

A STUDY ON THE EFFECT OF DIVIDEND PAYOUT RATIO AND FIRM PROFITABILITY

(KARACHI STOCK EXCHANGE)

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ABSTRACT: *The aim of the research study was to explore the effects of Dividend payout ratio on the firm profitability. This study was conducted on the non-financial firms listed in Karachi Stock Exchange (KSE) 100 index. The data were collected since 2008-2012 from the annual reports and Balance sheet analysis of the State Bank of Pakistan (SBP). Panel data regression was used in the research paper. As per the results of fixed effect model. The dividend payout ratio has significant effects on profitability (Alternate Accepted). Leverage has insignificant effect on the profitability and firm size has also insignificant effects on the firm profitability.*

Keywords: Dividend payout ratio, relationship, dividend policy, KSE 100 index, nonfinancial firms.

INTRODUCTION

One the most important issue in today's world is the dividend policy. The company uses the policy of dividend as guidelines to settle the payment of dividend to their shareholders [1]. Policy of the dividend plays primary role in any sort of corporate policy. The word "Dividend" means the basic profit or return on the shareholder's investment. Determination of the risk and investment company uses different type of factors in the organization like firm size, financing limitations, chances and choices of investment, pressure from shareholder and authoritarian regimes. Though the payout of the dividend of a firm's is not only affect cash flow of the shareholders, but relating to the company's current and future performance information is also being offered. A substantial number of papers, including Bhattacharya [2], Linter [3, 4], Miller and Rock [5] propose that the company design the different strategies or policies for the return to their shareholder on their investment. The main objective of the firm is to maximized shareholder's wealth and profit [6]. According to Azhagaiah and Priya [7], the wealth of shareholder is mostly influenced by the increase in sales, capital structure decisions, capital investment decision, and profit margin. Therefore, the company tries to view that how the company improve the wealth and profit of their shareholders and capability of the company to make earning from their investment. The value of the firm might affect by the dividend policy in the shape of shareholders wealth [8]. The firm needs to fulfill all the requirements, which the firm wants to be listed on the Nairobi Securities Exchange, whereas the firm has a clear future dividend policy (Kenya Gazette legal Notice No 60 May 2002). This policy makes attention that is more serious in the management.

Not only from the viewpoint of the company, but also for the investors, employee, customers and the government bodies, the dividend policy is still playing an essential role in all sorts of financial policies [9]. The allocation of the return on the shareholder investment in the shape of dividend is one of the four decisions in finance. Its determine the what fund allocate the investors and what type of fund retained by the firm for more investment [10]. They are also providing the necessary information to the stakeholders relating to the performance of the company. The firm's reserve also establishes the future earnings and the dividend's potential,

which manipulate the capital cost [11]. That's why it has been considering the most important financial decisions that the manager of corporate encounters [12]. The policies for dividend have a powerful inference for share prices and investor's return [13].

LITERATURE REVIEW

Theoretical Framework:

For the support of the study framework some of the important theories were discussed as follows:

Bird-in-the-hand theory

According to "Bird in Hand" theory. Gordon [14] reported that the higher dividend policy prefers by the outside shareholders. As compared to the future investment the shareholder prefers the dividend of today in uncertain capital gain. Several studies suggest that this approach fails, if it makes a perfect market completion along with shareholder, who act regarding the ideas of rational behavior [2, 15].

Signaling Theory

Eventually the signaling theory and information outline of dividend, the company even though the capital gain of by investment decisions deform, the firm may pay dividend to connect the future prospects of the investor [16]. This argument of underlying by the intuition is totally based on the information collected among the manager (insiders) and outside shareholders, whereas the firm's managers have a lot of information about the current and future position of the firm which is not for outsiders.

Agency theory

According to Agency theory that to control the over investment problem the investor might use the dividend payments even in case of the firm doesn't have a free cash flow. Easterbrook [17] according to him the problem of over investment may also reduce by the dividend because the dividend payout enhanced the occurrence with which the firm can get investment by the equity markets, for the purpose of raising the extra investment. For the attraction of new investor, the firm may follow themselves to observing and disciplining of these markets. It will lower the agency cost.

In today's emerging markets the policy for dividend is considered to be the mainly issue in the finance literature. It still remains itself in a well-known place in developed market. (Hafeez & Attiya 2009). A number of researchers

tried to reveal the subject regarding the dynamics and determinants of dividend policy, but still need to study the explanation for the practical dividend behavior of the companies [18, 19]. By several decades the dividend policy has been examined, but the established explanation about the dividend policy have no acceptance universally [20]. It is still a question mark in corporate finance since long.

Velnamby [21], using the Altman Original Bankruptcy Forecasting model based on 25 public listed companies in Sri Lanka, where the researcher observe the relationship among financial position and profitability, and reported that only four companies out of twenty five companies as a study of the universe in a condition to bankrupt in the near future. The researcher also examined the earning/total assets ratio, the ratio of the market value of total equity/book value of debt and sales/total assets are the most significant ratios in the influential the company's financial position of the above mentioned companies. Similarly, Miller and Modigliani [15] used sample assumptions, in the decision about the dividend, and reported that there has no influence on the firm's value. However the investor getting high dividend on their investment is because of properly managed dividend policy and it might influence the investors' wealth and share prices of the shareholder. The above mention discussion is based on two statements, such as no tax drawback to the shareholder in case of receiving dividends and secondly, the firms may also increase their capital in the capital market for new investment without any sort of important issuance cost. The second point refer that the dividend is bad for average stockholders due to their creation of tax disadvantage. As a result lower value of those groups who suggest that the dividend are good because of liking of shareholders. Therefore, in spite of huge research work on dividend, financial economists and managers of corporation still facing the problem of dividend policy [18].

METHODOLOGY

SAMPLE: The 100 index in KSC was the sample of the study. The financial firms are excluded from the scope of the study. The companies whose data was not available and who did not pay a regular dividend were excluded from the study, whereas the net 48 non financial firms were taken for the data collection.

DATA COLLECTION: The data were collected from the audited annual reports of the sampled nonfinancial firms. In addition, data were also collected from the Balance sheet analysis by State Bank of Pakistan.

VARIABLES:

Return on Assets: Return on assets was taken as a proxy for the profitability. It has been calculated by the following equation:

$$\text{ROA} = \frac{\text{Net Income after taxes}}{\text{Total Assets}}$$

Leverage: Leverage is calculated as the ratio of total debt to total equity of the company.

$$\text{Leverage} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

Size of The Firm: For the purpose of calculating the variable i-e size of the company, the research used natural log of total assets of the company.

$$\text{Size} = \ln(\text{total assets})$$

Dividend payout ratio: The dividend payout ratio was calculated by the following equation

$$\text{DPR} = \frac{\text{Dividend per share}}{\text{Earning per share}}$$

HYPOTHESIS

H₀: There is an insignificant effect of dividend payout ratio on profitability of the firm.

H₁: There is a significant effect of dividend payout ratio on profitability of the firm.

RESULTS AND DISCUSSIONS

Table 1: Fixed Effect Model

| ROA | Coefficient | Std.err | T-value | p> [t] |
|---------------------|-------------|----------|---------|--------|
| Payout ratio | -5.950722 | 1.723993 | -3.45 | 0.001 |
| Leverage | 1.804744 | 2.318457 | 0.78 | 0.437 |
| Firm size | -5.135485 | 2.8457 | -1.80 | 0.073 |
| Cons | 71.5978 | 28.80208 | 2.49 | 0.014 |

R²: 0.0797 F-value: 5.52 p-value: 0.0012

Table 1 shows the results of the fixed effect model of panel data regression of dividend payout ratio and profitability. The R² value of the model is 0.0797, means that the independent variables, i.e. payout ratio, leverage and firm size have almost 8 percent effects on firms profitability. The F-value is 5.52, shows the model fitness, whereas the standard F-value is 4. Similarly, it has been concluded from previous research studies that if the value is greater than 4 then the model is suitable and if less than 4 then not suitable for the study. The p-value of the model shows the value 0.0012. It means that the overall model is significant and the results predicted by this model can be used for the analysis and to testify of hypothesis. The results are present that payout ratio has significant (p-value 0.001) effects on firm profitability (Alternate accepted). The leverage has insignificant (p-value 0.437) effect on profitability of the firm (Null accepted). The firm size has insignificant (p-value 0.073) effects on the firm's profitability (Null accepted).

The above Table 2, shows the results of the random effect model of panel data regression of dividend payout ratio and profitability. The R² value of the model is 0.0750, means that the independent variables, i.e. payout ratio, leverage and firm size have almost 8 percent effects on firms profitability. The F-value is 5.52, the standard F-value is 4. Likewise, if the value is greater than 4 then the model is suitable and if less than 4 then not suitable for the study. The p-value of the model shows the value 0.0028. It means that the overall model is significant and the results predicted by this model can be used for the analysis and to testify of hypothesis. The results are present that payout ratio has significant (p-value 0.000) effects on firm profitability (Alternate accepted). The leverage has insignificant (p-value 0.469) effect on profitability of the firm (Null accepted). The firm size has insignificant (p-value 0.317) effects on the firm's profitability (Null accepted).

The Hausman test was run to know which model is suitable for the study. This test was used to select among fixed and random effect model. If the value is less than 0.05 then fixed effect model is recommended and if the value is more than

0.05 then the random effect will be selected. In the current study fixed effect model is selected for the analysis of the data

Table 2: Random Effect Model

| ROA | Coefficient | Std.err | T-value | p> [t] |
|--------------|-------------|----------|---------|--------|
| Payout ratio | -5.822677 | 1.670658 | -3.49 | 0.000 |
| Leverage | 1.619903 | 2.238857 | 0.72 | 0.469 |
| Firm size | -2.186481 | 2.183256 | -1.00 | 0.317 |
| Cons | 40.68126 | 22.08325 | 1.84 | 0.065 |

R²: 0.0750 F-value: 5.52 p-value: 0.0028

Table 3: Hausman Effect Model

| ROA | (b) fe | (B) re | (b-B) | S.E |
|--------------|-----------|-----------|-------|-----|
| Payout ratio | -5.822677 | -5.822677 | 0 | 0 |
| Leverage | 1.619903 | 1.619903 | 0 | 0 |
| Firm size | -2.186481 | -2.186481 | 0 | 0 |

b = consistent under HO and HA = obtained from xtreg, B = inconsistent under HA, efficient under HO = obtained from xtreg
 $\chi^2 = 0.00$

Table 4: Vector Inflationary Test

| Variable | VIF | 1/VIF |
|--------------|------|----------|
| Leverage | 1.01 | 0.993631 |
| Firm size | 1.00 | 0.996532 |
| Payout ratio | 1.00 | 0.996664 |
| Mean VIF | 1.00 | |

The Vector Inflationary test was used in the study to check the problems of multi-collinearity in the data. The standard for this test is 0.9 [22]. If the value of the variables is less than 9 then there is no problem of multi-collinearity, otherwise there is a problem of multicollinearity. In this research study the values are less than 9. The variables are suitable for the data analysis.

Heteroscedasticity Test

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity

Ho: Constant variance

Variables: fitted values of ROA

$\chi^2(1) = 0.02$

Prob > $\chi^2 = 0.8835$

The problem of heteroscedasticity also checks on the data. This test was run in the current study to check the problem of heteroscedasticity. The standard for this test is, if the value of Prob > χ^2 is less than 0.05 then there is a problem of heteroscedasticity. If the value is higher than 0.05 then there is no problem of heteroscedasticity. In this research paper the values show that there is no problem of heteroscedasticity.

CONCLUSION

The current study was designed to examine the effect of dividend payout ratio on firms profitability. The study was conducted on the non financial firms listed in KSE 100 index at Karachi Stock Exchange. Return on Assets (ROA) was taken as a proxy for profitability and treated as the dependent variable. Payout ratio, Leverage and Firm size

was taken as an independent variable. Only non financial firms were taken from the list and only those firms were selected for the data collection who pay regular dividends. The firms who did not pay any dividend or rare dividend, were not included in the sample. As the data was panelled in nature, panel data regression was used to know the effects. The Hausman test was used to select among fixed and random effect model. The test recommends fixed effect for our paper. As per the results of fixed effect model, 1) Dividend Payout ratio has a significant (p-value 0.001) effects on the profitability of the non financial firms (Alternate accepted). 2) Leverage has insignificant (p-value 0.437) effect on the profitability of the firm (Null accepted). 3) Firm size has insignificant (p-value 0.073) effect on the profitability of the firm (Null accepted).

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