998.3	2998.3	2998.3	2998.3
	a=	15657	15657	15657	15657	15657
	y=	30648.5	36645.1	42641.7	48638.3	54634.9
	Year	2009	2010	2011	2012	2013
% of increase in revenues		19.24%	19.57%	16.36%	14.06%	12.33%

### 3.6.7 Formulae Used

#### Income Statement

EBITDA = Revenues – Expenses

EBIT = EBITDA – Depreciation

EBT = EBIT – Interest + Other Income

EAT = EBT – Tax + Miscellaneous expenses

#### Balance Sheet

Total Assets = Cash + Other Current Assets + Fixed Assets – Revaluation Reserve – Accumulated Depreciation + Capital Work in Progress + Investments

Total Liabilities = Current Liabilities + Equity + Reserves & Surplus + Debt – Miscellaneous

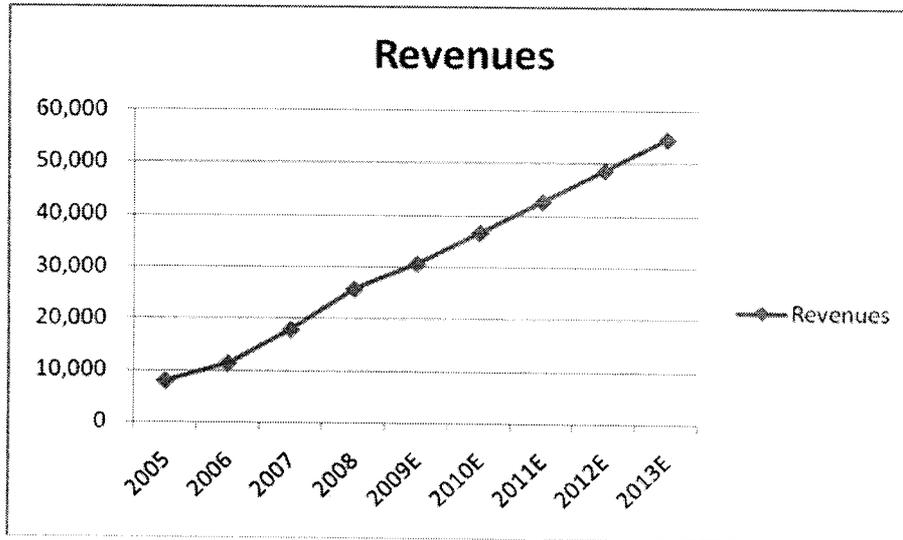
#### Cash Flow

Net Cash Flow Operating Activity = Diff in Current Assets + Diff in Current liabilities + Depreciation + EAT

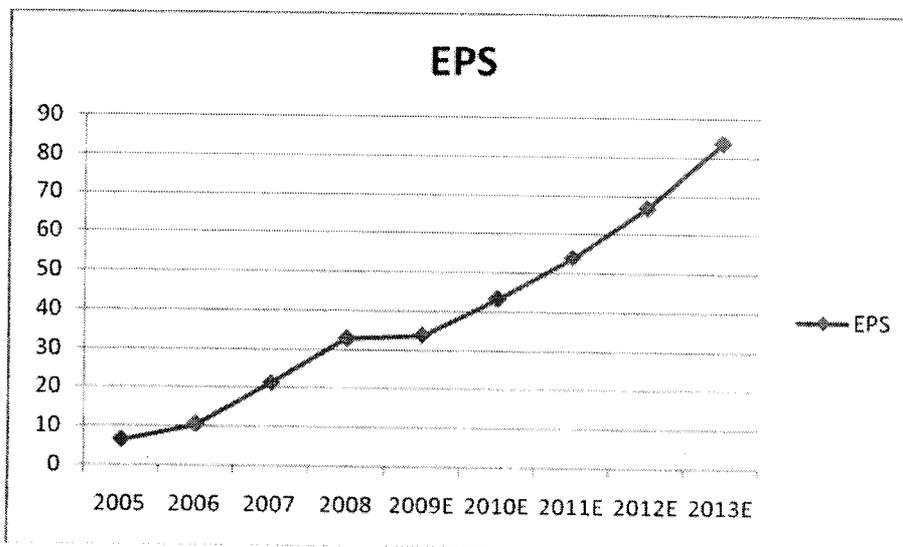
Net Cash used in Financing Activity = Equity \* Dividend Payout Ratio + Diff in debt

Net increase (decrease) in cash = Net Cash Flow Operating Activity + Net Cash used in Investing Activity + Net Cash used in Financing Activity

### 3.6.1 Revenues Chart



### 3.6.2 EPS Chart



### **3.6.8 Interpretation**

- In the past three years the revenues has grown up at a rate of 48 percent. The revenue growth of Bharti is the best as for the industry growth as a whole.
- The cash flow of the company is in a comfortable position.
- The earnings of the Bharti has grown about 100% in the year 06-07 and around 50 percent in the year 07-08 on the year on year basis.
- The dividend has not been paid to the investors in the last 4 years as a result of the vigorous investment plan of the company.
- The return received from the stock year on year has substantially increased by on an average.
- The EPS has grown and it is to grow atleast 15% year on year.

### **3.6.9 Inference**

The revenue growth of Bharti is expected to be at an average of 18% year on year. The growth in the telecom has been rapid and expected to grow at a similar phase. If the investor makes an investment in this stock then he can expect a return of 31% year on year

#### **Revenue drivers:**

- The subscribers are increasing around 10 million quarter on quarter basis.
- The increasing per capita income impacts the number of subscribers and the average number of calls made per month.
- Excellent business model has been built.
- The launch of blackberry services is gaining momentum.

#### **Constrains:**

- The increasing market players is reducing the profit margins.
- The huge amount of investments required in order to improve the infrastructure and provide coverage for the rural sector.

**Things to watch in future:**

- The consolidation that would take place due to the increased market players.
- The sharing of the towers which is to be given approval by the TRAI. This would enable to reduce the cost.
- The allocation of the 3G spectrum which would be an important development in the coming future.

## ***FINDINGS***

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## CHAPTER 4

### Findings

#### 4.1 RIL

The revenue growth of RIL has increased substantially around 20 percent year on year. This shows stable growth potential. The future revenues calculated using the trend analysis gives a picture of the minimum revenue growth that is expected in the future. The earnings per share have grown around 15 to 20 percent and is expected to show a steady growth. The average minimum return on the investment from the security that an investor could expect is 21 within a + or – 3.variation.

#### 4.2 L&T

The revenue growth of L&T has increased substantially around 24 percent on an average. This shows stable growth potential. The future revenues calculated using the trend analysis gives a picture of the minimum revenue growth that is expected in the future. The earnings per share has been stable around 50 to 70 rupees and is expected to continue so. The average minimum return on the investment from the security that an investor could expect is 17 within a + or – 3.variation.

#### 4.3 INFOSYS

The revenue growth of INFOSYS has increased substantially around 30 percent on an average. This shows stable growth potential. The future revenues calculated using the trend analysis gives a picture of the minimum revenue growth that is expected in the future. The earnings per share have been stable around 60 to 80 rupees and is expected to continue so. The average minimum return on the investment from the security that an investor could expect is 20 within a + or – 3.variation.

#### 4.4 HERO HONDA

The revenue growth of HERO HONDA has increased substantially around 10 percent on an average. This shows stable growth potential. The future revenues calculated using the trend analysis gives a picture of the minimum revenue growth that is expected in the future. The earnings per share have been stable around 40 rupees and is expected to continue so. The average minimum return on the investment from the security that an investor could expect is 22 within a + or – 3.variation.

#### **4.5 DLF**

The revenue growth of DLF has increased substantially around 20 percent year on year. This shows stable growth potential. The future revenues calculated using the trend analysis gives a picture of the minimum revenue growth that is expected in the future. The earnings per share have grown around 20 percent and is expected to continue so. The average minimum return on the investment from the security that an investor could expect is 27 within a + or – 3 variation.

#### **4.6 BHARTI AIRTEL**

The revenue growth of BHARTI AIRTEL has increased substantially around 40 percent year on year. This shows stable growth potential. The future revenues calculated using the trend analysis gives a picture of the minimum revenue growth that is expected in the future. The earnings per share have grown around 20 percent and is expected to continue so. The minimum revenue from the stock that an investor would be 17 with a variation within + or – 3. The average minimum return on the investment from the security that an investor could expect is 18% within a + or – 3 variation.

*SUGGESTIONS*

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## CHAPTER 5

### SUGGESTIONS

The future return of the various companies that are selected from the S&P Nifty index is forecasted in this project. The companies were segmented into 6 different strata's and the analysis is carried on. Before investing in a security it is essential to forecast the earning potential of it.

From the results obtained from the analysis few suggestions are drawn as to which would give the investor about the return he can expect from the securities.

- ✓ If the company fails to meet the earnings as calculated, then the investor can sell the stock as the growth of the company was not as per minimum expectation.
- ✓ Based on the earnings calculated for the future the investor can decide whether it meets his return expectations or not.
- ✓ The investors must be well aware of the risk involved in the securities market.
- ✓ If you analyze the RIL share it looks attractive to buy with a P/E ratio of about 13 times. But due to the negative news from the U.S. economy the stock price is fluctuating to year lows. The investor should select the stock and should be looking to purchase value buying at every sharp dips.
- ✓ If you analyze the returns generated from the stock RIL it is stable and the fundamentals of it on a long run is also strong. The RIL is one which could be recommended to customers who are satisfied with a return of 20 % at a minimal risk.
- ✓ The security L&T is not looking strong due the various constraints. The stock is influenced by various factors like slow growth rate of the world economy, increasing prices of commodities worldwide. Thus the investor can make investments in other avenues.

- ✓ The DLF is one stock which is looking very attractive in terms of the returns generated and the fundamentals of growth. The growth looks promising with the real estate prices touching all time highs.
  
- ✓ If results of the L&T in the quarterly statement in Q2 of 08-09 was not as per the expectation. Knowing this investors must learn to trade in falling market by going for short sell or future contract or for put option.
  
- ✓ In the long run the stock value will get corrected as per the fundamental value.
  
- ✓ Investors should plan for the purchases they are going to make by going through the past performances and company results but should not rely on them.
  
- ✓ Unrealistic expectations which finally leads to overtrading of the scrips by the investors should be avoided which sometimes leads to losses.
  
- ✓ If the investor gets a return more than the expected return he should be looking to book profits.
  
- ✓ With the cash available he should be looking for value buying.
  
- ✓ He should be careful with the manipulation that might take place and make sure he does not get trapped in it.
  
- ✓ He should not get trapped by purchasing the stocks only for the reason the volume of trade in it is high.
  
- ✓ The investor must note the volume of trade carried out in the futures market. He should look whether many short build ups are happening. Short build ups are a sign that the stock prices would suggest the future price movements.

*CONCLUSION*

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## **CHAPTER 6**

### **CONCLUSION**

The analysis on the future Return that is performed in the project would enable to give the investor an idea about the minimum return that the investor can expect from the investment. This would enable the investor to choose the security that would provide the return that he expects. The investors are likely to invest in the companies which show a strong growth in terms of the revenues, EPS and asset growths.

The calculation of the future income statement made in the analysis would enable the investor to make an investment which is profitable. If the result of the companies does not lie in par with the statement given in the analysis then the investor can choose to sell or buy the security. The price-earnings ratio would provide the investor an idea about the returns he would get as a return from the earnings growth.

Thus an analysis of the intrinsic value on the future returns on the select S&P Nifty scrips. The analysis which is performed based on the increase in the value of the assets and the earnings per share would enable the retail investors a method to calculate the intrinsic value of the security.

## *BIBLIOGRAPHY*

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## **BIBLIOGRAPHY**

### **BOOK REFERENCE**

- Bhalla v.k “Security analysis and portfolio management”, 14<sup>th</sup> edition.
- Donald. E.Fischer & Ronald.J.Jordan “Security analysis and portfolio management”, prentice hall of india pvtc. New Delhi.
- Avadhani P.A “ Security analysis and portfolio management”
- Zvi Bodi, Alex Kane,Alan J Marcus,Pitabas Mohanty, “ Investments”,6<sup>th</sup> edition
- Kevin.s “ portfolio management “ published in the year 2000

### **WEBSITE REFERENCE**

- [www.money.rediff.com](http://www.money.rediff.com)
- [www.economictimes.com](http://www.economictimes.com)
- [www.nseindia.com](http://www.nseindia.com)
- [www.moneycontrol.com](http://www.moneycontrol.com)
- [www.yahoofinance.com](http://www.yahoofinance.com)
- [www.investopedia.com](http://www.investopedia.com)
- [www.bloomberg.com](http://www.bloomberg.com)