"A STUDY ON IMPACT OF EARNINGS PER SHARE, RETURN ON EQUITY AND DIVIDEND YIELD ON SHARE PRICE MOVEMENTS WITH REFERENCE TO SELECT PHARMACEUTICAL AND DRUG COMPANIES."

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Abstract

The study entitled Impact of Earnings per share, Return on equity and Dividend yield on share price movements. In this study three exploratory variables Earnings per share, Return on investment and Dividend yield are used for predicting the share price movements. Through this study the impact of variables on share price of the selected industries have been studied, analysed and the association of variables are also measured. Various websites and magazines are used for conducting the study. The data for this study were collected from 10 companies of Pharmaceutical and drug companies (2015-2019) data were taken for the study. The collected data for the study was measured through Multiple Regression Analysis. The analysis shows that share price of various companies are not affected by the selected independent variables and only few companies are effected by the independent variables.

Key words: Earnings per share, Return on equity and Dividend yield.

INTRODUCTION:

A stock exchange or securities exchange is the place where in buying and selling of securities or the processes of trading happens such as bonds, shares, stock and also the other financial instruments by the agents, stock brokers and traders. Stock exchanges also provide issuing and redemption of securities, issuing and redemption of instruments and also provides the payments of fixed dividend to preference shareholders and also a certain amount of dividend to equity shareholders.

The performance of stock market is measured through stock index or stock market index. The firms stocks that are listed on the stock exchange similar stocks are grouped together and an index is formed.

The weighted average values of the grouped stocks used to calculate the value of the entire index. Ant change in the value of the stock will result in the change in the value of the index. Thus index acts as a indicative measure for the changes that happen in the stock market and helps the investors to compare the return on the specifies stocks that they are getting high returns.

RESEARCH METHODOLOGY

OBJECTIVES OF THE STUDY

- To study the impact of Earnings per share, Return on Equity and Dividend yield on share price movements on the select stocks.
- To determine which independent factor is showing a strong effect on the share price

HYPOTHESIS

H_0: There is no significant relationship between dependent variable (stock market price) and independent variables such as EPS (earnings per share), ROE (return on equity) and DY (dividend yield).

SOURCES OF DATA

To meet the objectives specified a lot of data need to be collected from the different sources.

Secondary data is used in this study. Share prices information of the select companies are obtained from NSE website. The required information for the financial analysis are obtained from the respective company's websites. Other websites are also used for the study like moneycontrol.com, business standard.com. A list of same websites has provided in the references.

SAMPLE FRAME WORK

SAMPLING SIZE AND SAMPLING TECHNIQUE

Ten companies in pharmaceutical and drug industry are selected as a sample for the purpose of this study. The sample has been selected based on top ten publicly listed Pharmaceutical and drug companies in India by Market capitalisation.

DATA ANALYSIS AND RESULTS

T-VALUES FOR CONSTANT AND COEFFICIENT AND STANDERD ERROR OF PHARMACEUTICAL AND DRUG COMPANIES

Company	Variables	Coefficients	Standard Error	t Stat	p value	Remarks
CIPLA	Constant	498.25	5.88	84.702	0.0075	REJECT H_0
	EPS	12.37	0.304	40.651	0.015	REJECT H_0
	ROE	-0.3	0.56	-0.68	0.619	ACCEPT H_0
	DY	-283.7	8.929	-31.781	0.02	ACCEPT H_0
AUROBINDO	Constant	2620.2	779.493	3.361	0.184	ACCEPT H_0
	EPS	-31.854	10.878	-2.92	0.2094	ACCEPT H_0
	ROE	-7.76	12.526	-0.619	0.6468	ACCEPT H_0
	DY	-1283.66	335.69	-3.823	0.162	ACCEPT H_0
LUPIN PHARMA	Constant	742.29	264.622	2.805	0.218	ACCEPT H_0
	EPS	13.69	17.532	0.781	0.5772	ACCEPT H_0
	ROE	-7.093	40.235	-0.17	0.8889	ACCEPT H_0
	DY	552.56	650.182	0.8498	0.5515	ACCEPT H_0
DR.REDDY'S LABORATORIES	Constant	6747.7	13356.96	4.9726	0.126	ACCEPT H_0
	EPS	-7.914	11.4484	-0.691	0.614	ACCEPT H_0
	ROE	30.4599	70.944	0.429	0.741	ACCEPT H_0
	DY	-4752.5	1370.26	-3.4683	0.178	ACCEPT H_0
SUN PHARMA	Constant	744.597	33.042	22.534	0.0282	REJECT H_0
	EPS	-19.99	3.7242	-5.368	0.1172	ACCEPT H_0
	ROE	42.74	5.1969	8.225	0.077	ACCEPT H_0
	DY	-594.53	60.011	-9.9068	0.064	ACCEPT H_0
CADILA HEALTHCARE	Constant	-810.5	3153.8	-0.257	0.839	ACCEPT H_0
	EPS	-91.37	47.3272	-1.93	0.304	ACCEPT H_0
	ROE	19.54	24.147	0.8094	0.5667	ACCEPT H_0
	DY	2869.6	3025.378	0.948	0.5168	ACCEPT H_0
GLENMARK	Constant	3664.09	1995.5	1.873	0.312	ACCEPT H_0
	EPS	16.759	14.648	1.144	0.457	ACCEPT H_0
	ROE	-80.71	66.701	-1.21002	0.439	ACCEPT H_0
	DY	-7405.43	4370.776	-1.694	0.3394	ACCEPT H_0
TORRENT	Constant	1133.17	200.777	5.643	0.1116	ACCEPT H_0
	EPS	22.494	10.176	2.21	0.2704	ACCEPT H_0
	ROE	-58.499	20.2766	-2.885	0.212411	ACCEPT H_0
	DY	318.272	285.207	1.1159	0.4651	ACCEPT H_0
ALEMBIC	Constant	781.372	181.655	4.301	0.4154	ACCEPT H_0
	EPS	7.32	3.515	2.082	0.284	ACCEPT H_0
	ROE	-4.891	2.808	-1.741	0.331	ACCEPT H_0
	DY	-368.71	154.823	-2.381	0.253	ACCEPT H_0
DIVI'S LABORATORIES	Constant	-1541.074	1344.59	-1.146	0.456	ACCEPT H_0
	EPS	6.445	14.884	0.433	0.739	PACCEPT H_0
	ROE	99.081	35.162	2.8177	0.217	ACCEPT H_0
	DY	514.76	534.37	0.9632	0.5118	ACCEPT H_0

Regression Equation

$SP = a_0 + a_1 EPS + a_2 ROE + a_3 DY$

Where a_0 is the Regression constant

             a_1, a_2, a_3 are the regression coefficients

FOR CIPLA, the equation is

$SP = 498.25 + 12.37\ EPS - 0.381\ ROE - 283.783\ DY$

Similarly, the equations can be written for other companies

REGRESSION ANALYSIS

COMPANY	Multiple R	Multiple R²	Adjusted R	Std. Error of Estimate
CIPLA	0.99998	0.999979	0.99991	0.8262
AUROBINDO	0.9896	0.9794	0.9177	48.381
LUPIN PHARMA	0.936	0.8777	5101	247.87
DR.REDDY'S LABORATORIES	0.972	0.94449	0.7796	236.39
SUN PHARMA	0.998	0.997	0.98986	17.83
CADILA HEALTHCARE	0.937	0.8799	0.5163	287.15
GLENMARK	0.9469	0.8966	0.5866	89.931
TORRENT	0.94508	0.89304	0.57216	182.101
ALEMBIC	0.9675	0.9361	0.74461	52.6404
DIVI'S LABORATORIES	0.9533	0.9089	0.635	219.86

ANOVA TABLE

COMPANY	SOURCE	SUM OF SQUARE	DF	MEAN SUM OF SQUARE	F	P-VALUE
CIPLA	REGRESSION	3634.45	3	1211.48		
	RESIDUAL	0.7433	1	0.7433	1629.7	0.0182
AUROBINDO	REGRESSION	111558.44	3	37186.1		
	RESIDUAL	2340.75	1	2340.75	15.886	0.1819
LUPIN PHARMA	REGRESSION	441091.388	3	147030.46		
	RESIDUAL	61441.3	1	61441.31	2.393	0.4359
DR.REDDY'S LABORATORIES	REGRESSION	958378.45	3	319459.48		
	RESIDUAL	55880.04	1	55880.04	5.7169	0.296
SUN PHARMA	REGRESSION	125324.599	3	41774.8		
	RESIDUAL	318.201	1	318.201	131.24	0.064
CADILA HEALTH	REGRESSION	5999559.762	3	199853.3		
	RESIDUAL	82459.53	1	82459.54	2.423	0.4336
GLENMARK	REGRESSION	70173.76	3	23391.25		
	RESIDUAL	8087.75	1	8087.754	2.8921	0.4021
TORRENT PHARMA	REGRESSION	276874.764	3	922291.59		
	RESIDUAL	33160.93	1	33160.94	2.783	0.4088
ALEMBIC PHARMA	REGRESSION	40630.188	3	13543.4		
	RESIDUAL	2771.011	1	2771.012	4.8875	0.3182
DIVI'S LABORATORIES	REGRESSION	482295.06	3	160765.02		
	RESIDUAL	48339.96	1	48339.938	3.325	0.3783

From the above table,

Probability value of CIPLA (0.0182) <significance level (0.05)

So, Null hypothesis is rejected.

Probability value of AUROBINDO (0.1819)>significance level (0.05)

So, Null hypothesis is accepted.

Probability value of LUPIN PHARMA (0.4359)>significance level (0.05)

So, Null hypothesis is accepted.

Probability value of DR. REDDY'S LAB (0.296)>significance level (0.05)

So, Null hypothesis is accepted.

Probability value of SUN PHARMA (0.064)>significance level (0.05)

So, Null hypothesis is accepted.

Probability value of CADILA HEALTH (0.4336)>significance level (0.05)

So, Null hypothesis is accepted.

Probability value of GLENMARK (0.4021)>significance level (0.05)

So, Null hypothesis is accepted.

Probability value of TORRENT PHARMA (0.4088)>significance level (0.05)

So, Null hypothesis is accepted.

Probability value of ALEMBIC PHARMA (0.3182)>significance level (0.05)

So, Null hypothesis is accepted.

Probability value of DIVI'S LAB (0.3783)>significance level (0.05)

So, Null hypothesis is accepted.

At 10% significance level, Cipla company null hypothesis is rejected, other companies H_0 are accepted. All the three independent variables (EPS, ROE, DY) are not explanatory variables for dependent variable (share price movements)

FINDINGS

- The value of Multiple R represents the relationship between the variables, Cipla has the highest multiple R i.e. 99.9% and the lowest is Lupin with 93.6%.
- The value of R square which determines the percentage of dependent variable variation, Cipla has the highest R square value with 99.9% whereas Lupin has the lowest R square with 87.7%
- From multiple regression analysis it can be said that there is a strong impact of Dividend yield and Earnings per share. There is a less impact of return on equity on the share price.
- Among the selected companies, Aurobindo, DR.Reddy's, Sunpharma, Glenmark, Alembic companies shows that there is a strong relationship between Dividend yield with the changes in stock prices with an average p value of 0.194 value when compared to EPS (p value 0.33)and ROE(p value 0.43).
- Among the selected companies, Cipla, Lupin pharma, Cadila companies show that there is a strong relationship between EPS and change in stock prices with an average P value of 0.27 when compared to DY (p value 0.36) and ROE(p value 0.68).
- Among the selected companies, only Torrent and Divi's Lab has a slight relationship of ROE and changes in the stock prices with the p values of 0.21 and 0.21 respectively.
- Among the selected companies, only Cipla Company has the strong relationship with both EPS and DY (p values of 0.015 and 0.020) that contribute to the changes in the stock prices.

CONCLUSION

- This study identified and analysed the effect on some factors on share market price such as Earnings per share, Return on Equity and Dividend yield. The study used ten companies of Pharmaceutical and Drug companies during the period 2015 to 2019.
- The data analysis include descriptive study, multiple regression analysis and the results found that there is effect of DY and EPS on share market price. There is no effect of ROE on share market price movements.
- Therefore, it is concluded that share market price behaviour of organization's are vital and play a very important role in performance of companies. There are many factors that contribute to the movement in the share market prices. Among all Dividend yield and Earnings per share contribute for the change in the movement of share market prices. Other factors like demand and supply, interest rates, decision of the investors, management, economy and political climate also influences the share price.

SUGGESTIONS

- It was found that there were certain companies like Torrent, Lupin Pharma, Cadilla health and Divi whose liquidity is having least correlation with dividend yield. However suggestions is made to such companies to increase their liquid position by reducing long term investment.

- It is suggested for the companies to increase the profitability position of the company because by increasing the profitability it will lead to increase in the Earnings per share which will attract the shareholders to invest in the particular type of share so that the share price will also increase accordingly.

- Before investing, investors should not only look for EPS, ROE and DY, they should always analyse all the factors that contribute to changes in share market price behaviour.

- After investing, investors need to keep the track of the company's performance and should know all the recent news about the company so that you can take a right decision on buying or selling shares at right time.

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