HOW INDEPENDENT VARIABLES AFFECT DIVIDEND POLICY THAT WILL EVENTUALLY CHANGE FIRM VALUE: CASE STUDY IN MALAYSIA FOODS AND BEVERAGES INDUSTRY

BY

LIM CHYE YING
LING ANNIE
SEE THO LIH JIA
TAN SEE NGAR

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DECLARATION

We hereby declare that:

(1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Equal contribution has been made by each group member in completing the research project.

(4) The word count of this research report is _____.

Name of Student:	Student ID:	Signature:
1. Lim Chye Ying	09ABB08024	_____
2. Ling Annie	09ABB07511	_____
3. See Tho Lih Jia	09ABB07515	_____
4. Tan See Ngar	09ABB06897	_____

Date: _____

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DEDICATION

We would like to dedicate this research project to our supervisor, Ms Zuriawati Binti Zakaria, who has been an inspiration to all of us with the boundless level of support and encouragement that has been shown throughout the conduct of this study.

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LIST OF ABBREVIATIONS

AMEX	American Express
ARCH	Autoregressive Conditional Heteroscedasticity
CEO	Chief Executive Officer
CMIE	Centre for Monitoring Indian Economy
DC	Domestic Corporation
EPS	Earnings per Share
ERM	Enterprise Risk Management
EU	European Union
F&B	Foods and Beverages
FCF	Free Cash Flow
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
IT	Information Technology
JB	Jarque-Bera
KLSE	Kuala Lumpur Stock Exchange
MB	Market to Book Value
MC	Multinational Corporation
MV/BV	Market Value to Book Value
NYSE	New York Stock Exchange
ROE	Return on Equity
TAQ	Trade and Quotes

NPV	Net Present Value
NPM	Net Profit Margin
OCED	Organisation for Economic Cooperation and Development
OLS	Ordinary Least Square
YTD	Year-to-Date

PREFACE

The demand in food industry is increasing as Malaysia's population is rising regularly around 1.95% every year and reaching a total population of 28.25 million. With the new and innovative equipment and technology, the demand for processed food and beverages boosted up. Dividend payments show to be a vital aspect for firms in Malaysia as studies have proven that change of share price will follow the trend of dividend fluctuation.

In this study, we have a purpose to examine how factors affect dividend policy and causing alteration on firm value in Malaysia consumer product industry. However, this research focuses on the food and beverages industry in order to obtain a more accurate result and a better understanding about the relationship between the specific factors and dividend policy, as well as to firm value.

ABSTRACT

This research project focuses on how these 7 factors which are profitability, liquidity, firm size, leverage, risk, earnings per share (EPS) and growth affects dividend policy and causes impact on firm value. In this study, we have studied a total of 67 out of 89 companies in Malaysia food and beverages industry for 5 years which are year 2006 to year 2010, in the trend of company performances and also their dividend payout in order to support our research. The sample data for this research is being obtained through the Data Stream database of Universiti Tunku Abdul Rahman. During the research, we will be using 3 models in testing 3 different kind of relationship between the specific factors, dividend policy and firm value. In the end of this research, the relationship between each independent variable and dividend payout as well as firm value is determined.

CHAPTER 1: INTRODUCTION

1.0 Introduction

This chapter gives an overview of the dividend policy affecting firm value in terms of ROE of Foods and Beverages companies in Malaysia under consumer products sector. This chapter will discuss the research background and explain the research problem. Next, researchers will set the research objectives which bring forth to the research questions to be answered. Besides, this chapter also mentioned the significance of the study.

1.1 Background of the Study

Since 1970s, Malaysia has transformed from a producer of raw materials to emerging multi-sector economy. With Malaysia's strategic location in the heart of Southeast Asia region attracts investors to set up offshore operations for the manufacture of advanced technological products for both regional and international markets. Malaysia is renowned 21st largest exporter among the trading nations worldwide. In order to achieve the high-income status on 2020, government has injected many efforts to boost domestic demand and reduce the dependence on imports. Oil and gas are the main exports in Malaysia which can get highest profit. The central bank also plays an important role in maintaining a healthy foreign exchange reserves and regulatory regime to avoid risk and financial crisis. The market value of publicly traded shares has increased from 256 billion in 2009 to 410.5 billion in 2010. Besides,

the stock of direct foreign investment in Malaysia also climbs up from 74.64 billion in year 2009 to 77.44 billion in year 2010.

Table 1.0: Exports and Imports Commodities

Commodities	**Exports**	**Imports**
Electronics	36.5%	29.4%
Petroleum and products	8.3%	7.0%
Chemical products	6.6%	9.1%
Natural gas	6.4%	-
Fats and Oils	6.4%	-
Electrical Engineering	4.6%	7.2%
Machinery	3.5%	8.9%
Food and living animals	-	6.2%
Iron and Steel	-	3.6%
Raw materials	-	3.4%

Source as cited in Market Watch Malaysia, 2011

Major import products are electrical and electronic products, machinery, iron and steel products as well as chemical products. In 2008, Malaysia's largest export revenue contribution was made by the electrical and electronics products sector (38%). However in 2009 there is a slight drop of 1.5% revenue contributed by the electronic. Still, electronic products remain as the main contributor to exports (36.5%) and imports (29.4%). In addition, palm oil and palm oil-based products, crude petroleum, liquefied natural gas and timber and timber-based products are also important sectors of exports.

Table 1.1: Exports and Imports Destinations for Processed Foods

Partners	Exports	Imports
China	12.2%	14.0%
Japan	9.8%	12.5%
US	11.0%	11.2%
Singapore	14.0%	11.0%
Thailand	5.4%	6.1%
Germany	2.7%	4.2%
Hong Kong	5.2%	-

Source as cited in Market Watch Malaysia, 2011

The top five trading partners of Malaysia are Singapore, China, United States, Japan and Thailand as above.

Malaysia's population is on the steady rise every year of about 1.95% and currently jotting down 28.25 million of population. Foods are basic necessities of all in order to sustain living. This explains the increasing demand on the food industry. Malaysia is the only country with multi-racial population consisting Malay, Chinese and Indian reflecting different practices and cultures have resulted in an intriguing range of processed food with an Asian twist.

Export activities of food processing sector have doubled over time but imports remain as the main contributor to the Malaysian economy. The rising demand for processed food and beverages has in turn shoot up the need for new and innovative food processing and packaging equipment and technology.

Table 1.2: Exports of Selected Processed Food and Beverage Products

Product	2008 (RM million)	2009 (RM million)	Change (%)
Total	**13,526.80**	**12,168.60**	**-10.0**
Processed Food	**12,154.60**	**10,689.60**	**-11.6**
Other Processed food	4,837.00	3,997.70	-17.4
Cocoa and cocoa preparations	3,281.80	3,097.00	-5.6
Prepared cereals	1,289.10	1,315.30	2.0
Dairy Products	1,084.60	587.30	-45.8
Processed Seafood	561.60	545.70	-2.8
Sugar and Sugar Confectionery	481.70	549.60	14.1
Prepared vegetables and fruits	421.90	430.40	2.0
Processed meat	149.50	166.60	11.4
Beverages	**1,372.20**	**1,429.60**	**4.2**
Alcoholic beverages	913.70	942.90	3.2
Non-alcoholic beverages	458.40	486.80	6.2

Source as cited in Market Watch Malaysia, 2011

In 2009, exports of selected processed food and beverages products decreased to RM 10,689.6 million compared with RM 12,154.6 million in 2008 resulted relative

change of -11.6 %. The major export items are cocoa and cocoa preparations (RM 3097.00 million), subsequently prepared cereal products (RM 1315.30 million), and dairy products (RM 587.30 million).

Malaysia relies heavily on the imported food goods due to limited domestic agriculture and increase demand especially the intermediate goods. Malaysia has experienced resilient growth of food demand and imports. This can be seen during the period of economic recession which the food sector remain still and strong as a result of its sustainable demand.

Table 1.3: Imports of Selected Processed Food and Beverage Products

Product	2008 (RM million)	2009 (RM million)	Change (%)
Total	**9,913.40**	**9,986.20**	**0.7**
Processed Food	**8,938.30**	**8,985.30**	**0.5**
Dairy Products	2,566.50	1,556.80	-39.3
Other Processed food	2,362.50	2,500.30	5.8
Sugar and Sugar Confectionery	1,733.80	2,470.50	42.50
Prepared cereals and flour	758.00	755.30	-0.4
Prepared vegetables and fruits	673.50	761.10	13.0
Processed Seafood	388.40	422.90	8.9
Cocoa and cocoa preparations	320.70	352.60	10

Tea and mate	99.20	123.40	24.4
Processed meat	35.80	42.40	18.6
Beverages	**975.10**	**1,000.90**	**2.6**
Alcoholic beverages	884.60	883.30	-0.2
Non-alcoholic beverages	90.30	117.60	30.3

Source as cited in Market Watch Malaysia, 2011

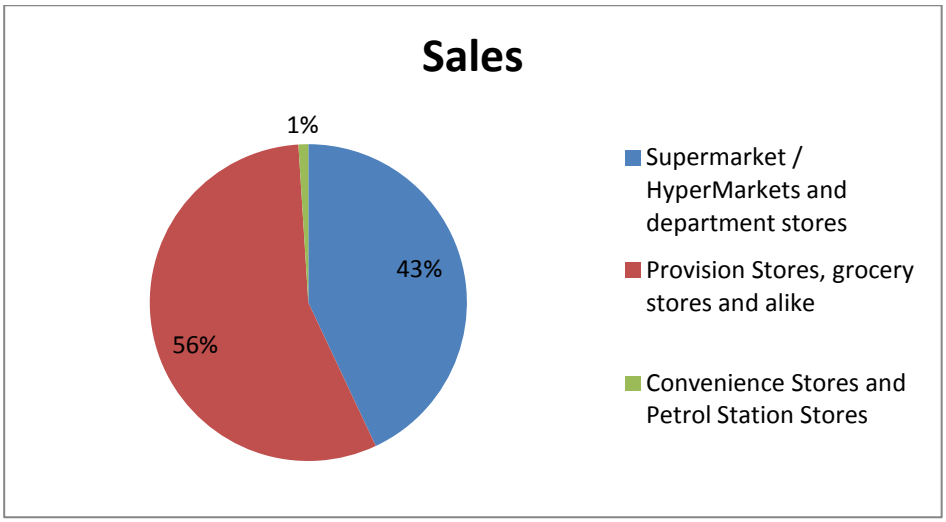
Malaysia was a net importer of food products in 2009. Total imports of processed food and beverages increased by 0.7% from RM9.9 billion in 2008 to RM10 billion. Processed Foods and Beverages products that showed escalation in imports were sugar and sugar confectionary (42.5%), tea and mate (24.4%) and non processed meat (18.6%).

Major imported products were sugar and sugar confectionery (RM2.5 billion), dairy products (RM1.6 billion). In 2009, Malaysia's largest import source for processed food was Australia (RM1.5 billion), followed by Brazil (RM1.2 billion), New Zealand (RM1.1 billion), Thailand (RM817.2 million) and United States (RM753.6 million).

Since 2000, the food utilization and imports in Malaysia have reported constant growth annually. According to the forecast by Business Monitor International in 2009, the food consumption in Malaysia will persist to nurture by a hefty 22.7% by 2013 and soft drink sales to increase by 32.9% over the same period. It is expected that the current global retail sales in food products are valued around US$3.5 trillion, and are predicted to rise at an annual rate of 4.8 per cent to US$6.4 trillion by 2020. In year

2008, the employment in food industry has improved 1.4%, from 44,778 in 2007 to 45,418 in 2008. Apart from that, Malaysia has a dynamic mass grocery retail sector with international retailers like Carrefour, Dairy Farm (Cold Storage and Giant), Jusco and Tesco. The well-organized and expansion plans by international retailer are forecasted to have 36.9% increases in the sales of Foods and Beverages products by 2013.

Figure 1.0: Retailer Structure



Source as cited in Market Watch Malaysia, 2011.

Traditional stores such as provision stores, grocery stores, specialty food stores and other sundry shops have the majority 56% shares of retail food sales followed by 43% share of the nationwide retail food in market modern stores such as supermarkets, hypermarkets and department stores with supermarkets. Convenience stores with only about 1% share of the nationwide retail food market have remained insignificant.

The current market trend is moving towards health consciousness. Consumers are more careful with their diets demand and grocery purchasing decisions. Besides partnering with Tereos, French sugar producer, Doehler, German ingredient manufacturer and British Sugar, Malaysian sweetener manufacturer, PureCircle has also announced its partnership with German sugar producer, Nordzucker in October 2010 to develop stevia products. Stevial Glycosides based ingredients are likely to be used as natural sweeteners in the European Union (EU) early in 2011 once approved (Business Monitor International, 2010). Concentration on the niche market segment above aimed at satisfying specific market needs and preferences which is the healthy eating lifestyle to continue to draw consumer attentions as well as to increase consumer awareness in nutrition value and food fortification. Furthermore, small and medium-sized companies are also developing new, advanced technology and equipment to improve product quality and design, increase shelf life and cut down the use of preservatives such as natural food flavours from plants and seafood in addition to meet the export standards in the manufacturing of processed foods and beverages.

There are few challenges faced by the industry. Firstly, corporate social responsibility program still very popular nowadays as more people are concerned about the environmental issues. Manufacturers cannot afford to ignore environmental issues such as recycling, biodegradable packaging and carbon footprints, which are increasingly important to consumers. Secondly is food safety compliance. Food safety and artificial additives are prompting consumers to look for products made with natural ingredients. With ageing and obese population, consumers are more concern about their health condition and lifestyle. Consumers tend to look for organic foods and drinks functioning to balancing their diets in order to achieve the lifestyle they desire. Thirdly, the rising in price of essential goods has become consumers' biggest worry as food on average accounts for more than 60% of household budgets. The 12th Malaysia International Food and Beverage Trade Fair 2011 indicates increase in

the cost of foods is mainly caused by extreme weather events such as the floods in Australia and Russia, surging oil prices that have driven up the cost of agriculture essentials, the depreciation of the US Dollar and export restrictions by various food producing nations. Foods price inflation shrinks consumers' purchasing power to spend on other goods as incomes fail to keep pace with rising food costs. Malaysian government has come out with a solution to mitigate the problems. Government announced the abolishment, reduction and exemption of import duty on a wide range of food products. Food companies therefore can increase the numbers of promotions and deals so consumers can achieve greater savings.

Besides challenges faced, Malaysia Foods and Beverages (F&B) industry positioning as the international "halal" food hub provides a window of opportunities for local and international F&B business fraternity into exploring new trades and investment opportunities globally. The concept of "halal" is related with food products in terms of hygiene, cleanliness and conformance with religious requirements. Malaysia's food manufacturers can consider to joint ventures with Australia and New Zealand to service the ASEAN, Middle East, European and US markets which have ample Muslim populations.

In Malaysia, dividend payment matters. Several studies have shown that an announcement of dividend increase (decrease) was followed by an increase (decrease) in share prices. Usually only firms that are profitable will pay dividends but some firms who reported losses still pay out dividend. This is due to the rationale that a cut in dividends will convey a signal of poor earnings. An increase will lead to expectation of good future earnings.

Table 1.4: Dividend yield for Foods and Beverages Companies

Company	12-month dividend yield (%) (as at Aug 10)
Top Glove Corp	2.38
Panasonic Manufacturing Malaysia Bhd	5.11
Fraser & Neave Holdings Bhd	9.91
British American Tobacco Malaysia Bhd	6.35
Tan Chong Motor Holdings Bhd	2.36
Dutch Lady Milk Industries Bhd	5.25
PPB Group Bhd	5.18
Batu Kawan Bhd	4.22
Lafarge Malayan Cement Bhd	5.07
Nestle (Malaysia) Bhd	3.48

Source as cited in The Edge Financial Daily Today, August 2011

1n 2011, Foods and Beverages Industry were among top gainers on the local exchange, Bursa Malaysia with high dividend yielding stocks. Fraser & Neave Holdins Bhd rose 46 sen to close at RM18.46. The stock has advanced 24% this year. Dutch Lady Milk Industries Bhd improved 38 sen to RM18.08 for a year-to-date (YTD) gain of 30%. Nestle (Malaysia) Bhd increased by 28 sen to RM47.48 with stock advancement of 25% this year meanwhile PBB Group Bhd was up 36 sen to RM17, for an YTD decline of 1.5%. Top Glove Corp Bhd added 91 sen to end at RM5.88 with an YTD increase of 18%. British American Tobacco Malaysia Bhd (BAT) was another major gainer after Top Glove. Panasonic Manufacturing Malaysia Bhd rose 58 sen to end at RM23.48 with stock advancement of 27% this year while Tan Chong Motor Holdings Bhd went up by 38 sen to RM5.08 for an YTD fall of 1.9%. Batu Kawan Bhd climbed 32 sen to RM15.42, for a decline of 9% this year while Lafarge Malaysia Cement Bhd rose 30 sen to end at RM16.70 for an YTD decline of 13% (The Edge Financial Daily Today, 2011).

There are few dividend distribution methods available such as regular dividends, share repurchases, special dividends and share split. Among all, regular cash dividends are the most preferred distribution mechanism with dividend target ratio. To listed companies, dividend signaling is very important as these firms are more concerned with stable dividend and avoid reduction in dividend payout. However, they are willing to deviate from that target when they set the level of the dividend.

Both dividend policy measures (dividend yield and dividend payout) have significant impact on the share price volatility. Investors pricing the shares are on the basis of the amount of dividends paid by companies. The market in the stocks of small listed firms could conceivably be less informed, more illiquid, and as a consequence subject to greater price volatility as small firms are likely to be less diversified in their activities. Study by Foong, Zakaria and Tan (2007) in Malaysia using annually cross-section regressions revealed weak evidence that the dividend yield and dividend stability have consistent and significant role in explaining firm stock returns before and during the Asian financial crisis. However changes in dividend yield show some impact on the firm stock returns with a consistent negative sign. The negative sign documented implies that the lower the changes in the dividend yield, the higher the stock returns. The finding is consistent with Lintner (1956) and Kalay (1982). Smoothing dividends payment over time can push the stock price to higher level. The dividend yield level can be maintained by adjusting the dividend payment accordingly to the stock price. Moreover, announcement on level of dividend yield changes gives important information to investors and thus must be well thought-out.

Appannan and Lee (2011) used 5 sample of listed companies for period of year 2004 until year 2008 to investigate the leading determinant of dividend policy on Malaysia food industries under consumer product sector and the regression results showed 60% of the samples companies in the food industries from KLSE use debt equity ratio determinant for their current dividend payment decision where as the remaining 40%

of the companies will refer to their past dividend per share to ensure consistent level of payment. These companies are trying to preserve consistent dividend flow to avoid fluctuation of dividend per share in respective to the current firm's performance and also to avoid shareholder's dissatisfaction when they compare the current dividend declared with the past dividend. Inability of firms in maintaining a steady dividend flow will show an unstable performance of the company since the dividend payment is declared from the company's retained earnings. In addition, consistent dividend flow create burden to companies in terms of high consistent dividend payment and create opportunity cost to forgo many potential investments that can improve the operations' performance.

The purpose of the study is to examine on how the independent variables will bring effect to the dividend policy then eventually will change the Foods and Beverages companies' performance in Malaysia. The study contributes to add new insight of the dividend policy influenced the firms' performance in Malaysia Foods and Beverages industry.

1.2 Problem Statement

Based on previous studies, there are some deficiencies in these past studies, some only shows how internal and external factors affect dividend policy but they do not further study on how it impacts firm value. According to the research by Al-Malkawi (2007), the paper used Tobit specifications to investigate the determinants of corporate dividend policy in Jordan. Size, age and profitability of a firm are the determinant factors on Jordan company dividend policy. Result showed that the proportion of stocks holding by the insiders and state ownership will change the dividends paid.

Meanwhile, some research papers have further study on the impact of dividend policy which is other than firm value. A research carried by Al-Kuwari (2009) used seven variables to test the determinants of dividend policy for firms listed on Gulf Co-operation Council (GCC) country stock exchanges. The seven variables are government ownership, free cash flow, firm size, growth rate, growth opportunity, business risk and firm profitability. Then, the paper had further research on how dividends reduce agency problem and maintain firm reputation but not on firm value. Apart from the article, according to Kapoor (2006), dividend policy of a firm has implication for investors, managers, lenders and other stakeholders. The paper investigated the impact of dividend policy on shareholders' value. Some shareholders might want a stable pattern of dividend payout, while some might prefer high current share returns.

Previous researchers have conducted their research on various sector, company or country. However, there are no researchers carry out their research on food production in Malaysia. Geng and Liu (2011) examined how the dividend policy influences the enterprise value based on the data from A-share listed companies from year 2005 to year 2009. To test the dividend payout strategies on the firm value and consider corporate finance as a major source for company's welfare, Kostyuk (2006) took the data across the companies in three countries which are Ukraine, Russia and Croatia.

This study is conducted to test on how the factors affecting dividend policy which then eventually bring changes on the firm value. Furthermore, to be specific and to get more accurate result, we focus our research on the Foods and Beverages production in Malaysia.

1.3 Research Objectives

The main research purpose of the study is to investigate how independent variables affecting dividend policy which then lead to changes in the firms' value of Foods and Beverages under consumer products sector in Malaysia.

The research objectives are:

1. To examine whether profit of the firm will affect dividend policy subsequently causing impact on firm value.

2. To examine whether firm liquidity will affect dividend policy subsequently causing impact on firm value.

3. To examine whether firm size will affect dividend policy subsequently causing impact on firm value.

4. To examine whether leverage of the firm will affect dividend policy subsequently causing impact on firm value.

5. To examine whether risk will affect dividend policy subsequently causing impact on firm value.

6. To examine whether firm's earning per share (EPS) will affect dividend policy subsequently causing impact on firm value.

7. To examine whether firm's growth will affect dividend policy subsequently causing impact on firm value.

1.4 Research Questions

The research questions that arise based on our research objectives are:

1. Will profit of the firm affect dividend policy and eventually causing an impact on firm value?

2. Will firm liquidity affect dividend policy and eventually causing an impact on firm value?

3. Will firm size affect dividend policy and eventually causing an impact on firm value?

4. Will leverage of the firm affect dividend policy and eventually causing an impact on firm value?

5. Will risk affect dividend policy and eventually causing an impact on firm value?

6. Will firm's earning per share (EPS) affect dividend policy and eventually causing an impact on firm value?

7. Will firm's growth affect dividend policy and eventually causing an impact on firm value?

1.5 Significance of the Study

This study is about how dividend policy affects the firms' value in the field of consumer products with the selection of study on Foods and Beverages companies in

Malaysia. By conducting this research, the proposed study can benefit and help future researchers as their guide. They can refer to this paper when they are researching. It enhances a better understanding and perspective on this field. Besides, it also opens up a new development of this study in this industry.

Furthermore, this study also helps policy makers, decision makers and consumers in making decision. It provides information in strategic management or decision making. Readers can make use of this paper information as one of the tools to analyze a firm performance. Readers can know and understand how well the firm doing and the worthiness in investing a company. This study also provides relevant information to the management of corporations, specifically those in the food production industry, to enable them to make better decisions in setting up dividend policy.

Besides, it will also allow companies to make better decision on profit. They can use the profits by investing in other field or businesses, or pay out dividend to the shareholder. The decision will bring impact on investor perception toward the company on the market. Consequently, this enables the company to concentrate to maximize the profits of the company.

1.6 Outline of the Study

Chapter 1 is an introductory chapter which introduces the background of the study. This chapter also includes problem statement, research objectives, research questions and significance of the study.

Chapter 2 consists of the discussion and evaluation of articles, journals and others studies in relation to the research topic. Besides, this chapter also review the literature of past researchers and review of the prior empirical. In addition, the theoretical framework and hypotheses development are presented.

Chapter 3 provides detailed of research methodology which describe the procedures and methods that have been used to carry out this research in terms of data collection methods, research design, population, sample, and sampling techniques and data analysis. Multiple Linear Regression analysis and normality test will be presented.

Chapter 4 interprets the overall results and the analysis of data. Tables and graphs are used to present and explain the research results by using E-views 5.0 in order to provide a clearer explanation for the reader.

Chapter 5 discusses the overall analyses from previous chapter. Besides, major findings and the implication of the study are discussed. It is the summary of the research and interpretation of the research results. Lastly, the limitations and

weaknesses of this research are identified. The concluding chapter also provides some recommendations for future research.

1.7 Conclusion

Chapter 1 provides a basic understanding of the research project. It gives a fundamental guideline for the research by giving an overview of the study background. The research questions are identified and to be answered. The significance of the study has discussed about the purpose of this study. The direction, insight and scope of the research will be presented to support the following chapters. The outcome of the study can be used as a reference for people who want to conduct relevant research topic in the future.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This chapter will be provided with the details of our research project where it consists of the literature review, review of relevant theoretical models, theoretical framework and hypotheses development. In this research, a review of literature will be followed to assess the factors determine the dividend policy affecting firm value within Foods and Beverages companies under consumer product in Malaysia. The variables will be determined and further discuss through various resources by past studies. These variables that will be examined in this chapter are profit, liquidity, firm size, leverage, risk, earnings per share and growth.

2.1 Review of the Literature

2.1.1 Determinant of Dividend

2.1.1.1 Firm Size

Based on Al-Kuwari (2009) study of non-financial firms listed on GCC countries' stock exchanges from year 1999 to 2003 showed that firm size has

a significant positive relationship with dividend policy, where firm size increases, dividend ratio will be increased. Larger firms are seems to have higher dividends compared to smaller firms as larger firms might face high agency costs that will cause ownership dispersion. Thus, in order to reduce agency costs, large firms tend to pay higher dividend. Moreover, larger firms seem to have easy access to capital market, funding with lesser issuance expenditure for external financing. Fama and French (2000) result is consistent with previous researcher which means leverage and firm size has a positive relation. The bigger the firms size the higher the dividend payout ratio. High dividend payout ratio is explained by lesser earning and net cash flows violations. The result is also consistent with Lee (1995) who studied the model in which agents trade shares in companies. The study on US corporations for the year 1992 to 1993 is chosen and the financial data is taken from NYSE Trade and Quotes (TAQ) CD-ROM. Results showed that large companies are indeed the one that are more likely to pay dividends. The results also showed, but not strongly, that large companies are likely to pay a large amount of dividends. However, research by Ahmed and Javid (2009) found out the negative impact on size of the firm and dividend payout policy which showed that the firms prefer to invest in their assets rather than pay dividends to their shareholders.

2.1.1.2 Investment Opportunities

In the presence or absence of profitable growth opportunities affordable by the company have an effect of interest conflict between managers and shareholders. When firms have positive investment opportunities, they tend to use future cash flows which could display higher debt or dividend payout ratio in order to convince the investors about their good forecast. Control

mechanism is necessary when firms do not have any investment and growth opportunities to deal properly with agency problem. The investigation of financial decisions and growth opportunities conducted by Alonso, Iturriaga and Sanz (2005) in Spain showed debts and dividend payments are inversely related to the creation of firm value. In contrast, firms with no profitable investment projects have positive relationship with leverage and dividends. The payment of dividend might be the lowest cost means for shareholders to monitor managers' investment behavior.

Firms' increase access to capital market increases the level of investment growth following with lower dividend payment. Firms' investment opportunities increase is also due to a decrease in the cost of capital rather than increase in profitability. According to Moh'd, Perry and Rimbey (1995) firms that have experienced or expect to experience high rates of revenue growth tend to distribute lower dividend payout as the funds are conserving for future investment opportunity. It also appears that firms do act to minimize the sum of agency costs and transactions costs toward an optimum level of dividend payout. The relation is consistent with Gaver and Gaver (1993) in their findings for dividend policy that growth firms pay lower dividends than non-growth firms. Growth firms have a significantly higher incidence of stock option plans, bonus plans and restricted stock plans than non-growth firms. It also means that growth firms pay higher compensation to executives compared to executives in non-growth firms. Dividend yield is significantly negatively related to investment opportunities. However, the relation between dividend payout and growth opportunities is insignificant.

2.1.1.3 Profitability

The profitability ratio is a very strong determinant for dividend payout ratio, supported by Al-Kuwari (2009) who used ROE studies. Jensen, Solberg and Zorn (1992) said that there is negative relationship between investment growth and dividends while profitability has positive relationship with dividend according to their cross-sectional data research in year 1982 using 565 firms and 632 firms in 1987. Aivazian, Booth and Cleary (2006) also added that the probability to pay dividend for a firm rises along with the profitability and also with the presence of high future growth opportunities.

Anil and Kapoor (2008) undertook their study to examine the relationship between determinants of dividend payout ratios in developing country like India. The study focused specifically on Indian Information Technology (IT) sector. The researchers have chosen 6 years data in between 2000 to 2006 from Prowess database of CMIE because it covered 2 business cycles and covered both recessionary and booming phase of IT industry. They suggested that the dividend payout ratio is positively related to profits. Appannan and Lee (2011) examined the determinants that affecting the dividend payment decision by the company management in Malaysia listed companies for food industries under the consumer products sector. They have selected data from year 2004 to 2008. Findings showed profit after tax and dividend payment decision has strong relationship. It also showed a positive relationship with dividends. The presumption of profitability is an important determinant of dividend payment is also supported by Mohamed, Wee, Omar, Abdul Rahman, Mastuki, Abdul Azis and Zakaria (n.d.). The paper analyzed the determinants of dividend payment for the top 200 companies that are listed on the Malaysian share market. The fact that a company profitable is an important

determinant for dividend payment is tested and supported by EPS and ROE methods. The paper also suggested future researchers to include more sample size so that results and analysis will be richer.

2.1.1.4 Leverage

Al-Kuwari (2009) studied on non-financial firms listed on GCC countries' stock exchanges from year 1999 to 2003. He found that leverage ratio has negative relationship with dividend payout ratio, which indicates that dividend will decrease when leverage ratio increases. This might due to the high transaction cost burden on high levered firms from external financing. Thus to maintain internal financing costs, they distribute lower dividends to their shareholders (Al-Kuwari, 2009). According to Fama and French (2000), firm with lesser market leverage tends to have higher profit by using tradeoff model while the result is consistent with the negative relationship above. When leverage is lower and profit is higher, firms pay higher dividend.

2.1.1.5 Government Ownership

According to Al-Kuwari (2009), government ownership is a factor that cause significant impact on dividend policy and it seems to have a positive relationship from study of non-financial firms listed on GCC countries' stock exchanges from year 1999 to 2003. He used free cash flow (FCF) hypothesis which measures cash used for company on activities and growth to explain that if the government owns a higher percentage level of shares, the dividend payments are higher since government ownership can form a center of attention for external funds and make it easier to fund investments. However, if firms have none or low government ownership, it is hard to raise fund

through fund raising activity and they can only depend on retained earnings to finance investments, therefore reducing dividend payout. Government ownership can also alleviate agency problem and attract private sector investment, added by Al-Kuwari (2009).

2.1.1.6 Insider Ownership Decision

As discussed by Jensen, Solberg and Zorn (1992) based on 565 firms researched in 1982 and 632 firms in 1987, insider ownership decision seems to be interdependent with financial decisions and it has a negative association with dividend levels of firms by the F-test conducted. In support by modified Pecking Order Theory, agency costs as well as bankruptcy costs is also a determinant of financing decisions which might lead to changes in dividend. However, Ahmed and Javid (2009) argued that ownership concentration have positive impact on dividend payout policy. Ownership concentration appeared to be more important tools to resolve agency conflict between controlling and minority shareholders when investor protection is weak. The high relationship of ownership of major shareholders can create the block of holders which may easily influence the dividend payout policy in Pakistan.

2.1.1.7 Debt

As discussed by Aivazian, Booth and Cleary (2006) using dividend data of SIC industry groups from year 1981 to 1999 from Research Insight database, debt has a strong impact on dividend policy. Large firms that have access to public debt markets with greater tangible assets and lower market to book (M/B) ratios tend to pay dividends. Lintner (1956) revealed that firms with high bond ratings pay lower current earnings as compared to firms with no

bond ratings. They also added that the probability for firm paying dividend to shareholders decreases with the debt level of firms. The strong relationship between debt and dividend is also supported by Appannan and Lee (2011). The positive correlation between current dividends per share with the companies' debt equity ratio means the higher the debt equity ratio, the higher the dividend payment. Low debt equity ratio means the portion of total funds contributed by the shareholders are more than the creditors, in other words, the company rely more on equity capital rather than external debt to operate their business. In order to reserve the cash to invest in potential investment opportunities, company tend to rely more on internal funds, as a result, fewer dividends are paid to company shareholders.

According to Kumar (2003), his paper examined the possible association between ownership structure, corporate governance and firms' dividend payout policy. He focused on Indian corporate sector due to few advantages over other emerging market economics. Indian Corporate Sector has large number of corporate firms, which bring large sample data size. Unlike other emerging markets, India always maintains their shareholding pattern over the period of time which enhances clarity. He found an evidence to conclude that debt equity and dividend is inversely related.

2.1.1.8 Risk

Akhtar (2006) used a sample of 973 Australian Multinational Companies (MCs) and 1776 Australian Domestic Companies (DCs) listed on the Australian Stock Exchange to determine the extent to which the imputation tax regime plays an important role between cash, share repurchase and other forms of dividend payout decisions. The researcher showed evidence that

Australian MCs pay less regular cash dividends, special dividends, total dividends and net dividends to their counterpart DCs. After investigated, they realized that political risk factor is extremely important in affecting regular cash dividends, total dividends and net dividend payments. Moreover, regular cash dividends, on market share repurchase and total dividends also are significant in explaining foreign risk exposure. The results showed firm increased dividend payments when earnings are received from safe overseas subsidiary countries.

2.1.1.9 Market Capitalization

Ahmed and Javid (2009) examined the dynamics and determinants of dividend payout policy of 320 non-financial firms listed in Karachi Stock Exchange during the year 2001 until 2006. Findings showed market capitalization have the negative impact on dividend payout policy which means that firms prefer to invest in assets than pay dividends to their company shareholders. With the aid of outsider investors, firm will require higher equity capital and reaching market capitalization as well as paying higher dividend payout as the raising capital of firms is essential in forming dividend policy (Aivazian, Booth and Cleary, 2003). Moreover, Mehar (2002) studied his sample of 180 companies listed in Karachi Stock Exchange in Pakistan, dividend payment is tested to have a positive linkage with market capitalization and also affecting the changes in investment in market.

2.1.1.10 Liquidity

Ahmed and Javid (2009) found the linkage between liquidity and dividend payout policy is positively significant. The market liquidity of the firms has a

positive influence which confirms that firms with higher market liquidity pay more dividends. Lee (1995) argued that the number of shareholders may also represent the liquidity in a stock. This argument shows positive correlation with the decision whether to pay dividends and the results showed that the dividend decision is quite robustly positively associated with liquidity of the company's shares. This suggests that liquidity has more relevance for the decision of whether to pay any dividends than for the decision of how much to pay in dividends.

2.1.2 Determinant of Firm Value

We found that there are other determinants of firm value such as the ownership structure, sources of financing, information technology (IT) investment and risk management.

2.1.2.1 Ownership Structure

According to Minguez-Vera and Martin-Ugedo (2007), there is no significant relationship between the ownership of large blockholders and firm value. Besides, they also found that the degree of control has positive effect to firm value. Although concentration of ownership may impose different effects on the firm value, it also allows investors who are also part of the shareholders to look out for their interests directly. As cited in King and Santor (2008) characteristics of the major shareholder also reflect the effectiveness of ownership structure. Firms are classified by whether they are controlled by a

family, government entity, non-financial corporation (including publicly traded subsidiaries) or financial institution. Baert and Vennet (2009) found that there is inverse relationship between ownership of financial institution and firm's market value. Researchers' empirical analysis does not show a positive relationship between family ownership and proxies for firm performance (Chen, Cheung, Stouraitis and Wong, 2005).

2.1.2.2 Sources of Financing

The next factor is sources of financing which is either external financing or internal financing. Rahaman (2010) stated that in existence of external financial limitations, financial structure on firm growth decreases with an increase in the firm's access to an external bank credit facility and firm rely more on internal financing to stimulate growth. Without external funding constraints, the firm is less dependable on internal funds and external financing become the primary source of financing for its growth. This is consistent with the findings by Myers and Majluf (1984) showed that firms may refuse to issue stock, and therefore miss out the valuable investment opportunities which further explained in the corporate financing behaviour, including tendency to rely on internal sourcing and to prefer debt to equity if an external source of funds is required.

2.1.2.3 Information Technology (IT)

Information technology (IT) investments have impact on firm value. This is due to consideration of both the magnitude and duration of competitive advantage. However, investment in IT has its own risk because it is important for IT expertise to find out the complex and different implications of IT

investments on firm value (Dehning, Richardson and Stratopoulos, 2005). Bharadwaj, Keil and Mahring (2009) tested how firms are affected by the market when they encounter unforeseen operating or implementation-related IT failures and the results showed that firm suffer great decline in value due to the IT failures.

2.1.2.4 Risk Management

Risk management has become very popular ever since the financial crisis in 1997. Large corporations and medium-sized firms have come to realise the importance of managing company risk in respond to any uncertainties. Gordon, Loeb and Tseng (2009) conducted research on relation between enterprise risk management (ERM) and firm performance with five factors affecting a firm such as environmental uncertainty, industry competition, firm size, firm complexity, and board of director's monitoring. Results showed that implementation of ERM concept will improve firms' performance. The result conducted is consistent with Andersen (2008) who found a positive relationship among firms investing in innovation and those operating in knowledge-intensive sectors. Investors and stakeholders trust that risk management has the ability to react to market factors beyond control of the management so as to stabilise organization earnings which generate better enhancement of the corporate performance.

2.1.3 Dividend Policy affects Firms' Value

According to Iturriage and Crisostomo (2010), they found that dividends play a disciplinary role in firms with fewer growth opportunities by reducing free cash flow under managerial control. The importance of corporate financial decisions such as capital structure and dividends on firm value has been at the heart of academic debate in recent decades. Conflict of interest inside firms is one of the aspects that influence the role of debt and dividends the most. Firms' managers, shareholders, and creditors have conflicting interests in the firm; and both the capital structure and dividend policies affect how their investments are compensated. In turn, capital structure and dividends are likely to affect managers' incentives and, hence, the firm's performance (Barclay, Smith and Morellec, 2006; Fama and French, 1998). As a result, dividends are positively correlated to firm value. When growths opportunities are absent, shareholders control managers by limiting their access to free cash flow.

Based on Setia-Atmaja (2010) article, he used panel data on a sample of Australian publicly listed firms over the period 2000–2005 (1,530 firm-year observations). This study suggested that the impact of governance mechanisms is moderated by companies' dividend policies. Thus, closely-held firms should be aware of the investor's need for more independent directors, especially when dividends are low. This study also found that board independence enhances firm value, particularly in closely-held firms that have lower dividend payouts. A slightly positive association between firm value and audit committee independence is also found, especially among closely-held firms. The agency problems between controlling and minority

shareholders in closely-held firms is more severe than those between owners and managers in widely-held firms (Villalonga and Amit, 2004), and it is worsen if blockholders (owner that holding large amount of company shares) not paying or paying low dividends. Porta, Silanes, Shleifer and Vishny (2000) research shows result highlighted the key role that independent directors on the board and audit committee can play in protecting minority shareholders from expropriation by controlling shareholders, and support for the notion that board or audit committee independence should increase as private benefits to insiders increase (Boone, Field, Karpoff and Raheja, 2005). The results could serve to justify initiatives to encourage board independence and audit committee independence in a country where private benefits of control are relatively high.

Next, Barclay, Smith and Watts (1992) analyzed the dividend choices of more than 6,700 industrial corporations over a 30-year period. They revealed that higher dividends can be effective in dealing with a corporate free cash flow problem. That is to say companies with a small number of major investment opportunities can limit management's temptation to overinvest by paying out a larger percentage of their earnings. Therefore, they would expect higher dividends in stable, low-growth industries. By contrast, high-growth companies with lots of investment opportunities are expected to pay low capital. Whereas their slow-growth counterparts tend to use higher dividends to address a potential overinvestment problem, high growth firm pay low dividend in part to guard against an underinvestment problem.

2.1.4 Dividend Payout Ratio as the determinant of Dividend Policy

Dividend policy is one key factor that decides the earning amount and dividend payout acts as the major financial decisions to firm managers, stated by Allen and Michaely (1995). They also ran an empirical observation on dividend policy through corporations' payout percentage of earnings as dividends and also the predominant form of dividends payout of 1000 largest firms according to their book value of assets in U.S. from year 1971 to year 1992. According to their findings, firms are not able to vary their value by altering their dividend policy in a perfect whole capital markets whereas in an imperfect market, dividends and payout policy will be financial managers' most important financial decisions with considerations in taxes, asymmetric information, incomplete contract, institutional constraints and transaction costs as in their research.

Rozeff (1982) agreed the generally usage of dividend payout ratios among firms through his study on optimal dividend payout factor. From his research, there are evidences showing that firm tends to issue lower dividend payout ratios when firm growth expected to rise, causing a significantly negative relationship with investment opportunities. He also proved that firms with higher beta coefficients are likely to establish lower dividend payout ratio as higher beta representing higher operating and financial leverage in the firm, resulting in a significant negative relationship. Cost minimization model tests and multiple regression models are used in the research among 200 firms' payout pattern over 7 years which are from year 1974 to year 1980 in determining their dividend payout ratios. The researcher also agreed that firms in imperfect market will produce a more optimal dividend policy as compared to firms in perfect capital markets.

2.2 Review of Relevant Theoretical Models

2.2.1 Dividend Relevance Theory

Dividend relevance theory, proposed by Gitman (n.d.) showed shareholders prefer current dividends payment and there is a direct relationship between a firm dividend policy and its market value. This shows that shareholders are risk averse and prefer dividends today rather than the stock appreciation in the future. According to this theory, optimal dividend policy should be determined to ensure the wealth of the shareholder is maximizes.

From the research carried by Barman (2007), majority of respondents (57.1%) agreed there is a relationship between dividend policy and firm value, whereas only 7.1% disagreed. On the other hand, there are 57.2% of respondents agreed on the "bird in the hand" theory of dividend payments. This shows that majority of people are agreeing that dividend policy can affects firm value. Magni (2007) said this theory is based on the amount of dividends distributed to shareholders is equal or greater than the free cash flow generated by fixed investment policy. Azzopardi (2004) argued that dividend relevance resulted in 2 extreme groups after many years of debate, which are Rightists and Leftists. For conservative group, the Rightists believe that higher dividend payouts will result in an increase in the value of the firm. This is supported by the "bird in the hand" argument, which means that investor prefer to receive dividend today since it is lower cost. On the other hand, Leftists agree the high dividend will bring down the firm value. If dividends are taxed more heavily than capital gains, people will prefer capital gain than dividend gain.

2.2.2 Dividend Signaling Theory

Dividend signaling theory, which is under dividend relevance theory, states that changes in dividend policy convey information about changes in future cash flows. A study that investigates the effect of corporate risk management in dividend policy suggests a positive relation between information asymmetry and dividend policy. In other words, the higher the asymmetric information level, the higher is the sensitivity of the dividend to future prospects of the firm (Dionne and Ouederni, 2011).

Another research done by Bernhardt, Douglas and Robertson (2003) tested on monotonicity conditions by using robust non-paremetric techniques. The outcome showed the greater the rate that dividend income is taxed relative to capital gains income, the greater the value of information revealed by a particular dividend yield. However, their findings indicated that the information content in dividend signaling is not positively related to the marginal cost of dividends in the manner implied by dividend signaling theory. Therefore, their findings concluded signaling concerns do not explain why dividends are issued and it reflects non-signaling explanations for dividends. A study was conducted to examine the differences between the firms that continue to pay dividends for a long period of time after inflation and those that do not. The researcher, Hobbs (2006) said that the firm that pay dividends for a long period is outperform than the firm that pay dividends temporary. Therefore, the relationship between dividend stickiness and long-run performance is not fully reflected in stock returns surrounding the announcements of dividend initiations.

Dividend signaling theory is more related to our study. The reason is this theory recommends future earnings for company when the company announces an increase in dividend payouts. Many researchers have been carried out to investigate how market reacts to company dividend signal. Most of the results proved the existence of dividend signaling theory when there are changes in dividend payment. These shows that dividend policy is really important in determine firm value.

2.3 Proposed Theoretical Framework

Figure 2.0: Model 1

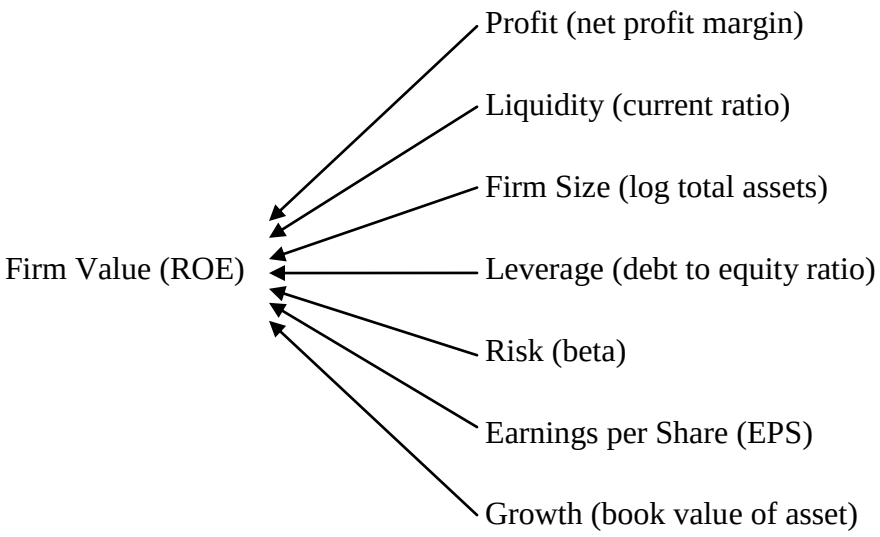


Figure 2.1: Model 2

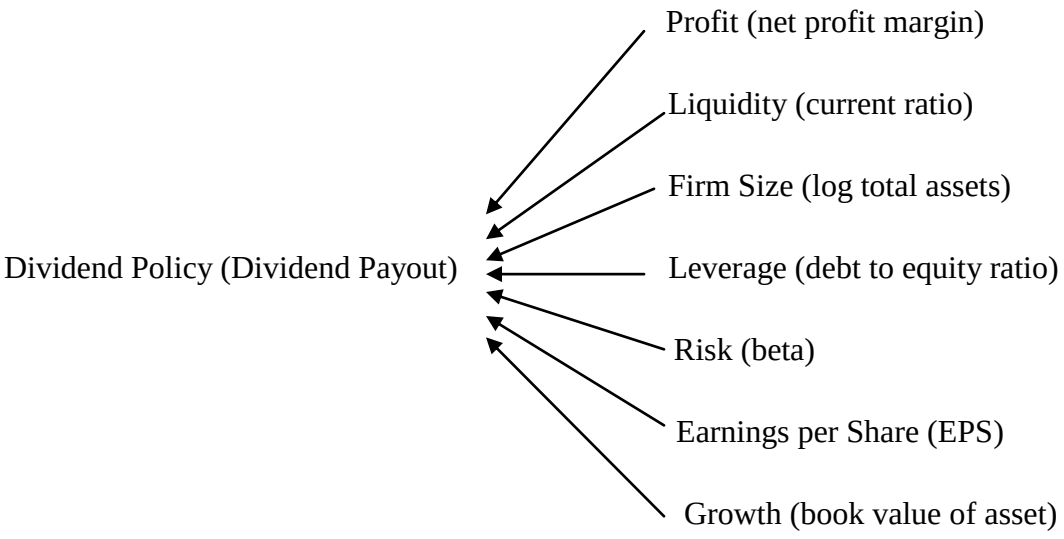
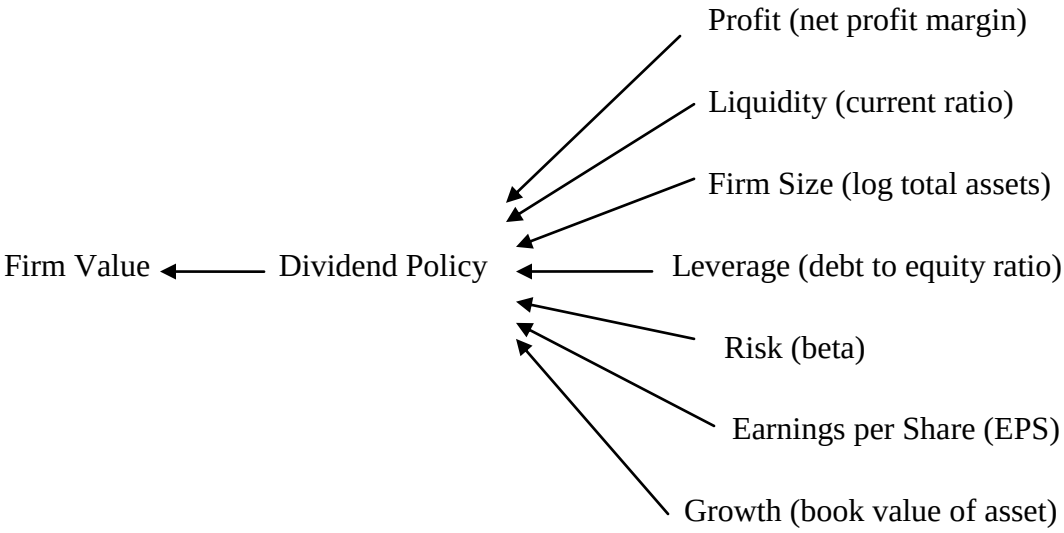


Figure 2.2: Model 3



The sketches above show the proposed theoretical framework that implement to serve as the foundation for the research project. Model 1 is to study how the seven factors affect the firm value. The seven factors which are also known as independent variables consist of profit, liquidity, firm size, leverage, risk, earnings per share and growth. Model 2 is to study the relationship between seven factors and dividend policy. While model 3 is a study about how the independent variables affect dividend policy that will eventually affect firm value.

2.4 Hypotheses Development

Model 1:

H_{1A}: Profitability has positive effect on firm value

Investor reacts positively when a company having higher profitability and reacts negatively when there is lower corporate profitability. A research carried by Christopoulos and Vergos (2005) to see whether publications and announcements in a company will affect the future movement of the firm value. Results showed that investors tend to react positively to event that imply higher profitability and negatively to event that imply lower corporate profitability. This paper is to examine the effect of actions by the management of a leading Greek mobile operator on its economic, investment and analysts' report announcements on the share price. They selected daily closing share price from the period 28 September 2000 until 2 March 2006 from the electronic EFFECT database.

Siegel (1989) conducted a research in examining whether change in the expectations of the future company profits will cause immediate changes in the level of firm value. The scope of the study is stock market crash on 19 October 1987, a most remarkable financial event at that time. In conclusion, the changes in profit forecasts and interest rates can cause the ROE increase.

H_{2A}: Liquidity has a positive effect on firm value

Based on Pastor and Stambaugh (2001), stocks that have an aggregate liquidity will eventually leads to higher expected return even after deducting market return exposures such as volume, price and momentum factors. They have run the research for over the last forty years, they found that when there is a great fall in market-wide liquidity, the market is likely to have a sharp downturn. This hypothesis is consistent with Datar, Nail and Radcliffe (1987) who used A&M's model and the result showed that stock returns and liquidity are significant to each other after scheming the firm size, book-to-market ratio, beta and January effect.

However, Banerjee, Gatchev and Spindt (2005) hypothesized that common stock liquidity is negatively related to firm's payout policy as demand for cash dividends in illiquid market will be greater. Firms with higher liquidity stock market will have lower incentive to issue cash dividends to their shareholders, causing investor to demand them in illiquid markets. Their result also proved that illiquid stock firms are likely to issue dividend payments while firm with higher liquid stock does not. They also found that firms that issue dividend payments able to lessen their return sensitivity to aggregate liquidity due to lower systematic liquidity risk exposure of investor.

H_{3A}: Firm size is positively related to firm value in terms of ROE

Schaefer (1998) studied the dependence of pay-performance sensitivity on the firm size and found a negative relationship between pay-performance sensitivities for individuals and firm size. Watts and Zimmerman (1989) said that there may be a political effect on executive compensation for larger firms. Larger firms are closely scrutinized since they are more visible. Therefore, when firm performance is outstanding, there may be a public backlash against extremely larger raises. Cichello (2009) research results showed the existence of strongly negative relationship between firm size and CEO ownership which is consistent with previous empirical findings. Additionally, Garen (1994), Hadlock and Lumer (1997) and Jensen and Murphy (1990) have also empirically recognized a strongly negative relationship between firm size and pay-performance sensitivity.

Based on Kumar (2011) research on the effect of ownership structure on firm value with 2478 Indian corporate firms from 1994 to 2000, it is found that foreign and corporate shareholders ownership do not influence firm performance. To better prove the result, researcher restricted sample for firms with foreign ownership less than 50 percent. The result showed that director group positively but not significantly influence firm performance. Fahlenbrach and Stulz (2009) research on American firms from year 1988 to year 2003 for the dynamics of managerial ownership and effect on firm value found that large increase in ownership is due to increase in shares held by officers. Hence, increases in the number of shares held by managers are favorable for firm value.

H_{4A}: Leverage has a negative effect on firm value

According to Lang, Ofek and Stulz (1994), they found that leverage has a negatively effect on firm value. This is due to the higher the leverage of a firm, the lower the future growth of that firm. This relation holds within and across industries, when leverage is assumed to depend directly on future growth and irrespective of which variables are used to forecast growth. Next, high leverage reduces a firm's ability to finance growth through a liquidity effect which means firms with more debt service have fewer discretionary funds available to finance growth, so that they tend to rely on external funds to finance new projects. However, the cost of using external funds is more expensive than using internal funds, this means that less growth will be finance and thus causes the value of the firm to decrease.

Aivazian, Ge and Qiu. (2005) also found that leverage is negatively related to investment and this negative effect is significantly stronger for firms with low growth opportunities than those with high growth opportunities. McConnell and Servaes (1995) examined a large sample of non-financial US firms for the years 1976, 1986, and 1988. For each year, they separated their sample into two groups, those with strong growth opportunities and those with weak growth opportunities. They showed that corporate value is negatively correlated with leverage for firms with strong growth opportunities (indicated by high Tobin's Q), and positively associated with leverage for firms with weak growth opportunities (or low Tobin's Q). Their results are consistent with the hypothesis that leverage induces underinvestment and reduces firm value, as well as the hypothesis that leverage attenuates overinvestment and increases firm value. Lang, Ofek and Stulz (1994) analyzed a large sample of US industrial firms over the period 1970–1989 and found a strong negative liinkage between leverage and subsequent investment, but only for firms with weak growth opportunities (with Tobin's Q less than one). Again, their results are consistent with the hypothesis that leverage reduces the firm value.

Besides that, Iturriaga and Chrisostomo (2010) used a sample of 213 Brazilian firms listed between 1995 and 2004 to examine the effect of the presence or absence of growth opportunities on the subsequent effect of leverage on firm value. They also found that leverage negatively affects the value of firms with growth opportunities (underinvestment theory) and it positively affects the value of firms without growth opportunities (overinvestment theory). Their results showed that in the presence of investment opportunities critically affects how the leverage affects firm value. They found that corporate debt plays a dual role in a firm's value, conditional on the availability of growth opportunities, which can be explained by two complementary approaches: underinvestment theory and overinvestment theory. The underinvestment view (Myers and Majluf, 1984) stressed the negative effect of too much corporate debt on firm value, as it may motivate managers to forgo profitable investment projects. Because of bondholders' priority over the firm's cash flow relative to shareholders, managers could forgo projects with positive net present value if the project's earnings go to the creditors (McConnell and Servaes, 1995). Thus, they could expect a negative relation between debt and firm value in the presence of growth opportunities.

H_{5A}: Risk has a negative effect on firm value

French, Schwert and Stambaugh (1987) supported that there are evidence to show the positive relationship between volatility and risk premium causing negative effect on common stock. When volatility increases, future expected risk premium will rise and thus lowering current stock price. There is negative relationship between expected return and changes in volatility and expected risk. Farrugglo, Michalak and Uhde (2010) also found empirical proof that announcement on credit risk securitization brings negative impact on shareholder value issues.

However, according to Zhu (2006), higher expected return on share is resulted from higher volatility and higher risk-free rate, causing market price to rise. The result shows the reason for a higher market price of risk is heteroskedasticity of volatility, where it disappears when an appropriate volatility model is applied. Shin and Stulz (2000) said increase in unsystematic risk has a significant negative on firm value, but decrease in unsystematic risk has an insignificant decrease in firm value. Moreover, no matter how high or low company leverage is, there is insignificant to the total risk of a company.

H_{6A}: Earning per Share has positive influence on firm value

According to Patell (1976), a positive relationship was found between firm values and earnings per share. After standardizing firm's unexplained price change by estimate of firm's price variability, the average change is positive and statistically large. The cumulative residual analysis is used to test the anticipation of earnings number to price changed, and the result showed positive relationship. The longer the range cumulative effects, the more consistent the relation between predicted value of earning numbers and other estimated market expectation.

Core, Guay and Kothari (2002) conducted a research to examine the stock price valuation, price-earnings relation and return earnings. They focus on the EPS denominator measurement calculation and provide theoretical and empirical evidence that diluted EPS. However, they recognized that earning per share is not a necessary variable in estimating the firm value. This is because the necessary for computing option-diluted EPS if to provide insight into misspecification in some commonly used empirical equity valuation models.

H_{7A}: Growth has a positive effect on firm value

In a study by Shin and Stulz (2000) showed that Tobin's q, as proxied by the ratio of the firm's market value to its book value and found that an increase in volatility increases the value of growth options. An increase in the value of growth options will increases q. Therefore, there is a positive relation between changes in q and changes in firm value. Next, the modern finance theory offers several reasons why expected cash flows might be related to the risk of cash flows. Firm value is often decomposed into the value of assets in place and the value of growth opportunities. There is a considerable literature that emphasizes the option properties of growth opportunities. If growth opportunities are real options on cash flows from assets in place, firms with greater volatility would have more valuable growth opportunities everything else kept constant. The real options view of growth opportunities therefore suggests that a firm's q should increase with the firm's total risk.

Based on Chi (2005) research, he explored the relationship between firm value and the shareholder rights-based Governance Index "G" which has become a popular measure of governance quality among researchers and investors. Gompers, Ishii, and Metrick (2003) concerned that firm value and G are correlated through some variable that they do not control for in their study, such as a firm's growth opportunities. Slow growing firms usually have lower value and may have incompetent managers. To avoid being controlled, the managers may adopt more governance provisions to restrict shareholder rights. That is, growth opportunities may be driving the observed relationship between shareholder rights and firm value, rather than shareholder rights affecting firm value. When the growth opportunities increases will cause the shareholder rights to become stronger and thus enhance the firm value.

Model 2:

H_{1B}: Profitability has negative effect on dividend policy

According to Grullon, Michaely and Swaminathan (2002), as dividend increase, profits tend to decrease as well. In a dividend declining firm, the profitability will usually recover before dropping further whereas in a dividend rising firm, there will be some uncertainty in dividend boosting decisions. Moreover, in the future study of Grullon, Michaely, Benartzi and Thaler (2005), they also supported with their results that some investors choose not to use dividend changes in forecasting profitability changes as the relationship between dividend and profitability is not consistent with the signaling hypothesis predictions.

However, Al-Kuwari (2009) opposed that when firm has high profitability, the firm tends to pay higher dividends as well. He added that profitability ratio has a strong and significant positive relationship with dividend payout ratio according to his research on 191 non-financial firms in GCC countries from year 1999 to 2003. This result also consistent with Aivazian, Booth and Cleary (2003), stating that in U.S., both firms and emerging firms will issue high dividend payment when the profitability is high.

H_{2B}: Liquidity has a negative effect on dividend policy

According to Banerjee, Gatchev and Spindt (2005), firms with lower liquidity stocks are more likely to issue dividend payment while firms with higher liquidity stocks have a lower incentive to issue dividends. They also added that firms that distribute dividend payments will have lower liquidity as it will helps to lower down the liquidity risk exposure faced by the firms. Thus, liquidity seems to have negative relationship with dividend policy according to their research of New York Stock Exchange (NYSE) and American Express (AMEX) firms from year 1963 to 2003.

On the other hand, Anil and Kapoor (2008) argued that liquidity is a strong factor in setting dividend payouts as liquidity determines generated cash and affecting dividend payments as it will influence company's ability to pay. They also added that liquidity and dividend policy has a positive and significant relationship as the flow of dividend is depends highly on liquidity according to their research in India's Information Technology (IT) industry from year 2005 to 2006.

H_{3B}: Firm size has a positive effect on dividend payout

The theory of firm size and dividend payout are positively correlated is widely accepted by many financial economists. A firm's size is expected to explain the firm's dividends policy. It is found that large corporations tend to pay dividends than small companies when tax-capitalization assumption holds. Besides, the capital structure of firms significantly influences dividend payout across but in terms of size-wise there is an insignificant relationship between dividend payout and capital structure. This relationship is supported by the choice of dividend policy made by managers to minimize the cost of equity capital is determined by firm size and market liquidity (Lee, 1995).

Adelegan (2006) studied the impact of growth prospect, leverage and firm size as determinants of dividend policy on dividend behavior of corporate firms in Nigeria. Dividend yield and cash flows are higher for small firms than large firms as firm size increases, cash flow decreases which are consistent with a higher demand for cash flows in large firms. Profit after tax and total distribution earnings are higher for large sized firms than for small firms as more debt in their capital structure. From the estimation of data on the basis of firm size, researcher found that after tax earnings explains the dividend behavior of small and medium-sized firms. There is a significant relationship exists between firm size and dividend payout. Research by Al-Najjar (n.d.) on Jordanian firms also proved that there is strong positive relationship

between firm size and dividend payout decision. The large Jordanian firms tend to be more diversified than smaller firms and hence less likely to be susceptible to financial distress and more able to pay dividends to the shareholders. This relation is supported by the transaction cost theory of dividend policy (Holder, Langrehr and Hexter, 1998; Gul and Kealey1999; Koch and Shenoy, 1999; Chang and Rhee, 2003; Ho, 2003; Aivazian, Booth and Clearly, 2003).

Kapoor (2006) studied on the impact of dividend policy on shareholders' value in Indian firms. The researcher proved that there is a negative relationship between firm size and dividend policy. In other word, small size firm pay more dividends to shareholder in order to attract them to invest and compensate for the risk they involved. Besides, they found that service provider company prefer retain the fund than giving out dividend for future investment opportunity.

H_{4B}: Leverage has a negative effect on dividend policy

Previous researcher, Al-Kuwari (2009) supported that leverage appears to be a strong and significant factor with dividend payout ratio but both variables have negative relationship with each other. When firms leverage ratio rises, their dividend payout ratio drops. A high levered firm bares high transaction cost from exterior financing and firms are being forced to maintain their internal funds by issuing lower dividends, added by Al-Kuwari (2009). Aivazian, Booth and Cleary (2003) have done research results in higher leverage consistent with lower dividend payments due to financial limitation. Al-Najjar (n.d.) supported with the result of negative relationship between leverage and dividends, explaining with low debt ratio are more willing to pay higher dividend value.

H_{5B}: Risk has a negative effect on dividend payout

Gul (1998) suggested the dividend payout and risk are negative correlated. The higher the business risk, the higher chance company will bankrupt, so this eventually lower down the possibility to pay dividends. The negative sign means company paying lower dividends because equity can finance through borrowings and receiving dividends limits the right of the firm to using tax-deductibility of interest payments. Another research performed by Al-Najjar (n.d.) also supports the negative relationship on his study to investigate dividend policy decisions in Jordan non-financial firms. The purpose is to study factors affect dividend policy such as business risk, profitability, firm size, growth rate and others. He argued that business risk is one of the important determinants for dividend policy.

"The risk management reduces the power of dividend changes to predict future changes in earnings", this quote is stated by Dionne and Ouederni (2011). The research studied about the effect of risk management on dividend policy. The result showed the higher risk level, the lower will be the dividend increases. In the study conducted by Fama and French (2000), they said catering is become insignificant once risk is controlled. It means risk is related to disappearing dividends. The result is supported by a series of tests and samples.

H_{6B}: Earnings per share have a positive effect on dividend payout

Average earning per share is the significant determinant of average dividend payment. Adesola and Okwong (2009) found that the degree of the impact of earnings per share on share market prices is greater than that of dividend payment. Lintner (1956) developed in his study a statistical model to consider the smoothing process in dividend payment (as cited in Al-Najjar, n.d.). He assumed that firms will always

stick to their target payout ratios. Therefore, the expected dividend payments are positively proportion to the firms' earnings per share. The finding is further supported by Al-Najjar (n.d.) result that earnings per share are statistically significant with dividend per share.

Higher dividends payout would be associated with lower earnings because decline in the funds that are to be reinvested by the firm. However, there is no exact relationship between dividends and earnings. Farsio, Geary and Moser (2004) hypothesize that no significant relationship between earnings and dividend holds in the long run.

H_{7B}: Growth has a positive effect on dividend payout

Vermeulen and Smit (2011) studied about the dividend payout and future earnings growth in South African, and then compare it to USA. The study used an enormous sample size which they selected 12 669 companies from the year 1973 to 2009 in a developing country, South Africa. The researchers' result showed that the lesser the available funds for financing growth, the lower the future earnings growth. This is supported by this recent study, the higher dividend payout ratio, the higher the future growth. This indicates a positive relationship between dividend payout and growth. Therefore, dividend payout ratio must be taken into consideration when evaluating growth expectation.

The result is consistent with the researched by Parker (1995). He agreed on the higher payout ratio, the higher the growth in market earnings. Besides, it is also consistent with Gwilym, Seaton, Suddason and Thomas (2004). They selected 11 countries from 30 OECD nations that represent the industrialized world. The data is extracted from Date Stream, an online database that provides all listed companies information. The

researchers broaden the research by examining whether the positive relationship works in the 11 international markets.

Model 3:

H_{1C}: There is relationship between profitability, liquidity, firm size, leverage, risk, earning per share, and growth to dividend policy that will affect firm value

Based on our previous researches, we can see that out of the seven factors, there are 5 factors that have negative relationship with dividend policy which are profitability, liquidity, firm size, leverage and risk. By referring to the research result of Grullon, Michaely, Benartzi and Thaler (2005) as well as Grullon, Michaely and Swaminathan (2002), there are strong evidences supporting that dividend policy and profitability are negatively significant to each other. As for liquidity, studies showed that firm that issue low liquidity stocks will have a higher dividend payment issued to shareholders and vice versa, added by Banerjee, Gatchev and Spindt (2005). Moreover, Adelegan (2006) and Al-Najjar (n.d.) support there is a positive relationship between firm size and dividend policy. Next, studies found that leverage seems to be strong factor which negatively related with dividend policy. According to past researchers Al-Kuwari (2009), Aivazian, Booth and Cleary (2003) and also Al-Najjar (n.d.), firms with high leverage ratios will have reduce their dividend payout ratios in order to sustain their interior financial support. Lastly, derived from the studies of Al-Najjar (n.d.) along with Dionne and Ouederni (2011), risk and dividend payout are negatively correlated with each other. This is due to higher risk in business, the chances of company facing bankruptcy is higher and thus, company tends to cut down dividend payments, added by Gul (1998).

Nevertheless, studies showed that earnings per share and growth have positive relationship with dividend policy. Adesola and Okwong (2009) have a consistent result with Al-Najjar (n.d.) that there is strong evidence showing that earnings per share have a positive and significant relationship with dividend payout and it seems to be a strong determinant in decision making of dividend payment. Other than earnings per share, growth is the only other factor that we found positively correlated with dividend policy. As supported by Vermeulen and Smit (2011), Parker (1995) as well as Gwilym, Seaton, Suddason and Thomas (2004), higher dividend payout ratio leads to higher market growth and also higher future growth of firm, showing a positive relationship between dividend policy and growth.

The independent variables above show different relationships with dividend policy and causing different effect on it. However, dividend policy has its own impact on firm value as well. Barclay and Smith (1999), Fama and French (1998) and Setia-Atmaja (2010) conducted researches and all results supported that dividend policy has a strong and positive impact on firm value, showing a clear and significant relationship between these 2 factors. In order to protect shareholders, board of directors and audit committees are suggested to increase insiders' profit, added by Raheja (2005). Thus, increasing dividend payout will cause rising of firm value as well.

In conclusion, we are expecting to see the studies of relationship in our research are consistent with the findings of previous researchers. We are looking forward to get the result proving the existence of negative relationship between the factors (profitability, liquidity, firm size, leverage and risk) with dividend policy whereas for earnings per share and growth, the result is expected to be positively correlated with

dividend policy. On the other hand, the ultimate finding of dividend policy is estimated to have a positive impact on firm value.

2.5 Conclusion

After the review of various past studies, various measurement standards were identified in establishing the proposed framework of the study. Hypotheses were developed in accord with the research objectives and research methodology involved will be identified in next chapter.

CHAPTER 3: RESEARCH METHDOLOGY

3.0 Introduction

This chapter describes the research method used for gathering relevant data that used to test the hypotheses developed in chapter two is describing in this chapter. Research methodology development also provide a guideline on how the research should be carried out in terms of determining the research design, data collection methods, sampling design.

3.1 Research Design

Our research intends to investigate the factors that affecting dividend policy that will eventually have an impact on firms' value in the Foods and Beverages under consumer production sector in Malaysia. This research will study about the key factors that imply the affect to share value of our research firms. Secondary research sources will be used in this research. Secondary data such as the annual report of each firm will be observe and compare to conduct the analysis. Furthermore, the descriptive research method that involves gathering quantitative and qualitative data will also be implied to utilize our research.

In this research, it will mainly based on the findings through quantitative research method as it will provide a more accurate result to determine the factors that have impact on firms' value. Although there are a few modification in the sample data and methodology to be use, consumer product sector appears to be the final decision as the data is large enough to have a more accurate analysis for this research.

3.1.1 Descriptive Research

In order to answer the hypotheses and research problems stated in chapter one and also to quantify the data and analyze the statistical results obtained from the sample population; descriptive research method will be used in this study.

3.2 Data Collection Methods

Secondary data is collected on the course of the research. The data for this study is collected through our university Data Stream database. Data Stream is used because it is easy and faster to obtain the data. The permanence of data and availability further encourage us to choose secondary data. We carried out our research based on the food production sector as the sample data for our research. This sector appears to have more data available and most of the companies from this sector are the necessity in our daily life. We have chosen data over 5 years period which is between years 2006 to year 2010 to carry out our research to make sure the data we obtained are up-to-

date. From the data found in database, we looked into report to get information needed to perform our calculation on the variables.

3.3 Population, Sample and Sampling Techniques

The target population is the companies in food products industry located in Malaysia. Among the total sample of 89 companies, there are a total of 67 companies provided complete data needed to be used in our research. As we have tried to search previously with the construction sector, plantation sector and technology sector, the result was disappointing as they failed to supply adequate data for this research. We believe that with the greater number of data available, the more accurate the results we can get for our research. Moreover, data from year 2006 to year 2010 have been chosen as our research duration. This is because it contains the most current data of the companies and we can get a more up-to-date result for our analysis. We obtain data for 5 years from each company in our research in order to carry out a more accurate analysis and able to compare company's performance in these 5 years time. However, 25% of the firms from our sample data failed to provide the data needed and have to be eliminated from our research.

3.4 Statistical Treatment of Data

In this section, the analysis on determinants of firm value based on statistical method and further explanation on each variable to be use will be presented. After the data with the duration for 5 years being collected, an equation of variable has been formed to conduct our analysis, which is:

$Y = \beta_o + \beta_1 x_1 + \beta_2 x_2 + \ln\beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7$, where

Y = Firm value by ROE

$\beta_1 x_1$ = Profitability measured by net profit margin in ratio

$\beta_2 x_2$ = Liquidity measured by current ratio

$\beta_3 x_3$ = Firm Size using log total assets

$\beta_4 x_4$ = Leverage using debt-to-equity ratio

$\beta_5 x_5$ = Risk using beta

$\beta_6 x_6$ = Earnings per Share (EPS)

$\beta_7 x_7$ = Growth as in book value of asset

3.4.1 Return on Equity (ROE)

Value of the firm is often measured in terms of the share prices. Often the firm performance is reflected with the pattern of dividend payments over time and the association with return on equity (ROE). ROE is used to calculate the firm

value because ROE gauges a company's ability to generate earnings from its investments and shows how effectively a company's management uses investors' money. In other word, ROE shows whether management is growing the company's value at an acceptable rate.

Al-Debi'e and Mustafa (2011) study on the relationship between market-to-book ratio (MV/BV) and return on equity (ROE) for a sample of firms listed on Amman Stock Exchange in Jordan from 2000 to 2009 found that distinguishing positive ROE from negative ROE in respect to their association with MV/BV is essential especially for small firms, industrial firms, and during period of low GDP growth rates. Wilcox and Philips (2005) enhanced the ROE to illuminate its use by applying it to be explanation of prices and the prediction of returns of both individual securities and market indexes. They have tested a model of security prices that is both simple and analytically tractable, and both economically and statically significant. Naffi and Clubb (2007) paper presented strong evidence that a simple linear model of ROE explains significant portion of the cross-sectional variation in future stock returns. We found that the higher a company's return on equity, the better the performances as compared to the industry.

Return on Equity (ROE) = Net Income / Average Stockholders' Equity

3.4.2 Profitability

The profitability ratio is a very strong determinant for dividend payout ratio, supported by Raya (2008) who uses net profit margin (NPM), or sometimes known as net income per net sales on testing the operating profitability in his

research paper. He also proved that net profit margin (NPM) is a significant factor as supported by his empirical data observation on top performing corporations according to their gross revenue in Philippine from year 1997 to year 2006 as an independent variable in testing the impact on return on equity (ROE), and they are positively correlated. Moreover, Quayyum (2012) measures profitability of selected firms from 4 different industries as listed in Dhaka Stock Exchange (DSE) in Bangladesh which are cement industry, food industry, pharmaceuticals industry and engineering industry, from year 2005 to year 2009 by using net profit margin (NPM) with the formula of net profit divided by sales.

Net Profit Margin = Net Income / Sales Revenue

3.4.3 Liquidity

Liquidity is a very crucial component in contributing to company's performance. According to our studies, if a company is in liquid position, it may require more cash to buy asset for business expansion, vice versa.

Referring to Chabotar (1989), current ratio is most widely used in indicating financial strength though many companies and non-profit organization also uses quick ratio and available funds ratio to approximate the liquidity ratio. Current ratio is popular due to the capability of meeting obligation with margin of safety in order to prevent value dropping in current asset, with receivables and stocks in particular. Edum-Fotwe, Price and Thorpe (1996) also supported that company which uses liquidity ratio is commonly used in

measuring company's potential capacity in meeting short-term debt obligations while current ratio is commonly used in indicating the ability to overcome short term obligations of firms by determining time and action required.

In addition, according to Costea and Hostiuc (2008), the general liquidity rate measures the company capacity to face obligations on short term by comparing all potential liquidity to the current assets with debt incurring that due in less than one year. The calculation formula for liquidity current ratio reports the current assets to current liabilities, with the margin of indicator between 0 and 1. If the ratio drops below 1, the company is predicted to be de-capitalized and having problems in repaying their short term debt. If the ratio is above 1, the cap of this indicator will be maximized at 2 and the company will be assumed to have a high ability to deal with short term obligations.

Current ratio = Current Assets / Current Liabilities

3.4.4 Firm Size

Firm size plays differing parts in managing earnings or earnings changes. The firm size may have a positive impact on earnings management. High growth firms have better access to capital market and are exposing to more investment opportunities. Larger companies may have more complicated internal control systems and have more skilled internal auditors as compared to smaller companies. Burgstahler and Dichev (1997) found that both large and small-sized firms manage earnings to avoid small negative earnings or earnings

decreases. Ramachandran and Packkirisamy (2010) examined the impact of firm size on the dividend behaviour of 73 corporate firms in India and log total assets measure is used to measure sample firms with various sizes. The study proved that dividend policy of small size, medium size, large size and overall corporate firms across industries in India is dependent on the level of debt in capital structure. The method used is consistent with Kouki (2009) research to measure relationship between firm size and dividend payment.

Benson and Davidson III (2009) used log total asset (LN TA) to measure firm size in their research to avoid any complex consequence of firm size on firm performance. Total assets are derived from firms' financial statements. Log transformation makes distribution of data closer to normal distribution and also makes interpretation of results easier because the changes in the logarithm domain represent percentage changes in the original metric. It is often posited that firm size can influence value of a firm. Therefore, log of total assets is used as a variable in the analysis to control for the effects of firm size (Ziedonis, 2004).

Firm size = log (Total Asset)

3.4.5 Leverage

Leverage is important to the company, because a company's leverage relates to how much debt it has on its balance sheet, and it is another measure of financial health. The more debt a company has, the riskier its stock is and generally bondholders have the priority to claim the company's assets in the

event of liquidation. Debt to equity ratio is used to measure how much of the company is financed by its debt holders compared with its owners. A company with a lot of debt will have a very high debt to equity ratio, while one with little debt will have a low debt to equity ratio. Assuming everything else is identical, companies with lower debt to equity ratios are less risky than those with higher such ratios.

Jensen (1986) research showed that as leverage increases, the usual agency costs of debt rise, including bankruptcy costs. The optimal debt-equity ratio is the point at which firm value is maximized, the point where the marginal costs of debt just offset the marginal benefits. It is further supported by Fama and French (1998) that high level of leverage signalling the company is unstable and agency problems between the stockholder and bondholder arise.

Besides that, Bowman (1980) also stated that leverage (debt to equity ratio) is an important variable in issues concerning the risk of a firm. He studies have generally found that a high debt to equity ratio in a company will affect the opportunity investment in the company. When come to investment, company will face higher risk in a high leverage compare to the company with low leverage.

Debt to Equity Ratio = (Short-Term Debt + Long-Term Debt) / Total Equity

3.4.6 Risk

Company risk brings a chance than an investment's actual return will be different than expected return, which will lead to a loss. A company loss will affect a company value indirectly. In the article named Beta, firm size, and concentration, the author, Binder (1992) stated that the asset beta of a firm is defined as the uncertainty about the firm's future value scaled by its current value. The research found that beta is negatively correlated to firm value. This shows that market power can affects beta. We have decided to use market beta to assess the companies' credit worthiness in our research. Villalonga and Amit (2004) also used market beta as the determinant of firm value. The objective of this research is to test how family ownership, control and management affect firm value. The data of this research is taken from proxy data on all Fortune 500 firms from year 1994 to 2000.

3.4.7 Earnings per Share (EPS)

Earnings per share are chosen as one of our independent variable because of its importance in determining shares price. It also represents the portion of the company's earnings (after the taxes and preferred share dividends) that distributed to each share of the company's common stock. A company that achieves good earnings will boost up its share price relatively share price drops when the company having poor earnings. This shows company earnings reflect future share price.

From the research conducted by Patell (1976), there is a statistically significant upward of stock price for firms which voluntarily issued forecasts of earnings per share. The subsequent price behavior was relatively level for the positive forecast group and continued to decline for the negative forecast group. When firms have use reported per-share earnings as an input, yield upwardly biased estimates of the market value of common stock. This is consistent with Core, Guay and Kothari (2002) article. This is also supported by Al-Najjar (n.d.). He used earning per share to investigate dividend behavior. He found that earning per share and dividend per share are both positively correlated.

Earnings per Share (EPS) = Net Income / No. of common stocks outstanding

3.4.8 Growth

A company's expected revenue growth is one of the most important factors investors use in determining the potential future stock price of that company. The value of common stocks is closely tied to the earnings power of the company. A fundamental understanding of the company's growth potential for both the near and long-term timeline is necessary in making a sound investment decision.

Barclay, Smith and Morellec (2006) predicted that the debt capacity of growth options is negative allows a new economic interpretation of the regressions of book leverage (debt divided by the book value of assets) on proxies for the investment opportunity set. The logic behind using the market-to-book ratio as a proxy for the value of a firm's growth options implies that the book value of assets serves as a proxy for the value of the firm's assets in place. Barber and

Lyon (1997) also used market to book ratio to analyze the relationship between growth, firm size and security returns for nonfinancial firms. The results show survivorship bias does not affect firm size or growth in returns neither in financial or nonfinancial firms.

Market to Book ratio = Market Price of Common Stock per Share / Book Value of Equity per Common Share

3.4.9 Dividend Policy

Dividend payout ratio is used as the determinant of dividend policy. This ratio provides estimation on how well earnings can support the dividend payments. Usually the high dividend payout ratio means the company is more mature and stable. Al-Najjar (n.d.) said that dividend policy of a company is extremely important in determining whether to pay dividends to shareholder. The researcher used dividend payout ratio to find out the dividend policy decisions for nonfinancial company in Jordan. The factors used to evaluate dividend policy are leverage ratio, profitability, business risk, growth rate and firm size.

This equation is also supported by Gul (1998). This paper mainly focuses on the relationship between growth opportunities, capital structure and dividend policies. The researcher defined dividend policy into two which are dividend payout ratio and dividend yield. There are many insignificant results between independent and dependent variable. This is caused by the omitted variables problem and incorrect specification of the model. The ratio is also used by Grullon, Michealy and Swaminathan (2002) to determine the relationship of

dividend policy and profitability. Aivazian, Booth and Cleary (2006) also used dividend payout as the determinant of dividend policy on public debt. The paper found that most of the firms with bond ratings applying traditional dividend smoothing policy, where the influence of historical dividend payment is very strong and the current dividend is insensitive to current earnings. Moreover, Aivazian, Booth and Cleary (2003) studied about dividend behaviour on profitability, debt and market to book ratio in US firms. They are also using dividend payout as the equation for dividend policy.

Dividend Payout Ratio = Dividend per Share / Earning per Share

3.5 Data Analysis Technique

3.5.1 Descriptive Analysis

Descriptive analysis is the transformation of data that describe characteristics such as central tendency, distribution and variability. Descriptive statistics is used to represent, manage and simplify large amounts of data in a more meaningful and sensible way. We used Microsoft Excel to compute our calculations and also make it easy for percentage computation. Besides, we will also use E-views 5.0 which is a computerized program to analyze the results calculated from the Microsoft Excel.

3.5.2 Regression Analysis

Regression analysis helps to determine whether the independent variables explain a significant variation in the dependent variable: whether a relationship exists. Besides, it also useful to determine how much of the variation in the dependent variable can be explained by the independent variables: strength of the relationship. For this study, we use Simple Linear Regression Analysis and Multiple Linear Regression Analysis. Simple Linear Regression analysis is used to test whether each of the independent variables affecting the dependent variable. OLS estimation is performed. Multiple Linear Regression Model is used to analyze the data as to examine in-depth on the significant level of the relationship between the independent variables and dependent variable. We will perform normality test to whether there is any problems exist such as multicollinearity, heteroscedasticity, autocorrelation, and model specification. The following are the assumptions that to be incorporated in the test:

i. Multicollinearity

Multicollinearity is the condition where the independent variables are related to each other. In other words, multicollinearity problem occur when two or more independent variables are highly correlated. Variance Inflation Factors (VIFs) is used to check whether there is multicollinearity problem. If the VIF is greater than 10.0, then multicollinearity is probably severe.

ii. Autocorrelation

Autocorrelation is simply the presence of correlation between adjacent (contemporaneous) residuals. Durbin-Watson d Test is performed to check whether autocorrelation exist. If d calculated is equal to 4 or p equal to -1, there is perfect negative autocorrelation. If d calculated is equal to 2 or p equal to 0, there is no autocorrelation. Lastly, if d calculated is equal to 0 or p equal to 1, there is perfect positive autocorrelation.

iii. Heteroscedasticity

Heteroscedasticity is a problem where the error terms do not have a constant variance. Autoregressive Conditional Heteroscedasticity (ARCH) test is used to check whether there is heteroscedasticity.

iv. Model Specification

There are 4 types of misspecification that need to be examined such as functional form, inclusion of an irrelevant variable, exclusion of a relevant variable and measurement error and misspecified error term. To test whether there is model specification error, Ramsey RESET test which is also called Regression Specification Error Test is conducted.

v. Normality Test

Normality test is performed by using histogram of residuals or Jarque-Bera (JB) Test. If the histogram appears to have the bell-shaped normally distributed curve, it is assumed that the normality requirement has been met.

3.6 Conclusion

In this chapter, we have discussed on research design, data collection methods, population, sample and sampling techniques, statistical treatment of data and data analysis. Furthermore, we also have discussed on how the research can be carried out and this section will contribute to the input of the following chapter which is Data Analysis.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

From the previous chapters we studied about how the dividend policy affecting firm value in terms of ROE in Malaysia for Foods and Beverages under consumer products industry and the review of relevant theoretical models, empirical studies, theoretical framework, hypotheses development as well as research method used in gathering relevant data used to test the hypotheses. In this chapter, we form three different economic models and run OLS regression to test multicollinearity, autocorrelation, heteroscedasticity, model specification test and normality test. Besides, we will also determine the relationship between variables.

Table 4.0: Diagnostic Checking

	Model 1		**Model 2**		**Model 3**	
	Prob. F	Prob. Chi-Square	Prob. F	Prob. Chi-Square	Prob. F	Prob. Chi-Square
Multicollinearity	No Multi Problem		No Multi Problem		No Multi Problem	
Autocorrelation	0.2207	0.1773	0.4759	0.4225	0.2475	0.1960
Heteroscedasticity	0.7732	0.7690	0.7645	0.7601	0.7645	0.7601
Model Specification Test	0.0004	0.0001	0.2967	0.2600	0.0004	0.0001

Multicollinearity

Multicollinearity is the undesirable situation where the correlations among the independent variables are strong. When two variables are highly correlated, they both convey same information. In this case, neither may contribute significantly to the model after the other one is included. In other words, multicollinearity misleadingly inflates the standard errors. Thus, it makes some variables statistically insignificant while they should be otherwise significant.

From the result that we run via e-view, we expected that the three models have no multicollinearity problem. The results show that all the independent variables are not highly correlated with dependent variables which are less than 0.70.

Autocorrelation

H_0: There is no autocorrelation problem.

H_1: There is an autocorrelation problem.

The decision rule is to reject H_0 when probability value of F-statistic is less than 0.1, 0.05 and 0.01, otherwise, do not reject H_0. Since our results show the probability value of F-statistic on model 1 (0.2207), model 2 (0.4759) and model 3 (0.2475) are higher than the level of significant (0.1, 0.05 and 0.01), thus, we do not reject H_0 as there is significant evidence to conclude that there are no autocorrelation problems on these three models.

Heteroscedasticity

H_0: There is no heteroscedasticity problem.

H_1: There is a heteroscedasticity problem.

The decision rule is to reject H_0 when probability value of F-statistic is less than 0.1, 0.05 and 0.01, otherwise, do not reject H_0. Since our results show the probability value of F-statistic on model 1 (0.7732), model 2 (0.7645), and model 3 (0.7645) are higher than the level of significant (0.1, 0.05 and 0.01), thus, we do not reject H_0. Therefore, there is no heteroscedasticity problem.

Model Specification Test

H_0: The model is correctly specified.

H_1: The model is not correctly specified.

We reject H_0 if the probability value of F-statistic is less than level of significant (0.1, 0.05 and 0.01), otherwise do not reject H_0. Since the probability value for F-statistic for model 1 and model 3 are 0.0004 which are less than level of significant (0.1, 0.05 and 0.01), we reject H_0.There is significant evidence to conclude that the model is not correctly specified. In model 2, the probability value for F-statistic is 0.2967 which is more than the level of significant (0.1, 0.05 and 0.01), we do not reject H_0. There is significant evidence to conclude that the model is correctly specified.

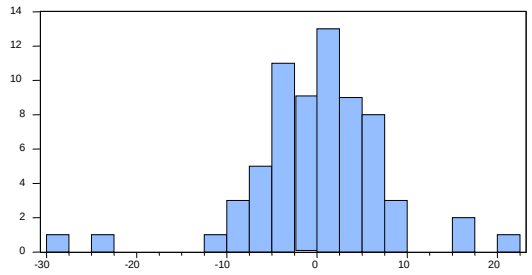
Normality Test

H_0: This test is error term is normally distributed.

H_1: The error term is not normally distributed.

Model 1:

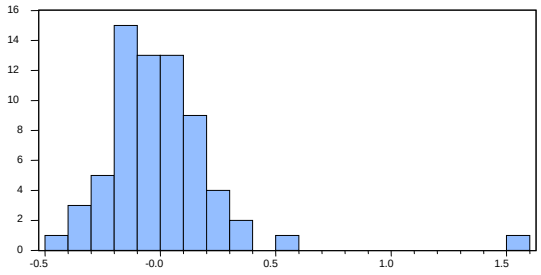
Figure 4.0



Series: Residuals	
Sample 1 67	
Observation 67	
Mean	9.68E-16
Median	0.478303
Maximum	21.466890
Minimum	-28.825920
Std. Dev	7.497015
Skewness	-0.716180
Kurtosis	6.607782
Jarque-Bera	42.064120
Probability	0.000000

Model 2:

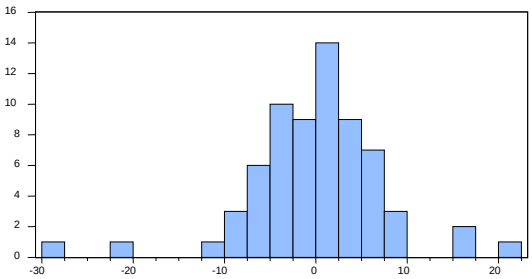
Figure 4.1



Series: Residuals	
Sample 1 67	
Observation 67	
Mean	1.99E-17
Median	0.017788
Maximum	1.522990
Minimum	-0.407382
Std. Dev	0.263320
Skewness	2.963435
Kurtosis	18.029160
Jarque-Bera	728.63430
Probability	0.000000

Model 3:

Figure 4.2



Series: Residuals	
Sample 1 67	
Observation 67	
Mean	2.07E-15
Median	0.664370
Maximum	21.16847
Minimum	-29.03075
Std. Dev	7.486208
Skewness	-0.714213
Kurtosis	6.562009
Jarque-Bera	41.11652
Probability	0.000000

The decision rule is to reject H_0 if the probability value of F-statistic is less than the level of significant (0.1, 0.05 and 0.01), otherwise do not reject H_0. The P-value of JB-stats for model 1, 2 and 3 are 0.0000 which is less than 0.1, 0.05 and 0.01. Thus, we reject H_0. This shows that the error term is not normally distributed.

4.1 Descriptive Analysis

Table 4.1: Descriptive Table

Sample companies: N= 67	**Mean**	**Median**	**Maximum**	**Minimum**	**Standard**

					Deviation
ROE (firm value)	8.0204	9.2080	57.4940	-38.0240	12.3244
Current Ratio (liquidity)	4.1814	1.7320	65.5560	0.2520	8.7722
Debt Equity (leverage)	53.6523	24.3360	330.2700	0.0000	65.8986
EPS	0.1982	0.1192	1.4000	-0.0952	0.2771
Market to Book Ratio (growth)	1.3542	0.9340	14.0300	0.2560	1.7642
Firm Size	5.5965	5.5540	7.1639	4.6451	0.4866
Net Margin (profitability)	15.0381	8.9060	126.0720	-81.6700	29.0085
Dividend Payout (dividend policy)	0.3166	0.2593	2.0006	-0.0411	0.3146
Beta (risk)	0.9389	0.9370	1.7050	0.2480	0.3504

In our study, the firm value on average has a minimum return on equity of -38.02% whereas it shows 57.50% of maximum return on equity. A business that has a high return on equity is more likely to be the one that is capable of generating cash internally. Therefore, the higher a company's return on equity compared to its industry, the better. We also studied how dividend policy affects firm value in Malaysia food and beverages production industry and we find that there are several variables that will cause an effect on dividend policy such as liquidity, leverage, earning per share, growth, firm size, profitability and risk. According to Ahmed and Javid (2009), liquidity has a positive effect on dividend payout which means the higher the liquidity, the greater the dividend payout. This makes the firm value to increase their dividend payout. Our study also shows that the current ratio (liquidity) has a median of 1.73 and standard deviation of 8.77%. Besides, the minimum and maximum points of current ratio on average are 0.25 and 65.56 respectively. These show that the liquidity is not high enough in order to generate greater firm value. On the other hand, we find that the debt equity (leverage) in our study is high where the maximum of debt and standard deviation goes to 330% and 65.90% respectively. While running our test, we do not limit the maximum and minimum leverage ratio of

our data and the maximum of 330% is considered as an outlier. As a result, the higher the debt, the lower the firm value will be. This theory is supported by Al-Kuwari (2009) along with Fama and French (2000) who supported that the lower the market leverage, the higher the profit gain. Fortunately, we get the result of zero on the minimum debt ratio.

Furthermore, the variables such as earning per share, market to book ratio (growth), firm size and net margin (profitability) are said to be the higher, the better as they are positively correlated on firm value according to our studies. This is supported by Core, Guay and Kothari (2002) and Patell (1976), where they have conducted several tests to prove that higher the earning per share, the greater the yield on market value of common stock and causing the yield on firm value to increase. Besides that, Gompers, Ishii, and Metrick (2003) as well as Chi (2005) also supported that the slow growing firms will have a low firm value. Moreover, firm size too, having a positive impact on earnings management. Profitability brings a huge impact on firm value, where Siegel (1989) found that change in expectations of future company profits will immediately cause changes in the level of firm value, which means the greater the increase in firm profit, the greater enhance in firm value. As a conclusion, our study shows that the median for earning per share, market to book ratio (growth), firm size and net margin (profitability) are 12%, 93%, 5.55% and 8.90% respectively. The standard deviations are 0.28% (earning per share), 1.76% (market to book ratio), 0.49% (firm size) and 29% (profitability).

In addition, through our study, we get to know that risk does make the changes in firm value, where the higher the risk, the bigger the firm value. In other words, high risk will lead to high return. According to Zhu (2006), higher expected return on share is due to higher volatility and higher risk-free rate, causing market price to rise

and thus, the firm value will increase. On average, the minimum and maximum betas in our study are 25% and 170% respectively. The median is 94% and the standard deviation is 35%. Some companies tend to invest in a higher risk investment with the thought of getting higher return and greater firm value in return.

4.2 Scale Measurement

Economic Function

Model 1:

Firm Value = f (Liquidity, Leverage, Earning per Share, Growth, Firm Size, Profitability, Risk)

Model 2:

Dividend Policy = f (Liquidity, Leverage, Earning per Share, Growth, Firm Size, Profitability, Risk)

Model 3:

Firm Value = f (Liquidity, Leverage, Earning per Share, Growth, Firm Size, Profitability, Risk, Dividend Policy)

Economic Model 1:

$$FIRMVALUE_t = \alpha_o + \alpha_1 LIQUIDITY_t + \alpha_2 LEVERAGE_t + \alpha_3 EPS_t + \alpha_4 GROWTH_t + \alpha_5 FIRMSIZE_t + \alpha_6 PROFITABILITY_t + \alpha_7 RISK_t + \varepsilon_t$$

Economic Model 2:

$$DIVPOLICY_t = \alpha_o + \alpha_1 LIQUTIDITY_t + \alpha_2 LEVERAGE_t + \alpha_3 EPS_t + \alpha_4 GROWTH_t + \alpha_5 FIRMSIZE_t + \alpha_6 PROFITABILITY_t + \alpha_7 RISK_t + \varepsilon_t$$

Economic Model 3:

$$FIRMVALUE_t = \alpha_o + \alpha_1 LIQUTIDITY_t + \alpha_2 LEVERAGE_t + \alpha_3 EPS_t + \alpha_4 GROWTH_t + \alpha_5 FIRMSIZE_t + \alpha_6 PROFITABILITY_t + \alpha_7 RISK_t + \alpha_8 DIVPOLICY_t + \varepsilon_t$$

Table 4.2: Econometric Testing

	Model 1	**Model 2**	**Model 3**
F-Stats	0.000000	0.002683	0.000000
R^2	0.629961	0.299594	0.631027

F-stats

H_o: All independent variable is not important in explaining the dependent variables.

H_1: At least one independent variable is important in explaining the dependent variables.

Since the probability of model 1 (0.0000), model 2 (0.002683), and model 3 (0.0000) are less than the significant levels 0.01, 0.05 and 0.1. Therefore, we reject H_o and conclude that at least one independent variable is important in explaining the dependent variable.

R^2

R^2 is mainly used in trend analysis. It is computed as a value between 0 (0%) and 1 (100%). The higher the value of R^2, the better is the fit.

For model 1, the R^2 is 0.629961 (63%), where model 2 is 0.299594 (29.96%), and model 3 is 0.631027 (63.10%) which means that 0.629961 (63%), 0.299594 (29.96%), and 0.631027 (63.10%) of the variation in the dependent variables of the model 1,2 and 3 can be explained by the variation in the independent variables. R^2 will increase when we add in more independent variables, but if adjusted R^2 goes down, this means that the additional independent variables did not contribute much to the explanation of the model.

4.3 Inferential Analysis

Run the OLS regression

Model 1:

Table 4.3: OLS Regression Table

Variable	Coefficient	T-Statistic	Prob.
LIQUIDITY	-0.2452	-1.8720	0.0662*
LEVERAGE	-0.0370	-2.2040	0.0314**
EPS	11.6012	2.4706	0.0164**
GROWTH	3.3310	4.6879	0.0000***
FIRMSIZE	-1.4389	-0.6696	0.5057
PROFITABILITY	0.1155	2.6950	0.0092***
RISK	1.0607	0.3723	0.7110
C	9.5408	0.7779	0.4397

*Significant level: ***1%, **5%, *10%*

As referred to model 1, our result suggested that liquidity has a negative relationship with firm value which is not linear with the hypothesis that we mentioned in chapter 2, thus, our hypothesis on H_{2A} is rejected. We also found that stocks with aggregate liquidity will eventually leads to a higher expected return even after deducting market return exposures, supported by Pastor and Stambaugh (2001). However, Banerjee,

Gatchev and Spindt (2005) hypothesized that liquidity is negatively related to firm's payout policy as demand for cash dividends in illiquid market is greater.

Next, according to our result in model 1, leverage has negative relationship with firm value and hypothesis (H_{4A}) is accepted. This result is consistent with Lang, Ofek and Stulz (1994) where leverage has a negatively effect on firm value and it is assumed to depend directly on future growth and irrespective of which variables are used to forecast growth.

Moreover, EPS shows to have positive relationship with firm value in our results and hypothesis H_{6A} are accepted. This is linear with Patell's (1976) that a statistically significant upward change in price during forecast disclosure of stock price behaviour is based on the voluntarily issued forecasts of earning per share.

Growth also showed to have positive signals in the result and our hypothesis, H_{7A} is accepted, as supported by of Shin and Stulz (2000) that an increase in volatility will also increases the value of growth options.

Furthermore, based on the results generated, it indicates that the firm size is negatively related to the firm value in term of ROE. However, our hypothesis (H_{3A}) supports positive relationship between these variables, which means that hypothesis (H_{3A}), is rejected. The negative relationship is supported by Schaefer (1998) as he found that there are negative relationship between pay-performance sensitivities for individuals and firm size.

In our results, profitability shows to have positive relationship with firm value and it is linear with our hypothesis H_{1A}, so our hypothesis is accepted. It is supported by Christopoulus and Vergos (2005), as they had conducted a test about publications and announcements in a company and will they affect the future movement of the share prices. The results show that investors tend to react positively to events that may lead to higher profitability.

Lastly, a positive relationship between firm value and risk is also shown in our result. It does not consistent with our hypothesis (H_{5A}). Therefore, our hypothesis H_{5A} is rejected. French, Schwert and Stambaugh (1987) supported along with Farrugglo, Michalak and Uhde (2010) that there are evidences to show the positive relationship between volatility and risk premium that will cause negative effect on common stock. However, according to Zhu (2006), higher expected return on share forms higher volatility and higher risk-free rate, causing market price to rise.

Model 2:

Table 4.4: OLS Regression Table

Variable	Coefficient	T-Statistic	Prob.
LIQUIDITY	-0.0012	-0.2537	0.8006
LEVERAGE	-0.0021	-3.4862	0.0009***
EPS	0.0465	0.2820	0.7789
GROWTH	0.0572	2.2931	0.0254**
FIRMSIZE	-0.1586	-2.1010	0.0399**
PROFITABILITY	-0.0019	-1.2779	0.2063
RISK	-0.1172	-1.1716	0.2461
C	1.3715	3.1838	0.0023

*Significant level: ***1%, **5%, *10%*

In model 2, our results show that liquidity has negative relationship with dividend policy and hypothesis H_{2B} is accepted. This is supported by Banerjee, Gatchev and Spindt (2005) as they stated that firms that distribute dividend payments will have a lower liquidity as it will help to lower down the liquidity risk exposure faced by the firms.

Next, leverage also shows a negative impact on dividend policy based our result. Therefore, hypothesis H_{4B} is accepted. This can be proved by previous researchers such as Al-Kuwari (2009) who supported that leverage appeared to be a strong and significant factor with dividend payout ratio but both variables have negative relationship with each other. When firms leverage ratio rises, the dividend payout ratio drops.

There is a positive relationship between EPS and dividend policy and it is consistent with hypothesis H_{6B}, and the hypothesis is accepted. Adesola and Okwong (2009) found that the degree of the impact of earnings per share on share market prices is greater than dividend payment. Besides, this finding is further supported by Al-Najjar (n.d.) that earnings per share are statistically significant with dividend per share.

From our results, we also got a positive relationship between growth and dividend policy and this shows that our hypothesis H_{7B} is accepted. This is supported by the research run by Parker (1995). He agreed that the higher payout ratio, the higher the growth in market earnings. Besides that, it is also supported by Gwilym, Seaton,

Suddason and Thomas (2004) who have conducted tests based on 11 selected countries from 30 OECD nations that represent the industrialized world.

However, firm size shows a negative relationship with dividend policy which indicated that our hypothesis in H_{3B} is rejected. This can be proven by small size firms that pay more dividends to shareholder in order to attract investment and compensation for the risk they bared (Kapoor, 2006).

Furthermore, profitability also shows negative effect on dividend policy and our hypothesis (H_{1B}) is accepted. This is proven by Grullon, Michaely and Swaminathan (2002) who stated that dividend increase, profits tend to decrease as well.

Lastly, in our model 2, the results show a negative relationship between risk and dividend policy accepted hypothesis H_{5B}. Research run by Al-Najjar (n.d) supported this negative relationship. This study was to investigate dividend policy decisions in Jordan's non-financial firms. Besides that, Gul (1998) also suggested that the dividend payout and risk are negatively correlated.

Model 3:

Table 4.5: OLS Regression Table

Variable	**Coefficient**	**T-Statistic**	**Prob.**
LIQUIDITY	-0.2434	-1.8443	0.0703
LEVERAGE	-0.0339	-1.8235	0.0734
EPS	11.5301	2.4364	0.0179

GROWTH	3.2436	4.3431	0.0001***
FIRMSIZE	-1.1966	-0.5333	0.5959
PROFITABILITY	0.1184	2.7068	0.0089***
RISK	1.2398	0.4272	0.6708
DIVPOLICY	1.5282	0.4094	0.6838
C	7.4448	0.5568	0.5798

*Significant level: ***1%, **5%, *10%*

In model 3, the dividend policy has a positive relationship with firm value, this has proven that our hypothesis H_{1C} is accepted. According to Iturriage and Crisostomo (2010), they found that dividends play a disciplinary role in firms with fewer growth opportunities by reducing free cash flow under managerial control. This also means that dividends are positively related to firm value when growths opportunities are absent.

Moreover, the results of other variables in model 3 such as liquidity, leverage, EPS, growth, firm size, profitability and risk are same as the results shown in model 1 and their hypothesis are accepted except for liquidity, risk and firm size. In our hypothesis (H_{2A}) stated that liquidity has a positive effect on firm value where our result shows a negative effect and it is not consistent with the hypothesis and thus, the hypothesis is rejected. Besides, in hypothesis $H_{5A,}$ risk has a negative effect on firm value, but we got a positive relationship in our result instead. Thus, we concluded that hypothesis H_{5A} is rejected. Next, in our results, we got negative effect between firm size and firm value but in hypothesis (H_{3A}), we mentioned that risk has a positive relationship towards firm value. Therefore, hypothesis (H_{3A}) is rejected.

4.4 Conclusion

After all the tests we have conducted, the results shown that our data has no multicollinearity problem and no autocorrelation problem. There is no existence of heteroscedasticity problem in the three models too. Besides that, we successfully examined the relationship between the dependent variables and independent variables on the three models. Next, we will discuss the major finding in chapter 5 in order to corroborate our research objective and hypothesis. In chapter 5, we will provide some recommendations for future research as well.

CHAPTER 5: DISCUSSION, CONLUSION AND IMPLICATIONS

5.0 Introduction

This chapter will conclude and discuss about the major findings in our research objective and hypothesis, where our research objective is to investigate how independent variables affect dividend policy that will eventually change firms' value in Malaysia listed companies for Foods and Beverages under consumer products sector. We have run the hypothesis testing in chapter 4 and there will be a summary of its outcome in this chapter. Besides, implications and limitations of study will also be shown in this chapter. Lastly, we will provide some recommendations for future research via our study.

5.1 Summary of Statistical Analysis

In chapter 4, our study shows that the current ratio (liquidity) has a median of 1.73 and 8.77% for standard deviation. Besides, the minimum and maximum on average are 0.25 and 65.56 respectively. Next, we find that the debt equity (leverage) in our study is quite high where the highest level of debt and standard deviation go to 330% and 65.90% respectively. On average, the minimum ratio and median are 0% and

24.34%. Moreover, our study shows that the median for earning per share, market to book ratio (growth), firm size and net profit margin (profitability) are 12%, 93%, 5.55% and 8.90% respectively. Subsequently, the standard deviations are 0.28% (earning per share), 1.76% (market to book ratio), 0.49% (firm size) and 29% (profitability). Lastly, we get minimum ratio of 0.25% and maximum ratio of 1.70% on beta (risk) through the research we have done earlier. The median and standard deviation for beta are 94% and 0.35% respectively.

Model 1:

Table 5.0: Inferential Analysis Table

Dependent variable : Firm Value		
Variables	**Relationship towards firm value**	**Hypothesis**
LIQUIDITY	Negative	Reject
LEVERAGE	Negative	Accept
EPS	Positive	Accept
GROWTH	Positive	Accept
FIRMSIZE	Negative	Reject
PROFITABILITY	Positive	Accept
RISK	Positive	Reject

Furthermore, in chapter 4 we have run three models to test the relationship between the dependent variables and independent variables. In model 1, we test the relationship between firm value and 7 independent variables which are liquidity, leverage, earning per share, growth, firm size, profitability and risk. Our results show

that liquidity, leverage and firm size have negative effect on firm value and the hypothesis (H_{4A}) on leverage is accepted but the hypothesis for liquidity (H_{2A}) and firm size (H_{3A}) are rejected. Whereas, earning per share, growth, profitability and risk give a positive effect on firm value and the hypothesis are accepted except for risk which the hypothesis (H_{5A}) is rejected.

Model 2:

Table 5.1: Inferential Analysis Table

Dependent variable : Dividend Policy		
Variables	**Relationship towards dividend policy**	**Hypothesis**
LIQUIDITY	Negative	Accept
LEVERAGE	Negative	Accept
EPS	Positive	Accept
GROWTH	Positive	Accept
FIRMSIZE	Negative	Reject
PROFITABILITY	Negative	Accept
RISK	Negative	Accept

Next, we run model 2 to examine the relationship between dividend policy and liquidity, leverage, earning per share, growth, firm size, risk as well as profitability. As referred from the results, only earning per share, growth and firm size are positively towards dividend policy and the hypothesis are accepted except for firm size which the hypothesis (H_{3B}) is rejected. As for the other independent variables

such as liquidity, leverage, risk and profitability are negatively related towards dividend policy, and the hypotheses are accepted.

Model 3:

Table 5.2: Inferential Analysis Table

Dependent variable : Firm Value		
Variables	**Relationship towards firm value**	**Hypothesis**
LIQUIDITY	Negative	Reject
LEVERAGE	Negative	Accept
EPS	Positive	Accept
GROWTH	Positive	Accept
FIRMSIZE	Negative	Reject
PROFITABILITY	Positive	Accept
RISK	Positive	Reject
DIVPOLICY	Positive	Accept

In model 3, we test again the relationship between firm value and liquidity, leverage, earning per share, growth, firm size, profitability and risk. In this model, we included an additional independent variable which is dividend policy and it is found to have a positive relationship with firm value. The results for other variables are same as in model 1 as well as the hypothesis testing.

5.2 Discussion of Major Findings

5.2.1 Profitability

The results that we get from our research are consistent with the objective. Profitability is significant at level 0.01 in both model 1 and model 3. Thus, it shows to be a significant factor affecting dividend policy that will eventually causes impact on firm value as subjected in our objective. This result is also supported by Al-Kuwari (2009) that profitability has a strong relationship with dividend policy as well as firm size. In Malaysia, profitability ratio affects most of the decision making in a company as return is the main factor that shareholders concern. Thus, profit is a strong factor for firm in forming dividend policy and also in determining dividend payout.

5.2.2 Liquidity

The result for this variable is also constant with the objective. Liquidity is significant at level 0.10 in model 1. This proved that liquidity is a significant factor that will affect dividend policy and also firm value. Banerjee, Gatchev and Spindt (2005) supported that liquidity is a significant factor in the issue of dividend payment, affecting shareholders' demand in market and changing

firm value. According to the data of our research years, most listed companies in Malaysia Foods and Beverages under consumer products industry has high liquidity which also means that there is high available cash ready for investment or other purposes. With higher cash in hand, argument for dividend payment will be lesser as companies still manage to earn as well as issuing high dividend.

5.2.3 Firm Size

The outcome for firm size affecting dividend policy and firm value is significant at level 0.05 in model 2 as we conducted the tests. This is consistent with our objective where firm size will affect dividend policy subsequently causing impact on firm value. As supported by Schaefer (1998) and Lee (1995), firm size has significant relationship with dividend payout ratio and also firm value in term of return on equity (ROE).

5.2.4 Leverage

According to our tests, leverage is significant at level 0.5 and level 0.01 in model 1 and model 2. This result supported with our objective as firm leverage will influence dividend policy and eventually affecting firm value. Aivazian, Booth and Cleary (2003), Al-Kuwari (2009) and Lang, Ofek and Stulz (1994) also supported that leverage is a strong and significant factor to influence dividend payment and causing significant impact on firm value. Since leverage is the significant of debt amount in a company, it might as well

have a great impact in dividend policy making. As our research in Malaysia listed companies for Foods and Beverages under consumer products sector, debt is important because if firm has high leverage, dividend payment might be affected due to high debt carried by the firm, causing burden in issuing dividend.

5.2.5 Risk

Referring to our analysis, risk is insignificant in every level of significant among the 3 models. This result has opposed our objective of risk having the influence on dividend policy as well as causing impact on firm value. The insignificant relationship is supported by Shin and Stulz (2000). During our researching years which is from year 2006 to 2010, Malaysia has suffered from several crisis such as subprime crisis in the United States in year 2008 which indirectly affecting the economy in Malaysia, fuel and gas crisis in year 2008 as well causing the risk in Malaysia fluctuates and hard to be predicted. Thus, risk is not a suitable determinant in estimating dividend policy in Malaysia listed companies for Foods and Beverages under consumer products sector for the years of our research as it might not be an accurate estimator especially in the long run.

5.2.6 Earnings per share (EPS)

Based on our outcome, earnings per share (EPS) is significant at level 0.05 in model 1. It appears to be consistent with our objective that earnings per share

(EPS) will have effect on dividend policy and also have impact on firm value. As supported by Adesola and Okwong (2009), earnings per share (EPS) seem to be a significant determinant in dividend payment. Earnings per share (EPS) also tested to have a positive and significant impact on forecasting stock price behavior and also estimating firm's price variability, added by Patell (1976).

5.2.7 Growth

Among all our variables, there is evidence showing that growth is the strongest variable in our test. It is significant at level 0.01, level 0.05 and also level 0.10 in all the 3 models. As mentioned in our objectives, our result shows that growth will affect dividend policy and causing impact on firm size. This outcome is being supported by Parker (1995) along with Gwilym, Seaton, Suddason and Thomas (2004) that growth is affecting dividend policy making and also having a positive impact on firm value (Shin and Stulz, 2000).

From all the findings above, we can summarize that the outcome of our studies is consistent with our hypotheses except for risk. Besides proving there is relationship between independent variables and dividend policy with firm value, our result also supported dividend signaling theory as a relevant theoretical model for our research. In this theory, when there is a raise in dividend payout, it will indirectly affect the future earning of the firm and also the firm value (Dionne and Ouederni, 2010). Moreover, we can see the relationship between independent variables, dividend policy and firm value through model 3. Model 3 has successfully shown there is relationship among the three subjects.

5.3 Implications of the Study

The study provides useful information for the management level of corporations as well as government agencies to have a better understanding on how dividend policy affects the firms' value in Malaysia listed companies for Foods and Beverages under consumer products field.

Dividend policy is a significant decision taken by the financial managers of company. It helps policy makers in strategic management and decision making. By referring to this study, decision makers can have a better understanding in analyzing firms' performance. They can know how about the company ongoing and the worthiness in investing a company especially for the food production industry in Malaysia. Besides, company decision makers can use this research to decide how much dividend to pay to their shareholders, whether in the form of cash dividend or stock dividend to investors. As a result, this information enables companies to maximize their profits.

Furthermore, the study also aims to provide government agencies with a better knowledge about which dividend policy factor is going to affect company share price at the most. Government can focus and make a better decision through government policies according to certain variables. Moreover, there is a relationship between government control level and the cash dividends payments of company as government can control the company cash dividends by implying policy on it. For example, the higher level of government control, the more cash dividends the

company will distribute. The appropriate decision made can ensure country growth and boost the economy and reputation of Malaysia.

5.4 Limitations of the study

Although there are many remains to be done, our work generates important findings in the field of Foods and Beverages in the performance of the industry with dividend policy implemented. The first limitation concerns the factors of dividend policy in affecting firms' performance. There might be some relevant factors which significantly influence the generation of firms' value with respect of dividend policy. However, the discussion of other relevant factors of firms' performance is beyond the scope of this paper. It is not within the scope of this paper to provide an extended discussion of the ongoing debates. Factors of dividend policy affecting firms' value are still tentative and subject to confirmation and modification through further investigation and examination. Besides, there are studies which have been done locally is insufficient as compared to the foreign countries. Therefore, foreign studies and journals are used and they may not be applicable to the local context.

Furthermore, it is very difficult to gain access to certain secondary data due to limited budget since a fee is required to purchase certain journals and thus, we may have limited the research ability in obtaining alternative views to the areas discussed within this study. It may take some time to identify the most appropriate sources, decide the quality of the data, and to design the process of obtaining the data and analyzing it. In addition, occurrence of errors or mistakes in the data as some sources collected may contain errors, incomplete or having missing data that limited our sample sizes.

Besides, due to time constraint, we are only able to cover data for 5 years. It is better to conduct the research for a period of 10 years and above to provide richer analysis. Carrying two tasks at the same time which are coping with our studies and doing research project at a time is very time consuming. This has created a need for every action taken to be extensively researched and consulted before being finalized.

It should be noted that these limitations are acknowledged and they do not divert the significance of findings. They merely provide platforms for future studies.

5.5 Recommendations for Future Research

To get a more accurate result, larger sample size is needed. Future researchers can increase the number of sample size in their future research. This would help to remove any bias within the sample that has been selected within this study due to the relatively moderate sample size chosen. Larger sample size can increase the precision and the accuracy of the result.

Besides, future researcher can also broaden the area of their research. They can study on one or more industry as well as focus on a whole country. This covers a broader area of research and creates a new research field.

Moreover, they can include more variables as the determinants of dividend policy that affects firm price. For example, Al-Najjar (n.d.) investigates dividend policy by determining factors institutional ownership and asset structure which is not included in our research. The more variety of independent variables, the more information we can obtain.

Next, future researcher should allocate more time to conduct their study. This is important in getting a more detail and accurate analysis. Besides, the result run by e view should be double checked in order to prevent mistakes and ensure the accuracies.

Lastly, future researcher should ensure that the access of journals and databases are adequate, and the admission to the required journals, articles and other materials are attainable during the conduct of the study.

5.6 Conclusion

This study investigates various factors influencing the dividend policy which affecting firms' performance in Foods and Beverages for Malaysia under consumer products sector over the period of year 2006 to year 2010. Based on the estimated results, the dividend policy has a strong and positive relationship towards firm value. In model 1, risk, earnings per share, growth, and profitability have been proved to

have a positive impact towards firm value while leverage, liquidity and firm size have inverse relationship with firm value. In model 2, the results pooled are slightly different from model 1. Profitability is inversely related with dividend policy in model 2. According to Grullon, Michaely and Swaminathan (2002), profits usually recover before declining further whereas in a dividend rising firm, there will be some uncertainty in dividend boosting decision. Besides, there is a negative relationship between risk and dividend policy, supported by Al-Najjar (n.d). To further test our hypotheses, model 3 is developed to determine how independent variable affects dividend policy then eventually the impact on the changes of firms' value. The findings have discovered that dividends are positively related to firm value when growths opportunities are absent. It means that the determinant of dividend policy in terms of the dividend payout is significantly influencing firm value in Foods and Beverages sector. Moreover, the results of other variables in model 3 such as liquidity, leverage, EPS, growth, firm size, profitability and risk are same as the results shown in model 1.

In conclusion, this research is conducted accordingly with references of the model adopted and the outcomes generated; it shows that most of the hypotheses and research objectives had been reasonably achieved. Our results may provide a reference for future researchers to improve the factors used in determining dividend payout in order to increase the performances of foods and beverages industry in Malaysia. Nevertheless, this study has its limitations and needs further analysis in order to gain a broader scope of research.

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APPENDIX

Appendix A: OLS Regression from E-Views

Run the OLS regression

Model 1:

Dependent Variable: FIRMVALUE

Method: Least Squares

Date: 02/11/12 Time: 14:48

Sample: 1 67

Included observations: 67

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LIQUIDITY	-0.245180	0.130969	-1.872046	0.0662
LEVERAGE	-0.037008	0.016791	-2.203965	0.0314
EPS	11.60117	4.695767	2.470558	0.0164
GROWTH	3.331020	0.710560	4.687880	0.0000
FIRMSIZE	-1.438925	2.149017	-0.669574	0.5057
PROFITABILITY	0.115507	0.042860	2.695006	0.0092
RISK	1.060681	2.848997	0.372300	0.7110
C	9.540825	12.26512	0.777883	0.4397

R-squared	0.629961	Mean dependent var	8.020358
Adjusted R-squared	0.586058	S.D. dependent var	12.32437
S.E. of regression	7.929291	Akaike info criterion	7.090655
Sum squared resid	3709.546	Schwarz criterion	7.353902
Log likelihood	-229.5369	Hannan-Quinn criter.	7.194823
F-statistic	14.34895	Durbin-Watson stat	2.128476
Prob(F-statistic)	0.000000		

Model 2:

Dependent Variable: DIVPOLICY

Method: Least Squares

Date: 02/11/12 Time: 19:24

Sample: 1 67

Included observations: 67

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LIQUIDITY	-0.001167	0.004600	-0.253726	0.8006
LEVERAGE	-0.002056	0.000590	-3.486185	0.0009
EPS	0.046509	0.164925	0.282001	0.7789
GROWTH	0.057228	0.024956	2.293140	0.0254
FIRMSIZE	-0.158576	0.075478	-2.100962	0.0399
PROFITABILITY	-0.001924	0.001505	-1.277871	0.2063
RISK	-0.117230	0.100062	-1.171569	0.2461
C	1.371517	0.430776	3.183832	0.0023

R-squared	0.299594	Mean dependent var	0.316586
Adjusted R-squared	0.216495	S.D. dependent var	0.314624
S.E. of regression	0.278492	Akaike info criterion	0.392799
Sum squared resid	4.575925	Schwarz criterion	0.656046
Log likelihood	-5.158774	Hannan-Quinn criter.	0.496967
F-statistic	3.605260	Durbin-Watson stat	1.649059
Prob(F-statistic)	0.002683		

Model 3:

Dependent Variable: FIRMVALUE

Method: Least Squares

Date: 03/14/12 Time: 17:18

Sample: 1 67

Included observations: 67

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LIQUIDITY	-0.243396	0.131975	-1.844265	0.0703
LEVERAGE	-0.033866	0.018571	-1.823540	0.0734
EPS	11.53009	4.732434	2.436397	0.0179
GROWTH	3.243563	0.746836	4.343070	0.0001
FIRMSIZE	-1.196586	2.243841	-0.533276	0.5959
PROFITABILITY	0.118447	0.043759	2.706827	0.0089
RISK	1.239834	2.902494	0.427162	0.6708
DIVPOLICY	1.528221	3.733193	0.409360	0.6838
C	7.444842	13.37168	0.556762	0.5798

R-squared	0.631027	Mean dependent var	8.020358
Adjusted R-squared	0.580134	S.D. dependent var	12.32437
S.E. of regression	7.985827	Akaike info criterion	7.117621
Sum squared resid	3698.859	Schwarz criterion	7.413774
Log likelihood	-229.4403	Hannan-Quinn criter.	7.234809
F-statistic	12.39914	Durbin-Watson stat	2.112770
Prob(F-statistic)	0.000000		

Appendix B: Multicollinearity Results from E-Views

Model 1:

	FIRMVALUE	LIQUIDITY	LEVERAGE	EPS	GROWTH	FIRMSIZE	PROFITABILITY	RISK
FIRMVALUE	1.000000	0.005905	-0.361422	0.643142	0.631161	0.124151	0.354347	0.048718
LIQUIDITY	0.005905	1.000000	-0.282477	0.106860	-0.060893	0.041649	0.481160	-0.091768
LEVERAGE	-0.361422	-0.282477	1.000000	-0.302407	-0.065594	-0.108494	-0.394404	-0.053410
EPS	0.643142	0.106860	-0.302407	1.000000	0.567872	0.184284	0.298806	-0.014915
GROWTH	0.631161	-0.060893	-0.065594	0.567872	1.000000	0.298771	0.005406	-0.062924
FIRMSIZE	0.124151	0.041649	-0.108494	0.184284	0.298771	1.000000	-0.087733	0.002807
PROFITABILITY	0.354347	0.481160	-0.394404	0.298806	0.005406	-0.087733	1.000000	0.095762
RISK	0.048718	-0.091768	-0.053410	-0.014915	-0.062924	0.002807	0.095762	1.000000

Model 2:

	DIVPOLICY	LIQUIDITY	LEVERAGE	EPS	GROWTH	FIRMSIZE	PROFITABILITY	RISK
DIVPOLICY	1.000000	-0.009633	-0.351339	0.253693	0.308364	-0.081280	-0.000182	-0.143037
LIQUIDITY	-0.009633	1.000000	-0.282477	0.106860	-0.060893	0.041649	0.481160	-0.091768
LEVERAGE	-0.351339	-0.282477	1.000000	-0.302407	-0.065594	-0.108493	-0.394404	-0.053410
EPS	0.253693	0.106860	-0.302407	1.000000	0.567872	0.184284	0.298806	-0.014915
GROWTH	0.308364	-0.060893	-0.065594	0.567872	1.000000	0.298771	0.005406	-0.062924
FIRMSIZE	-0.081280	0.041649	-0.108493	0.184284	0.298771	1.000000	-0.087733	0.002807
PROFITABILITY	-0.000182	0.481160	-0.394404	0.298806	0.005406	-0.087733	1.000000	0.095762

RISK	-0.143037	-0.091768	-0.053410	-0.014915	-0.062924	0.002807	0.095762	1.000000

Model 3:

	FIRMVALUE	LIQUIDITY	LEVERAGE	EPS	GROWTH	FIRMSIZE	PROFITABILITY	RISK	DIVPOLICY
FIRMVALUE	1.000000	0.005905	-0.361422	0.643142	0.631161	0.124151	0.354347	0.048718	0.311997
LIQUIDITY	0.005905	1.000000	-0.282477	0.106860	-0.060893	0.041649	0.481160	-0.091768	-0.009633
LEVERAGE	-0.361422	-0.282477	1.000000	-0.302407	-0.065594	-0.108493	-0.394404	-0.053410	-0.351339
EPS	0.643142	0.106860	-0.302407	1.000000	0.567872	0.184284	0.298806	-0.014915	0.253693
GROWTH	0.631161	-0.060893	-0.065594	0.567872	1.000000	0.298771	0.005406	-0.062924	0.308364
FIRMSIZE	0.124151	0.041649	-0.108493	0.184284	0.298771	1.000000	-0.087733	0.002807	-0.081280
PROFITABILITY	0.354347	0.481160	-0.394404	0.298806	0.005406	-0.087733	1.000000	0.095762	-0.000182
RISK	0.048718	-0.091768	-0.053410	-0.014915	-0.062924	0.002807	0.095762	1.000000	-0.143037
DIVPOLICY	0.311997	-0.009633	-0.351339	0.253693	0.308364	-0.081280	-0.000182	-0.143037	1.000000

Appendix C: Autocorrelation, Heteroscedasticity, and Model Specification Test Results from E-Views

Autocorrelation

Model 1:

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.551916	Prob. F(2,57)	0.2207
Obs*R-squared	3.459958	Prob. Chi-Square(2)	0.1773

Model 2:

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.752273	Prob. F(2,57)	0.4759
Obs*R-squared	1.723022	Prob. Chi-Square(2)	0.4225

Model 3:

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.431951	Prob. F(2,56)	0.2475
Obs*R-squared	3.259748	Prob. Chi-Square(2)	0.1960

Heteroscedasticity

Model 1:

Heteroskedasticity Test: ARCH

F-statistic	0.083781	Prob. F(1,64)	0.7732
Obs*R-squared	0.086286	Prob. Chi-Square(1)	0.7690

Model 2:

Heteroskedasticity Test: ARCH

F-statistic	0.090525	Prob. F(1,64)	0.7645
Obs*R-squared	0.093222	Prob. Chi-Square(1)	0.7601

Model 3:

Heteroskedasticity Test: ARCH

F-statistic	0.090525	Prob. F(1,64)	0.7645
Obs*R-squared	0.093222	Prob. Chi-Square(1)	0.7601

Model Specification Test

Model 1:

Ramsey RESET Test:

F-statistic	14.03245	Prob. F(1,58)	0.0004
Log likelihood ratio	14.51714	Prob. Chi-Square(1)	0.0001

Model 2:

Ramsey RESET Test:

F-statistic	1.108976	Prob. F(1,58)	0.2967
Log likelihood ratio	1.268965	Prob. Chi-Square(1)	0.2600

Model 3:

Ramsey RESET Test:

F-statistic	13.91323	Prob. F(1,57)	0.0004
Log likelihood ratio	14.63318	Prob. Chi-Square(1)	0.0001