

Dividend Policy and Corporate Profitability Econometric Analysis of Listed Manufacturing Firms in Sri Lanka

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Abstract

The issue of dividend policy is a very important one in the current business environment. Dividend policy is the regulations and guidelines that a company uses to decide to make dividend payments to shareholders. The objective of the study is to find out the impact of dividend policy on corporate profitability of Listed manufacturing companies in Sri Lanka.. Dividend payout ratio and dividend yield are used to measure the dividend policy while ROE and ROA are used to measure the corporate profitability.

Data for the study were extracted from annual report and accounts of 23 Listed manufacturing companies in Sri Lanka for the period of 2009 to 2014. These data were subjected to regression analysis, using E-view software and the findings indicate that; there is a significant impact of dividend policies of organizations on corporate profitability. It is recommended that Organizations should ensure that they have a good and robust dividend policy in place because it will enhance their profitability and attract investments to the organizations.

Keywords: Dividend policy, Corporate profitability and Earning per share.

Introduction

Back Ground of the Study

So many factors affect the corporate profitability and one of those factors is dividend policy. Dividend policy serves as a mechanism for control of a managerial opportunism. The pattern of corporate dividend policies not only varies over time but also across countries, especially between developed, developing and emerging Capital markets. If the value of a company is the function of its dividend payments, dividend policy will affect directly the firm's cost of capital. Dividend policy can affect the value of the firm and in turn, the wealth of shareholders. This makes dividend policy worthy of serious management attention. Dividend policy remains one of the most important financial policies not only from the viewpoint of the company, but also from that of the shareholders, the consumers, employees, regulatory bodies and the Government. But does the dividend policy significantly impact on corporate profitability.? This is the question this research study intends to answer. The main objective of this study is to empirically examine the possible impact of firm's dividend policy on corporate profitability.

Review of Related Literature

Theoretical Framework

Bird-In-The-Hand Theory

The "Bird in Hand" theory of Gordon (1962) argues that outside shareholders prefer a higher dividend policy. They prefer a dividend today to a highly uncertain capital gain from a questionable future investment. A number of studies demonstrate that this mode fails if it is posited in a complete and perfect market with investors who behave according to notions of rational behavior (Miller and Modigliani, 1961; Bhattacharya, 1979) [15].

Signaling Theory

According to the information content of dividends or signaling theory, firms, despite the distortion of investment decisions to

capital gains, may pay dividends to signal their future prospects (Amidu, 2007) [3]. The intuition underlying this argument is based on the information asymmetry between managers (insiders) and outside investors, where managers have private information about the current and future fortunes of the firm that is not available to outsiders.

Agency Theory

Even if a firm does not have free cash flow, dividend payments can still be useful for the shareholders in order to control the overinvestment problem. Easterbrook (1984) argues that dividends reduce the over investment problem because the payment of dividends increases the frequency with which firms have to go to equity markets in order to raise additional capital. In the process of attracting new equity, firms subject themselves to the monitoring and disciplining of these markets. This lowers agency cost.

Empirical Review

Velnampy.T (2006) [23] examined the financial position of the companies and the relationship between financial position and profitability with the sample of 25 public quoted companies in Sri Lanka by using the Altman Original Bankruptcy Forecasting Model. His findings suggest that, out of 25 companies only 4 companies are in the condition of going to bankrupt in the near future. He also found that, earning/total assets ratio, market value of total equity/book value of debt ratio and sales/total assets in times are the most significant ratios in determining the financial position of the quoted companies.

Velnampy.T (2013) [20] in his study of "corporate governance and firm performance" with the samples of 28 manufacturing companies using the data representing the periods of 2007 – 2011 found that determinants of corporate governance are not correlated to the performance measures of the organization. Regression model showed that corporate governance don't affect

companies' ROE and ROA revealed that corporate governance measures are not correlated with performance measures.

Velnampy.T and Nimalathan, B. (2009) investigated the association between organizational growth and profitability of Commercial bank Ltd in Sri Lanka over the period of 10 years from 1997 to 2006. They found that, sales are positively associated with profitability ratios except operating profit, return on equity and number of depositors are negatively correlated to the profitability ratios except operating profit and return on equity. Likewise, number of advances is also negatively correlated to the return on average shareholders' funds.

Amidu (2007) [3] found that dividend policy affects firm performance especially the profitability measured by the return on assets. The results showed a positive and significant relationship between return on assets, return on equity, growth in sales and dividend policy. This showed that when a firm has a policy to pay dividends, its profitability is influenced. The results also showed a statistically significant relationship between profitability and dividend payout ratio.

Modigliani and Miller (1961) [15] observed that 'The theoretical principles underlying the dividend policy and its impact on firms can be described either in terms of dividend irrelevance or dividend relevance theory'. Therefore, dividend policy is irrelevant for the cost of capital and the value of the firms in a world without taxes or transaction cost. This shows that when investors can create any income pattern by selling and buying shares, the expected return required to induce them to hold firm's shares will be invariant to the way the firm packages its dividend payments and new issues of shares. It is to be observed that a firm's assets, investments opportunities, expected future net cash flows and cost of capital are not affected by the choices of dividend policy.

Agrawal and Jayaraman (2004) [2] observed that Dividend payments and leverage policy are substitute mechanism for controlling the agency cost of free cash flow hence, improves performance. If a firm's policy is to pay dividend each year end to shareholders, the level of activity in the organization will increase to obtain more income and have excess retained earnings to meet the standard set.

Brockington (1987) [6] observed that 'Dividend policy has the effect of destabilizing dividend as only a prolonged increase or decrease in profits will affect the average sufficiency to have any appreciable effect on the size of the distribution'. Since it is a conservative dividend policy-in the long run, only one half of all profits will be distributed and there will be substantial buildup of retained earnings. This will certainly reinforce further, the consistency of dividends, which could for a while, be maintained even in the face of actual losses. It may also relieve the company of having recourse to external sources of finance. The retention under this policy bears no relationship to the availability of profitable investment opportunities. The risk is that projects yielding less than the true cost of capital will be undertaken in order to absorb funds which would otherwise lie idle.

Samuels and Wilkes (2005) [17] stated that the shareholders are entitled to a revenue stream of dividends. The value of the share corresponds to the present value of this stream of dividend payments.

Lintner, (1996) in a study of dividend policies of large Industrial Corporation in the United States suggested that in the majority of cases, current dividend decisions are intimately related to previous decisions. In the study, he concluded that management takes the existing dividend decision as a question

of whether or not to change this rate in the current period. However, other views on the issues suggest that the dividend rate should be related to current earnings and must reflect changes in business conditions. The question therefore is how and why, a company should select a particular payout ratio and determine its rate of adjustment towards that particular rate? At this point, it is pertinent that we consider the factors affecting dividend policy of an organization.

Lintner (1996) developed a model to study the determinants of the dividend behavior of American corporations by assuming that the dividend payout is a function of net current earnings after tax (PAT) and dividend paid during the previous year his findings revealed that payout a fixed proportion of their net profits as dividend to common stockholders especially when they are well-known for stable dividends policy and may try to achieve the target level of dividend or targeted payout ratio even whenever profit changes.

Stock. Luke (2011) [14] states that a significant part of returns investors can realize from putting money into stocks comes from dividends paid by companies. The amount of money a company pays in form of dividends varies significantly from one business to the other. Companies use dividend policy to determine how much they will distribute. There is a connection between dividend policy and retention policy. Retained earnings are important sources of finance for the Nigerian Companies and the factors that encourage retaining the profit instead of dividend payment includes: a. Dividend policy is determined by Directors. They are, therefore, attractive source of finance for developmental project without resources to outsiders for extra funds. b. The belief that there is no cost associated with the use of retained earnings although not true. It does not lead to cost involving payments of cash. c. In periods of prosperity, the management may not be liberal in dividend payments because of availability of larger profitable investments opportunities. d. In periods of depression, the management may retain a larger part of its earnings to preserve the firm's liquidity position. e. Retained earnings avoid issue cost.

Data Collection Techniques

The data for this study are secondary data generated from annual reports and accounts of twenty three randomly selected Manufacturing companies quoted in the Colombo stock exchange for the period of year 2009 to 2014. The data were then analyzed using multiple regressions with the aid of E-view software.

Methodology

Secondary data were used to measure the variables which are related to Dividend policy and profitability. In this regard, the following indicators were taken into account to measure the dividend policy.

Definition of Variables: Dividend payout ratio and dividend yield ratios are used to measure the dividend policy of the firm.

- Dividend payout ratio (DPOR): It is distribution, generally of assets, made by a corporation to its stockholders. The formula is given as

$$= \frac{\text{Yearly Dividend per Share}}{\text{Earnings per Share}}$$

or equivalently:

$$= \frac{\text{Dividends}}{\text{Net Income}}$$

Dividend Yield Ratio

Dividend yield is a financial ratio that measures the amount of cash dividends distributed to common shareholders relative to the market value per share.

$$\text{Dividend yield} = \frac{\text{Cash dividend per share}}{\text{Market Value per Share}}$$

Profitability

Profitability ratios are most often used to measure management’s effectiveness in achieving profitability. Even though, there are several profitability ratios based on the investment and turnover. The following two ratios were taken into account in the study.

Return on Equity (ROE)

The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. ROE is expressed as a percentage and calculated as:

$$\text{Return on Equity} = \frac{\text{Net Income/Shareholder's Equity}}{\text{Return on assets (ROA)}}$$

ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage. Sometimes this is referred to as "return on investment".

The formula for return on assets is:

$$= \frac{\text{Net Income}}{\text{Total Assets}}$$

Control variables

Three variables are used as control variables in this study these variables are size of the firm (measured in terms of natural log of sales), current ratio and leverage ratio. Size of the firm is calculated using the natural logarithm of total assets of the company.

Current ratio: This involves with the current asset and current liability.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current Liability}}$$

Leverage ratio: A leverage ratio is any one of several financial measurements that look at how much capital comes in the form of debt (loans), or assesses the ability of a company to meet financial obligations.

Regression Model

To investigate the impact of dividend policy on profitability, the model used for the regressions analysis is expressed in the general form as given in equation 1.

Profit = f (Divpayout, ca, Leve, firm size) Equation 1
 Specifying in econometric format; we have;
 ROEit = β0 + β1 DPOR + β2 ca + β3 Leve + β4 Firm size + +E it model 1
 ROAit = β0 + β1 DPOR + β2 ca + β3 Leve + β4 Firm size + +E it model 2
 ROEit = β0 + β1 DY ratio + β2 ca + β3 Leve + β4 Firm size + +E it model 3
 ROAit = β0 + β1 DY ratio+ β2 ca + β3 Leve + β4 Firm size + +E it model 4

Where: profit, β0, β1, β2, β3, β4, E it represent profit, intercept term, impact on profit, impact on current assets, impact on leverage, impact on firm size and error term respectively.

Hypotheses of the research

In this study, the following hypotheses are considered by the researcher.
 Hypotheses 1(H1): The dividend policy significantly impact on ROE of the manufacturing companies.
 Hypotheses 2(H2): The dividend policy significantly impact on ROA of the manufacturing companies.

Results and Discussion

To test the hypotheses, regression analysis was carried out. The summary is presented in the Table 01.

Table 1: Regression Summary

Dependent Variable: ROE				
Method: Least Squares				
Date: 12/02/15 Time: 21:37				
Sample: 1 138				
Included observations: 138				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
DPO	3.110443	0.346987	8.964147	0.0000
CURRENT_RATIO	0.105497	0.210421	0.501361	0.6169
LEVERAGE_RATIO	-1.570705	0.728587	-2.155824	0.0329
Firm size	1.210796	0.109019	11.10633	0.0000
R-squared	0.607480	Mean dependent var		12.23333
Adjusted R-squared	0.598692	S.D. dependent var		16.00356
S.E. of regression	10.13807	Akaike info criterion		7.499030
Sum squared resid	13772.59	Schwarz criterion		7.583878
Log likelihood	-513.4331	Hannan-Quinn criter.		7.533510
Durbin-Watson stat	1.296778			

The Table above shows the estimated result of model 01. R square shows that the model explained 60.74% of total variations of the dependent variable. It means that 60.74% of the changes in dependent variable are described by both independent and control variables. As a point of focus, the hypotheses of this study states that the dividend policy significantly impact on corporate profitability in all companies selected for the study.

As observed, as the results show that dividend payout ratio has a coefficient of 3.11 with t statistics of 8.964 with p value 0.000. Thus, from the results, it can be stated that there is significant impact of dividend policy on corporate profitability. Leverage ratio and firm size also significantly impact on corporate profitability. To test the hypotheses (H2), regression analysis was carried out. The summary is presented in the Table 02.

Table 2: Regression Summary

Dependent Variable: ROA				
Method: Least Squares				
Date: 12/02/15 Time: 21:40				
Sample: 1 138				
Included observations: 138				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
DPO	2.597686	0.310991	8.352926	0.0000
CURRENT_RATIO	0.295398	0.188592	1.566332	0.1196
LEVERAGE_RATIO	-1.681877	0.653004	-2.575599	0.0111
firm size	0.834977	0.097709	8.545527	0.0000
R-squared	0.516700	Mean dependent var	9.515217	
Adjusted R-squared	0.505879	S.D. dependent var	12.92629	
S.E. of regression	9.086368	Akaike info criterion	7.279985	
Sum squared resid	11063.32	Schwarz criterion	7.364833	
Log likelihood	-498.3189	Hannan-Quinn criter.	7.314465	
Durbin-Watson stat	1.039496			

As these results show dividend payout ratio significantly impact on return on Equity at 1% significant level. Beta value of the dividend payout is 2.59. This implies that dividend payout increases that will increase the profitability. leverage ratio and the firm size are also significantly impact on profitability. Therefore Hypotheses is accepted. The dividend policy significantly impact on ROA of the manufacturing companies. The Table above shows the estimated result of Model 02. R square shows that the model explained 51.67% of total

variations of the dependent variable. It means that 51.67% of the changes in dependent variable are described by both independent and control variables. As a point of focus, the hypotheses of this study states that the dividend policy significantly impact on corporate profitability in all companies selected for the study. To test the hypotheses, regression analysis was carried out. The summary is presented in the Table 03.

Table 3: Regression Summary

Dependent Variable: ROA				
Method: Least Squares				
Date: 12/02/15 Time: 21:41				
Sample: 1 138				
Included observations: 138				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
DY ratio	0.560862	0.228133	2.458487	0.0152
CURRENT_RATIO	0.005591	0.004830	1.157653	0.2491
LEVERAGE_RATIO	-0.337321	0.778525	-0.433282	0.6655
firm size	1.118470	0.112280	9.961475	0.0000
R-squared	0.272331	Mean dependent var	9.515217	
Adjusted R-squared	0.256040	S.D. dependent var	12.92629	
S.E. of regression	11.14932	Akaike info criterion	7.689192	
Sum squared resid	16657.20	Schwarz criterion	7.774040	
Log likelihood	-526.5542	Hannan-Quinn criter.	7.723672	
Durbin-Watson stat	0.647370			

As these results show dividend dividend yield ratio significantly impact on return on Equity at 5% significant level. Beta value of the dividend payout is 0.56. This implies that dividend payout increases that will increase the profitability. Firm size also significantly impact on profitability. Therefore Hypotheses 2 is accepted. The dividend policy significantly impact on ROA of the manufacturing companies.

The estimated result of Model 03. R square shows that the model explained 27.23% of total variations of the dependent variable. It means that 27.23% of the changes in dependent variable are described by both independent and control variables. As a point of focus, the hypotheses of this study states that the dividend policy significantly impact on corporate profitability in all companies selected for the study.

To test the hypotheses, regression analysis was carried out. The summary is presented in the Table 04.

Table 4: Regression Summary

Dependent Variable: ROE____
 Method: Least Squares
 Date: 12/02/15 Time: 22:17
 Sample: 1 138
 Included observations: 138

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DY Ratio	0.443020	0.262075	1.690432	0.0933
CURRENT_RATIO	0.000229	0.003697	0.062000	0.9507
LEVERAGE_RATIO	0.168446	0.903846	0.186366	0.8524
firm size	1.554863	0.129364	12.01933	0.0000
R-squared	0.372115	Mean dependent var	12.23333	
Adjusted R-squared	0.358058	S.D. dependent var	16.00356	
S.E. of regression	12.82226	Akaike info criterion	7.968800	
Sum squared resid	22030.99	Schwarz criterion	8.053648	
Log likelihood	-545.8472	Hannan-Quinn criter.	8.003280	
Durbin-Watson stat	0.726139			

As these results show dividend payout ratio significantly impact on return on Equity at 10% significant level. Beta value of the dividend payout is 0.443. This implies that dividend payout increases that will increase the profitability. Firm size also significantly impact on profitability. Therefore H1 is accepted. The dividend policy significantly impact on ROE of the manufacturing companies.

Conclusion and Recommendations

The study sought to investigate the impact of dividend policies on the corporate profitability of the listed manufacturing companies in CSE. In order to achieve the objectives of this study, data were obtained from 23 listed manufacturing companies listed in Colombo Stock Exchange for the period 2009 to 2014. From the results of analysis, it was discovered that the dividend policies of organizations have a significant positive impact on corporate profitability of Listed Manufacturing Companies in Sri Lanka. We can therefore conclude that dividend policies of organizations are vital in enhancing the profitability of manufacturing companies in Sri Lanka. Organizations should ensure that they have a good and robust dividend policy in place. This will enhance their profitability and attract investments to the organizations.

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