# Dividend, Debt and Other Variables Influence Firm Performance In Listed Malaysia's Consumer Product Companies

BY

Foo Kien Wah

Low Wai Chin

Saw Siew Teng

Teoh Jiun How

Ting Pey Ee

A research project submitted in partial fulfilment of the requirement for the degree of

BACHELOR OF BUSINESS ADMINISTRATION (HONS) BANKING AND FINANCE

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE
DEPARTMENT OF FINANCE

SEPTEMBER 2011

# DECLARATION

We hereby declare that:

(1) This UBFZ3026 undergraduate Research Project is the end result o 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 paper 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 14,6 words.

| Name of Student: | Student ID: | Signature |
|---|---|---|
| 1. FOO KIEN WAH | 10ABB00418 | _____ |
| 2. LOW WAI CHIN | 10ABB00379 | _____ |
| 3. SAW SIEW TENG | 09ABB01949 | _____ |
| 4. TEOH JIUN HOW | 10ABB00436 | _____ |
| 5. TING PEY EE | 08ABB04317 | _____ |

Date: _____

# ACKNOWLEDGEMENT

Our research project has been successfully completed with the assistance of various authorities. We would like to take this opportunity to thank everyone who have help and guide us in completing our research project.

First of all, we would like to thank to University Tunku Abdul Rahman (UTAR) for giving us the opportunity to conduct this research. It enables us to learn and gain more experience in conducting a research.

Second, we express gratitude to our supervisor, MS. Zuriawati; who is a lecturer of the Faculty of Business and Finance in UTAR. We are very grateful for her guidance, advice, suggestion, constructive comment and commitment to reply our queries promptly throughout this research project. Ms. Zuriawati always stood by us and scarified her valuable time for helping us when we were in need for assistance.

Besides that, we would like to thank to our parents and friend who had gave us support and help us in any manner, which had lead to the completion of this research project.

Lastly, we would like to thank all of our group members who are willing to scarified their valuable time and holidays in order to work hard together to complete this research project. During this period, we had developed deeper friendship with each other; thereby give us more inspiration to complete this research successfully.

# Table of Content

# LIST OF TABLE

Page

# LIST OF ABBREVIATIONS

| | |
|---|---|
| ROE | Return on Equity |
| BAT | British American Tobacco |
| KLCI | Kuala Lumpur Composite Index |
| GFOA | Government Finance Officers Association |
| PPG | Public and Publicly Guaranteed |
| CIA | Central Intelligence Agency |
| ROA | Return on Asset |
| ROS | Return in Sales |
| TANG | Tangibility |
| ROSE | Return on Shareholders' Equity |
| ROCE | Return on Capital Employed |
| GPM | Gross Profit Margin |
| CLT | Central Limit Theorem |
| OLS | Ordinary Least-squares |
| DW | Durbin-Watson |
| W | Wald |
| LR | Likelihood Ratio |
| LM | Lagrange Multiplier |
| DCE | Debt-Constraint Expropriation |
| DFE | Debt-Facilitate Expropriation |

| | |
|---|---|
| NSE | Nigeria Stock Exchange |
| IDS | Indonesia Stock Exchange |
| USA | Unites States America |
| R&D | Research and Development |

# PREFACE

This research paper is submitted in partial fulfilment of the requirement for Bachelor of Business Administrations (Hons) Banking and Finance. Our Supervisor on the project is Ms Zuriawati bin Zakaria. The final year project is made solely by the authors yet it is based on the research of others and the resources are quoted as in references.

There are a lot of researches and studies conclude on this topic but yet, there is none of it doing studies about the variables that affect the firm performance in listed Malaysia's consumer product companies. We are interested to know more about the model of the variables that will influences the firm performance. Thus, we choose the topic 'dividend, debt and other variables influence firm performance in listed Malaysia's consumer product companies'.

Writing this thesis has been difficult but during the process we have learned how to deal with the conditions of some listed companies and their dividend and debt. We strongly felt that the knowledge we learned from this research will help us in our future career.

# ABSTRACT

This paper aim to analyze the dividend, debt and other variables that influence firm performance listed Malaysia' consumers' product companies. We have chosen total 50 companies as our sample. The variables we have chose are dividend, debt, tangibility, size, and profitability for 5 years which is from year 2005 to 2009. By using the Multiple Regression method, we obtain the result among the 5 independent variable we test on, the variable affect firm performance is profitability and tangibility, and other variables, dividend, debt, and size are insignificant in the test.

# CHAPTER 1: RESEARCH OVERVIEW

## 1.0 Introduction

The objective of this research is to investigate or test some factors that will affect firm's performance in listed consumer product industry in Malaysia such as debt, dividend, size, profitability and tangibility of company. However, we will cover background of study, problem statement, objective, research questions, hypotheses to be tested, significant of study and chapter layout in this chapter.

### 1.1 Research Background

Dividend policy is one of the attracting issues in financial literature. According to Tatum (2010), dividend policy is the regulations that recognized and apply by the corporation or company when make dividend payment to their investors. Corporation or company distribute dividend when they earn profit, but they did not give out all of their profit as dividend. The portion of profit that did not distribute as dividend is retained, corporation or company uses it to reinvest or pay off the debt.

In Malaysia, dividend payment does not have any standard policy or regulatory procedures. So that, corporation or company are free to decide how much they want to pay to their shareholders and when they want to pay, as long as they fulfil the Section 365 of Companies Act, that states "No dividend shall be payable to

the shareholders of any company except out of or pursuant to Section 60" (Articlesbase, 2010). According to Companies Act (1963), "Nothing in this section shall be taken to prohibit the payment of a dividend properly declared by a company or the discharge of a liability lawfully incurred by it".

Previous researcher Pandey (2003), found firms in Malaysia follow a stable dividend policy that control by a number of internal and external factors. But, the author also found that Malaysia consumer product sector dividend policy is not constant. It is because, Malaysian firms increase their dividend payment when their earning increases and when their earning fall, they still adhere to pay the dividend to maintain their company reputation. But, when they suffer losses, they force to disclaim the dividend in order to maintain their internal fund resources. If companies adhere to give dividend when facing losses, this action will reduce their internal and formation capabilities. It is because dividend payment will reduce the company profit and internal fund resources.

**Table 1: Malaysia KLCI Top 10 companies' dividend yield on 13 April 2011:**

| **Stock Name** | **Return on Equity (ROE)** | **Dividend Yield** |
|---|---|---|
| MALAYAN BANKING | 14.5 | 8.18 |
| TELEKOM MALAYSIA | 16.4 | 6.57 |
| MAXIS | 26.1 | 6.49 |
| BAT MALAYSIA | 157.3 | 6.29 |
| DIGI. COM | 82.1 | 5.50 |
| PETRONAS DAGANGAN | 17.3 | 5.25 |
| PPB GROUP | 13.8 | 5.23 |

| | | |
|---|---|---|
| YTL POWER INTL | 18.2 | 4.98 |
| BERJAYA SPORTS TOTO | 82.3 | 4.63 |
| MALAYSIA INTL SHIPPING | 3.1 | 4.51 |

Sources: Top Yield (2011)

Based on table 1, we can prove that companies in Malaysia are free to give dividend. In year 2011, one of the consumer product companies, British American Tobacco (BAT) Malaysia ROE which use to measure firm performance is 157.3, is the highest in Malaysia KLCI list. However, their dividends yield just recorded 6.29%. The earning that did no pay to the investors as dividend keep by the company as retained earnings. Companies may use the retained earnings to make investment in order to gain more profit. But, Malaysia Intl Shipping, the company that has lowest ROE in the table paid 4.51% dividend with only 3.1 ROE. Besides, the company paid highest dividend 8.18%, Malaysia Banking performance is consider low, with 14.6 ROE. It is because, normally companies have good performance paid low dividend and high dividend paid by the companies having poor performance to attract investor.

According to Al-Malkawi et al. (2010), dividend policy is controversial because of their investors and characteristics. In year 2001, Malaysia companies start to follow the trend of changed in favor of higher payouts in UK. Tam (2003) had proven it with the record of 600 per cent dividend that Maybank announce in the same year. It had involved RM1.2 billion total payout, after its net profit rose 19 per cent for the first six months to 31 December 2002. Besides, Carlsberg Brewery (Malaysia) Bhd's also announce a large payout of a final and special dividend, 65 sen per share. This caused it share price increase by 40 sen, or 4 per

cent higher than before. According to the author, the latest company that had declared a large dividend to its shareholders is merchant banking group, CIMB Bhd.

**Table 2: 14 Malaysia Listed Companies Stock Price and Dividend Yield on 2 May 2003**

| Stock | Price | Dividend Yield (%) |
|---|---|---|
| CIMB | 2.30 | 10.6 |
| GUINESS | 3.64 | 9.9 |
| PERLIS PLNT | 4.36 | 9.9 |
| AMWAY | 6.10 | 9.0 |
| YTLPOWER | 2.81 | 7.1 |
| YTLCMT | 2.89 | 6.9 |
| CARLSBERG | 11.20 | 6.7 |
| IOICORP | 5.00 | 6.0 |
| BAT | 38.00 | 5.7 |
| MALAKOF | 4.30 | 5.1 |
| PPB OIL | 2.93 | 4.4 |
| HLCRED | 3.78 | 4.2 |
| NESTLE | 20.00 | 4.1 |
| TANJONG | 9.35 | 4.1 |

Sources: YTL Community (2003)

According to Little (2011), dividend yield is calculated by dividend the dividend by the current stock price. There is negative relationship between dividend yield and price. The lower the dividend yield, the highest the price, and vice versa. But, the high yield bonds are issued by companies whose financial strength is not rock solid. So that, they must pay a higher yield than other safer alternative in order to attract investors.

Based on table 2, BAT stock price is RM38 per stock, is the highest; but the dividend yield only recorded 5.7%. It regarding to BAT Malaysia has the highest ROE in Malaysia KLCI top ten companies' dividend yield, in table 1. Simultaneously, CIMB stock price is recorded RM2.3 per stock with 10.6% dividend yield. There is negative relationship between dividend and price. When the price of the share is high, there will be low dividend, because the high share price means there is low risk on the share and vice versa to the share have high price.

**Trend of debt policy in Malaysia**

Debt can define as the amount of money or cash that owed by person or organization for funds borrowed such as loan note, bonds, mortgages or some form stating repayment terms. The debt policy sets priorities for each type of debt and will restrict the organization from taking out certain types of loans. Hence, the policy have listed out some available financial options, such as tax exempt debt, commercial paper, bonds, and interest rate swaps in company for their financial management. The debt policy includes reasonable precautions for each arrangement, such as choosing an authorized international swap dealer when take part into an interest rate swap contract.

In organization, a formal debt policy was very important to effective the financial management to control the debt level. During 1995, the Government Finance Officers Association (GFOA) conducts that formal policy must follow by all jurisdictions when issue debt. The objective of debt policy is to improve the quality of decisions making, to provide justification for the structure of debt issuance, to identify policy goals, and to demonstrate a commitment to long-term financial planning. (Straley, 1997).

Nowadays Malaysia can defines as the successful country in manage the debts because most of companies in Malaysia having the implementing and undertaking prudent debt management strategies which can minimizing risk exposure against

global shocks, managing exchange rate fluctuations and against movement shifts in investor sentiments which target to encourage the diversification of external debts.

During the period from year 1970 until 2006 in Malaysia, there are different several types of debts on the economic growth in the development process. There are external debt, long-term debt, multilateral debt, private non-guaranteed debt, public and publicly guaranteed debt (PPG), public and publicly guaranteed debt service, short-term debt and total debt which give the service nonrecourse lending to private borrowers (Choong, et al., 2010).

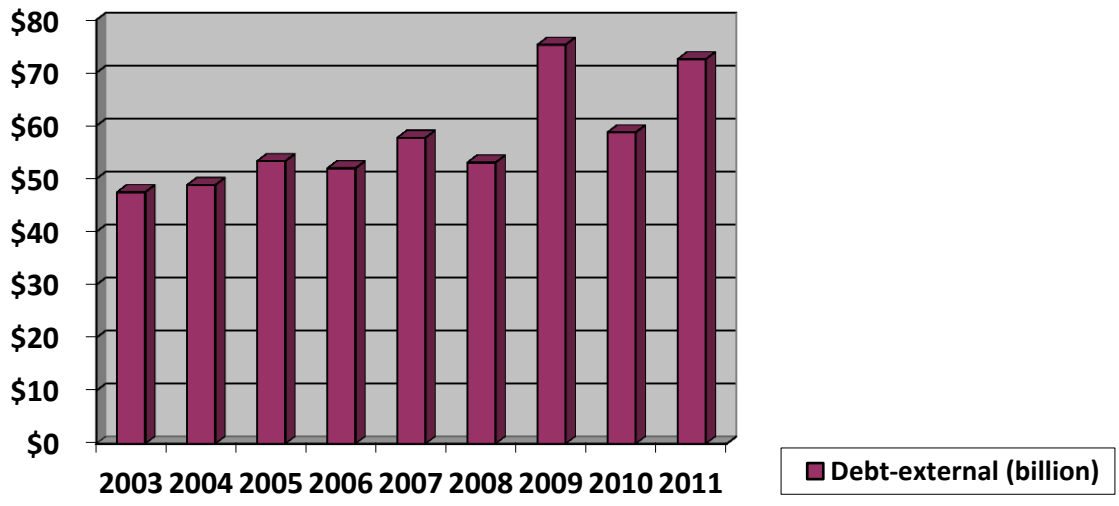
In Malaysia, all debts was contribute negatively and significantly relationship between GDP in economic growth. Furthermore, there is a unidirectional short run cause of the effect running from multilateral debt service, public and publicly guaranteed debt and public and publicly guaranteed debt service to economic growth. There has evidence to prove that the growth-driven debt hypothesis for external debt and short term debt. Moreover, there is bidirectional relationship between long term debt and economic growth, and between total debt and economic growth. This can conduct that all types of debts has negative long-run relationship with the economic growth in Malaysia (Choong et al., 2010).

Besides that, policy makers predicate that company or country should not focus seriously on foreign debts because foreign debts will lead negative impacts on economic growth. So the debtor country cannot fully benefit from a raise in production as a large portion of the production channels to creditor countries to pay the debt payment. Moreover, the crowding-out effects may occur when the resources being used by foreign debt instead productive investment. Malaysian policymakers ensure that projects financed by foreign debts must contribute to foreign exchange earnings. For example, the payments can principal to overseas creditors in term of interest. Instead, a crucial lesson that Malaysia must play a role in monitoring its private foreign borrowing as well as to put more concern on their fiscal and monetary policy, so that the country continues to reformulate its economic policy after devastating crises.

Purposely to ensure that the debt do not become a burden in future, Malaysia as a small and developing country which burdened with moderate high foreign debts should take solution such as develop a sound financial plan to overcome the debts. Besides that, as a advise to Malaysian government to minimize the dependant on foreign debt and to stabilize political and economic condition, Malaysia government have to use fiscal and monetary policy in an efficient way. So that the political n economic condition in Malaysia will get more aggressive and status of country will more stable in future.

**Table3: Debt external in Malaysia**

| Year | Debt – external (billion) |
|---|---|
| 2003 | $47.50 |
| 2004 | $48.84 |
| 2005 | $53.36 |
| 2006 | $52.00 |
| 2007 | $57.77 |
| 2008 | $53.09 |
| 2009 | $75.33 |
| 2010 | $58.79 |
| 2011 | $72.60 |




Source: Index Mundi, (2010)

The table 3 record the total public and private debt owed to nonresidents repayable in foreign currency, goods, or services which can define as part of the total debt in a country that is owed to creditors outside the country. The table states the debt external in Malaysia during year 2003 until 2011 in CIA world Factbook. Generally the figures were calculated on an exchange rate basis, not in purchasing power parity terms. Based on the table, we know that the higher of debt external in Malaysia is 2009 which have $75,330,000,000 and the percent change is 41.89%. However Malaysia has the lower debt external is $47,500,000,000 at year 2003.

From the table 3, the macroeconomics performance on the burden of external debt in Malaysia is sustainable. This because the real value of the current external debt is burden by the unstable value of currency market and the domestic inflation rate which during the period. To overcome the external debt repayment, the government can enhance some fiscal and monetary policies. Moreover, the stability of fiscal adjustment in Malaysia can be used to harm the external debt level problem in upcoming years.

**Table 4: Statistic of Sectors (Average)**

| Average by industry | Consumer | Construction and Property | Trading and Services | Industrial |
|---|---|---|---|---|
| Total debt to total assets | 0.4367 | 0.6322 | 0.4350 | 0.4025 |
| Long term debt to total assets | 0.0697 | 0.1699 | 0.1924 | 0.1125 |
| Short term debt ratio | 0.3670 | 0.4623 | 0.2426 | 0.2900 |
| Total debt to market value ratio | 0.4383 | 0.5874 | 0.4723 | 0.4371 |

| | | | | |
|---|---|---|---|---|
| Long term debt to market ratio | 0.0724 | 0.2069 | 0.1964 | 0.1170 |

Source: Mazlina, Hashanah and Badriyah, (2011)

Table 4 presents that the statistics of debt of listed companies in different sectors in Malaysia. There are 4 sectors which are consumer, construction and property, trading and service, and industrial. From the table, there shown that the companies from the construction and property sectors have the higher total debt ratio (total debt/ total assets) compare with other sectors which are 63.22%. Moreover, the construction and property sectors also have the highly average debt ratio compare with other sector such as short term debt ratio (46.23%), long term debt to market ratio (20.69%) and total debt to market value ratio (58.74%) except the long term debt to total assets ratio. The trading and services sectors have the higher long term debt to total assets ratio in the table which is 19.24%. Refer to the table; the companies in the construction and property have the higher debt ratio compare with other sectors because it was required to huge more capital in investment and operating stage when running their business. This will cause the companies to obtain more debt financing by exposure to risk, uncertainty and complexity.

According to Loganathan, et al. (2010) indicate that the challenge of lending in Malaysia is to lessen the inflation rate, poverty level and external debt toward sustainable economic growth while Malaysia has accumulated a number of external debts. Initially, external debt can defined as borrowing the money from abroad, while the rising in external debt will burden the countries fiscal adjustment and growth rate. Generally, development the nations economics targets was supported by using the external sources which can develop the internal financial budgetary and fulfill the gap of domestic resources of financial.

In 1988 until 2008, some policymakers indicate that Malaysia has faced several uncertain or unstable economic scenarios. The data of external debt have show that the macroeconomics performance on the burden of external debt in Malaysia is sustainable. Based on the policy perspectives, the external debt has close

relationship with macroeconomic variables performance, so the government may enhance some fiscal and monetary policies to overcome the external debt repayment. Hence, the problem of external debt can solve through performance and stability of Malaysia's fiscal adjustment.

**Relationship between Dividend and Debt Policy**

Dividend policy and debt policy have strongly relationship between each other both are corporate governance mechanism to reduce agency conflict between majority and minority shareholders. They are indispensable in solving the agency conflict (Alwi, 2009). It is because, dividend policy generates internal monitoring, and debt policy generates external monitoring (Rozeff, 1982; Easterbrook, 1984). When agency conflict occurs, dividend policy will force the management into the equity market more frequency, and when new equity rose, managers are monitored by capital market. By the way, with the debt policy, when agency conflict occurs, majority shareholders will act to improve the firm's performance. In order to solve the conflict completely, dividend policy and debt policy are indispensable. Besides, markets are response positively to these two policies. Denis and Kruse (1998) found these policies not only reduce the agency conflict, but also increase firm performance.

Besides, there is also negative relationship between dividend and debt policy. When company feels constrained by their debt load, they will minimize or ignore the dividends in order to pay the debt (Alwi, 2009). It is because, when the company have a lot of debt, the must keep up with the interest payment, so it cause company cash flow limited. At last, company will minimize or ignore the dividend. But, when the company has high profit, high dividend will be given. Generally, company will adhere to pay dividend, if their cash flow is allow, because dividend payment is to signal the market that the issuer is confident and healthy.

## 1.2 Problem Statement

According to Fairchild (2010), firm's ability to invest in a new project is affected by dividend. Besides that, Myers and Majluf (1984) state that selling secured debt will benefit for firms. The risks incurred in selling of debt would have an impact on company's performance. Small firms have more debt than large firms (Rajan and Zingales 1995). According to Cho and Pucik (2005) research has been done so far, the relationship between quality (profitability) and firm performance is not clear yet because data analysis with large scale have not been complemented. Besides that, based on Forbes (2002) state that there is not sufficient document to support issued on large depreciation to some countries that have more flexi exchange rate to large depreciation. The need to understand the relationships among customer metrics and profitability has never been more critical (Gupta and Zeithaml 2006).

According to Pagano and Schivardi (2003) stated that the R&D is important and good to have an essential innovation for a small firm but may face the financing limits due to the credit-market imperfections. Based on Chiu at el. (2008) research, they showed technological development able to create opportunity for market or product diversification. Besides that, it also allows firm to cultivate competitive advantage when industry structure is imperfect, quality improvement and innovation require the firms to diversify the technological base.

Dividend policy adopted by management may have either positive or negative influence to firm performance because management are dealing with various shareholders who have conflict of interest (Amidu, 2007). Based on Zaher (2010), heavy debt has over time harmed many large firms in USA and other countries, but it is still not clear for the companies whether they are still insist in borrowing and operated with debt free balance sheet whether investors will reward companies.

After we review past research, we found that less research about debt and dividend and firm performance in Malaysia. That makes us want to extend the research about Malaysia.

## 1.3 Research Objective

Our research objectives are mostly based on the problem that we had found on the above.

### 1.3.1 General Objective

- To examine certain factors that will influence firm's performance in listed consumer product industry in Malaysia

### 1.3.2 Specific Objective

- To determine factors that dividend will affect firm's ability to invest in a new project
- To examine how the firm will be benefited by secured debt
- To examine how does large firms will manage its performance since it has lower debt compared to small firms
- To investigate the financial management capability of a firm through asset.
- To do a large scale data analysis to test the relationship between quality (profitability) and firm performance

## 1.4 Research Question

1. How does dividend influence firm's performance in listed consumer product industry?

2. Why selling secured debt will benefit for firms?

3. Should large firms borrow more or less since it has lesser debt compared to small firms?

4. Will asset influence the financial management capability of the firms?

5. Is there a significant relationship between profitability and firm performance?

## 1.5 Hypothesis of the study

There are five hypotheses that we wanted to test the significant of certain factor that will affect firm's performance in listed consumer product industry in Malaysia. The first factor is dividend will influence firm's performance in listed consumer product industry in Malaysia. Next hypothesis is to test whether debt will affect firm's performance in listed consumer product industry in Malaysia. Third, size of the company also will be tested whether it will affect firm's performance in listed consumer product industry in Malaysia. Forth, we will test whether tangibility will be tested whether it will impact on firm's performance in listed consumer product industry in Malaysia. Lastly, profitability will affect firm's performance in listed consumer product industry in Malaysia. Whenever the final result of significant level shows more than 0.05 is mean $H_0$ will be accepted. However, if the final result of significant level shows less than 0.05, $H_0$ will be rejected.

## 1.6 Significant of study

The significant study of this research is to help the Malaysia consumer product industry firm to have better understand on the variable that will bring most influence to the firm value, so that they can work out on the specific variable to increase their firm value, which will have better financial status, and this will bring a lot of income by attracting the investor to invest their money on the firm.

Besides that, our study also will help to improve Malaysia consumer product industry firm value, where by every firm will continue growth, job opportunity are created and the unemployment rate of Malaysia will be decrease, economy of Malaysia also will improve compare to before by improving the consumer product industry firm's value.

Moreover, our study also support academic problem at the point of view variable that influence firm performance, where by student can have better understand how each of the relevant variable will influence the firm value and how to increase firm value.

Last but not the least, our study also benefit to individual investor which in our research show how is the relevant variable influence the firm value, and individual investor can make their investment decision base on our research, however there is not hundred percent that will lead profit to investor but at least there is some guideline for them.

## 1.7 Chapter Layout

**Chapter 1**

This chapter will provide an overview of this research topic by presenting the background of the selected research area. This chapter include the introduction, research background, problem statement, research objectives, research questions with general and specific objectives, hypothesis of the study, significant of the study, chapter layout and conclusion where study on the debt and dividend policy influence firm performance in listed consumer product industry.

**Chapter 2**

This chapter will be further elaborated on the relationship between based on the previous studies which include the introduction, review of the literature, review of the theoretical models, proposed theoretical/conceptual framework, hypotheses development and conclusion of Chapter 2.

**Chapter 3**

This chapter demonstrates how the research is carried out by using data collection method and analysis method. In this chapter, it include the introduction, research design, data collection methods which include secondary data, sampling design, research instrument, constructs measurement, data processing, data analysis and conclusion of this chapter.

**Chapter 4**

Information collected from the secondary data and pattern of the results will then be analyzed in this chapter along with further explanations.

**Chapter 5**

This chapter will provide the implications and limitations of the study and recommendations for future research.

## 1.8 Conclusion

As we can see that problem statement, objectives, research question has been covered in this chapter. However, the answer of these research questions will be conducted in the next chapter of literature review. Besides that, hypothesis of study, significant of study and chapter layout also has been covered in this chapter. We will further our research of theoretical and actual framework in chapter 2.

# CHAPTER 2 - LITREATURE REVIEW

## 2.0 Introduction

This chapter we will discuss the review of literature which is based on previous researchers. We will give a clear indication on what we found in the result from all journals and articles we had used. Other than that, the theoretical framework, actual framework and hypothesis will be written in order to examine the relationship between the dependent variable (firm's performance) and independent variables (debt, dividend, size, profitability, tangibility, large depreciation and customer service.)

## 2.1 Review of Literature

### 2.1.1 Firm's Performance & Debt

However, Ismiyanti and Mahadwartha (2008) found that Debt-Constraint Expropriation (DCE) and Debt- Facilitate Expropriation (DFE) is the base of the relationship of debt to firm performance. Besides, relationship between firm performance and debt also can be determined by using the empirical relationships that estimates in each condition of group-affiliate and no group-affiliate firms. However, the authors also argue that

governance mechanisms can reduce default risk can be reduce by governance mechanisms. So that, corporate governance plays a significant role on shareholders, and debt holders protection, because governance can modifying agency cost, monitoring managerial performance and reduce information irregularity between the firm and the lenders.

Furthermore, Cavanaugh and Garen (1997) stated that the asset-specific investments will straightly cause the firm to hold less debt because the specific assets do not have much value as collateral. Besides that, they also expect the effect of specificity on debt will becomes more positive or less negative as union power grows. According to Aivazian et al. (2005), a higher percentage of long-term debt in total debt will significantly decrease the firm's investment to have high growth chances. On the contrary, the correlation between debt maturity and investment is not significant for firms with low growth opportunities. Base on Forbes (2002), they found that higher debt ratio's firm will have lower net income growth, but there is no strong relationship between other performance variables and debt exposure. Continue with Yu et al. (2002) also study about documents public debt issuance influences the firm profitability.

Next, Yu et al. (2002) found that public debt plays a negatively significant role in determining the firm profitability. Last but not the least, the author research's result show that firm profitability negatively affected by public debt. By using multiple regression measure the data from financial statements of listed companies in manufacturing industries between 2003-2006 in Indonesia Stock market, Martani et al. (2009) found that the debt to equity ratio has positive correlation with stock return but not statistically significant. These indicate that a firm's capital structure can represent by the debt to equity ratio. The firm which uses debt financing aggressively will having a high debt to equity ratio. The firms can earn profits when the fund can be used to support long term growth because the increase in debt will increase the value of the company.

### 2.1.2 Firm's Performance & Dividend

The relationship between dividend and firm performance is complicated. According to Fairchild (2010), dividend will affect the firm's ability to invest in a new project and it provide confusing signal to investors. When dividend increased, there would be a negative signal because the firm is lacking of growth opportunities. However, when dividend has been cut down, there would be a positive signal as the firm has significant growth opportunities.

According to Tian et al. (2006) the relationship between dividend and firm performance is positive and significant founded by construct a sample composed of 406 companies from January 1989 to December 2000. From the autocorrelation test, researchers found that the coefficient of rate of dividend changed per share is positive in the years following performance announcement. The coefficients are 0.1298 and 0.0575 respectively. The results show that dividend changes are more strongly related with current and past performance. The market value of the firms has a negative relationship with dividend policy and firm's size but positively related to the dividend pay-out ratio leverage and also growth (Amidu, 2007). Holder, et al. (1998) had investigated the relationship between the dividend-policy decisions and investment decisions of a firm which firm value will be influence. Other than that, Amidu (2007) also study how the dividend policy influence performance of firms listed on the Ghana Stock exchange. The results show positive relationships between dividend policy, return on assets and growth in sales, moreover their study also supports the second school of thought that dividend policy is significant to the firm's performance.

According to Azhagaiah and Priya, (2008), the higher dividend will increase the share value in market. After collect all data of organic and Inorganic Chemical Companies in India during 1996- 2006, there are five

variables will influence the wealth of the shareholders measure by using multiple regression method and stepwise regression model. The variables are Growth in Sales, Improvement of Profit Margin, Capital Investment Decisions (both working capital and fixed capital), Capital Structure Decisions, and Cost of Capital (Dividend on Equity, Interest on Debt). There shown significant impact of dividend policy on shareholders' wealth in Organic Chemical Companies in India, so the dividend is an important factor to determines the shareholder's wealth which the shareholders preferred current dividend to future income.

### 2.1.3 Firm's Performance & Size

Rajan and Zingales (1995) had revealed that large firms have less debt than small firms in Germany. Therefore, large firms should borrow more because they are more diversified and lesser risk of the firm will get into bankrupt. These results suggest a positive relationship between firm size and firm performance. However, the problem of information asymmetry is less severe for large firms, so the packing order theory suggests a negative relationship between firm size and debt ratio.

According to Firm's size is an important determinant of firm's performance, so that Onaolapo and Kajola (2010) found that there is positive relationship between firm size and firm performance. From the testing by using 30 out of 121 non-financial firms listed on the Nigeria Stock Exchange (NSE) that use to measure the size of the market in the test, the authors found that there is positive relationship between firm size and firm performance. Besides, Kajola (2008) also found that there is positive relationship between firm performance and board size. Pagano and Schivardi (2003) showed that there is positive relationship between the average firm size and productivity growth or growth of the firm performance. They also conclude a measure of the average firm size and

found that differences in the size distribution within sectors will play an important role by explaining cross-country differences in average firm size.

On the other hand, Pagano and Schivardi also stated the positive correlation between size and growth. The larger firms grow slower compare to the small firms which are the most dynamic component of the industry According to Forbes (2002), larger firms normally have lower performance compare to smaller firms, although the significance of this result fluctuates across other reason. Moreover, Beck, et al. (2005) also had study whether small, medium-sized, and large firms are constrained differently in countries with different level of firm performance.

Lastly, based on the author's result show that the small firms will get most benefit from improvements in firm performance. Gomes et al. (2009) have stated that the differences are not significant in the performance when compared the large and small firms. Only a significant difference have been shown when compare the small firms with the large firms is the cost reduction due to technological innovations to the process, while suggests that large firms are innovating significantly more in processes, which is consistent with the literature.

### 2.1.4 Firm's Performance & Profitability

Rajan and Zingales (1995) had continued to reveal that profitability has negative relationship with firm performance. Based on their study, when the debt financing is the dominant mode of external financing but investments and dividends are fixed in the short term, and then the changes in firm performance will be negatively correlated with the changes in profitability. From the survey of senior IS executive from 760 companies operating in different industries in United States, Zhang (2011) found that the relationship between firm performance and profitability are negative,

or not significantly. The author test the profitability impact of information systems (IS) support for product innovation at the firm level by using survey and archival data. The result of standard deviations and zero-order correlations from the test shows there is not significantly between profitability and performance. IS support for product innovation was negatively related to profitability and firm performance when complementarily from firm specific information and knowledge was low.

Due to Mueller (1977, 1986), found that to gain relatively high profits it should not overly problematic that some firms at a point in time because competition should make sure that such high profitability is a transitory, and not a persistent, phenomenon. From Hagedoorn and Schakenraad (1994) point of view stated that horizontal strategic alliances have no significant overall impact on partner firms' profitability gains. However, Oum et al. (2004) have found that alliance is an important factor in define the extent of alliance impact on the firm performance and conclude that have a significant and positive impact on profitability when they involve in high level cooperation.

As stated in Cho and Pucik (2011), they have examined the relationship between profitability together with other variable at the firm level. Their result shows that there is a positive relationship between profitability and firm performance whereby increase of profitability will lead to improve firm performance. According to Martani et al. (2009) from indonesia state that the variables which are consistently significant on adjusted return and abnormal return to the firm are profitability ratios, total assets turnover, and market value ratio through applying multiple regression measure the data from financial statements of listed companies in manufacturing industries during 2003-2006. The profitability of a firm shows that the efficiency of profit returns to shareholder, so the investors' point of view financial ratios are very useful when making decision on investment.

Besides that, Firer and Stainbank, (2003) indicate the intellectual capital performance in company is only positive predictor of company's performance in term of profitability. This because when a company's performance measure by using the return on assets, there was a positive relationship between intellectual capital performance and a company's performance. From research of Chen and Chang, (2009) who using ANN model found there is positive relationship between profitability of the US pharmaceutical companies and their patent citations. This means that high profitability ratio of companies' in the US pharmaceutical industry can lead to increase their performance. Therefore, US pharmaceutical companies should raise their profitability so that they can invest more R&D resources to increase their innovation performance.

### 2.1.5 Firm's Performance & Tangibility

According to Myers and Majluf (1984) state that selling secured debt will benefit for firms because there are some risks related with issuing securities about which firm's managers have better information than other shareholders. Furthermore, suggestion of this finding is positive relationship between tangibility and firm performance because mostly lenders need hold some collateral before issuing debt therefore firms holding assets can take advantage of this opportunity. By using financial statements of 30 out of 121 non-financial listed companies on the NSE from 2001-2007, Onaolapo and Kajola (2010) found that there is negative correlated between firm performances with 1% asset tangibility. It provides relevant evidence that the sampled firms did not arrangement their asset carefully to control their firm performance.

According to Chiu, et al. (2008) have revealed that the different specialized complementary assets have different moderating effect on the relationship between the technological diversification and performance

and thus conclude that by maintaining the relationship will help the firms generate competitive advantage. The study applied a panel data set and it is collected during 1997 to 2005 from the listed in the Electronic Information Technology category of Taiwan's stock markets and there are 638 listed companies but only 582 companies are used for the study sample. Kochha (1997) discover that firms will decrease firm performance if they do not get suitable potential suppliers of fund (Strategic asset). The author also found that performance across firms is likely to be controlled by the strategic asset.

Lozano et al. (2006) have found that new established company and small companies with a minimal existence of tangible assets are experience greater financing problems. This because their principal source of value is the presence of assets that are difficult to value. So the price of the shares which is a variable has an influence on the debt power of the company and on its value in the market.

### 2.1.6 Firm's Performance & Large Depreciation

Based on Forbes (2002) have found that firms with more foreign sales exposure have significantly better firm performance after the depreciations. Framework in the author research is to examine the impact of depreciations on more companies and also tested about the effects of depreciations on firm performance. According to the author again, firms in depreciating countries will have significantly lower firm value and firms in depreciating countries also will have bad performance during the year of the depreciation when firm performance is measured in U.S. dollars.

Last but not the least, the author also found that firms with lower capital ratios are expected to have good performance after depreciations compare with firms with higher capital ratios. From the result by using a sample of

13,500 companies from the world to do the test how 12 major depreciations between 1997 and 2000 affected firm performance, it recommend that in the year after depreciation have significantly higher growth in market capitalization (Forbes, 2002). Author found depreciation increase the present value of firms' expected future profits, so this cause the higher growth in market capitalization in the year after depreciation.

According to the Jackson et al.(2009) stated that although the firms' depreciation method option is a normatively unrelated consideration but the result showed the large depreciation is related with significantly higher levels of investments than the straight-line depreciation. However, there will be significantly smaller capital investments in the post-change periods than the pre-change periods for the firms that change from large depreciation to the straight-line depreciation.

### 2.1.7 Firm's Performance & Customer Satisfaction

In order to test the relationship between customer satisfaction and firm performance, Anderson et al. (1997) build a database matching customer-based measures of firm performance with traditional measures of business performance, such as productivity and Return on Investment from annual reports and business information services. The result shows that the relationship between customer coefficient and ROI is positive and significant at 0.09. The interaction between customer satisfaction and productivity is found to be positive and significant for goods at 1.45.

In Gupt and Zeitham (2006) research, they do a research on the impact of customer metrics (customer satisfaction) on firm performance. Besides that, researchers investigate both unobservable or perceptual customer

metrics (customer satisfaction) and observable or behaviour metrics (customer retention and lifetime value) on firm performance. According to same author, firms must demonstrate the link with customer behaviour to understand customer better, create customer satisfaction, to have better firm's financial performance. According to Leo et al. (2009), it is written that the customer satisfaction is a factor that will affect the firm profitability in terms of return on assets and market values of shares. The sample consists of firms listed on the Indonesian Stock Exchange (IDX) from year 2003 to year 2005 with the final sample consists of 199 firm-year observation. While Ittner and Larcker (1998) explained that the firm value will positively and significantly affect the firm's value even though the market does not react to the publication of the customer's satisfaction index.

### 2.1.8 Firm's Performance &Information Technology

There is significant and positive correlation between information technology (IT) and firm performance (Harris and Katz, 1991; Newman and Kozar, 1994; Mukhopadhyay, Kekre and Kalathuret, 1995). However, Keramati (2007) have not been able to found such relationship. Research shows that IT strongly and positively affects on firm performance with apply Canonical Correlation Analysis (CCA) to study the relationship between IT usage and firm performance in the study of analyzed the effects of IT usage on 112 Iranian car part suppliers. Dasgupta et al. (1999) concluded that there is a negative relationship between the IT investments on the firm performance in the manufacturing and service firms.

Besides that, as a rational manager, the person will not invest any money on the IT, unless planned and make analysis properly that the IT

investment will provide positive return to the firm. Bharadwaj et al. (1999) had disclosed that a firm's future performance will be affected by the IT investments and summarized that a positive relationship, which can be captured by looking forward to the firms performance measure such as q. The final sample was comprised of 631 firms over the years 1989-1993 with about 53% of the sample from the manufacturing sector and 47% from the services sector.

## 2.2 Review of Relevant Theoretical Model

There are few variables will influence firm performance. For example, dividend, debt, tangibility, size of the company and profitability. The model is just as below;

**Public listed consumer product's company**

$$\mathbf{Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5X5}$$

Y = Firm's Performance

X1= Dividend

X2 = Debt

X3 = Tangibility

X4 = Size

X5 = Profitability

### 2.2.1 Trade off theory

This theory can provide a consistent prediction with the fluctuation facts due to debt structure. According to Rasiah and Kim (2011), the main advantage of debt is the tax deductibility of interest payments. However, the other advantage of debt is the shareholder firm's disparity because debt financing limits the free cash flow and to control the firm's problems.

As Sheikh and Wang (2011) have mentioned that the trade-off theory emphasizes taxes and yet it is also provide a better understanding the potential factors that influence capital structure and the firm's financial behaviour. According to DeAngelo and Masulis (1980), there is a prediction that firms will find out the way to maintain an optimal capital structure in order to balance the debt and benefits from the benefit-bankruptcy cost trade-off models.

Besides that, the trade-off theory states that where the tax from an extra dollar in debt are same to the costs that increased profitability of financial distress. Other than that, the trade-off theory framework, firm will set a target debt to equity ratio in which shows that some form of optimal capital structure appear which can maximize the firm value (Sheikh and Wang, 2011). The authors also said that the trade-off theory has strong practical appeal and it moderate debt ratio.

### 2.2.2 Agency Theory

In the last few decades, agency theory had become one of the key concepts fundamental the importance of corporate governance (Armah, 2011). It is because, according to O'Farrell (2011), agency theory help identifies the different motivations that have by different parties who involve in same situation with same goal. So that, agency theory had plays a very significant role in almost every aspect of business activities decision-making, by both executive and non-executive directors. Besides, it has been successfully applied to a various disciplines including accounting, economics, politics, finance, marketing, and sociology.

According to eNotes (2011), under agency theory firm is a connection of contracts between resource holders. The relationship between stockholders and mangers and between debt holder and stockholders are the primary agency relationship in business. These relationship increase when one or more individuals, called principals, hire one or more other individuals, called agents, to perform some service and representative decision-making authority to the agents.

Pietersz (2011) had found one most important agency issue, which is the conflict between the interests of shareholders and debt holders. It is because a risky strategy has higher return and higher default on debt at the same time. This strategy will benefit the shareholders by the higher return, but it have disadvantage to the debt holders. Debt holders being permitted to a fixed return and will not benefit from higher returns. However, if the risk goes bad, shareholders will thanks to limited liabilities, because they share a sufficiently bad loss with debt holders.

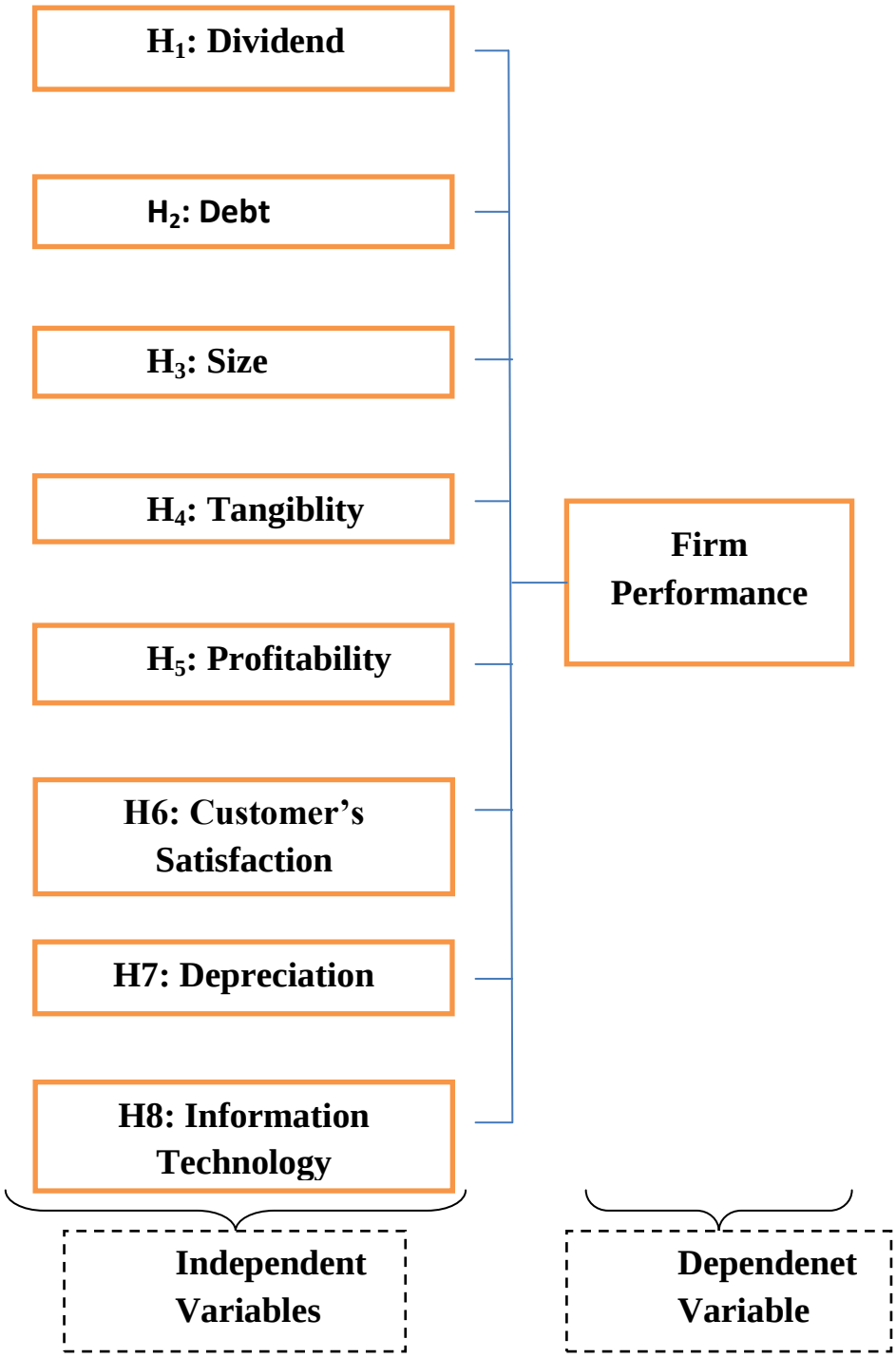
### 2.2.3 Pecking Order Theory

Pecking order theory of capital structure is designed for the firm to have a perfect hierarchy for the financing to make the decisions correctly. The best choice is using the internal retained earnings which is not require any financial information to show that are more strictly to the market regulation and possible losses of great competitive advantage. Based on Myers (1984) stated that the firm must use the external funds and the financing source is debt and preferred stock or common stock.

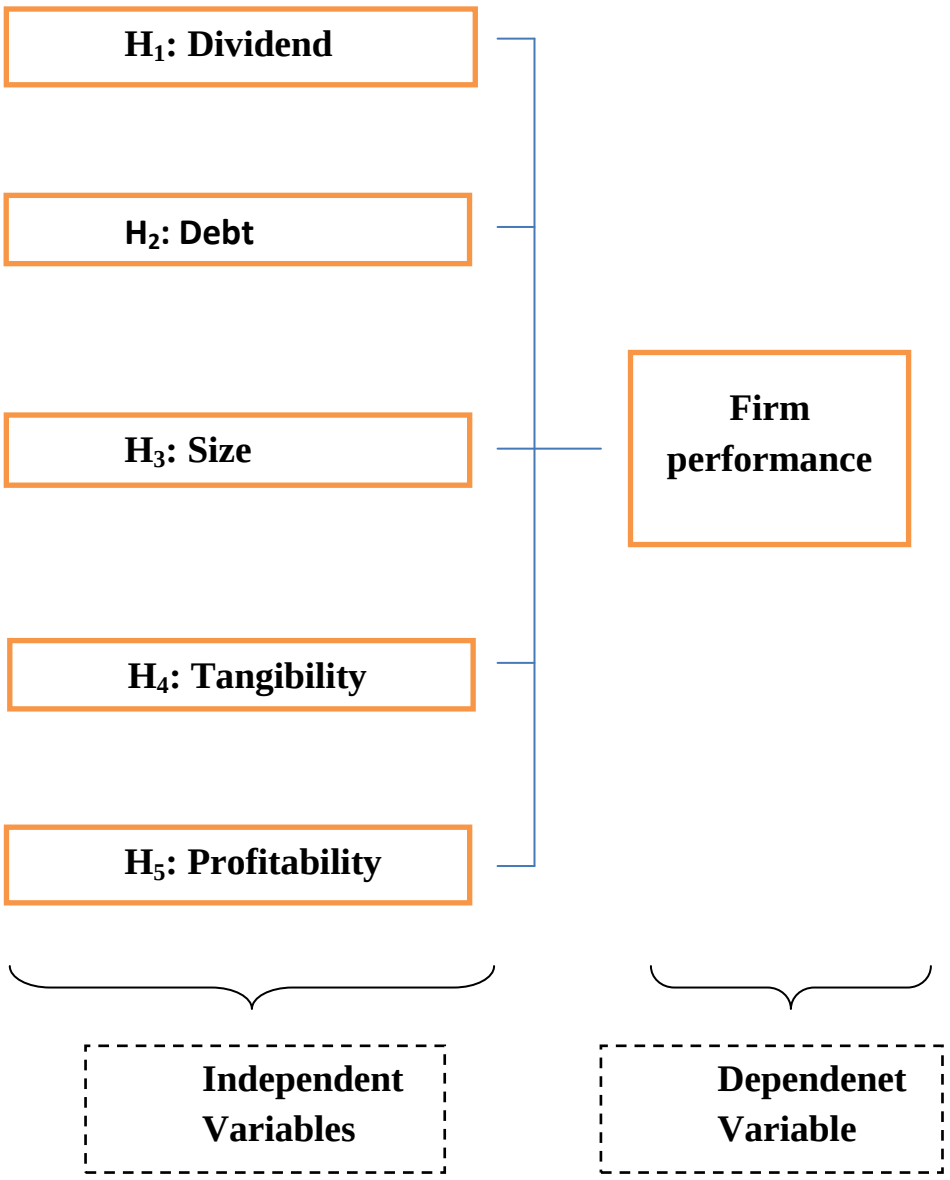
However, Hawawini and Viallet (1999) showed that the financial manager needs some motivations to manage and maintain the performance of the firm well. The company can minimize the cost of equity since the common stock has a ''voice'' in the management and by this can also avoid the negative market reaction to an announcement of a new equity issued. From the Rasiah and Kim (2011) research indicated the pecking order theory had made a conclusion that the profitable firms will have a negative relationship between the profitability and leverage.

Myers and Majluf (1984) said that the pecking order theory is the asymmetric information or the financial managers will have a lot of information about the company financial condition and the future growth opportunities compare to the outside investors. The managers will find other solution to finance the new project to prevent the underinvestment problems happen, such as internal funds or the riskless debt as a security that is not undervalued by the market.

## 2.3 Actual Conceptual Framework



**Proposed Theoretical / Conceptual Framework**



## 2.4 Hypothesis of study

**a) Dividend influenced the firm's performance in consumer product sector;**

According to Fairchild (2010), dividend will affect the firm's ability to invest in a new project and it provide confusing signal to investors. When dividend increased, there would be a negative signal because the firm is lacking of growth opportunities.

$H_0$: Dividend will not influence the firm's performance in consumer product sector

$H_1$: Dividend will influence the firm's performance in consumer product sector

**b) Debt influenced the firm's performance in consumer product sector;**

Ismiyanti and Mahadwartha (2008) found that Debt-Constraint Expropriation (DCE) and Debt- Facilitate Expropriation (DFE) is the base of the relationship of debt to firm performance. Besides, relationship between firm performance and debt also can be determined by using the empirical relationships that estimates in each condition of group-affiliate and no group-affiliate firms. However, the authors also argue that governance mechanisms can reduce default risk van be reduce by governance mechanisms.

$H_0$: Debt will not influence the firm's performance in consumer product sector

$H_1$: Debt will influence the firm's performance in consumer product sector

**c) Size influenced the firm's performance in consumer product sector;**

Pagano and Schivardi (2003) showed that there is positive relationship between the average firm size and productivity growth or growth of the firm performance. They also conclude a measure of the average firm size and found that differences in the size distribution within sectors will play an important role by explaining cross-country differences in average firm size.

$H_0$: Size will not influence the firm's performance in consumer product sector

$H_1$: Size will influence the firm's performance in consumer product sector

**d) Tangibility influenced the firm's performance in consumer product sector;**

There is a positive relationship between tangibility and leverage because assets that are holding by the firm can issue to lender as collateral and also it may issue more debt (Sheikh and Wang, 2011).

$H_0$: Tangibility will not influence the firm's performance in consumer product sector

$H_1$: Tangibility will influence the firm's performance in consumer product sector

**e) Profitability influenced the firm's performance in consumer product sector;**

According to Sheikh and Wang (2011), there is a positive relationship between profitability and leverage that is suggested by trade-off theory because debt will be used when there is a high profitability and it provide an opportunity to firms to gain the benefit tax shields on interest payments.

$H_0$: Profitability will not influence the firm's performance in consumer product sector

$H_1$: Profitability will influence the firm's performance in consumer product sector

## 2.5 Conclusion

The objective of study in this chapter is to determined factors that will affect the firm's performance in consumer product industry of public listed company in Malaysia. Since many previous researchers have done the research that is match and useful to our research for some of the certain variables, therefore it provides many useful information and guide to our study. By the way, we will discuss these information in the further chapter.

# CHAPTER 3: METHODOLOGY

## 3.0 Introduction

In this chapter, we will discuss the overview of how the research methodology was carried. Secondary data is used in this research and the method of research design, data collection, data processing and data analysis are described.

## 3.1 Research Design

Before examining types of research designs, it is important to be clear about the role and purpose of research design. We need to know where designs fix into the whole research process from framing a question to finally analyzing and reporting data. In this research paper, we are using the quantitative research which using numeric and quantifiable data. In quantitative research, we aim is to determine the relationship between the independent variables which are firm size, debts, dividend, profitability, and asset tangibility, while the dependent variable is company performance.

According to Eldabi et al., (2002), quantitative research is the researcher primarily that positivist epistemology which to know a social setting by identifying individual components and explaining the phenomenon in term of constructs and relationship between constructs. Hence, quantitative research plays a role in emphasis on methodology, procedure and statistical measures of validity. It also

relies on the measurement and analysis of statistical data to produce quantifiable conclusion.

According to Nau (1995), quantitative investigation use for distinguishing characteristics, elemental properties and empirical boundaries to measure how much or how often. Besides that, a quantitative research design has always been concern to define the truth-value of propositions and allows flexibility in the treatment of data, such as comparative analysis, statistical analyses and repeatability and data collect in order to verify reliability. Essentially, quantitative research can emphasizes the need to formulate hypothesis for subsequent verification. It also can help to search for causal explanations and fundamental laws, and generally reduces the whole to the simplest possible elements to facilitate analysis (Amaratunga et al., 2002).

## 3.2 Sampling Design

### 3.2.1 Target Population

Target population can be defined as the group of people a researcher wants to study also called the universe (Glenncoe 2004). In this research, our target population is the consumer product sector in Malaysia. As we mention in the data collection method, consumer product sector in Malaysia consists of 216 company and we randomly take 50 of it for our research purpose. After that, we draw our attention to the 50 company to examine the relationship on how dividend policy, debt policy and other variable such as size, tangibility and profitability influence the 50 consumer product sector's company firm performance.

### 3.2.2 Sampling Technique

Sampling method can be categorize in two major type which is the probability sampling method and non-probability sampling method, in probability sampling method, every population also has a known, non-zero probability of being selected. (McDaniel and Gates, 2001)In our research, the sampling technique we use is the Electronic Views which also known as EViews. We use EView software to run the regression analysis.

### 3.2.3 Sampling size

Sampling size can be defined as the number of units in a population to be studied. The sample size should be big enough to have a high likelihood of detecting a true difference between two groups (Mondofacto 2010). 50 companies are use in our measurement on how independent variables influence firm performance to obtain the data.

## 3.3 Data Collection Method

In our research, we have chosen 5 independent variables which are *Dividend, Debt, Profitability*, *Tangibility* and *Firm Size*. However, we have also collected the data of public listed company in consumer product sector from Bursa Malaysia webpage. Usually, we are focusing on consumer product sector and all the data is come from the annual report of the company from the year of 2005 to 2009. There are 216 listed companies in the main market of consumer product sector. However, there are only 50 companies data is fully available for this research. Therefore, 166 listed companies have been rejected in this research.

### 3.3.1 Secondary Data

Secondary data was collected and analyzed by the organization to convene the requirements of various research objectives (Adfoster 2010). However, secondary data are the data that had collected before by the previous researcher for some purpose other than the one at hand (Zikmund, 2003). In this study, a literature was undertaken. Specific areas of focus in the literature review included some variables which are firm performance, dividend, debt, profitability, tangibility and size of the firm. The main sources of secondary data for our research would be some articles, online information, journals and book which is related to the factor affecting firm's performance.

## 3.4 Data Processing

**Firm Performance**

According to Gunasekarage and Power (2006), dividend changes provide the information of managerial assessments about the current and future performance of firms to investors and help corporate managers to know the managerial behavior by removing the available optional cash flows. Qian et al.(2008) found that Return on Assets (ROA, Return in Sales (ROS), and Return on Equity (ROE) are the measurement that most widely used by accounting to measure the performance, and ROE is the one of the most widely used in the international business research and can reflect the productivity of capital employed (Morsy and Rwegasire, 2010). Thus, we choose ROE as the firm performance measurement.

$$\text{ROE} = \frac{profit\ before\ tax}{total\ asset}$$

ROE measured by firm pre-tax profit to total asset. The higher the ROE, it means the higher the firm performance, because when the ROE is higher, it means that the firm net income is higher. ROE shows stronger positive linear relationship with dividend yield and dividend payout ratio as compared to growth opportunities factor and firm size (Qian et al., 2008).

**Dividend**

Anil and Kappor (2008) found that profitability has always been considered as a key indicator of dividend payout ratio. There are numerous other factors other than profitability also that affect dividend decisions of an organization namely cash flow, corporate tax, sales growth and market to book value. According to Lintner's (1956) dividend increase is a signal about a permanent shift in earnings rather than a signal about future earnings growth, and suggests that a firm's dividend policy through time behaves as though the managers have a target dividend in mind, which is a fixed proportion of current earnings, and they adjust to this target from last year's dividend to the target level at a speed of adjustment equation gradually. Dividend policy measures the firm performance by dividend yield. Dividend yield is calculated by dividend per share and share price (Okpara and Chigozie, 2010).

$$\text{Dividend Yield} = \frac{dividend\ per\ share}{share\ price}$$

Companies with dividend increase usually have a high ratio of current earning to price and vice versa. Thus, dividend change will seize this information error, so that content cannot be observed (Tian et al., 2006).

**Debt**

The capital structure will be measured by the debt ratio which the firm liabilities divided by total assets (Al-Ajmi and Hussain, 2011). Total debt of the firm includes both long-term debt and current liability. Prasad and Murinde (2001) found that the high level of debt will have negative impact on return on equity, ceteris paribus. The relationship between liquidity and firm size is assumed to be negative, because the bigger firms may have a lower liquidity position than smaller firms (Ameer, 2010).

Besides, free cash flow per share has a positive impact on debt Al-Ajmi and Hussain (2011). This is because the firm that pursues to increase its liquidity would typically increase its operating of the firm.

$$\text{Debt ratio} = \frac{liabilities}{total\ asset}$$

Hennesy and Whited (2005), higher profits mean more dollars for debt service and more table income to shield. Firm should mean higher target debt ratios.

**Tangibility**

Onaolapo and Kajola (2010) suggest that there is a positive relationship between tangibility and firm performance, because firms holding assets can bring these assets to lender as collateral and issue more debt. Besides, Anderson et al., (2003) found that the high firm performance have an encouragement to invest sub

optimally to appropriate wealth from the firm's debt holders. According to Sheikh and Wang (2011), tangibility accounting measure is TANG.

$$\text{TANG}=\frac{net\ fixed\ asset}{total\ asset.}$$

According to Yartey (2011), firms with high ratios of fixed assets to total assets are predicted to have high long-and short-term leverage. There is a positive relationship between tangibility and debt levels. In particular, tangible assets often reduce the costs of financial distress because they tend to have to have higher liquidation value. So that, tangible assets normally provide high collateral value relative to intangible assets, which implies that these assets can support more debt.

**Size**

Su and Vo (2010) found that firm size is the control variable that is highly correlated with the dependent and the independent variables. According to Brady et al. (2011), there are four categories, sector, and size, stability, and scandal likely influential firm characteristics. The addition of control variable will help reduce forged relationships.

Kajola (2008) shows a positive relationship between size and firm performance. Firm size and competition may be some of the absorbing reasons which indicate that the adoption in industrialized companies (Porter, 2010). The small sizes of firms are more often than not are in the weak position in buying new technology especially when competitive dealing with a strong and more experience

industrialized. Firm size is measure by size as natural logarithm of sales (Sheikh and Wang, 2011).

$$\text{Size} = \text{Ln (Sales)}$$

According to Su and Vo (2010), the bigger the size of the firm is, the lower is its liquidity position, with the growth potential of the firm decreasing with increasing size.

**Profitability**

Profitability of a firm generally benefits majority and minority shareholders (Filatotchey and Tomasz, 2011). Sheikh and Wang (2011), suggest a positive relationship between profitability and firm performance, because high profitability promotes an incentive to firm to benefit on interest payment. According to Ivanov and Zaima (2011), profitability is return-to-total assets, defined as the ratio of net income to total assets.

There are three accounting ratios are used to examine profitability, which are return on shareholders' equity(ROSE), the return on capital employed (ROCE), and the gross profit margin ratio (GPM) (Gunasekarage and Power, 2006).

$$\text{GPM} = \frac{operating\ income}{total\ asset}$$

Gross profit margin is use the measure the company. The higher the GPM show the higher the firm performance. High performance firms are relatively more

profitable, more valuable and payout more cash to their shareholders (Mokhtar et al., 2009).

## 3.5 Data Analysis

### 3.5.1 SPSS

In this study, we might be using SPSS to analyze the data collected from Bursa Malaysia. According to Holiday (1983), SPSS is stands for Statistical Package for the Social Sciences, and quantitative research data was organized into various statistical formats to determine the related of variables associated with the research topic. He does mention that SPSS helps researchers approach at statistical relevance with accuracy and efficiency, and many researchers and scholars consider it a critical tool. Besides that, SPSS can also run descriptive analysis, t-Tests, Chi-square and other non-parametric tests as well as linear regression models and analysis of variance, among other statistical analysis tests.

### 3.5.2 T-Test Statistic

The t-test is a basic statistical method for examining the mean of the variables associated with two independent samples or groups. T-test also compared the proportions of binary variables when sample size is large and does not matter the data are balanced or unbalanced in the t-test (Park, 2009). While according to Park (2005), with the unknown population means, the t-test is to be assumes that the samples are randomly drawn

from normally distributed populations. Otherwise the means are no longer to be the best measures of central tendency and t-test will not valid. The Central Limit Theorem (CLT) stated that, when the N is large the distributions of $\bar{y}1$ and $\bar{y}2$ are approximately to be normal.

According to DeCoster (2006), the t-test statistic is to help to determine a P-value that indicates how likely could have gotten the result by chance to test whether the p-value for the test statistic is at the significance level. If the p-value is less than the significance level 1%, 5%, or 10%, thus we will reject the null hypothesis and found mean of population is significantly differently from comparison value. While if p-value is larger than the significance level, we will fail to reject hypothesis null and conclude that there is not significantly between the independent variable and dependent variable.

### 3.5.3 Autocorrelation

Autocorrelation is the correlation between members of a series of numbers arranged in time. Positive autocorrelation might be considered a specific form of 'persistence' and tendency to remain in the same from one observation to the next. According to Hatemi-J (2004) most of the economic data include the time-series and error terms in the model are often dependent on each the successive time periods. This is known as the problem for autocorrelation. The ordinary least-squares (OLS) are not efficient if there is autocorrelation problem. Therefore, time-series data is important to test the autocorrelation and Durbin-Watson (DW) statistic is using to test the presence of autocorrelation.

The DW statistic test is for the autocorrelation of the first order and is not valid in dynamic models. Huitema and McKean (2007) stated that the test for autocorrelation is to compare the obtained value of **d** against two values from the DW critical value table. If **d** > $d_u$ means that there is no positive autocorrelation while if **d** <$d_L$ means there is a positive autocorrelation in the process. The test is inconclusive when the **d** is fall between $d_L$ and $d_u$.

### 3.5.4 Chi-Square

A chi-square test is performed to test whether two variables can be considered statistically independent. When the chi-square statistic is large, rejects the null hypothesis of independence or if its P-value is less than the predetermined significance level such as 0.05. According to the Andrew (1988) said that the chi-square test can be made with the partition based on the least square residuals in a manner similar to that used with chi-square tests of normality in models with the response variables and asymptotic properties are same in these two models.

Besides that, Andrew (1988) also test the process that possess asymptotic optimality properties for power against nonparametric but does not exist. So there are some alternatives such as a Wald (W), likelihood ratio (LR) and Lagrange Multiplier (LM) test for the optimality properties against the subclass or choose a test that promise to have a good power against a wider of alternatives, although there is not necessarily for optimal power over any parametric subclass such as chi-square test. The author also concludes that the test has higher power, the greater is the expected inaccuracy.

## 3.6 Conclusion

Data that is required will be collected and we will use SPSS or Eview to run and analyze the data and the result will be shown in chapter 4.

# CHAPTER 4: DATA ANALYSIS

## 4.0 Introduction

This chapter we used 50 listed companies from consumer product sector in Malaysia over the 5 years from 2005 to 2009. The data we found is based on the annual reports from Bursa Malaysia. We had used SPSS software to analyse our findings and data. Moreover, we had also analysed 2 problems in our analysis which are heteroscedasticity and Chi-Square by using SPSS. SPSS also provides an accurate output in analysing descriptive statistic, correlation and regressions.

## 4.1 Scale of Measurement

### 4.1.1 Chi-Square

**Table 4.1.1: Result of Chi-Square Test**

| | ROE | DIV YIELD | DEBT RATIO | TANG | SIZE | GPM |
|---|---|---|---|---|---|---|
| Chi-Square | 0.000[a] | 0.000[a] | 4.520[b] | 0.960[c] | 0.000[a] | 0.000[a] |
| Df | 49 | 49 | 46 | 48 | 49 | 49 |
| Asymp.Sig | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

a. 50 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.0.

b. 47 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.1.

c. 49 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.0.

Before we move further in of our result, here is a brief introduction, we had use the Chi-Square test in SPSS to test there is autocorrelation between the variables or not, and form our hypothesis which is $H_0$ (There is no autocorrelation between the variable) and $H_1$ (There is autocorrelation between the variable).

According to table 1 above, ROE having a result of 0.000 for Chi-Square value, degree of freedom of 49 and assumption significant of 1.000, the assumption value (P-value) 1.000 which is more than α (0.01), therefore we reject $H_1$ (There is autocorrelation between the variables) and we have sufficient evidence to support our $H_0$ (There is no autocorrelation between the variables).

Next we looking at the DIV YIELD, the result are same as ROE where the Chi-Square value of 0.000, degree of freedom of 49 and assumption significant of 1.000. The assumption value (P-value) 1.000 which is more than α (0.01), therefore we successful reject our $H_1$ (There is autocorrelation between the variables) and we have enough evidence to conclude that there is no autocorrelation between the variable which support our $H_0$.

Furthermore, for DEBT RATIO we having a Chi-Square value of 4.520 which is the highest Chi-Square value compare to other variable in the result, degree of freedom of 46 and P-value of 1.000, due to P-value is more than α (0.01), so we reject our $H_1$ (There is autocorrelation between the variables) and conclude that $H_0$ (There is autocorrelation between the variables).

Beside from the above, TANG having a Chi-Square value of 0.960 in the Chi-Square test which is the second higher value among the variable, with a degree of freedom of 48 and assumption significant of 1.000. As a result P-value equal to 1.000 which more than α (0.01), we can reject our $H_1$ (There is autocorrelation between the variables) and giving a conclusion of there is no autocorrelation between the variables.

Continue, SIZE is one of the variable we tested in the Chi-Square test also, and the result show a Chi-Square value of 0.000 with degree of freedom of 49 and P-value of 1.000, therefore we can conclude there is no autocorrelation between the variable and reject our $H_1$ (There is autocorrelation between the variables) since the P-value is more than α (0.01).

Last but not least, GPM having a result same as variable SIZE where by having the result of Chi-Square value 0.000, degree of freedom of 49 and assumption significant of 1.000, and we also can conclude as what is conclude in variable SIZE where we have enough evidence to support our $H_0$ (There is no autocorrelation between the variable) and reject our $H_1$ (There is autocorrelation between the variables).

## 4.2 Descriptive Analysis

**Table 4.2.1: Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| ROE | 50 | -0.0461 | 5.8565 | 0.251551 | 0.8222397 |

| | | | | | |
|---|---|---|---|---|---|
| DIV YIELD | 50 | 0.0914 | 31.1153 | 4.443535 | 4.3090931 |
| DEBT | 50 | 0.0000 | 0.7183 | 0.196435 | 0.1839577 |
| RATIO | 50 | 0.1900 | 158.8586 | 3.782996 | 22.3801461 |
| TANG | 50 | 7.5636 | 21.4563 | 16.149116 | 2.6896041 |
| SIZE | 50 | -0.0690 | 43.1941 | 0.965856 | 6.0956297 |
| GPM | 50 | | | | |
| Valid N | | | | | |

Based on the 50 companies that we used, the result showed that the minimum ROE is -4.61 percent and with the maximum ROE is 585.65 percent. As for the firm performance (ROE) is measured by the profit before tax over total asset have a mean of 0.251551 and also with 0.8222397 for the standard deviation. However, the result found by the Onaolapo and Kajola (2010) is higher than our result. Based on the previous research the minimum and maximum ROE in examines the impact of capital structure on firm's financial performance recorded as -1290 percent and 1071 percent with the mean 3.419 and 13.949 standard deviation. On the other hand, the finding by Mokhtar et al. (2009) in the study of compare the performance between 5 Malaysia companies in year 2004, with the mean 14.206 and 6.085 standard deviation, the minimum ROE recorded as 4.68 percent and the maximum is 20.3 percent.

Besides that, the dividend per share over share price is used to measure the dividend (dividend yield) and the result stated that the mean is 4.443535 with standard deviation is 4.309031. This can mean by one percent of the standard deviation increases in dividend it would lead to increase RM1914.73 in the firm performance (= 4.3090931 x 4.443535). However, the maximum for the dividend yield is 3111.53 percent and the minimum recorded at 91.4 percent. In the study of dividend changes and future earnings performance in United State, Tian et al. (2006) found standard deviation 0.3432 and mean for dividend increase -0.4798, 1 percent increase in standard deviation will lead to 16.4667 percent decrease in

dividend with the standard deviation 0.3432 and the mean for mean dividend increase 0.2596. However standard deviation 0.5676 and mean for dividend increase 0.2596 will increase 14.7349 percent in dividend with the 1 percent increase in standard deviation.

Next, we had found out that the firm performance increases 3.61 percent it will due to the increases one percent of standard deviation in debt and as the debt (debt ratio) is measure by liabilities divided total asset have a mean of 0.196435 with standard deviation 0.1839577 (= 0.1839577 x 0.196435). The maximum debt ratio is 71.83 percent but the minimum is as low as 0 percent. The result in this study support by the Ameer (2010) with the minimum debt as low as 0 percent and the maximum debt is recorded as 48.32 percent. 1 percent increase increase in standard deviation will lead to 0.5451 percent in firm performance in Malaysia firms.

While for the tangibility (TANG) is measure by net fixed asset over total asset have a mean of 3.782996 with standard deviation 22.3801461.Increase one percent standard deviation in tangibility will lead to 8466.40 percent increase in firm performance (= 22.3801461 x 3.782996) . Maximum TANG recorded as 15885.86 percent; however the minimum is 19 percent. But, from the research done by the Onaolapo and Kajola (2010) the minimum and maximum for tangibility is 1 percent and 96 percent, with the mean 0.379 and standard deviation 0.217. The result show 1 percent increase in standard deviation will lead to increase 8.2243 percent in tangibility in Nigeria Stock Exchange. By the way, there is 0.358 percent and 98.933 percent for the minimum and maximum tangibility in the research by Serrasqueiro (2011). With the 0.24176 standard deviation and 0.02698 mean, 1 standard deviation increase will lead to 0.6523 percent increase in tangibility.

On the other hand, size is measure by the logarithm of total sales and the result showed that the mean is 16.149116 with standard deviation 2.6896041. So, this will lead to the increase one percent of standard deviation in size with the increases 4343.47 percent in firm performance (= 2.6896041 x 16.149116). The result shows that the size for maximum is 2145.63 percent, and the minimum is 756.36 percent. However, Onaolapo and Kojola (2010) found that the minimum for size is 363 percent, and 1055 percent for maximum from thirty non-financial firms listed on the Nigerian Stock Exchange.

Lastly, profitability (GPM) measure by operating income over total asset has a mean of 0.965856 with standard deviation of 6.0956297. Increase one percent of standard deviation in profitability will lead to increase 588.75 percent in firm performance (= 6.0956297 x 0.965856). Maximum GPM recorded as 4319.41 percent, however the minimum is -69 percent. Qian et al. (2008) found that 1 standard deviation increase in standard deviation will lead to 101.1683 percent increase in profitability with the means 3.253 and profitability 0.311 in the study of hoe regional diversification affects firm performance.

From the finding in this study, the effects of dividend yield, tangibility and size on firm performance are big; however debt and profitability have rather small effect on firm performance than others variable.

## 4.3 Regression Analysis

### 4.3.1 R-Squares

**Table 4.3.1: Coefficient**

| Model | R | R square |
|---|---|---|
| 1 | 0.993[a] | 0.987 |

a. Predictors: (Constant), GPM, DIV YIELD, DEBT RATIO, SIZE, TANG

As we can see from Table 4.3.1, two things that we need to analyse are R and R square. The R is used to measure the degree of correlation between Y and X, which is known as correlation coefficient. The value of the range is between -1 and 1. Value that is close to -1 is means a strong negative relationship between Y and X. However, if the value is close to 1 is means a strong positive relationship between Y and X. Now, our Y is dependent variable (firm performance) and X is independent variable (Dividend Yield, Debt, Size, Tangibility and GPM). The result shows in Table 4.3.1, R is 0.993 which is very close to 1. Therefore, it shows a strong correlation between Y (dependent variable) and X (independent variable).

Next, we need to analyse the R square in Table 4.3.1. R square is to measure as the proportion of the total variation in the Y variable that is explained by the variation in the X variable. The range of R square is from 1 to 100%. If the R square value is close to 1%, it is mean that less variation of Y can be explained by the variation of X. If R square is close to 100%, is means that high variation of Y can be explained variation of X. However, if R square equal to 0, it is mean that there is no variation of Y can be explained by variation of X. Since our R square is 0.987 which is also equal to 98.7%. So,

this tells us that 98.7% variation of firm performance can be explained by variation of Dividend Yield, Debt, Size, Tangibility, and GPM. By right, 1.3% remains cannot be explained by this model.

### 4.3.2 Linear regression

**Table 4.3.2.1: Regression**

| **Model** | **Coefficient** | **t-test** | **Significant** |
|---|---|---|---|
| (Constant) | 0.305 | 2.975 | 0.005 |
| Div Yield | 0.001 | 0.331 | 0.742 |
| Debt Ratio | 0.126 | 1.379 | 0.175 |
| Tangibility | -0.158 | -5.728 | 0.000 |
| Size | -0.011 | -1.622 | 0.112 |
| GPM | 0.713 | 7.036 | 0.000 |

**Table 4.3.2.2: Hypothesis**

| **Hypothesis** | **Conclusion** |
|---|---|
| $H_0$: dividend will not influence the firm's performance in consumer product sector.<br>$H_1$: dividend will influence the firm's performance in consumer product sector. | Accept $H_1$ |
| $H_0$: debt will not influence the firm's performance in consumer product sector.<br>$H_1$: debt will influence the firm's | Accept $H_1$ |

| | |
|---|---|
| performance in consumer product sector. | |
| $H_0$: Tangibility will not influence the firm's performance in consumer product sector.<br>$H_1$: Tangibility will influence the firm's performance in consumer product sector. | Accept $H_1$ |
| $H_0$: Size will not influence the firm's performance in consumer product sector.<br>$H_1$: Size will influence the firm's performance in consumer product sector. | Accept $H_1$ |
| $H_0$: Profitability will not influence the firm's performance in consumer product sector.<br>$H_1$: Profitability will influence the firm's performance in consumer product sector. | Accept $H_1$ |

Table 4.3.2.2 show the result of the relationship between dependent variable and independent variables from the previous researchers.

**Table 4.3.2.3: Hypothesis**

| **Test** | **Hypothesis** | **Decision rule** | **Statistic** | **Result** |
|---|---|---|---|---|
| | $H_0$: $\beta_1 \neq 0$<br>$H_1$: $\beta_1 = 0$ | | P-value<br>=0.742 | Accept $H_0$ |

| | | | | |
|---|---|---|---|---|
| | $H_0: \beta_2 \neq 0$ | | | |
| | $H_1: \beta_2 = 0$ | | P-value | Accept $H_0$ |
| | | **P< 0.05** | =0.175 | |
| **T-test** | $H_0: \beta_3 \neq 0$ | **Reject $H_0$** | | |
| | $H_1: \beta_3 = 0$ | | | |
| | | | P-value | Reject $H_0$ |
| | $H_0: \beta_4 \neq 0$ | | =0.000 | |
| | $H_1: \beta_4 = 0$ | | | |
| | $H_0: \beta_5 \neq 0$ | | P-value | Accept $H_0$ |
| | $H_1: \beta_5 = 0$ | | =0.112 | |
| | | | P-value | Reject $H_0$ |
| | | | =0.000 | |

According to Table 4.3.2.1, the dividend yield estimated on firm's performance (ROE) is positive relationship and not significant at 5 percent level, which p-value is 0.742 in table 4.3.3. It is greater than 0.05, so we do not reject null hypothesis. Based on our opinion, subprime crisis may cause the insignificant of dividend. The finding of Benartzi et al. (1997) shows that, the portfolio of dividend-decreasing companies earned insignificant cumulative excess return of 1.1 per cent during the three years following the dividend cut, while the portfolio of dividend increasing companies earning significant but smaller cumulative excess return than dividend-decreasing companies, 8.0 per cent only. Dividend will not influence the firm's performance in consumer product sector. It is because dividend will change when there is good news for the company or economy environment. Firms will increase their dividend paid when there is good news, while decrease dividend paid within 240-day post

announcement period if there is a bad news. These finding confirm the early evidence of Gunasekarage and Power (2006), firms that increased their dividend experienced significant increase earnings in the year before and the year of the announcement, but showed no significant growth in subsequent years.

Next is for the debt, as we can see from the table 4.3.2.1, debt ratio estimated on firm's performance also is positive relationship and not significant at 5 percent level, the p-value in table show 0.175, which is greater than 0.05. Therefore we do not reject null hypothesis, and conclude that debt will not influence the firm's performance in consumer product sector. However, Onaolapo and Kajola (2010) argue that there is significant relationship between firm performance and debt. Besides, Forbes (2002) also proves that firms with higher debt rations tend to have significantly higher firm performance with the result p-value equal to 0.857. Normally the company has higher debt will not giving any dividend paid, so that the problem between manager and shareholder because of their different objective with the interest will not occur. So that firm can use the cash efficiently to pay the debt interest periodically, and majority shareholders will act to improve the firm's performance. From the view of agency cost theory, higher debt is expected to lower agency cost, reduce inefficiency and thereby lead to improvement in firm's performance (Alwi, 2009).

However, for the tangibility, estimated on firm's performance result appear in negative relationship and significant at 5 percent level, and the result of table 4.3.2.3 have shown the P-value of tangibility is 0.00 which smaller than the P-value of T-test, 0.05. So that support our hypothesis, $H_1$ that means the tangibility will influence firm's performance in consumer product sector. The coefficient of tangibility is -0.158 that means increase 1 per cent of the tangibility will lead to a 15.80 per cent decrease in firm's

performance. The tangibility have negative relationship but significant with firm's performance because the inefficient exert the assets of firm, while the assets cannot fully utilize during operation. This results finding was supported by Onaolapo and kajola (2010) provides evidence that the sampled firms was unable to utilize the fixed asset composition in the total asset judiciously to impact on firm's performance. Besides that, the tangibility with less collateral assets may also limit the managers' consumptions of perquisites, so cause the firm with more tangibility but inefficient influence in the firm's performance (Nadeem and Zongjun, 2011). The efficient utilization of recourse was very important, this because the assets in firms play a role to increase the profit in firm. When the management of firm can fully utilize the firm's assets, it will exert more influence to lead a firm become more profitability (Rahul Kochhar, 1997).

Next move on to next variable which is Size of the company, as show in the table 4.3.2.1, size estimated on firm's performance result in negative relationship and not significant at 5 percent level, and the result of table 4.3.2.3 which the p-value of size is 0.112 was greater than the p-value of T-test 0.05, so support Hypothesis null that means the size will not influence the firm's performance in consumer sector. When the size of firm was bigger, the liquidity of firms may become lower. If the firm having financial problem, the financial of firm will affect because not enough liquidity to turnover in short term so the firm's performance will drop. However, this kind of financial problem will solve in long term, so the firm's size was insignificant with the firm's performance. This finding was argued by the Zunaidah and Fauzias (2010) that the size of firm is an important variable to determinate the firm's financial performance. Besides that, Martani et al. (2009) also argue that the firm's size was indicated by the total assets is positive relationship with the firm's performance. The possible explanation is some factors such as risk

diversification and dominant market position will have a batter access to capital market which will affect the firm's performance.

Last but not the least, variable of GPM (profitability) estimated on firm's performance result in positive relationship and significant at 5 percent level, because the table 4.3.2.3 have shown that P-value of GPM is 0.00 which smaller than the P-value, 0.05 therefore the result support our hypothesis, $H_1$. So the profitability will influence the firm's performance in consumer product sector. The coefficient of GPM is 0.713 that means increase 1 per cent of GPM will lead to a 71.30 per cent increase in firm's performance. This implies that the profitability can increase by conversation of intellectual capital when the management of firm can fully manage those potential intellectual capital, for example the intellectual capital can utilized as vehicle, so can increase the profitability of firm. At the same time, the firm's performance can raise because of increasing the profitability in firm. As a support to this conjecture, the positive relationship between intellectual capital and the company's performance in term of profitability which measure by the return on assets was extremely encouraging, the manager has to notice those full potential of the intellectual capital to maximize all stakeholder wealth (Firer and Stainbank, 2003). The shareholder and investor will focus the firm's profitability throght the analysis of financial condition which the variables are consistently significant positive which means will affect the ability of firm to make the devidend payment. Hence, the investors' point of view financial ratios are very useful when they make investment decision because the higher ROE state that the higher efficiency of money invested by shareholder to gain the profit growth (Martani et al., 2009).

As a conclusion, in our research we have two significant variables result estimated on firm's performance which is Tangibility and GPM

(profitability), and three not significant variables estimated on firm's performance which is the dividend, debt and size of the company.

## 4.4 Conclusion

This chapter shows the overview of the scale of measurement, descriptive statistic and regression analysis. The following chapter we will discuss about findings, implication of study, limitation and recommendations for future research.

# CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

## 5.0 Introduction

This chapter consists of the overall conclusion of the entire research. This is including the summary of statistical analysis that was showed and discussed in chapter 4. It is also provides the discussion of the major findings and implication of the study. Lastly, we will also suggest some recommendations for future research, based on our findings, limitation and conclusion.

## 5.1 Summary of Statistical Analysis

### 5.1.1 Descriptive Analysis

There is positive relationship between every variable we use with firm performance. Every 1 percent standard deviation increase in variable will lead to firm performance increase. From the finding, we conclude that debt have less effect on firm performance. 1 percent standard deviation of the debt increase will only increase 3.61 percent of the firm performance. However, 1 percent increase of tangibility standard deviation will increase 8466.40 percent firm performance.

There is positive relationship between every variable we use with firm performance. Every 1 percent standard deviation increase in variable will

lead to firm performance increase. From the finding, we conclude that debt have less effect on firm performance. 1 percent standard deviation of the debt increase will only increase 3.61 percent of the firm performance. High growth firm's performance will significantly decrease when the percentage of the long term debt the firm is high, but it is not significantly affects the firm with low growth opportunities supported by Aivazian et al. (2005). However, 1 percent increase of tangibility standard deviation will increase 8466.40 percent firm performance. Positive relationship between debt and profitability suggested by Myers and Majluf (1984), the lenders mostly need to hold some collateral before issuing debt; therefore the firms with high tangibility asset have the advantages to reduce the risk of issuing securities.

### 5.1.2 Regression Analysis

Refers to table 4.3.1 in chapter 4, R is equal to 0.993 which means is very close to 1. Therefore, it shows a strong correlation between Y (dependent variable) and X (independent variable). However, R square value in table 4.3.1 is equal to 0.987 which means 98.7% variation of firm performance can be explained by variation of Dividend Yield, Debt, Size, Tangibility, and GPM. By right, we can say that there is a high percentage of variation of Dividend Yield, Debt, Size, Tangibility, and GPM are related to Firm performance in listed consumer product companies in Malaysia.

We had used regression analysis from SPSS to analyze the relationship of dividend, debt, tangibility, size, and gross profit margin of 50 public listed consumer product sector companies toward firm's performance. Result show there is three insignificant variables towards the relationship which is

dividend, debt and size. However, there are two significant variables towards the relationship which is tangibility and gross profit margin.

We found that profitability can positively affect the firm performance in consumer product industry. The reason is when a company gain more profit, they are capable to extend their business or improve their firm performance in the future. We have rejected $H_0$ (no relationship between profitability and firm performance). As Ourn et al. (2004) have mentioned that profitability was positively impact of firm performance when they involve in high level cooperation.

Next variable, tangibility also result in positive relationship with firm performance as stated by Myers and Majluf (1984), which is same as our research result where we have rejected our H0 (no relationship between tangibility and firm performance). This is due to when a firm have more asset in their financial management, it show the firm have a strong financial situation, and will attract more investor to invest in their company, and the company can continue to improve or enlarge their firm performance.

Besides that, debt is proven that to be significantly affected firm performance by the other authors, such as Aivazian et al. (2005), Cavanaugh and Garen (1997), Yu et. al (2002) and Forbes (2002). However, our result showed that there is no relationship between debt and firm performance. $H_0$ has been rejected (no relationship between debt and firm performance). Nevertheless, Martini et al. (2009) found that the debt has positive correlation with firm performance but statistically not significant.

Insignificant of dividend was showed in our result, which is mean there is no relationship between dividend and firm performance. However, it is proven that dividend is actually significantly impact on firm performance by the authors, such as Fairchild (2010), Tian et al. (2006) and Azhagaiah and Priya (2008). This is because dividend will affect the firm's ability to invest in a new project and it provide confusing signal to investors (Fairchild, 2010).

Last but not the least, size also result in not significant whereby we reject our H1 (no relationship between size and firm performance). However, previous research such as Onaolapo and kajola (2010), Pagano and Schivardi (2003) and Forbes (2002) found there is actually a positive relationship between the size and firm performance where size of the firm increase, firm performance increase; size of the firm decrease, firm performance decrease as well.

## 5.2 Limitation of study

The number of journals that is related to our industry is insufficient. Therefore, we could not find any specific journal to get more inspiration on our study. Therefore, we have to refer to the journals that are focusing on the other industries instead of financial industry and other country. It could be one of the obstacles as we cannot get any benchmark for our analysis.

Data collection is one of the limitations. We were trying to collect data of consumer product companies in Malaysia for 5 years. However, the data available in Bursa Malaysia is not complete. There are plenty companies that do not have

complete annual reports from year 2005- 2009. Therefore, we are having difficulties in generating more companies as our sample of research. Lastly, we have only successfully collected 50 consumer product companies' data for our research.

Besides that, the data collected is calculated manually by referring to the annual report that we generated from the Bursa Malaysia. We have been using the formulas to calculate the independent variables from the data collected and some data are from the book. Therefore, there could be bias in our data despite several times of checking.

## 5.3 Recommendation for Future Research

The analysis can include analysis across industries. We only used consumer product sector industry. Future research should enlarge the research area such as technology industry, hotel industry, construction industry and others. Other than that, the sample size should be increased because this will lead to higher accuracy of result.

Moreover, our research has examined the relationship between dependent variable (firm performance) and independent variables (debt, dividend, tangibility, size, profitability). Therefore, future research is recommended to test on other independent variables such as large depreciation, customer satisfaction and information technology.

## 5.4 Contribution for Future Investors

Based on the significance of tangibility and profitability, it may lead to a better understanding for the future investor that the more asset of the company, the more profitable and capable to extend their business. The reason is because the company is more capable to get loan from finance companies or banks to invest in the future. Therefore, these may increase the firm performance.

## 5.5 Conclusion

As a conclusion, we have rejected null hypothesis which mean the tangibility and profitability (GPM) were significantly related to the firm performance but debt, dividend and size were proven to be insignificantly which mean no relationship to firm performance.

We found out some limitations that could affect the result in our research which are included the limited journal, data collection and data accuracy. Lastly, we have provided some recommendation to future research which are included enlarge the research area, increase sample size, and test on other independent variables.

# REFERENCES

Journals and Articles:

Adfoster. (2010). *Primary & Secondary Data*. Retrieved May 22, 2011, from http://www.adfoster.com/primary_secondary_data_what_s_the_difference

Aivazian, V. A., Ge, Y., & Qiu, J. (2005). Debt Maturity Structure and Firm Investment. *Financial Management, Vol.34, No.4* , 107-119.

Al-Ajmi, J., & Hussain, H. A. (2011). Corporate dividends decisions: Evidence from Saudi Arabia. *The Journal of Risk Finance Vol. 12, No. 1* , 41-56.

Al-Malkawi, H.-A. N., Rafferty, M., & Pillai, R. (2010). Dividend Policy: A Review of Theories and Empirical Evidence. *International Bulletin of Business Administration* , 171-194.

Almeida, H., & Campello, M. (2007). Financial Constraints, Asset Tangibility, and Corporate Investment. *The Review of Financial Studies 1 v 20* , 1430-1458.

Alwi, S. (2009). Dividend and Debt as Corporate Governance Mechanism: Indonesian Evidence. *Journal Pengurusan 29* , 111-127.

Rasiah, D., & Kim, P. K. (2011). A Theorectical Review on the Use of the Static Trade Off Theory, the Pecking Order Theory and the Agency Cost Theory of Capital Structure. *International Research Journal of Finance and Economics Issue 63* , 151-158.

Ameer, R. (2010). Determinants of Corporate Hedginf Practices in Malaysia. *International Business Research, Vol. 3, No. 2* , 120-125.

Amidu, M. (2007). How Does Dividend Policy Affect Performance of The Firm On Ghana Tock Exchange. *Investment Management and Financial Innovation, Vol 4 , Issue 2,* 103-111.

Anaspach, D. (2011). *About. com*. Retrieved from About. com Web site: http://moneyover55.about.com/od/investmentincome/a/highyieldinvestments.htm

Anil, K., & Kapoor, S. (2008). Determinants of Dividend Payout Ratios-A Study of Indian Information Technology Sector. *International Research Journal of Finance and Economics* .

Armah, W. (2011). *Warmah*. Retrieved from Warmah Web site: http://warmah.com/articles/agency_theory.html

*Articlesbase*. (2010, December 23). Retrieved from Articlesbase Web site : http://www.articlesbase.com/investing-articles/dividend-policy-malaysian-public-listed-companies-2006-to-2009-3902681.html

Beck, T., & Asli Demirguc-Kunt, V. M. (2005). Financial and Legal Contrainys to Growth: Does Firm Size Matter? *The Journal of Finance, vol 60, No 1* , 137-177.

Benartzi, S., Michaely, R., & Thaler, R. (1997). Do Changes in Dividend's Signal the Future or the Past? *The Journal of Finance, Vol. 52, No. 3, Papers and Proceedings Fifty-Seventh Annual Meeting, American Finance Assopciation, New Orleans, Louisiana* , 1007-1034.

Bharadwaj, A. S., Bharadwaj, S. G., & Konsynski, B. R. (1999). Information Technology Effects on Firm Performance as Measured by Tobin's q. *Management Science, Vol.45, No.7* , 1008-1024.

Brady, D., Isaacs, K., Reeves, M., Burroway, R., & Reynolds, M. (2011). Sector, Size, Stability, and Scandal Explaning the Presence of Female Executives in Fortune 500 Firms. *Gender in Management: An International Journal Vol. 26 No.1* , 84-103.

Cavanaugh, J. K., & Garen, J. (1997). Asset Specificity, Unionization and the Firm's Use of Debt. *Managerial and Decision Economies, Vol.18, No.3* , 255-269.

Chiu, Y.-C., Lai, H.-C., Lee, T.-Y., & Liaw, Y.-C. (2008). Technological Diversification, Complementary Assets, and Performance. *Technological Forecasting & Social Change 75* , 875-892.

Cho, H.-J., & Pucik, V. (2005). Relationship Between Innovation, Quality, Growth, Profitability, and Market Value. *Strategic Management Journal, Vol 26, No.6.* 555-575.

Choong, C. K., Lau, E., Liew, V. K., & Puah, C. H. (2010). Does Debts Foster Economic Growth? The Experience of Malaysia. *African Journal of Business Management Vol.4(8)* , 1564-1575.

Clandia Maffini Gomes, I. K., & Scherer, F. L. (2009). Company Size Effect in innovation Performance. *Journal of Technology Management and Innovation, Vol 4, Issue 4* , 1-19.

Chen, Y. S., & Chang, K. C. (2010). Analyzing the Nonlinear Effects of Firm Size, Profitability, and Employee Productivity on Patent Citations of the US Pharmaceutical Companies by Using Artificial Neyral Network. *Scientometrics* , 1-8.

Dasgupta, S., Sarkis, J., & Talluri, S. (1999). Influence of Information Technology on Firm Productivity: a Cross-Sectional Study. *Logistics Information Management Vol.12 N 2* , 120-129.

DeAngelo, H., & Masulis, R. W. (1980). Optimal capital structure under corporate and personal taxation. *Journal of Finance Economic 8*, 3-29.

Denis, D. J., & Kruse, T. A. (1998). Managerial Discipline and Corporate Restructuring Following Performance Declines. *Journal of Management* , 1-43.

Easterbroo, F. H. (1984). Two Agency-Cost Explanations of Dividends. *The American Economic Review, Vol. 74, No. 4* , 650-659.

Eldabi, T., Irani, Z., J.Paul, R., & E.D.Love, P. (2002). Quantitative and Qualitative Decision Making Method in Simulation Modelling. *Management Decision 40/1* , 64-73.

*eNotes*. (2011). Retrieved from eNotes Web site: http://www.enotes.com/biz-encyclopedia/agency-theory

Eugene W. Anderson, C. F. (1997). Customer Satisfaction, Productivity, and Profitability: Differences between Goods and. *Marketing Science, Vol. 16, No. 2* , 129-145.

Fairchild, R. (2010). Dividend policy, signalling and free cash flow: an integrated approach. *Managerial Finance Vol. 36 No. 5*, 394-413.

Filatotchev, I., & Mickiewicz, T. (2011). Ownership Concentration, Private Benefits of Control and Debt Financing. *ACE-Phare project P98-1048-R* , 1-33.

Firer, S., & Stainbank, L. (2003). Testing the Relationship Between Intellectual Capital and A Company's Performance: Evidence from South Africa. *Meditari Accountancy Research Vol 11* , 25-44.

Forbes, K. J. (2002). How Do Large Depreciations Affect Firm Performance? *International Monetary Fund Vol. 49, Special Issue* , 214-238.

Gomez-Mejia, L. R. (1992). Structure and Process of Diversification, Compensation Strategy and Firm Performance. *Strategic Management Journal, vol 13, No 5.* 381-397.

Gunasekarage, A., & Power, D. M. (2006). Anomalous evidence in dividend announcement effect. *Managerial Finance Vol.32, No.3* , 209-226.

Hennessy, C. A., & Whited, T. M. (2005). Debt Dynamics. *The Journal of Finance Vol. LX, No.3* .

Hitt, E. B. (2000). Beyond Computation: Information Technology, Organizational Transformation and Business. *The Journal of Economic Perspectives, Vol. 14, No. 4* , 23-48.

Holder, M. E., Langrehr, F. W., & Hexter, J. L. (1998). Dividend Policy Determinants: An Investigation of the Influence of Stakeholder Theory. *Financial Management, Vol 27, No 3* , 73-82.

Holiday, R. (1983). *Definition of SPSS Software.* Retrieved May 22, 2011, from http://www.ehow.com/facts_6822077_definition-spss-software.html

*Irish Statute Book*. (1963). Retrieved from Irish Statute Book Web site: http://www.irishstatutebook.ie/1963/en/act/pub/0033/index.html

Ismiyanti, F., & Mahadwartha, P. A. (2008). Does Debt Affect Firm Financial Performance? The Role of Debt on Corporate Governance in Indonesia. *Jurnal Riset Akuntansi Indonesia, Vol. 11, No. 1* , 1-22.

Ittner, C. D., & Larcker, D. F. (1998). Are Nonfinancial Measures Leading Indicators of Financial Performance? An Analysis of Customer Satisfaction. *Journal of Accounting Research Vol. 36 Studies on Enhancing the Financial* , 1-35.

Ivanov, S. I., & Zaima, J. K. (2011). Analysis of the effects of ESOP adoption on the company cost of capital. *Managerial Finance Vol. 37, No. 2* , 173-188.

Jackson, S. B., Liu, X. (., & Cecchini, m. (2009). Economic Consequences of Firms' Depreciation Method Choice: Evidence from Capital Investments. *Journal of Accounting and Economics 48* , 54-68.

Kajola, S. O. (2008). Corporate Governance and Firm Performance: The Case of Nigerian Listed Firms. *European Journal of Economics, Finance and Administrative Sciences* .

Katz, S. E. (1991). Organizational Performance and Information Technology Investment Intensity in the. *Organization Science, Vol. 2, No. 3* , 263-295.

Keramati, A. (2007). Assessing the Effects of Information Technology on Firm Performance Using Canonical Correlation Analysis: A Survey in Iran Car Part Suppliers Sector. *Proceedings of World Academy of Science, Engineering and Technology, Volume 21,ISSN 1307-6884* .

Kochhar, R. (1997). Strategic Asset, Capital Structure, and Firm Performance. *Journal of Financial and Strategic Decisions, Vol 10, No 3* , 24-38.

Kozar, J. N. (1994). A Multimedia Solution to Productivity Gridlock: A Re-Engineered Jewelry Appraisal System. *MIS Quarterly, Vol. 18, No. 1* , 21-30.

Leo, L., Gani, L., & Jermias, J. (2009). Investigating The Impacts of Customer Satisfaction on Firm Perfomance. *Gadjah Mada International Journal of Business Vol. 11, No.3* , 341-359.

Lintner, J. (1956). Distribution of Incomes of Corporations Among Dividens, Retained Earnings, and Taxes. *The American Economic Review, Vol. 46, No. 2, Papers and Proceedings of the Sixty-eighth Annual Meeting of the American Economic Association* , 97-113.

Little, K. (2011). *About.com. Stock*. Retrieved from About.com. Stock Web site: http://stocks.about.com/od/evaluatingstocks/a/pe.htm

Loganathan, N., Sukemi, M. N., & Sanusi, N. A. (2010). External Debt and Macroeconomics Performance in Malaysia: Sustainable or Not? *Global Economy and Finance Journal Vol 3. No.2* , 122-132.

Lozano, M. C., & Fuentes, F. (2006). The Problem of Internet Company Financing: A Methodological Analysis. *International Research Journal of Finance and Economics ISSN 1450-2887, Issue 3* , 93-99.

Martani, D., Mulyono, & Khairurizka, R. (2009). The Effect of Financial Ratios, Firm Size, and Cash Flow from Operating Activities in The Interim Report to The Stock Return. *Chinese Business Review, ISSN 1537-1506, Vol 8, No 6 (Serial No 72)* , 45-52.

Mokhtar, S. M., Sori, Z. M., & Hamid, M. A. (2009). Corporate Governance Practices and Firms Performance: The Malaysian Case. *Journal of Money, Investment and Banking ISSN 1450-288X Issue 11* , 46-56.

Morsy, A., & Rwegasire, K. (2010). Does Demutualization Matter to the Financial Performance of Stock Exchanges? An Investigation of Demutualized MemberStock Exchanges of the World Federation of Exchanges.

*International Research Journal of Finance and Economics ISSN 1450-2887 Issue 40* , 157-166.

Mueller, D. C. (1977). The Persistence of Profits above the Norm. *Economica, New Series, Vol. 44, No.176* , 369-380.

Myers, S. C. (2009). The Capital Structure. *Noth American Journal of Finance and Banking Research Vol. 3, No.3* , 2-30.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics 13*, 187-221.

Nau, D. (1995). "Mixing Methodologies: Can Bimodal Research Be A Viable Post positivist Tools?" The Qualitative Report Vol 2. No 3

Newman, J., & Kozar, K. A. (1994). A Multimedia Solution to Productivity Gridlock: A Re-Engineeredd Jewelry Appraisal at Zala Corporation. *Management Information Systems Research Center, University of Minnesota* , 21-30.

O'Farrell, R. (2011). *wiseGEEK*. Retrieved from wiseGEEK Web site: http://www.wisegeek.com/what-is-an-agency-theory.htm

Okpara, G. C. (2010). A Diagnosis of the Determinant of Dividend Pay-Out Policy in Nigeria: A Factor Analytical Approach. *American Journal of Scientific Research* , 57-67.

Onaolapo, A. A., & Kajola, S. O. (2010). Capital Structure and Firm Performance:Evidence from Nigeria. *European Journal of Economics, Finance and Administrative Sciences ISSN 1450-2275 Issue 25* , 70-80.

Oum, T. H., Park, J.-H., Kim, K., & Yu, C. (2004). The Effect of Horizontal Alliances on Firm Productivity and Profitability: Evidence from the Global Airline Industry. *Journal of Business Research 57* , 844-853.

Pagano, P., & Schivardi, F. (2003). Firm Size Distribution and Growth. *The Scandinavian Journal of Economics, Vol.105, No.2* , 255-274.

Pandey, I. M. (2003). Corporate Dividend Policy and Behaviour: The Malaysian Evidene. *Asian Academy of Management Journal, Vol. 8* , 17-32.

Pietersz, G. (2011). *Moneyterms*. Retrieved from Moneyterms Web site: http://moneyterms.co.uk/agency/

Qian, G., Li, L., Li, J., & Qian, Z. (2008). Regional diversification and firm performance. *Journal of International Business Studies* , 197-214.

Rajan, R. G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *The Journal of Finance Vol.1 No. 5*, 1421-1460.

Rasiah, D., & Kim, P. K. (2011). A Theorectical Review on the Use of the Static Trade Off Theory, the Pecking Order Theory and the Agency Cost Theory of Capital Structure. *International Research Journal of Finance and Economics Issue 63* , 151-158.

R.Azhagaiah, & Priya.N, S. (2008). The Impact of Dividend Policy on Shareholders' Wealth. *International Research Journal of Finance and Economics ISSN 1450-2887, Issue 20* , 181-187.

Serrasqueiro, Z. (2011). Are capital structure decisions decisions Empirical evidence from Portugal. *Management Research Review Vol. 34 No. 1* , 34-57.

Sheikh, N. A., & Wang, Z. (2011). Determinants of capital structure:An empirical study of firms in manufacturing industry of Pakistan. *Managerial Finance Vol.37, No.2* , 117-133.

Su, G.-S., & Vo, H. T. (2010). The Relationship between Corporate Strategy, Capital Structure and Firm Performance: An Emperical Study of the Listed Companies in Vietnam. *International Research Journal of Finance and Economics ISSN 1450-2887 Issue 50* , 62-71.

Tam, F. (2003, May 5). *YTL Community*. Retrieved from YTL Community Web site: http://www.ytlcommunity.com/commnews/shownews.asp?newsid=6238

Tatum, M. (2011). *What Is Dividend Poliy?* Retrieved from wiseGEEK Web site: http://www.wisegeek.com/what-is-a-dividend-policy.htm

Tian, G., Zhang, H., & Cao, Y. (2006). Dividend Changes and Future Earnings Performance: Evidence from UK Market. *Journal of Modern Accounting and Auditing, ISSN1548-6583, USA, Vol.2, No.2 (Serial No.9)* , 40-47.

Tridas Mukhopadhyay, S. K. (1995). Business Value of Information Technology: A Study of Electronic Data Interchange. *MIS Quarterly, Vol. 19, No. 2* , 137-156.

Yartey, C. A. (2011). Small Business Finance in Sub-Saharan African: the case of Ghana. *Management Research Review Vol. 34 No 2* , 172-185.

Yu, H.-C., Anita K, P., & Hsieh, D.-T. (2007). How Does Public Debt Compliment the Interrelationships Between Banking Relationships and Firm Profitability? *International Research Journal of Finance and Econimics,ISSN 1450-2887, Issue 12* , 37-55.

Zaher, T. S. (2010). Performance of debt free firms. *Managerial Finance Vol. 36 No. 6*, 491-501.

Zhang, M. J. (2011). Firm-level performance impact of. *European Journal of Innovation Management, Vol. 14, No. 1* , 118-132.

Zikmund, W. G. (2003). *Business Research Method 7th edition.* Oklahoma State University: South-Western.

# Annual Reports

Acoustech Berhad. (2005). *Annual Report*, Kuala Lumpur. Malaysia.

Acoustech Berhad. (2006). *Annual Report*, Kuala Lumpur. Malaysia.

Acoustech Berhad. (2007). *Annual Report*, Kuala Lumpur. Malaysia.

Acoustech Berhad. (2008). *Annual Report*, Kuala Lumpur. Malaysia.

Acoustech Berhad. (2009). *Annual Report*, Kuala Lumpur. Malaysia.

Ajinomoto Berhad. (2005). *Annual Report*, Kuala Lumpur. Malaysia.

Ajinomoto Berhad. (2006). *Annual Report*, Kuala Lumpur. Malaysia.

Ajinomoto Berhad. (2007). *Annual Report*, Kuala Lumpur. Malaysia.

Ajinomoto Berhad. (2008). *Annual Report*, Kuala Lumpur. Malaysia.

Ajinomoto Berhad. (2009). *Annual Report*, Kuala Lumpur. Malaysia.

Apollo Food Holding Berhad. (2005). *Annual Report*, Johor. Malaysia.

Apollo Food Holding Berhad. (2006). *Annual Report*, Johor. Malaysia.

Apollo Food Holding Berhad. (2007). *Annual Report*, Johor. Malaysia.

Apollo Food Holding Berhad. (2008). *Annual Report*, Johor. Malaysia.

Apollo Food Holding Berhad. (2009). *Annual Report*, Johor. Malaysia.

Bonia Corporation Berhad. (2005). *Annual Report*, Kuala Lumpur. Malaysia.

Bonia Corporation Berhad. (2006). *Annual Report*, Kuala Lumpur. Malaysia.

Bonia Corporation Berhad. (2007). *Annual Report*, Kuala Lumpur. Malaysia.

Bonia Corporation Berhad. (2008). *Annual Report*, Kuala Lumpur. Malaysia.

Bonia Corporation Berhad. (2009). *Annual Report*, Kuala Lumpur. Malaysia.

British American Tobacco (Malaysia) BHD. (2005). *Annual Report*, Selangor. Malaysia.

British American Tobacco (Malaysia) BHD. (2006). *Annual Report*, Selangor. Malaysia.

British American Tobacco (Malaysia) BHD. (2007). *Annual Report*, Selangor. Malaysia.

British American Tobacco (Malaysia) BHD. (2008). *Annual Report*, Selangor. Malaysia.

British American Tobacco (Malaysia) BHD. (2009). *Annual Report*, Selangor. Malaysia.

Carlsberg Brewery Malaysia Berhad. (2005). *Annual Report*, Selangor. Malaysia.

Carlsberg Brewery Malaysia Berhad. (2006). *Annual Report*, Selangor. Malaysia.

Carlsberg Brewery Malaysia Berhad. (2007). *Annual Report*, Selangor. Malaysia.

Carlsberg Brewery Malaysia Berhad. (2008). *Annual Report*, Selangor. Malaysia.

Carlsberg Brewery Malaysia Berhad. (2009). *Annual Report*, Selangor. Malaysia.

CCK Consolidated Holdings Berhad. (2005). *Annual Report*, Sarawak. Malaysia.

CCK Consolidated Holdings Berhad. (2006). *Annual Report*, Sarawak. Malaysia.

CCK Consolidated Holdings Berhad. (2007). *Annual Report*, Sarawak. Malaysia.

CCK Consolidated Holdings Berhad. (2008). *Annual Report*, Sarawak. Malaysia.

CCK Consolidated Holdings Berhad. (2009). *Annual Report*, Sarawak. Malaysia.

Cycle And Carriage Bintang Berhad. (2005). *Annual Report*, Kuala Lumpur. Malaysia.

Cycle And Carriage Bintang Berhad. (2006). *Annual Report*, Kuala Lumpur. Malaysia.

Cycle And Carriage Bintang Berhad. (2007). *Annual Report*, Kuala Lumpur. Malaysia.

Cycle And Carriage Bintang Berhad. (2008). *Annual Report*, Kuala Lumpur. Malaysia.

Cycle And Carriage Bintang Berhad. (2009). *Annual Report*, Kuala Lumpur. Malaysia.

DeGem Berhad. (2005). *Annual Report*, Kuala Lumpur. Malaysia.

DeGem Berhad. (2006). *Annual Report*, Kuala Lumpur. Malaysia.

DeGem Berhad. (2007). *Annual Report*, Kuala Lumpur. Malaysia.

DeGem Berhad. (2008). *Annual Report*, Kuala Lumpur. Malaysia.

DeGem Berhad. (2009). *Annual Report*, Kuala Lumpur. Malaysia.

Dutch Lady Milk Industries Berhad. (2005). *Annual Report*, Petaling Jay. Malaysia.

Dutch Lady Milk Industries Berhad. (2006). *Annual Report*, Petaling Jaya. Malaysia.

Dutch Lady Milk Industries Berhad. (2007). *Annual Report*, Petaling Jaya. Malaysia.

Dutch Lady Milk Industries Berhad. (2008). *Annual Report*, Petaling Jaya. Malaysia.

Dutch Lady Milk Industries Berhad. (2009). *Annual Report*, Petaling Jaya. Malaysia.

Emivest Berhad. (2005). *Annual Report*, Selangor. Malaysia.

Emivest Berhad. (2006). *Annual Report*, Selangor. Malaysia.

Emivest Berhad. (2007). *Annual Report*, Selangor. Malaysia.

Emivest Berhad. (2008). *Annual Report*, Selangor. Malaysia.

Emivest Berhad. (2009). *Annual Report*, Selangor. Malaysia.

Eng Kah Corporation Berhad (2005). *Annual Report*, Penang. Malaysia.

Eng Kah Corporation Berhad (2006). *Annual Report*, Penang. Malaysia.

Eng Kah Corporation Berhad (2007). *Annual Report*, Penang. Malaysia.

Eng Kah Corporation Berhad (2008). *Annual Report*, Penang. Malaysia.

Eng Kah Corporation Berhad (2009). *Annual Report*, Penang. Malaysia.

Eurospan Holdings Berhad. (2005). *Annual Report*, Butterworth. Malaysia.

Eurospan Holdings Berhad. (2006). *Annual Report*, Butterworth. Malaysia.

Eurospan Holdings Berhad. (2007). *Annual Report*, Butterworth. Malaysia.

Eurospan Holdings Berhad. (2008). *Annual Report*, Butterworth. Malaysia.

Eurospan Holdings Berhad. (2009). *Annual Report*, Butterworth. Malaysia.

Formosa Prosonic Industries Berhad (2005). *Annual Report*, Kuala Lumpur. Malaysia.

Formosa Prosonic Industries Berhad (2006). *Annual Report*, Kuala Lumpur. Malaysia.

Formosa Prosonic Industries Berhad (2007). *Annual Report*, Kuala Lumpur. Malaysia.

Formosa Prosonic Industries Berhad (2008). *Annual Report*, Kuala Lumpur. Malaysia.

Formosa Prosonic Industries Berhad (2009). *Annual Report*, Kuala Lumpur. Malaysia.

Furniwed Industrial Products Berhad (2005). *Annual Report*, Kuala Lumpur. Malaysia.

Furniwed Industrial Products Berhad (2006). *Annual Report*, Kuala Lumpur. Malaysia.

Furniwed Industrial Products Berhad (2007). *Annual Report*, Kuala Lumpur. Malaysia.

Furniwed Industrial Products Berhad (2008). *Annual Report*, Kuala Lumpur. Malaysia.

Furniwed Industrial Products Berhad (2009). *Annual Report*, Kuala Lumpur. Malaysia.

Guiness Anchor Berhad. (2005). *Annual Report*, Kuala Lumpur. Malaysia.

Guiness Anchor Berhad. (2006). *Annual Report*, Kuala Lumpur. Malaysia.

Guiness Anchor Berhad. (2007). *Annual Report*, Kuala Lumpur. Malaysia.

Guiness Anchor Berhad. (2008). *Annual Report*, Kuala Lumpur. Malaysia.

Guiness Anchor Berhad. (2009). *Annual Report*, Kuala Lumpur. Malaysia.

Hing Yiap Knitting Industries Berhad (2005). *Annual Report*, Kuala Lumpur. Malaysia.

Hing Yiap Knitting Industries Berhad (2006). *Annual Report*, Kuala Lumpur. Malaysia.

Hing Yiap Knitting Industries Berhad (2007). *Annual Report*, Kuala Lumpur. Malaysia.

Hing Yiap Knitting Industries Berhad (2008). *Annual Report*, Kuala Lumpur. Malaysia.

Hing Yiap Knitting Industries Berhad (2009). *Annual Report*, Kuala Lumpur. Malaysia.

Hup Seng Industries Berhad. (2005). *Annual Report*, Johor. Malaysia.

Hup Seng Industries Berhad. (2006). *Annual Report*, Johor. Malaysia.

Hup Seng Industries Berhad. (2007). *Annual Report*, Johor. Malaysia.

Hup Seng Industries Berhad. (2008). *Annual Report*, Johor. Malaysia.

Hup Seng Industries Berhad. (2009). *Annual Report*, Johor. Malaysia.

Khind Holding Berhad. (2005). *Annual Report*, Selangor. Malaysia.

Khind Holding Berhad. (2006). *Annual Report*, Selangor. Malaysia.

Khind Holding Berhad. (2007). *Annual Report*, Selangor. Malaysia.

Khind Holding Berhad. (2008). *Annual Report,* Selangor. Malaysia.

Khind Holding Berhad. (2009). *Annual Report,* Selangor. Malaysia.

Latitude Tree Holding Berhad. (2005). *Annual Report,* Selangor. Malaysia.

Latitude Tree Holding Berhad. (2006). *Annual Report,* Selangor. Malaysia.

Latitude Tree Holding Berhad. (2007). *Annual Report,* Selangor. Malaysia.

Latitude Tree Holding Berhad. (2008). *Annual Report,* Selangor. Malaysia.

Latitude Tree Holding Berhad. (2009). *Annual Report,* Selangor. Malaysia.

Leong Hup Holdings Berhad. (2005). *Annual Report*, Johor. Malaysia.

Leong Hup Holdings Berhad. (2006). *Annual Report*, Johor. Malaysia.

Leong Hup Holdings Berhad. (2007). *Annual Report*, Johor. Malaysia.

Leong Hup Holdings Berhad. (2008). *Annual Report*, Johor. Malaysia.

Leong Hup Holdings Berhad. (2009). *Annual Report*, Johor. Malaysia.

Lii Hen Industries Berhad. (2005). *Annual Report,* Selangor. Malaysia.

Lii Hen Industries Berhad. (2006). *Annual Report,* Selangor. Malaysia.

Lii Hen Industries Berhad. (2007). *Annual Report,* Selangor. Malaysia.

Lii Hen Industries Berhad. (2008). *Annual Report,* Selangor. Malaysia.

Lii Hen Industries Berhad. (2009). *Annual Report,* Selangor. Malaysia.

Lii Hen Industries Berhad. (2009). *Annual Report,* Selangor. Malaysia.

LTKM Berhad. (2005). *Annual Report,* Selangor, Malaysia.

LTKM Berhad. (2006). *Annual Report,* Selangor. Malaysia.

LTKM Berhad. (2007). *Annual Report,* Selangor. Malaysia.

LTKM Berhad. (2008). *Annual Report,* Selangor. Malaysia.

LTKM Berhad. (2009). *Annual Report, Selangor*. Malaysia.

Mamee-Double Decker (M) Berhad. (2005). *Annual Report*, Johor Bahru. Malaysia.

Mamee-Double Decker (M) Berhad. (2006). *Annual Report*, Johor Bahru. Malaysia.

Mamee-Double Decker (M) Berhad. (2007). *Annual Report*, Johor Bahru. Malaysia.

Mamee-Double Decker (M) Berhad. (2008). *Annual Report*, Johor Bahru. Malaysia.

Mamee-Double Decker (M) Berhad. (2009). *Annual Report*, Johor Bahru. Malaysia.

Media Prima Berhad (2005). *Annual Report*, Kuala Lumpur. Malaysia.

Media Prima Berhad (2006). *Annual Report*, Kuala Lumpur. Malaysia.

Media Prima Berhad (2007). *Annual Report*, Kuala Lumpur. Malaysia.

Media Prima Berhad (2008). *Annual Report*, Kuala Lumpur. Malaysia.

Media Prima Berhad (2009). *Annual Report*, Kuala Lumpur. Malaysia.

MINTYE Berhad. (2005). *Annual Report,* Kuala Lumpur. Malaysia.

MINTYE Berhad. (2006). *Annual Report,* Kuala Lumpur. Malaysia.

MINTYE Berhad. (2007). *Annual Report,* Kuala Lumpur. Malaysia.

MINTYE Berhad. (2008). *Annual Report,* Kuala Lumpur. Malaysia.

MINTYE Berhad. (2009). *Annual Report,* Kuala Lumpur. Malaysia.

Nestle (Malaysia) Berhad. (2005). *Annual Report*, Selangor. Malaysia.

Nestle (Malaysia) Berhad. (2006). *Annual Report*, Selangor. Malaysia.

Nestle (Malaysia) Berhad. (2007). *Annual Report*, Selangor. Malaysia.

Nestle (Malaysia) Berhad. (2008). *Annual Report*, Selangor. Malaysia.

Nestle (Malaysia) Berhad. (2009). *Annual Report*, Selangor. Malaysia.

NI HSIN Resources Berhad. (2005). *Annual Report*, Selangor. Malaysia.

NI HSIN Resources Berhad. (2006). *Annual Report*, Selangor. Malaysia.

NI HSIN Resources Berhad. (2007). *Annual Report*, Selangor. Malaysia.

NI HSIN Resources Berhad. (2008). *Annual Report*, Selangor. Malaysia.

NI HSIN Resources Berhad. (2009). *Annual Report*, Selangor. Malaysia.

NTPM Holdings Berhad. (2005). *Annual report*, Penang. Malaysia.

NTPM Holdings Berhad. (2006). *Annual report*, Penang. Malaysia.

NTPM Holdings Berhad. (2007). *Annual report*, Penang. Malaysia.

NTPM Holdings Berhad. (2008). *Annual report*, Penang. Malaysia.

NTPM Holdings Berhad. (2009). *Annual report*, Penang. Malaysia.

Oriental Food Industries Holdings Berhad. (2005). *Annual Report*, Kuala Lumpur. Malaysia.

Oriental Food Industries Holdings Berhad. (2006). *Annual Report*, Kuala Lumpur. Malaysia.

Oriental Food Industries Holdings Berhad. (2007). *Annual Report*, Kuala Lumpur. Malaysia.

Oriental Food Industries Holdings Berhad. (2008). *Annual Report*, Kuala Lumpur. Malaysia.

PadiBeras National Berhad. (2005). *Annual Report*, Petaling Jaya. Malaysia.

PadiBeras National Berhad. (2006). *Annual Report*, Petaling Jaya. Malaysia.

PadiBeras National Berhad. (2007). *Annual Report*, Petaling Jaya. Malaysia.

PadiBeras National Berhad. (2008). *Annual Report*, Petaling Jaya. Malaysia.

PadiBeras National Berhad. (2009). *Annual Report*, Petaling Jaya. Malaysia.

Paragon Union Berhad. (2005). *Annual Report.* Selangor, Malaysia.

Paragon Union Berhad. (2006). *Annual Report.* Selangor. Malaysia.

Paragon Union Berhad. (2007). *Annual Report.* Selangor. Malaysia.

Paragon Union Berhad. (2008). *Annual Report.* Selangor. Malaysia.

Paragon Union Berhad. (2009). *Annual Report.* Selangor. Malaysia.

Pelikan International Corporation Berhad. (2005). *Annual Report*. Selangor. Malaysia.

Pelikan International Corporation Berhad. (2006). *Annual Report*. Selangor. Malaysia.

Pelikan International Corporation Berhad. (2007). *Annual Report*. Selangor. Malaysia.

Pelikan International Corporation Berhad. (2008). *Annual Report*. Selangor. Malaysia.

Pelikan International Corporation Berhad. (2009). *Annual Report*. Selangor. Malaysia.

Plus Expressways Berhad (2005). *Annual Report*, Kuala Lumpur. Malaysia.

Plus Expressways Berhad (2006). *Annual Report*, Kuala Lumpur. Malaysia.

Plus Expressways Berhad (2007). *Annual Report*, Kuala Lumpur. Malaysia.

Plus Expressways Berhad (2008). *Annual Report*, Kuala Lumpur. Malaysia.

Plus Expressways Berhad (2009). *Annual Report*, Kuala Lumpur. Malaysia.

Poh Huat Resources Holdings Berhad. (2005). *Annual Report*, Johor. Malaysia.

Poh Huat Resources Holdings Berhad. (2006). *Annual Report*, Johor. Malaysia.

Poh Huat Resources Holdings Berhad. (2007). *Annual Report*, Johor. Malaysia.

Poh Huat Resources Holdings Berhad. (2008). *Annual Report*, Johor. Malaysia.

Poh Huat Resources Holdings Berhad. (2009). *Annual Report*, Johor. Malaysia.

Poh Kong Holding Berhad. (2005). *Annual Report.* Selangor. Malaysia.

Poh Kong Holding Berhad. (2006). *Annual Report.* Selangor. Malaysia.

Poh Kong Holding Berhad. (2007). *Annual Report.* Selangor. Malaysia.

Poh Kong Holding Berhad. (2008). *Annual Report.* Selangor. Malaysia.

Poh Kong Holding Berhad. (2009). *Annual Report.* Selangor. Malaysia.

PPB Group Berhad. (2005). *Annual Report*, Kuala Lumpur. Malaysia.

PPB Group Berhad. (2006). *Annual Report*, Kuala Lumpur. Malaysia.

PPB Group Berhad. (2007). *Annual Report*, Kuala Lumpur. Malaysia.

PPB Group Berhad. (2008). *Annual Report*, Kuala Lumpur. Malaysia.

PPB Group Berhad. (2009). *Annual Report*, Kuala Lumpur. Malaysia.

QL Resources Berhad. (2005). *Annual Report*. Selangor. Malaysia.

QL Resources Berhad. (2006). *Annual Report*. Selangor. Malaysia.

QL Resources Berhad. (2007). *Annual Report*. Selangor. Malaysia.

QL Resources Berhad. (2008). *Annual Report*. Selangor. Malaysia.

QL Resources Berhad. (2009). *Annual Report*. Selangor. Malaysia.

Sern Kou Resources Berhad. (2005). *Annual Report.* Johor. Malaysia.

Sern Kou Resources Berhad. (2006). *Annual Report.* Johor. Malaysia.

Sern Kou Resources Berhad. (2007). *Annual Report.* Johor. Malaysia.

Sern Kou Resources Berhad. (2008). *Annual Report.* Johor. Malaysia.

Sern Kou Resources Berhad. (2009). *Annual Report.* Johor. Malaysia.

Spritzer Berhad. (2005). *Annual Report*, Ipoh. Malaysia.

Spritzer Berhad. (2006). *Annual Report*, Ipoh. Malaysia.

Spritzer Berhad. (2007). *Annual Report*, Ipoh. Malaysia.

Spritzer Berhad. (2008). *Annual Report*, Ipoh. Malaysia.

Spritzer Berhad. (2009). *Annual Report*, Ipoh. Malaysia.

Supermax Corporation Berhad (2005). *Annual Report*, Selangor. Malaysia.

Supermax Corporation Berhad (2006). *Annual Report*, Selangor. Malaysia.

Supermax Corporation Berhad (2007). *Annual Report*, Selangor. Malaysia.

Supermax Corporation Berhad (2008). *Annual Report*, Selangor. Malaysia.

Supermax Corporation Berhad (2009). *Annual Report*, Selangor. Malaysia.

Tan Chong Motor Holdings Berhad (2005). *Annual Report*, Kuala Lumpur. Malaysia.

Tan Chong Motor Holdings Berhad (2006). *Annual Report*, Kuala Lumpur. Malaysia.

Tan Chong Motor Holdings Berhad (2007). *Annual Report*, Kuala Lumpur. Malaysia.

Tan Chong Motor Holdings Berhad (2008). *Annual Report*, Kuala Lumpur. Malaysia.

Tan Chong Motor Holdings Berhad (2009). *Annual Report*, Kuala Lumpur. Malaysia.

The Glove Corporation berhad (2005). *Annual Report*, Kuala Lumpur. Malaysia.

The Glove Corporation berhad (2006). *Annual Report*, Kuala Lumpur. Malaysia.

The Glove Corporation berhad (2007). *Annual Report*, Kuala Lumpur. Malaysia.

The Glove Corporation berhad (2008). *Annual Report*, Kuala Lumpur. Malaysia.

The Glove Corporation berhad (2009). *Annual Report*, Kuala Lumpur. Malaysia.

UMW Berhad. (2005). *Annual Report,* Selangor. Malaysia.

UMW Berhad. (2006). *Annual Report,* Selangor. Malaysia.

UMW Berhad. (2007). *Annual Report,* Selangor. Malaysia.

UMW Berhad. (2008). *Annual Report,* Selangor. Malaysia.

UMW Berhad. (2009). *Annual Report,* Selangor. Malaysia.

UPA Corporation Berhad. (2005). *Annual Report,* Selangor. Malaysia.

UPA Corporation Berhad. (2006). *Annual Report,* Selangor. Malaysia.

UPA Corporation Berhad. (2007). *Annual Report,* Selangor. Malaysia.

UPA Corporation Berhad. (2008). *Annual Report,* Selangor. Malaysia.

UPA Corporation Berhad. (2009). *Annual Report,* Selangor. Malaysia.

Wang Zheng Berhad. (2005). *Annual Report,* Kuala Lumpur. Malaysia.

Wang Zheng Berhad. (2006). *Annual Report,* Kuala Lumpur. Malaysia.

Wang Zheng Berhad. (2007). *Annual Report,* Kuala Lumpur. Malaysia.

Wang Zheng Berhad. (2008). *Annual Report,* Kuala Lumpur. Malaysia.

Wang Zheng Berhad. (2009). *Annual Report,* Kuala Lumpur. Malaysia.

Weida (M) Berhad (2005). Annual Report, Sarawak. Malaysia.

Weida (M) Berhad (2006). Annual Report, Sarawak. Malaysia.

Weida (M) Berhad (2007). Annual Report, Sarawak. Malaysia.

Weida (M) Berhad (2008). Annual Report, Sarawak. Malaysia.

Weida (M) Berhad (2009). Annual Report, Sarawak. Malaysia.

Xian Leng Holdings berhad (2005). Annual Report, Johor. Malaysia.

Xian Leng Holdings berhad (2006). Annual Report, Johor. Malaysia.

Xian Leng Holdings berhad (2007). Annual Report, Johor. Malaysia.

Xian Leng Holdings berhad (2008). Annual Report, Johor. Malaysia.

Xian Leng Holdings berhad (2009). Annual Report, Johor. Malaysia.

Yee Lee Corporation Berhad. (2005). *Annual Report*, Ipoh. Malaysia.

Yee Lee Corporation Berhad. (2006). *Annual Report*, Ipoh. Malaysia.

Yee Lee Corporation Berhad. (2007). *Annual Report*, Ipoh. Malaysia.

Yee Lee Corporation Berhad. (2008). *Annual Report*, Ipoh. Malaysia.

Yee Lee Corporation Berhad. (2009). *Annual Report*, Ipoh. Malaysia.

Yeo Hiap Seng (Malaysia) Berhad. (2005). *Annual Report*, Selangor. Malaysia.

Yeo Hiap Seng (Malaysia) Berhad. (2006). *Annual Report*, Selangor. Malaysia.

Yeo Hiap Seng (Malaysia) Berhad. (2007). *Annual Report*, Selangor. Malaysia.

Yeo Hiap Seng (Malaysia) Berhad. (2008). *Annual Report*, Selangor. Malaysia.

Yeo Hiap Seng (Malaysia) Berhad. (2009). *Annual Report*, Selangor. Malaysia.

# APPENDICES

## Appendix 1: Chi-Square

**Table 4.1.1 Result of Chi-Square Test**

| | ROE | DIV YIELD | DEBT RATIO | TANG | SIZE | GPM |
|---|---|---|---|---|---|---|
| Chi-Square | 0.000[a] | 0.000[a] | 4.520[b] | 0.960[c] | 0.000[a] | 0.000[a] |
| Df | 49 | 49 | 46 | 48 | 49 | 49 |
| Asymp.Sig | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

a. 50 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.0.

b. 47 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.1.

c. 49 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.0.

**Appendix 2: Descriptive Statistics**

**Table 4.2.1 Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| ROE | 50 | -0.0461 | 5.8565 | 0.251551 | 0.8222397 |
| DIV YIELD | 50 | 0.0914 | 31.1153 | 4.443535 | 4.3090931 |

| | | | | | |
|---|---|---|---|---|---|
| DEBT | 50 | 0.0000 | 0.7183 | 0.196435 | 0.1839577 |
| RATIO | 50 | 0.1900 | 158.8586 | 3.782996 | 22.3801461 |
| TANG | 50 | 7.5636 | 21.4563 | 16.149116 | 2.6896041 |
| SIZE | 50 | -0.0690 | 43.1941 | 0.965856 | 6.0956297 |
| GPM | 50 | | | | |
| Valid N | | | | | |

**Appendix 3: R-Squares**

**Table 4.3.1 Coefficient**

| Model | R | R square |
|---|---|---|
| 1 | 0.993[a] | 0.987 |

a. Predictors: (Constant), GPM, DIV YIELD, DEBT RATIO, SIZE, TANG

**Appendix 4: Linear regression**

**Table 4.3.2.1 Regression**

| **Model** | **t-test** | **Significant** |
|---|---|---|
| (Constant) | 2.975 | 0.005 |
| Div Yield | 0.331 | 0.742 |
| Debt Ratio | 1.379 | 0.175 |
| Tangibility | -5.728 | 0.000 |
| Size | -1.622 | 0.112 |
| GPM | 7.036 | 0.000 |