INTRA-INDUSTRY CONFORMITY IN DIVIDEND POLICY IN MALAYSIA

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Abstract

The topic on determinants of dividend policy has remained as a hot topic even though much relevant research had conducted. Every company wishes to increase their company's value by having a suitable dividend policy. The dividend policy of a company may be affected by other industry players due to the similar business environment. Besides, dividend decision can convey message to public about its performance which may indirectly affect a company's share price. Intra-industry effect on dividend policy was identified outside Malaysia. Since dividend is a crucial decision to a company, the same research should be conducted in Malaysia. The main purpose of this paper is to test the intra-industry effect on dividend policy in Malaysian market. In order to explore the influence of intra-industry effect, the logistic regression was performed by using the variables that may affect the probability of a company to pay dividend. The findings revealed a significant positive relationship between probability of a company paying a dividend and number of companies within plantation industry that pay a dividend. However, there is an insignificant relationship between probability of a company paying a dividend and number of companies within construction industry that pay a dividend. Overall, the findings support the view of intra-industry conformity in dividend policy in Malaysia. Thus, the intra-industry effect should be considered as one of the determinants in dividend policy. The findings are useful not only for investors but the company as well.

Keywords: Dividend, intra-industry effect, Malaysia

Abstrak

Topik mengenai penentu dasar dividen masih menjadi topik hangat walaupun banyak kajian berkaitan telah dijalankan. Setiap syarikat ingin meningkatkan nilai syarikat mereka dengan mempunyai polisi dividen yang sesuai. Dasar dividen syarikat boleh terjejas oleh peserta industri lain kerana persekitaran perniagaan yang sama. Selain itu, keputusan dividen boleh menyampaikan mesej kepada orang ramai mengenai prestasi dan boleh menjejaskan harga saham syarikat itu. Kesan antara industri dasar dividen telah dikenal pasti di luar Malaysia. Disebabkan dividen adalah satu keputusan yang penting untuk syarikat, penyelidikan yang sama, hendaklah dijalankan di Malaysia. Tujuan utama kajian ini adalah untuk menguji kesan antara industri dasar dividen di pasaran Malaysia. Dalam usaha untuk meneroka pengaruh kesan antara industri, regresi logistik telah dilakukan dengan menggunakan pemboleh ubah yang boleh menjejaskan kebarangkalian syarikat untuk membayar dividen. Dapatan kajian menunjukkan hubungan positif yang signifikan di antara kebarangkalian syarikat membayar dividen dan bilangan syarikat dalam industri perladangan yang membayar dividen. Walau bagaimanapun, terdapat hubungan yang insignifikan antara kebarangkalian syarikat membayar dividen dan bilangan syarikat dalam industri pembinaan yang membayar dividen. Secara keseluruhan, dapatan kajian menyokong pandangan antara industri pematuhan dalam dasar dividen di Malaysia. Oleh itu, kesan antara industri boleh dianggap sebagai salah satu penentu dalam polisi dividen. Hasil kajian ini berguna bukan sahaja kepada pelabur tetapi syarikat itu juga.

Katakunci : Dividen , kesan antara industri , Malaysia

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CHAPTER 1

INTRODUCTION

1.1 Background

A dividend is a form of profit distribution to shareholders. The board of directors' approval is needed to declare the interim dividend whereas the final dividend requires a majority shareholder's approval. Dividend is a source of income to shareholders. On the other hand, dividend is an expenses to a company. As a rule of thumb, a company is not in favour to pay dividend when the company is not performing. The ultimate objective of the company is to increase shareholder's wealth. Thus, the decision maker for dividend policy requires a comprehensive and careful judegment.

Dividend policy involves important financial decision. Dividend policy refers to a practice which followed by management representatives to decide the amount and the form of distribution to shareholders for a certain timeframe (Lease et al, 2000).

A company can distribute the profit by cash dividend or stock dividend. A cash dividend is a form of payment from the company's retained earnings. From a company's perspective, cash dividend is considered as an expenses at the expense of future investment opportunities. Therefore, it is not surprising that some companies prefer to pay stock dividend to attract investors. Stocks dividend does not reduce company's cash. It involves the issuance of new shares and increase the number of outstanding shares.

The company can choose either internal or external sources to finance the dividend payment. Most of the time, retained earnings is chosen to finance dividend payment. External sources refer to pay dividend by using debt financing or equity financing, which will incur additional cost to the company.

Lintner (1956) and Benartzi, Michealy and Thaler (1997) opined that a company's profitability in previous year would have implication to the current year dividend decision. Current year dividend policy might be affected by how much dividend paid in previous year (Baker, Powell and Veit, 2002). Besides, it has been widely debated that companies within the industry are more likely to share similar dividend policy. This is because the company views the dividend policy as a general industry practice which is necessary to follow in order to maintain investors' confidence. Based on findings by Lintner (1965), he highlighted that a company would prefer to change its dividend policy towards desired dividend policy in a moderate level rather than a huge change. A huge increment in dividend payout will be a burden to the company in future because it has restricted itself to follow the benchmark. Whereas a huge decrease may send negative news to public (Baker, Farrelly & Edelman, 1985). Annuar and Shamsher (1993) and Kester and Isa (1996) also found that Malaysian companies have tendencies to follow stable dividend policy.

Many researches were conducted in order to identify the factors in determining dividend policy (Al-Deehani, 2003; Bhattacharyya, 2007; Al-Malkawi, 2007). Rozeff (1982) examined the relationship between dividend policy, riskiness level and growth rate on companies in United States. His findings indicated that dividend payment was

negatively correlated with risks level and growth in revenue. A cash cow company which has a stable growth in revenue and a lower beta incline to have better dividend payout. On the other hand, a high risk company may offer a good capital gain to investors instead of dividend income.

Several empirical test on Malaysian listed companies were conducted on dividend policy (Pandy, 2001; Ayman, 2015; Hashemijoo, Ardekani and Younesi, 2012). According to Pandy (2001), different industry would distinctly adopt a different set of dividend policy. Hence, a company's decision in dividend policy is affected by a set of industry "benchmark" policy. In Pandy's findings, companies from agricultural and consumer product industries tend to have better dividend payout and large size performing company can pay better dividend. However, if the large size performing company has many future investment plans, it will not pay good dividend.

The primary objective of this study is to examine the intra-industry conformity in dividend policy in plantation industry and construction industry in Malaysia.

1.2 Problem statement

Many researchers have debated on issues relating to dividend policy for last few decades (Fama and French, 2001; Lintner, 1956; Michaely, Roni, Thaler and Womack, 1995). Even though many studies have been conducted, there are still much controversy on dividend policy and not well understood (Brealey and Myers, 1991). Past research suggested that a company's condition and market condition have their impact on the dividend policy (Denis and Setpanyan, 2009).

In general, a company would declare dividend based on its own financial performance situation. However, some companies distribute dividend even though it is not recommended.

Research done by Dempsey, Laber and Rozeff (1993) indicated that there is a significant impact of intra-industry effect on dividend payout policy. In addition, Baker (1988) also suggested that there is significant variation in dividend payout ratios among industries. Van Caneghem and Aerts (2011) discovered intra-industry effect on dividend policy based on a large sample of US firms. This has raised a question whether intra-industry effect on dividend decision exists in Malaysia.

However, there is limited empirical study to examine the existence of intra-industry effect on dividend policy in Malaysian companies. In general, dividend is an income to shareholders. It is also an important corporate decision made by company.

Therefore, it is necessary to do an in-depth study on the intra-industry effect on dividend policy.

The identified gap is whether dividend decision of Malaysian public-listed companies would be influenced by the intra-industry effect. Empirical analysis was conducted to fill the gap and logistic regression analysis result could explain the existence of the intra-industry effect on dividend policy in Malaysia.

1.3 Significance of the study

Dividend policy topic was debated for a long time and it remains as one of the puzzling topics. This study will provide some insights for intra-industry effect on dividend policy in Malaysia. It also adds value to the pool of knowledge for academicians and researchers.

Secondly, this study identified the relevance of behavioural aspect in dividend policy on top of existing literature on determinants of dividend policy. The decision on dividend policy may be affected by other industry players within the industry.

Thirdly, currently the examination of intra-industry effect on company's dividend policy in Malaysia is not well-established. There is limited research on the intra-industry effect in Malaysian public-listed companies for the last decade based on a search conducted on several reputable global publisher journals, for instance, Social Science Research Network and Emerald Management Plus.

This study also provides empirical evidence on the factors which would affect the company's dividend policy. The result of this paper could explain whether industry players would pursue for the same dividend policy due to the influence from competitors.

Lastly, the result from this research can assist the shareholders to understand whether the dividend was paid for the sake of paying at the expense of the company.

1.4 Scope and Limitations of Study

This study examined the intra-industry conformity in dividend policy in Malaysia. The construction and plantation industries have been playing crucial role in Malaysian economy by contributing country's gross doestic product ("GDP") and offering job opportunities and faciliate the economic development. Hence, this paper explores the dividend policy in construction and plantation industries. Companies from plantation industry pay higher dividends due to slower growth, while companies from construction industry pay lower dividends since the companies need fund for business expansion. This study examines the dividend, size of company, retained earnings, growth rate, market-to-book ratio of the sampled companies. A total of 71 companies from construction industry and plantation industry were identified from Bursa Malaysia. The sample period covered for the period from 2006 to 2014.

The limitations of this study are as follows:-

1. Limited past literature research or studies over the topic of intra-industry effect on dividend policy in the academic field in Malaysia. Hence, the literature review in this paper mainly made of earlier research done in overseas.

2. Due to the limited sample availability, it does not fully justify all Malaysian public-listed companies.

3. There are differences in the companies financial year end. In order to maintain the consistency in this research, the companies' financial year end were categorised according to their financial year end.

1.5 Research Objectives

The main objective of this study is to test whether the company is mimicking rivals in dividend policy in Malaysia. By including all companies in plantation industry and construction industry, the study can be more comprehensive and avoid the sample selection problems.

Specifically the following objectives are addressed:

1. To examine the relationship between the probability of a company paying a dividend and number of companies which pay dividend in construction and plantation industries.
2. To examine the relationship between the probability of a company paying a dividend and number of companies which pay dividend in construction industry.

3. To examine the relationship between the probability of a company paying a dividend and number of companies which pay dividend in plantation industry.

1.6 Research Questions

In tandem with the objective, this study attempts to answer the following questions:

1. Is there a significant positive relationship between the probability of a company paying a dividend and number of companies which pay dividend in construction and plantation industries?

2. Is there a significant positive relationship between the probability of a company paying a dividend and number of companies which pay dividend in construction industry?

3. Is there a significant positive relationship between the probability of a company paying a dividend and number of companies which pay dividend in plantation industry?

1.7 Organisation of the Dissertation

This dissertation is organized into five chapters. Chapter one provided an overview of dividend policy. This chapter also provided the problem statement, significance of the study, scope and limitations of study, research objectives and research questions.

Chapter two provided literature review relating to this research study. It also provided an overview of dividend policy theories and theoretical considerations.

Chapter three discussed on research methodology that was used in this research. Hypothesis development, data collection procedures and techniques of data analysis were provided in this chapter as well.

Chapter four tested the hypothesis and present the results of research based on data collected.

Last chapter provided a conclusion drawn from this research paper and recommendations for future research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Dividend policy is one of the important corporate actions made by company. A manager should form a suitable dividend policy based on the company's business performance and future growth. The company is required to make decision either to distribute the dividend as a reward to shareholders (short term goal) or to invest in positive net present value projects (long term goal) (Black, 1976).

Dividend policy can affect a company financial. For example, a cash dividend payout will reduce the company's liquidity and affect the business growth. Moreover, share price is sensitive towards the dividend announcements (Fama and French, 2001). Therefore, in order to increase the company's value, managers should pay more attention to the dividend policy.

2.2 Dividend relevance and irrelevance theories

2.2.1 Dividend irrelevance theory

Miller and Modigliani (MM) (1961) disagreed with the statement on dividend distribution would affect a company's value. Based on their perfect capital market concept, the company's value is based on its assets and cash flows. Dividend payout has no impact on firm value. The company assets and cash flows are the determinants of the company's value.

2.2.2 Dividend relevance theories

Williams (1938) introduced the discounted cash flow model to determine the intrinsic value of the firm's stock by present value the dividend payment. Gordon (1959) introduced Gordon Growth Model as an upgraded model from the discounted cash flow model. Based on the Gordon Growth Model, the value of a stock is based on the future series of dividends that grow at a constant rate. Hence, a dividend paying decision does affect a company's value and thus requires much attention from company.

Under Bird-in-the-hand theory, dividend is relevant to the company's value. Bird-in-the-hand theory postulates that shareholders prefer to receive dividend payments now rather than uncertain capital gain in the future (Lintner, 1956).

Under tax clienteles' effect, investors prefer company to keep the unused fund as cash instead of distributing it as dividends due to the tax advantage. The tax rate on dividend is higher than the capital gain tax. Hence, the company should keep dividend payments smaller if they want to maximize company's value.

Another dividend relevance theory is signaling theory. Signaling theory suggests that the company's dividend announcement can be disseminated intentionally to the public (Woolridge and Ghosh, 1988). Kale & Noe (1990) shared the same view with Ghosh & Woolridge. Their findings have shown dividend can provide hint on a company's future cash flow.

Dividend can help to reduce agency cost (Bohren, O., Josefsen, M. and Steen, P., 2012) by align the managers' interests to shareholders' interests. For example, if a manager (agent) is performing well, the company's share price will increase. The issuance of stock dividend to the managers will encourage them to act on behalf of shareholders' interests. On the other hand, dividends will decrease the risk of overinvestment by distributing the excess cash to shareholders (Allen and Michaely, 2002).

In short, dividend policy is closely related to corporate finance. In addition to current research on dividend policy which focuses more on tax advantages, signaling motives and agency problems (Coles and Li, 2012), dividend policy can be influenced by industry effect (Marsh and Merton, 1987).

2.3 Discussion on conformity tendencies in dividend policy

2.3.1 Institutional templates for appropriate behaviour

One of the most discussed areas in finance is the determinants of dividend policy (Michaely and Roberts, 2012). Frankfurter and Wood (2002) viewed that behavioural and socio-economic influence factors were overlooked in considering as one of the determinants in dividend policy. Frankfurter and Wood (2002) indicated that in order to improve the application of corporate policy, behavioural and socio-economic influences should not be ignored.

New institutionalism theory studies the effect of the social element on organisational behaviour and provides a sociological view on institutions. Under the new institutionalism theory, uncertainty in decision-making in relation to the public-known policy will induce the imitation (Galaskiewicz and Wasserman, 1989). Imitation is a form of social learning by observation and replication based on a "reference group". Imitation at industry level can promote a norm and causing certain normal behaviour to become appropriate. As a result, institutions have changed to more alike, despite the fact that they are changing by different ways (DiMaggio and Powell, 1983). Huff (1982) proposed that managers from a similar sector might share the common pratice. Managers also tend to observe industry practices and subsequently would develop a set of industry-based institutional templates of appropriate behaviours (Greenwood and Higgins, 1996). Institutional templates not only provide a set of appropriate practices, but it has the influence to shape the regulatory practise (Scott, 1995).

2.3.2 Industry effect on dividend payout behaviour

"Virtually all board and senior management analysis related to dividend decisions starts with in-depth peer benchmarking."

Dividends: The 2011 guide to dividend policy trends and best practices (J. P. Morgan)

The above section has concluded that dividend decisions were affected by institutional templates of appropriate behaviour. Companies are more willing to adopt practises that were adopted by many companies in the same environment. A company would prefer to imitate another company within the same industry as compared to a different industry. This is because it is easier for the company to compare itself against the competitors' performance and actions.

Managers make dividend decisions by considering dividend decisions of their peer groups (Manski, 1993). The peer effects help to interpret the industry effect. Peer effects arise when peer group has influence on the other people's decision. The peer group is a group of connected people who share the similar interest (Krauth, 2003). The peer effects arise due to individuals sharing the same environment. In order to be better-off, the individual will compare himself with peers from time to time and make adjustment to his decision.

Duflo and Saez (2002) also supported a mimicking behaviour in financial decisions due to the peer effect. Companies from the same industry will share the similar

business environment. The second reason is financial policies of firms are moderately shaped by peers. Hence, the change in decision or attitude of peer will affect the company. In addition, a company can take advantage by considering peer's action to make decision, for example, due to limited expertise and resources (Bikhchandani, Hirshleifer, and Welch, 1992).

There is an industry effect in dividend policy because industry practice was considered in deciding dividend payout ratio (Marsh and Merton, 1987). In addition, Baker (1988) found a significant difference of dividend policies between industries. According to the survey on New York Stock Exchange companies, about 45% of the respondents informed that the intention to follow the industry practice is considered as an important factor in formulate dividend policy (Baker and Powell, 2000). Based on the survey done by 384 Chief Financial Officers, it is noted that dividend policies of competitors are crucial in dividend decisions (Brav, Graham, Harvey & Michaely, 2005).

In addition, Lintner (1956) found that managers would consider the dividend payout of industry practise. Lintner (1956) classic work hypothesized that dividend policy is a product under industry effect. He proposed such industry effect as dividend leadership analogous to price leadership or wage leadership. A company possibly follow another company from the similar industry in dividend decision when there is a change or movement by leader. Lintner quoted the oil industry as an example for the dividend leadership effect.

Scharfstein and Stein (1990) supported that companies have intention to mimic one another. They opined that managers tend to ignore their own financial position and follow the decisions made by other companies to avoid negative perception towards the company. By mimicking, companies can send a positive signal on their earnings to investors (DeAngelo, De Angelo and Skinner, 1996). As compared to complicated accounting practices and corporate valuation methods, dividend is the most common and easiest understood financial information for public to understand the company's financial situation. Investors may lose confidence on the companies which fail to adopt industry practices. There are sets of "industry recipes" which managers are pressured to follow in dividend payout policy (Spender, 1989).

There is an interdependent nature in company's policy under strategic interaction model (Leary and Roberts, 2009). Strategic interaction model suggests that peers play an important role in shaping corporate financial policies. Strategic interaction model suggests that companies from the same industry will join together to eliminate rivals (Rajan, 1994). For instance, if the industry players declared an interim dividend, the rest of the industry players will attempt to declare dividend and force competitors out of the industry. In some extreme cases, the industry players will put more pressure in dividend policy and exploit competitors' cash flow to drive them insolvency.

The conformity bias is a concept that individual prone to look for reference in understanding proper behaviour. Siebert and Martin (2014) studied on people management rationales and indicated that it is a norm for companies to respond on what industry is practising. These companies tend to find out the practices which are

mostly in-used. Cialdini (1993) added that certain behaviour is viewed as correct when many people apply the same practice. It also can reduce the market uncertainty and pressures encountered.

Reputation-based models of peer effects involve rational but ineffective decision. Managers who are concerned about his reputations would follow other company's action and ignore their own judgement (Scharfstein and Stein, 1990). When there are uncertainties in making decision, the managers tend to follow the practice adopted by many companies to protect themselves (Scharfstein and Stein, 1990). If such decision was turned out to be wrong decision, the negative impact on manager's reputation is relatively smaller because there are many companies sharing the same mistake. Such herding effect was identified by Grinblatt, Titman and Wermers (1995).

On the other hand, Howe and Shen (1998) empirically tested the intra-industry information effects of dividend initiations announcement. In their findings, dividend initiation policy is firm-specific and stock prices of rivals do not respond to dividend initiation. The industry competitors do not react or follow others action. Slovin, Sushka, and Polonchek (1992) failed to detect significant industry effect from announcement for seasoned equity issues. It shows that company may not react to other industry players' action.

2.4 Chapter Summary

Dividend policy is one of the important corporate actions made by company. Dividend is relevant to the company's value under Bird-in-the-hand theory, tax clienteles, signalling theory and agency theory. Dividend policy can also be influenced by industry effect.

Managers observe industry practices and develop a set of industry-based institutional templates of appropriate behaviours. The institutional templates do not only provide a set of appropriate practices, but it has the influence to shape the company's practise.

Companies prefer to imitate another company within the same industry. A mimicking behaviour in financial decisions is due to peer effect. There is an industry effect on dividend decisions. Managers tend to ignore their own financial position and follow the decisions made by other companies to avoid negative perception towards the company. There is an industry effect on dividend policy under the strategic interaction model as well.

CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter elaborated on research methodology applied in this study. Started with discussion on the research design in Section 3.1, then data collection in Section 3.2, sample selection in Section 3.3, continued by hypotheses development and selection of relevant proxy variable in Section 3.4, and lastly chapter summary in Section 3.5.

3.2 Research Design

This study was designed to examine the intra-industry conformity on dividend policy in construction and plantation industries in Malaysia.

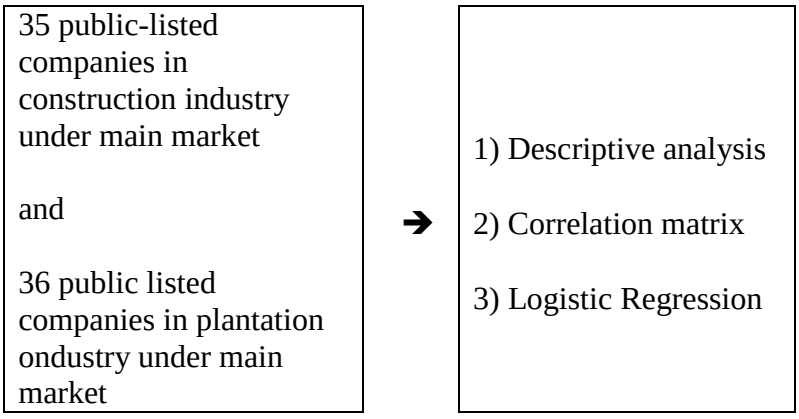

Figure 3.1
Research Design

3.3 Data Collection

There are two approaches to examine the intra-industry effect on dividend policy. The first approach is to run statistical test based on secondary financial data. Second approach is to obtain primary data by conducting interview session with the management in understanding dividend policy.

Primary data was not collected for this research paper due to the time constraint and limited budget to complete this paper. Therefore, this secondary data was collected for analysis. Secondary data is referred to the information which was gathered and recorded by someone earlier.

In this study, the secondary data was derived from DataStream under Worldscope through Thompson Reuters. The financial statements of the sampled companies were downloaded for further analysis.

This study aimed to examine the intra-industry effect in dividend policy in Malaysia. The data for public-listed companies from construction and plantation industry under Main Market in Bursa Malaysia was collected and excluded new public-listed companies due to incomplete data. The list of companies were selected in accordance with industry based on information provided in Bursa Malaysia website. This paper examined the intra-industry relationship on annual basis from 2007 to 2014.

3.4 Sample selection

For this study, the author retrieved 10 years of financial statements (Balance Sheet, Income Statement and Statement of Cash Flows) for all sampled companies. To proceed with analysis, additional 1 year data was needed due to 1 of the variable was using 1 year lagged data. Besides, there is a difference in financial year for the sample. Hence, for the fair judgment and comparison purpose, the companies was classified by financial year ended. Based on Bursa Malaysia website, there were 43 construction and 42 plantation public-listed companies listed in main market. Out of these construction and plantation population, some companies were not taken into consideration in this research report due to certain reasons, for example, unavailable past 10 years data and incomplete financial data. After filtering these criteria, it left 35 construction and 36 plantation public-listed companies to be included in this research.

3.5 Hypothesis Development and Selection of Relevant Proxy Variables

The chapter 1 identified the research objectives affecting the dividend policy. Aligned with the research objectives, this chapter will specify the testable research hypotheses to be used to answer the research questions. The previous chapter had showed the mixed arguments for intra-industry effect on dividend policy. It was used as a guidance to create the hypotheses based on the determinants of dividend policy presented in the Chapter 2. The justifications of the selected variables would be discussed in this section.

The hypotheses of this study are as below:-

H1: There is a significant positive relationship between the probability of a company paying a dividend and number of companies which pay dividend in construction and plantation industries.

H2: There is a significant positive relationship between the probability of a company paying a dividend and number of companies which pay dividend in construction industry.

H3: There is a significant positive relationship between the probability of a company paying a dividend and number of companies which pay dividend in plantation industry.

Identified variables are shown in research framework in Table 3.2. Based on the study done by Van Caneghem and Aerts (2011), this study will consider 7 explanatory variables to examine the intra-industry conformity in dividend policy.

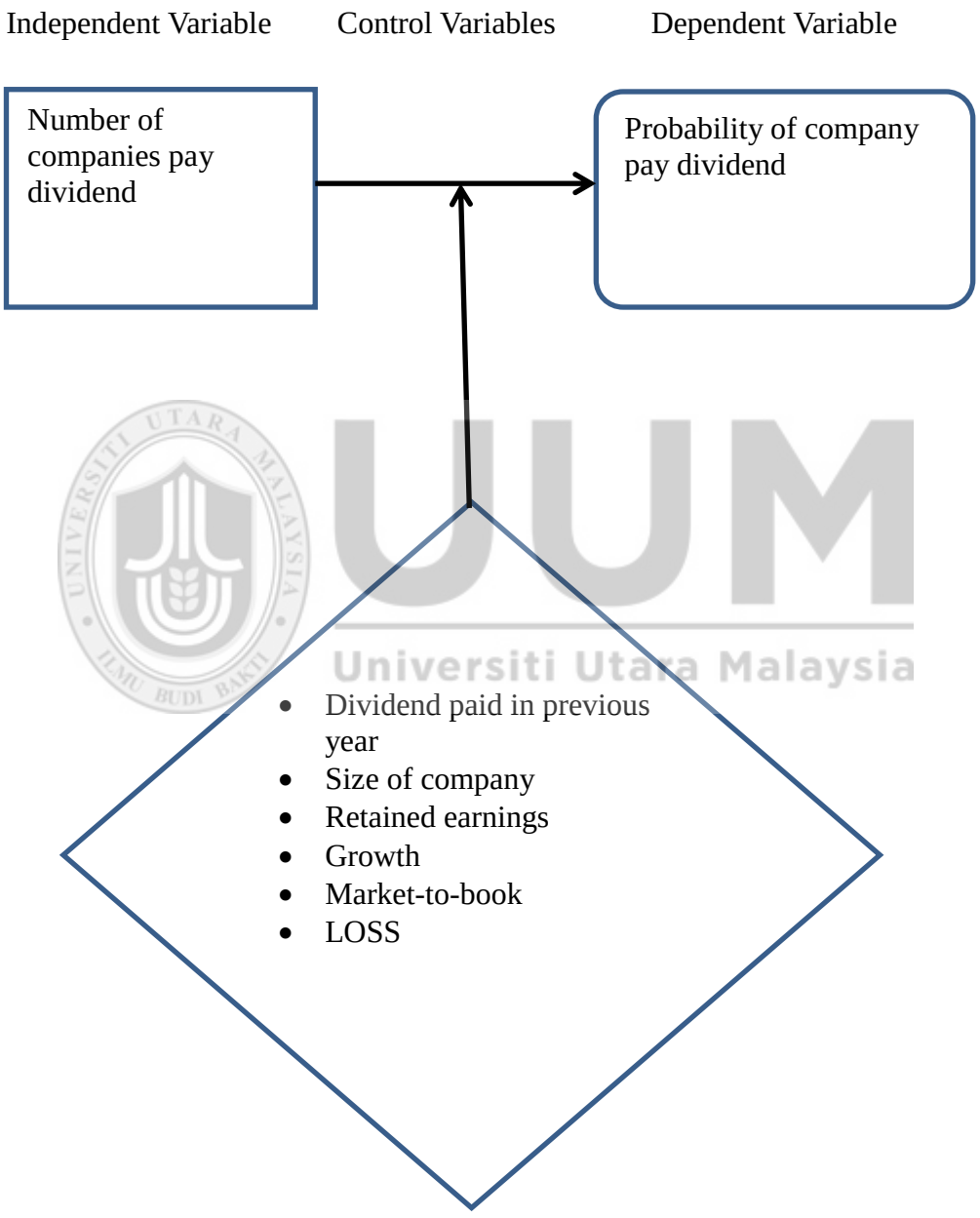

Figure 3.2
Research Framework

When the dependent variable is dichotomous (i.e. probability of company pay vs no pay dividend), logistic regression is appropriate (Hosmer & Lemeshow, 1989). Logistic regression is very useful at estimating the probability that an event will occur, given a set of condition. It also examines the relationship between independent variables and dependent variable. It is a statistical model that predicts the response of the dependent variable based on the values of the explanatory variables.

In order to test hypothesis, the regression model as follows:

$$Pr_{it} = \delta_0 + \delta_1 DIVDUM_t + \delta_2 PERCIND_{it} + \delta_3 SIZE_{it} + \delta 4RE_{it} + \delta 5GROWTH_{it} + \delta 6MTOB_{it} + \delta 7LOSS_{it} + \mathcal{E}_{it} \quad \textbf{(3.5)}$$

where:

Pr	Probability of a company pays dividend.
DIVDUM	Dummy variable either 1 for company pays dividend or 0 for otherwise in previous year
PERCIND	Percentage of companies paying dividend within the industry
SIZE	Natural logarithm of sales
RE	Retained earnings relative to total assets
GROWTH	Average revenue growth relative to eight years
MTOB	Market price relative to book price ratio
LOSS	Dummy variable either 1 for ROA is negative and 0 for otherwise
YEAR	Specific years for dummy variables
i,t	Company and years

Independent variable

In hypothesis, the most important variable is PERCIND which represents the number of companies within the same industry paying dividend. The current dividend payout is highly associated with dividend decisions made by others in the same industry.

Control variables

The author has included a number of variables in regression model to control for factors affecting a company to pay dividend. Many of these variables have been used in prior research as determinants affecting the dividend policy. The author acknowledged the dividend decision might be determined by these control variables.

Agency problem refers to the conflict arise between the managers (agent) and shareholders (owner) due to the separation of ownership and control, whereby both parties have different objectives in the company. Dividend payments are mechanism to improve agency problems (Jensen, Gerald, Donald and Thomas, 1992). The dividend payment reduces the retained earnings of a company and causing the managers to seek capital from outsiders. For the purpose to obtain fund, the company may proceed to disclose company's information and thus reduce agency costs (Easterbrook, 1984). Jensen and Meckling (1976) revealed the agency costs would have an increase in tandem with the increase in company's size, and transaction costs, thus, agency costs is related to company's size (Smith, 1977). Therefore, SIZE was included in this study and measured with natural logarithm of total sales. A large company is easier to raise fund from market at lower cost as compared to small company. Hence, a large company can pay higher dividends to shareholders.

Retained earnings (RE) refers to the availability fund within the company for business growth or dividend payout. It is a more ideal for company to use retained earnings as dividend payout instead of borrowing from external parties. DeAngelo, DeAngelo and Stulz (2006) observed that mature companies tend to have more retained earnings which induce the dividend payment. Therefore, this variable was included and measured using retained earnings relative to total assets.

Signalling theory argued that dividend is able to convey information to public on its earning's capability (DeAngelo, DeAngelo and Skinner, 2000). An extension from signalling theory, DeAngelo, DeAngelo and Skinner (1992) identified strong relationship between profitability (current and future) and dividend payout. On the other hand, Benartzi, Michaely and Thaler (1997) found a strong relationship between profitability (past and current) and dividend payout. Therefore, past, current and future earnings can affect dividend payout. Thus, LOSS is included as control variable. LOSS is a dummy variable and labelled as one if the company has a negative return on assets and zero for otherwise.

Generally, a company in a growth stage would less likely to pay a dividend for shareholders. This statement is supported by Rozeff (1982) and growing companies tend to retain funds for future business development. Higgins (1972) also mentioned the negative relationship between dividend payout and growth variables. Therefore, average rate of revenue growth over the past years (GROWTH) was included as variable proxy for the past growth.

Market-to-book ratio (MTOB) is a proxy for the company's growth opportunity. Myers and Majluf (1984) viewed that company with high growth opportunities pay lesser dividend. There was a significant negative relationship between dividends and growth (Jensen et al., 1992). MTOB also served as determinant to understand the movement in the company's value over its book value.

3.6 Chapter Summary

This chapter discussed on the research methodology used in this research. A sample size of 35 construction and 36 plantation companies were selected for analysis. The financial information of the sample for 8 years from 2007 to 2014 was collected. The hypotheses were developed based on previous literature on intra-industry effect on dividend. These research hypotheses were used to examine the intra-industry conformity in dividend policy under construction, plantation and both industries. This chapter also explained the variables applied in analysis based on previous research.

CHAPTER 4

ANALYSIS OF FINDINGS

4.1 Introduction

This chapter showed the results and findings on intra-industry effect on dividend policy. This research used three methods to analyse and explain the findings, namely (1) descriptive analysis, (2) correlation analysis and (3) logistic regression.

4.2 Results of the Study

4.2.1 Descriptive Analysis

Descriptive statistics were carried out to obtain sample characteristics. Table 4.1 summarised the descriptive statistics for sampled companies from construction and plantation industries. On average, over the period from 2007 to 2014, 63.38% of Malaysian companies paid dividends.

Table 4.2 and Table 4.3 show descriptive statistics for construction industry and plantation industry respectively. On average, over the period from 2007 to 2014, 54.29% of construction companies paid dividends, while 72.22% of plantation companies paid dividends. As compared to construction industry, more plantation companies were paying dividend.

Table 4.1
Descriptive statistics for construction and plantation industries

	N	Minimum	Maximum	Mean	Std. Deviation
DIVDUM	568	.00	1.00	.6338	.48219
SIZE	568	.00	4.06	2.2690	.65873
RE	568	-13.94	.85	.0559	.94156
GROWTH	568	-.15	1.52	.2144	.29333
MTOB	568	.00	8.16	1.0495	.86563

DIVDUM is either 1 for company pays dividend or 0 for otherwise; SIZE is natural logarithm of sales; RE is retained earnings relative to total assets; GROWTH is average revenue of growth for 8 years; MTOB is market price relative to book price.

Table 4.2
Descriptive statistics for construction industry

	N	Minimum	Maximum	Mean	Std. Deviation
DIVDUM	280	.00	1.00	.5429	.49905
SIZE	280	.00	3.67	2.3113	.58745
RE	280	-13.94	.64	-.1217	1.28031
GROWTH	280	-.15	1.52	.2117	.31507
MTOB	280	.00	8.16	.9523	.96777

DIVDUM is either 1 for company pays dividend or 0 for otherwise; SIZE is natural logarithm of sales; RE is retained earnings relative to total assets; GROWTH is average revenue of growth for 8 years; MTOB is market price relative to book price.

Table 4.3
Descriptive statistics for plantation industry

	N	Minimum	Maximum	Mean	Std. Deviation
DIVDUM	288	.00	1.00	.7222	.44868
SIZE	288	.00	4.06	2.2278	.71996
RE	288	-1.42	.85	.2286	.31182
GROWTH	288	-.14	1.23	.2171	.27105
MTOB	288	.00	5.36	1.1439	.74278

DIVDUM is either 1 for company pays dividend or 0 for otherwise; SIZE is natural logarithm of sales; RE is retained earnings relative to total assets; GROWTH is average revenue of growth for 8 years; MTOB is market price relative to book price.

4.2.2 Correlation analysis

Correlation analysis was done to identify the relationship between each variables. Multicollinearity applies to multiple regression and it happens when variables are highly correlated (>0.70) (Lehmann, Gupta and Steckel,1998). Multicollinearity post difficulties to recognise the distinctive effect of each variable on dependent variable.

Table 4.4 provided the correlation matrix for construction and plantation industries. It showed the dependent variable (DIVDUM_n) was highly correlated with lagged dependent variable (DIVDUM_n-1) with coefficient of 0.727 which suggested the industries adopt a consistent dividend policy. Despite the strong correlation between some variables, the analysis suggested that this study have insignificant multicollinearity problem.

Table 4.5 showed the correlation matrix for construction industry. It showed the dependent variable (DIVDUM_n) is highly correlated with lagged dependent variable (DIVDUM_n-1) with coefficient of 0.726 which suggested the industry adopt a consistent dividend policy. Despite the strong correlation between some variables, the analysis suggested that this study have insignificant multicollinearity problem.

Table 4.6 showed the correlation matrix for plantation industry show the dependent variable (DIVDUM_n) is strongly correlated with lagged dependent variable (DIVDUM_n-1) with coefficient of 0.708 which suggested the industry adopt a

consistent dividend policy. Since the correlation between variables is not high, the analysis suggested this study have insignificant multicollinearity problem.

Table 4.4
Correlation matrix for construction and plantation companies

	DIVDUM	DIVDUM_n-1	PERCIND	SIZE	RE	LOSS	GROWTH	MTOB
DIVDUM	1	.727**	.234**	.397**	.301**	-.334**	-.128**	.049
DIVDUM_n-1		1	.129**	.424**	.297**	-.270**	-.137**	.060
PERCIND			1	-.026	.181**	-.180**	.007	.118**
SIZE				1	.323**	-.238**	-.106*	.149**
RE					1	-.146**	-.047	.075
LOSS						1	.001	-.031
GROWTH							1	-.014
MTOB								1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

DIVDUM is either 1 for company pays dividend or 0 for otherwise; DIVDUM_n-1 is either 1 for company pays dividend or 0 for otherwise, in previous year; SIZE is natural logarithm of sales; RE is retained earnings relative to total assets; LOSS is a dummy variable coded as 1 when company has negative return on assets and 0 for otherwise; GROWTH is average revenue of growth for 8 years; MTOB is market price relative to book price.

Table 4.5
Correlation matrix for construction companies

	DIVDUM	DIVDUM_n-1	PERCIND	SIZE	RE	LOSS	GROWTH	MTOB
DIVDUM	1	.726**	.091	.495**	.276**	-.358**	-.221**	.032
DIVDUM_n-1		1	.009	.513**	.273**	-.257**	-.252**	.016
PERCIND			1	.059	.083	-.063	.000	.035
SIZE				1	.503**	-.264**	-.171**	.027
RE					1	-.122*	-.059	.052
LOSS						1	.084	.068
GROWTH							1	-.060
MTOB								1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

DIVDUM is either 1 for company pays dividend or 0 for otherwise; DIVDUM_n-1 is either 1 for company pays dividend or 0 for otherwise, in previous year; SIZE is natural logarithm of sales; RE is retained earnings relative to total assets; LOSS is a dummy variable coded as 1 when company has negative return on assets and 0 for otherwise; GROWTH is average revenue of growth for 8 years; MTOB is market price relative to book price.

Table 4.6
Correlation matrix for plantation companies

	DIVDUM	DIVDUM_n-1	PERCIND	SIZE	RE	LOSS	GROWTH	MTOB
DIVDUM	1	.708**	.189**	.357**	.485**	-.246**	-.021	.025
DIVDUM_n-1		1	-.035	.389**	.488**	-.240**	-.001	.077
PERCIND			1	.039	.065	-.097	.000	.066
SIZE				1	.188**	-.263**	-.049	.301**
RE					1	-.151*	-.038	.110
LOSS						1	-.133*	-.160**
GROWTH							1	.053
MTOB								1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

DIVDUM is either 1 for company pays dividend or 0 for otherwise; DIVDUM_n-1 is either 1 for company pays dividend or 0 for otherwise, in previous year; SIZE is natural logarithm of sales; RE is retained earnings relative to total assets; LOSS is a dummy variable coded as 1 when company has negative return on assets and 0 for otherwise; GROWTH is average revenue of growth for 8 years; MTOB is market price relative to book price.

4.2.3 Regression analysis

The regression analysis was conducted based on the regression equation which presented in chapter 3. The results of the regression analysis are presented in Table 4.7, Table 4.8 and Table 4.9.

Logistic regression does not make any assumption of normality, linearity and homogeneity of variance for independent variables.

The value of the Durbin-Watson statistic for construction and plantation is 2.214, which falls within the acceptable range from 1.50 to 2.50. While the value of the Durbin-Watson statistic for each construction and plantation are 2.225 and 2.153 respectively. The analysis satisfies the assumption of independence of errors.

Variance inflation factor (VIF) measures the impact of collinearity among the variables in a regression model.Values of VIF for construction and plantation indicate no multicollinearity problem.

Table 4.7 presented the regression analysis for construction and plantation industries. There is no single well accepted measure in logistic regression that performs the function of the R-square statistic of linear regression. Under Model summary, it provided the -2 Log Likelihood statistic is 345.649. Cox & Snell R Square and Nagelkerke R Square are goodness of fit measures known as pseudo R-squareds. The explained variation in the dependent variable base on the model ranges from 50.60%

to 69.20%. The Omnibus Tests of Model Coefficients showed this is a useful model because the model is significant with p-value less than 0.05 (p-value is 0.000).

The classification table indicated that the overall 87.90% cases are correctly predicted by the model. This table showed 499 cases are correctly predicted (170 cases are observed to be “no pay dividend” and are correctly predicted to be “no pay dividend”, 329 cases are observed to be “pay dividend” and are correctly predicted to be “pay dividend”). 38 cases are observed to be “no pay dividend” but are predicted to be “pay dividend”. 31 cases are observed to be “pay dividend” but are predicted to be “no pay dividend”.

The variables in the equation table presented the coefficient and significant of each variable. The interpretation of logistic coefficient is more difficult than in the case of linear regression. Coefficient reported in column B refers to the log-odds of paying dividend. Coefficient indicated the direction and strength of relationship between the variables and dependent variable.

The variables in the equation table presented the coefficient and significant of each variable. The logistic regression equation can be formed in additive form:

$$\text{logit}(\pi) = -4.729 - 2.965\ (\text{DIVDUM\_n-1}) + 5.558\ (\text{PERCIND}) + 0.968\ (\text{SIZE}) + 2.842\ (\text{RE}) - 0.149\ (\text{GROWTH}) - 0.152\ (\text{MTOB}) + 0.879\ (\text{LOSS})$$

The above equation tells us that increasing number of companies paying dividend can increase the log odds of paying dividend. The bigger size of the company, higher

retained earnings are also increase the log odds of paying dividend. The decrease in growth variable and lower market value will increase the log odds of paying dividend.

The hypothesis 1 suggested there is a significant positive relationship between the probability of a company paying a dividend and number of companies which pay dividend in construction and plantation industries. As expected, there was a positive relationship between the independent variable percentage of other companies within the industry (PERCIND) and dependent variable probability of a company paying dividend. The p-value for PERCIND variable is 0.000. Hence the null hypothesis is rejected.

The significance of variable which reported in column marked "Sig" show that 5 predict variables were significant and 2 predict variables were not significant at the 0.05 level.

The coefficient for the size proxy (SIZE) attained statistical significance ($p<0.05$). There was a significant positive coefficient on the retained earnings (RE). The result was consistent with findings from DeAngelo et al. (2006) that higher retained earnings will encourage dividend payment. LOSS scored a statistical significance ($p<0.05$). Profitability variable MTOB and GROWTH did not produce significance result.

The logistic model is written in terms of the odds of an event occurring. Odds is defined as ratio of number of occurrence to the number of non-occurrence. The odds

with value greater than 1 shows that the odds are increased and for the value lesser than 1 shows that the odds are decreased (SPSS, 1989). In the column Exp(B) are the odds ratios for the predictors. They are the exponentiation of the coefficients.

When other factors in the model are held constant:

- 1 unit of increase in DIVDUM_lagged variable will result the odds of pay dividend increase by a factor of 0.052.
- 1 unit of increase in PERCIND variable will result the odds of pay dividend increase by a factor of 259.182.
- 1 unit of increase in SIZE variable will result the odds of pay dividend increase by a factor of 2.632.
- 1 unit of increase in RE variable will result the odds of pay dividend increase by a factor of 17.155.
- 1 unit of increase in LOSS variable will result the odds of pay dividend increase by a factor of 2.410.

Table 4.7
Regression summary statistics for construction and plantation industries

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	345.649[a]	.506	.692

a. Estimation terminated at iteration number 9 because parameter estimates changed by less than .001.

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	400.590	7	.000
	Block	400.590	7	.000
	Model	400.590	7	.000

Classification Table[a]

Observed			Predicted		
			DIVDUM_n		
			No pay dividend	Pay dividend	Percentage Correct
Step 1	DIVDUM_n	No pay dividend	170	38	81.7
		Pay dividend	31	329	91.4
	Overall Percentage				87.90

a. The cut value is .500

Table 4.7 (Continued)

	B	S.E.	Wald	df	Sig.	Exp(B)
DIVDUM_n-1	-2.965	.299	98.612	1	.000	.052
PERCIND	5.558	1.384	16.115	1	.000	259.182
SIZE	.968	.263	13.561	1	.000	2.632
RE	2.842	.640	19.753	1	.000	17.155
GROWTH	-.149	.514	.084	1	.771	.861
MTOB	-.152	.181	.701	1	.402	.859
LOSS(1)	.879	.428	4.227	1	.040	2.410
Constant	-4.729	1.198	15.579	1	.000	.009

Dependent variable is DIVDUM. DIVDUM is 1 for company pays dividend or 0 for otherwise; DIVDUM_n-1 is either 1 for company pays dividend or 0 for otherwise, in previous year; SIZE is natural logarithm of sales; RE is retained earnings relative to total assets; GROWTH is average revenue of growth for 8 years; MTOB is market price relative to book price; LOSS is a dummy variable coded as 1 when company has negative return on assets and 0 for otherwise.

Table 4.8 presented the regression analysis for construction industry. Under Model summary, it provided the -2 Log Likelihood statistic is 173.720. The explained variation in the dependent variable base on the model ranges from 53.20% to 71.10%. The model is a useful model because the model is significant with p-value less than 0.05 (p-value is 0.000).

The classification table provideed a measure of probability of paying and no paying dividend. It indicateed that the overall 86.80% cases are correctly predicted by the model. This table showed 243 cases are correctly predicted (110 cases are observed to be “no pay dividend” and are correctly predicted to be “no pay dividend”, 133 cases are observed to be “pay dividend” and are correctly predicted to be “pay dividend”). 18 cases are observed to be “no pay dividend” but are predicted to be “pay dividend”. 19 cases are observed to be “pay dividend” but are predicted to be “no pay dividend”.

The logistic regression equation can be formed in additive form:

$$\text{logit}(\pi) = -8.302 - 2.743\,(\text{DIVDUM\_N-1}) + 8.204\,(\text{PERCIND}) + 1.623\,(\text{SIZE}) + 3.888\,(\text{RE}) + 0.260\,(\text{GROWTH}) + 0.269\,(\text{MTOB}) + 1.033\,(\text{LOSS})$$

The above equation tells us that increasing number of companies paying dividend can increase the log odds of paying dividend. The bigger size of the company, higher retained earnings, higher growth and higher market value can increase the log odds of paying dividend.

The hypothesis 2 suggested there is a significant positive relationship between the probability of a company paying a dividend and number of companies which pay dividend in construction industry. There was an insignificant relationship between the independent variable percentage of other companies within the industry (PERCIND) and dependent variable probability of a company paying dividend. The p-value for PERCIND variable is 0.065. Hence the null hypothesis is accepted.

The significance of variable which reported in column marked "Sig" show that 3 predict variables are significant and 4 predict variables are not significant at the 0.05 level.

Inconsistent with agency theory, the coefficient for the size proxy (SIZE) did not gained statistical significance ($p<0.05$). There was a significant positive coefficient on the retained earnings (RE). The result was consistent with findings from DeAngelo et al. (2006) that higher retained earnings will encourage dividend payment. Coefficients for company growth proxies (GROWTH and MTOB) did not achieve statistical significance. The result is inconsistent that growth is not significant to dividend decision. Company with high growth opportunities would need more funds to grow and thus keep the fund instead of paying as dividend (Chang and Rhee, 2003).

When other factors in the model are held constant:

- 1 unit of increase in DIVDUM_lagged variable will result the odds of pay dividend increase by a factor of 0.064.

- 1 unit of increase in SIZE variable will result the odds of pay dividend increase by a factor of 5.066.
- 1 unit of increase in RE variable will result the odds of pay dividend increase by a factor of 48.807.

Table 4.8
Regression summary statistics for construction industry

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	173.720[a]	.532	.711

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	212.383	7	.000
	Block	212.383	7	.000
	Model	212.383	7	.000

Classification Table[a]

	Observed		Predicted		
			DIVDUM_n		
			No pay dividend	Pay dividend	Percentage Correct
Step 1	DIVDUM_n	No pay dividend	110	18	85.9
		Pay dividend	19	133	87.5
	Overall Percentage				86.8

a. The cut value is .500

Table 4.8 (Continued)

	B	S.E.	Wald	df	Sig.	Exp(B)
DIVDUM_n-1	-2.743	.419	42.796	1	.000	.064
PERCIND	8.204	4.440	3.415	1	.065	3656.840
SIZE	1.623	.599	7.328	1	.007	5.066
RE	3.888	1.174	10.958	1	.001	48.807
GROWTH	.260	.719	.131	1	.717	1.298
MTOB	.269	.315	.734	1	.392	1.309
LOSS(1)	1.033	.619	2.785	1	.095	2.808
Constant	-8.302	2.924	8.062	1	.005	.000

Dependent variable is DIVDUM. DIVDUM is 1 for company pays dividend or 0 for otherwise; DIVDUM_n-1 is either 1 for company pays dividend or 0 for otherwise, in previous year; SIZE is natural logarithm of sales; RE is retained earnings relative to total assets; GROWTH is average revenue of growth for 8 years; MTOB is market price relative to book price; LOSS is a dummy variable coded as 1 when company has negative return on assets and 0 for otherwise.

Table 4.9 presented the regression analysis for plantation industry. Under Model summary, it provided the -2 Log Likelihood statistic is 153.632. The explained variation in the dependent variable base on the model ranges from 47.70% to 68.80%. The Omnibus Tests of Model Coefficients showed this is a useful model because the model was significant with p-value less than 0.05 (p-value is 0.000).

The classification table indicated that the overall 88.20% cases are correctly predicted by the model. This table show 254 cases are correctly predicted (62 cases are observed to be "no pay dividend" and are correctly predicted to be "no pay dividend", 192 cases are observed to be "pay dividend" and are correctly predicted to be "pay dividend"). 18 cases are observed to be "no pay dividend" but are predicted to be "pay dividend". 16 cases are observed to be "pay dividend" but are predicted to be "no pay dividend".

The variables in the equation table presented the coefficient and significant of each variable. The logistic regression equation can be formed in additive form:

$$\text{logit}(\pi) = -7.853 - 3.748\ (\text{DIVDUM\_n-1}) + 11.930\ (\text{PERCIND}) + 0.742\ (\text{SIZE}) + 2.654\ (\text{RE}) + 0.394\ (\text{LOSS}) - 0.282\ (\text{GROWTH}) - 0.527\ (\text{MTOB})$$

The above equation tells us that increasing number of companies paying dividend can increase the log odds of paying dividend. The bigger size of the company and higher retained earnings are also increase the log odds of paying dividend. The decrease in growth variable and lower market value will increase the log odds of paying dividend.

The hypothesis 3 suggested there is a significant positive relationship between the probability of a company paying a dividend and number of companies which pay dividend in plantation industry. As expected, there was a positive relationship between the independent variable percentage of other companies within the industry (PERCIND) and dependent variable probability of company paying dividend. The p-value for PERCIND variable is 0.000. Hence the null hypothesis is rejected.

The significance of variable which reported in column marked "Sig" show that 4 predict variables are significant and 3 predict variables are not significant at the 0.05 level.

Consistent with agency theory, the coefficient for the size proxy (SIZE) attained statistical significance ($p<0.05$). There was a significant positive coefficient on the retained earnings (RE). The result is consistent with findings from DeAngelo et al. (2006) that higher retained earnings will encourage dividend payment. Coefficients for GROWTH, MTOB and LOSS do not gain statistical significance.

When other factors in the model are held constant:

- 1 unit of increase in DIVDUM_lagged variable will result the odds of pay dividend increase by a factor of 0.024.
- 1 unit of increase in PERCIND variable will result the odds of pay dividend increase by a factor of 151790.93.
- 1 unit of increase in SIZE variable will result the odds of pay dividend increase by a factor of 2.10.

- 1 unit of increase in RE variable will result the odds of pay dividend increase by a factor of 14.211.

In this chapter, the author has provided robust evidence to test hypotheses. The findings in this research support H1 and H3, but reject H2.

Table 4.9

Regression summary statistics for plantation industry

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	153.632[a]	.477	.688

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	186.693	7	.000
	Block	186.693	7	.000
	Model	186.693	7	.000

Classification Table[a]

Observed			Predicted		
			DIVDUM_n		
			No pay dividend	Pay dividend	Percentage Correct
Step 1	DIVDUM_n	No pay dividend	62	18	77.5
		Pay dividend	16	192	92.3
	Overall Percentage				88.20

a. The cut value is .500

Table 4.9 (Continued)

	B	S.E.	Wald	df	Sig.	Exp(B)
DIVDUM_n-1	-3.748	.532	49.648	1	.000	.024
PERCIND	11.930	2.627	20.631	1	.000	151790.930
SIZE	.742	.324	5.247	1	.022	2.100
RE	2.654	.846	9.852	1	.002	14.211
GROWTH	-.282	.779	.131	1	.717	.754
MTOB	-.527	.334	2.486	1	.115	.590
LOSS(1)	.394	.705	.312	1	.576	1.483
Constant	-7.853	1.932	16.523	1	.000	.000

Dependent variable is DIVDUM. DIVDUM is 1 for company pays dividend or 0 for otherwise; DIVDUM_n-1 is either 1 for company pays dividend or 0 for otherwise, in previous year; SIZE is natural logarithm of sales; RE is retained earnings relative to total assets; GROWTH is average revenue of growth for 8 years; MTOB is market price relative to book price; LOSS is a dummy variable coded as 1 when company has negative return on assets and 0 for otherwise.

CHAPTER 5

CONCLUSION

5.1 Summary of the Study

In this paper, the author undertook an empirical testing of a model to examine the intra-industry conformity on dividend policies. The author concluded that there is an intra-industry conformity on dividend policies in Malaysia**.** To reiterate, the hypotheses of this study are as below:-

H1: There is a significant positive relationship between the probability of a company paying a dividend and number of companies which pay dividend in construction and plantation industries.

H2: There is a significant positive relationship between the probability of a company paying a dividend and number of companies which pay dividend in construction industry.

H3: There is a significant positive relationship between the probability of a company paying a dividend and number of companies which pay dividend in plantation industry.

The regression results from previous chapter provided evidence of a significant positive relationship between the probability of a company paying a dividend and number of companies which pay dividend and this allow the author to accept the

above H1 and H3, but reject H2.

5.2 Limitation and Implications of the Study

Due to the limited sample availability, this paper could not fully justify all public listed companies in Malaysia. The findings of this research was believed to be among the first of its kind done in Malaysia. This research discovered significant positive relationship between the probability of company paying a dividend and density of companies which pay dividend. In brief, this study provided the additional insight to the studies on dividend policy by recognizing industry effect. This study could benefit shareholders and investors when valuation on the company because a dividend-paying company does not equivalent to a performing company.

The research results have revealed a mixed of results for determinants of dividend policy. Further studies are recommended to explore further on the contradicting results.

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