

IMPACT OF EPS AND DPS ON STOCK PRICE: A STUDY OF SELECTED PUBLIC SECTOR BANKS OF INDIA

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ABSTRACT

Investment in equity shares is one of the major avenues of investment that yields significant returns to investors. It is also a source of finance for the capital requirements of firms. Returns from such equity investments are subject to vary owing to the movement of share prices, which depend on various factors. Such factors that influence stock prices could be either firm specific internal factors such as earnings, dividend, book value, etc. or external factors such as interest rate, government regulations, foreign exchange rate, etc. This research paper is an attempt to analyze the impact of two specific internal factors EPS and DPS on Stock Price. The research, "impact of EPS and DPS on Stock Price: a study of selected public sector banks of India" has been carried out for the time period of 2006-07 to 2014-15 (9 years) financial years of twelve selected public sector banks of India. The cause and effect relationship was checked by regression model using EViews7. Since, the time series data was employed, stationarity of the data was checked in order to avoid spurious regression. The Augmented Dickey - Fuller test was used for unit root testing to check the stationarity of the time series data. Research has disclosed a significant impact of EPS and DPS on Stock Price.

Key Words: EPS, DPS, Stock Price, NSE, Public sector banks, India.

INTRODUCTION

EARNINGS PER SHARE (EPS)

The term earnings per share (EPS) indicate the return earned per share. This ratio measures the company's shares market value. It points out whether the earning power of the company has increased or not. It symbolizes the part of a company's earnings, net of taxes and preferred stock dividend that is apportioned to each share of common stock. The figure can be computed simply by dividing net income earned in a given reporting period (usually quarterly or annually) by the total number of shares outstanding during the same term or is calculated by dividing earnings after interest, the depreciation and tax by total number of outstanding shares. It refers to

the ratio of the profit after tax of the company for any financial year after payment of preference dividend (Islam, Khan, Choudhury, Adnan, 2014).

“The revenue earned by a company after meeting cost of production, then interest, depreciation and tax belongs to the equity share holders. This earnings divided by the number of outstanding equity shares is referred to as EPS.” (Bhatt and Sumangala, 2012).

EPS is widely used for indicating the performance of the company to the shareholders and the analysts. It helps as a basis of valuation of the company. It helps in determining the market price of equity share. It also helps in determining the company's capacity to pay dividend. It is useful to set a benchmark for a meaningful comparison of performance among different companies.

DIVIDEND PER SHARE (DPS)

Dividend per share (DPS) indicates the return earned per share. This ratio shows the amount payable per share to equity shareholders. Dividend per share ratio ignores earnings retained in the business. The net profit after taxes belong to shareholders but the income that they really receive is the amount of earnings distributed and paid as cash dividend. It is a reward for risk taken by the investor on their investment. It is a share of profit of the company divided among its shareholders. It is mandatory and strategic distribution of portion of company's taxed earnings decided by the board of directors, to a class of its shareholders and is generally referred as dividend per share (DPS) which can be in the form of cash, stock or property. (Zafar, Chaubey and Khalid, 2012).

Dividend per share is the portion of the profit after tax, which is distributed to the shareholders for their investment bearing risk in the company (Geetha and Swaaminathan, 2015).

It helps in measuring the dividend distributed per equity share. It indicates the profitability aspect of the company. It also sets a benchmark for a meaningful comparison among different companies. DPS helps in indicating the growth of a firm.

STOCK PRICE

Stock price is the cost of purchasing a security on an exchange. Stock price of the share depends upon many factors, such as earning per share, dividend per share, payout ratio, size of the firm and dividend yield, management, diversification, etc. The investors are always careful when purchasing stock in the company, as the stock price is known to fluctuate greatly in this specific market.

Stock prices are often very tempting in an economic fall. The low prices offered are a good deal for many people, they just do not trust the company to improve. Investment in shares offers the benefit of liquidity as well as the opportunity to get high returns. But the task of forecasting share prices is not an easy practice. Share price movement is not independent in nature and both extrinsic as well as intrinsic factors have been established to exercise influence over stock price movements (Tandon & Malhotra 2013).

LITERATURE REVIEW

Adebisi and Lawal (2015) has investigated the factors affecting firm's equity share price. They identified that the DPS, EPS, book value per share, dividend payout, price earning ratio and size of the firm has the major impact on the firm's equity share price.

Lashgari and Ahmadi (2014) has analysed the impact of dividend policy on share price volatility in Tehran Stock Exchange. They found that on 5% significance error level dividend payout ratio has a significantly negative effect on stock price volatility and asset growth rate has a significantly positive effect. Other variable such as leverage, earning volatility and company size has no significant impact on stock price volatility.

Mehr-un-nisa and Nishat (2012) has investigated the impact of financial fundamental and macroeconomic factor on the stock price and found that previous year's stock price, company size and previous year EPS have significant impact on current year's stock price. They also revealed that macroeconomic factors like real GDP growth, ROI and financial development have strong impact on stock price. Further they revealed that there is no significant impact of market to book value, share turnover ratio and inflation rate on stock price.

Hashemijoo, Ardekari, and Younasi (2012) has analysed the impact of dividend policy on the share price volatility. The impact of two main measurement of dividend policy i.e dividend yield and dividend payout on stock price volatility are examined by applying multiple regression and found significant negative relationship. They also observed the significant negative impact of firm size on stock price volatility. Further it has been observed that dividend yield and size are the most important indicators of stock price volatility.

Das and Pattnayak (2013) has investigated the impact of fundamental factors (ROI, Earning power factor, stock valuation factor, Risk factor, volatility Factor, Growth factor) on the Indian Stock Exchange by applying regression analysis and found that there is a favourable impact of ROI, Earning power, Growth Factor, Stock valuation factor on share price of Sensex and Nifty while Risk and Volatility had negative impact on share price of Sensex and Nifty.

Zafar, Chaubey, and Khalid (2012) has examined the impact of dividend policy on shareholder's wealth and market price of shares and found that out of many factors affecting the market price of share dividend is only one factor. They also observed that various factors affecting dividend policy affects the shareholder's wealth in different manner.

Malhotra & Tondon (2013) has examined the factors affecting stock price on NSE 100 companies. They use linear regression model and found that there is a significant positive relationship of firm's book value, EPS and Price Earning Ratio with firm's stock price, Whereas there is significant inverse relationship of dividend yield with market price of firm's stock.

Almumani (2014) has examined the determinants of Equity Share Price. They used regression and correlation analysis and found that out of six factors affecting the share price, 4 factors which are EPS, Book value per share, Price Earning Ratio and Size have significant impact on share price whereas other two factors which are DPS, Dividend Payout have no significant impact on the share price.

Srinivasan (2012) investigated the factor affecting equity share price in India. He observed that DPS has a significant negative impact on share price whereas book value per share have positive impact on share price. Further he revealed that EPS, Price Earning ratio and size are the strong indicator of share prices.

Challa, and Chalam (2015) has investigated the impact of book value, DPS, EPS, Size of the firm, Dividend Payout Ratio, dividend yield, Return on net worth, Price Earning ratio on the equity price of listed Companies in BSE. By employing multiple regression analysis they found that book value and return on net worth have significant positive relationship with market share price.

Hasan, Asaduzzaman and Karim (2013) aims to identify the impact of dividend policy on the market price of shar in Bangladesh. They have used secondary data and applied descriptive statistics, correlation and multiple regression model. Dividend per share and retained earning per share has been used as independent variable and market price per share has been used as a dependent variable. They found that DPS has Retained earning per share has significant and positive impact on the market price per share. Further they stated that those industries who pay higher dividend have higher market price per share as compared to those who pay lower dividend.

Islam, Khan, Choudhury, and Adnan (2014) has investigated how the EPS affects share price and firm's value. They revealed that as EPS increases the share price also increases but not that much. EPS is only one of the factor affecting share price, there are also other factors affecting share price such as macroeconomic factor, microeconomic factor on the company, director's role and company's factor and

other factors. The researcher has suggested that investor should keep in mind above said factors along with EPS while investing in capital market.

Garba (2014) has examined the impact of dividend -per -share on common stock returns of the Manufacturing firms listed on the Nigerian Stock Exchange. Multiple regressions and Pearson Moment Correlation was applied in order to obtain the relationship between dependent and independent variable. He found that the Pearson Correlation Coefficient was highly significant and the result of regression analysis revealed that dividend-per-share has a significant impact on the common stock returns of the sampled firms.

Bhatt and Sumangala (2012) has investigated the impact of EPS on market value of equity share. By applying correlation coefficient they found the positive relationship between EPS and market value of equity share and by applying regression analysis they found the significant impact of EPS on the market value of equity shares. They also stated that EPS is only one of the factors affecting market value of equity shares, there are other factors also which affect the market value of equity shares such as company related factors, and industry related factors and economic factors.

Menike & Prabath (2014) investigated that there is a significant and positive impact of accounting variables - earning per share, dividend per share and book value per share on the stock price of Colombo stock exchange. For analysis single and multiple regression analysis were used to establish the direction of relationship between different variables. The study compared the results of the developed market and developing market where EPS shows less impact to the share price in the Colombo Stock Exchange whereas DPS and BVPS shows significant impact.

Ebrahimi and Chadegani (2011), studied the relationship between Earning, Dividend, Stock Price and Stock Return. They used cross-section, pooled data and panel data regression models for testing. They investigated the effect of earning, dividend and stock price on stock return. In earlier years the effect of dividend was significant but in later years there was not any significant relationship between dividend and stock return. The results showed that only earning has effect on stock return and there is a significant relationship between EPS to stock price ratio and stock return.

Geetha and Swaaminathan (2015), studied four automobile and IT industries (listed in BSE and NSE) for the period of five years as a sample and examine about the influence of book value, earnings per share (EPS) and price earnings ratio towards the market price of the share. The paper is an attempt to analyse the influencing factors which affects the movement of stock price either upward or down trend. The research shows that EPS has a significant effect on market price. But the dividend per share does not have positive or negative effect towards the market price.

Shubiri (2010), conducted a study of 14 commercial banks of Amman Stock Exchange. For analysis simple and multiple regression analysis is used to find out the

relationship of microeconomic factors with the stock price. The study revealed that there is high positive significant relationship between market price of stock and net asset value per share, market price of stock dividend percentage, gross domestic product, and negative significant relationship on inflation and lending interest rate.

OBJECTIVE OF THE STUDY

- To analyze the impact of EPS and DPS on stock price of selected public sector banks.
- To open new avenues for further research.

HYPOTHESIS OF THE STUDY

H_0 : There is no significant impact of EPS and DPS on Stock Price.

RESEARCH METHODOLOGY

The study was causal in nature. It was aimed to find out the Impact of EPS and DPS on the Stock Prices. The study is done to analyze the relationship in Indian context. For the same various indicators have been taken. Specifically, EPS, DPS and Stock Prices of selected Public Sector Banks. The data have been taken for the last 9 years (2006-2007 to 2014-15). The population of the study included all the banks of India. And the sampling frame was all the public sector banks of India. EPS, DPS and Stock Prices was sampling elements. Non probability purposive sampling technique was used for collecting the data. Augmented Dickey fuller test was used for unit root testing to check the stationerity of the data. Regression analysis was applied to check the cause and effect relationship between variables. Regression assumption was confirmed through assumption testing by ARCH LM test to check the serial correlation and ARCH effect and Actual fitted residual table - To check the overall fitness of regression model.

RESULTS AND DISCUSSION

UNIT ROOT TEST

Since time series data was employed, it is important to test for the stationarity of the variables in order to avoid spurious regression. The Augmented Dickey - Fuller test was used for unit root testing. The results of the unit root test for the variables are presented below:

Table 1: Unit Root Test results

Variable	ADF-statistic	Critical value	Level of significance	Order of integration
EPS	-3.372073	-3.492523 -2.888669 -2.581313	1% 5% 10%	Level
DPS	-3.490993	-3.492523 -2.888669 -2.581313	1% 5% 10%	Level
Stock Price	-3.978501	-4.054393 -3.456319 -3.153989	1% 5% 10%	Level

The Unit Root tests showed that all variables were stationary at level Order of integration all the variables EPS, DPS and Stock Price are stationary at level order of integration. Augmented Dickey- Fuller unit root test statistics are greater than their critical values considered at 5% level of significance. The absolute ADF statistic value should be greater than the critical value of any one selected percentage level from available three levels ignoring the sign.

REGRESSION ANALYSIS:

Table 2: REGRESSION ANALYSIS

VARIABLE	COEFFICIENT	STD.ERROR	T STATISTIC	PROB.
C	2.388497	0.344668	6.929847	0.0000
DPS	0.413117	0.178272	2.317333	0.0224
EPS	0.641126	0.181675	3.528978	0.0006

The outcome of regression model has shown that the Prob. value of t-statistic of independent variables; DPS (0.0224) and EPS (0.0006) is less than 0.05 so; there is a significant effect of DPS and EPS on Stock Price.

$$y = a + b_1x_1 + b_2x_2 + e$$

$$= 2.388497 + 0.413117 b_1 + 0.641126 b_2 + e$$

Table 3: MODEL SUMMARY

R-squared	Adjusted R-squared	D-W statistic	F-statistic	Prob.(F-statistic)
0.834312	0.831156	1.427811	264.3607	0.000000

The above table (Table-3) defines the results of regression analysis. The coefficient of determination 0.831156 means that 83.11% variation in Stock Price is being explained by the independent variables EPS and DPS, Value of F-statistic 264.3607 is significant at 0.000000 which is less than 5% reveals, model is good fit.

REGRESSION'S ASSUMPTION TESTS

ARCH LM Test:

H_0 - residuals are not serially correlated.

Table 4: ARCH Test

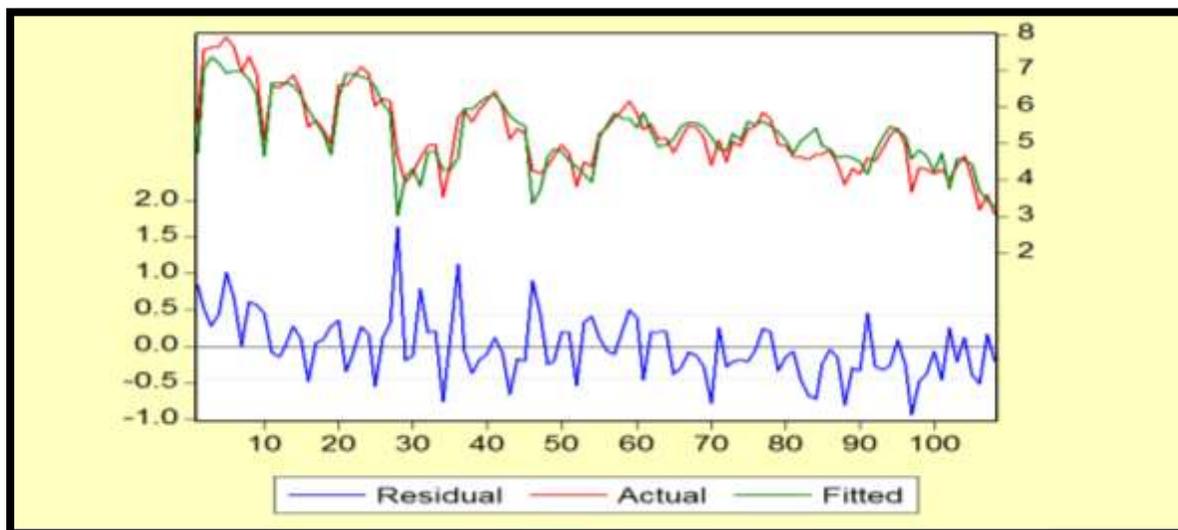
F-statistic	0.137194	Probability	0.711833
Obs*R-squared	0.139624	Probability	0.708655

From the above table (Table-3) it is resulted that P-value (0.708655) of Observed R-square is more than standard value (0.05) so, null hypotheses is not rejected. It means the residuals are not serially correlated.

Actual Fitted Residual Graph

Actual Fitted Residual Graph represents graphically the effective value of the dependent variable (stock price), its estimated value and errors in regression.

Graphical representation of the effective value of the stock price, its estimated value and errors in regression



The above graph provides the views which describe the actual values, fitted values, and residuals.

DISCUSSIONS

It can be advocated that there is a positive relationship between EPS, DPS and Stock price as seen in the literature. However, it should be noted that possible data set or period changed may decrease or strengthen the reliability of the outcomes observed from our analysis. The study revealed that dividend per share and earning per share can be noted as an integral factor bearing an impact on stock prices for the further researches. Importantly this outcome is consistent with the findings provided in Ebrahimi and Chadegani (2011) and Challa, and Chalam (2015). The outcome of the study has exposed that as, nearly 16.89 % of the movement in stock prices remains unexplained. Noticeably, the results of the present study are in line with the propositions of Adebisi and Lawal (2015), Lashgari and Ahmadi (2014) and Malhotra & Tondon (2013) where it has been observed that earning per share is a major determinant of stock prices. The next significant factor that emerges out of the empirical findings is dividend per share has a strong relationship with that of stock price. thus, and there is some scope for further researches in this area as there are factors not included in the study which can precisely explain the remaining unexplained movement of stock prices. The results of the present study can be particularly helpful for investors to study the volatility of stock prices and fund managers as they can look out for these significant factors while analyzing stock returns and predicting future prices.

CONCLUSION

This study examined the Impact of EPS and DPS on stock price of selected public sector banks of India. The time series data on different variables; EPS, DPS and Stock Price were taken for carrying out the study mainly from the websites of money control and NSE. Time period is taken to analysis the cause and effect relationship between EPS, DPS and Stock Price, 9 years period from 2006-07 to 2014-15. Stationarity test, regression model assumption was checked through ARCH LM test and to check the impact of EPS and DPS on stock price, regression test was applied. It has been concluded by testing the hypothesis and following results were obtained that, there is a significant effect of EPS and DPS on Stock price of selected Public sector banks in India. The study has disclosed that 83.43% variation in Stock Price is being explained by the independent variables EPS and DPS, Value of F-statistic 264.3607 is significant at 0.00% which is less than 5% reveals, model is good fit.

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