“A STUDY ON IMPACT OF EARNINGS PER SHARE, DIVIDEND PER SHARE PRICE EARNING RATIO ON BEHAVIOUR OF SHARE MARKET PRICE MOVEMENTS (PHARMA SECTOR) WITH SPECIAL REFERENCE TO NSE”

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ABSTRACT

The study entitled “Impact of Earnings per Share, Dividend per Share, and Price Earnings Ratio on behavior of Market prices. The study was undertaken to know whether the Earnings per Share, Dividend per Share and Price Earnings Ratio can be used as a significant explanatory variable for predicting share Market prices. Through this study the impact of Earnings per Share, Dividend Per Share, Price Earnings Ratio on share price of selected industries have been analyzed, the strength of association of variables have also been measured. The study was conducted by collecting data from various websites and magazines. The selected companies were those companies which are listed and activity traded with high volumes in NSE. The data were collected from 5 companies of 1 sector (2010-2015) data were taken for the study. The collected data were exploratory data's which was measured through simple Correlation analysis and Multiple regression analysis. The analysis shows that share price of various companies are not affected by the independent variables and only few industries are affected.

Keywords: EPS, DPS, Pharmacy Sector.

1. INTRODUCTION

1.1 INDUSTRY PROFILE

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. Government of India has initiated several steps to strengthen the capital market and regulate its activities. The number of shareholders has increased from a low figure of about two millions towards the end of seventies to the level of more than 25 millions. [3][4]

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. [5][6]

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

1.1.1 Stock Exchange

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

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

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

1.1.2 Bombay Stock Exchange

The origin of the Bombay stock exchange date back to 1875. It was organized under the name of “the native stock and shares brokers association” as a voluntary and non-profit making association. It was recognized on a permanent basis in 1957. This premier stock exchange is the oldest stock exchange in Asia. The objectives of the stock exchanges are:

1. To safeguard the interest of the investing public having dealings on the exchange.
2. To establish and promote honorable and just practices in securities transaction.
3. To promote, develop, and maintain well regulated market for dealing in securities.
4. To promote industrial development in the country through efficient resource mobilization by the way of investment in corporate securities.

1.1.3 National Stock Exchange

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


Trading on NSE is characterized by four key innovations.

- The physical floor was replaced by anonymous, computerized order-matching with strict prime-time priority.
- The limitations of being on Mumbai and the limitations of India’s Public telecom network were avoided by using satellite communications. Now NSE has a network of over 2000 satellite terminals all over the country. On a typical day almost over 3500 traders login to the trading computer over this network. This is larger than the capacity of the largest trading floors in the world.
- NSE is not owned by brokers. It is a limited liability company and brokers or franchisees. Therefore NSEs staff is free of pressures from brokers and is able to perform its regulatory and enforcement functions more effectively.
- Traditional practices of unreliable fortnightly settlement cycle with escape clause of badla were replaced by a strict weekly settlement cycle without badla.

1.2 DIVIDEND – AN OVERVIEW

1.2.1 Dividend

The term dividend refers to that part of profit of a company that is distributed by the company among its shareholders. It is the shareholders for investments made by them in the shares of company.

1.2.2 Dividend Yield
The dividend yield on a company stock is the company’s annual dividend payments divided by its market cap, or the dividend per share divided by the price per share. It’s often expressed as a percentage.

1.2.3 Dividend Policy
The term dividend refers to that part of profit of a company, which is distributed by the company among its shareholders. It is the shareholders for investment made by them in the shares of company. The investors are interested in earning the maximum return on their investment and maximize their wealth.

1.2.4 Determinant of dividend policy
The payment of dividend involves legal as well as financial considerations. It is difficult to determine a general dividend policy which can be followed by different firms at different times because the dividend decision has to be taken considering special circumstances of an individual case. The following are the important factors, which determine the dividend policy of a firm:
- legal restrictions
- magnitude and trend of earnings
- desire and type of shareholders
- nature of industries
- age of the company
- future financial requirements
- governments economic policy
- taxation policy
- inflation
- requirements of institutional investors

2. OBJECTIVES, NEED, SCOPE, AND LIMITATIONS

2.1 OBJECTIVES OF THE STUDY
The main objective of the study is to determine the share price movement of the selected industries in India. More specifically, the objectives of the study are as follows:
- To study the impact of the Earnings Per Share, Dividend Per Share, Price Earnings Ratio of the selected industries.
- To measure the strength of association of independent variable (Dividend Per Share, Earnings Per Share, Profit Earning Ratio).

2.1.1 Independent Variables
The explanatory variables or the independent variables in the study are Dividends Per Share (DPS), Earnings Per Share (EPS), Price Earnings Ratio (P/E ratio).

2.1.2 Dependent Variable
The dependent variable in the present study is the average Market Price (MPS) of the selected companies in NSE.

2.2 NEED FOR THE STUDY
The need for the study is to analyze the impact of Earnings per Share, Dividend per Share, and Price Earnings Ratio in various share price movements of various companies of various sectors of National Stock Market, which is also funneled down to the NIFTY stocks.

There is always an expectation of the stock holders to get an optimum return for the risk being beared by the investors in investing in such stocks. The returns are expected in the form of appreciation of the share values and in the form of dividends declared by the companies.

There is a need to analyze whether the Earnings per Share issued by the companies is playing a major role in the price movements of the stocks. And whether Dividend per Share impact is major factor or whether Price Earnings Ratio is having an impact in prices changes of the stock market.

2.3 SCOPE OF THE STUDY
The purpose of the study is to find out whether the companies share prices movements depends on the company’s profit and their dividend issues. The research reveals a general study related to the investment patterns of investors relate to the price changes due to Earnings Per Share, Dividend Per Share, Price Earnings Ratio. The research reveal the results regarding the various Earnings Per Share, Dividend Per Share, Price Earnings Ratio impact on the price changes during that period. Data are collected from the web sites helped to find out the impact and the causes of price changes.

2.4 LIMITATIONS OF THE STUDY
The following are the limitations of this study.
Though there are many industries listed in the National Stock Exchange only 5 sectors and 25 companies have been selected for the analysis due to lack of time.

An in-depth analysis on the cause of changes in industry’s performance is not being made.

The analysis results can be used for predicting the future results to some extent.

3. Review of Literature

DIVIDEND VARIABILITY AND VARIOUS BOUNDS TESTS FOR THE RATIONALITY OF STOCK MARKET PRICES -- Seminar at Yale and Harvard 1983

- TERRY A. MARSH AND ROBERT C. MERTON perhaps as far as long as there has been a stock market. Economists have debated whether or not stock prices rationally reflect the intrinsic or fundamental values of the underlying companies.

- Samuelson-fama efficient market hypothesis that stock prices fully reflect available information and are therefore the best estimate of the intrinsic values. The majority of the empirical studies report results that are consistent with stock market rationally. There is for example considerable evidence that, on average, individual stock prices respond rationally to surprise announcements concerning firm fundamentals, such as dividend and earnings changes and that prices do not respond to non-economic events. Stock price are however, also known to be considerably more volatile than either dividends or accounting earnings.

THE EX DIVIDEND DAY BEHAVIOUR OF STOCK PRICES -- seminar paper of university of Rochester

- AVNER KALAY- past studies have documented an ex-dividend day prices drop which is less than the dividend per share and positively correlated with the corresponding dividend yield. In contrast to prior work, we show that, without additional information, the marginal tax rates cannot be inferred from this phenomenon, which is, there fore, not necessarily the result of a tax included clientele effect. Despite adjustments for potential biases in earlier work however, the correlation between the ex dividend relatively price drop and the dividend yield is still positive which is consistent with a tax effect and a tax included clienteles effect.

- MILLER AND MODIGLIANI - show, if capital markets are perfect the dividend policy of the firm, for a given investments policy, does not affect its market value.

4. RESEARCH METHODOLOGY

4.1 INTRODUCTION

Research methodology is a way to systematically solve the research problems. It includes the overall research design, the sampling procedure, and Data collection method and analysis procedure.

4.2 RESEARCH DESIGN

A research design is the arrangement of condition for collection and analysis of data in a manner, which may result in an economy in procedure. It stands for advance planning for collection of the relevant data and the techniques to be used in analysis, keeping in view the objectives of the research and availability of time. The research used here for the study is exploratory research. Exploratory research is quite informal, it relays on the secondary data. The result are usually used for making decision by themselves.

4.2.1 Population

All the companies in the equity market listed in National Stock Exchange constitute population as far as my study is concerned.

4.3 SAMPLING TECHNIQUES

The samples are chosen from the NSE India site, which is actively and highly traded pharm industries in the past five years.

<table>
<thead>
<tr>
<th>No. Of. Years</th>
<th>5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. Of sectors</td>
<td>1 sector</td>
</tr>
<tr>
<td>No. Of companies</td>
<td>5 companies</td>
</tr>
</tbody>
</table>

4.3.1 Sample Size

Five years financial data collected from the five sectors and each sector consist of five companies constitute the sample size.

Year taken for study : 2010-2015

Sectors for study : PHARMA SECTOR

- Cipla
- Dr reddy
- Ranbaxy
- Sterling
- Torrent

4.3.2 Sample Unit

Each and every company of equity market listed in national stock exchange, whose one-year financial data will constitute the sample unit.
4.4 DATA SOURCE
While deciding about the method of data collection for the study the researcher should keep in mind the two sources of data.

- Primary data
- Secondary data

The source taken for study is:

4.4.1 Secondary Data
- Secondary data are also collected through the NSE India sites and websites of various companies
- Review of the articles being published on the topic in various magazines
- The information in the NSE India has helped to analyze the price changes.

4.5 STATISTICAL TOOLS
The data are analyzed through statistical method. There are various statistical tools to analysis the data.

- Regression
- Correlation
- Multiple regression

5. DATA ANALYSIS AND INTERPRETATION

5.1 CORRELATION
Correlation analysis helps to determine the strength of the linear relationship between the two variables X and Y, in other words, as to how strongly are these two variables correlated. Karl Pearson, in 1896, developed an Index or Coefficient of this association in cases where the relationship is a linear one, i.e. where the trend of the relationship can be described by a straight line.

The Pearson’s coefficient of correlation is designated by \( r \). The coefficient of correlation \( r \) can be designed as a measure of strength of the linear relationship between the two variables X and Y.

The sign of the coefficient can be positive or negative. It is positive when the slope of the line is positive and it is negative when the slope of the line is negative.

The Coefficient of Correlation (\( r \))

\[
r = \frac{n(\sum XY) - (\sum X)(\sum Y)}{\sqrt{n(\sum X^2) - (\sum X)^2} \sqrt{n(\sum Y^2) - (\sum Y)^2}}
\]

**TABLE 5.1**

<table>
<thead>
<tr>
<th>S. No</th>
<th>Name of the company</th>
<th>Price/Eps</th>
<th>Price/Dps</th>
<th>Price/Pe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>( r )</td>
<td>( r^2 )</td>
<td>( r )</td>
</tr>
<tr>
<td>1</td>
<td>CIPLA</td>
<td>0.7</td>
<td>0.5</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>0.6</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>2</td>
<td>DR REDDY</td>
<td>0.6</td>
<td>0.8</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>0.9</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>3</td>
<td>RANBAXY</td>
<td>0.7</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>0.6</td>
<td>0.5</td>
<td>0.6</td>
</tr>
</tbody>
</table>

CIPLA is having high correlation with Earnings Per Share. The calculated \( r \) (0.720) value shows that the Earnings per Share is positive correlated and here the calculated coefficient of determination \( r^2 \) is 0.518, which indicates 51.8% of the variations of share price movements are explained by Earnings Per Share. Next to the Earnings Per Share, Dividend Per Share is having high positive correlation with share price movements. Here the calculated value of \( r \) is (0.627) and the coefficient of determination \( r^2 \) value is 0.394, which indicates 39.4% of the share price movements are explained by the Dividend Per Share.\[^{[7]}\]
The Price Earning Ratio are having very very low degree of positive correlation and only 1.1% of the share price movements are explained by the Price Earning Ratio.

**DR REDDY** is having high correlation with Price Earning Ratio. The calculated \( r \) (0.761) value shows that the Price Earning Ratio is positively correlated and here the calculated coefficient of determination \( r^2 \) is 0.579, which indicates 57.9% of the variations of share price movements are explained by Price Earning Ratio. Next to the Price Earnings Ratio, Earnings Per Share is having high positive correlation with share price movements. Here the calculated value of \( r \) is (0.660). The coefficient of determination \( r^2 \) value is 0.435, which indicates 43.5% of the share price movements are explained by the Earnings Per Share.

The Dividend Per Share are having very very low degree of positive correlation and only 7.4% of the share price movements are explained by the Dividend Per Share.

**RANBAXY** is having high correlation with Dividend Per Share. The calculated \( r \) (0.990) value shows that the Dividend Per Share is positive correlated and here the calculated coefficient of determination \( r^2 \) is 0.980, which indicates 98.0% of the variations of share price movements are explained by Dividend Per Share. Next to the Dividend Per Share, Earnings Per Share is having high positive correlation with share price movements. Here the calculated value of \( r \) is (0.921). The coefficient of determination \( r^2 \) value is 0.849, which indicates 84.9% of the share price movements are explained by the Earnings Per Share.

The Price Earning Ratio are having very very low degree of positive correlation and only 35% of the share price movements are explained by the Price Earning Ratio.

**STERLING** is having high correlation with Price Earning Ratio. The calculated \( r \) (0.620) value shows that the Price Earning Ratio is positively correlated and here the calculated coefficient of determination \( r^2 \) is 0.620, which indicates 62.0% of the variations of share price movements are explained by Price Earning Ratio. Next to the Price Earning Ratio, Earnings Per Share is having high positive correlation with share price movements. Here the calculated value of \( r \) is (0.675). The coefficient of determination \( r^2 \) value is 0.456, which indicates 45.6% of the share price movements are explained by the Earnings Per Share.

The Dividend Per Share are having very very low degree of positive correlation and only 35% of the share price movements are explained by the Dividend Per Share.

**TORRENT** is having high correlation with Price Earning Ratio. The calculated \( r \) (0.960) value shows that the Price Earning Ratio is positively correlated and here the calculated coefficient of determination \( r^2 \) is 0.960, which indicates 96.0% of the variations of share price movements are explained by Price Earning Ratio. Next to the Price Earning Ratio, Earnings Per Share is having high positive correlation with share price movements. Here the calculated value of \( r \) is (0.765). The coefficient of determination \( r^2 \) value is 0.585, which indicates 58.5% of the share price movements are explained by the Earnings Per Share.

The Dividend Per Share are having very very low degree of positive correlation and only 57% of the share price movements are explained by the Dividend Per Share.

### 5.2 MULTIPLE REGRESSION ANALYSIS

The regression is a statistical relationship between two or more variables. When there are two or more independent variables, the analysis that describes such a relationship is multiple regressions. This analysis is adopted where there is one dependent variable that is presumed to be a function of two or more independent variables.

The linear multiple regression problem is to estimate coefficients \( \beta_1, \beta_2, ..., \beta_j \) and \( \beta_0 \) such that the expression,

\[
Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + ... + \beta_j X_j
\]

provides a good estimate of an individual \( Y \) score based on the \( X \) scores, where,

- \( Y \) is Dependent Variable
- \( X_1, X_2 \) and \( X_3 \) are the independent variables
- \( \beta_0 + \beta_1 + \beta_2 + ... + \beta_j \) are the parameters to be estimated.

**INDIVIDUAL TEST**

An individual test produces a statistical result for testing each variable influenced with its dependent variable and results produced is in the form of acceptance or rejections of a set hypothesis.

**INDIVIDUAL TABLE**

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Dividend Per Share (B₁=0) / Earning Per Share (B₂=0) / Price Earning Ratio (B₃=0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate Hypothesis</td>
<td>Dividend Per Share (B₁≠0) / Earning Per Share (B₂≠0) / Price Earning Ratio (B₃≠0)</td>
</tr>
</tbody>
</table>

Significance level = 0.05

**TABLE 5.2**
# T-VALUES FOR CONSTANT AND COEFFICIENT AND STANDARD ERROR OF PHARMA SECTOR

<table>
<thead>
<tr>
<th>Company</th>
<th>Variables</th>
<th>Co-efficients</th>
<th>Std. error</th>
<th>t</th>
<th>p-value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIPLA</td>
<td>Constant</td>
<td>-0.388</td>
<td>0.657</td>
<td>-0.592</td>
<td>0.660</td>
<td>Accept H₀</td>
</tr>
<tr>
<td></td>
<td>DPS</td>
<td>0.430</td>
<td>0.082</td>
<td>5.269</td>
<td>0.119</td>
<td>Accept H₀</td>
</tr>
<tr>
<td></td>
<td>EPS</td>
<td>0.924</td>
<td>0.228</td>
<td>4.045</td>
<td>0.154</td>
<td>Accept H₀</td>
</tr>
<tr>
<td></td>
<td>P/E</td>
<td>-0.161</td>
<td>0.066</td>
<td>-2.445</td>
<td>0.247</td>
<td>Accept H₀</td>
</tr>
<tr>
<td>DR REDDY</td>
<td>Constant</td>
<td>2.490</td>
<td>2.155</td>
<td>1.156</td>
<td>0.454</td>
<td>Accept H₀</td>
</tr>
<tr>
<td></td>
<td>DPS</td>
<td>-6.986E-03</td>
<td>0.222</td>
<td>-0.031</td>
<td>0.980</td>
<td>Accept H₀</td>
</tr>
<tr>
<td></td>
<td>EPS</td>
<td>-0.192</td>
<td>0.513</td>
<td>-0.375</td>
<td>0.772</td>
<td>Accept H₀</td>
</tr>
<tr>
<td></td>
<td>P/E</td>
<td>-4.753E-02</td>
<td>0.382</td>
<td>-0.124</td>
<td>0.921</td>
<td>Accept H₀</td>
</tr>
<tr>
<td>RANBAXY</td>
<td>Constant</td>
<td>-1.313</td>
<td>1.060</td>
<td>-1.239</td>
<td>0.432</td>
<td>Accept H₀</td>
</tr>
<tr>
<td></td>
<td>DPS</td>
<td>0.126</td>
<td>0.282</td>
<td>0.446</td>
<td>0.733</td>
<td>Accept H₀</td>
</tr>
<tr>
<td></td>
<td>EPS</td>
<td>0.757</td>
<td>0.477</td>
<td>1.587</td>
<td>0.358</td>
<td>Accept H₀</td>
</tr>
<tr>
<td></td>
<td>P/E</td>
<td>0.772</td>
<td>0.343</td>
<td>2.253</td>
<td>0.266</td>
<td>Accept H₀</td>
</tr>
<tr>
<td>STELLING</td>
<td>Constant</td>
<td>-2.462</td>
<td>7.254</td>
<td>-0.339</td>
<td>0.792</td>
<td>Accept H₀</td>
</tr>
<tr>
<td></td>
<td>DPS</td>
<td>-3.951</td>
<td>5.233</td>
<td>-0.755</td>
<td>0.588</td>
<td>Accept H₀</td>
</tr>
<tr>
<td></td>
<td>EPS</td>
<td>3.407</td>
<td>3.536</td>
<td>0.964</td>
<td>0.512</td>
<td>Accept H₀</td>
</tr>
<tr>
<td></td>
<td>P/E</td>
<td>2.971</td>
<td>4.874</td>
<td>0.610</td>
<td>0.652</td>
<td>Accept H₀</td>
</tr>
<tr>
<td>TORRENT</td>
<td>Constant</td>
<td>-1.326</td>
<td>1.408</td>
<td>-0.942</td>
<td>0.519</td>
<td>Accept H₀</td>
</tr>
<tr>
<td></td>
<td>DPS</td>
<td>-0.254</td>
<td>0.796</td>
<td>-0.320</td>
<td>0.803</td>
<td>Accept H₀</td>
</tr>
<tr>
<td></td>
<td>EPS</td>
<td>1.085</td>
<td>0.037</td>
<td>29.540</td>
<td>0.022</td>
<td>Reject H₀</td>
</tr>
<tr>
<td></td>
<td>P/E</td>
<td>0.833</td>
<td>0.117</td>
<td>7.145</td>
<td>0.089</td>
<td>Accept H₀</td>
</tr>
</tbody>
</table>

Regression Equation

\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 \]

Where

- ‘a’ is the Regression constant.
- ‘b₁, b₂, b₃’ is the Regression coefficient.

For CIPLA, the equation is,

\[ Y = -0.388 + 0.430 \text{DPS} + 0.924 \text{EPS} - 0.161 \text{P/E} \]

Similarly Equations can be written for other companies.

`t` the standard regression coefficient is calculated as follows,

\[ t = \frac{b_i - B_i}{S_{bi}} \]

where,

- \( b_i \) the slope of fitted regression
- \( B_i \) the actual slope hypothesized for the population
- \( S_{bi} \) the standard error of the regression coefficient

Degrees of freedom = \( n-k-1 \)

\( B_i = 0 \) (Assumption)

For intercept of CIPLA,

\[ t = \frac{-0.388}{0.657} = -0.592 \]

**INTERPRETATION**

For CIPLA, At 10% significance level all independent variables are proved as \( B \neq 0 \). But at 5% of significance all three independent variables are proved as \( B = 0 \).

For DR REDDY, At 10% significance level all independent variables are proved as \( B \neq 0 \). But at 5% of significance all three independent variables are proved as \( B = 0 \).

For RANBAXY, At 10% significance level all independent variables are proved as \( B \neq 0 \). But at 5% of significance all three independent variables are proved as \( B = 0 \).
For STE RLING, At 10% significance level all independent variables are proved as B ≠ 0. But at 5% of significance all three independent variables are proved as B = 0.

For TORRE NT, At 10% significance level all independent variables are proved as B ≠ 0. But at 5% of significance Dividend Per Share, and Price Earning Ratio are proved as independent variables by B = 0.

GLOBAL TEST
Null Hypothesis : X₁, X₂, X₃ are not significant explanatory variables.
B₁, B₂, B₃ equal to zero.

Alternative Hypothesis :
X₁, X₂, X₃ are significant explanatory variables.
B₁, B₂, B₃ equal to zero.
Significance level = 0.05

Where,
X₁, X₂, X₃ are Dividend Per Share, Earning Per Share and Price Earning Ratio respectively.
B₁, B₂, B₃ are the regression co-efficient of the Dividend Per Share, Earning Per Share and Price Earning Ratio respectively.

### TABLE 5.3 REGRESSION ANALYSIS

<table>
<thead>
<tr>
<th>PHARMA Sector</th>
<th>Multiple R</th>
<th>Multiple R²</th>
<th>Adjusted R²</th>
<th>Std. Error of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIPLA</td>
<td>0.992</td>
<td>0.983</td>
<td>0.933</td>
<td>2.608E-02</td>
</tr>
<tr>
<td>DR REDDY</td>
<td>0.769</td>
<td>0.591</td>
<td>-0.636</td>
<td>6.193E-02</td>
</tr>
<tr>
<td>RANBAXY</td>
<td>0.999</td>
<td>0.998</td>
<td>0.991</td>
<td>1.740E-02</td>
</tr>
<tr>
<td>STE RLING</td>
<td>0.875</td>
<td>0.766</td>
<td>0.063</td>
<td>0.6825</td>
</tr>
<tr>
<td>TORRE NT</td>
<td>1.000</td>
<td>1.000</td>
<td>0.998</td>
<td>1.044E-02</td>
</tr>
</tbody>
</table>

### TABLE 5.4 ANOVA TABLE

<table>
<thead>
<tr>
<th>Pharma Sector</th>
<th>Source</th>
<th>Sum of Square</th>
<th>DF</th>
<th>Mean Sum of Square</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIPLA</td>
<td>Regression</td>
<td>4.011E-02</td>
<td>3</td>
<td>1.337E-02</td>
<td>19.656</td>
<td>0.164</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>6.802E-04</td>
<td>1</td>
<td>6.802E-04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DR REDDY</td>
<td>Regression</td>
<td>5.541E-03</td>
<td>3</td>
<td>1.847E-03</td>
<td>0.482</td>
<td>0.755</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>3.836E-03</td>
<td>1</td>
<td>3.836E-03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RANBAXY</td>
<td>Regression</td>
<td>0.136</td>
<td>3</td>
<td>4.545E-02</td>
<td>150.19</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>3.026E-04</td>
<td>1</td>
<td>3.026E-04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STE RLING</td>
<td>Regression</td>
<td>1.523</td>
<td>3</td>
<td>0.508</td>
<td>1.090</td>
<td>0.591</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>0.466</td>
<td>1</td>
<td>0.466</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TORRE NT</td>
<td>Regression</td>
<td>0.262</td>
<td>3</td>
<td>8.740E-02</td>
<td>801.18</td>
<td>0.026</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>1.091E-04</td>
<td>1</td>
<td>1.091E-04</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From the above table,
Probability value of CIPLA (0.164) > Significance level (0.05).
So, Null hypothesis is accepted.
Probability value of DR REDDY (0.755) > Significance level (0.05).
So, Null hypothesis is accepted.
Probability value of RANBAXY (0.60) > Significance level (0.05),
So, Null hypothesis is accepted.
Probability value of STERLING (0.591) > Significance level (0.05)
So, Null hypothesis is accepted.
Probability value of TORRENT (0.026) < Significance level (0.05)
So, Null hypothesis is rejected.

At 10% significance level Ranbaxy and Torrent Companies null hypothesis are rejected. All the independent variables are not significant explanatory variable of share price movements. At 5% significance level, Ranbaxy and Torrent Companies null hypothesis is rejected. And other companies H_0 are accepted.

6. FINDINGS

It is found that Earnings per Share of Pharma Sector are having high corellation with share price movements of Dr. Reddy, Ranbaxy, Sterling, and Torrent. Next to Earnings Per share, Price Earning Ratio is having high positive corellation with Dr. Reddy, Sterling, and Torrent. The Dividend Per Share is also having impact on three companies Dr Reddy, Sterling, Torrent. Even though they are positively correlated their impact is slighter in other companies.

It is found through global test of 5% significance level is that Null hypothesis of Torrent is rejected. (i.e.) the independent variable are significantly explanatory variables. And the other companies Cipla, Dr. Reddy, Ranbaxy, Sterling’s variables are not significantly explanatory variables. When we opt for 10% significance level Ranbaxy, Torrent null hypothesis is rejected which says the variable are not significant explanatory variables.

Individual test of 5% significance level all companies null hypothesis are accepted except Torrent’s Earnings Per Share, which says that variables of the companies are not significantly explanatory variable. But when we opt for 10% significance level null hypothesis of all companies are accepted except Torrent Earnings Per Share, which says the variables are not significantly explanatory variable. So we conclude that all variables are not significantly explanatory variables in pharma sector.

6.1 CONCLUSION

The following broad conclusions are drawn form the findings of this empirical work. The correlation techniques have revealed that earnings per share is the most determinant factor of market price of share out of the three variables taken for the study, the next is the dividend per share followed by the Price Earning Ratio, Earnings Per Share. Surprisingly, the Earnings per share has proud to be the most determinant factor of share price. It has been found that dividend has a significant impact on the market price of shares in all the selected industries.

To conclude, out of the three variables taken for the study, that no single variable has significantly influenced the share prices of the selected industries. This study thus corroborates the views expressed by the empirical researchers in the past that none of the variables has any significant impact on the equity prices of all industry at all times. Therefore study reveals that different variables assumed significance in different years depending upon the stock market conditions. Thus, broadly rejecting the hypothesis that the set of variables determining equity price behavior for both the groups would be significantly different from each other due to the different in the nature and motive of investment. Finally, the investors should keenly watch the situation like market price, economy, company progress, etc. and according to that they should take decisions whether to buy or sell securities. Hence, investing in shares especially the secondary market becomes a very rich experience.

REFERENCE BOOKS

WEBSITES
4. www.Moneycontrol.com
5. www.Moneypore.com
6. www.Icicidirect.com

MAGAZINES
7. Capital Market
8. Dalal Street