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**THE IMPACT OF BOARD CHARACTERISTICS ON DIVIDEND POLICY: EVIDENCE FROM
MANUFACTURING SECTOR OF COLOMBO STOCK EXCHANGE**

Dissanayake D.M.K.T

Lecturer

School of Business, NSBM Green University Town,
Pitipana, Homagama, Sri Lanka
Kasun@nsbm.lk

Dissabandara D.P.B.H

Professor

Department of Finance, University of Sri Jayewardenapura
Gangodawila, Nugegoda, Sri Lanka
dissa@sjp.ac.lk

Abstract

Finance scholars motivate to seek answers for the query on payment of Dividends by companies and the affecting factors for the payment of Dividends was majorly due to the prevailing issue of problem of Dividends since 1950s. The study is based to how one of the main components of corporate governance, which is the Board characteristics, has influenced dividend policy. The data for this paper was gathered Manufacturing sector companies in Colombo Stock Exchange taking the last 5-year figures as a base.

Dividend Decision and Dividend payout were taken into reflection for the measurement of Dividend policy. And the three analytical strategies of Descriptive Statistics, Binary Logistic Regression and Panel Regression were taken as tools of analysis. Descriptive statistics were used to understand the nature of board characteristics in Banking and Finance sector of Sri Lanka. The effect on Board characteristics on dividend decision was expansively defined in Binary Logistic regression. The effect on level of dividend payout through Board characteristics were discussed through Panel Regression.

Keywords - Corporate Governance, Board Characteristics, Dividend Policy, Binary Logistic Regression, Panel Regression

Introduction

What are the reasons behind the Dividend Payment? Moreover, what are the factors that determine the dividend policy of the companies? The empirical studies on the determinants of dividend policy are basically based on the various theoretical explanations given in the different competing theories. However, the results widely vary across the countries and the time periods. Therefore, time to time the empirical examination of factors affecting the dividend policy has been warranted.

The studies on the dividend policy have attempted to answer three questions:

- a) Why companies pay dividends?
- b) Does the dividend policy affect the value of the firm?
- c) What are the factors that determine the dividend policy?

Among the early studies on this issue, Linter (1956) argues that firms target their desired payout ratio, and it is determined by the current earnings and past dividends of the companies. Considering certain unrealistic assumptions like (a) there is no tax, (b) there is no agency cost, (c) there is no asymmetric information, (d) there is no transaction costs and so on. Miller and Modigliani (1961) are of the opinion that the dividend policy is irrelevant in measuring the value of the firm or shareholder's wealth in a perfect market. Over the years relaxing all these unrealistic assumptions taken by Miller and Modigliani, a large amount of research has been carried out on firms' dividend policy. This research has

led to number of competing theories such as tax clientele theory, signaling theory, agency theory, firm life cycle theory and so on to explain the dividend payout ratio of the companies. The tax clientele theory states that investors in low tax bracket prefer the high dividend paying stock, and investors in high tax bracket prefer low dividend paying stocks (Litzenberger & Ramaswamy, 1979). The other argument related to tax is that if the dividend tax is more than the capital gain tax then investors do not prefer dividends (Elton & Gruber, 1970). The advocates of signaling theory argue that the payment of dividend convey private information about current and future earnings and it can be used to minimize the information asymmetry between the insider and outsider, therefore, the dividend policy does affect the value of the firm (Aharony & Swary, 1980). The agency cost theory views that dividend payments would reduce the extra discretionary power of the managers and thus reduce the agency problem arising between the shareholders and managers (Jensen & Meckling, 1976). Therefore, a positive relationship can be expected between dividend payout ratio and the value of the firm. If taken averagely, the market reacts positively towards dividend announcements (Dissabandara & Samarakoon, 2002).

Corporate governance matters for the dividend policies of the firms. In the literature dividend behavior is used as the outcome of the governance (La Porta, Lopez, Shleifer & Vishny, 2000). The standard of corporate governance and investor protection are lower in south Asian countries and compared to the US and Japan (La Porta, Lopez, Shleifer & Vishny, 1998) and identified the positive relationship between managerial ownership and firm value.

Another study regarding the relationship between the board independence and dividend policy for the Sri Lanka hotel industry concluded that there is statistically significant relationship between the board independence and dividend payout ratio (Ajanthan, 2013). Research conducted by Mansourinia (2013) argued that there is no significant relationship between the board independence and dividend payout ratio. There is significant and positive relationship exists between board independence and dividend payout ratio among the Egyptian companies empirically argued by Abor and Fiador (2013).

In this paper, researcher highlighted this debate by studying how board characteristics influence the payout policy using a sample of listed companies listed in Colombo stock exchange.

This is one of the first attempts at examining the relationship between board characteristics and dividend policy for Sri Lankan companies, with the analysis distinctively informed by agency theoretical insights drawn from the outcome and substitution hypotheses.

Literature Review

According to the statement brought up by Al-Najjar and Hussainey (2009), the existence of outside directors may hold a direct influence over the effectiveness of the board as per their power to safeguard the wealth of the shareholders in the form of dividend pay-out. Furthermore, Borokhovich, Brunarski, Donahue and Harman (2006) suggested that outside directors have immense incentive to control and monitor managers' opportunistic behavior with the mere intention of augmenting their image in the labour market.

But, with accordance to the past studies (Borokhovich et al., 2006) there was a negative relationship which was found between the outside directors and dividend payout policy. Similarly, Al-Najjar and Hussainey (2009) reported a negative relationship between the number of outside directors and dividend payout after considering 400 non-financial firms. Cadbury report (1992) and Combined Code (2003) stated that it is favorable to have majority of board members as outside directors.

Once too much of executive power is given to the CEO, after joining CEO and chairperson roles, it would ultimately lead to agency problems, as they tend to chase after their own personal interests at the cost of the shareholders (Mollah, Farooque & Karim, 2012). When the two roles of CEO and chair are merged, it could also negatively effect on board independence as it could lead to a reduction in scrutinizing the activities of the top management (Fama & Jensen, 1983). On the other hand, due to lack of monitoring of activities of the top management, it could ultimately grant the CEOs the fortune of seize shareholders' wealth by paying low or no dividends to the shareholders. As a result, with the base

**3rd Interdisciplinary Conference of Management Researchers
23rd – 25th October 2018 – Sabaragamuwa University of Sri Lanka**

of substitute hypothesis, if a company holds a collective control they are obliged to pay higher dividends in order to eliminate meager governance resulted by CEO role duality (Chen, Firth, Gao & Rui, 2006). Earlier evidence on the connection between dividend pay-out rates and CEO duality is normally mixed. As per the previous studies showed (Abor & Fiador, 2013) there was a negative connotation between dividend payout policy and CEO duality. But on the other hand there was no association which was found between CEO duality and dividend payout policy in Iranian, US and Malaysian listed firms (Dadashi, Mansourinia, Emamgholipour, Bagheri & Mohammadpour, 2013). Cadbury report (1992) and Combined code (2003) stated the opposite statement, with reference to the UK regulatory perspective, most of the UK governance reforms indicate that roles of chairperson and CEO should be in separation if they are to develop board independence. In order to carry out the business without any challenges it is important to have a sufficient number of board members in a firm (Cadbury, 1992). In order to control the opportunistic behavior of the management, large boards could be effective as larger boards have the capability of increasing performance of the firm, minimize agency problem as well as dividend pay-out. But with accordance to the substitution hypothesis, larger boards lack effectiveness in monitoring opportunistic behavior of management as they are attached with the problem of co-ordination and communication, which ultimately leads to poor governance previous studies on the connection between board size and dividend payout policy are assorted. With a sample of Australian companies, Kiel and Nicholson (2003) proved the same positive relationship between the two.

Methodology

The researcher applied “Quantitative Research Approach” to conduct this study. “Quantitative research” most often uses deductive logic, in which researchers start with hypotheses and then collect data which can be used to determine whether empirical evidence to support that hypothesis exists. The study was based on “Secondary Data Analysis”. Data collected for nine variables using audited annual reports of 36 companies listed in Colombo stock exchange

Sample Selection

To measure the impact of board characteristics on dividend policy, initial sample of 41 quoted public companies were selected. This sample covered all the companies registered under manufacturing sector in Colombo stock exchange. Reasonable care has been exercised in order to select a large number of companies to provide more valid research findings.

A company was selected for the final sample only if the following selection criteria were satisfied.

- a) The company should be listed in the Colombo Stock Exchange throughout the sample period. That is during the period of year 2013 to 2017.
 - b) Required information should be available during the period of 2013 to 2017.
- After the consideration of above mentioned criteria, following final sample has been used for the research.

Table 3.1: Final Sample

Sector	Initial Sample	Excluded	Final Sample
Manufacturing Sector	41	05	36

Source: Author’s Source

Required data for the selected variables of board characteristics has been collected from the published financial statements of the companies included in final sample. The research based on secondary data and time span of the study was from 2013-2017.

Hypothesis Development

After a rigorous process of the Literature review, author determined to test six hypothesis developed from board characteristics. Planned six hypothesis backed by literature are as follows.

H1: There is a relationship between board size and dividend pay-out rate.

H2: There is a relationship between board independence and dividend payout rate.

H3: There is a relationship between CEO duality and dividend pay-out rate.

H4: There is a relationship between the frequency of board meetings and dividend pay-out rate.

H5: There is a relationship between board gender diversity and dividend payout rate.

H6: There is a relationship between audit committee size and dividend pay-out rate.

Definition of Variables and Model Specifications

Based on the hypothesis developed above, table 3.2 represents the proposed variables, abbreviations, nature of the variables and measurement techniques of proposed study. Two control variables to be used in order to account for potential “Omitted variable bias”.

Table 3.2 Variable Description

Variable	Abbreviation	Nature
1.Board Size	BS	Independent
2.Board Meetings	BM	Independent
3.Board Independence	BI	Independent
4.CEO Duality	CD	Independent
5.Board Gender Diversity	BD	Independent
6.Audit committee size	AS	Independent
7.Firm size	FS	Control
8.Leverage	LV	Control
9.Dividend Decision	DD	Dependent Variable
10. Dividend Payout	DP	Dependent Variable

Source: Author’s Source

Assuming that all the hypothesized relationships are linear, model 01 to be estimated is specified as follows:

Binary Logistic Regression (Model 01)

$$DDit = \alpha_0 + \beta_1 BS + \beta_2 BM + \beta_3 BI + \beta_4 CD + \beta_5 BD + \beta_6 AS + \sum ni = 0 \beta_i CONTROLS + \epsilon_{it}$$

Where: DD is the main dependent variable; BS, BM, BI, CD, BD, AS are independent variables; and CONTROLS refers to control variables including FS, L.

Assuming that all the hypothesized relationships are linear, model 02 to be estimated is specified as follows:

Panel Regression (Model 02)

$$DPit = \alpha_0 + \beta_1 BS + \beta_2 BM + \beta_3 BI + \beta_4 CD + \beta_5 BD + \beta_6 AS + \sum ni = 0 \beta_i CONTROLS + \epsilon_{it}$$

Where: DP is the main dependent variable; BS, BM, BI, CD, BD, AS are independent variables; and CONTROLS refers to control variables including FS, LV.

Analysis and Discussion

Descriptive Statistics

Table 4.1: Descriptive Statistics - Manufacturing Sector

	DP	AUD_S	BOD_G	BOD_I	BOD_M	BOD_S	CEO_D	FIRM_S	LEV
Mean	0.3414	2.5587	0.0749	2.6313	5.1844	7.4022	0.8268	7.3922	0.7561
Median	0.2600	2.0000	0.0000	2.0000	4.0000	7.0000	1.0000	7.3356	0.4000
Maximum	1.2400	5.0000	0.4290	8.0000	15.0000	12.0000	1.0000	9.9522	57.0000
Minimum	-0.267	0.0000	0.0000	2.0000	2.0000	4.0000	0.0000	0.0000	0.0000
Std. Dev.	0.3239	1.0604	0.1012	1.2263	4.0439	2.1187	0.3795	1.5700	4.2511

Source: Author's Source

Table 4.1 depicts the descriptive statistics for the study variables related to 180 firm-year observations of 36 companies listed under manufacturing business sector for the period of 2012-2016. The proportion of women on boards (BD) ranges from 0 to 0.4290 with an average of 7.49%, which implies that the presence of women on the boards of manufacturing companies is considered low. This indicates the gender bias nature of boards of manufacturing sector firms. Furthermore, the presence of non – executive independent directors on boards (BI) ranges from 2 to 8 with an average of 2.63. Considering number of directors on boards (BS) ranges from 4 to 12 with an average of 7.4, average value of 2.63 for board independence implies that some companies of manufacturing sector do not possess required balance in their boards. As can be noticed from table 4.1, board meetings (BM) held per year ranges from 2 to 15 with an average of 5.18 which is satisfactory with regards to “Code of Best Practices for Corporate Governance 2017” issued by CA Sri Lanka .It emphasizes that board meetings should be held at least once in every quarter of a financial year (Principle A.1.1).As per the mentioned Corporate Governance code, Audit committee should consist of at least three non-executive directors. In Manufacturing sector, number of non-executive directors in an audit committee (AS) ranges from 1 to 5 with an average of 2.55 hinted that some of the manufacturing companies do not comply with audit committee requirement. Moreover, dummy variable has been used to measure whether there is a separation of positions of Chairperson and Chief Executive Officer (CD). Result shows with an average of 0.82, most of the companies registered in Manufacturing sector separated

**3rd Interdisciplinary Conference of Management Researchers
23rd – 25th October 2018 – Sabaragamuwa University of Sri Lanka**

positions during 2013 to 2017. The dependent variable of the model dividend payout ranges from -26% to 124% with an average of 34.14%. The data set was controlled for Firm Size (FS) which was measured by total assets of the firm and Leverage which was measured by debt to asset ratio. Average value of firm size was Rs1623mn (natural log value 7.3922). Average percentage for leverage of a firm was 75.61%. Average percentage for Leverage ratio confirmed that the Manufacturing sector in CSE consist with highly levered companies.

Binary Logistic Regression Results

Table 4.2: Binary Logistic Regression Results - Manufacturing

Variable	Coefficient	Std. Error	z-Statistic	Prob.
AS	0.8100	0.3432	2.3602	0.0183
BD	2.8313	2.6761	1.0580	0.2901
BI	-0.6918	0.2930	-2.3614	0.0182
BM	0.0227	0.0769	0.2953	0.7678
BS	0.0672	0.1616	0.4162	0.6772
CD	2.5477	0.5974	4.2648	0.0000
FIS	0.9427	0.2763	3.4124	0.0006
LV	0.0125	0.0913	0.1374	0.8907
C	-8.5876	2.2395	-3.8346	0.0001
McFadden R-squared	0.374921	Mean dependent var		0.765363
S.D. dependent var	0.42496	S.E. of regression		0.328173
Akaike info criterion	0.781669	Sum squared resid		18.30862
Obs with Dep=0	42	Total obs		180
Obs with Dep=1	138			

Source: Author's Source

The analysis in table 4.2 indicates a value of McFadden R-squared of 37.49%, which implied that 37.49% of the variations of dividend decision were determined by selected board characteristics in Banking and Finance sector; while the remaining 62.51% of variations were attributed to other variables. Out of 180 firm- year observations collected from 36 companies for 2013-2017 period, dividends were paid in 138 observations. As a percentage it is 76.67 %.

Table 4.2 depicts the results of logistic regression which aims to examine the impact of board characteristics on the likelihood of dividend payout taking into consideration six board characteristics

**3rd Interdisciplinary Conference of Management Researchers
23rd – 25th October 2018 – Sabaragamuwa University of Sri Lanka**

and two control variables (Firm size and Leverage). As can be observed from the table, Audit committee size and CEO duality have a significant positive relationship with likelihood of dividend payout at a significance level of 0.05. Board independence has a significantly negative impact on dividend payments at a significance level of 0.05.

Panel Regression Results

“Hausman test “was conducted to decide whether to select fixed effects model or random effects model in panel regression. The “Hausman test” can be used to differentiate between fixed effects model and random effects model in panel data. In this case, Random effects (RE) is preferred under the null hypothesis due to higher efficiency, while under the alternative fixed effects (FE) is at least as consistent and thus preferred. Since the probability value is 0.4 for the mentioned test, null hypothesis was accepted under the significance level of 0.05. Thus random effect model was used to perform the regression analyses.

Table 4.3: Regression Results - Manufacturing Sector

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AUD_S	0.0923	0.0482	1.9147	0.0578
BOD_G	-0.3725	0.3847	-0.9683	0.3347
BOD_I	-0.0878	0.0412	-2.1340	0.0347
BOD_M	-0.0077	0.0100	-0.7696	0.4430
BOD_S	0.0194	0.0238	0.8186	0.4146
CEO_D	0.1618	0.1318	1.2282	0.2216
FIRM_S	0.0293	0.0423	0.6942	0.4888
LEV	-0.0061	0.0046	-1.3370	0.1836
C	-0.0184	0.3651	-0.0504	0.9599

Source: Author’s Source

Table 4.3 documented that dividend payout of firms listed under manufacturing sector is significantly affected by Audit committee size with significant positive relationship with dividend payout at a significance level of 0.1. There was a negative relationship between board independence and dividend payout t at 0.05 significance level.

Conclusion

The Dividend problem remained an unresolved conundrum since 1950s. The Researchers started finding a common answer for the question of why companies pay Dividends and the factors affecting for the payment of dividends. This research is based on finding out how Boards Characteristics, which is a main component of Corporate Governance has affected dividend policy. Furthermore the thesis has taken data based on previous 5 years, from 36 companies in Manufacturing sector listed in the Colombo Stock Exchange. In this paper, the dividend policy was measured using two dependent variables. Namely, Dividend Decision (whether dividend is paid or not) and, Dividend pay-out. The

3rd Interdisciplinary Conference of Management Researchers
23rd – 25th October 2018 – Sabaragamuwa University of Sri Lanka

research is based on three analytical strategies which could be identified as Descriptive statistics, Binary Logistic Regression and Panel Regression. With accordance to the results generated in Descriptive statistics, the 36 companies used for the study to fathom the average of the dividend payout for the last 5 years was 34%. Average number of non-executive directors in Audit Committee was 3. Percentage of women on board depicted as 7%. This is a fine example to show that the Board Gender diversity is far less in Sri Lanka. Average board size was 7. The average financial leverage in Banking and Finance sector was 75%.

With respect to the Binary Logistic Regression results, Audit committee size and CEO duality had significant positive relationship with likelihood of dividend payout at a significance level of 0.05. Board independence has a significantly negative impact on dividend payments at a significance level of 0.05. According to the results generated in panel regression, dividend payout of firms listed under manufacturing sector is significantly affected by Audit committee size with significant positive relationship with dividend payout at a significance level of 0.1. There was a negative relationship between board independence and dividend payout t at 0.05 significance level. In a nutshell, mixed findings of this study support both outcome and substitution hypothesis. Outcome hypotheses suggests that managers in poor-governed firms are often interested in maximizing their own personal wealth, by paying no or low dividends to shareholders (La Porta et al., 1998) whereas Substitution model proposes, firms with poor governance structures tend to pay larger dividends in order to establish a positive reputation with shareholders (La Porta et al., 1998).

References

- Abor, J., & Fiador, V. (2013). Does corporate governance explain dividend policy in Sub-Saharan Africa?. *International Journal Of Law And Management*, 55(3), 201-225.
- AHARONY, J., & SWARY, I. (1980). Quarterly Dividend and Earnings Announcements and Stockholders' Returns: An Empirical Analysis. *The Journal Of Finance*, 35(1), 1-12.
- Ajanthan, A. (2013). Corporate Governance and Dividend Policy: A Study of Listed Hotels and Restaurant Companies in Sri Lanka. *International Journal Of Management*, 3(12), 1125-1132.
- Al-Najjar, B., & Hussainey, K. (2009). The association between dividend payout and outside directorships. *Journal Of Applied Accounting Research*, 10(1), 4-19.
- Borokhovich, K., Brunarski, K., Donahue, M., & Harman, Y. (2006). The Importance of Board Quality in the Event of a CEO Death. *Financial Review*, 41(3), 307-337.
- Cadbury Committee. (1992). *The Financial Aspects of Corporate Governance*. London.
- Chen, G., Firth, M., Gao, D., & Rui, O. (2006). Ownership structure, corporate governance, and fraud: Evidence from China. *Journal Of Corporate Finance*, 12(3), 424-448.
- Dadashi, I., Mansourinia, E., Emamgholipour, M., Babanejad Bagheri, S., & Mohammadpour Arabi, A. (2013). Investigating the effect of growth and financial strength variables on the financial leverage: Evidence from the Tehran Stock Exchange. *Management Science Letters*, 3(4), 1125-1132.
- Dissabandara, & Samarakoon, L. (2002). Dividend Announcements, Firm size and Dividend growth in the Sri Lankan Stock Market. *Sri Lankan Journal Of Management*, 7(3), 228-245.
- Elton, E., & Gruber, M. (1970). Homogeneous Groups and the Testing of Economic Hypotheses. *The Journal Of Financial And Quantitative Analysis*, 4(5), 581.



3rd Interdisciplinary Conference of Management Researchers
23rd – 25th October 2018 – Sabaragamuwa University of Sri Lanka

- Fama, E., & Jensen, M. (1998). Separation of Ownership and Control. SSRN Electronic Journal.
- Financial Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal Of Financial Economics*, 3(4), 305-360.
- Kiel, G., & Nicholson, G. (2003). Board Composition and Corporate Performance: how the Australian experience informs contrasting theories of corporate governance. *Corporate Governance*, 11(3), 189-205.
- Kumar, P., & Zattoni, A. (2015). Ownership Structure, Corporate Governance and Firm Performance. *Corporate Governance: An International Review*, 23(6), 469-471.
- La Porta, R., Lopez de Silanes, F., & Shleifer, A. (1998). Corporate Ownership Around the World.
- La Porta, R., Lopez de Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor Protection and Corporate Governance.
- Litzenberger, R., & Ramaswamy, K. (1979). The effect of personal taxes and dividends on capital asset prices. *Journal Of Financial Economics*, 7(2), 163-195.
- Miller, M., & Modigliani, F. (1961). Dividend Policy, Growth, and the Valuation of Shares. *The Journal Of Business*, 34(4), 411.