

## Predictive Power of Net Profit On Share Returns

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### Abstract

The major indicator that attracts a person to invest in a company is the performance of the firm. Various measures such as ROA, ROE, and Tobin's Q have been tagged on performance. But the traditional and objective measure is the net profit of the company. Using purposive sampling of 25 companies from NIFTY, this paper has attempt to find out the relationship, cause and effect between companies net profit and stock return an investor obtains within an accounting year. To achieve this, both univariate and bivariate analysis were run on a balanced panel data from 2009-2013 accounting years of the sample companies.

The results reveal that companies had experienced an increasing profit over the period but the biggest portion is retained since a change in net profit results to less than proportionate change in dividend per share. Stock returns fluctuates much without a fixed pattern. Capital gain accounts for 95% of the total stock returns which also fluctuates over the time. Although net profit has positive impact on stock returns, it is not significant relationship. Because capital gains which is the biggest part of stock returns is not significantly influence by annual net profit. Hence, it is concluded that reported annual net profit does not have predictive power on total stock returns

**Keywords:** net profit, stock returns, capital gain, dividend

### I. Introduction

Investing in shares is very risky, hence investors tries to reduce their risk by analysing the correct information and factors influencing stock return. The ultimate influencing factor on stock returns is the performance of the company. Every investor or analyst resorts to financial statements which is the pictorial evidence of company's current and future performance. While various methods such as  $EPS^1$ ,  $ROA^2$ , and  $ROE^3$  have been develop to

predict and measure performance, net profit still remains the basic foundation of all financial performance measure. Numerous researches on performance and stock returns uses different variables such as EPS, ROA, ROE on the grounds that net profit can be misleading because of the numerous subjective accounting practices. While this study does not dispute this fact, it still hold the view that net profit is the common signal of returns and forms the basis for all other

performance proxies. To the common investor, a company will give returns when it makes profit. This indicates the importance of net profit as a predictive power of stock returns. It is for this reason that, an attempt has been made to determine the relationship between net profit of a firm and the returns to its investors.

Thus it is imperative for a study to be conducted on the relationship between net profit and total returns to shareholders.

The study in its attempt to find the predictive power of net profit on stock returns will also fulfil the following objectives. To determine the average trend of capital gain over the period; to determine the average trend of dividend of the companies; to find the trend of net profit of the companies for the period and to determine the cause of variation in total return over the period.

## II. Literature review

Using random panel effect regression model, Khan et. al 2012 did not find any significant relationship between accounting numbers (net profit) and stock returns. This study was conducted on the impact of earnings on stock returns in Pakistan. A related study on impact of financial variables on share prices by Placido (2012) disclosed a weak negative correlation between ROA and share price. EPS on the other side have a positive strong correlation with share price. The study was analysis with spearman Rank order correlation on 50 listed companies. The multiple regression also confirm these relationship and further reveals that the model was able to explain about 73% of average share price changes.

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1. *EPS – Earning Per Share*

2. *ROA – Return on Asset*

3. *ROE – Return on Equity*

An empirical study by O'Hara (2000) proves a direct relationship between share price and earnings as well as dividend declaration. But this relationship holds only for short-periods, because there was no fixed pattern relationship in the long run.

Balaputhiran (2014) study on the relationship between firm performance and EPS, found no significant relationship between their two variables. Although there positive correlation, performance does not statistically impact on the EPS on listed companies in Sri-Lanka

Dhaliwal (1998) found out that net income has more influence on stock returns than comprehensive income in USA. But this was criticized by Skinner (1999) that, there is no economic rationale to expect comprehensive income to outperform net income as a measure of stock returns. Kanagaretnam et al (2009) also contrasted Skinner argument by finding strong correlation between comprehensive income and stock price than the relationship between net income and stock prices in Canada. Cahan et al (2000) in New Zealand also concluded that, comprehensive income as a composite has information value than its individual components. A related research by Ali-Saeedi in Iran on comprehensive income and stock returns also shows a weak relationship between the two variables.

## II. Dataset and data analysis

A balance panel data of 500 annual observations were collected from 25 companies out of the Nifty (50) companies for 2009 to 2013 accounting

years. These 25 samples represent the active sectors of India economy namely, IT , automobile, banking and. Nifty companies are good population for the study because they have the highest market capitalisation and are daily traded which causes price movement. The Nifty also contains the diverse sectors of India economy.

The data was analysed through simple regression and Karl Pearson Correlation on E-view and Starter statistical computation programs

### III. Hypothesis and equations

#### *Total Stock Returns and Net profit*

The blur picture on the relationship between income (profit) and stock returns from existing literature makes it difficult to draw clear expectation of their relationship. Viewing the relationship from common man shows that, net profit of a company will have significant impact on the total returns of the company. It is therefore hypothesis;

**H<sub>0</sub>: β<sub>1</sub> = 0** (there is no significant relationship between total returns and net profit)

**H<sub>1</sub>: β<sub>1</sub> ≠ 0** (there is a significant relationship between total returns and net profit)

$$SR_{it} = \alpha + \beta_1 np + u_{it}$$

.....Equation 1

#### *Dividend and net profit*

Finance literature argues that a company will pay dividend mainly from current profit and will only when there is profit. Thus there is an assumption of significant impact of net profit on dividend.

**H<sub>0</sub>: β<sub>1</sub> = 0** (there is no significant impact of net profit on dividend)

**H<sub>1</sub>: β<sub>1</sub> ≠ 0** (there is a significant impact of net profit on dividend)

$$DV_{it} = \alpha + \beta_1 np + u_{it}$$

.....Equation 2

#### *Capital gain and net profit*

While dividend may be paid out net profit and controlled by directors, capital gain is determine by the free hands of demand and supply. This free hand may be or castrated by the net profit of the company. Since in practice company's shares are still traded even when there is net loss, it is right to expect no significant influence of net profit on capital gain.

**H<sub>0</sub>: β<sub>1</sub> = 0** (there is no significant impact of net profit on capital gain)

**H<sub>1</sub>: β<sub>1</sub> ≠ 0** (there is a significant impact of net profit on capital)

$$CG_{it} = \alpha + \beta_1 np + u_{it}$$

.....Equation 3

Where SR – Stock return (DV + CG)

DV – Dividend

CG – Capital gain

np – net profit

U<sub>it</sub> – error term

### IV. Discussions of Results

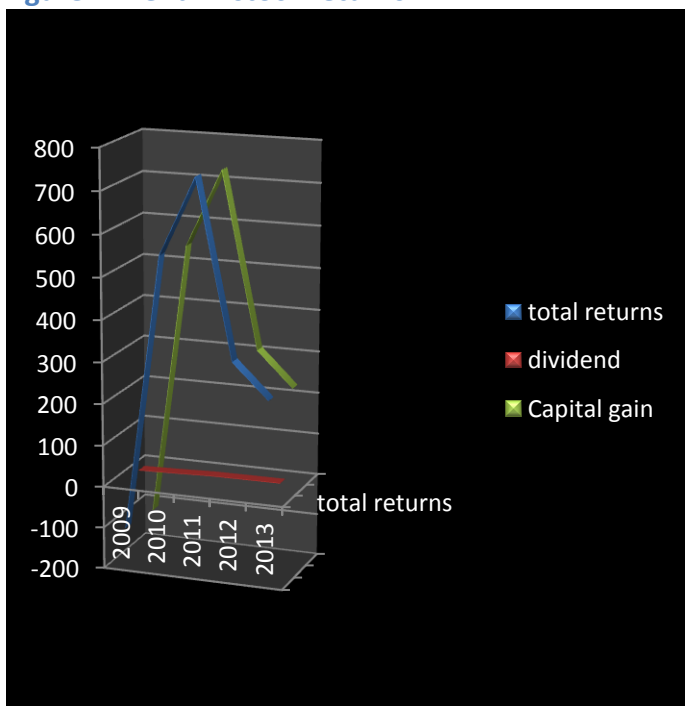
#### **Descriptive results**

##### *Stock returns*

It can be seen from *figure 2* that on average, shareholders had negative returns in 2009 by investing in the companies through fall in share prices. A total return was Rs. -105.302 due to high capital loss of Rs. 116.36. The global economic crisis could have affected the share prices in 2009.

The dividend mitigated the capital loss marginally. The share prices picked up in 2010 and 2011 because most investors both foreign and domestic saw that India was not much affected with the global crisis and was safe to invest. Companies also attracted investors by paying high dividends in 2010. Since the share price is determined by demand and supply which cannot be predicted easily, the capital gain does not follow any fixed pattern resulting to fluctuation in the total stock returns. The dividend on the other hand is demonstrating an increasing pattern over the period from Rs. 10.834 in 2009 to Rs. 17.078 in 2013 the data also indicates that sample companies pay less than Rs. 20 dividend per share to shareholders over the period. Dividend also account for less than 10% of the total stock returns for the period.

**Figure 1 Trend in stock returns**

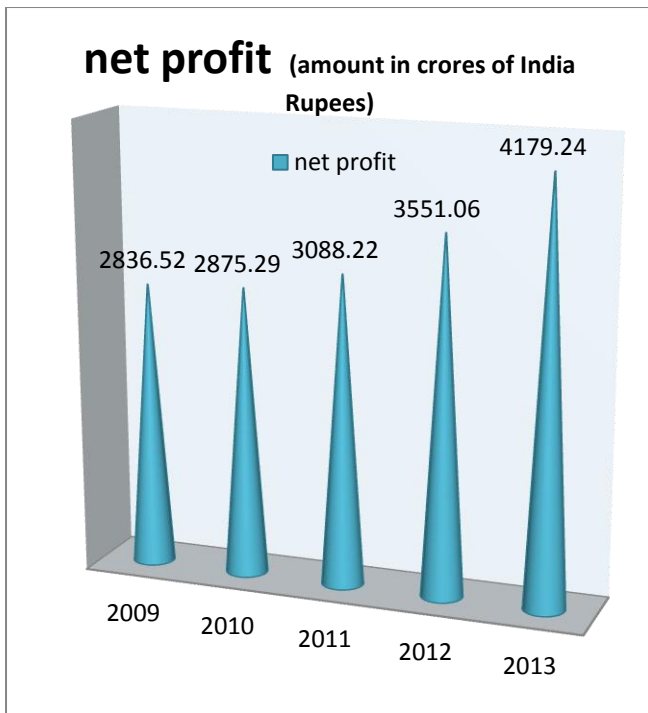


Panel data extracted from annual reports of sample companies

Every company is expected to make profit as the year goes by in order to be in business. This is the case of the net profit trend of the companies as depicted in figure 1. The figure shows that from 2009, the companies have been increasing their net profit from Rs. 2836.5 cores to Rs. 4179.24 cores in 2013. There was no much difference between 2009 and 2010 net profits due to the economic meltdown, because most of the companies such as TCS, INFOSYS and Tata Motors make much of their sales outside India. Some companies even made a loss during those periods. Net profit increased by about Rs. 450 cores in 2012 and Rs. 628 cores in 2013. It is expected that these increase will results to high dividend per share, but as *figure 2* shows, the dividend by companies has been nearly flat over the period. It can be inferred that the biggest part of the profit increase are plough back into the company. The data also implies that, on average, all the sample companies may be required by Section 135 of the Companies Act 2013 to undertake Corporate Social Responsibility activity in line with schedule 7 of the Act. At least they all meet the net profit threshold of Rs. 5 core of average profit from immediate preceding 3 years

*Figure 2: Net profit*

*Net profit*



Based on panel data extracted from sample companies annual reports

### Econometric results

#### Stock returns and profit

The result shows that profit have positive correlation with total stock returns. The profit also have positive coefficient indicating a positive relationship but insignificant at 5%. It is normally expected that profit will have significant impact on total returns. This results is contrary to finance literature because, capital gains accounts for more than 95% of the total returns. And capital gain is not influence much by end of year net profit reporting. With the advent of interim reporting, investors and analyst are able to make forecasting about end of year profit. This has reduced the significance of year end net profit on share prices. Therefore alternative hypothesis is rejected in favour of the null hypothesis.

Dependent Variable: SR  
Method: Panel Least Squares  
Sample: 2009 – 2013

Periods included: 5  
Cross-sections included: 25  
Total panel (balanced) observations: 125

Variable	Coefficient	Std. Error	t-Statistic	Prob.
	-	-	-	-
PF	0.02090	0.08967	0.23309	0.8162
C	358.565	323.701	1.10770	0.2707

#### Dividend and net profit

It is quite obvious that dividend will have perfect linear relationship with net profit, because dividend is paid out of net profit. A careful look at the raw data on dividend and net profit shows that some companies were paying dividend when there was net loss and majority maintains same dividend amount even when profit changes. This absurd pattern necessitated a model to establish the relationship between the two variables. Although the results shows almost a perfect linearity of PV 0.0006 and strong positive correlation, the coefficient (0.00129) is too small. That is, profit can cause a change in dividend; such change in profit will lead to small change in dividend. Thus  $H_1$  is accepted.

Dependent Variable: DVL  
Method: Panel Least Squares  
Sample: 2009 2013  
Periods included: 5  
Cross-sections included: 25  
Total panel (balanced) observations: 125

Variable	Coefficient	Std. Error	t-Statistic	Prob.
	0.00129	0.00036	3.50974	
PF	10.3282	1.66419	6.20616	0.0006
C	4	8	4	0.0000

### Capital gain and net profit.

Since the total stock returns is 95% accounted for by the capital gain, it is important to explain the impact of net profit on capital gain. The outcome shows that there is marginal positive correlation and coefficient but not significant. This confirms the relationship between the total stock returns and net profit. It implies that, increasing yearend profit may cause share appreciation, it is not a determinant. Other strong factors account for the price movements and capital gain in shares. Again an investor cannot use annual net profit figures to predict the capital gain of companies. It can be inferred from all the regression results that end of year net profit does not have predictive power on total stock returns, although it can be used to predict dividends. That is  $\beta_1 = 0$  making  $H_1$  to be rejected.

Dependent Variable: CG

Method: Panel Least Squares

Sample: 2009 2013

Periods included: 5

Cross-sections included: 25

Total panel (balanced) observations: 125

Variable	Coefficient	Std. Error	t-Statistic	Prob.
	0.02341	0.02810	0.83317	-
PF	7	6	1	0.4068
	228.652	101.452	2.25379	
C	9	6	0	0.0264

## V. Conclusion

This research has statistically answered the question whether reported annual net profit has predictive power on total stock returns. The results

depict that companies had experienced an increasing profit over the period but the biggest portion is retained since a change in net profit results to less than proportionate change in dividend per share. Stock returns fluctuates much without a fixed pattern. Capital gain accounts for 95% of the total stock returns which also fluctuates over the time. Although net profit has positive impact on stock returns, it is not significant relationship. Because capital gains which is the biggest part of stock returns is not significantly influence by annual net profit. Another reason for the insignificant impact of net profit on total stock returns is that, dividend which has perfect positive linearity with net profit is only 5% of the total stock return. Further, the advent of interim reporting has made it possible for investors and analyst to trade with forecasted annual figures before net profit declaration. Hence information on net profit is mostly already incorporated into share prices before its formal declaration.

The study therefore concludes that reported annual net profit does not have statistical significant predictive power on stock returns. And capital gain is the major returns to an investor in the sample companies.

The same study can be done on small and medium companies where capital gain is not much driven by demand and supply. Further studies can be conducted to establish the predictive power of interim reports on stock returns. A research can also explore the timing of profit declaration and its impact on capital gain.

## VI. References

1. Allah Bakhsh Khan Syed Zulfiqar Ali Shah 2012 “The Impact of Retained and Distributed Earnings on Future Profitability and Stock Returns in Pakistan” International Research Journal of Finance and Economics available at <http://www.internationalresearchjournaloffinanceandeconomics.com>
2. Placido M. Menaje, Jr 2012 “Impact of Selected Financial Variables on Share Price of Publicly Listed Firms in the Philippines” American International Journal of Contemporary Research Vol. 2 No. 9
3. Skousen, K., Stice, J. & Stice, E. (2007). Intermediate Accounting (16th ed.) Thomson South-Western
4. O’Hara, T., Lazdowski, C., Moldovean, C. & Samuelson, S. (2000). Financial indicators of stock performance. West Haven: American Business Review
5. Sathasivam Balaputhiran 2014 Firm performance and earnings per share: A study of listed banks in Sri Lanka Merit Research Journal of Accounting, Auditing, Economics and Finance Vol. 2(1) pp. 008-011, January, 2014
6. Dhaliwal, D., Subramanyam, K.R., Trezevant, R., 1998. Is comprehensive income superior to net income as a measure of firm performance? Journal of Accounting and Economics, this issue.
7. Douglas J. Skinner 1999 How well does net income measure firm performance? A discussion of two studies Journal of Accounting and Economics 26 (1999) 105—111
8. Abdolreza Ghasempour and Mehdi Ghasempour 2013 The Relationship between Operational Financial Ratios and Firm’s Abnormal Stock Returns Research Journal of Applied Sciences, Engineering and Technology ISSN: 2040-7459; e-ISSN: 2040-7467

## **Appendix**