

STOCKHOLDER WEALTH MAXIMIZATION - A MYTH OR REALITY?

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ABSTRACT: *A firm's financial and investment decisions are inseparable and play a dominant role in increasing its market of value. Plough back of corporate profits, if invested wisely, leads to an appreciation in the market value of common stock in the long-run. Retained earnings must be invested in positive net present value projects, ensuring the shareholders a decent return which is higher than their expected market return. When companies are financially well off, the shareholders can be enriched in proportion to it. The study examines the effectiveness of investment of retained earnings regarding yielding a positive change in firms' market value in the long-run. On the examination of 147 Indian firms, it was found that majority of them are not able to yield their shareholders the rate of return on investment of retained earnings not even equivalent to their rate of average profitability meaning that the firms were profitable, but their shareholders were not relatively enriched. The shareholders could have earned a better return on their investments of distributed profits if they had received dividends from these firms.*

Keywords: Shareholder Enrichment, Retained Earnings, Dividends, Stock Market Discipline, Pecking Order Theory

INTRODUCTION

Plough back of corporate profits, if invested wisely, leads to an appreciation in the market value of common stock in the long-run. The greater the retained earnings, the higher the share prices are. Pecking order theory of finance promulgates that firms prefer retained earnings as their first choice for asset expansion requirements. Therefore, firms whose retention ratio is higher, signal the market that they have greater potential investment opportunities to invest that would lead to increased future earnings. Earnings retained are the most important internal sources of financing the growth of firms. Deployment of internal funds conveys information about growth prospects. Thus, earnings retained if invested in positive NPV projects would increase the market price of the common stock.

There are also empirical research findings as to how the market value of securities is affected by the earnings distributed and retained. Plough back of corporate profits gives rise to an appreciation in the value of corporate securities, according to Oscar Harkavy [1]. Firms with growth prospects reinvest more of their earnings. Watts, Barclay and Smith [2] found that higher dividends are paid by stable and mature firms. Growth is likely to place a greater demand on internally generated funds. Myers and Majluf [3] advocated that firms with greater potential investment opportunities finance their growth by minimal debt. These firms retain more for their investment needs. Growth opportunities can produce moral hazard effects and push companies to take more risk. To mitigate this problem, growth opportunities should be financed with equity or retained earnings instead of debt. Smith [4] found a negative relation between debt and growth opportunity. Thus, internally generated funds have contributed enormously to financing the growth of corporate firms. There is evidence for a positive association between firms' profitability and their market value. According to Gordon [5], an investor, when he acquires a share, buys the income per share regardless of whether they are distributed to him or not. Friend and Puckett [6] declared that market price of shares is equated to the present value of expected future earnings and these returns

may take the form of dividends and capital gains. Profitability of firms would lead to increase in the market price which enriches the shareholders, according to Raj Ojha [7]. These results confirm that current earnings would have a positive impact on the market value of shares irrespective of the fact that they are distributed or retained.

The issue to be investigated in the study pertains to how far the firms are genuine in rewarding their shareholders in response to their profitability in the long-run. Firms' profitability can be measured by various financial metrics. The study begins its analysis by raising questions like Do the so-called popular financial metrics including return on equity and earnings growth measure the shareholder enrichment in the long-run? Are the retained earnings employed effectively by the firms in India? Do retained earnings significantly affect the market price of shares in the long-run?

Review of Literature

As of a given time, stock prices tend to vary directly in proportion to earnings distributed. Over a period of years, the stocks of those corporations retaining a greater portion of earnings tend to exhibit greater price appreciation, according to Oscar Harkavy [1]. However, small dividend payout does not always guarantee outstanding price appreciation, unless the earnings retained are efficiently invested in positive net present value projects. Ben C Ball [8] who examines the relationship between shareholder enrichment and company performance states that almost half of the U.S corporations produce a marginal increase in market value less than \$1 for each \$1 of retention in the long run. On average, 16 per cent of the retained earnings of the corporations studied somehow disappear. The stock of more than one – fifth of these companies fall in price, some of it falls drastically. So the market has unavoidably discounted the value of these companies, despite an influx of new capital from retained earnings.

Dividend payments have an immediate effect on market value of shares. Desai [9] concluded that current dividend is found to be the most significant variable in increasing the market value of shares. However, in the long-run, retention of net

profits would lead to firms' growth and in turn shareholder wealth can be maximised, Bhole [10] revealed. Chawla and Srinivasan [11] tested the impact of dividend and retention on the share price. Their results show that both dividend and retained earnings significantly explain the variations in share price. The impact of dividend, however, is much more pronounced than that of the retained earnings. But the market has started to assign more weight for retained earnings.

The impact of dividend payments on market price of shares is felt stronger than that of retained earnings, according to Khan [12]. Also, Falak and Faisa [13] are of the view that retained earnings do not have a significant relationship with the stock returns. However, Beisland [14] found that retained earnings positively influence the market price of shares. According to Park and Pincus [15], internally generated funds are the best source of financing the asset needs of firms for the cost of internal funds is the cheapest. Muhammed Ali and Mehboob Ahmed [16] found that the value of a firm and its shareholders' wealth can be maximized by the investment of retained earnings on positive net present value projects. The most significant result found by Lincoln [17] is that the companies should distribute their earnings unless they have potential investment opportunities. This is also supported by Khan and Zulfiqar [18]. According to them, growth of a firm is not ensured by higher volume of retained earnings, but the effective investment and reinvestment of such earnings retained.

Above studies observed that the market value of firms with greater potential investment opportunities is positively associated with retained earnings. However, higher dividends increase the market price of shares when firms do not have considerable investment opportunities because retention of income is of no use for these firms.

Methodology

The research methodology for the study is as follows:

i. Sample

The Official Directory of the Bombay Stock Exchange, Mumbai classifies the Indian industries into 23 major industries. From the official classification, seven major Indian industries are selected at random which forms the sampling frame. One hundred and forty-nine companies, which are on average the most profitable for 15 years from 1999-2013, constitute the sample for the study. Proxy for profitability is earnings growth of companies.

ii. Variables used

The primary task executed upon the data collected is the conversion of the needed financial information into five-year rolling average figures. The five-year period is chosen on the basis that the impact of earnings retained if anything could well be reflected in the long-run say for five years on the market price of the shares. The common metrics indicating the financial performance of the companies are used as independent variables.

The shareholder enrichment has been used as the dependent variable. Three variants of shareholder enrichment which measure the benefit the shareholders have received in response to the financial performance of the companies

during the 15-year period have been used. These are enumerated as below.

A. Shareholder Enrichment to Earnings Ratio (SE/E)

This ratio measures how well the shareholders are benefitted about the profits of the firms. The earnings, irrespective of whether they are declared as dividends or retained in the business, belong to shareholders. When the profits are distributed, this ratio is expected to be equal to 100 per cent. When they are retained, then this ratio is supposed to be more than 100 per cent in the long-run as the stock market would add a premium to the earnings retained when the reinvested earnings are effectively utilised. However, when this ratio falls short of 100 per cent, then it is understood that the retained earnings are not used efficiently by the companies. The stock market has depreciated the retained earnings. Those earnings retained do not yield any returns to the shareholders. The earnings get lost in the process of their being employed in the business when they are not put into effective utilisation. Therefore, the shareholders suffer from their investment in shares. Shareholders of those companies where this ratio is less than 100 per cent would have been better benefitted, had the entire earnings been paid off as dividends.

B. Change in Market Value of Shares to Retained Earnings Ratio (CMV/RE)

This ratio measures the change in market value of shares during a period in response to the amount of retained earnings in the same period. This ratio infers as to how much the market price per share has increased to the average retained earnings in that five-year period. If retained earnings increase by one rupee, then the market price per share is expected to increase by more than a rupee within the period of five years. If not, the shareholders do not get a return on the investment of their earnings retained which is higher than their opportunity cost. This ratio measures the enrichment of the shareholders precisely out of reinvested earnings within the company.

C. Return on Shareholder Investment (ROSI)

This ratio measures the shareholder enrichment taking into consideration the benefit forgone on the alternative investment opportunities available for shareholders. The shareholder enrichment, as calculated by this ratio, is compared to the inflation rate and the India Government 10-year Bond Rate which are used as proxies for the opportunity cost of earnings reinvested into the business.

The three dependent variables are framed from the shareholders' point of view, not from the companies' point of view.

Various cumulative average financial metrics studied as explanatory variables are (i) Price to Earnings Ratio, (ii) Payout Ratio, (iii) Return on Equity Ratio, (iv) Capital Expenditures to Revenue Ratio, (v) Ratio of Debt to Market Value (vi) Per cent of Capital by Internal Funds (vii) Earnings Growth Ratio and (viii) Beta.

i. Price to Earnings Ratio (P/E Ratio)

It measures how much an investor is willing to pay for the earnings per share of the company. This ratio reflects the shareholders' expectation about the future earnings of the company. So, higher price earnings ratio conveys the

shareholders that the future earnings of the enterprise are prosperous.

ii. Dividend Payout Ratio (DPR)

Payout indicates the relationship between dividend paid to equity stockholders and earnings available to equity shareholders. The shareholders will know how much of the earnings are distributed to them as dividends.

iii. Return on Equity Ratio (ROE Ratio)

Profitability of a company is measured differently in different contexts. Shareholders are directly interested in the relationship between profits (after fixed interest payments) and the nominal capital issued, while managers who are interested in the effective utilisation of capital relate earnings (before interest payments) to the total capital employed. Since the study focuses on the profitability of equity shareholders, return on equity is calculated dividing profit after tax and preferred dividend by net worth.

iv. Capital Expenditures to Revenue Ratio (Capital to Revenue Ratio)

This ratio explains the association between the revenue earned and the capital expenditures incurred by a company. For every rupee of earnings, how much amount money has been invested is identified with the help of this ratio. This ratio is intended to represent the capital intensity of the companies.

v. Debt to Market Value of Shares Ratio (Ratio of Debt to Market Value)

The ratio of debt to market value of shares explains how the long-term debt is related to market value of securities. Before a decision to invest in shares is taken up, the potential investors would normally like to judge the risk associated with their investment. This ratio associates the financial risk with the return on investment.

vi. Internally available Funds to Capital Expenditures Ratio (Per cent of Capital by Internal Funds)

Cash flow- the sum of profit after tax and depreciation- is equated to internally available funds. If expressed as a ratio to capital expenditure, this would measure how much amount of capital expenditures can be financed through internally available funds without resorting to external capital either in the form of new borrowings or new equity issue. Maximum use of internal resources, being the cheapest source of financing would reduce the weighted average cost of capital which leads to maximization of shareholder wealth.

vii. Earnings Growth Rate (Earnings Growth)

Earnings growth rate is the annual growth rate of earnings calculated during the 15-year period. This rate measures how a company grows profitably over the period.

viii. Stock Beta (Beta)

Stock beta indicates the volatility of share prices in the market. Beta has been calculated by regressing the market return with the individual stock return. From the shareholder's point of view, beta indicates the risk associated with their investment in shares.

Scheme of Analysis

This paper makes an attempt to examine the validity of Ben C. Ball's model in Indian conditions. Based on his methodology, simple and multiple regression analyses have been executed at three stages to test the association between the conventional metrics calculated to describe the firms' financial performance and the three variants of shareholder enrichment to identify the effectiveness of the deployment of retained earnings in enriching shareholders in long-run, taken to be a five-year period in the study. At the first stage, the association between shareholder enrichment as represented by the three calculated measures - shareholder enrichment to earnings ratio, change in market value to retained earnings ratio, return on shareholder investment ratio - and the important metrics of financial performance of the companies is tested.

Of all the financial indicators used as the independent variables in the first stage of regression analysis, return on equity and earnings growth are the most widely used financial criteria by the investors and the financial analysts to judge the performance of firms. Therefore, at the second level return on equity and earnings growth are regressed on shareholders' enrichment as represented by the same three measures.

Return on equity is the most useful metric showing the return on investment by the shareholders. So, to test its impact on shareholder enrichment, simple regression analysis has been performed at the third stage.

The Regression Models

The following regression models are framed

Model-I

$$SE/E = a + b_1 P/E + b_2 DPR + b_3 ROE + b_4 CR + b_5 DMV + b_6 IFCE + b_7 EGR + b_8 Beta + e$$

Model-II

$$CMV/RE = a + b_1 P/E + b_2 DPR + b_3 ROE + b_4 CR + b_5 DMV + b_6 IFCE + b_7 EGR + b_8 Beta + e$$

Model-III

$$ROSI = a + b_1 DPR + b_2 ROE + b_3 CR + b_4 DMV + b_5 IFCE + b_6 EGR + b_7 Beta + e$$

In the third model, P/E Ratio has been excluded due to the reason that market price per share is an integral part of both ROSI and the P/E Ratio. For further confirmation of the results of the above equations, shareholder enrichment is again regressed on earnings growth and return on equity. The following are the equations.

Model-IV

$$SE/E = a + b_1 ROE + b_2 EGR + e$$

Model-V

$$CMV/RE = a + b_1 ROE + b_2 EGR + e$$

Model-VI

$$ROSI = a + b_1 ROE + b_2 EGR + e$$

For the final confirmation of the results, each variant of shareholder enrichment is regressed on ROE. The equations are as follows.

Model-VII

$$SE/E = a + b_1 ROE + e$$

Model-VIII

$$\text{CMV/RE} = a + b_1 \text{ ROE} + e$$

Model-IX

$$\text{ROSI} = a + b_1 \text{ ROE} + e$$

Where,

a	=	Intercept
b_1 to b_8	=	Regression Coefficient
P/E	=	Price to Earnings Ratio
DPR	=	Dividend Payout Ratio
ROE	=	Return on Equity Ratio
CR	=	Capital to Revenue Ratio
DMV	=	Debt to Market Value of Shares
IFCE	=	Internally available Funds to Capital

Expenditure Ratio

EGR	=	External Growth Rate
Beta	=	Beta Coefficient
'e'	=	Error Term

Sensitivity of Shareholder Enrichment to Retained Earnings

Testing the association between the traditional financial metrics and shareholder enrichment forms the first part of the analysis. The issue about how the market price of shares reacts in response to retained earnings in the long-run forms the second part of the analysis. Return on equity, the yardstick commonly used to judge the financial performance of the companies, is also tested regarding its strength in explaining the shareholder enrichment. The results are discussed in the following paragraphs.

Shareholder Enrichment to Earnings Ratio

The range of shareholder enrichment to earnings ratios for the sample companies is enumerated in Table 1.

The average shareholder enrichment to earnings ratio is 327.66. The shareholders are enriched on average by Rs.327.66 for every one rupee of earnings retained. However, the range of distribution of the ratio is very broad. Nineteen firms have efficiently invested their retained profits i.e. the stock market discipline has forced the companies to add a premium on their retained earnings investment.

The average shareholder enrichment to earnings ratio for 80 firms is just Rs. 48.46. It shows that the shareholders of these companies have received a return on their investment lower than what they would have obtained if the earnings had been distributed. The most surprising results are found with the remaining 36 companies whose average ratio is negative at 323.02 which indicates that the shareholders of these companies have incurred loss on their investment. For every one rupee of earnings retained, the shareholders have lost on average by Rs. 323.02. So retained earnings have not been invested wisely in these companies over the 15-year period.

Almost 116 companies constituting 78 per cent of the sample show that their retained earnings have not been efficiently utilised for such investment proposal which would yield a fair return to shareholders.

It is, therefore, necessary to identify as to what has happened to the lost retained earnings. To determine whether the lost retained earnings have been reflected by way of increase in the market value of shares, the ratio of change in market value of shares to retained earnings is analysed.

Change in Market Value of Shares to Retained Earnings Ratio

Change in market value to retained earnings ratio determines the increase in market value of shares to increase in retained earnings. For every rupee of earnings retained, the market is expected to increase the share price by more than a rupee; otherwise, earnings retained become unprofitable to shareholders. One can expect this ratio to be at least one. This ratio explains the value attached to retained earnings by the stock market. Whenever there is a decision to retain profit, the stock market starts evaluating the investment of retained earnings in terms of increase in share price. If retained earnings are invested efficiently, the stock market would add a premium to such investment. So this ratio is expected to be more than a rupee or 100 per cent.

On the other hand, if the market believes that the retained earnings are not invested effectively, the market would discount the retained earnings by way of reducing the market price of the shares. If this is the case, this ratio is less than a rupee or less than 100 per cent. A ratio which is less than 100 per cent indicates the inefficient utilization of retained earnings. Table 2 explains the range of change in market value to retained earnings ratio.

It is clear that only 111 out of 149 companies have provided their shareholders with a relatively fair reward by about Rs. 2.78 for every rupee of earnings retained. The shareholders of these companies have benefitted by the decision to reinvest earnings by the companies.

The shocking results are registered with the remaining 38 firms. The ratio for these companies is found to be less than one rupee, i.e., less than 100 per cent. For every rupee of earnings retained, the market price of the shares has declined by Rs.9.81. The stock market has discounted the retained earnings of these companies on the belief that the earnings retained have not been utilized to their fullest potential. The shareholders have lost growth in their investment in shares in these companies. If these companies had distributed the earnings, such distributed earnings would have fetched a fair return to the shareholders through investment in better alternatives.

The average ratio indicates that 38 companies are penalized for their decision to reinvest their earnings.

Return on Shareholder Investment Ratio

Table 3 summarizes the return on shareholder investment ratio for all the sample companies.

Return on shareholder investment ratio explains that 118 companies constituting 79 per cent of the sample have yielded on average 12 per cent return to shareholders. This rate of return is well ahead of the average rate of inflation during the period which is 6.77 per cent and the average yield on 10 - year India Government Bond during the same period which is 7.91 per cent. (Source: inflation.eu). However, the average return on shareholder investment ratio for 31 companies is -0.07. In a rigid sense, these 31 companies have deteriorated their shareholders' earnings by their decision to retain. The retention decision has ultimately proved wrong.

Return on Equity as a Measure of Shareholder Enrichment

One of the most significant metrics of evaluating the financial performance of firms is the return on equity ratio. This ratio measures the return generated out of equity capital employed. Shareholder value is created when the return on equity is greater than the required return as expected by the shareholders on their investment in shares. So, the shareholders use return on equity ratio for evaluating the utilization of their money by the companies. This premise on return on equity has set a base for analyzing this ratio as a measure of shareholder enrichment in the study. The return on equity, mainly used by shareholders and financial analysts for assessing the financial performance of firms, is compared with the return on shareholder investment which precisely measures the shareholder enrichment from shareholders' point of view in consideration with the opportunity cost of their alternative investments. Table 4 portrays the range of return on equity ratios calculated for all the companies in the sample.

The average return on equity ratio for all the firms is 14 per cent. The return is negative for three firms which implies that the shareholders are not benefitted only in three out of 149 companies. The rest 146 companies have yielded on average 14 per cent return to their shareholders.

A vast difference is noticed between the returns as expressed by return on shareholder investment and return on equity. Return on shareholder investment emphasizes that the top 118 companies have yielded 12 per cent return to shareholders which is lower by two per cent when compared to return on equity for 146 companies. Thirty-one companies have ineffectively reinvested their earnings as per return on shareholder investment, but according to return on equity, only three companies have made their shareholders suffer the loss on their investment. The reported return on equity exceeds the return on shareholder investment by six per cent.

Return on Shareholder Investment to Return on Equity Ratio

A new ratio is formed dividing return on shareholder investment by return on equity to precisely estimate the effective return to shareholders. This ratio measures how much the shareholders benefit, as calculated by return on shareholder investment ratio for every rupee of return on equity. So, this ratio is expected to be 100 per cent as both the numerator and the denominator indicate the return to shareholders. Table 5 brings the results of return on shareholder investment to return on equity.

The reported ratio of return on shareholder investment to return on equity is less than 100 per cent for 118 firms. Among them, the results are even worse for 29 firms as they report a negative return to shareholders. The average ratio is 46 per cent only as against 100 per cent that is expected to be. Thus, return on equity does not convey the real return to shareholders but still, this is extensively used for assessing shareholders' return in relation to a company's financial performance.

Shareholder Enrichment and the Popular Financial Metrics

Multiple regression technique is employed to determine the association between the three dependent variables representing the shareholder enrichment viz., shareholder enrichment to earnings ratio, change in market value to retained earnings ratio and return on shareholder investment ratio and the extensively employed independent variables, measuring corporate financial performance. The independent variables included are the price to earnings ratio, payout ratio, return on equity, capital expenditures to revenue ratio, the ratio of debt to market value of shares, internally available funds to capital expenditures ratio, earnings growth rate and beta value. The results are analyzed as follows:

i. Shareholder Enrichment to Earnings Ratio and the Popular Financial Metrics

The results of multiple regression analysis worked out between shareholder enrichment to earnings ratio as the dependent variable and the selected financial ratios measuring the financial performance of companies as independent variables are shown in Table 6. Return on equity is the only variable that significantly influences the shareholder enrichment at five per cent level. F-statistic signifies that the model is a good fit at one per cent level. However, R^2 suggests that the model explains only 14 per cent of the variation in shareholder enrichment. The Durbin-Watson test indicates there is no autocorrelation.

ii. Change in Market Value of Shares to Retained Earnings Ratio and the Popular Financial Metrics

Table 7 displays the results of multiple regression analysis carried out between change in market value to retained earnings ratio as the dependent variable and the selected financial ratios as independent variables. None of the financial measures shows significant impact on shareholder enrichment. R^2 explains only about three per cent of the variation in change in market value to retained earnings. F value reveals that the model does not explain any amount of variation in change in market value to retained earnings as against shareholder enrichment to earnings ratio which accounts at least for some variation. Durbin-Watson statistic confirms the absence of autocorrelation.

iii. Return on Shareholder Investment Ratio and the Popular Financial Metrics

Table 8 explains the results of multiple regression analysis carried out between return on shareholder investment ratio as the dependent variable and the selected financial ratios measuring the financial performance of companies as the independent variables.

Price to earnings ratio is omitted since the market price is a major component of the dependent variable 'return on shareholder enrichment ratio' and the independent variable 'price to earnings ratio'. The results exhibited in Table 8 look similar to what has been derived from Tables 6 and 7. Return on equity is still the only variable, statistically significant at one per cent level. R^2 and adjusted R^2 are slightly higher than those found in Tables 6 and 7. Though F value signifies the fit of the model at one per cent level, the magnitude of variation explained by return on equity on return on

shareholder investment does not seem to be impressive. The Durbin-Watson statistic suggests that there is no autocorrelation.

Several other tests are executed to validate further the results shown in Tables 6, 7 and 8. The results are as follows.

Sensitivity of Popular Financial Metrics to Retained Earnings

Return on equity is found to be significantly associated with shareholder enrichment. Return on equity and earnings growth are the two extraordinary measures used to evaluate company performance. So an attempt has been made to regress 'return on equity' and the 'earnings growth' only against shareholder enrichment. The results are as follows:

i. Shareholder Enrichment to Earnings Ratio and the Popular Financial Metrics

The results of the regression of 'return on equity' and 'earnings growth' on 'shareholder enrichment to earnings ratio' for all the sample companies are summarized in Table 9. Return on equity is still significant at one per cent level confirming the same results derived earlier. However, the R^2 measures just nine per cent of the variation in shareholder enrichment as calculated by shareholder enrichment to earnings. Again, another attempt is made to identify the particular impact of return on equity, the only variable significantly influencing the shareholder enrichment. The results are given below.

ii. Shareholder Enrichment to Earnings Ratio and Return on Equity

A test of regression has been performed between shareholder enrichment to earnings and return on equity. Table 10 consolidates the results. Return on equity is still significant at one per cent level. However, the R^2 measures just nine per cent of the variation in shareholder enrichment. Thus the return on equity is not a fair indicator of the shareholder enrichment.

iii. Change in Market Value of Shares to Retained Earnings Ratio and the Popular Financial Metrics

The results of the regression of return on equity and earnings growth against change in market value to retained earnings ratio for all the sample companies are summarized in Table 11. Both the return on equity and earnings growth are not found to be significantly associated with shareholder enrichment. The results remain the same when compared to the results revealed by the Table 7.

v. Change in Market Value of Shares to Retained Earnings Ratio and Return on Equity

The association between change in market value to retained earnings and return on equity is explained in Table 12. The results revealed by Table 12 confirms that return on equity is not a proper measure to determine the shareholder enrichment as calculated by the change in market value to retained earnings as the coefficient of return on equity is not significant, and the magnitude of its effect is also minuscule.

vi. Return on Shareholder Investment Ratio and the Popular Financial Metrics

Results of regression analysis explaining the association between shareholder enrichment as calculated by return on shareholder investment ratio and the earnings growth and

return on equity are summarized in Table 13. Return on equity is found to be significantly associated with shareholder enrichment as expressed by the ratio of return on shareholder investment. However, the R^2 value explains only 35 per cent of the variation in shareholder enrichment. There is no much improvement in the results.

vi. Return on Shareholder Investment Ratio and Return on Equity

The association between return on shareholder investment ratio and return on equity is explained in Table 14. The results as revealed by the Tables 8 and 14 do not differ significantly. They confirm that the return on equity is not at all an important measure explaining the shareholder enrichment.

CONCLUSION

The statistical analysis shows that there is no significant association between financial performance of the firms and shareholder enrichment. The attractive financial metrics which are used by the investors and financial analysts to gauge the performance of companies do not convey the exact information about the shareholder enrichment. Earnings might measure the health of a firm but not certainly the wealth of shareholders. Return on equity has been widely used by the investors and financial analysts as a measure of choice of investment. The results, however, show it does not have any significant influence on the three metrics of shareholder enrichment. The return on equity does not precisely measure what the shareholders would benefit from their investment in shares. The results also reveal that the impact of retained earnings in the long-run on market price of the shares is negligible. The market has discounted the investment of retained earnings which has resulted in a lower return on investment for shareholders in the long-run.

Shareholders can be benefitted in two forms on their investment in shares. One is the current dividend, and the other one is the capital gain in the form of share price appreciation. According to Lintner [14], firms follow a stable dividend policy, and they are reluctant to increase the dividend payments, as long as they have projects with positive net present value. The findings of the study fall in line with what was concluded by Ben C Ball [8] that there is no guarantee for shareholders to participate in the future capital gain as retained earnings are not effectively used to enhance the market price of the share. But, what the shareholders can do for this, because of the fact, dividend decision is ultimately vested in the hands of directors of the companies. Shareholders can rule the dividend decision by approving or not the dividend policy of decided by the directors. However, shareholders do not generally challenge the dividend decision proposed by the board of directors, because they believe that the directors are well informed about the capital needs of the firms and therefore the decisions taken by the board of directors will maximise their wealth. These companies, however, have had tremendous financial and managerial resources at hand. But the shareholders are not able to get what they are entitled to. Nevertheless, investors customarily use 'Return on Equity' as

a key decision criterion while considering investments in stock.

The study looks at the scope where (i) the managers of corporate undertakings in India shall use the retained earnings for successful investment proposals. (ii) they shall retain profits only when there are better opportunities to reinvest them, rather than retaining the earnings first when the companies are profitable and then looking for its investment. In many of the firms considered in the study, earnings are presumed to have been retained without any purpose, so the amount is idle till the opportunities knock the doors, or invested in some of the available investment proposals where the return would be lower. Thus, the study leads to the conclusion that retained earnings, if not profitably invested, would not yield the expected return to shareholders which leads to erosion of capital.

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Appendix – A

Table 1
Shareholder Enrichment to Earnings Ratio

Range	Number of Companies	Average Ratio
Above 10,000	1	13,330.76
7,000 – 9,999	1	7,233.31
5,000 – 6,999	3	5,575.48
3,000 – 4,999	1	3,676.30
1,000 – 2,999	4	1,515.74
800-999	4	865.13
600 – 799	1	723.82
400 – 599	4	470.36
200-399	14	248.20

0-199	80	48.46
Less than Zero	36	-323.02
Average Ratio		327.66

Table 2
Change in Market Value of Shares to Retained Earnings Ratio

Range	Number of Companies	Average Ratio
Above One	111	2.78
Zero and less than Zero	38	-9.81
Average Ratio		-0.43

Table 3
Return on Shareholder Investment Ratio

Range	Number of Companies	Average Ratio
Zero to One	118	0.12
Less than Zero	31	-0.07
Average Ratio		0.08

Table 4
Return on Equity Ratio

Range	Number of Companies	Average Ratio
Zero to One	146	0.14
Less than Zero	3	-0.05
Average Ratio		0.14

Table 5
Return on Shareholder Investment to Return on Equity Ratio

Range	Number of Companies	Average Ratio
3 and Above	1	3.21
2 - 2.99	3	2.17
1 - 1.99	27	1.30
0 - 0.99	89	0.64
Less than zero	29	-1.12
Average Ratio		0.46

Table 6
Shareholder Enrichment to Earnings Ratio and the Popular Financial Metrics

Variables	Regression Coefficient	Standard Error	"t" d.f.:140
Price to Earnings Ratio	19.529	10.720	1.822
Payout Ratio	-62.559	296.396	-0.211
Return on Equity Ratio	4367.489*	1753.403	2.491
Capital Expenditures to Revenue Ratio	0.314	0.176	1.783
Ratio of Debt to Market Value	-63.181	66.959	-0.944
Per cent of Capital by Internal Funds	-0.900	12.841	-0.070
Earnings Growth	-29.602	43.286	-0.684
Beta	-380.031	458.124	-0.830

Constant : -30.594
Standard Error of Estimate : 1535.402
Adjusted R² : 0.091
R² : 0.140**
F Value : 2.853
Durbin-Watson Statistic : 1.870
** Significant at one per cent level
* Significant at five per cent level

Table 7
Change in Market Value of Shares to Retained Earnings Ratio and the Popular Financial Metrics

Variables	Regression Coefficient	Standard Error	"t" d.f.:140
Price to Earnings Ratio	-0.068	0.145	-0.468
Payout Ratio	0.469	4.015	0.117
Return on Equity	40.583	23.751	1.709
Capital Expenditures to Revenue	-0.001	0.002	-0.256
Debt to Market Value	0.346	0.907	0.381
Per cent of Capital by Internal Funds	-0.029	0.174	-0.169
Earnings Growth	0.558	0.586	0.952
Beta	1.566	6.206	0.252

Constant : -7.863
Standard Error of Estimate : 20.798
Adjusted R² : -0.029
R² : 0.026
F Value : 0.471
Durbin-Watson Statistic : 2.107
** Significant at one per cent level

* Significant at five per cent level

Table 8
Return on Shareholder Investment Ratio and the Popular Financial Metrics

Independent Variables	Regression Coefficient	Standard Error	"t" d.f:141
Payout Ratio	0.003	0.015	0.193
Return on Equity	0.639**	0.091	7.042
Capital Expenditures to Revenue	0.000	0.000	1.027
Debt to Market Value	-0.010	0.003	-2.588
Per cent of Capital by Internal Funds	0.000	0.001	-0.497
Earnings Growth	0.003	0.002	1.283
Beta	0.013	0.024	0.539

Constant : -0.004
 Standard Error of Estimate : 0.080
 Adjusted R² : 0.361
 R² : 0.392**

F Value : 12.965
 Durbin-Watson Statistic : 1.795

** Significant at one per cent level

* Significant at five per cent level

Table 9
Shareholder Enrichment to Earnings Ratio and the Popular Financial Metrics

Variables	Regression Coefficient	Standard Error	"t" d.f:146
Return on Equity	6010.647**	1584.060	3.794
Earnings Growth	-2.550	41.483	-0.061

Constant : -512.075
 Standard Error of Estimate : 1546.860
 Adjusted R² : 0.077
 R² : 0.090

F Value : 7.209**
 Durbin-Watson Statistic : 1.937

** Significant at one per cent level

* Significant at five per cent level

Table 10
Shareholder Enrichment to Earnings Ratio and Return on Equity

Variable	Regression Coefficient	Standard Error	"t" d.f:147
Return on Equity	6012.678**	1578.339	3.809

Constant : -514.117
 Standard Error of Estimate : 1541.609
 Adjusted R² : 0.084
 R² : 0.090**

F Value : 14.512
 Durbin-Watson Statistic : 1.937

** Significant at one per cent level

* Significant at five per cent level

Table 11
Change in Market Value of Shares to Retained Earnings Ratio and the Popular Financial Metrics

Variables	Regression Coefficient	Standard Error	"t" d.f:146
Return on Equity	33.777	20.899	1.616
Earnings Growth	0.477	0.547	0.872

Constant : -5.492
 Standard Error of Estimate : 20.408
 Adjusted R² : 0.009
 R² : 0.022

F Value : 1.658
 Durbin-Watson Statistic : 2.092

** Significant at one per cent level

* Significant at five per cent level

Table 12
Change in Market Value of Shares to Retained Earnings Ratio and Return on Equity

Variable	Regression Coefficient	Standard Error	"t" d.f:147
Return on Equity	33.397	20.877	1.6000

Constant : -5.110
 Standard Error of Estimate : 20.391
 Adjusted R² : 0.010
 R² : 0.017
 F Value : 2.559
 Durbin-Watson Statistic : 2.077
 ** Significant at one per cent level
 * Significant at five per cent level

Table 13
Return on Shareholder Investment Ratio and the Popular Financial Metrics

Variables	Regression Coefficient	Standard Error	"t" d.f:146
Return on Equity	0.727**	0.083	8.751
Earnings Growth	0.003	0.002	1.560

Constant : -0.021
 Standard Error of Estimate : 0.0811
 Adjusted R² : 0.341
 R² : 0.350**

 F Value : 39.240
 Durbin-Watson Statistic : 1.814
 ** Significant at one per cent level
 * Significant at five per cent level

Table 14
Return on Shareholder Investment Ratio and Return on Equity

Variables	Regression Coefficient	Standard Error	"t" d.f:146
Return on Equity	0.724**	0.083	8.678

Constant : -0.018
 Standard Error of Estimate : 0.0815
 Adjusted R² : 0.334
 R² : 0.339**
 F Value : 75.312
 Durbin-Watson Statistic : 1.799
 ** Significant at one per cent level
 * Significant at five per cent level