THE IMPACT OF BOARD OF DIRECTORS’ CHARACTERISTICS ON DIVIDEND POLICY: EVIDENCE FROM A DEVELOPING COUNTRY

D. M. K. T. Dissanayake *, D. B. P. H. Dissabandara **

* Corresponding author, NSBM Green University, Homagama, Sri Lanka
Contact details: NSBM Green University, Mahenwaththa, Pitipana, Homagama, Sri Lanka
** University of Sri Jayewardenapura, Nugegoda, Sri Lanka

Abstract

The “dividend puzzle” has been an unresolved problem since the 1950s. The purpose of this paper is to investigate the nature and a level of the relationship between board characteristics and dividend policy. The study used a positivistic approach and Spearman correlation metric, descriptive statistics, and binary regression models have been deployed as analytical tools. It is found that food and beverages sector had the highest percentage for dividend payout from 2015 to 2019. The highest percentage for women on boards was 13% in the land and property sector. The average board size for the selected companies was 8. The likelihood to pay dividends, women on boards, the board size, and CEO duality indicated a significant positive relationship. Panel regression results indicate that there is no significant relationship between board characteristics and the level of dividend payment for the selected sample. But in a sectorial analysis audit committee size has a significant negative relationship with the level of dividend payment in the manufacturing sector whereas board gender diversity has a significant positive relationship with the same in the food and beverage sector. In summary, dividend decision has been affected by several board characteristics, but such factors had no significant impact on the level of dividends declared in the market. The sectorial analysis revealed that several characteristics affected the level of dividends in two sectors.

Keywords: Corporate Governance, Board Characteristics, Dividend Policy, Spearman Correlation, Binary Logistic Regression, Panel Regression

1. INTRODUCTION

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-de-Silanes, Shleifer, & Vishny, 2000). A study conducted by Faccio, Lang, and Young (2001) mentioned that dividend behavior is used as the outcome of governance. In a similar mannerism, Almeida (2011) accentuated that firms with good governance practices tend to have a higher value and a good payout ratio when compared to firms with poor governance practices. Furthermore, Faccio et al. (2001) observed that the dividend payout ratio is comparatively higher in Europe than in Asia.
The corporate governance standards and protection of investors are lower in South Asian countries than in the US and Japan (La Porta, Lopez-de-Silanes, & Shleifer, 1998). Despite suggestions that dividend policy is determined by corporate boards and top executives (Borokhovich, Brunarski, Harman, & Kehr, 2005), existing studies examining the effect of corporate governance on dividend payout are rehashed (Ghosh & Sirmans, 2006). Fortunately, as our brief review of relevant studies shows, the concept of corporate governance seems to bring new tools to solve what Black (1976) described as the “dividend puzzle”. The dividend decision is taken by the board of directors. Hence it is important to understand the impact of board characteristics on dividend policy. The following objectives are formulated to achieve the purpose of this study:

- provide a descriptive statistical analysis on board characteristics and dividend payout of selected listed companies and sectors in the Colombo Stock Exchange;
- identify the nature of the relationship between board characteristics and dividend decision in selected companies and sectors listed in the Colombo Stock Exchange;
- understand the level of the relationship between board characteristics and dividend payout in selected companies and busines sectors listed in the Colombo Stock Exchange.

Studies on the degree to which corporate governance processes influence dividend policy are scarce in general but especially acute in the case of Sri Lankan firms. As a result, the researchers hope to contribute to the existing literature by investigating how corporate board characteristics (such as board size, board independence, CEO position duality, frequency of board meetings, board gender diversity, and audit committee size) affect dividend policy of listed firms in Sri Lanka.

The structure of this paper is as follows. Section 2 reviews the relevant literature on corporate governance with special reference to Sri Lanka and empirical studies conducted based on board characteristics used in this study. Section 3 analyses the methodology that has been used to conduct the study including conceptual framework, sample selection, and analytical tools. Findings and discussion are presented in Section 4. Section 5 concludes the main outcome of this research work.

This is one of the first attempts at examining the relationship between board characteristics and dividend policy based on multiple sectors in the Colombo Stock Exchange (CSE).

2. LITERATURE REVIEW

Corporate governance has become a global concern during the 1980s with the mega-corporate debacles in many developing countries, and the improvement of corporate governance practices has become a prominent issue in all countries around the world. Also, Sri Lanka is not immune from these dynamics and corporate governance challenges. With the implementation of open economic policies in 1977 and the continuation of those policies by successive governments, the private sector, dominated by corporate entities, has become an important economic force in Sri Lanka (Senaratne, 2011).

This section focuses on corporate governance in Sri Lanka, empirical studies on corporate governance and dividend policy, and finally, the researchers identified several board characteristics to be tested in this study based on extant literature.

2.1. Corporate governance in Sri Lanka

The origin of corporate governance in Sri Lanka dates back almost 150 years to its time under the British rule until the island achieved independence in 1948. Imperialism conquered Sri Lanka from the 18th century onwards, causing two repercussions for its feudal culture. The first was the transformation of the kingship into a colonial state, and the second was the advent of a mercantile economy based on plantations (Alawattage & Wickramasinghe, 2009).

It is worth noting that colonial economic policy had two political methods when dealing with the colonies. The mortality rate of colonizers, traders, and missionaries determined the policies were suitable in each colony. As a result, if their mortality rate was poor, they migrated to a colony and decided to settle down. The colonies with higher mortality rates but natural endowments such as minerals, fertile land, and crop weather were used to maximize exploitation for the parent country’s development (Acemoglu & Johnson, 2005).

Demirgüç-Kunt, Laeven, and Levine (2003) argued that colonizers did not introduce institutions in an extractive setting that favored the growth of competitive markets because the colonizers thought that the place of extraction could be threatened by competitive markets. On geo-political strategic grounds, Sri Lanka and India were appealing. With natural harbors, the British naval forces could monitor the entire Indian Ocean.

As a consequence, they developed common law, though not to the fullest extent appropriate for the growth of a stock market (Acemoglu, Johnson, & Robinson, 2001b). According to Morgan (1958), Sri Lanka has been a classic example of a least developed capital market, constitutive processes, and extraction of its wealth.

The Waste Land Act of 1832

The British government took ownership of vast areas of uncultivated hill land in up country in the 19th century and sold them to British planters. The Waste Land Act of 1832 was enforced by the colonialists and, accordingly, by documentary proof, locals who could not claim land lost ownership of their lands. Such lands were subsequently sold at cheaper rates to British planters and civil servants (Ramaiya, 1935). Although countries vary in the degree to which their legal structure defines and preserves the right to land, this act established the legal basis for the ownership of a legal title by a person or company for the resource it owns.

Companies were governed by English law in the early days, as enshrined in the Civil Law Ordinance No. 5 of 1852, which was brought to Sri Lanka. The Joint-Stock Companies Ordinance No. 4 of 1861 was the first company law enacted specifically for Sri Lanka. With the growth of the plantation market, cultivators have been
experimenting with new ways of raising funds for their company. They established small businesses and sold stock to the general public (The Registrar of Companies, 2011).

The Colombo Share Brokers Association was founded in 1896 (CSE, n.d.) in order to find a large-scale capital for the plantation business. In terms of generating job opportunities and earning critical foreign exchange earnings, plant industry companies were the most powerful in the private sector in the economy until the mid-1970s (Kiyotaki & Moore, 1997).

The formalization of corporate governance activities began in 1996 when Institute of Chartered Accountants in Sri Lanka (ICASL) has set up a committee to make recommendations on issues related to the financial aspects of corporate governance with the assistance of Institute of Directors in Sri Lanka, Ceylon Chamber of Commerce, and Securities and Exchange Commission.

Consequently, in 1997, ICASL released its first report on the Code of Best Practice on Matters Related to the Financial Aspects of Corporate Governance. Following this initiative, many other governmental bodies, professional bodies, and ICASL have developed subsequent codes in line with the establishment of corporate governance codes worldwide, particularly, in the United Kingdom. These voluntary and mandatory codes are meant to strengthen the governance of operations of the companies listed in the CSE. They were all developed based on the codes established in the United Kingdom. These include the report of the Cadbury Committee of 1992; the report of the Hampel Committee, known as the 1998 Combined Code; the recommendations of the Turnbull Committee of 1999; the report of the Smith Committee on the audit committees of 2003 and the Combined Code of 2003 (Senaratne & Gunarathne, 2008).

**Code of Best Practice of 1997**

The first-ever Code of Best Practice for Corporate Governance was published by ICASL in 1997 to discuss the financial aspects of corporate governance of the listed companies in Sri Lanka. This was established after the review of such reports reported in other countries. However, the rules contained in the code were largely based on the Cadbury Report (Senaratne & Gunarathne, 2008).

The application of this code is expanded to include all listed companies, unit trusts, fund management companies, finance companies, banks, and voluntary insurance companies. It deals with facets of corporate governance under two primary headings: “Board of directors” and “Audit”.

This code is based on the Anglo-Saxon model and therefore more focus has been put on the roles and the duties of the board of directors. Section 1 (The board of directors) of the Code sets out governance procedures to improve the efficiency of the board members. The next section (Audit) of the Code deals with governance aspects relevant to external audits. These include protocols for ensuring the effectiveness of external audits.

The Code was not detailed and only discussed the financial aspects of corporate governance. As a result, this Code was succeeded by the ICASL Code of Best Practice on Corporate Governance in 2003.

**Code of Best Practice of 2003**

In 2001, as a result of the developments in the global corporate governance environment, the ICASL appointed a committee to update the existing 1997 code to improve corporate governance practices in Sri Lanka. This code is largely based on the United Kingdom’s 1998 Combined Code (the Hampel Committee Report). Accordingly, the ICASL Code of 2003 covers corporate governance criteria under two main sections: “The company” and “Institutional shareholders”.

Section 1 of the Code deals with the governance standards of the board of directors, namely, board procedures and meetings. Section 2 ("Institutional shareholders") of the Code deals with governance concepts applicable to the institutional and other investors of a corporation and, in particular, the role of institutional shareholders in voting and assessing the disclosure of governance, and investment or divesting decisions and voting by individual shareholders.

**Code of Best Practice of 2008**

Subsequently, the ICASL Code of 2003 was replaced by the Code of Best Practices on Corporate Governance of 2008 prepared jointly by ICASL and the SEC in collaboration with the CSE. The Joint Committee developed the Code on the voluntary enforcement of listed companies in accordance with the mandatory corporate governance rules incorporated in the CSE listing rules.

The Code makes its recommendations under the two broad headings: “The company” and “Shareholders”. Yet another special aspect of this code is that it allows businesses to follow a Code of Business Conduct and Ethics for directors and senior management.

**Corporate Governance Standards in Listing Rules of 2007**

The ICASL and the SEC, in cooperation with the CSE, have embarked on a joint project. The initiative was launched in 2006 to develop corporate governance standards for mandatory compliance of listed companies on the CSE. These requirements were developed in light of recent changes in corporate governance standards in the United Kingdom and the United States, and they cover the minimum number of non-executive and independent directors to be included on the board; the criteria for assessing the “independence” of non-executive directors; and the reports to be made by listed companies in respect of their corporate governance.

Section 6 of the 2007 CSE Listing Rules includes these provisions. Section 7.10 of the 2009 Listing Rules has been revised. As of April 1, 2008, listed companies must comply with these regulations. Penalties will be imposed if the listing rules are not followed.

These regulations outline only the bare minimum that the specified entity must meet, and the ICASL Code of 2008 is to be applied on a voluntary basis in compliance with the mandatory laws. The implementation of mandatory corporate governance listing rules is a significant step toward improving the governance standards of listed companies in Sri Lanka.
2.2. Board characteristics and dividend policy

Director board characteristics is the proxy for corporate governance in this study. The following section presents the existing literature on board characteristics and dividend policy which founded the research hypotheses.

**Board independence:** A study conducted in 2009 indicated that (Al-Najjar & Hussainey, 2009) the presence of outside directors (independent) may hold a direct impact on the effectiveness of the board as per their power to protect the wealth of the shareholders in the form of dividend payout. Due to dividend payout has over reducing the free cash flow obtainable to managers, dividends vitally help in alleviating agency conflicts, mostly in firms with poor governance. (Easterbrook, 1984).

But, an empirical study in 2005 suggested that (Borokhovich, et al., 2005) there was a negative relationship which was found between the outside directors and dividend payout policy which was derived from a sample of 177 Nigerian firms. Similarly, Al-Najjar and Hussainey (2009) reported an inverse relationship between the number of outside directors and dividend payout after considering 400 non-financial firms. Jenkins (1993) stated that it is favorable to have the majority of board members as outside directors.

**Board gender diversity:** The aspect of gender diversity is widely examined. Carter, Simkins, and Simpson (2003) stated that board diversity can improve board independence and effectiveness by bringing in miscellaneous ideas. The studies conducted to examine the impact on board gender diversity on dividend payout are relatively low in number. In comparing the performance in US firms with the board gender diversity, it showed a positive association (Carter et al., 2003; Erhardt, Werbel, & Shrader, 2003).

**Board meetings:** Theoretically, there are conflicting views on the effect of board meeting frequency on dividend payout policy. On the one hand, regular board meetings will help to reduce agency tensions by communicating information to managers and shareholders in a straightforward manner, thus improving work process efficiency (Allegrini & Greco, 2011). Furthermore, regular board meetings have been suggested to increase board independence and effectiveness by giving directors more time to monitor/evaluate management efficiency (Conger, Finegold, & Lawler, 1998). Increased managerial oversight associated with board meetings will minimize agency issues and boost company results, including dividend (Ntim & Osei, 2011).

**CEO duality:** Abor and Fiado (2013) found that evidence on the connection between dividend payout rates and CEO duality is normally mixed. Zhang (2008) indicated that there is a negative connotation between dividend payout policy and CEO duality by considering a sample of Chinese firms. 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. Jenkins (1993) and FRC (2012) 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.

**Board size:** It is important for a company to have a sufficient number of board members to conduct business without difficulty (FRC, 2012). According to Ntim and Osei (2011), large boards can be successful in controlling management opportunistic actions since larger boards can increase firm efficiency, minimizing agency problems, and increasing dividend payout. However, according to the substitution theory, larger boards are less successful at tracking management opportunistic activity because they are burdened with coordination and communication issues, which inevitably leads to weak governance (Lipton & Lorsch, 1992). Kiel and Nicholson (2003) found that previous research on the relationship between board size and dividend payout policy is mixed. Mansourinia, Emamgholipour, Rekabadarkolaei, and Hozoori (2013) discovered a positive relationship between dividend payout strategy and board size. Kiel and Nicholson (2003) demonstrated the same positive relationship between the two in a study of Australian businesses. Furthermore, a positive relationship between board size and dividend policy is demonstrated in a study conducted over a 7-year period using data from 1056 share-listed companies in Shanghai and Shenzhen Stock Exchanges (Chen, Lin, & Kim, 2011). A study was conducted among 81 Iranian listed companies on the Tehran Stock Exchange from 2005 to 2011. Ghasemi, Madrakian, and Keivani (2013) suggested a negative correlation between dividend payout policy and board size.

**Audit committee size:** Razae (2008) made a statement that in order to monitor and expand the quality of financial reporting which the managers provide to the shareholders, it is the firms' obligation to form independent audit committees. The larger the audit committee is,
the more effective will be the monitoring and controlling of the managerial opportunistic behaviors due to the fact that they are related with experience, expertise, and skills (Kyereboah-Coleman & Biekpe, 2006). But, on the contrary, Chen (2010) has stated that dividends have the capability of alleviating agency problems in the firms which have poor governance practices. Accordingly, the following hypotheses were developed by the researchers:

H1: There is an association between board independence and dividend policy.
H2: There is an association between board meetings and dividend policy.
H3: There is an association between board meetings and dividend policy.
H4: There is an association between CEO duality and dividend policy.
H5: There is an association between board size and dividend policy.
H6: There is an association between audit committee size and dividend policy.

3. METHODOLOGY

3.1. Conceptual framework

The study aims to identify the impact of board characteristics on dividend policy. The dividend policy of this study was measured by two dependent variables: dividend decision and dividend payout. Two models were applied by the researchers. Those models will be illustrated later in this section. The conceptual framework illustrated as follows (Figure 1).

![Figure 1. Conceptual framework](image)

Source: The researchers' elaboration.

3.2. Research approach

The author used the quantitative research approach to perform this study. Quantitative research is most commonly conducted using deductive reasoning, in which researchers begin with hypotheses and then collect data to establish whether empirical evidence to support the hypotheses exists.

3.3. Sample selection

One hundred (100) and ninety-one (91) companies that cover nine sectors were selected as the initial sample. The final sample was selected based on the following criteria:

- the company should be listed on the CSE from 2015 to 2019;
- information required should be available and accessible from 2015 to 2019.

Accordingly, the final sample was selected as follows (Table 1).

![Table 1. Final sample](image)
Out of 20 business sectors categorized in the CSE (until 19th January 2020), the CSE adopted Global Industry Classification Standard (GICS) along with S&P/CSE co-branded sector indices with effect by 20th January 2020) 9 sectors have been selected for the study. The sectors that possess only 8 or fewer companies have been omitted from the final sample. The banking, insurance, and finance sector (highly leveraged) alongside with power and energy sector (highly regulated) also eliminated from the final sample due to the unique characteristics of those sectors. The necessary data for the selected variables of board characteristics was gathered from the publicly available financial statements of the companies included in the final study. The study covered the years 2015–2019 and was focused on secondary data.

3.4. Analytical strategies, definition of variables, and model specifications

The researchers used four analytical strategies: descriptive statistics, the Spearman correlation, binary logistic regression, and panel regression to achieve the objectives of the study. Descriptive statistics and the results of the Spearman correlation are discussed in the next section of the paper.

Table 2 shows the proposed variables, abbreviations, nature of each variable, and measurement techniques for the proposed analysis. To account for possible “omitted variable bias” two control variables were used (Gujarati, 2003).

### Table 2. Variable description

<table>
<thead>
<tr>
<th>Variable</th>
<th>Abbreviation</th>
<th>Nature</th>
<th>Measure techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Board size</td>
<td>BS</td>
<td>Independent</td>
<td>No. of directors</td>
</tr>
<tr>
<td>2. Board meetings</td>
<td>BM</td>
<td>Independent</td>
<td>No. of meetings in a year</td>
</tr>
<tr>
<td>3. Board independence</td>
<td>BI</td>
<td>Independent</td>
<td>No. of Ind. directors</td>
</tr>
<tr>
<td>4. CEO duality</td>
<td>CD</td>
<td>Independent</td>
<td>Dummy variable, 1 for yes, 0 otherwise</td>
</tr>
<tr>
<td>5. Board gender diversity</td>
<td>BD</td>
<td>Independent</td>
<td>Percentage of female directors</td>
</tr>
<tr>
<td>6. Audit committee size</td>
<td>AS</td>
<td>Independent</td>
<td>No.of directors in audit committee</td>
</tr>
<tr>
<td>7. Firm size</td>
<td>FS</td>
<td>Control</td>
<td>Total assets in Mn</td>
</tr>
<tr>
<td>8. Leverage</td>
<td>LV</td>
<td>Control</td>
<td>Debt to asset ratio</td>
</tr>
<tr>
<td>9. Dividend decision</td>
<td>DD</td>
<td>Dependent Variable</td>
<td>Dummy variable, 1 for &quot;paid&quot;, 0 otherwise.</td>
</tr>
<tr>
<td>10. Dividend payout</td>
<td>DP</td>
<td>Dependent Variable</td>
<td>Dividend payout ratio</td>
</tr>
</tbody>
</table>

Assuming that all the hypothesized relationships are linear, Model 1 to be estimated is specified as follows:

**Binary logistic regression (Model 1)**

\[ DD_{it} = a_0 + \beta_1 BS + \beta_2 BM + \beta_3 BI + \beta_4 CD + \beta_5 BD + \beta_6 AS + \sum_{i=0}^{n} \beta_i CONTROLS + \epsilon_{it} \]  

(1)

where, \( DD \) is the main dependent variable; \( BS, BM, BI, CD, BD, AS \) are independent variables; and \( CONTROLS \) refers to control variables including \( FS, LV \).

Assuming that all the hypothesized relationships are linear, Model 2 to be estimated is specified as follows:

**Panel regression (Model 2)**

\[ DP_{it} = a_0 + \beta_1 BS + \beta_2 BM + \beta_3 BI + \beta_4 CD + \beta_5 BD + \beta_6 AS + \sum_{i=0}^{n} \beta_i CONTROLS + \epsilon_{it} \]  

(2)

where, \( DP \) is the main dependent variable; \( BS, BM, BI, CD, BD, AS \) are independent variables; and \( CONTROLS \) refers to control variables including \( FS, L \).

4. ANALYSIS AND DISCUSSION

Four analytical strategies have been used to analyze the relationships between board characteristics and dividend policy. Firstly, the Spearman correlation method was applied to identify the correlation of independent variables with dividend decision (dependent variable) of the main model in this study. Descriptive statistics has been used to explain the status quo of the board characteristics in Sri Lankan listed companies and dividend policies of the same. Then binary logistic regression has been applied to find out the relationships between board characteristics and dividend decision whereas dividend decision (dependent variable) was measured in binary terms. One (1) for payment of dividends and 0 for non-payment of dividends. Finally, panel regression was applied only for dividend paid firm-year observations in order to identify the relationship between board characteristics and dividend payout.

4.1. Correlation matrix: The Spearman correlation

The Spearman's correlation matrix, shown in Table 3, analyses the existence and degree of relationship between the variables used in the analysis. The importance of correlations between independent variables is low to moderate, demonstrating the absence of multicollinearity among the variables chosen. The model consists of two ranked variables, namely, dividend decision (dependent variable) and CEO duality (one of the independent variables).
According to the test results generated, 5 out of 6 board characteristics positively correlated with the likelihood of payment of dividend at a significant level of 0.05. Audit committee size positively correlated with the likelihood of payment of dividends at a significant level of 0.1. Since all the independent variables used in the model are significantly correlated, all the independent variables in this model could be used for regression models.

**Table 3. Correlation matrix**

<table>
<thead>
<tr>
<th>Probability</th>
<th>DD</th>
<th>AS</th>
<th>AG</th>
<th>BI</th>
<th>BM</th>
<th>BS</th>
<th>CD</th>
<th>FS</th>
<th>LV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significance</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>AS</td>
<td>0.0563</td>
<td>1</td>
<td>0.5211</td>
<td>0.5308</td>
<td>0.6168</td>
<td>1</td>
<td>0.0022</td>
<td>0.9006</td>
<td>0.3618</td>
</tr>
<tr>
<td>BI</td>
<td>0.1121</td>
<td>0.6186</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0.2630</td>
<td>0.1394</td>
<td>0.2041</td>
<td>0.1971</td>
</tr>
<tr>
<td>BM</td>
<td>0.0988</td>
<td>0.5211</td>
<td>0.5308</td>
<td>0.6168</td>
<td>1</td>
<td>0.0022</td>
<td>0.9006</td>
<td>0.3618</td>
<td>0.1971</td>
</tr>
<tr>
<td>CD</td>
<td>0.0137</td>
<td>0.6900</td>
<td>0.5765</td>
<td>0.8765</td>
<td>0.7393</td>
<td>0.1393</td>
<td>0.0800</td>
<td>0.1060</td>
<td>0.1637</td>
</tr>
<tr>
<td>FS</td>
<td>0.0800</td>
<td>0.0900</td>
<td>0.1791</td>
<td>0.2000</td>
<td>0.2793</td>
<td>0.1650</td>
<td>0.0000</td>
<td>0.0718</td>
<td>0.0921</td>
</tr>
<tr>
<td>LEV</td>
<td>0.1971</td>
<td>0.0729</td>
<td>0.0491</td>
<td>0.0792</td>
<td>0.2793</td>
<td>0.1650</td>
<td>0.0000</td>
<td>0.0656</td>
<td>0.0724</td>
</tr>
<tr>
<td>Significance</td>
<td>0.0713</td>
<td>0.0515</td>
<td>0.2113</td>
<td>0.4561</td>
<td>0.3642</td>
<td>0.0987</td>
<td>0.0678</td>
<td>0.5642</td>
<td>0.0787</td>
</tr>
</tbody>
</table>

Source: The researchers’ elaboration.

### 4.2. Descriptive statistics, binary logistic regression and panel regression

The following discussion is based on the results of descriptive statistics, binary logistic regression, and panel regression. The sectors are abbreviated as follows intending to ease the presentation:

1. Manufacturing (MF)
2. Hotel & travels (HT)
3. Food & beverage (FB)
4. Diversified (DF)
5. Land & properties (LP)
6. Plantations (PL)
7. Chemicals & pharmaceuticals (CP)
8. Trading (TD)
9. Investment trusts (IT)

#### 4.2.1. Discussion on descriptive statistics

As per the data collected from 170 companies in 9 sectors listed in the CSE, average dividend payout was 23% for the five-year period of 2015–2019. Nevertheless, the dividend payout percentage average is higher in MF, FB, LP, and CP in comparison to the overall dividend payout percentage. FB sector showed the highest dividend payout percentage from 2015 to 2019. Women on board for overall data were depicted as 9%. However, this is merely a very low percentage. This indicates the gender imbalance in Sri Lankan corporate boards. It is considered that the presence of non-executive directors in the board is vital for board independence. According to the data collected, there are 3 non-executive directors present on average. But, the trading sector lacked the average need of 3 non-executive directors, as the TD sector only comprises of 2 non-executive directors on average. There is a norm in corporate governance that the board meetings should be held at least once a quarter (CA Sri Lanka, 2017). It was observed that the board of directors meets 6 times per year on average. Therefore, it is considered as compliance with the Code of Best Practice issued by the CA of Sri Lanka. Furthermore, in the LP sector, the average was 3, which could be stressed as a worrisome sign.

The average board size for selected companies in Sri Lanka was found out to be 8. There was no sectoral-wise significant deviation. The separation of positions of Chairperson and the CEO was measured using a dummy variable. According to the statistics, 75% out of 170 companies separated the positions of the Chairman and the CEO. However, in the PL sector, all companies accept the norm of CEO duality. But in the LP sector, the percentage was found out to be 30% on average. Financial leverage for 170 companies investigated was 49%. The lowest leverage was found out in IT companies that is a percentage of 5%.

**Table 4. Discussion on descriptive statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall</th>
<th>MF</th>
<th>HT</th>
<th>FB</th>
<th>DF</th>
<th>LP</th>
<th>PL</th>
<th>CP</th>
<th>TD</th>
<th>IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP</td>
<td>23%</td>
<td>34%</td>
<td>20%</td>
<td>35%</td>
<td>18%</td>
<td>28%</td>
<td>14%</td>
<td>24%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>BI</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>BS</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>BM</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>CP</td>
<td>25%</td>
<td>83%</td>
<td>67%</td>
<td>60%</td>
<td>50%</td>
<td>40%</td>
<td>30%</td>
<td>100%</td>
<td>78%</td>
<td>63%</td>
</tr>
<tr>
<td>VM</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>LV</td>
<td>49%</td>
<td>76%</td>
<td>23%</td>
<td>34%</td>
<td>29%</td>
<td>27%</td>
<td>57%</td>
<td>34%</td>
<td>47%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: The researchers’ elaboration.
4.4.2. Discussion on binary logistic regression results

The researchers used the binary logistic regression method to identify whether there are any relationships between board characteristics and dividend decision. Summarized results are shown in Table 5.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall</th>
<th>MF</th>
<th>HT</th>
<th>FB</th>
<th>DF</th>
<th>LP</th>
<th>PL</th>
<th>CP</th>
<th>TD</th>
<th>IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS</td>
<td>-0.0115</td>
<td>0.81000</td>
<td>-0.70040</td>
<td>0.038</td>
<td>-1.36190</td>
<td>7.01970</td>
<td>0.0523</td>
<td>-0.8029</td>
<td>0.0696</td>
<td>-0.2465</td>
</tr>
<tr>
<td>BS</td>
<td>1.70170</td>
<td>2.83130</td>
<td>4.35780</td>
<td>-0.1584</td>
<td>37.54060</td>
<td>-8.15830</td>
<td>-2.0430</td>
<td>27.5736</td>
<td>-2.1547</td>
<td>1.0013</td>
</tr>
<tr>
<td>BM</td>
<td>-0.0112</td>
<td>0.0227</td>
<td>-2.00650</td>
<td>-0.8671</td>
<td>0.1021</td>
<td>0.338</td>
<td>-0.2725</td>
<td>-1.3215</td>
<td>0.0158</td>
<td>-0.5194</td>
</tr>
<tr>
<td>BS</td>
<td>0.16260</td>
<td>0.06720</td>
<td>0.272</td>
<td>0.0872</td>
<td>0.82390</td>
<td>1.22690</td>
<td>0.0141</td>
<td>0.3302</td>
<td>0.6702</td>
<td>0.62380</td>
</tr>
<tr>
<td>CD</td>
<td>0.74770</td>
<td>2.54770</td>
<td>1.36550</td>
<td>0.8473</td>
<td>5.26120</td>
<td>0.7544</td>
<td>-0.1531</td>
<td>3.0372</td>
<td>-3.6633</td>
<td>-3.5282</td>
</tr>
<tr>
<td>FS</td>
<td>0.04750</td>
<td>0.94270</td>
<td>0.26290</td>
<td>1.1575</td>
<td>1.26730</td>
<td>0.2743</td>
<td>0.1198</td>
<td>1.1982</td>
<td>0.7089</td>
<td>-0.9286</td>
</tr>
<tr>
<td>LV</td>
<td>-0.0003</td>
<td>0.0125</td>
<td>-4.41620</td>
<td>-4.3748</td>
<td>-1.312</td>
<td>-9.3648</td>
<td>-1.8643</td>
<td>-8.9357</td>
<td>-2.3188</td>
<td>6.227</td>
</tr>
<tr>
<td>C</td>
<td>-1.891</td>
<td>-8.3876</td>
<td>-1.3539</td>
<td>-8.0103</td>
<td>-23.9624</td>
<td>-27.9717</td>
<td>0.1732</td>
<td>-0.6428</td>
<td>-2.3509</td>
<td>11.7075</td>
</tr>
</tbody>
</table>

Note: *Statistically significant at 0.05; **Statistically significant at 0.01.
Source: The researchers' elaboration.

The result is based on the overall sample of the study. Audit committee size has negatively affected the likelihood to pay dividends. Higher the audit committee size, lesser the propensity to pay dividends. However, this relationship was statistically insignificant. In the sectorial analysis, audit committee size has positively affected the likelihood to pay dividends for MF, FB, LP, PL sectors of the CSE. Positive relationships in MF and LP sectors were statistically significant at a 0.05 significance level. The variable negatively affected the payment of dividends in HT, DF, CP, and IT sectors. Out of negative relationships, audit committee size has a significant negative relationship with the likelihood to pay dividends in the HT sector at a significance level of 0.05 whereas inverse relationship in DF at a 0.1 significance level.

The next board characteristic in the model, women on board has positively affected the likelihood to pay dividends. The higher the women on board, the higher the propensity to pay dividends. This relationship was statistically significant at a 0.05 significance level. In the sectorial analysis, women on board have positively affected the likelihood to pay dividends for MF, HT, DF, CP, IT sectors. The positive relationship with the HT sector was statistically significant at a 0.1 significance level whereas a positive relationship in the DF sector was significant at a 0.05 significance level. The variable negatively affected the payment of dividends in FB, LP, PL, and TD sectors. Out of negative relationships, women on boards have a significant negative relationship with the likelihood to pay dividends in the LP sector at a significance level of 0.05.

Board independence has negatively affected the likelihood to pay dividends for the overall sample. Higher the number of independent non-executive directors of the board (board independence) lesser the propensity to pay dividends. However, this relationship is statistically insignificant. In the sectorial analysis, board independence has positively affected the likelihood to pay dividends for FB, DF, PL, and CP sectors of CSE. None of the positive relationships were statistically significant. The variable negatively affected the payment of dividends in MF, LP, TD, and IT sectors. Out of negative relationships, board independence had a significant negative relationship with the likelihood to pay dividends in the MF sector at a significance level of 0.05.

The next board characteristic in the model, the number of board meetings held per year negatively affected the likelihood to pay dividends for the full data set obtained from 170 companies for the period of 2015–2019. This relationship is statistically insignificant. In the sectorial analysis, the variable has positively affected the likelihood to pay dividends for MF, DF, LP, and TD business sectors. None of the relationships were significant. The variable negatively affected the payment of dividends in HT, FB, PL, CP and IT sectors. Out of negative relationships, board meetings had significant negative relationships with the likelihood to pay dividends. In HT and CP sectors at a significance level of 0.05.

The researchers found a unique observation regarding the variable of board size. For the full data set for the 9 sectors used in this study, board size has positively affected the likelihood of dividend payments. The higher the board size, the higher the propensity to pay dividends. The relationship was statistically significant at 0.05. Apart from that, positive relationships in MF, HT, DF, CP, and IT were statistically significant at a 0.05 significance level.

Finally, CEO duality has positively affected the likelihood to pay dividends. The higher the CEO duality, the higher the propensity to pay dividends. This relationship is statistically significant at 0.05 significance level. In the sectorial analysis, CEO duality has positively affected the likelihood to pay dividends for MF, HT, FB, DF, and IT business sectors of CSE. Positive relationships in MF, HT, and DF sectors were statistically significant at 0.05 significance. The variable negatively affected the payment of dividends in the PL and IT sectors. None of the relationships were significant.

4.4.3. Discussion on panel regression results

The researchers applied panel regression to quantify relationships between board characteristics and the level of dividend payment. Out of 850 firm-year observations, only dividend-paid observations were used for panel regression analysis (666 observations). The sectors with a small number of companies had to be eliminated from the analysis due to insufficient firm-year observations. Eliminated sectors are CP, TD, and IT. Summarized results are shown in Table 6.
Audit committee size has positively affected the percentage of dividend payout for the full data set obtained. The higher the audit committee size, the higher the percentage of dividend payout. However, this relationship is statistically insignificant. In sectorial analysis, audit committee size positively affected the percentage of dividend payout in all sectors tested under panel regression. A positive relationship with the MF sector was statistically significant at a 0.1 significance level. According to Razaee (2008), independent audit committees should be implemented with the intention of monitoring and improving the quality of financial reporting which is provided to the shareholders by the management. Kajola (2008) suggested that monitoring and controlling managerial opportunistic behavior could be effectively done through the existence of larger audit committees. Empirical evidence is lacking related to the effect audit committee size has over dividend pay-out policy, therefore making it clear that further research on this aspect is productive.

The next board characteristic in the model, women on board have negatively affected the percentage of dividend payout for the full data set obtained from 155 companies from 2015 to 2019. The higher the women on board, the lesser the percentage of dividend payout. However, this relationship is statistically insignificant. In the sectorial analysis, women on board have negatively affected the percentage of dividend payout in all sectors tested under panel regression except the FB sector. None of the positive relationships were significant. The only negative relationship of the variable with the percentage of dividend payment showed was statistically significant at a 0.1 significance level. According to the outcome hypothesis, Asher, Mahoney, and Mahoney (2005) suggested that board independence and effectiveness could be enhanced through board diversity by introducing varied ideas, experience, and perspectives to the board which in return could lead to increment in firm performance and dividend pay-out through board gender diversity. But by contrast, Baranchuk and Dyvig (2009) vehemently stated that board gender diversity is not considered an effective governance mechanism, as it seemed due to the immense conflicts prevailing among the board members.

Board independence has positively affected the percentage of dividend payout for the full data set obtained. The higher the board independence, the higher the percentage of dividend payout. However, this relationship was statistically insignificant. In sectorial analysis, board independence positively affected the percentage of dividend payout in HT, FB, DF, and PL sectors. A positive relationship with the HT sector was statistically significant at a 0.05 significance level. The variable negatively affected the percentage of dividend payout in the MF and LP sectors. A negative relationship in the MF sector was statistically significant at a 0.1 significance level. Due to the existence of non-executive directors on boards of the company, Belden, Fister, and Knapp (2005) specified that it would lead to a reduction in agency cost of management and consequently, the dividends may tend to increase. The impact over payment of higher dividends seems to occur as a result of the independent directors in the company in order to assist shareholders on their linked franking credits (Setia-Atmaja, Tanewski, & Skully, 2009). Moreover, according to the findings of Yarram and Dollery (2015), the size of dividend payout is positively influenced by board independence; which rather denotes that corporate firms are invigorated by independent directors to pay high payout and pursue the necessary funds through capital markets.

The number of board meetings held per year has positively affected the percentage of dividend payout for the full sample tested. The higher the board meetings, the higher the percentage of dividend payout. However, this relationship was statistically insignificant. In sectorial analysis, board meetings positively affected the percentage of dividend payout in HT, DF, LP, and PL sectors.

None of the positive relationships were statistically significant. The variable negatively affected the percentage of dividend payout in MF and FB sectors. None of the negative relationships were statistically significant. Chen and Chen (2012) stated that board meetings impact significantly on performance, there seems to be a dearth of studies conducted on examining the effect of board meetings on dividend pay-out policy.

Board size has negatively affected the percentage of dividend payout for the full sample. The higher the board size, the lesser the percentage of dividend payout. However, this relationship was statistically insignificant. In sectorial analysis, board size positively affected the percentage of dividend payout in MF, FB, and PL sectors. The variable negatively affected the percentage of dividend payout in HT, DF, and PL sectors. A negative relationship in the HT sector was statistically significant at a 0.05 significance level. According to the study conducted by Klein (2000), the specialization of directors majorly comes through larger boards. Hence, the study stated that higher specialization could lead to effective monitoring and
lower dividends are considered. Moreover, Abor and Fiador (2013) mentioned that board size is positive and significantly related to dividend policy.

Finally, CEO duality has positively affected the percentage of dividend payout for the full dataset obtained. The higher the board independence, the higher the percentage of dividend payout. However, this relationship was statistically insignificant. In sectorial analysis, CEO duality positively affected the percentage of dividend payout in MF, HT, FB, and PL sectors. A positive relationship in HT sectors was statistically significant at a 0.1 significance level. The CEO duality negatively affected the percentage of dividend payout in DF and LP sectors. None of the negative relationships were significant. This study is in line with agency theory, supporting its concepts. Therefore, an assumption is made that the parting between the position of Chairman and CEO is a fair attribute of corporate governance. But Abor and Fiador (2013) worked out an opposite theory by stating that the association between CEO duality and dividend payout is negative. The reason behind such negativity was clarified as to whom CEO duality gives the CEO greater opportunity to influence the decisions taken by the board. This directly results in the payment of lower dividends.

5. CONCLUSION

This paper is based on finding out how the board’s characteristics, which is the main component of corporate governance, have affected dividend policy. Furthermore, the study has taken data based on 5 years, from 9 sectors in 170 companies in the Colombo Stock Exchange. Hence, the findings are generated through quantitative analytical tools.

According to the test results generated by Spearman correlation, all six independent variables are significantly correlated with the dependent variable (dividend decision). Therefore, to formulate a binary logistic regression model and panel regression model, all six independent variables were used. The three analytical strategies of descriptive statistics, binary logistic regression, and panel regression were firstly applied into overall data, and then it was split into the 9 sectors.

Descriptive statistics have shown that the 9 sectors used for the study to fathom the average of the dividend payout for the last 5 years were 23%. The highest dividend payout was noted to be in the FB sector which took a percentage of 35%; the average number of non-executive directors in the audit committee was 3. The highest percentage of women on board depicted as 13% and this was found out to be in the LP sector. This is a fine example to show that the board gender diversity is far less in Sri Lanka. The average board size was 8 and the average financial leverage in selected sectors was 49%. Fifty-six (56%) of firm-year observations used in this study are “dividend-paid” observations. Those observations were used for the binary logistic regression.

Binary logistic regression results revealed that women on boards, the board size, and CEO duality have a significant positive relationship for likelihood to pay dividends. Audit committee size, board independence, and board meetings were negatively affected by the dividend decision. But none of the negative relationships were significant.

According to the results generated in overall panel regression, women on boards and board size negatively affect the level of dividend payout. Out of this, women on board seemed to show a significant negative relationship.

An unusual finding describes that Women on Board positively affect for the likelihood to pay dividends but negatively affect the level of dividend payout. This denotes that women directors support the payment of dividends but in lesser amounts.

REFERENCES


