

THE IMPACT OF DIVIDEND POLICY ON
SHAREHOLDERS' WEALTH: EVIDENCE ON
MALAYSIA'S LISTED FOOD PRODUCER SECTOR

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

ANOVA	Analysis of Variance
AMEX	American Express
ASX	Australia Securities Exchange
BAFA	British Accounting and Finance Association
BAT	British Tobacco American
CRSP	Center for Research in Security Prices
DMY	Dummy
DPR	Dividend Payout Ratio
DR	Debt Ratio
DW	Durbin Watson
EBIT	Earnings Before Interest and Tax
EPS	Earnings per share
ESPR	Effective spread
EV	Earning Volatility
EVA	Economic Value Added
E-views 6	Electronic view 6

E-view 7	Electronic view 7
FEM	Fixed Effect Model
FPL	Florida Power & Light
FTSE	Financial Times and the London Stock Exchange
GA	Growth in Assets
HIBOR	Hong Kong Interbank Offer Rate
IPC	Inter-Process Communication
JB	Jarque-Bera
KLCI	Kuala Lumpur Composite Index
KSE	Karachi Stock Exchange
LIQ	Liquidity
LTDR	Long Term Debt Ratio
MICG	Malaysia Institute of Corporate Governance
MM	Miller-Modigliani
MVA	Market Value Added
NASDAQ	National Association of Securities Dealers Automated Quotation System
NLS	National Longitudinal Survey of Labor Market Experience NYSE
NPV	Net Present Value
NYSE	New York Stock Exchange
PACAP	Pacific-Basin Capital Markets

PSID	Panel Study of Income Dynamics (PSID).
OLS	Ordinary Least Square
QSPR	Quoted spread
REIT	Real Estate Investment Trust
REM	Random Effect Model
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment
SMIs	Medium-Small Industries
SPSS	Statistical Package for the Social Sciences
SSE	Sum of Squared Error
SUR	Seemingly Unrelated Regressions (SUR)
TAQ	Trade and Quote database
TNB	Tenaga Nasional Berhad
TOL	Tolerance
VAR	Vector-Autoregressive Framework
VIF	Variance Inflation Factor
WAI	Wealth Added Index
2SLS	2 Stage Least Square Regression

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PREFACE

Dividend policy has been kept as the top ten puzzles in finance. The distribution of dividend and earning become one of the concerns of company's shareholders. In corporate world, the decision of distribution of dividend is fall under the decision of management teams and consideration of company's future prospect. Thereby, this research is aimed to determine the impact of dividend policy on shareholders' wealth which specializes in food producer sector.

There are huge studies in this research topic which able to search online. However, there is less research in the area of Malaysia's food producer sector. Thus, this research is conducted in order to provide meaningful result and broaden the knowledge in Malaysia' food producer sector. In addition, this research is useful and benefits for the policy makers, manager, investor and academician to increase the understanding on company's decision on the distribution on earning to shareholders.

There are various type of information regarding dividend policy and shareholders' wealth provided in this research. Furthermore, this research also touches on background of dividend policy in Malaysia, research objective, the independent variables that bring the significant impact on shareholders' wealth, the empirical results, major findings as well as recommendation on future research.

ABSTRACT

The objective of this research paper is to determine the impact of dividend policy on shareholders' wealth in Malaysia's food producer sector. The variables used in this research are dividend payout ratio, earning volatility, long term debt ratio, growth in assets, liquidity and profitability (ROE). Secondary data was used in this research and panel data was used to carry out the regression model. The total of observation of 295 companies is taking into account in this research started from the period of year 2008 to year 2012. The model was employed by random effect method. From the regression result, it found out that earning volatility and profitability (ROE) are positively significant with shareholders' wealth. However, dividend payout ratio and long term debt ratio are negatively significant with earnings per share. On other hand, growth in assets and liquidity are positively insignificant with earnings per share.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

It is essential for researchers to study the purpose and nature of the research project before conducting a research. This research study will be divided into five chapters. The objective of this research is to investigate the impact of dividend policy on shareholders' wealth in Malaysia's listed food producer sector such as dividend payout ratio, earning volatility, long term debt ratio, growth in asset, liquidity and profitability (ROE). The background of study would further explain the knowledge of dividend policy and shareholders' wealth. However, this research also cover the problem statement, objective, research questions, hypotheses to be tested, significant of study in this chapter.

1.1 Background of Study

1.1.1 Dividend Payout Policy in Malaysia

Dividend policy has been kept as the top ten puzzles in finance (Al- Shubiri, 2012). Dividend is defined as distribution of earnings in corporation to shareholders as a reward for investing. In other words, dividend is deemed to be shared between the shareholders of recognized Appannan & Lee (2011).

Dividend policy was first found by John Lintner in year 1956. He interviewed 28 industrial firms and found out dividend is sticky and management treat dividend

payout policy as company's long term perspective. Besides, dividend will be smoothed from year to year and avoid cutting of dividend (Lintner, 1956). Dividend payout policy today also in line with Lintner's study where avoid dividend cut. Nevertheless, after 5 decades from the year 1956, company nowadays concentrated investment and liquidity requirement of company and treat dividend payout as the second-order concern. Besides, repurchase also become popular type of payout method (Brav et al., 2003).

When company makes a profit, management team should decide whether to payout the dividend or retain the earnings for capital expenditure or other investment opportunities. In the case of expanding and developing companies, it is advisable to retain the earnings to conduct research and development for expansion purposes. On the other hand, for the companies with consistent growth, management team mostly will distribute the profits to shareholders as dividends (Subramaniam & Devi, 2010).

There are no specific rules on the standard of dividend policy in Malaysia (Subramaniam & Devi, 2010). In other words, companies are freely deciding the way of the earning distribution without restricted by any rules and regulations. Based on the Companies Act 1965 (section 365), dividend should distributed from profits either taken the current profits or accumulated profits. In addition, in line with the 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".

Company will determine and set a target dividend payout ratio and make changes according to the earning generated in the company (Lintner, 1956). Furthermore, the author proved that company is looking for stable policy and increment of dividend to the given target payout ratio. Dividend stability is defined as the

continuous to pay dividend at a target amount and make changes on the dividend payout according to company earnings. Malaysia's companies across all sectors have shown a dividend stability which they paid dividend regularly regardless how small the amount of dividend (Pandey, 2003). Managers disinclined with the decrease of dividend as it would hurt share prices and this action is goes against the investors' expectation. In addition, managers will only adjust the target payout ratio when they have confidence to sustain the changes of dividend made (Lintner, 1956).

In line with Pandey (2003), the dividend payout ratios by sectors in Malaysia for the year 1993 to year 2000 showed that plantation companies is paying higher dividend than construction companies which paying lowest dividend as compared to other sectors. Besides, trading and services also pay low dividend due to the low profit earned. This can be concluded that different sectors consist of different dividend payout ratio in Malaysia.

Table 1.1: Malaysia KLCI Highest Dividend Yield Stocks for the year 2013

No	Stock Name	2013		2012	
		Share Price (RM)***	Dividend Yield (%) *	Share Price (RM)***	Dividend Yield (%) **
1	Malayan Banking	9.20	5.23	8.58	5.57
2	Maxis	6.65	4.97	5.48	5.02
3	British American Tobacco (BAT) Malaysia	63.00	4.68	49.92	4.46
4	CIMB Group Holdings	7.63	4.39	7.44	3.45
5	UMW Holding	11.94	4.22	7.00	1.97
6	Digi.Com	5.29	4.19	3.88	4.00
7	Telekom Malaysia	6.04	3.96	4.96	3.68
8	Sime Darby	9.52	3.78	9.2	3.47
9	IOI Corporation	5.11	3.56	4.98	3.16
10	Axiata	5.29	3.51	5.14	3.59

Sources: Thomson Reuters DataStream ***
Top Yield 2013*
Top Yield 2012**

Based on Table 1.1, the share price for British American Tobacco (Malaysia) in the year 2012 is RM49.92 per share which is the highest share price for the year. However, the dividend yield is only 4.46%. On the other hand, the share price for British American Tobacco (Malaysia) in the year 2013 is RM63.00 and the dividend yield rise from 4.46% to 4.68%.

British American Tobacco (Malaysia) has a higher share price in the year of 2012 and year 2013. The highest ranking that achieved by British American Tobacco (BAT) might due to the highest earning for the particular year (British American Tobacco (Malaysia) Berhad, 2013). Furthermore, this result might due to the relevant of dividend policy in examining the share price changes (Ilaboyah & Aggreh, 2013). Dividend policy is positively related to the profitability (Lintner, 1956). Besides, Shirvani & Wilbratte (1997) have determined that current earnings, cash flows and stock prices are the elements use for the measurement of company dividend payout ratio. According to the research of Pandey (2003) on Malaysia firms in all sectors, 50% cases of share price increase when dividend increase and maintain dividends when earning fall. In addition, the share price for Maxis for the year 2012 and 2013 are RM 5.48 per share and RM 6.65 per share respectively. Nevertheless, the dividend yield is recorded only 5.02% in year 2012 and 4.97% in year 2013 which is slightly changes in dividend yield. In short, the dividend yield decreases while the share price is increase. Such result might due to Maxis have a negative impact on share price risk (Ilaboya & Aggreh, 2013).

Based on the result from British American Tobacco (Malaysia) and Maxis, it shows that there is negative relationship between share price and dividend yield. Although the share price is high, it is not necessary that the dividend yield is high as well; while there will be low dividend. There is an inverse relationship between share price and dividend yield (Hashemijoo et al., 2012).

Recently, Malaysia was recorded as the second largest dividend payout country within the Asia ex-Japan region. The dividend payout is recorded as 48.9% within the Asia ex-Japan region. Basically, Malaysia companies have large dividend payout due to the family ownership business model where minority shareholders act in accordance to large shareholders (Yap, 2012).

There are two types of dividend policies which namely as managed and residual (Kapoor, 2009). Management who emphasizes on maximizing investors return and believed dividend policy is positively related to share price will implement the managed dividend policy. However, residual dividend policy is implemented by firms which payout left cash as dividend after desirable investment. In the assumption if perfect capital where there is no market taxes, transaction costs or asymmetric information; the dividend payout ratio of a company will not affect neither the share value nor the investors return. (Miller-Modigliani, 1961). However, in the real world with market imperfection, Baker & Powell (2000) argue that companies with stable cash flows but paying low dividend will result in extra investment of cash flows or inadequate net present value. They also dispute that dividend payout in high growth companies will lead to company's financial capabilities failure or lost valuable investment opportunity. Thus, it can be concluded that dividend payment is criteria decision for company. Dividend is always used as a gauging tool by investors to measure the future performance (Malkawi et al., 2010). Increase in dividend payment tends to reflect the increase of share prices. Managers will also use dividend to support company's share prices. In addition, they also believe that unfavorable dividend will give effect and signal to the market therefore they always smoothed dividends over time. Hence, it can be concluded that that dividend policy have an impact on share price.

Table 1.2: Malaysia KLCI 10 Highest Dividend Stock on 2013

No	Stock Name	Dividend Rate (RM)	Average Share Price before 3 days of dividend announcement (RM)	Share Price on actual day of dividend announcement (RM)	Average Share Price after 3 days of dividend announcement (RM)
1	Malayan Banking	0.225	9.68	9.62	9.48
2	Maxis	0.08	6.85	6.87	6.87
3	British American Tobacco (BAT) Malaysia	0.68	61.16	62.40	61.64
4	CIMB Group Holdings	0.1282	7.38	7.41	7.53
5	UMW Holding	0.10	12.42	12.46	12.19
6	Digi.Com	0.057	4.76	4.73	4.69
7	Telekom Malaysia	0.098	5.16	5.23	5.25
8	Sime Darby	0.27	9.24	9.28	9.39
9	IOI Corporation	0.085	5.06	5.08	5.15
10	Axiata	0.08	6.68	6.75	6.75

Sources: Yahoo Finance 2013 (www.yahoo.finance)

A company can either stating the actual dividend payout or percentage when wish to pay the dividend to their shareholder (Australia Securities Exchange (ASX), 2014). Based on Table 1.2, Maxis announced RM 0.08 tax-exempted interim dividend during the year 2013. In other words, it means that every single shareholder able to receive RM 0.08 of dividend for every share they are holding. On the other hand, every shareholder of Digi.Com will received a RM 0.057 of dividend in year 2013.

Before the dividend announcement day, the share price of British American Tobacco (BAT) Malaysia is RM 62.40 per share. However, the share price per share rises after the dividend announcement, which is RM 61.64 per share. In the theory of free cash flow hypothesis indicates that the increase (decrease) in share price is due to there is a positive (negative) change in dividend. In other words, the relationship of share price and change in dividend payout is positively correlated (Karim, 2010). On the other hand, the share price for Axiata has no different in the share price between before and after dividend announcement. The share price remained at RM 6.75 per share. As proposed by Miller and Modigliani (1961) changes in dividend will not affect the share price. However, the changes in share price are mainly due to company's investment or financial decision. In the Axiata case, share price is not affected by the dividend announcement. The share price remains at RM 6.75 after the dividend announcement. In other words, the constant share price of Axiata is consistent with the idea that proposed by Miller and Modigliani (1961).

1.1.2 Food Producer Sector in Malaysia

“Diverse” is the best word to describe Malaysia’s food industry. Malaysia is known as a multi-cultures country with a wide range of processed food with Asian tastes. This sector is expected to grow 4.8% annually with the global retail sales in food products which are worth around US\$3.5 trillion currently (Malaysia Investment Development Authority (MIDA), 2014). In recent years, the exports in Malaysia have a great improvement in this sector. The reasons behind Malaysia still remains as a net importer instead of exporter are the lack of technology, limited research and development and shortage of raw materials. The major imported foods are cereals and cereal preparations (RM7.2 billion), vegetables and fruits (RM4.2 billion), cocoa (RM3.6 billion), sugar and sugar confectionery (RM3.4 billion) and animal feed (RM2.8 billion). As of year 2008, around 10% of Malaysia’s manufacturing output with products exported to over 200 countries in this sector (MIDA, 2014).

Table 1.3: Top 8 Best KLCI Dividend Stocks in Food Producer Sector for the year 2013

No	Stock Name	2013			
		Dividend Rate (RM)	Average Share Price before 3 days of dividend announcement (RM)	Share Price on actual day of dividend announcement (RM)	Average Share Price after 3 days of dividend announcement (RM)
1	Dutch Lady Milk	0.50	47.68	46.62	46.70
2	Nestle (Malaysia) Berhad	0.60	65.14	66.03	65.84
3	Kuala Lumpur Kepong	0.15	20.80	20.96	20.98
4	Chin Teck Plantations	0.13	9.61	9.40	9.55
5	Hup Seng Industries	0.15	0.59	0.71	0.72
6	Negeri Sembilan Oil Palms	0.05	5.49	5.55	5.54
7	United Malacca	0.11	7.36	7.35	7.35
8	Riverview Rubber Estates	0.10	3.93	3.93	3.95

Source: Yahoo Finance 2013 (www.yahoo.finance)

Before the dividend announcement day, the share price for Nestle is RM 66.03 per share. However, the share price per share drops after the dividend announcement, which is RM 65.84 per share. Nevertheless, the share price for Hup Seng Industries has a rise between before and after dividend announcement. Before dividend announcement, the share price is RM 0.71 per share while the share price rose to RM 0.72 per share after dividend announcement.

Prior to and after the dividend announcement there is no certain relationship between the dividend payment and the share price. In other words, there is no consistent price movement (Trueman et al., 2003). Some of the share price has positive relationship with dividend and vice versa. Moreover, the study of Trueman et al. (2003) stated that the magnitude of the pre-announcement returns is small and it is only significant for the day before or the day after the dividend announcement date. It also can explain that the market price does not response towards dividend announcement (Nazir et al., 2010).

Dividend policy is an important element in a corporation (Moradi et al., 2010). Dividend reflects the corporation power and provides a stable income for shareholder. Eventually, it increases the confidence of shareholder especially in their yield of capital receipt. Therefore, it is important to have a better understanding on the other independent variables such as earning volatility, long term debt and other variables which affecting the changes of share price (Moradi et al., 2010).

1.1.3 Shareholders' Wealth Maximization

Shareholder wealth is defined as the present value of expected future returns to shareholders (Brunzell et al., 2012). Shareholder wealth is determined by the market value of the company's shares and the returns are based on the regular dividend or the gain from the sales of shares. The primary goal of management team in a company is to maximize the shareholders' wealth which also known as maximizing the value of the company as determined by the value of the common stock in the particular company (Azhagaiah & Priyah, 2008).

There is no separation between management and financing when a company is dependent on the internal finance. In other words, there is no deviation between the ownership and control (Seoul, 1999). Malaysia is concentrating in shareholders' wealth instead of corporate wealth management (Seoul, 1999). Other than that, due to the rapid growth in the financial economic as a separate body of knowledge, Malaysia had shifted their concentration to shareholder wealth maximization. Eventually, it becomes the key financial goal in making financial decisions (Karbhari et al., 2004). The shareholdings in Malaysia are occupied around 13% out of the total market capitalization of Bursa Malaysia since the year 2002 from the total institutional (Wahab et al., 2008). Shareholding in Malaysian Public Listed Company is towards and concentrated on the family based company such as Hwa Tai, Dutch Lady Milk and Nestle which in line in the food producer sector (OECD, 2001).

The optimal dividend policy is defined as the policy that maximizes the stock prices of the company which consequently maximizes the shareholders' wealth. Thus, it may lead to the improvement of the economic growth. In shareholders point of view, they prefer current dividend to future income. In other words, dividend is the important determinant in order to examine the shareholders'

wealth (Azhagaiah & Priyah, 2008). Other than that, the few variables that influence the shareholders' wealth are growth in sales, improvement of profit margin, capital investment decision, capital structure decision and cost of capital (Rozeff, 1982 and Azhagaiah & Priya, 2008).

Conversely, some companies not paying their shareholder dividend. These companies are having same characteristic which are low earnings, strong investment and relatively small in size. As compared to year 1973 to year 1977 have one third of companies paying dividend while in year 1999 only have 3.7 percent companies made dividend payout. The reasons of not paying dividend are low earning made; maintain high growth opportunity and also existing of repurchase in year 1980. In addition, company experiencing merger or delisting also stop paying dividends. Other than that, distress firm which generating negatively earning will also terminate dividend as well. High growth companies normally not pay dividend to shareholder as they made lower profit compared to dividend payer companies. Moreover, companies with high growth and investment opportunity pay dividend at the same time will worsen the profit and investment made. Lastly, dividend payer companies are normally large company. There is less evidence of small company paying dividend (Fama & French, 2001).

According to tax preference theory, tax is imposed when company distribute dividend to shareholders. In Malaysia, the tax imposed on cash dividend is greater than tax imposed on capital gains. Thus, investors prefer capital gain rather than dividend (Zameer et al., 2013). Investors focusing on after-tax return and it eventually increase the demand for dividend. Moreover, tax effect also affects the dividend supply where management will increase retained earnings to maximize shareholder wealth (Malkawi et al., 2010).

Table 1.4 Fifteen Largest Companies in the S&P500 that do not currently pay a dividend

	Company	Market Value (\$ billions)
1	Google (GOOG)	291.9
2	Berkshire Hathaway (BRK-B)	187.3
3	Amazon.com (AMZN)	126.1
4	Gilead Sciences (GILD)	80.7
5	eBay (EBAY)	66.8
6	American International (AIG)	66.9
7	Biogen Idec (BIIB)	53.4
8	Express Scripts (ESRX)	50.2
9	Celgene (CELG)	50.1
10	Priceline.com (PCLN)	40.9
11	DirecTV (DTV)	35.0
12	Yahoo (YHOO)	29.3
13	Salesforce.com (CRM)	23.4
14	Adobe (ADBE)	22.1
15	Crown Castle (CCI)	20.1

Sources: Sterman, 2013 (www.finance.yahoo.com)

Not paying dividends is a trend among the UK's largest quoted companies (Smith, 2012). This trend was rising since the year 1985 when the proportion of non-dividend payers was about 6.5%. Moreover, the trend of not paying dividends is continuing although the shareholder demand from the earning from stocks is high. Google is one of the largest companies that do not pay dividend to their shareholders based on the Table 1.4. One of the reasons Google refuse to pay dividend is due to Google would like to investing in future growth initiative instead of pay out retained earnings to its shareholders (Sterman, 2013). Other than Google, Apple is one of the companies does not pay dividend. In the point of view of Apple's management team, the earning is act as a security funds which help to develop new products as well as long term project in order to gain a higher earnings in the future (Ghosh, 2011). Non-dividend paying companies maximize shareholder wealth by retained the dividend and make reinvestment for long-term benefits. This is done because dividend can add value to total return and reduce the volatility (Bhana, 1992).

The following is the rankings of 100 companies in Asean and Malaysia in term of shareholder wealth creation for the year 2008. There are 24 Malaysian companies out of 100 Asean companies and they are from different sectors. IOI Corp Bhd is ranked at 6th place whereas food producers sector companies-Kuala Lumpur Kepong Bhd and PBB Group Bhd are ranked at 27th and 33rd place respectively. Telecommunication sectors-Digi.Com Bhd ranked at 18th. Banking sectors-Public Bank Bhd ranked at 41st. Other companies such as Sime Darby, Genting Bhd, MMC Corp Bhd and YTL Corp Bhd are also among the 100 selected companies. Conversely, some companies listed with negative Wealth Average Index (WAI) which means not maximizing shareholder wealth. These companies are such as Resorts World Berhad, AmBank (AMMB) Holdings Bhd, PLUS Expressways Bhd and Tenaga Nasional Bhd (TNB). Moreover, TNB has ranked itself at 99th place (Tee, 2008).

In Malaysia, there was weak evidence on types of industry in affecting the dividend payout pattern. Instead of this, dividend policy is decided according to respective firm payout pattern. Based on Nedina (2010), she examined on 100 listed companies in Bursa Malaysia for the period 2006-2009. The sample selected is excluded from close-end fund, Real Estate Investment Trust (REIT) and exchange traded fund based on their market capitalization. Among the 100 listed companies, 28 firms from industrial product sector, 23 firms from trading and services sector, 13 firms from consumer product industry, 12 firms from properties sectors, 5 firms from finance sector, 5 firms from plantation sector, 8 firms from construction sector, 3 firms from technology sector and 1 from hotel, mining and infrastructure sector.

Table 1.5 100 listed company from Bursa Malaysia with dividend and non-dividend payer for year 2006-2009

Sector	Dividend payer	Non-dividend payer
Consumer product	12	1
Industrial product	24	4
Construction	5	3
IPC	1	0
Trading Services	15	8
Finance	4	1
Properties	9	3
Plantation	4	1
Hotel	1	0
Mining	1	0
Technology	3	0
Total	79	21

Sources: Nedina, 2010 (www.articlesbase.com)

In the consumer product sectors, 12 out of 13 companies in the sample is dividend payers whereas in properties sector only 9 out of 12 companies grouped as dividend payers (Nedina, 2010). Out of 100 shareholder wealth creation Asean companies, Kuala Lumpur Kepong Bhd and PPB Group Bhd ranked at 27th and 33rd (Tee, 2008). Conversely, companies in property sector have negative EVA which means company not generating shareholder wealth but consume on

company's capital (Yahaya & Mahmood, 2011). Contribution and economic value added of property sectors to firm are mostly not recognized. In other words, property sectors failed to maximize shareholder wealth (Lindholm & Levainen, 2006).

1.2 Problem Statement

Dividend policy is one of the most controversial subjects in finance (Myers & Bacon, 2004). Dividend is always unpredictable in the residual policy due to the dividend is keep growing followed by years. The effect of dividend policy on shareholders wealth is important for the planning of portfolios especially the management as well as investors. Some researchers believe that dividend policies are irrelevant in determining the wealth of shareholders while others believe that dividend policies are relevant and greatly affect the wealth of shareholders. For instances, Miller & Modigliani (1961) believe that dividend policies are irrelevant in determining the wealth of shareholders. On the other hand, Kapoor (2009), Azhagaiah & Priya (2008) and Chidinma et al. (2013) argue that dividend policies are relevant and it is significantly influence the wealth of shareholder.

The researchers of Azhagaiah & Priya (2008) and Iram (2010) have different findings on the impact of dividend policy on shareholders' wealth with Asquith & Mullins (1983). Based on Azhagaiah & Priya (2008) and Iram (2010), the authors found a significant impact of dividend policy on shareholders' wealth however the shareholders' wealth is not influenced by the dividend payout. On the other hand, according to Asquith & Mullins (1983) stated that excess return is positively relevant to the size of dividend payout. Subsequent increases in dividend will produce a large positive impact on shareholders' wealth. This shows that there are different arguments in this issue and further research should be undergone in order to have better understanding on this area.

Hashemijoo et al. (2012) pointed out that the dividend policy is a well-known research topic among financial research for over 50 years, it deals with a key issue for many companies, such as agency costs, clientele effect and share assessment. Hashemijoo et al. (2012) have tried to investigate the relationship between dividend policy and share price of firm but they have different results and still, there is no consensus among researchers about the impact of dividend policy on share price.

A major problem is how modern finance company's dividend policy will affect shareholders' wealth. Its purpose is to analyze how the firm to maximize shareholders' wealth with dividend policy and reinvestment of profits from operations (Brunzell et al., 2012). Since Miller & Modigliani (1961) showed frictionless world is irrelevant to dividend but still companies need to pay it out at all based on the dividend basis. However, the vast majority of companies pay dividends, and they also apply a complex dividend policy. Brunzell et al. (2012) have doubt the reason why the real world is not as academic model explained by Miller - Modigliani (MM) irrelevant argument.

Investors, academicians and even managers still doubt whether there is any policy that can be familiarly accepted to all and the value added to a prudently chosen dividend policy (Lease et al., 2000, pp. 407). Corporate dividend policies vary significantly across different countries (Breuer et al., 2014). Therefore, researchers still have a huge space to explore into different countries to study the relationship between the dividend policy and the market values respectively. In line with the studies of Breuer et al. (2014), there are strong systematic differences between typical values of behavioral parameters in different countries which translate into systematic differences in decision making while all individuals in a country exhibit similar preferences. According to Mohanty (1999) in India, those companies will declared the dividend to the shareholders as a percentage of the face value of the share, such as a face value with Rs 10 per share gives a 30 percent dividend; each shareholder will get Rs 3 as the dividend per share. Besides that, the payout ratio in India does not appear too much matter on it, because it is the dividend rate, rather than the payout ratio that is important to explain the dividend paying behavior of

the companies. However, this practice in India is completely different from the practice which followed abroad where a company will declare the dividend to shareholder as a percentage of the profit after profit (PAT) or the net profit. In US, payout ratio is an important parameter in the dividend policy of any company. Lintner (1956) found that the profitability of U.S. companies in the sixties as a large part of the dividend distribution, but they also tried to maintain a stable dividend. Malaysian firms rely both on historical dividend and current earnings to make decision of the current period's payment of dividend (Pandey, 2001).

Other than that, there are few studies have analyzed the relationship between dividend payout and shareholders' wealth in Malaysia. According to Azhagaiah & Priya (2008), net earnings can be divided into two parts, which are retained earnings and dividends. The retained earnings will be reinvested and treat as the source of long-term funds in a business. Meanwhile, the dividend will be paid to its shareholders to maximize their wealth, because they have invested their own money to be made better economic expectations. This allows investors to remain in skeptical payout level and affect the extent to shareholder wealth, especially in the food production sector.

Furthermore, Malaysia is a multicultural country which has a food industry with a wide range of processed food with Asian tastes. The food processing industry is mainly Malaysia-owned. It is estimated that global retail sales of food is worth about \$ 3.5 trillion, and the annual growth rate of 4.8% is expected will grow to \$ 6.4 trillion by 2020 (Malaysian Investment Development Authority (MIDA), 2012). According to Pandey (2001), Malaysia's food industry under consumer products sector pay highest dividends as they have fewer opportunities for growth and higher cash surplus. Thus, it is important to understand about the dividend policy in Malaysia's food producer sector due to this may influence corporate financial decision. Since there is doubt about the relationship dividend policy and shareholders' wealth in Malaysia's food producer sector, there are continuing in-depth studies in order to obtain a strong theoretical and empirical analysis on dividend.

Since there is no consensus between researchers on the impact of dividend policy on shareholders' wealth particularly in Malaysia, this study therefore comes in to fill the gap. Hence, this research will further study on whether there is a relationship between dividend policy and shareholder wealth among listed companies of food producer sector in 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 evaluate the effect of dividend policy on shareholder wealth with a focus on food producer companies listed in Malaysia stock market.

1.3.2 Specific Objective

- To examine the relationship of significant between dividend payout ratio and shareholders' wealth.
- To examine the relationship of significant between earning volatility and shareholders' wealth.
- To examine the relationship of significant between long term debt ratio and shareholders' wealth

1.4 Research Question

The following questions are addressed in the course of study to gain an insight and understandings between the relationship of dividend policies and shareholder wealth.

- Whether there is significant relationship between dividend payout ratio and shareholder wealth?
- Whether there is significant relationship between earning volatility and shareholder wealth?
- Whether there is significant relationship between long term debt ratio and shareholder wealth?

1.5 Hypothesis of Study

There are three hypotheses provided to test the significant factors of dividend policies impact on shareholders' wealth.

- H_0 : There is no significant relationship between dividend payout ratio and shareholders' wealth
 H_1 : There is significant relationship between dividend payout ratio and shareholder wealth.
- H_0 : There is no significant relationship between earning volatility and shareholders' wealth.
 H_1 : There is significant relationship between earning volatility and shareholders' wealth.

- H_0 : There is no significant relationship between long term debt ratio and shareholders' wealth.
 H_1 : There is significant relationship between long term debt ratio and shareholders' wealth.

1.6 Significant of Study

This study could contribute policy makers by given them a clearer picture and close look on the financial as well as the performance of the firm such as dividend payout ratio, earning volatility, long term debt ratio, growth in assets, liquidity and profitability (ROE). Based on this financial information, policy makers can make a decision on how much of dividend they have to pay to shareholder in order to maximize their shareholders' wealth. Decision makers have to prioritize the use of a firm's capital among balance sheet repair, new investments, increasing liquidity and shareholder distribution to maximize shareholders' wealth in the firm (Morgan, 2011).

In addition, this study is also helpful for investors to gain more understanding about the significance of dividend which is related to the decisions of management, and these decisions will be affected on their wealth. Besides that, it is important for managers to formulate the best policy and implement it with proper evaluation and control in order to maximize shareholders' wealth in the company. For instances, managers have to decide how much the dividend have to pay to shareholders in order to get trust from them, or other way around they have to cut the dividend and reduce the financial cost on the company in order to maintain the retained earnings. This study can give a clear idea to investors that how the dividend policy is important in order to get maximum return on investment (Tahir & Raja, 2014).

According to Sarwar (2013), companies are facing difficulties in making profit because of the globalizations and privatizations issues. While, it is important for a corporate to formulate a dividend policy which can bring value added to the company. Therefore, this study might give guidelines to financial managers to have more understanding on how that firm competes in such type of modernized framework of businesses.

Lastly, add to body of knowledge to academicians of the impact of dividend policy on shareholders' wealth in Malaysia. They may do further research on this area of study to contribute more details about the impact of dividend policy towards shareholders' wealth on other sectors in Malaysia.

1.7 Chapter Layout

The first chapter of this research provide an overview of this research topic by presenting the background of the selected research area, then toward to explain the problem statements, 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 impact of dividend policy on shareholders' wealth. Next, chapter 2 will discuss about the literature review, review of the theoretical models, conceptual framework, hypothesis development and conclusion of Chapter 2. In the following chapter 3, the areas of discussions are the sample, key variables, and methodology used to examine the impact of dividend policy on shareholders' wealth. Then, chapter 4 presents the descriptive statistics, scale measurement and inferential analysis. Lastly, chapter 5 will provide the implications and limitations of the study and recommendations for future research.

1.8 Conclusion

Chapter 1 has covered basic understanding of this research project. It included problem statement, objectives and research question. Nevertheless, research questions will be identified and conducted in chapter 2 literature review part. In addition, this chapter also includes the hypothesis of study as well as the significant of study which is the purposes of this study. In chapter 2, further research on theoretical and actual framework will be discussed.

CHAPTER 2 - LITREATURE REVIEW

2.0 Introduction

This chapter will discuss on the review of literature which is based on the previous researchers. In this chapter, clear indication on the results obtained from journals and articles will be provided. Furthermore, the theoretical framework, actual framework and hypothesis development will be written in this chapter as well in order to investigate the relationship between the dependent variable (earnings per share) and independent variables (dividend payout ratio, earning volatility, long term debt ratio, growth in asset, liquidity and profitability).

2.1 Theoretical Framework

2.1.1 Signaling Effect

Based on Modigliani and Miller (1961), the researchers argued that dividend may have a signaling effect. It helps management to forecast on the future earning or long term planning of the company. Investor can predict the changes of future profit prospect for the firm based on the changes on the dividend rate. However, the firms must have stabilized dividend payout and higher dividend payout compared to target payout ratio. Dividend changes might not the causal factor to changes of share price. Nevertheless, changes on share price may reflect the future earning and opportunity cost for the respective company. In line with the study of Modigliani and Miller (1961), investors and management have asymmetric information. This

leads to management tend to pass on the favorable information to the investors. However, low firm value's company may suffer higher cost in conveying information to investors as compared to high firm value's company. Besides, the information not will be conveyed in a straightforward way through press for instance. The reason is management had to liable for the damages to shareholders (Grinblatt et al., 1984). Lintner (1956) stated that the dividend can be increase once the earning is confirmed permanently increased; otherwise, management should not increase the dividends no matter any changes of the condition. On the other hand, according to Miller and Rock (1985), dividend has signaling effect. However, there are 'dissipative' costs that are involved as well and these are the firms' investment decisions.

The study of Zameer et al. (2013) found out that dividends have a signaling effect due to dividend provides transmission of information to the market (Laux, 2011) as well as regarding the future earnings prospects of the firm (Zameer et al., 2013). In other words, dividends are signaling tools for a company to the market.

Investors can predict the share price to increase when corporate management issue securities. Management will utilize excess retained earning generate from profit to finance the investment when market price of company asset is higher than expected value of asset. In contrary, when company raise fund from external financing through debt, it implies that company asset is overvalued. This makes investor predict that the share price will decrease (Yook, 2003). In the financial market, there is the presence of asymmetric information between outsiders (shareholders) and insiders (managers and directors). In this case, managers and directors have more company information in terms of the current and future prospects which is not available to outsiders (Malkawi et al., 2010). Asymmetric information will result in company's true intrinsic value is not available to the market and share price is inaccurate in reflecting the firm's value. Managers will transmit information and

knowledge they possessed to investors in order for them to understand the real value of firm. In the investor perspective, cash flows are used as a measure to value firm. Therefore, dividend payment can be used to deliver the company's future earnings. This has been known as "information content of dividends" or signaling effect. In fact, precise and accurate information from insiders will lead the market and share price to react positively to the dividend announcement and vice versa (Malkawi et al., 2010). This causes investors to perceive that dividend announcement as the assessment of firm future performance and prospect. Increase in dividend payment represents the firm is making good and profiting in the future and share price will increase. In contrast, when there is a dividend cut signaling the poor future of the firm and share price will eventually drop.

Signaling effect is supported by the study of Laux (2011) when payout ratios are above the long-run target ratio as well as a positive liquidity shock occurs. In addition, those firms who pay dividends are assumed to have higher quality earnings. Moreover, the information regarding the level of profitability is applicable when there is a change in dividend (Grullon et al., 2005). However, there are some journals which do not support the signaling effect such as the study of Benartzi et al. (1997) and Grullon et al. (2005). The changes in dividends do not make some changes in the present earnings; however, the changes are not in the future earnings (Benartzi et al., 1997). Although the distribution of dividends implies an expected theoretical outcome, but there is no improvement in future profitability (Grullon et al., 2005). In the case of FPL Group, the parent company of Florida Power & Light Company, dividend changes had led to an ambiguous signal. FPL announced a dividend cut to retain earnings for new investments to improve the company's future operation and performance. This is a case where it proved that dividend payment may lead to a wrong signal to market value and share price (Soter et al., 1996).

2.1.2 Agency Theory / Free Cash Flow Theory

Jensen (1983) was the first scholar to propose and introduce the theory of agency cost, which defined as the contracting problem among self-interested individuals with different interests. He defined the agency cost as a sum of the costs of structuring, bonding, monitoring contracts between agents as well as the costs stemming which it does not pay to enforce all contract perfectly. According to Jensen and Meckling (1976), most of the agency relationship will incur positive monitoring and bonding costs, in addition those different decisions among agents would maximize the welfare of the principal. Agency relationship can be defined as a contract involve one or more principals engaged with another agents to perform services on their behalf by sending some of the decision-making authority to agents. There is a good reason to believe that the agent might not always act in the best interest of principal when the relationship of both parties is utility maximizes.

A number of researchers such as Jensen and Smith (1985), Depken et al. (n.d.) and Chernenko et al. (2010) have been explaining this theory. According to Zameer et al. (2013) stated that agency theory focus on the conflict of interest between principal and agent which are shareholder and manager respectively. The main duty of managers is to manage the business efficiently and increases the shareholder wealth. The agency problem arises when managers have excess cash flow; they invest in low or negative net present value of the project, and use the cash for their own interests. Hence, shareholder has to monitor the managers and cost of monitoring is referred to agency cost. Dividend is issued in order to reduce the agency cost. So that managers have less cash in hand and will move toward the capital market which imposes some restrictions to the managers for misuse of funds. The author also argues that agency cost will reduce when insiders increase their ownership because in this case interest of both managers and shareholders will align and there will be no need to use dividend to mitigate agency cost.

According to Waithaka et al. (2012), free cash flow is one of the major agency issues which cause the conflict between manager and shareholders which in turn affected the share price to a very large area. In addition, based on the findings, it further showed that in order to eliminate free cash flows from managerial control in firms that faced limited investment opportunities, dividend were a way to eliminating it. In addition, the agency conflict is arises from managers' incentives to consume private benefits. For instances, managers invest free cash flows in negative net present value projects to build their empires or spending cash on perquisites. Thereby, this problem is mitigating by dividend that reducing free cash flows available to managers

Agency cost is the cost of the conflict of interest that exists between the shareholders and management (Hussainey et al., 2011). However, according to Miller and Modigliani (1961) assume that managers are perfect agents for shareholders while there is no conflict of interest exists between them. This is because managers' interest might not necessarily the same as the shareholders' interest. In addition, managers might conduct some activities which could be costly to shareholders such as consuming excessive perquisites or over-investing in managerially rewarding but unprofitable activities (Malkawi et al., 2010). Besides that, Hussainey et al. (2011) stated that agency costs may also exists between shareholders and bondholders. Shareholders are required more dividends while bondholders are require fewer dividend than shareholders. It is because they are putting in place a debt covenant to ensure availability of cash for their debt repayment. Last but not least, D' Souza (1999) argues that there is negative relationship between agency cost and dividend payout. However, Holder et al. (1998) stated that the higher the insider ownership (lower agency cost) will result lower dividend payments.

2.2 Review of Literature

2.2.1 Earnings Per Share & Dividend Payout Ratio

Mokaya et al. (2013) study the determination of the effects of dividend policy on the market share value in banking industry of Kenya by using National Bank Kenya. The authors were used the primary data sample of 100 shareholders drawn from a target population of 47,000 shareholders of National Bank of Kenya. This study tested the working of the hypothetical model using ANOVA while multiple regressions measure the data to test model in explaining the relationship between dividend payout and market share value. The result shows that there is a strong and positive correlation between dividend payout and market share value, which is 0.85 between them. It is also evident that an increase in a dividend payout result an increase in share price. Majority of the respondents indicated that they considered payment of dividends as an important factor in the value of shares, meaning that an increase in a dividend payout causes an increase in share price. The study also found that the confidential information of dividends paid better signal than other forms of media, thereby enhancing the value of the stock.

Similar result also found by Murekefu and Ouma (n.d.), based on 41 companies listed in Nairobi Securities Exchange. The data for regression analysis was drawn from the financial statements for a nine year period which is from year 2002 to year 2010. In this study, they had found out that the relationship between dividend payout and firm performance was a strong positive relationship as well. In other words, firm performance also represents shareholders' wealth. The strong relationship result was shown at 1% significant level and a positive coefficient. This shown that dividend is a significant factor in influencing firm performance and dividend policy was corresponding. Furthermore, they had used regression analysis to determine the

relationship between dividend payout and firm performance. Based on their study, dividend payout was measured using the actual dividends paid out and the firm performance was measured by the net profit after tax which indicates profitability.

Consistently, in recent study by Zakaria et al. (2012), stated that there is a significant positive relationship between the dividend payout of a firm and share price volatility, which implied a correlation 0.0026 between them. This study is to investigate the result on the impact of dividend policy on the share price volatility of the Malaysian listed construction and material companies that listed on the Kuala Lumpur Stock Exchange (Bursa Malaysia) and covers for a period of six years from year 2005 to year 2010. This study was based on a sample of 77 construction and materials companies in Bursa Malaysia and using least square regression method. The author found out that the share prices will become more volatile when there is a higher dividend payout. However, this study found only 43.43 percent of the changes in the share prices are explained by dividend payout ratio.

However, according to the study of Hashemijoo et al. (2012), stated that there is a significant negative relationship between dividend payout and share price changes. The result shows the value of -0.382 and it is significant at level of 1%. It showed that decrease in the dividend payout causes an increase in the share price volatility. A sample of 84 companies from 142 consumer product companies listed in main market of Bursa Malaysia were examined in this study and using multiple regression for a period of six years from year 2005 to year 2010.

Besides that, from the study of Ilaboya & Aggreh (2013) was based on companies listed in the Nigerian Stock Exchange Market. 26 sampled firms across a number of sectors were selected through simple random sampling technique over a period which is from year 2004 to year 2011. In this study, the researchers used pooled OLS and panel EGLS to examine the result. Furthermore, the researchers also

conducted various tests such as Multicollinearity, Heteroscedasticity, Autocorrelation and Model specification tests by using E-views 7.0. Based on the finding showed that dividend payout impose a negative and insignificant influence on share price volatility with a negative coefficient of -0.092 and insignificant at 5% and 10%. Hence, this indicated that higher payout ratios could signal lesser stock volatility.

In conclusion, this research expects that dividends policy has a positive relationship with shareholders' wealth. In other words, the higher the dividend payout ratio may causes the higher the shareholders' wealth.

. 2.2.2 Earnings Per Share & Earning Volatility

Based on Billings & Morton (1999) and Michelson et al. (1995) earning volatility is defined as risk factor or something highly exposed to risk factor that at the equilibrium state. This lead to investors had to increase the required return to compensate this level of earnings volatility.

Earnings volatility is a firm based and classified as diversifiable risk. However, in investors' perspective is under systematic risk. Based on Campbell & Shiller (1988), their results show long moving average of real earning are significantly and positively used to forecast the future real dividend. At the same time, earning variable to current stock price ratio is also known as one of the reliable predictor of share return. The authors has observed the Standard and Poor Composite Index's annual observations on prices, dividends and earning on year 1871 to year 1987. The earning was introduced and measured in annually using vector-autoregressive framework (VAR).

Asghar et al. (2011) study the impact of dividend policy on stock price risk in Pakistan. The data was taken for Non-Financial Listed firms which main in five sectors such as Chemical, Cement, Sugar, Engineering and Synthetic & Fiber between the periods of 2005-2009. From the result, it shows that the correlation between earning volatility and share price is 0.21 which is significant at the significant level of 0.05. It shows that Pakistan companies have significant relationship between earning volatility and stock price.

Furthermore, based on the study of Hashemijoo et al. (2012), the study area is the impact of dividend policy on share price volatility in the Malaysian stock market in the periods of six years which started from year 2005 to year 2010. It included 84 companies from 142 consumer product companies listed in main market of Bursa Malaysia. As a result, the coefficient between these two variables is 0.541 which is implies significant at the significant level of 0.01. In short, earning volatility has the positive impact on share price and eventually affects the optimal dividend policy for corporations.

According to Nazir et al. (2010), the relationship between stock price volatility and earning volatility is positive and insignificant by construct an analysis on firms of KSE-100 index with selected 73 companies within the year 2003 to year 2008. The method using in this analysis is fixed model effect and random effect model of regression in order to examine the clear relationship between earning volatility and stock price volatility. From the result, it shows that stock price volatility has positive insignificant correlation with earning volatility which the coefficient is 0.005. In other words, it means that KSE 100 index companies with high earning volatility pay high dividends.

According to Michelson et al. (1999), he mentioned that owner will have more confident with the reported stable earnings rather than high earning volatility. He

emphasize on the dividend smoothing which implies that earning volatility is negatively related to shareholder value. In addition, dividend smoothing will promote a higher dividend rate and consequently causes the higher share price. The authors examine the 500 stocks of Standard and Poor's 500 Index (S&P 500) on December 31, 1991 through COMPUSTAT for year 1980 through year 1991. The methodology employed to identify the mean abnormal returns among smoothing and non smoothing companies is using statistical difference and involves a cross sectional comparison.

Based on the study of Barnes (2001), there is a significant negative relationship between market valuation and earning volatility. The data was collected from the COMPUSTAT full coverage, industrial and research quarterly files from year 1973 to year 1998 inclusive. The negative relationship between market valuation and earning volatility remains negative although the operating cash flow volatility has been controlled. It means that the higher earnings associated with lower market to book ratio

However, this is not consistent with the study of Allayannis & Weston (2003). The analysis was constructed by includes all firms with non-missing observations for assets and sales in the data on CRSP and COMPUSTAT data bases by taking the reading of quarterly and annually. The sample was taken between the year 1983 and year 2002. As a result, it found out that the relationship is uncertain. The uncertain relationship is means that the earning volatility is either not valued or positively valued after the cash flow volatility has been controlled.

Based on review, this research expects to see positive relationship between earning volatility and shareholders' wealth. Most of the researchers such Campbell & Shiller (1988), Asghar et al. (2011) and Hashemijoo et al. (2012) found that the relationship

is positive of both variables. It means that the higher the earning volatility may causes the higher the shareholders' wealth.

2.2.3 Earnings Per Share and Long Term Debt Ratio

Lixin & Lin (n.d.) study the relationship between the debt financing and market value from about 272 Chinese real estate companies, which are all from Shanghai Stock Exchange and Shenzhen Stock Exchange between 2002 and 2007. By using the multiple regression analysis, real estate companies' long-term debt financing rate and the company's market value has significant positive correlation relationship at 1% significant level. However, their correlation coefficient is relatively small which is only 0.107. It is because it can generate tax shield effect due to the interest payments on long-term liabilities arising from pre-tax deduction and the cycle of long-term borrowing is long. Hence, that enterprise has enough time with borrowed funds; do not rush to pay short-term repayment interest, which can enhance their market value. Besides, real estate companies used long-term loans to purchase land for the construction of real estate development later. Companies will gain profit due to the land prices are raising from year 2002 to year 2007 and this indirectly improve its corporate value.

Similar result is also found by Altan & Arkan (2011). Based on their investigation on the relationship between financial structures of firms operated in the manufacturing industry and their firm values. The quarterly data which collected from year 2004 to year 2007 is belongs to 127 firms indexed in ISE-XUBIN. The result indicates that there is positive relationship between long term debt and firm value by multiple regression analysis of this data in SPSS program. The higher percentage of long-term debt in total debt will significantly increases the firm value.

Furthermore, the goal in the study Apergis & Sorros (2010) is to investigate the impact of long-term debt on the value of the firm for international listed manufacturing firms. There are 346 internationally listed firms are chosen while testing period is based on quarterly data from year 1999 to year 2009. The methodologies are using panel co-integration and panel causality. Through panel co-integration, the empirical results show that long-term debt and negative statistically significant effect on firm value. Moreover, the size is considered to be an important factor in this study and lead to repeat the empirical analysis by dividing the sample into big and small firms. The result implies the long-term debt composed of small firms in such a way is configured to compete a higher value. However, the large firms financing with long term debt will have lower firm value.

In conclusion, this research expects that there is a positive relationship between long term debt and shareholders' wealth. It means the higher the long term debt ratio may causes the higher the shareholders' wealth.

2.2.4 Earnings Per Share & Growth in Assets

According to the study of Rashid & Rahman (2008), there is a significant relationship between share price and growth in assets. The study was carried out in Bangladesh. It taking the total sample of 554 observations from 104 non-financial firms listed in Dhaka Stock Exchange between the periods of year 1996 to year 2006. The regression model was developed by using Ordinary Least Square (OLS) and 2 Stage Least Square Regression (2SLS). From the regression result, researchers found that the relationship between the share price and growth in assets is positive with the coefficient of 1.48. In other words, it indicates that high growth in a company or firm lead to a larger payout. In addition, in the recent study by Sadiq et al. (2013) also underwent the study of stock price volatility in relation to dividend policy on the Karachi Stock Market. This study included 35 firms from the periods year 2001 to year 2011 based on panel data. The results show that growth in assets is positively correlated to share price with correlation of 0.266. As a result, an increase of 0.266 percentage point in the growth in assets is expected lead to 1 percentage point increase in share price. In short, the study of Rashid & Rahman (2008) and Sadiq et al. (2013) shows that the relationship between share price and growth in assets is positive.

Moreover, the study of Profilet & Bacon (2013) also found that the relationship between growth in assets and share price is negatively correlated. Their study was taken a sample of 599 firms from the Value Line Investment Survey Database. It analyzes using Ordinary Least Square (OLS) for determining the influences of financial variables on the stock price volatility in U.S. Equity Capital Market. From the regression result, the coefficient is -0.17676. In other words, share price and growth in assets are positively related. The authors found that this result was unanticipated which contrary to the literature regarding the relationship between these two variables.

In contrary, Hussainey et al. (2011) stated that there is inverse relationship between growth in asset and share price volatility. Company with high growth in asset will have lesser volatilities and therefore the lower share price volatility. The researchers examine on the sample of publicly quoted UK companies throughout 10 years period from year 1998 to year 2007. Nazir et al. (2010) reported that stock price volatility and growth in assets for Karachi companies is negatively correlated with the correlation of -0.025. It implies that the use of more assets in business does not represent a positive sign of performance by the investors. As a result, there is a negative relationship between share price and growth in assets.

Consistently with the study of Naveed & Ramzan (2013), the result stated that there is an inverse relationship between share price and growth in assets. A sample of 15 banks was selected in their study which is selected from Karachi stock exchange for determining the impact of different variables on share price. Time periods on this study is from the year 2008 to year 2011 by utilized Fixed Effect regression model. The coefficient is -7.932705 which indicates that growth in assets is statistically insignificant relationship with share price. In order words, the increase of 1 unit of growth in assets will lead to the decrease of share price by 7.932705. Lastly, in this study has resulted that there is a negative correlation between share price and growth in assets.

Based on review, this research expects to see negative relationship between share price and growth in assets. Most of the researchers such Hussainey et al. (2011), Profilet & Bacon (2013), Nazir et al. (2010), and Naveed & Ramzan (2013) found that the relationship negative of both variables. Hence, the higher the growth in assets, it will reduce the shareholders' wealth.

2.2.5 Earnings Per Share & Liquidity

In the study of Chordia et al. (2008) indicates that liquidity and the stock return (bid-ask spreads) are significantly positive correlated. All NYSE companies listed in CRSP are sorted on market capitalization and largest 500 are observed. Among the 500 stocks, 193 with daily traded on NYSE were retained in the sample. Daily traded stocks from year 1993 to year 2002 in NYSE as the intraday market efficiency is closely related to the daily liquidity. Period year 1993 to year 2002 was selected due to the transaction data was available from Trade and Automated Quotations database (TAQ). Besides, the span of 10 years was recorded with significant minimum tick size. This is also because market efficiency will be improved with the decrease in minimum tick size with come along with decline in bid-ask spreads. Quoted spread (QSPR), effective spread (ESPR) and order imbalance retrieve from NYSE TAQ database. The study of Chordia et al. (2008) was run on basic regression separately for large, mid-cap and small firms. Firm size significantly influences NYSE firms at 5% significant level. The result was consistent with their proposed hypotheses. Whereby increase in liquidity facilitate return predictability and increase informational efficiency by allowing price to reflect more information. In other words, increase in liquidity will increase in stock return.

Stock liquidity does help in improving the firm performance (Fang et al., 2009). Liquidity will stimulate and attract more informed investors to enter in stock market and increase the number of informative stakeholders. Nevertheless, they not support for companies with agency-based operating performance theories. According to causative theories, liquidity will have positive significant relationship with firm performance in the absence of causative agency theory. If there is existence of manager myopia, then liquidity will not increase the firm performance (Fang et al., 2009). According to Chowdhury & Ovtchinnikov (2009), managerial myopia is the tendency that managers will focus on short term investment. Management will neglect and consume on the resources in long term value maximizing project to

invest in short term maximizing projects. The study of Fang et al. (2009) also not found evidence of liquidity will diminish the performance effect of shareholder's right. Fang et al. (2009) retrieve data from Center for Research in Security Prices (CRSP) and quotes from Trade and Quote database (TAQ) which in line with the study of Chordia et al. (2008). The sample observed was stock traded on NYSE, Amex or Nasdaq for minimum 6 months in fiscal year. The final sample have 8290 firms with 2642 firms for the year 1993, 1995, 1998, 2000, 2002 and 2004. This is due to TAQ data was only available on year 1993 as mentioned earlier in Chordia et al. (2008) study. The sample was estimated by using pooled OLS and Tobin's Q was use to study the relationship between firm performance and stock market liquidity. This study stated that there is positive relationship between firm performance and operating liquidity. However, they failed to prove liquidity can eliminate the agency conflicts among managers and shareholders.

In the study of Lam & Tam (2011), they study the relationship between liquidity and stock returns in Hong Kong and considering all liquidity related factors. These factors are excess market return, factors for size, book-to-market ratio and liquidity. They made up a conclusion that, liquidity is positively significant to stock return while need to adjust for the three-moment CAPM, Fama-French three-factor model and augmented Fama-French factor model. In other words, liquidity factors (excess market return, factors for size, book-to-market ratio and liquidity) are negatively insignificant to stock return. The data used in the study of Lam & Tam (2011) was retrieve from Pacific-Basin Capital Markets (PACAP) Database. It contains 769 listed companies on board of Hong Kong Stock Exchange from July 1981 to June 1988 and one-month Hong Kong Interbank Offer Rate (HIBOR) from July 1988 to December 2004. The sample was conducted by using time-series test.

In the research of Emery & Cogger (1982), cash flow ratio can used to represent the liquidity of the company. In other means high cash flow indicates the company possessed high liquidity. The study of Elouafa (2012) is consistence with Emery &

Cogger (1982) where cash flow from operation is significantly affecting the earning (abnormal return of stock). Elouafa (2012) stated that excess cash flow from operation of French companies leads to incremental information of earning. In other words, when there is excess cash flow the earning of stock also increased and therefore shareholder wealth.

In contrary, some researchers found negative relationship between liquidity and stock return. For instance in the study of Beneish and Whaley (1996), they take sample from S&P 500 on January 1986 to June 1994. Out of 177 firms, they remove 45 pre-1993 Nasdaq stock which intraday trade and quote data not available and 29 firms which announcements are contaminated by firm specific release. Lastly, 103 firms were newly added in to and 33 were under new announcement policy from year 1989 to year 1994. In line with their study, an addition in trading volume to S&P 500 Index show increase in stock liquidity however decline in stock price. Consistent with their study, on the effective day in normal condition trading volume and size will be the highest and follow by bid-ask spread or stock return. As recorded in their study on January 1986 to September 1989, trading volume increases by 1.89 times. However, Vanguard's 500 portfolios increase 4 times as trading volume level out at 7.7. In the two subsequent periods, increase of 5.033 in trading volume leads to Vanguard's 500 Portfolio asset value shoot up to more than 400 percent from 1989 to 1994. In short, the stock return or increase in share price after effective date was driven by close-to-open return. Lastly, this case is not coincide as previous authors Chordia et al. (2008), Fang et al. (2009), Lam & Tam (2011) and Eloufa (2012) findings.

These authors Calcagno & Heider (2007) had proved same result as Beneish and Whaley (1996) did which is negative relationship between liquidity and stock return. As they point out in their study, speculator trading aggressiveness was closely related to the liquidity of market. However, the liquidity was depends on the duration taken in trading. If speculator did not alter the long term investment period

then there is no large aggressiveness happened to speculators. In this case the stock return will carry on as usual. But in contrary, myopic speculators who cut short the trading horizon will causes CEO not pays the stock price as agreed on earlier and speculators may face lower expected stock return. This is due to shorten the trading horizon will decline the information content of stock prices and mix up the useful and useless information. This results in management incentives more expensive in which management will generate less effort and consequently lower the expected value of the firms.

To have a brief summary that in the study of Chordia et al. (2008), Fang et al. (2009), Lam & Tam (2011) and Eloufa (2012), they also proven there is a positive significant relationship between liquidity and stock return as well as firm performance. On the contrary, Beneish and Whaley (1996) and Calcagno & Heider (2007) show liquidity is negatively related to stock price return.

Hence, this research expects that there is a positive relationship between liquidity and shareholder wealth. It means that the higher the liquidity, the higher the shareholders' wealth.

2.2.6 Earnings Per Share & Profitability (ROE)

Based on Emamgholipour et al. (2012), this study is to determine the relationship between capital structure and firm performance evaluation measures with the evidence from Tehran Stock Exchange. The purpose of this study is to examine how was the capital structure will affect the financial performance of listed companies in Tehran Stock Exchange. Based on this study, the authors were selected 400 firms among companies listed in Tehran Stock Exchange, and it is in the form of 12 industrial groups as the sample during 2006 to 2010. Those firms that be chosen must be listed before the research period, nonfinancial companies, and the end of financial period of companies end up at 31 December every year with not changed in the course of the study. With these considerations, only 80 firms were being selected. Return on assets ratio (ROA) and return on equity ratio (ROE) were being chosen as the dependent variables for this study in order to evaluate for the firm performance. They are using Pearson correlation and estimating of multiple regression models for hypotheses testing. After that, t-statistic will be used to estimate coefficient of independent variables. Lastly, Durbin Watson test (DW) will be used to identify the presence or absence of significant auto regression among components of intervals. From this study, the result showed that there is a strong significant negative relationship between debt ratios and performance measures of Iranian firms (ROA and ROE). Based on the result, the researchers show that by reducing the debt ratio, profitability of the firm can be increased by the management, hence, it will increased the amount of the company's financial performance measures as well as increased the shareholders' wealth. In order words, there is a positive relationship between ROE and shareholders' wealth.

Masum (2014) study has proved the same result as Emamgholipour et al. (2012) did which is positive relationship between return on equity and share price. The research studied on the estimation of stock market returns for 30 banks listed in Dhaka Stock

Exchange from 2007 to 2011. To examine the relationship exists between dividend policy and stock market returns of private commercial banks in Bangladesh as well as the degree of return on stock for the same period of time. Similarly to the result of Kumaresan (2014) study, stated that there are strong positive relationship between return on equity and shareholders' wealth. The research examined on the impact of firm's dividend policy on shareholders' wealth in Sri Lanka. Top ten listed companies from hotel and travel sector in Sri Lanka were chosen for the study during the period from 2008 to 2012. Correlation, regression and descriptive statistics were used by the researcher to evaluate the data collected.

Similarly to Arowoshegbe & Emeni, (2014) study, this stated that there is a negative relationship between debt ratio (DR) and return on equity ratio (ROE). This research was examined the relationship between shareholders' wealth and the debt-equity mix of quoted companies in Nigeria. The study was based on a panel data set of 15 years, which is from 1997 to 2011 comprising 134 non-financial firms quoted on the Nigerian Stock Exchange as at 2011. Furthermore, the sample size was determined by using the Burley's formula which propounded by Yamane (1973). Only 100 sample size out of 134 non-financial firms was being chosen after they used the formula to do determination of sample size. After that, they proceed to second stages in order to determine the sample size, at the end, 60 non-financial firms were being chosen in this study. In this study, return on equity (ROE) and earnings per share (EPS) were taken as the dependent variables respectively to measure the shareholders' wealth. However, debt ratio (DR) was being chosen as the explanatory variable for each model. They were using correlation matrix and Jarque Bera test to examine the pattern of relationship among the data and the possible degree of multicollinearity among the regressors. Besides that, ordinary least square analysis on the pooled data and Hausman specification test of choices were also being carried out in this study. In the end, the result of this study shows that DR as a proxy of corporate leverage is negatively related to the EPS and ROE as proxies of shareholders' wealth. In order words, DR has a negative relationship between ROE

and EPS respectively. This implies that increased in ROE will increase the shareholders' wealth.

However, according to Kabajeh et al. (2012), this study consisted of all the Jordanian insurance public companies listed in Amman Security Exchange from the period between year 2002 and year 2007. There are 23 listed companies out of 28 public companies being chosen based on the Jordanian insurance public companies. Those companies were might be affected by financial crisis and it was lacked of information after 2010. In this study, market price per share will be taken as the dependent variable in order to measure the shareholders' wealth, while ROE, ROI and ROA have taken as the independent variable. Pooled regression analysis was used in this research which indicating that coefficient of the ROE variable is equal to 0.001. Hence, it shows that there is no relationship with share price. Based on the result of the study, there is no relationship between the return on equity ratio (ROE) on market share prices.

In conclusion, this research expects that there is a positive relationship between ROE and shareholders' wealth. It means that the higher the ROE, the higher will be the shareholders' wealth

2.3 Proposed Theoretical Framework

Figure 2.1 Proposed Theoretical Framework Model

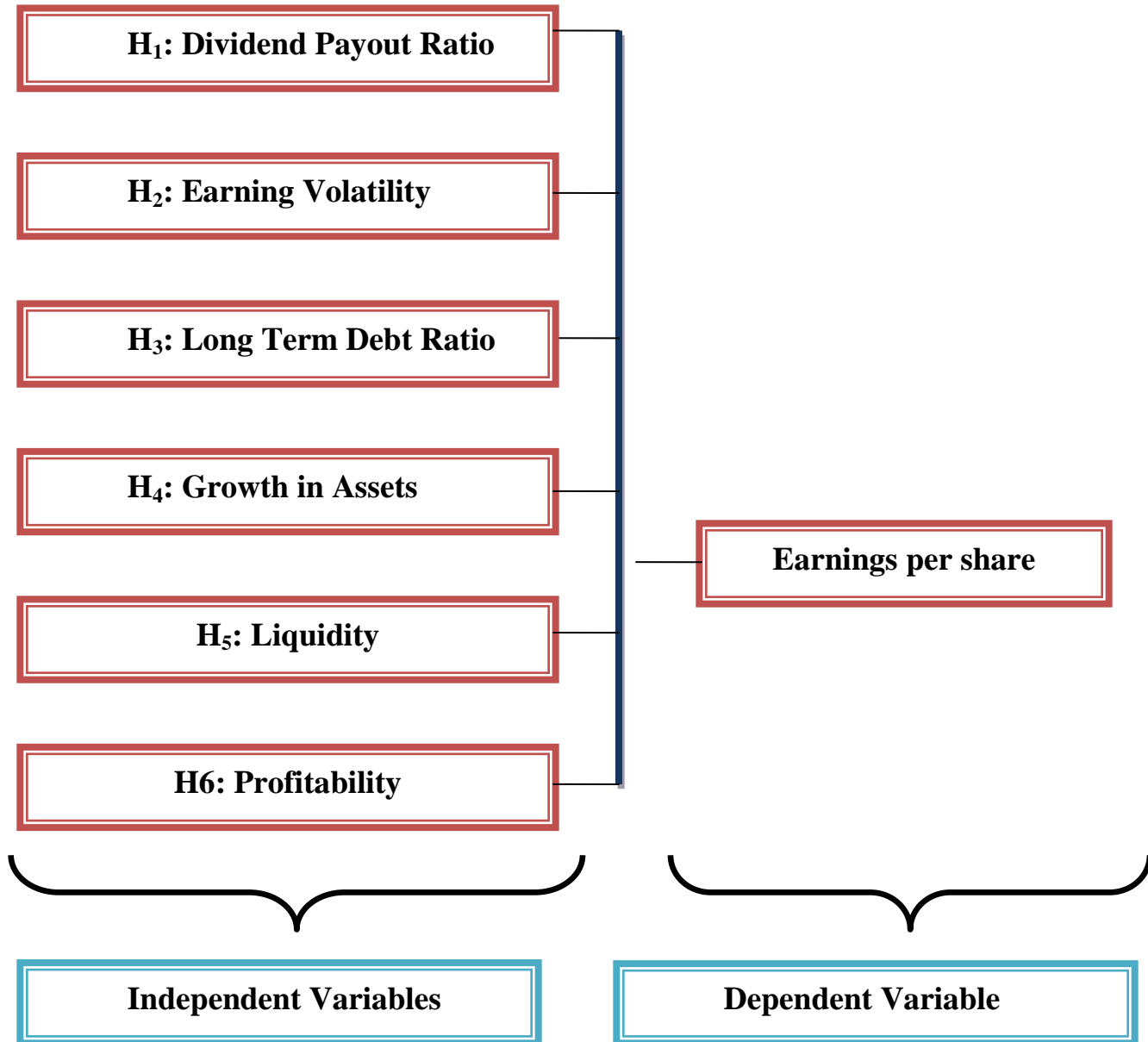


Figure 2.1 shows the model of proposed theoretical framework that implement to serve in this research. This model is a study in determining the impact of six independent variables on shareholders' wealth which major in Malaysia's food producer sector. The six independent variables are refer to dividend payout ratio, earning volatility, long term debt ratio, growth in assets, and liquidity and profitability (ROE)

2.4 Hypothesis Development

Dividend Payout Ratio influenced the shareholders' wealth maximization in food producer sector

In the studies of Mokaya et al. (2013), Murekefu and Ouma (n.d.) and Zakaria et al. (2012), states that there is a strong positive relationship between dividend payout and shareholders' wealth maximization. An increase in a dividend payout result an increase in shareholders' wealth. In other words, the higher the dividend policy will eventually causes the higher the shareholders' wealth.

H_1 : Dividend payout ratio is positively significant with shareholders' wealth

Earning Volatility influenced the shareholders' wealth maximization in food producer sector

According to the researchers such Campbell & Shiller (1988), Asghar et al. (2011) and Hashemijoo et al. (2012), there is a positive significant between earning volatility and shareholders' wealth maximization. In other words, the higher the earning volatility will lead to the increase of share price. Consequently, it eventually affects the optimal dividend policy for corporations.

H₂ : Earning Volatility is positively significant with shareholders' wealth

Long Term Debt influenced the shareholders' wealth maximization in food producer sector

From the study of Lixin & Lin (n.d) and Altan & Arkan (2011), they showed that there is a positive relationship between long term debt and shareholders' wealth maximization. The higher percentage of long-term debt in total debt will significantly increases the firm value.

H₃ : Long Term Debt Ratio is positively significant with shareholders' wealth

2.5 Conclusion

The objective of study in chapter 2 is to examine the independents variables that bring impact on the shareholders' wealth which major in Malaysia's food producer sector. Previous researchers provides useful information and guidance on certain variables such as dividend payout ratio and earning volatility which done on the research topic of dividend policy. Further information will be provided in the following chapter.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This chapter comprises the research design, data collection method, target population, construct measurement, data processing and also data analysis. The research methodology is a useful information for the readers and researchers to be clear how the research to be carried out.

This research is conducted based on secondary data and those data was obtained from Thomson Reuters DataStream. The software of E-view 6 is used in this research to obtain the analysis results as well as in detecting the econometric problem such as multicollinearity, autocorrelation, heteroscedasticity and so on.

3.1 Research Design

Quantitative data in term of secondary data is used in this research. In this research, the total of 5 years period was taken which between the year 2008 to year 2012 and undertaking the 59 food producer firms in Bursa Malaysia. Thus, the total number of observations is 295 and the data was taken from Thomson Reuters DataStream. In this study, the research is to determine the impact of six independent variables (dividend payout ratio, earning volatility, long term debt ratio, growth in assets, liquidity and profitability (ROE) on shareholders' wealth which represented by earnings per share.

Quantitative research was used because it able clearly establishes the relationships between both variables whether both variables are in positive or negative relationship. Other than that, research with undergoing quantitative method able to reduce and

reorganized a complicated problem to a limited number of variables (Sukamolson, n.d. and Sharma, 2012). Hence, it shows that quantitative research plays an important role in a research to measure the data validity. However, it was relied on the statistical data in order to generate a quantifiable result.

3.2 Data Collection Method

This research paper is aimed at analyzing the impact of dividend policy on shareholders' wealth which focuses on food producers sector. For this purpose, a sample of 59 companies from food producers companies listed in main market Bursa Malaysia was selected. This research paper is applying multiple regression for a period of 5 years from 2008 – 2012 by taking six independent variables (dividend payout ratio, earning volatility, long term debt ratio, growth in assets, liquidity and profitability) and shareholders' wealth as dependent variable which represented by the earnings per share. Thus, the total number of observations is 295. In this research, the data was collected in term of secondary data which taken from the sources of Thomson Reuters DataStream. Table 3.1 below shows the summary of the variables in this research.

Table 3.1 Variable, Description & Sources

Variable	Proxy	Explanation	Unit Measurement	Sources
Earnings Per Share	EPS	Earnings per share (EPS) was used to determine the market values of the company's shares.	RM	Silviana & Rocky (2013)
Dividend Payout Ratio	DPR	Dividend payout ratio is calculated as dividend per share is divided by earnings per share	Percentage (%)	Habib et al. (2012)
Earning Volatility	EV	Earning volatility is measured by taking the ratio of operating earnings to total assets.	Ratio (%)	Nazir et al. (2010)
Long Term Debt Ratio	LTDR	Long term debt ratio is measured by long term debt to total assets ratio.	Ratio (%)	Lixin & Lin (n.d); Apergis & Sorros (2010)
Growth in Assets	GA	Growth in assets is calculated by taking the ratio of change in assets.	Percentage (%)	Ilaboya & Aggreh (2013); Profilet & Bacon (2013) ; Asghar et al. (2011)
Profitability (ROE)	ROE	The measurement of ROE is equal to the profit after interest (net profit) divided by the shareholders' equity as a percentage	Percentage (%)	Shoesmith (2004) ; Damodaran (2007)
Liquidity	LIQ	Liquidity defined as net cash flow divided by cash	Ratio (%)	Emery & Cogger (1982)

3.3 Sampling Design

3.3.1 Target Population

Based on Godwin et al. (1998), target population defined as a researcher would like to study the group(s) of youth. In this research, the target population is focused in the food producer sector in Malaysia. The reason of choosing food producer sectors in this research is due to the data availability in datastream. The data which provided by Thomson Reuters DataStream in this sector is more completed compare to other sectors such as banking sector, fixed line telecom (e.g Digi, Maxis) and others. Moreover, there are few researchers underwent their research in dividend policy which specialize in food producer sector. Most of the researchers underwent their researches which focus in consumer product companies. For instance, Hashemijoo et al. (2012) undergo the research of the impact of dividend policy on share price volatility in the Malaysian Stock Market which specializes in consumer product companies which listed in Bursa Malaysia. Based on MIDA (2014), Malaysia's food producer sector remained as net importer instead of net exporter although the performance of this sector has getting better compared to the past ten years. The export value is more than RM 11 billion nowadays, which this amounts is equivalent to two-thirds of the total food exports of over RM 18 billion. According to Ahmed (2012), this sector is made up by medium-small industries (SMIs) which have the characteristics of low levels of capitalization and inefficient in management. Those characteristics may lead to a low productivity performance. Based on FTSE (2014), Malaysia's food producer sector was ranked under bottom 5 sectors of performers. The performance of Malaysia's food producer sector is 12.22% annually and -2.80% in a month. Nevertheless, the dividend yield for this sector is 2.69%. In line with Appannan & Lee (2011), Malaysia's plantation sector was paying a high dividend to their shareholder due to their fewer growth opportunities and the cash on hand is high. As a result, this research is going to identify whether food producer sector in

Malaysia follow the dividend policies and whether the dividend payments closely relates the changes in earning and eventually impact on the shareholders' wealth. There are 78 companies under food producer sector which listed in the Bursa Malaysia. However, there are only 59 companies was chosen. The reason behind is due to there are certain company's information or data which are not available. Furthermore, there are no dividend payouts between the time periods of year 2008 to year 2012. As a result, 59 companies was chosen in order to determine the impact of six independent variables (dividend payout ratio, earning volatility, long term debt ratio, growth in assets, liquidity and profitability) on shareholders' wealth.

3.3.2 Sampling Technique

Electronic-view 6 (E-view 6) software will be applied in this research in order to run the regression analysis. E-view 6 able to carry out few analysis result such as Unit Root test, Ordinary Least Square (OLS), Jarque-Bera Test, Diagnosis Checking and others. E-view 6 been chosen in this research because E-view 6 are easy to apply, able to provide data analysis as well as detect the econometric problem.

3.3.3 Sampling Size

Sampling size is defined as the number of sample size included in a research. In this research, panel data are used. Panel data is the method with the combination of cross-sectional data and time series data. There are 78 companies in Malaysia's listed food producer sector. However, the total of 59 companies was chosen in this research due to the not available data or information as well as there are no dividend payouts between the research periods which are between year 2008 to year 2012. In a nutshell, the panel data are based on 59 companies which under food producers sector started from the year 2008 to year 2012. The total sample size or observation in this research is 295.

Table 3.2 Number of Observations

First Level of Filtration Process	
No. of Companies	78
No. of Observations	390 (78 x 5)

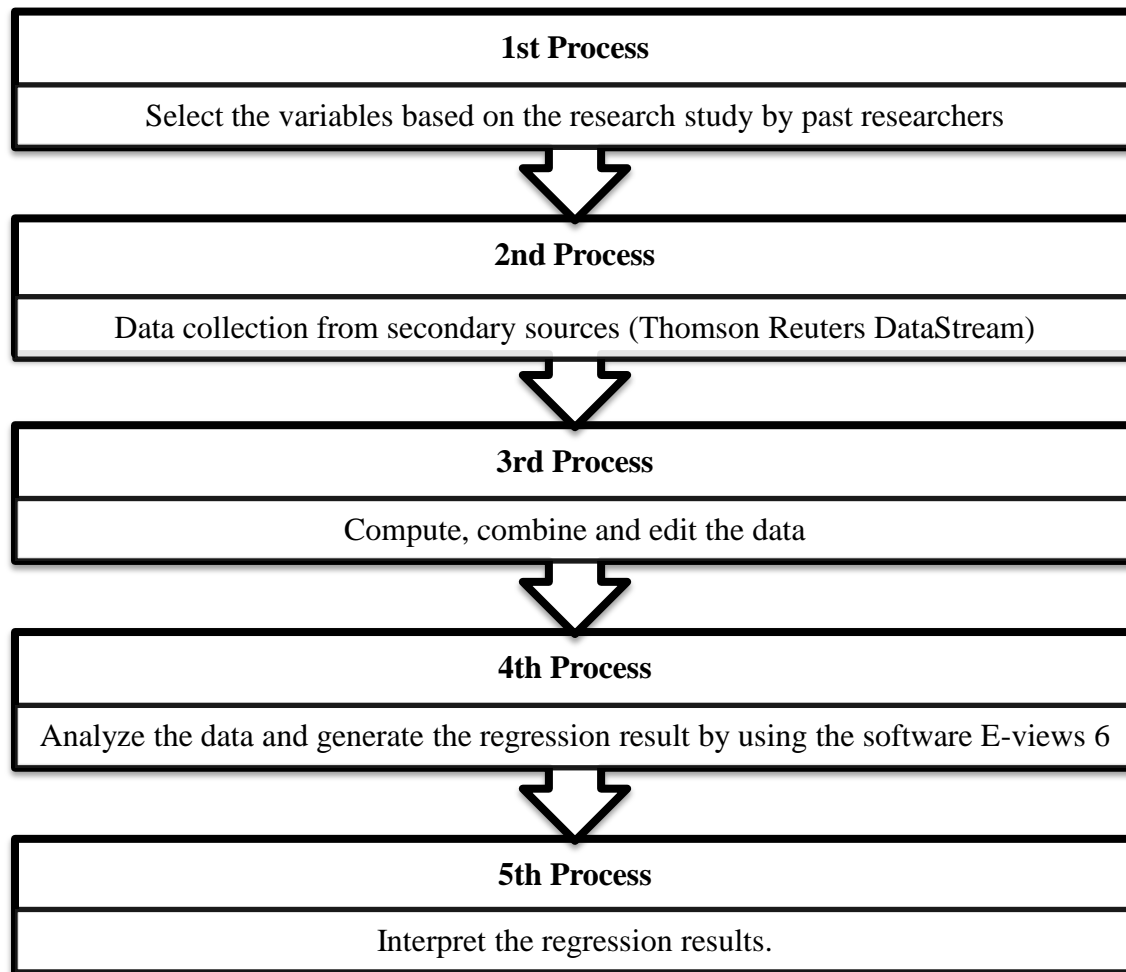
After First Level of Filtration Process	
No. of Companies	59
No. of Observations	295 (59 x 5)

3.4 Data Processing

This research included six independent variables (dividend payout ratio, earning volatility, long term debt ratio, growth in assets, liquidity and profitability) in order to determine the impact on the shareholders' wealth. However, shareholders' wealth is represented by the earnings per share (EPS). There are 78 companies in Malaysia's listed food producer sector. Nevertheless, the total of 59 companies was chosen in this research after filtration process. The reason of taking 59 companies as sample size is due to missing data for some companies. In addition, some companies did not have any dividend payouts between the research periods (between the year 2008 to year 2012). In a nutshell, the panel data are based on 59 companies which under food producers sector started from the year 2008 to year 2012. The total sample size or observation in this research is 295. The flow chart is as shown in the figure 3.1.

Figure 3.1 shows the index flow chart. The first process of data processing is to select the variables for this study based on the references from past researchers. As a result, six independent variables were selected such as dividend payout ratio, earning volatility, long term debt ratio, growth in assets, liquidity and profitability. Next is to undergo the data collection from the secondary data sources. In this research, the data was obtained from Thomson Reuters DataStream. Then, the data was compute, combine and filter to make sure the data was standardized in order to improve the results accuracy. The following process is to analyze the data and generate regression results by using the software of E-views 6. Lastly is to interpret the regression results obtained.

Figure 3.1 Index flow Chart



3.4.1 Dependent Variable

Shareholders' wealth

$$\text{Earnings per share} = \frac{\text{Net income} - \text{Preferred dividend}}{\text{Number of shares outstanding}}$$

According to Brunzell et al. (2012), shareholders' wealth is measured and represented by the market values of the company's shares. In other words, it implies the company's investment, financing and dividend decision. Based on the study Azhagaiah and Priya (2008), the proxy in the measurement of shareholders' wealth is market value (MV) of equity of the companies. On the other hand, Oana (n.d.) found out that there are few measurements to determine market value per share such as Economic Value Added (EVA), Earnings before Interest and Tax (EBIT), Market Value Added (MVA), Return on Equity (ROE) and Earnings per Share (EPS). According to Silviana & Rocky (2013), earnings per share (EPS) were used to determine the market values of the company's shares. It is because EPS has significant influence toward share price. The market value of a firm is increasing when the dividend is high. Hence, the shareholder values may increase as well (Chidinma et al., 2013). Thus, EPS is used as the measurement of shareholders' wealth in this research.

3.4.2 Independent Variable

Dividend Payout Ratio

It is important for companies to make decision based on the amount of the dividend payable due to the company's goal is to maximizes shareholder wealth as measured by the price of the company's ordinary shares (Waithaka et al., 2012). Dividends are defined as certain things relative to the stock price appreciation because dividends are less risky than capital gains. The dividend payout ratio is calculated as dividend per share is divided by earnings per share (Habib et al., 2012).

$$\text{Dividend Payout Ratio} = \frac{\text{Dividend per Share}}{\text{Earnings per Share}}$$

Azhagaiah & Priya (2008), Brunzell et al. (2012) and Zafar et al. (2012) measure dividend policy by using dividend payout ratio. According to Zakaria et al. (2012) stated that dividend payout is a major element of stock return to shareholders which the higher dividend payout ratio will lead to a more volatile share prices. Therefore, there is a strong positive correlation between dividend payout and share price changes. Furthermore, the authors explained that high dividend payout can be interpreted as a stability of a firm and reduce the share price volatility (Hashemijoo et al., 2012).

By using dividend payout ratio in dividend policy, it provides signal to the investors that the company is being in line with good corporate governance practices. Besides that, it also able to attract investors and indirectly increase the share price of company. Furthermore, company could easily to raise funds through new share

issuance for expansion which then would increase profits and increase share price (Zakaria et al., 2012).

Earning Volatility

$$\text{Earning Volatility} = \frac{EBIT}{\text{Total Assets}}$$

Based on Petrovic et al. (2009), earning volatility is an important tool in the prediction of future earnings. In other words, earning volatility is a significant predictor on future earnings (Petrovic et al., 2009). Earning volatility is measured by taking the ratio of operating earnings to total assets (Nazir et al., 2010). Operating earnings here means the operating earnings before interest and tax (EBIT). Other than Nazir et al. (2010), some of the researchers also support the measurement of earning volatility as stated above such as Asghar et al. (2011), Sadiq et al. (2013), Hussainey et al. (2011) and Rashid & Rahman (2008.).

Long Term Debt Ratio

$$\text{Long Term Debt to Total Assets Ratio} = \frac{\text{Long term debt}}{\text{Total Assets}}$$

According to the study of Apergis & Sorros (2010), the role of long term debt would be similar with the role of shareholder's equity capital. Thus, it should be financed by earnings instead of finance long term assets with short term liabilities. Long term debt ratio can be measured by long term debt to total assets ratio, which is long term debt divided by total assets (Lixin & Lin, n.d.). In addition, the study of Apergis & Sorros (2010) also using the same measurement for long term debt. Due to Caprio & Demirguc – Kunt (1997) study indicates that there is a correlation between long term debt and productivity. It is consistent with the result from Apergis & Sorros (2010) which also shows that there is a positive relationship between leverage and common stock returns.

3.4.3 Control Variable

Growth in Assets

$$\text{Growth in Assets} = \frac{\text{Total Assets in year } t - \text{Total Assets in year } t-1}{\text{Total Assets in year } t-1}$$

According to Li et al. (2012), there are few measurements of growth in assets. In the study of Li et al. (2012), the few measurements of assets growth are based on growth in total assets, capital expenditure or investments. These measurements tend to highly correlated. Among the few measurements stated above, Li et al. (2012) found out that taking the ratio of the changes in total assets within a year from the beginning of the year to the ending of the year is the most suitable measurement in the determination of growth in assets. It is because the result by using this measurement seems to consistently have the greatest return predictive power compared to other measurement. In addition, most of the researchers such as Hussainey et al. (2011), Profilet & Bacon (2013), Hashemijoo et al. (2012) and Asghar et al. (2011) also support on this measurement in the determination of growth in assets. In short, growth in assets is calculated by taking the ratio of change in assets and measured as averaged for year 2008 to year 2012.

Liquidity

$$\text{Liquidity} = \frac{\text{net cash flow}}{\text{cash}}$$

Liquidity is defined as excess cash need to maintain in company to meet unexpected investment opportunity and also expenses. Positive value of net cash flows in a company implies that there liquidity reserve and vice versa (Emery & Cogger, 1982). Current ratio, quick ratio are traditional ways to identify the liquidity of a firm (Walter, 1957). Furthermore, as stated in study of Kirkham (2012), current ratio is merely ratio between total current asset and total current liabilities; whereas quick ratio is indicating the ability to pay for every dollar that currently owed. Nevertheless, working capital ratio is used as a proxy to measure liquidity (Ho, 2003). According to Walter (1957), traditional measures of liquidity unable to identify when there is net cash inflows or sales fluctuate widely. In addition, quick ratio and current ratio are used to measure the short term solvency. In addition, based on the studies of Charitou & Vateas (1998), cash flow is better than earning in measuring firm performance due to it considered the liquidity position of firm. Other than that, Jooste (2006) stated operating cash flow ratio can help to determine the ability of a company to generate sufficient for paying its debt, dividend and invest in new investment project. Moreover, inflation and increase in cost leads to rising in investment value lead to the importance for management to identify cash flow information to access firm performance. Thus, we conclude that the liquidity can be measured by net cash flow divided by cash.

$$\text{Cash flow ratio} = \frac{\text{Cash flow from operation}}{\text{Current Liabilities}}$$

Rather than using the traditional ratio which is quick ratio to estimate the liquidity cash flows is replaced and used by several researchers such as Zeller & Stanko (1994), Ibarra (2009) and Kirkham (2012). As mentioned in the study of Zeller & Stanko (1994), quick ratio and current ratio not accurately reflect the ability to pay while cash flow ratio is representing excess cash flow of operating cash flow after working capital. In the study of Ibarra (2009), the company with cash flow ratio greater than 40% indicate it is common and healthy firms. In short, this study is applying net cash flow divided by cash as the measurement of liquidity.

3.4.4 Dummy Variable

Profitability (ROE)

Undeniable, to evaluate the management skill of a company, return on equity is the preferred metric. It can be used to measure the return that obtained by the business owners from their investment in the business (Traub, 2001). This ratio indicates that how well a shareholder is doing in accounting sense (Morsy & Rwegasire, 2010).

Simplistically, the measurement of ROE is equal to the profit after interest (net profit) divided by the shareholders' equity as a percentage (Shoesmith, 2004). The other researchers Damodaran (2007), Ranti (2013) and Masum (2014) also applied the same method to measure the ROE in their studies.

$$\text{ROE} = \frac{\text{Net profit after tax}}{\text{Book Value of Equity}}$$

Net profit after tax of the current year is assumed to be generated by equity investment at the beginning of the year, while book value of equity will be used to measure the equity invested in existing assets (Damodaran, 2007).

Return on equity refers to the efficiency of a company by using its own capital to generate remuneration for shareholders, in order to maximizing their wealth. Thus, it is important to shareholders, who may determine whether the remuneration they get can be rewarded the risk they assumed. On the other hand, managers have to achieve an appropriate level of this rate, in order to maintain their position and to achieve company's goal, to ensure a high return for shareholders to maximize their wealth. Therefore, this ratio is to express the degree to which the managers have to succeed to achieve the company's main objective (Circiumaru et al., n.d.).

The higher the ROE, the higher the growth in share price (Price, 2012). Thus, it will increase the shareholders' wealth. This shows there are significant relationship between ROE and share price and it is consistent with the study of Emamgholipour et al. (2012).

In this study, ROE will be using as the dummy variable, which is determined by the median. 0 represents the ROE of each of the company which is lower than the median, 9.6570% for each year. 1 represents the ROE of each of the company which is higher than the median, 9.6570% for each year.

In this study, ROE will be using as the dummy variable, which is determined by the median. Dummy variable apply to further classify high and low profitable company based on median. High profitable firm denoted as 1, otherwise, zero. Median was used by numbers of researchers to classify company to high and low such as Clemmensen (2006) and Hedensted & Raaballe (2008).

3.5 Data Analysis

3.5.1 Econometric Model

The objective of this research is to examine the impact of dividend policy in shareholders' wealth. There are six independent variables (dividend payout ratio, earning volatility, long term debt ratio, growth in assets, liquidity and profitability). The time frame of this research is from the year 2008 to year 2012 which taken the total of 59 companies in food producers sector. The research framework is created in order to achieve research's objective.

The regression model on this research is as below.

$$EPS_{i,t} = \beta_0 + \beta_1 DPR_{i,t} + \beta_2 EV_{i,t} + \beta_3 LTD_{i,t} + \beta_4 GA_{i,t} + \beta_5 LIQ_{i,t} + \beta_6 DMY_{i,t} + \varepsilon_{i,t}$$

EPS = Earnings Per Share

*β*₀ = Intercept for the regression model

*β*₁, *β*₂, *β*₃, *β*₄, *β*₅, *β*₆ = Partial regression model

DPR = Dividend Payout Ratio

EV = Earnings Volatility

LTD = Long Term Debt

GA = Growth in Assets

LIQ = Liquidity

DMY = Dummy = 1 for highly profit company, otherwise = 0

*ε*_{*i*} = Error terms of the regression model

3.5.1.1 Panel Data Technique

The early development of panel data statistical methods from their introduction by Airy in 1861 for the analysis of astronomical data, through the work of Galton and Fisher on human heredity, development of fixed-effects ANOVA by Fisher and his disciples, down to the analysis of variance components or random effects model of animal breeding experiment so frequent work human genetic work. Then there are some earliest work of researchers such as Hildreth, Hoch, Mundlak, and Balestra and Nerlove, culminating in the First Paris Conference on Panel Data Econometrics of 1977 (Nerlove, 2002, pp. 1).

On the other hand, based on Dupont-Kieffer & Pirotte (2011), the early years of panel data econometrics and two seminal papers are established by Mundlak (1961) and Balestra & Nerlove (1966). Potential individual heterogeneity problem was identified as a central issue. One of the main ambition is to get an example of how across individuals or behavioral differences through time can and should be modeled on a clear understanding. Another key aspect is the inherent assumption that the dynamic model of economic behavior, which requires the use of specific models and data collection.

For example, in Balestra & Nerlove (1966), data of 36 states in U.S. over a 13 years period were used in the analysis. Panel data can be use to compare with the pure cross-section data, observations on individual units at a point in time, and with pure time-series data observations, usually of aggregate properties, over time there is no "longitudinal" dimension (Nerlove, 2002).

Panel data is the data sets which consisting of multiple observations on each sampling unit such as countries, states, regions, firms, or randomly sampled

individuals or households. All of the sampling units could be generated by pooling time-series observations across a variety of cross-sectional units (Baltagi, n.d.). However, the econometric approach is nevertheless strange compared to the experimental contexts. Panel data is emphasizing model specification, testing, and tackling a number of issues to arise from the particular statistical problems with economic data (Croissant & Millo, 2008).

Based on Greene (2010) studies, there are two famous panels, or longitudinal, data sets, which are National Longitudinal Survey of Labor Market Experience (NLS) and the Michigan Panel Study of Income Dynamics (PSID). This researcher stated that the analysis of panel data sets is an active and innovative body of literature in econometrics, this might be due to it can provides a wider environment for development of estimation techniques and theoretical results. In addition, researchers are able to use time-series cross-sectional data in order to examine the issues which could not be studied in either cross-sectional or time-series setting alone.

Besides that, panel data can also be defined as a repeated measure of one or more variables on one or more persons (Bruderl, 2005). Below is the data structure ("long" format, $T = 2$):

Table 3.3: Panel Data Structure

i	t	y	x
1	1	y_{11}	x_{11}
1	2	y_{12}	x_{12}
2	1	y_{21}	x_{21}
2	1	y_{22}	x_{22}
....			
N	1	y_{N1}	x_{N1}
N	2	y_{N2}	x_{N2}

Sources: Bruderl (2005)

The basic linear panel model which used in econometrics is as below:

$$y_{it} = \alpha_{it} + \beta_{it}^T x_{it} + u_{it}$$

Where $i = 1, \dots, n$ is the individual (group, countries, state...) index, $t = 1, \dots, T$ is the time index and u_{it} is a random disturbance term of mean 0 (Croissant & Millo, 2008).

There are two common statistical models for meta-analysis which is fixed-effect model and random-effects model. A similar set of formula has apply in both models in order to calculate statistics, sometimes may produce similar estimates of various parameters, and this is a fact that may lead people to think that the models are interchangeable. In addition, the models represent fundamentally different assumptions about the data. Select the appropriate model is important to ensure that the various statistical correct estimate. Additionally, more importantly, the model is designed to analyze the range. It provides a target for analysis and statistical interpretation of the data frame (Borenstein et al., 2010). Primary advantage of these models is the ability to control for time-invariant omitted variables that may deviate observed relationships (Bollen & Brand 2008).

(i) Advantages of Panel Data

Analysis of panel data is able to provide a large of data point to researchers, by increasing the degrees of freedom and reducing the collinearity among explanatory variables. Hence, this can improve the efficiency of econometric estimates (Hsiao, 2003). Furthermore, researchers are also able to analyze a number of important economic issues which could not be addressed by using either cross-sectional or time-series data sets. In addition, panel data also can reduce or resolve the key of econometric problem which often founded in empirical studied, namely, there is often certain effects are omitted variables which are correlated with the explanatory variables. By utilizing information on both the inter temporal dynamics and the individuality of the entities being

investigated, it is better able to control in a more natural way for the effects of missing or unobserved variables.

Undeniable, panel data is able to provide the possibility of generating more accurate predictions for individual outcomes compare to time-series data setting alone. Panel can observe the behavior of others and provide a possibility of learning an individual's behavior if the individual behaviors are similar conditional on certain variables. Hence, a more accurate description of an individual's behavior can be obtained by pooling the data (Hsiao, 2003). Another advantage of panel data is able to identify and measure the effects that are simply not detectable in pure cross-section or pure time-series data. For instance, suppose that a cross-section of women with 50% average yearly labor force participant rate. This might be due to case (a) each women having 50% chance of being in the labor force, while case (b) 50% of the women working all the time and 50% not at all. In case (a) has high turnover, whereas the case (b) has no turnover. Based on this case, only panel data can be used to discriminate between these cases. Thus, in panel study, it can be use to avoid the problem since a difference estimator will make inference based only on intrapersonal rather than interpersonal comparison of satisfaction.

3.5.1.1.1 The Fixed Effects Model (Least Square Dummy Variable Model)

The significant feature of fixed-effect model is that all studies in the analysis share a common effect size (Borenstein et al., 2010).

Another type of panel has a constant slope of the model, however, the cross section according to the unit (group) for example, which type of interception.

There are significant differences between countries in this type of model although there was no significant time effect. The intercept is a cross-section (group) and in this particular case, different from country to country, may or may not change over time. These models are called fixed effects model (Yaffee, 2003).

There are five types of fixed effects models depends on the assumptions about the intercept, the slope coefficients, and the error term, unit. There are several possibilities as below (Gujarati, 2003, pp. 640):

- Assume that the intercept and slope coefficients are constant across time and space and the error term seize differences over time and individuals.
- The slope coefficients are constant but the intercept changes over individuals.
- The slope coefficients are constant but the intercept changes over individual and time.
- All coefficients (intercept and slope coefficient) will vary with the individual.
- The intercept and slope coefficients vary with individuals and time

(i) Advantages of Fixed Effects Models

It is suitable to use the fixed-effect model if there are two conditions met. First, there is good reason to believe that the same features all studies. The second objective is to calculate the combined effect size, which will be included in the analysis cannot be generalized beyond the (narrowly defined) population (Borenstein et al., 2010).

One advantage of the fixed effects model of which is the error term may be associated with the impact of individual. If the group is not associated with the effect of the return of a group way, it might be better to use more compact panel model parameters (Yaffee, 2003). Besides that, the involvement of the latent time-invariant variables associated with time-varying covariates in the models is an advantage of fixed effects model over the random effects model. However, the correlation between the sizes of the realization of the fixed effects model is not reported, this thing can provide a better understanding of the potential for time-invariant variables (Bollen & Brand, 2008).

(ii) Disadvantages of Fixed Effects Models

Nevertheless, there are some disadvantages of fixed effects models. Fixed effects model may often need to specify the dummy variable due to many observations of cross-section units. Too many dummies may weaken a sufficient number of degrees of freedom model is strong enough statistical test. Moreover, a model with many such variables may lead to multicollinearity, which increases the standard errors, and thus the statistical power of the model parameters can be released into the test. If these variables in the model are not vary within the group,

parameter estimation, although the model residuals are assumed to be normally distributed, uniform, there could easily to be country-specific (groupwise), different variance or autocorrelation with the passage of time which will further worsen the estimation (Yaffee, 2003).

Fixed effects model allows correlation, but it does not allow the direct effects of the between the covariates and time invariant variables (Bollen & Brand, 2008). Another drawback to perform typical fixed effects estimator is that it does not allow researchers, to include time-invariant observed variables, such as gender, race, place of birth, etc. It is a researcher interested in the extent of these short comings while at the same effects of observed variables (Bollen & Brand, 2008). The complexity will increase if add more regressors to the fixed effects models due to the possibility of collinearity among the regressors (Gujarati, 2003, pp. 641).

3.5.1.1.2 Random Effects Model

Random effects model is also known as variance components model where the estimation of linear regression models when the effect of omitted individual-specific effects are treated as random variables (Hsiao, 2003). Besides that, in the studies of Bollen & Brand (2008), states that the major differences of random effects model from fixed effects model is that the omitted time-invariant variables are assumed to be uncorrelated with the included time-varying covariates in the previous, whereas in the latter they are allowed to correlate whether the covariates correlate with the latent time-invariant variable.

In the random effects model, allow the true effect sizes to differ which it is possible that all studies share a common effect size; however it is also possible that the effect size differ from study to study (Borenstein et al., 2010). Furthermore, random effects model treat the effect-size parameters as if they were a random sample from a population of effect parameters and estimate hyper parameters whereby usually just the mean and variance that describing this population of effect parameters (Hedges & Vevea, 1998).

In addition, according to Diggle et al. (2002) showed that there are two different approaches to imply about random effects model. The first is suitable when we are interested in a particular subset of regression coefficients, none of which are assumed to differ across subjects. While the second approach is adequate when the subject-specific coefficients are themselves of interest or when conditioning away the information about the random effects get rid of too much information about an important regression coefficient.

(i) Advantages of Random Effects Models

The random effects model has the advantage of it allows the derivation of efficient estimators that make use of both within and between group variation. And it also allows the estimation of the impact of time-invariant variables (Nerlove, 2007). Besides that, the random effects models has greater efficiency compared to the fixed effects model leading to smaller standard errors and higher statistical power to investigate effects (Bollen & Brand, 2008).

Furthermore, according to DerSimonian & Laird (1986), random effects model has the benefit in sum up the data and in illustrating the distinct kinds of result

which one obtains from randomized and non-randomized studies. Overall, studies with greater potential for bias, such as uncontrolled or nonrandomized, show greater treatment effect as well as greater heterogeneity.

Besides that, the study weights of random effects model are more uniform which also known as similar to one another. Large studies are assigned less relative weight and small studies are assigned more relative weight as compared with the fixed effects model (Borenstein et al., 2010). Moreover, the number of parameters of random effects model stay constant when sample size increases (Nerlove, 2007).

(ii) **Disadvantages of Random Effects Models**

Based on Borenstein et al. (2010) studied, one of the disadvantages of random effects model such as if the assumed random distribution for the effect does not hold, it can be misleading. This happen when there is a strong correlation between the effects estimates from the several studies and their variances. That is, when the results of larger studies are systematically distinct from results of smaller studies. This is the pattern often associated with publication bias, but could in fact be due to several other causes.

3.5.1.1.3 Poolability Hypothesis Test

Poolability hypothesis test is used for test pooled or fixed effects which model is the best. Sub-sample stability of the estimated regression coefficients is equivalent to the testing for poolability hypothesis (Patuelli et al., 2013).

According to Croissant & Millo (2008), pool test is the same coefficients apply to each individual test. It is a standard F test, based on the full sample, and compares the model to obtain estimates for each individual model.

A poolability testing is very important to deal with panel data. The null hypothesis is that the slope of the independent variables (except group and time) constant across groups (or time). If the null hypothesis is rejected, the multi-level model (requires hierarchical regression model). If the null hypothesis is not rejected, a "pool" model (such as fixed effects model or random effects model) can be used.

A poolability test is to use SSE as "centralized" model group and individual models of the F test. Poolability test has the following hypothesis:

Null hypothesis: $\beta_i = \beta$ for all i

Alternative Hypothesis: $\beta_i \neq \beta$ at least for some i

The test statistics for poolability test: Restricted F test

$$F = \frac{(R_{FEM}^2 - R_{Pooled}^2) / (K_{FEM} - K_{Pooled})}{(1 - R_{FEM}^2) / (n - (K_{FEM} + 1))}$$

Let R_{FEM}^2 = R-squared of fixed effects model, R_{Pooled}^2 = R-squared of pooled model, K_{FEM} = number of independent variable of fixed effects model, K_{Pooled} = number of independent variable of pooled model, n = number of observation

Decision Rule: Reject H_0 if the probability of F -statistic is less than 1% significant level; otherwise, do not reject H_0 . Reject H_0 conclude that pooled OLS model is not valid and FEM is more appropriate.

3.5.1.1.4 Hausman Test

Based on Seung C & Stuart (1996), a Hausman test has been used to define the consistency of the GLS estimator in static models with pooled cross-section-time-series data.

Hausman Specification test was developed by Hausman in 1978 to test the empirical model between FEM or REM is suitable for estimating the equation (Gujarati, 2003, pp. 651). Hausman test is a way to determine the reasonableness of the fixed and random effects models (Bollen & Brand, 2008). According to Gujarati (2003), the FEM and REM estimators do not differ substantially in null hypothesis underlying the Hausman test. Hausman test statistic developed by distributed with asymptotic χ . If the null hypothesis is rejected, it is better off to use FEM, in which case statistical inferences will be conditional on the ϵ_i in the sample due to the conclusion that REM is not appropriate. Hausman Test has the following hypothesis:

Null hypothesis: $E(X_j \epsilon_i) = 0$ (that random effects would be consistent and efficient.)

Alternative Hypothesis: $E(X_j \epsilon_i) \neq 0$ (that random effects would be inconsistent.)

Decision Rule: Reject H_0 if the probability of test statistic (H) is less than 1% significant level; otherwise do not reject H_0 . Reject H_0 conclude FEM is more appropriate than REM.

The test statistic has an asymptotic approximation of χ^2 distribution with degree of freedom equal to number of regressors in the model. If the calculated chi-square value of the chi-square value exceeds a given threshold level of freedom and level of significant conclude that REM is not appropriate because the random error term may correlate with one or more regressors. In this case, the FEM is preferred to REM.

3.6 Diagnosis Testing

3.6.1 Normality Test

Normality test is used to measure how the variables are normally distributed. It helps to unbiased and consistent result and without misleading interpretation. Normality test is the most widely use assumption to test the normality (Mantalos, 2010). It is firstly suggested by Bowman and Shenton (1975). However due to the rate of convergence are slow and Bowman and Shenton did not attach importance on the test, Jarque and Bera (1987) had introduced another approach and derived as Lagrange multiplier test (Von & Hain., 2010). Besides, easy calculation, simplicity and combination of skewness and kurtosis made Jarque-Bera test a popular test for normality (Shalit, 2012). Jarque and Bera test also known as Jarque-Bera test or simply *JB* test as follow:

$$JB = n \left[\frac{\text{skewness}^2}{6} + \frac{(\text{kurtosis}-3)^2}{24} \right]$$

The sample mean of independent variable is normal the sampling distribution of mean will also be normally distributed (Mantalos, 2010). The sample size 50 is considered large sample size while sample size 20 is considered small sample size.

The larger the sample size and significant level moves towards zero will improve the accuracy (Jonsson, 2011). The hypothesis testing for JB test is as follow:

H_0 : Error terms are normally distributed

H_1 : Error terms are not normally distributed

3.6.2 Multicollinearity

Multicollinearity is the presence of linear relationship among some or all of the independent variables. The existence shows that the regression cannot interpret the influence of independent variable towards dependent variable precisely (Gujarati & Porter, 2009, p. 321). The nature of regression model is that it will consist of some degree of collinearity which is independent variables are correlated. In order to get unbiased estimators, the main concern is no collinearity between independent variables. This can be done by including other independent variables that is uncorrelated with existing independent variables (York, 2012). There is no formal test to detect the multicollinearity in the regression model (Gujarati & Porter, 2009). The simplest rule of thumb of detecting multicollinearity is correlation coefficient is higher than 0.8 or 0.9. High correlation coefficient established there is simplest rule of detecting multicollinearity is correlation between independent variables, (Farrar & Glauber, 1967). Besides, another method to detect multicollinearity is high variance inflation factors (VIF). Collinearity between independent variables increase, VIF will also increase. VIF exceeds 10 shows high collinearity. The third method is Tolerance (TOL) where $TOL = \frac{1}{VIF}$ or $(1-R^2)$. When TOL near zero, it indicates high collinearity (Mansfield & Helms, 1982). The remedial measure for multicollinearity is excluding the high collinearity variable or transformation of variables. This is done to reduce the collinearity in polynomial regression (Gujarati & Porter, 2009, p. 346).

Lastly for this study, correlation coefficient will be applied to determine the multicollinearity between the independent variables. When correlation coefficient is 80% or above means there is existence of multicollinearity problem.

3.6.3 Autocorrelation

Autocorrelation is existence of correlation between a series of observations in term of time (time series data) or space (cross sectional data) (Gujarati & Porter, 2009, p. 413). Autocorrelation is an important diagnostic checking in applied time series analysis, presence of autocorrelation will results in biased hypothesis testing and lead the conclusion of significant is invalid (Nguimkeu & Rekkas, 2011). Durbin-Watson test is used to detect the first-order autocorrelation of disturbance term which is the estimated standard errors of parameter using ordinary least square (Weber & Monarchi, 1982).

The hypothesis testing for autocorrelation is:

H_0 : There is no autocorrelation

H_1 : There is autocorrelation

The Durbin-Watson test is ranging from 0 to 4 where 2 represents there is no autocorrelation. According to Aga & Safakli (2007), Prusty (2010, p.55), Vogt & Johnson (2011, p.118) critical value between 1.5 and 2.5 are considered acceptable.

Therefore, the decision rule for Durbin-Watson test is that do not reject H_0 when d value is within 1.5 to 2.5. If otherwise reject H_0 . The remedial measure for pure autocorrelation is to transform the original model to new model. This is due to may

be important variable is missed out or wrong functional form (Gujarati & Porter, 2009, p. 441).

3.6.4 Heteroscedasticity

Heteroscedasticity defined as the unequal spread in the error variance (Gujarati & Porter, 2009, pp. 365-366). Researchers run heteroscedasticity diagnostic checking in order to examine the constant variance of error terms. The heteroscedasticity problem occurs when the variance of error terms not achieved at the optimal level. It eventually causes estimated parameter become inefficient estimator. Heteroscedasticity problem mostly occurs in cross sectional data compared to time series data (Gujarati & Porter, 2009, p. 369). The model that contains of heteroscedasticity problem will no longer have minimum variances or it is categorized as inefficient. The present of outliers, the skewness in the distribution of one or more regressors included in the model, incorrect functional form and incorrect data transformation will causes the heteroscedasticity problem in the model.

Several ways can be used in the detection of heteroscedasticity problem according. The method of Park Test, Glejser Test, Goldfeld-Quandt Test and White Test (Gujarati & Porter, 2009, pp. 378-387) can be used to detect the heteroscedasticity problem in the model. In these test, we must make sure that these tests show that no sufficient evidence to reject H_0 at certain significant level. White Test is the easiest method to implement compared to other method. Other than that, White test can be a test of (pure) heteroscedasticity or specification bias or both.

On the other hand, if heteroscedasticity occurs in the model, generalized least squares (GLS) and Weighted least squares (WLS) can be used to solve the problem. The different between GLS and WLS is the variance of error term in GLS for each

observation will become constant with value equal to one. However, the variance of error term in WLS for each observation will become constant. In order to solve the heteroscedasticity problem, it can increase the sample size too if the model is correctly specified. It is because large number of observation can reduce the impacts of missing value as well as outlier on the estimated results. Besides, White's Heteroscedasticity-consistent Variances and Standard Error is one of the ways to solve the problem. The coefficient values are found as same and standard error of coefficients are difference after applied this method in solving the heteroscedasticity problem (Gujarati & Porter, 2009, pp. 387-388).

However, the method of cross section SUR is used directly in this research to control the heteroscedasticity problem.

3.6.5 T-test

Researcher undergoes T-test hypothesis tests in order to examine the means of two population means (Williams & Shoesmith, 2010, p. 321). This method was used when the populations' standard deviations is unknown as well as there is a small sample size, which is sample size less than 30 ($n < 30$). The significant level that used in this hypothesis testing is either 1%, 5% or 10%. In this method, t-test statistic was used in order to examine the P-value of the model. P-value indicates the probability to the right of test statistic calculated using the null distribution. The hypothesis testing for t-test is as below (Williams & Shoesmith, 2010, p. 916).

$$H_0 : \beta_2 = 0$$

$$H_1 : \beta_2 \neq 0$$

$$\text{Critical value} = t_{\frac{\alpha}{2}, n-k-1}$$

$$\text{Test statistic: } t = \frac{\widehat{\beta}_2 - \beta_2}{SE(\widehat{\beta}_2)}$$

The smaller the P-value, the higher the chances rejects the null hypothesis (H0). In other words, it can be conclude that there have strong evidences to prove that there is a significant relationship between independent variable and dependent variable. On the other hands, if the P-value is larger than the significant level, it means that null hypothesis will be rejected. As a result, there is insignificant relationship between the independent variable and dependent variable (Gujarati and Porter, 2009, pp. 115-117). In a nutshell, t-test is used to examine the significant relationship between each independent variable to dependent variable.

3.6.6 F-test

F-test is the hypothesis testing that used by researcher to examine the hypothesis of equality of two population variances. In other words, F-test is a measure on the overall significance of the estimated regression (Gujarati and Porter, 2009, p. 238). F-test was used when there is more than one parameter are involved in the model, which is also known is multiple regression. The significant level that used in this hypothesis testing is 1%, 5% or 10%. The purpose of undergo F-test is to identify the model that best fits the population from which the data were sampled. T-test is using T test statistic to determine the P-values while F-test is by using the F-test statistic to determine a P-value. The hypothesis testing for F-test is as below:

$$H_0 : \beta_i = 0, i = 2, 3, 4$$

$$H_1 : \beta_i \neq 0, i = 2, 3, 4$$

$$\text{Critical value} = F_{\alpha, v_1, v_2}$$

Test statistic, F

$$F = \frac{R^2/k}{(1-R^2)/(n-k-1)}$$

The smaller the P-value, the higher the chances rejects the null hypothesis (H_0). In other words, it can be conclude that it is significant for the whole model to explain the dependent variable. However, if the P-value is larger than the significant level, it means that null hypothesis will be rejected. As a result, it is insignificant for the whole model to explain the dependent variable (Gujarati and Porter, 2009, pp. 238-239).

3.7 Conclusion

In conclusion, this research is using secondary data which obtained from Thomson Reuters DataStream. The total of 59 companies from food producers sector is taking into account in this research started from the year 2008 to year 2012. The ordinary Least Squares (OLS) regression will be applied in the data analysis. Other than that, this research also undergoes diagnostic checking to detect the econometric problems. The analysis result will discuss further in the following chapter.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

This chapter introduces the descriptive statistic and presents the tests and analysis of the assumption underlying panel data by using various test such as Poolability test and Hausman test in running the panel regression model. Next, normality test such as Jarque-Bera, Multicollinearity, Autocorrelation and Heteroscedasticity were used for diagnostic checking. Lastly is to examine the result and see which variables are significant for the determinants of the shareholders' wealth in listed food producer sector in Malaysia from year 2008 to year 2012.

4.1 Descriptive Statistic

Table 4.1 Descriptive Statistic for Earnings Per Share (EPS) and Explanatory Variables (2008-2012)

	Mean	Median	Maximum	Minimum	Std. Dev
EPS (RM)	0.272260	0.157000	2.155000	-0.777000	0.397143
DPR (%)	0.479274	0.275000	24.59016	-0.595890	1.607322
EV (%)	0.092368	0.090027	0.440633	-0.748237	0.086671
LTDR (%)	0.063952	0.033734	0.497878	0.000000	0.079752
GA (%)	0.121842	0.082269	3.647403	-0.751797	0.283508
LIQ (%)	0.051082	0.070208	19.88889	-9.482351	1.460584
ROE (%)	0.498305	0.000000	1.000000	0.000000	0.500847

4.1.1 Earnings Per Share (EPS)

For the earnings per share, the mean value and its standard deviation in Malaysia's food producer sector are 0.272260 and 0.397143. These two values show that the dispersion of panel data is small. The results of mean value and standard deviation implies there are small dispersion of earnings per share in the 59 companies of food producer sector. The mean value (0.272260) is higher than the 0.0967 mean value reported by Khaledi (2013) by using firm level data from Compustat between the years 2000 to 2002 with the sample size of 1213. On the other hand, there is a different result found out from Salim & Yadav (2012). Based on their study, the

mean value is -0.69131 which is lower than 0.272260. Their study is carried out a sample of 237 Malaysian listed companies on the Bursa Malaysia Stock exchange during 1995-2011. In addition, the mean value is higher which stated as 5.5 which found out by Sadiq et al. (2013) compared to this study (0.272260). Sadiq (2013) determine the mean value by using 35 firms from the non financial firms listed on Karachi Stock Exchange with started on the year 2001 to year 2011.

4.1.2 Dividend Payout Ratio

Dividend payout ratio is calculated as dividend per share divided by earnings per share and the result stated that the mean, median and standard deviation of dividend payout ratio in Malaysia's food producer sector are 0.479274, 0.275000 and 1.607322 respectively. However, the maximum for the dividend payout ratio is 24.59016 percent and the minimum recorded at -0.595890 percent. The mean value of dividend payout ratio is 0.479274 (47.9274%), which means that average dividend per share is about 47.9274% of the earnings per share for 59 listed food producer sector in Malaysia from year 2008 to year 2012.. This mean value is higher than the average value in the study of Zakaria et al. (2012) which is 0.1824. Besides that, based on the research of Hashemijoo et al. (2012) using 84 consumer product companies listed in stock market. The mean value of dividend payout ratio is 0.372579 which is lower than the mean value of 0.479274.

4.1.3 Earning Volatility

For the proxy variable of earning volatility, it is measured by operating earnings to total assets with the unit measurement of percentage (%). The average value of earning volatility in Malaysia's food producer sector is 0.092368 while the value of standard deviation is 0.086671. These results indicate that the data dispersion is relatively small throughout panel series. The mean value of earning volatility represents the average earning among the 59 companies of food producer sector is 0.092368 (9.2368%) from the year 2008 to year 2012. Besides that, the average value reported by Asghar et al. (2011) also lowers than 9.2368%. The mean value reported by Asghar et al. (2011) is 8.3346% by taken the data from the published resources of State Bank of Pakistan and Karachi Stock Exchange for the period of 2005 to 2009. Other than that, Sadiq et al. (2013) reported that the earning volatility has an average value of 21.3% among the non financial listed firms listed on Karachi Stock Exchange between the periods of 2001 to 2011. Furthermore, the result found out from Ilaboya & Aggreh (2013) also shows that the mean value is lower than 9.2368%. Based on their study, the mean value is 3.53% by taking into account the listed company in the Nigerian Stock Exchange Market which chosen 26 sampled firms across a number of sectors for the period of 2004 to 2011. However, mean value of 9.2368% is lower compared to the mean value investigated by Nazir et al. (2010). The value is 18.4806% by applying 73 firms from Karachi Stock Exchange (KSE-100) firms for the period of year 2003 to year 2008.

4.1.4 Long Term Debt Ratio

Long-term debt is the total debt to total assets ratio of each year and then takes the average for all available years. For long term debt, the mean value and its standard deviation in Malaysia's food producer sector are 0.063952 and 0.079752 respectively. This figure indicates that the value dispersed from the mean value is relatively small. This result suggests that 59 companies of food producer sector are having small dispersion of long term debt. This mean value of long term debt which is 0.063952 is lower than the mean value of 0.0955 reported in Lixin & Lin (n.d.) which explained the relationship between the debt financing and market value from about 272 Chinese real estate companies between 2002 and 2007. However this mean value is higher than the mean value of 0.019 reported in Ilaboya & Aggreh (2013) by examined the relationship between dividend policy and share price volatility across 26 sample companies listed in the Nigerian Stock Exchange Market. Moreover, the mean value (0.225) reported by Habib et al. (2012) for Pakistan stock market and the mean value (0.1816) reported by Hussainey et al. (2011) for sample of firms listed in the London Stock Exchange are close. Nevertheless, both of them are higher than the mean value of long term debt 0.063952 in this study.

4.1.5 Growth In Asset

The mean value of growth in asset in Malaysia's food producer sector is 0.121842. It is moderate compared to others variable in the panel series. The standard deviation stood at 0.283508. This indicates the data dispersion is small in panel series. As compared to observation of British Accounting and Finance Association (BAFA) (2013), the mean for asset growth is relative lower than 0.191 and standard deviation also ranked lower than 0.826. BAFA examines on the UK public listed company throughout years 1988- 2010. In the study of Chan et al. (2008), they studied for

asset growth and stock return on Pacific-Basin region (PACAP) and US for 1981-2004. In their study, mean value of PACAP is measured at 19.30% or 0.1930 which is higher than 0.121842 and standard deviation at 30.22% or 0.3022. Mean value for US is relative lower than PACAP but still higher than 0.121842, however standard deviation is relative same as PACAP at 0.3070. In year 2010 Chan et al. (2008), they continue to test for Asia countries and US for years 1981-2007. Same result is shown where mean value for Asia is 0.228 and standard deviation is 0.322 whereas for US mean value stood at 0.263 and standard deviation at 0.375. As a result, the mean value and standard deviation for growth in asset is relative low if compared to other researchers' study.

4.1.6 Liquidity

The mean value and standard deviation in Malaysia's food producer sector for the liquidity are 0.051082 and 1.460584. According to the study of Ho (2003), with the observation for 840 Australia firms and 1395 Japanese firms from 1992-2001 which show average value of 1.452 and standard deviation for 0.921, whereas for Japanese company's mean value is 1.412 and standard deviation is 0.640. Mean value is lower, while standard deviation is higher than both Australia and Japanese firms. Mean value is less than mean value of 0.516 as reported by Olowe & Moyosore (n.d.) who observes the 20 banks in Nigeria for year 2006 to year 2008. The standard deviation stood at 1.460584 also higher than Nigerian banking industry which is 0.193.

4.1.7 Profitability (ROE)

Profitability (ROE) is used as dummy variable in this study with a mean value of 0.498305 and standard deviation is 0.500847 in Malaysia's food producer sector. Based on this study, high profitable corporate has the maximum value of 1, while the low profitable corporate has the minimum value of 0.

On the other hand, the mean value reported in Masum (2014) study on commercial banks listed in Dhaka Stock Exchange is 0.19588 which is lower than the mean of this study 0.498305. Standard deviation is 0.112727 with the maximum value of 1.04 percent and minimum value is -0.298 percent. The mean in the study of Yanxin et al. (2007) on Chinese securities market has recorded as 0.099 and standard deviation recorded as 0.0564 with the maximum ROE is 0.4198 percent and minimum ROE is -0.0618 percent.

4.2 Testing Assumption Underlying Panel Data Analysis

4.2.1 Diagnostic Checking

4.2.1.1 Normality Test

Table 4.2: Result of Normality Test

	Jarque-Bera Statistic	Decision
All firms No. of firms: 59 No of observation: 295	571.5731***	Non-normality
Hypothesis Testing	H_0 : Error terms are normally distributed H_1 : Error terms are not normally distributed	

Notes: *Significant at 10%; ** Significant at 5%; *** Significant at 1%.

Jarque-Bera test of normality is used to identify the normality of error term. Based on the Jarque-Bera statistic of table 4.2, the full model is significant at 1% significant level. The value for the full model is less than significant level and thus we have sufficient evidence to reject null hypothesis. This also can be concluded as the error term is not normally distributed.

According to central limit theorem, if number of observation is large and random variable are independently and identically distributed then the distribution tends to be normally distributed (Gujarati & Porter, 2009, p. 99). In addition, number of observation more than 100 is considered large sample size. However, the number of observations is 295 in this research. Therefore, it can assume the error term is normally distributed as in accordance with central limit theorem.

4.2.1.2 Multicollinearity

Table 4.3: Result of Pair-Wise Correlations of All Variables for Full Model

	EPS	DPR	EV	LIQ	GA	LTDR	DMY
EPS	1.000000						
DPR	0.015294	1.000000					
EV	0.592926	0.047480	1.000000				
LIQ	0.019526	-0.034939	-0.066067	1.000000			
GA	-0.005792	0.003257	0.086267	-0.290445	1.000000		
LTDR	-0.089796	-0.027835	0.022842	-0.048562	0.089031	1.000000	
DMY	0.390581	-0.011038	0.561721	0.008364	0.170841	0.152382	1.000000

Note: EPS= earnings per share; DPR= dividend payout ratio, EV= earning volatility; LIQ= liquidity; GA= growth in asset; LTDR= long term debt ratio; DMY= company with high profitability (ROE).

Pair-wise correlation is used to measure the existence of multicollinearity between the variables. High pair wise correlation between two variables mean there is a serious multicollinearity problem in the regression model. The level of high multicollinearity exist when the correlation between two variables exceed 80% (Gujarati & Porter, 2009, p. 338).

Based on the result as stated in table 4.3, the highest pair-wise correlation is 59.2926% between earning volatility and earnings per share while the lowest pair-wise correlation is 3.2357% between growth in asset and dividend payout ratio. In short, it can conclude that the model in this research does not suffer

from serious multicollinearity due to the highest pair-wise correlation is lower than 80%.

4.2.1.3 Autocorrelation

Table 4.4 Result of Autocorrelation Test

	Durbin-Watson Statistic	Decision
All firms No. of firms: 59 No of observation: 295	1.549770	No Autocorrelation
Hypothesis Testing	H_0 : There is no autocorrelation H_1 : There is autocorrelation	

Durbin-Watson test is used to test for the autocorrelation problem in the regression model. In the studies of Aga & Safakli (2007), Prusty (2010, p.55), Vogt & Johnson (2011, p.118) states that the critical value within 1.5 to 2.5 is acceptable. From the result of autocorrelation test in table 4.4, the Durbin-Watson statistic is 1.549770. It falls between 1.5 and 2.5. Thus, the null hypothesis is not rejected and it can conclude that there is no autocorrelation problem in this regression model.

4.2.2 Poolability Hypothesis Test and Hausman Test

Table 4.5 Result of Poolability Hypothesis Test

	Cross Section F- statistic	Decision
All firms No. of firms: 59 No of observation: 295	23.626786***	Proceed to Hausman Test

Notes: * Significant at 10%, ** Significant at 5%, *** Significant at 1%

Based on the result of cross section F-statistic from Table 4.5, the model shows that it is significant at the significant level of 1%. As a result, the null hypothesis, H_0 of Poolability Hypothesis Test is rejected. In other words, there is no common intercept across the companies in food producer sector (Gujarati & Porter, 2009, p. 596). Thereby, proceed to Hausman test to further confirmation to select Fixed Effect Model or Random Effect Model.

Table 4.6: Result of Hausman Test

	Cross Section Chi Sq. statistic	Decision
All firms No. of firms: 59 No of observation: 295	12.482900	Random Effect Model (REM)

Notes: * Significant at 10%, ** Significant at 5%, *** Significant at 1%

According to the result of cross section chi-square statistic in Table 4.6 above, the result shows that the model is not significant at the significant level of 5%. As a result, there is no rejection on null hypothesis, H_0 of Hausman Test. In other words, Random Effect Model (REM) is consistent and efficient compared to FEM in this research. In addition, there is less possibility there is a multicollinearity problem in the model (Gujarati & Porter, 2009, p. 605). Thus, it implies that REM is more appropriate compared to FEM.

4.3 Empirical Result

The objective of this is to study the impact of dividend policy on shareholders' wealth by taking the dividend payout ratio, earning volatility, long term debt ratio, growth in assets, profitability and liquidity as independent variables. The total observation of 295 companies in Malaysia's food producer sector was taken to carry out this research by taking the period from year 2008 to year 2012. Panel data regression model is used in this research by running E-view 6 using Random Effect Model (REM) in order to obtain the regression result and find out the econometric problem of the research's model.

Furthermore, the empirical results are controlled by the method white cross section (SUR). This method was used to correct the heteroscedasticity problem in the model.

4.3.1 R-square

The coefficient of determination R^2 is the proportion of variability in variable Y can be explained by the variation in variable X. R-squared values are always range from 0 to 100. If the R-squared value is 0%, it shows that the model explains the variation around the average value is no response data, and 100% indicates that the model explains the data about the average response of all of the variability. In general, it is better for a model with higher R-squared to fit the data. Since the R-squared estimated that from this result is 0.363495 which is equal to 36.3495%. This indicates that 36.3495% of the variation in the earnings per share can be explained by the variation in the explanatory variables which is dividend payout ratio, long term debt, return on equity, liquidity, growth in asset and earning volatility from from year 2008 to year 2012. However, for the remaining 63.6505% is unable to explain in this model.

Table 4.7 Multiple Regression Results

Independent Variables	Dependent Variable: Earnings per share (EPS)		
	Coefficient	Std. Error	T-statistic
Dividend Payout Ratio (DPR)	-0.009954***	0.003346	-2.974409
Earning Volatility (EV)	1.590034***	0.185325	8.579708
Long Term Debt Ratio (LTDR)	-0.290564*	0.169357	-1.715694
Growth in Assets (GA)	0.032430	0.025588	1.267371
Profitability (ROE) (Dummy Variable)	0.090754***	0.021227	4.275393
Liquidity (LIQ)	0.003928	0.006376	0.616055
Constant	0.099368	0.072216	1.375997
R^2	0.363495		
Adjusted R^2	0.350234		
F-statistic	27.41179***		
No. of Observations	295		
Poolability Statistic	23.626786***		
Hausman Statistic	12.482900		
Durbin Watson Test	1.549770		

Notes: * Significant at 10%, ** Significant at 5%, *** Significant at 1%

4.3.2 F-statistic

H_0 : All the independent variables are not significant in explaining the shareholders' wealth.

H_1 : At least one independent variable is significant in explaining shareholders' wealth.

Based on Table 4.7, it shows that the F-statistic is significant at the significant level of 1% since the probability value of F-statistic is less than 1%. As a result, the null hypothesis, H_0 of F Test is rejected. Hence, it can be concluded that at least one of the independent variable is significant in explaining shareholders' wealth.

4.3.3 Dividend Payout Ratio

H_1 : Dividend Payout Ratio is negatively significant with shareholders' wealth in Malaysia's food producer sector.

According to the table 4.7, dividend payout ratio is negative relationship and significant with earnings per share at significant level of 1%. The result showed that the p-value of dividend payout is 0.0032. Hence, the null hypothesis was rejected and supports the alternative hypothesis. There is a significant relationship between dividend decisions and shareholders' wealth. The coefficient of dividend payout ratio, -0.009954 indicates that if dividend payout ratio increased by 1 percentage point, the earnings per share will be decreased by RM 0.009954, holding other variables constant.

4.3.4 Earning Volatility

H₂: Earning Volatility is positively significant with shareholders' wealth in Malaysia's food producer sector.

Based on the result in Table 4.7, earning volatility is positively significant with earnings per share (EPS) since the p-value of t-statistic is less than 1% of the significant level. Thereby, the null hypothesis, H₀ is rejected and supported the H₁. As a result, when the earnings volatility increase by 1 percentage point, the earnings per share will increase by RM 1.590034, holding other variable constant.

4.3.5 Long Term Debt Ratio

H₃: Long Term Debt Ratio is negatively significant with shareholders' wealth in Malaysia's food producer sector.

Based on the table 4.7, the result estimated shows there is negative significant relationship between long term debt ratio and earnings per share. The result is significant at 10% level with the p-value of 0.0873. Therefore, the null hypothesis is rejected. It can be conclude that long term debt ratio has significant impact on the shareholders' wealth in Malaysia's food producer sector. The coefficient of long term debt ratio is -0.290564, it indicates that if long term debt ratio increased by 1 percentage point, the earnings per share will be decreased by RM 0.290564, holding other variables constant.

4.4 Conclusion

Chapter 4 discovered the relationship between shareholders' wealth and all independent variables of listed food producer sector in Malaysia and also interprets the results of this research. At the following chapter, it will further discuss on the major findings, implication of study, limitations and recommendations for future research.

Table 4.8 Summary of Regression Results

Independent Variable	Expectation		Regression Result		Consistent	
	Sign	Significant	Sign	Significant	Sign	Significant
DPR	+	Significant	-	Significant	Inconsistent	Consistent
	The researchers such as Mokaya et al. (2013), Murekefu and Ouma (n.d.), Zakaria et al. (2012) support for this result.					
EV	+	Significant	+	Significant	Consistent	Consistent
	The researchers such as Campbell & Shiller (1988), Asghar et al. (2011) and Hashemijoo et al. (2012) support for this result.					
LTDR	+	Significant	-	Significant	Inconsistent	Consistent
	Lixin & Lin (n.d) and Altan & Arkan (2011) support for this result					
GA	-	Significant	+	Insignificant	Inconsistent	Inconsistent
	Most of the researchers such Hussainey et al. (2011), Nazir et al. (2010), Profilet & Bacon (2013) and Naveed & Ramzan (2013) support for this result.					
LIQ	+	Significant	+	Insignificant	Consistent	Inconsistent
	The researchers such as Chordia et al. (2008), Fang et al. (2009) and Lam & Tam (2011) support this result.					
ROE	+	Significant	+	Significant	Consistent	Consistent
	The researchers Emamgholipour et al. (2012), Masum (2014) and Kumaresan (2014) support for this result.					

CHAPTER 5: CONCLUSION

5.0 Introduction

Chapter 5 is the chapter that summarized the overall conclusion and discussion for this research. The major findings in this entire research will be discussed based on the regression result in chapter 4. Next, the limitations of the study and some recommendation will be given in order to improve the regression result in future research. At the end, there is an overall conclusion for the entire research.

5.1 Summary

The major objective of this research is to investigate the impact of dividend policy on shareholders' wealth which majoring in 59 listed companies in food producer sector within the period of year 2008 to year 2012. Annual data was collected in this research while panel data is used in this research instead of time series data. Therefore, the total observation is 295. This research was focusing on the effects of dividend policy on shareholders' wealth. The variables of dividend payout ratio, earning volatility and long term debt ratio are act as the independent variables in this research, while the variables of growth in assets, liquidity and high profit company are control variables. Besides, the variable that represents shareholders' wealth in this research is earnings per share (EPS). This regression model was employed by using random effect model to carry out the objective of the study. The overall result that obtained is summarized in Table 5.1.

Table 5.1 Summary of the Decision of the Hypothesis

Hypothesis of Study	Decision of Full Model (2008 – 2012)
	Reject / Do not Reject H_0
<i>H₁ : Dividend payout ratio is positively significant with shareholders' wealth</i>	Reject H_0
<i>H₂ : Earning Volatility is positively significant with shareholders' wealth</i>	Reject H_0
<i>H₃ : Long Term Debt Ratio is positively significant with shareholders' wealth</i>	Reject H_0
<i>H₄ : Growth in Assets is negatively significant with shareholders' wealth</i>	Do not Reject H_0
<i>H₅ : Liquidity is positively significant with shareholders' wealth</i>	Do not Reject H_0
<i>H₆ : Profitability (ROE) is positively significant with shareholders' wealth</i>	Reject H_0

Based on the result summarized in Table 5.1, earning volatility and profitability are positively significant with earnings per share. However, growth in assets and liquidity are positively insignificant with earnings per share. On the other hand, dividend payout ratio is negatively significant with earnings per share while long term debt ratio is negatively insignificant with earnings per share in this research. The regression result of earning volatility is consistent with the expectation of the hypothesis of study in this research. Nevertheless, the regression results for the other variables such as dividend payout ratio, long term debt ratio, growth in assets, liquidity and profitability are inconsistent with the expectation of the hypothesis of study in this research.

5.2 Discussion of Major Findings

There are six independent variables are taken into account in this research in order to examine the relationship between earnings per share and others independent variables. Those independent variables are includes dividend payout ratio, earning volatility, long term debt ratio, growth in assets and liquidity and profitability (ROE). In the following section is going to discuss the major findings of this research based on the regression results in chapter 4.

5.2.1 Dividend Payout Ratio

Based on the results in Chapter 4, dividend payout ratio shows a significant negative relationship towards shareholders' wealth in listed food producer sector in Malaysia from year 2008 to year 2012. The result is consistent with the finding of Haque et al. (2013) which showed that dividend payout ratio is significant and have a negative relationship on the economic value added. In other words, economic value added also represents shareholders' wealth. Their relationship is negative is due to an

increase in dividends may lead to a decrease in funds that are to be reinvested by the firm. Firms that pay high dividends without think over investment may therefore experience lower future earnings. Furthermore, an increase in dividends in a quarter may be the result of the management's policy to let investors satisfied and avoid them from selling the stock at times when future earnings are expected to decrease or current losses are expected to continue whereby this is a reason of rising dividends followed by decreasing earnings (Murekefu & Ouma, n.d.). Furthermore, it might be happened because of dividend payout have the effect of reducing the stock price on the ex-dividend date (Hull, 2012, pp. 215-218). Therefore, when dividend payout of the firm is increase, stock price decreases, hence it also lowers the shareholders' wealth. Besides that, it also probably happen is because of when the dividend payout is low, ownership structure such as managers, investors and family will preferred long term investments whereby this indirectly also will lowers the shareholders' wealth.

However, the result obtained from this study is inconsistent with the finding of Mokaya et al. (2013), Wet & Mpinda (2013) and Al-Hasan et al. (2013). They found out that dividend payout is significant and have a positive correlation on the shareholders' wealth. This is because of driven by sticky dividends which combined with mean reversion in more volatile earnings. The provisional increases and decreases in earnings eventually reversed lead to the dividend payout ratio to be positively correlated with future earnings growth. Moreover, it also due to a high dividend payout ratio shows management's confidence in the stability and growth of future earnings while a low dividend payout ratio indicates that management is not confident of the stability of earnings or sustainability of earnings growth. Hence, managers will pay low dividends to avoid dividend cuts when earnings drop (Murekefu & Ouma, n.d.). Besides that, when dividend payouts of a firm increase will mitigate agency costs of free cash flow problem, thus, increase the firm value (Sulong & Mat Nor, 2008).

The negative result is inconsistent with the signaling effect theory. This theory suggest that a higher dividend payouts act as an indicator of the firm possessing strong future prospects and those firms who pay dividends are assumed at higher quality earnings. However, the negative result shows that the higher dividend payouts in the listed companies of food producer sector, the firm value will become lower. Therefore, dividend payout ratio result is inconsistent with this theory.

Besides that, the negatively significant result is also inconsistent with the agency theory. This theory states that if a firm has a high dividend payout, it has to turn to external investors for additional capital to invest new projects. Therefore, the firm must continually conquer itself to market forces to maximize the shareholders' wealth. Furthermore, if a firm that usually pay high amount of dividends, it will reduce the agency cost of the firm as the conflict of interest between principal and agent which are shareholder and manager has reduce and hence increases the shareholders' wealth. However, the negative result shows the lower dividend payouts in the listed companies of food producer sector, the higher the maximization of shareholders' wealth.

5.2.2 Earning Volatility

Based on the regression result for the full model, earning volatility is positively significant impact on shareholders' wealth in Malaysia's food producer sector on the period of year 2008 to year 2012. The regression result shows that the coefficient for this variable is in positive sign. The positive coefficient sign is consistent with the expected sign in the hypothesis of study. The researchers such as Campbell & Shiller (1988), Asghar et al. (2011) and Hashemijoo et al. (2012) support for this result. According to Hashemijoo et al. (2012), the positive correlation between the earning volatility and shareholders' wealth indicates that companies which have higher in earning volatility tend the companies facing higher risk. In addition, high earning volatility implies that the companies distribute higher dividends to the shareholders (Nazir et al., 2010).

The positive sign of coefficient is consistent with the theory of signaling effect. This theory suggests that managers can forecast the earnings of the firm so as the insider of the firms (Zameer et al., 2013). Based on Petrovic et al. (2009), earning volatility is a tool in predicting the earning. In other words, it means that companies with high earning volatility may increase the company's share price due to the higher risk the companies need to bear. Consequently, more earning will distribute to the shareholder. Thereby, shareholders' wealth will increase. In addition, a poor earning management will incur high risk in the companies due to the fund is not managed well. Due to this, the alternative way to reduce the risk in the companies, the management team will distribute more earning to the shareholders. Thus, the shareholders' wealth increased. In short, the positive result that obtains from this research implies that the listed companies of food producer sector tend to distribute higher earnings to the shareholders due to the high earning volatility. Hence, it can be conclude that earning volatility and shareholders' wealth is positively correlated and it is consistent with the theory of signaling effect.

On the other hand, the positive sign of coefficient is consistent with the agency theory. This theory suggests that the distribution of earning or dividend among the shareholders reduces the resources under the manager's control. This action might reduces the power of manager and reduces the probability of manager misuse the resources of company in own benefits. In this research, it is found out that the earning volatility is positively significant on shareholders' wealth. In other words, it means that a higher dividend will be distributed to the shareholders. Thus, it reduces the resources under manager's control and it can be conclude that it is consistent with the agency theory perspective.

5.2.3 Long Term Debt Ratio

Referring to the regression result, the long term debt is negatively significant towards the company's shareholders' wealth. This result is on par with the research conducted by Apergis & Sorros (2010), they found out long term debt has significant negative effects on the value of the firm for international listed manufacturing firms. This is due to the value of a company's stock is a part of the company's total value. The value of a company comprises the total value of the company's capital structure. This research suspects that company will not be able to cover its financial responsibilities with respect to the long term debt they are issuing. The increases of interest expense will which in turn affect the earnings per share to decrease and lower the value of stock price. Additionally, the situation will go worse if a company goes bankrupt and the stockholders are the last to be paid retribution. Besides that, Ling et al. (2008) also shows the similar result that company leverage has negative relationship with dividend yield and dividend payout. The authors stated that there is a dampening effect on its dividend policy by leverage. Generally, a debt-burdened company do not pay dividend.

However, the negative coefficient sign in this research is not consistent with some previous researches. For instances, Lixin & Lin (n.d.) by investigate the real estate companies' long-term debt financing rate and the company's market value argued that they has significant positive correlation relationship. However their correlation coefficient is relatively small which only 0.107 with p-value equal to zero. This is because real estate companies more dependent on debt financing, debt financing is main financing channels. Real estate companies use long-term loans for the purchase of land for real estate development in the future, land prices raised from year 2002 to year 2007 the building, so buy more land; real estate companies will get more profit. Hence it can improve its corporate value which will in turn affect the shareholders' wealth to increase (Lixin & Lin, n.d.). Similarly to the result by Altan & Arkan (2011), they proved that there is positive significant relationship between the long term debt and firm value. This might due the interest rate is lower than the expected total shareholder return (TSR) on equity in a company. Second, interest paid for debt is tax deductible. This can help to lower the tax bill effectively and increase cash liquidity for a company. Moreover, the assumption of debt may be beneficial because it can give companies more opportunities to reinvest resources into operations. It will be profitable for a business to borrow money if it can earn a higher rate of return on capital than the interest rate at which it borrows on its long term debt. The value of the common stock and shareholders' wealth are perceived to be higher with high company's earnings. Moreover, according to Appannan & Lee (2011) the food producer industries companies decided the dividend payment ratio by relying on the debt equity ratio. The debt equity ratio is showed to have positive relationship with the current dividend per share and affecting the firm's decision of setting the dividend policy. The company's debt to equity ratio represents the percentage of the total funds provided by the creditors versus the shareholders. If the ratio is lower, it means that part of the total capital contribution of shareholders is more than creditors, so the company relies on its own capital and other internal funds to operate their business. Because of internal funds is more reliable, these companies tend to retain cash for other potential investment opportunities by reducing the dividend payment to its shareholders

The negative sign of coefficient is consistent with the signaling effect theory. Based on Jensen et al. (1992), signaling theory suggests that a firm's debt and dividend are related. Signaling effects is due to asymmetric information. Long term debt issue may be a signal for the company's strength because managers are confident that company will not go bankruptcy and do not want to dilute existing shares. It also indicated that the commitment to increase food production to rival firms and increases competitive advantages. Hence, it increases the company profitability which in turn to increase shareholders' wealth. This concludes that long term debt is inconsistency with signaling effect perspective.

The negative sign of coefficient is consistent with the theory of agency cost. According to Morris (1987), the agency cost of debt is borne by the equity holder. Agency costs may also arise between shareholders and creditors. Shareholder may ask for more dividends while bondholders are require fewer dividends need to ensure that the sufficient supply of cash dividends to repay their debt through the debt covenant (Hussainey et al., 2011). Taking on more debt might increases agency costs and potential of agency conflict between debt holders and equity holders. If a firm takes on heavy debt and eventually becomes insolvent, equity holders will have to bear more risk. This is because equity holders are the last claimer on company asset in case of a bankruptcy. When a corporation earns profits, they may have benefit to receive dividend more than the interest income than debt holder. Hence, it reduces the shareholders' wealth and concludes that long term debt is consistency with agency theory perspective.

5.2.4 Growth in Assets

According to the regression result of the model, growth in asset is positively insignificant to shareholder wealth. The positive sign is consistent with the studies of Rashid & Rahman (2008), Profilet & Bacon (2013) and Sadiq et al. (2013), to whom stated there is positive relationship between growth in asset and shareholder wealth. The researchers indicate that company with growth in asset will increase the dividend payout and eventually shareholder wealth. On the other hand, increase in growth in asset will increase the share price. However, the result is not significant in this study.

In contrary, Hussainey et al. (2011), Nazir et al. (2010) and Naveed & Ramzan (2013) stated that growth in asset is negatively related to the share price and eventually shareholder wealth. According to the research of Cooper et al. (2008), growth in assets is insignificant to stock return in large capitalization firm. Growth in assets is significant to return as current assets is most important to small firms while change in property, plant and equipment or simply growth in long term assets is significant to stock return. However, in large firms stock financing or equity financing is much more significant to stock return. This has lead to growth in asset coefficient is insignificant to stock return in the study of Cooper et al. (2008).

The positive sign of the coefficient is consistent with agency cost. Based on the study of Jensen's (1986), delegated management will cause excessive accumulation of assets and lead to agency cost. Management will spend wastefully for serving their interest rather than maximizing shareholder interest. Besides, shareholders also know that expenditure will decrease the firm value and stock price will adjust downward. Based on Chan et al. (2008), management will expand the physical assets by using the investment return gain from earlier securities offering. When the investment return is used to expand physical assets, amount of dividend can be distributed to shareholder is reducing. This possibly leads to the conflict of interest

between shareholder and management. Increase in asset growth may lower the available investment return to be distributed to shareholders and constitute agency cost. As a result, asset growth will decrease the shareholder wealth.

The positive sign of coefficient is inconsistent with the signaling theory. Based on the study of Brennan & Kraft (2012), the researchers found there is strong evidence that debt issuance is positively associated with earning yield instead of asset growth. When there is high earning yield, debt financing will increase the reported earnings per share. Besides, rather than using asset growth, management is relying on the debt financing to predict the future stock return. Besides, according to Li & Zhao (2008), the researchers state that large firms with high profitability and low growth potential are more likely to pay dividends. Growth in asset is negatively related to dividend and cannot used to predict future investment return. Therefore the conclusion might be drawn is that debt financing probably significant to signaling theory, while growth in assets do not show any significance towards signaling theory. Growth in asset does not bring signal for gaining future return and it is negatively related to dividend. As mention above, company with high growth will decrease the dividend payment. Therefore, growth in asset possibly will cause reduction in the shareholder wealth.

5.2.5 Liquidity

According to the regression result of the full model, liquidity is positively insignificant to shareholder wealth. The positive relationship result is in accordance with result of Chordia et al. (2008), Fang et al. (2009), Lam & Tam (2011) and Eloufa (2012). These researchers proposed that the liquidity indicate the availability of company to pay dividend and debt thus increase the share price to reflect more information. In contrary, the result of positive relationship between liquidity and shareholder wealth is inconsistent with the researchers Benish & Whaley (1996) and

Calcagno & Heider (2007). Benish & Whaley stated that liquidity is negatively related to share price and thus shareholder wealth after effective date due to stock return is driven by overnight return. Calcagno & Heider (2007) stated liquidity is negatively related to shareholder wealth when the company is dependent on the duration of trading. The insignificant result is supported by Shleifer (1986); the researcher proposed that higher liquidity in stock trading will leads to lower return. Large companies have more public information and large stock trading activities will increase liquidity. This will lead to share price increase and decrease the required rate of return.

In addition, in the study of Eriki et al. (2012), their result also revealed that liquidity in financial management is insignificant in affecting the shareholder wealth. In the study, dividend payout ratio, debt equity ratio, total fixed asset and liquidity ratio are used to identify the relationship with shareholder wealth. Other than that, according to Spiegel & Wang (2005), liquidity is negative correlated with returns with the presence of idiosyncratic risk. However, when idiosyncratic risk is controlled, liquidity is not strongly enough to influence returns. Hence, this implies liquidity is not strongly significant to stock returns.

The positive sign of coefficient is consistent with agency problem. According to Carpenter (1995), higher liquidity in a company will have more available fund for investment projects and management shall overinvested which include value-destroying projects. According to Jensen (1986), free cash flow is the cash flow in excess fund that needed to invest in positive net present value investment. The conflict between management and shareholder will intense when there is increase of free cash flow. Besides, shareholder is worry how to make management to take out the excess money and share among them rather than investing in investment of negative net present value. Hence, increase the free cash flows might leads to management tendency to use the excess cash flow for their personal usage. As a result, this might lead worsen the interest shareholders and shareholder wealth is not

maximized. Pawlina & Renneboog (2005), if there is available free cash flow in company, investment projects may be undertaken. Therefore even with a negative net present value management still undertake the investment. Negative net present value investment is not profitable to shareholder. This eventually will lead to agency problem and lower down the shareholder wealth.

The positive sign of coefficient is consistent with the signaling theory. Based on the study of Denis et al. (1994), cash flow signaling hypothesis stated that positive abnormal return will increase the dividend while negative abnormal return will leads to announcement of dividend decrease. The degree of share price movement in the market is depending on the standardized dividend change. Therefore when dividend changes it will signal changes in future cash flow and analyst can predict their future return according to the direction of dividend announcement. When there is high liquidity in firm, it will have free cash flow and possibly making higher dividend payment to their shareholder. The increase in dividend may signal investors about the increase future cash flows. It might also imply that the company will continue making positive abnormal return and shareholders are having potential to receive high dividend and thus increase shareholder wealth.

5.2.6 Profitability

Regarding to the regression result in chapter 4, found that profitability (ROE) indicates a significant positive relationship towards shareholders' wealth in Malaysia's food producers sector. This result is same as Liu & Hu (2005), Hedensted & Raballe (2008) and Masum (2014) studied, which also found that there is positive relationship between ROE and stock price. According to Kennon (2014), return on equity represent how much profit a company earned compared to the total amount of shareholder equity which stated in balance sheet every year. Besides that, total asset turnover may influence on return on equity, it reflecting the way the

company manages on its assets. A fast turnover means that the possibility of achieving a higher return on equity, hence the company is using a lower volume of fixed assets and current assets (Circiumaru et al., n.d.). On the other hand, when the management in the company is performing efficiently and utilizing the resources powerfully, it may give good returns on investment as well as it will affect the stock price positively. Otherwise, it has negative effect stock prices. Positive relationship of both variables show that increased in ROE, earnings per share of the firm will be increased and it can help to increase shareholders' wealth as well (Hunjra et al., 2011).

There are many ways to improve ROE in an industry, such as increasing sales turnover, wider operating margins on sales, more leverage, cheaper leverage and lower taxes. Tax is playing an important role in a company's profits and thus ROE. In Malaysia, manufacturers of taxable goods are required to be licensed under the Sales Tax Act 1972, for those companies with a sales turnover of less than RM 100,000; they can be exempted from the licensing. Generally, sales tax is 10%, however, raw materials and machinery that to be use in manufacture of taxable goods are eligible exempted from Sales Tax which are meant to export. Food producers in Malaysia have enjoyed the tax benefits due to the government's attempt to encourage investment in the sector. These have help many food production companies shore up their ROE, thus increased their shareholders' wealth.

The positive sign of coefficient is consistent to the theory of agency cost, which stated that the cost of conflicts between agents (managers) and principals (shareholders). In this theory, managers are playing an important role in the company, they must be a good decision maker in order maximize the shareholders' wealth. Managers have to determine the amount of dividend pay to shareholders, maintain the leverage of the firm, interest rate, capital structure, and to achieve company's goal. The main goal they have to achieve is to concern about

shareholders' wealth, any lack of independency in decision making process might bring harmful decision to investors, thus it might affect the shareholders' wealth.

5.3 Implication of Study

Through this research, it is hope that to provide an insight on the impact of dividend policy in influencing the shareholders' wealth for major players such as policy makers, investors, managers, and academicians. The finding of this research might be useful for policy makers, managers, investors and managers in making decision, while academicians might gain more understanding about the impact of dividend policy and as a guideline for future research.

Most of the researchers' findings are showed that dividend policy has a positively significant relationship with shareholders' wealth. However, based on this research, dividend payout ratio is negatively significant with shareholders' wealth. In other words, higher dividend payout ratio might reduce the shareholders' wealth in the firm. This might happen due to the dividend payout have the effect of reducing the stock price on the ex-dividend date (Hull, 2012, pp. 215-218) and ownership structure such as investors, managers and family might preferred long term investments instead of high dividend payout. Therefore, policy makers should force to strengthen the policies to increase the shareholders' wealth with a suitable dividend payout in order to increase the investors' confidence level.

In addition, higher long term debt in the firm might reduce the shareholders' wealth as a result of the increase of interest expense might affect the earnings per share to decrease, thus lower the share price as well as the shareholders' wealth. However, according to Appannan & Lee (2011) the food producer industries companies are decided the dividend

payout ratio by relying on the debt equity ratio, which has the positive relationship with the current dividend per share. In other words, the higher the debt of a company, the higher the interest which brings benefit to creditors, thus lowers the shareholders' wealth. Regulators and policy makers in this sector should further investigate this issue and try to limit the debt held by company.

By taking more debt in the company might arise the agency problem between shareholders and debt holders. In other words, the wealth of shareholders is come from debt holders as a result of company borrow fund from creditors to operate their business. Malaysia Institute of Corporate Governance (MICG) should try to strengthen the governance policies in order to reduce expropriate of debt holders' wealth to shareholders' wealth. The higher the debt in a company means that there is more capital for the firm to operate. However, tendency managers may invest this capital in a negative NPV project, thus it may hurt the shareholders and debt holders' wealth. Therefore, company should strongly monitor the manager behavior, as well as strengthen policies in order to reduce the agency problem between shareholders and managers. With this, shareholders may increase their loyalty towards the company, and they may increase their holding in the company when they are satisfied with the firm's performance. Hence, the firm might have sufficient internal sources to finance its assets, and tend to reduce the debt in the firm as well as lower the bankruptcy risk of the firm.

Through the major findings, financial managers can help the firm to raise fund by using appropriate sources as well as to reduce the financial distress of the firm. Besides that, this research paper also provides the in-depth knowledge of the impact of dividend policy for investors. Higher debt ratio will affect the company facing higher bankruptcy risk, thus reduce the shareholders' wealth. However, growth asset in the company is insignificantly with shareholders' wealth. Thus, based on this information, investors can gain more understanding in the factors affected the shareholders' wealth, and they can make an accurate decision on which industries and companies to invest in order to achieve their goals. Lastly, the finding in this study will add on to academicians on the

theoretical and empirical knowledge's of the impact of dividend policy, Thus, they may put more effort into further research and to contribute more details about the impact of dividend policy on others industries in Malaysia.

5.4 Limitation

This research is just focus on one country only, which is limited in the Malaysia's food producer sector. However, this research does not run for the food producer sectors in other countries as well such as Singapore, Thailand and Japan. Furthermore, it does not mean that the result obtained from Malaysia's food producer sector is same as the food producer sector in other countries. The result will be different due to the different size of companies, cultural, law, economic condition, number of companies and so on. The different in sample size will obtain different results. Thus, this research is limited to Malaysia's food producer sector only to study the impact of dividend policy on shareholders' wealth.

There are a large number of listed companies under different industries in Malaysia. This study may therefore lacks in revealing complete forces of shareholders' wealth. There are other sectors such as banking and properties sectors which contribute high dividend yield have excluded in this research. However, this research only investigates food producer sectors in Malaysia. Hence, all the information and the result of this research are only useful for the food producer sector's major players such as policy makers, managers, investors and academicians. This is due to all the different sectors have their own unique business culture and characteristic which is unable to make comparison among each other.

In addition, earnings per share are used in this research as the measurement of shareholders' wealth. However, other than earnings per share, there are few measurements can be used in order to measure the shareholders' wealth. For instance,

Economic Value Added (EVA), Earnings before Interest and Tax (EBIT) and Market Value Added (MVA) can be used to measure the shareholders' wealth. The regression result might be different when different measurement is used in measuring shareholders' wealth. However, this research is limited in using earnings per share as the only one measurement of shareholders' wealth.

Besides that, this research has taken a short period for analysis, which is only 5 years and only review on secondary data such as dividend payment report and financial statement of the Malaysia's food producer sector to examine the effects of the explanatory variables on shareholders' wealth. Therefore, the accuracy of the results of analysis is dependent, as well as upon the reliability and accuracy of the compiled secondary data. On the other hand, the sample size of listed food producer companies that has been selected in this study is small. In fact, there are 79 companies in food producers sectors in Malaysia. However, after filter up the data, there are only 59 companies are available for the analysis due to data availability.

5.5 Recommendation

This research is limited on the Malaysia's food producer sector only in order to study the impact of dividend policy in shareholders' wealth. Future research is recommended to broaden the research area in the countries other than Malaysia such as Singapore, Thailand and others. Comparison able to be made in term of the result obtained from different countries. Other than that, the behavior of dividend policy can be known after undergoing the research in different countries. Moreover, there is difference in term of number of sample size among the food producer sector in different countries. The larger the sample size in the results may increase the accuracy of the result.

Shareholders' wealth is the dependent variable in this research. However, earnings per share are used as the measurement of shareholders' wealth. Future research is recommended to use other measurement as the measurement of shareholders' wealth instead of earnings per share such as Economic Value Added (EVA), Earnings before Interest and Tax (EBIT) and Market Value Added (MVA). Different result will be obtained by using different measurement and comparison can be made to identify the best measurement for shareholders' wealth.

This research focuses on food producers sector in Malaysia with a sample of 59 companies was selected for analysis. However, in the future the sample size could be increased as well as the number of companies can be used which are listed in food producers sector. This study includes only 6 independent variables for analysis. The number of independent variables could be increased in the future, so that the result may become more robustness. Furthermore, future research is also recommended to increase the time period of the study as only 5 years data was used for analysis in this study. Besides that, the future research should collect the unbalanced panel data consistently in order we can obtain more accuracy and reliable results in future.

5.6 Conclusion

The major objective of this research is to determine the impact of dividend policy on shareholders' wealth. The total 59 companies from Malaysia's food producer sector were taken into account in this research within the time period of year 2008 to year 2012. Furthermore, the models were employed by random effect model while it is controlled by white cross section SUR.

From the regression result, it found out that earning volatility and profitability (ROE) are positively significant with earnings per share. However, dividend payout ratio and long term debt ratio are negatively significant with earnings per share. On other hand, growth in assets and liquidity are positively insignificant with earnings per share. Based on the result, the variables of earning volatility, long term debt ratio and liquidity are consistent with the theory of signaling effect and agency cost. For the variables of dividend payout ratio, it is inconsistent with the theory of signaling effect and agency cost based on the result obtained. The variable of growth in assets is consistent with the theory of agency cost but inconsistent with the theory of signaling effect based on the results obtained. In addition, the result shows that profitability is consistent with the theory of agency cost.

This research is useful and benefits for the policy makers, manager, investor and academician. There are some limitations on this research. This study only focuses on one country and one sector only with the time period of five years (year 2008 to year 2012). In addition, there are other measurements to measure shareholders' wealth. Therefore, future research should broaden the research area in different countries and different sectors. In addition, the time period of the research can be up to the year of 2013. Moreover, other measurements can be used to measure shareholders' wealth.

REFERENCES

- Aga, M., & Safakli, O. V. (2007). An Empirical Investigation of Service Quality and Customer Satisfaction in Professional Accounting Firms: Evidence from North Cyprus. *Problems and Perspectives in Management*, 5(3), 84-98.
- Ahmed, E. M. (2012). Malaysia's Food Manufacturing Industries Productivity Determinants. *Modern Economy*, 3(4), 444-453.
- Allayannis, G., & Weston, J. P. (2003). *Earnings volatility, cash flow volatility, and firm value*. Working Paper.
- Al- Hasan, M. A., Asaduzzaman, M., & Al Karim, R. (2013). The Effect of Dividend Policy on Share Price: An Evaluative Study. *Journal of Economics and Finance*, 1(4), 6-11.
- Al-Malkawi, H. N., Rafferty, M., & Pillai, R. (2010). Dividend Policy: A Review of Theories and Empirical Evidence. *International Bulletin of Business Administration*, 9, 171-200.
- AL- Shubiri, F. N. (2012). Determinants of Changes Dividend Behaviour Policy: Evidence from the Amman Stock Exchange. *Far East Journal of Marketing and Management*, 2(2), 1-15.
- Altan, M., & Arkan, F. (2011). Relationship between Firm Value and Financial Structure: A Study on Firm in ISE Industrial Index. *Journal of Business and Economic Research*, 9(9), 61-65.
- Amihud, Y., & Mendelson, H. (2012). Liquidity, the Value of the Firm, and Corporate Finance. *Journal of Applied Corporate Finance*, 24(1), 12-29.
- Appannan, S., & Lee, W. S. (2011). *Liquidity, the Value of the Firm, and Corporate Finance*. 2nd International Conference on Business and Economic Research (2nd Icerber 2011) Proceeding. Working Paper.
- Apergis, N., & Sorros, J. (2010). Long-Term Debt and the Value of the Firm: Evidence from International Listed Manufacturing Firms. *Review of Economics & Finance*, 60-72.
- Arowoshegbe, A. O. & Emeni, F. K. (2014). Shareholders' Wealth and Debt-Equity Mix of Quoted Companies in Nigeria. *International Journal of Financial Research*, 5(1), 107-113.
- ASX. (2014). *How are dividends released?*. Retrieved 4 March, 2014, from <http://www.asx.com.au/prices/dividends.htm#>.
- Asquith, P., & Mullins, (1983). The Impact of Initiating Dividend Payments on Shareholders' Wealth. *The Journal of Business*, 56(1), 77-96.

- Asghar, M., Shah, S. Z. A., Hamid, K., & Suleman, M. T. (2011). Impact of Dividend Policy on Stock Price Risk: Empirical Evidence from Equity Market of Pakistan. *Far East Journal of Psychology and Business*, 4(1), 45-52.
- Australian Trade Commission. (2014). *Food and beverage to Malaysia*. Retrieved 20 June, 2014, from <http://www.austrade.gov.au/Export/Export-Markets/Countries/Malaysia/Industries/Food-and-beverage#.U8vz4bGCTJk>.
- Azhagaiah, R., & Priya, S. N. (2008). The Impact of Dividend Policy on Shareholders' Wealth. *International Research Journal of Finance and Economics*, (20), 181-187.
- BAFA. (2013). *Does Firm Growth Reduce Shareholder Wealth?*. Working Papers.
- Baker, H. K., & Powell, G. E. (2000). *Determinants of Corporate Dividend Policy: A Survey of NSYE Firms*. Financial Practice and Education.
- Balestra, P., & Nerlove, M (1966). Pooling Cross Section and Time Series Data in the Estimation of a Dynamic Model: The Demand for Natural Gas. *Journal of Econometrica*, 34(3), 585-612.
- Baltagi, B. H. (n.d.). *Panel Data Methods*. Working Paper.
- Barnes, R. (2001). *Earnings Volatility and Market Valuation: An Empirical Investigation*. Working Paper.
- Beneish, M. D., & Whaley, R. E. (1996). An Anatomy of the "S&P Game": The Effects of Changing the Rules. *The Journal of Finance*, 51(5), 1909-1930.
- Bernartzi, S., Michaely, R., & Thaler, R. (1997). Do Changes in Dividend Signal the Future or the Past?. *The Journal of Finance*, 52(3), 1007-1034.
- Billings, B. K., & Morton, R. M. (1999). *Do Stock Prices Fully Reflect Information in Dividends About Future Earnings?*. Working Papers Series.
- Bhana, N. (1992). An Evaluation of the Market Rating of Retained Earnings of Companies Listed on the Johannesburg Stock Exchange: An Empirical Analysis. *Investment Analysts Journal*.
- Bogdan, S., Bareša, S., & Ivanović, S. (2012). Measuring Liquidity on Stock Market: Impact on Liquidity Ratio. *Tourism and Hospitality Management*, 18(2), 183-193.
- Bollen, K. A., & Brand, J. E. (2008). *Fixed and Random Effects in Panel Data Using Structural Equations Models*. California Center for Population Research. Working Papers Series.
- Bollen, K. A. & Brand, J. E. (2010). A General Panel Model With Random and Fixed Effects: A Structural Equations Approach. *NIH Public Access Author Manuscript*, 89(1), 1-34.

- Borenstein, M., Hedges, L. V., & Higgins, J. P. T. (2010). A basic introduction to fixed-effect and random-effects models for meta-analysis. *Research Synthesis Methods*, 1(2), 97-111.
- Bowman, K. O., & Shenton, L. R. (1975). Omnibus test contours for departures from normality based on V/b_1 and b_2 . *Biometrika*, 62(2), 243-250.
- Brav, A., Graham, J. R., Harvey, C. R., & Michaely, R. (2003). *Payout Policy in the 21st Century*. NBER Working Paper Series no 9657.
- Brennan, M. J., & Kraft, H. (2012). *Financing Asset Growth*. Working Paper Series.
- Breuer, W., Rieger, M. O., & Soypak, K. C. (2014). The behavioral foundations of corporate dividend policy a cross-country analysis. *Journal of Banking and Finance*, 42, 247-265.
- British American Tobacco Malaysia. (2013). *BAT Malaysia registers a strong 2012 performance*. Retrieved 3 April, 2014, from http://www.batmalaysia.com/group/sites/BAT_7RYJ8N.nsf/vwPagesWebLive/D095AEZ4?opendocument&SKN=1.
- Bruderl, J. (2005). *Panel Data Analysis*. Retrieved 20 May, 2014, from <http://www.sowi.uni-mannheim.de/lessm/veranst/Panelanalyse.pdf>.
- Brunzell, T., Holm, S., & Jonsson, B. (2012). A Model of Optimal Dividend Policy to Maximize Shareholder Wealth When Taxes are Considered. *Open Access Scientific Reports*, 1(11), 1-5.
- Calcagno, R., & Heider, F. (2007). *Market Based Compensation, Price Informativeness and Short-term Trading*. European Central Bank. Working Paper Series.
- Campbell, J. Y., & Shiller, R. J. (1988). Stock Prices, Earnings and Expected Dividends. *The Journal of Finance*, 43(3), 661-676.
- Caprio, G. J., & Demirgüç-Kunt, A. (1997). The Role of Long Term Finance: Theory and Evidence. *The World Bank Research Observer*, 13(2), 171-189.
- Carpenter, R. E. (1995). Finance constraints or free cash flow?. *Journal of Empirica*, 22(3), 185-209.
- Chan, L. K. C., Karceski, J., Lakonishok, J., & Sougiannis, T. (2008). *Balance sheet growth and the predictability of stock returns*. Working Papers.
- Charitou, A., & Vafeas, N. (1998). The association between Operating Cash Flow and Dividend Changes: an Empirical Investigation. *Journal of Business Finance & Accounting*, 25(1-2), 225-249.
- Chen, S., & Dodd, J. L. (1998). *Usefulness of Operating Income, Residual Income, and EVA[®]: A Value-Relevance Perspective*. Working Paper Series.

- Chen, S., Yao, T., Yu, T., & Zhang, T. (2010). *Asset growth and stock returns: Evidence from Asian financial markets*. Working paper.
- Chernenko, S., Foley, C. F., & Greenwood, R. (2010). *Agency Costs, Mispricing, and Ownership Structure*. NBER Working Paper No. 15910
- Chidinma, O. N., Okaro, S.C., & Okoye, P. V. C. (2013). Shareholder's value and firm's dividend policy: Evidence from public companies in Nigeria. *Research Journal of Management Sciences*, 2(12), 26-28.
- Chordia, T., Roll, R., & Subrahmanyam, A. (2008). Liquidity and market efficiency. *Journal of Financial Economics*, 87(2), 249-268.
- Chowdhury, J., & Ovtchinnikov, A. V. (2009). *Managerial Myopia and Corporate Investment*. Working Paper.
- Circiumaru, D., Siminica, M., & Marcu, N. (n.d.). *A Study on the Return on Equity for the Romanian Industrial Companies*. Working Paper.
- Clemmensen, L. H. (2006). *Estimation and Classification through Regression with Variable Selection amongst Features Extracted from Multi-Spectral Images (Estimation of moisture content in sand & Identification of Penicillium funghi)*. Working Paper.
- Cooper, M. J., Gulen, H., & Schill, M. J. (2008). Asset Growth and the Cross-Section of Stock Returns. *The Journal of Finance*, 63(4), 1609-1651.
- Croissant, Y., & Millo, G. (2008). Panel Data Econometrics in R: The plm Package. *Journal of Statistical Software*, 27(2), 1-43.
- Damodaran, A. (2007). *Return on Capital (ROC), Return on Invested Capital (ROIC) and Return on Equity (ROE): Measurement and Implications*. Working Paper.
- Denis, D. J., Denis, D. K., & Sarin, A. (1994). The Information Content of Dividend Changes: Cash Flow Signaling, Overinvestment, and Dividend Clientele. *The Journal of Financial and Quantitative Analysis*, 29(4), 567-587.
- Depken, C. A., Nguyen, G. X., & Sarkar, S. K. (n.d.). *Agency Costs, Executive Compensation, Bonding and Monitoring: A Stochastic Frontier Approach*. Working paper.
- DerSimonian, R., & Laird, N. (1986). Meta- Analysis in Clinical Trials. *Elsevier Science Publishing Co, Inc*, (7), 177-188.
- Diggle, P. J., Heagerty, P., Liang, K. Y., & Zeger, K. Y. (2002). *Analysis of Longitudinal Data*. (2nd ed.). New York: Oxford University Press, Inc.
- D'Souza, J. (1999). Agency Cost, Market Risk, Investment Opportunities, and Dividend Policy- An International Perspectives. *Journal of Managerial Finance*, 25(6), 35-43.

- Dupont-Kieffer, A., & Pirotte, A. (2011). The Early Years of Panel Data Econometrics. *History of Political Economy*, 43(1), 258-282.
- Elouafa, K. (2012). Incremental Information Content of Cash Flows Versus Funds from Operations and Earnings: Applying New Methodologies in French Context. *International Journal of Multidisciplinary Management Studies*, 2(5), 1-10.
- Emamgholipour, M., Pouraghajan, A., Malekian, E., Lotfollahpour, V., & Bagheri, M. M. (2012). The Relationship between Capital Structure and Firm Performance Evaluation Measures: Evidence from the Tehran Stock Exchange. *International Journal of Business and Commerce*, 1(9), 166-181.
- Emery, G. W., & Cogger, K. O. (1982). The Measurement of Liquidity. *Journal of Accounting Research*, 20(2), 290-303.
- Eriki, P. O., Idolor, E. J., & Eghosa, I. L. (2012). Financial Management Practices, Wealth Maximization Criterion and Firm Value: An Empirical Analysis. *Journal of Research in National Development*, 10(2), 160-164.
- Fang, V. W., Noe, T. H., & Tice, S. (2009). Stock market liquidity and firm value. *Journal of Financial Economics*, 94(1), 150-169.
- Fama, E. F., & French, K. R. (2001). *Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay?*. Working Paper No. 509.
- Farrar, D. E., & Glauber, R. R. (1967). Multicollinearity in Regression Analysis: The Problem Revisited. *The Review of Economics and Statistics*, 49(1), 92-107.
- FTSE Group (2014). *FTSE Bursa Malaysia Index Series*. FTSE Monthly Report.
- Ghosh, P (2011). Why doesn't Apple pay a dividend?. *International Business Times*. Retrieved 5 May, 2014, from: <http://www.ibtimes.com/why-doesnt-apple-pay-dividend-253145>.
- Godwin, T. M., Steinhart, D. J., & Fulton, B. A. (1998). *Peer Justice and Youth Empowerment: An Implementation Guide for Teen Court Programs*. United States. DIANE Publishing.
- Greene. (2010). *Models for Panel Data*. Retrieved 17 May, 2014, from <http://pages.stern.nyu.edu/~wgreene/DiscreteChoice/Readings/Greene-Chapter-9.pdf>.
- Grinblatt, M. S., Masulis, R. W., & Titman, S. (1984). The Valuation Effects of Stock Splits and Stock Dividends. *Journal of Financial Economics*, 13(4), 461-490.
- Grullon, G., Michaely, R., Benartzi, S., & Thaler, R. H. (2005). Dividend Changes Do Not Signal Changes in Future Profitability. *Journal of Business*, 78(5), 1659-1682.
- Gujarati, D. N. (2003). *Basic Econometric*. (4th ed.). Kuala Lumpur. McGraw-Hill Higher Education.

- Gujarati, D. N., & Porter, D. C. (2009). *Basic Econometric*. (5th ed.). Kuala Lumpur. McGraw-Hill Higher Education.
- Habib, Y., Kiani, Z. I., & Khan, M. A. (2012). Dividend Policy and Share Price Volatility: Evidence from Pakistan. *Global Journal of Management and Business Research*, 12(5), 79-84.
- Hedensted, J. S. & Raaballe, J. (2008). *Dividend Determinants in Denmark*. Working Paper.
- Hashemijoo, M., Ardekani, A. M., & Younesi, N. (2012). The Impact of Dividend Policy on Share Price Volatility in the Malaysian Stock Market. *Journal of Business Studies Quarterly*, 4(1), 111-129.
- Haque, M. R., Siddiquee, M. J. A., Hossain, M. S., Chowdhury, S. P., & Rahman, M. M. (2013). Relationship between Dividend Payout and Economic Value Added: A case of Square Pharmaceuticals Limited, Bangladesh. *International Journal of Innovation and Applied Studies*, 3(1), 98-104.
- Hedges, L. V., & Vevea, J. L. (1998). Fixed- and Random- Effects Models in Meta-Analysis. *The American Psychological Association, Inc*, 3(4), 486-504.
- Ho, H. (2003). Dividend Policies in Australia and Japan. *International Advance in Economic Research*, 9(2), 91-100.
- Holder, M. E., Langrehr, F. W., & Hexter, J. L. (1998). Dividend Policy Determinants: An Investigation of the Influence of Stakeholder Theory. *Financial Management*, 27(3), 73-82.
- Hsiao, C. (2003). *Analysis of Panel Data*. (2nd ed.). United Kingdom: Cambridge University Press.
- Hull, J. C. (2012). *Options, Futures, And Other Derivatives*. (8th ed.). United States: Pearson Education Limited.
- Hunjra, A. I., Niazi, G. S. K., Akbar, S. W., & Rehman, K. U. (2011). Application of Finance Techniques: An Empirical Analysis of Pakistani Corporate Sector. *Actual Problems of Economics*, (9), 394-404.
- Hussainey, K., Mgbame, C. O., & Chijoke-Mgbame, A. M. (2011). Dividend policy and share price volatility: UK evidence. *The Journal of Risk Finance*, 12(1), 57-68.
- Ibarra, V. C., (2009). Cash Flow Ratios: Tools for Financial Analysis. *Journal of International Business Research*, 8(1), 91-106.
- Ilaboya, O. J., & Aggreh, M. (2013). Dividend Policy and Share Price Volatility. *Journal Asian Development Study*, 2(2), 109-122.
- Iram, F. (2010). *The impact of dividend Policy on Shareholder's wealth*. An M-Phil proposal.

- Jarque, C. M., & Bera, A. K. (1987). A Test for Normality of Observations and Regression Residuals. *International Statistical Review / Revue Internationale de Statistique*, 55(2), 163-172.
- Jayaraman, S., & Milbourn, T. (2011). *The Role of Stock Liquidity in Executive Compensation*. Working Paper.
- Jensen, G. R., Solberg, D. P., & Zorn, T. S. (1992). Simultaneous Determination of Insider Ownership, Debt, and Dividend Policies. *Journal of Financial and Quantitative Analysis*, 27(2), 247-263.
- Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, 76(2), 323-329.
- Jensen, M. C. (1983). Organization Theory and Methodology. *The Accounting Review*, 58(2), 319-339.
- Jensen, M. C. & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305-360.
- Jensen, M. C., & Smith, C. W. S. (1985). Stockholder, Manager, and Creditor Interests: Applications of Agency Theory. *Theory of the Firm (Book)*, 1(1), 1-45.
- Jonsson, K. (2011). A robust test for multivariate normality. *Economics Letters*, 113(2), 199-201.
- Jooste, L. (2006). Cash flow ratios as a yardstick for evaluating financial performance in African businesses. *Journal of Managerial Finance*, 32(7), 569-576.
- Kabajeh, M. A. M., Nu'aimat, S. M. A. A., & Dahmash, F. N. (2012). The Relationship between the ROA, ROE, and ROI Ratios with Jordanian Insurance Public Companies Market Share Prices. *International Journal of Humanities and Social Science*, 2(11), 115-120.
- Kapoor, S. (2009). *Impact of Dividend Policy on Shareholders' Value: A Study of Indian Firms* (Doctoral's Thesis). Retrieved 4 May, 2014, from <http://125.21.244.195/uploads/SUJATA%20SYNOPSIS.pdf>.
- Karbhari, Y., Sori, Z. M., & Mohamad, S. (2004). *Shareholder Wealth Effects and Corporate Name Change: Evidence from Malaysia*. Working Papers Series.
- Karim, M. (2010). *Announcement Effect of Dividend on the Stock Price of Enlisted Companies in Developed Countries: A Comparative Study between London Stock Exchange & New York Stock Exchange*. Working Papers Series.
- Kennon, J. (2014). *Return on Equity (ROE)*. Investing for Beginners. Retrieved 4 May, 2014, from <http://beginnersinvest.about.com/od/incomestatementanalysis/a/understanding-return-on-equity.html>.

- Khaledi, N. (2013). Determinants of Firms Managinf EPS through Share Repurchases. *Academy of Accounting and Financial Studies Journal*, 17(4), 82-94.
- Kirkham, R. (2012). Liquidity Analysis Using Cash Flow Ratios an Traditional Ratios: The Telecommunications Sector in Australia. *Journal of New Business Ideas & Trends*, 10(1), 1-13.
- Kumaresan, S. (2014). Impact of Dividend Policy on Share Holders' Wealth: A Study of Listed Companies in Hotels and Travels Sector of Sri Lanka. *International Journal of Technological Exploration and Learning (IJTEL)*, 3(1), 2319-2135.
- Lam, K. S. K., & Tam, L. H. K. (2011). Liquidity and asset pricing: Evidence from the Hong Kong stock market. *Journal of Banking & Finance*, 35(9), 2217–2230.
- Laux, J. (2011). Topics In Finance Part VII—Dividend Policy. *Journal of Banking & Finance*, 35(9), 25-31.
- Lease, R. C., John, K., Kalay, A., Loewenstein, U., & Sarig, O. H. (2000). *Dividend Policy: Its Impact on Firm Value*. Boston. Harvard Business School Press.
- Li, K., & Zhao, X. (2008). Asymmetric Information and Dividend Policy. *Journal of Financial Management*, 673-694.
- Li, X., Becker, Y., & Rosenfeld, D. (2012). Asset Growth and Future Stock Returns: International Evidence. *Financial Analysts Journal*, 68(3), 51-62.
- Lindholm, A., & Levainen, K. I. (2006). A framework for identifying and measuring value added by corporate real estate. *Journal of Corporate Real Estate*, 8(1), 38-46.
- Ling, F. S., Mutalip, M. L. A., Shahrin, A. R., & Othman, M. S. (2008). Dividend Policy: Evidence from Public Listed Company in Malaysia. *International Review of Business Research Papers*, 4(4), 208-222.
- Lintner, J. (1956). Distribution of Incomes of Corporations Among Dividends, Retained Earnings, and Taxes. *The American Economic Review*, 46(2), 97-113.
- Liu, S., Hu, Y. (2005). Empirical Analysis of Cash Dividend Payment in Chinese Listed Companies. *Nature and Science*, 3(1), 65-70.
- Lixin, X., & Lin, C. (n.d.). *The Relationship Between Debt Financing and Market Value of Company: Empirical Study of Listed Real Estate Company of China*. Proceedings of the 7th International Conference on Innovation & Management.
- Lybek, T., & Sarr, A. (2002). *Measuring Liquidity in Financial Markets*. Monetary and Exchange Affairs Department. IMF Working Paper.
- Malaysia AHK. (2012). "Market Watch 2012" *The Malaysian Food Industry*. Retrieved 25 June, 2014, from http://www.malaysia.ahk.de/fileadmin/ahk_malaysia/Market_reports/The_Malaysian_Food_Industry.pdf.

- Malaysia Investment Development Authority. (2012). *Investment for Transformation*. Retrieved 26 June, 2014, from http://www.mida.gov.my/env3/uploads/PerformanceReport/2012/MIPR2012_ENG.pdf
- Malaysia Investment Development Authority. (2014). *Food Technology and Sustainable Resources*. Retrieved 3 March, 2014, from <http://www.mida.gov.my/home/food-technology-and-sustainable-resources/posts/>.
- Malkawi, H. A. N. A., Rafferty, M., & Pillai, R. (2010). Dividend Policy: A Review of Theories and Empirical Evidence. *International Bulletin of Business Administration*, (9), 171-200.
- Mansfield, E. R., & Helms, B. P. (1982). Detecting Multicollinearity. *The American Statistician*, 36 (3), 158-160.
- Mantalos, P. (2010). *Robust Critical Values for the Jarque-bera Test for Normality*. JIBS Working Papers No. 2010-8.
- Masum, A. A. (2014). Dividend Policy and Its Impact on Stock Price – A Study on Commercial Banks Listed in Dhaka Stock Exchange. *Global Disclosure of Economics and Business*, 3(1), 9-20.
- Meng, C. W., & Devi, S. S. (2009). *Malaysia's dividend Rule: A Blot on Corporate Governance?*. Universiti of Malaya: Accounting.
- Michelson, S. E., Jordan-Wagner, J., & Wootton, C. W. (1999). *Income Smoothing and Risk-adjusted Performance*. Working Paper.
- Michelson, S. E., Jordan-Wagner, J., & Wootton, C. W. (1995). A Market Based Analysis Smoothing. *Journal of Business Finance and Accounting*, 22(8), 1179-1193.
- Miller, M. H., & Modigliani, F. (1961). Dividend Policy, Growth, and the Valuation of Shares. *The Journal of Business*, 34(4), 411-433.
- Miller, M., & Rock, K. (1985). Dividend Policy under Asymmetric Information. *Journal of Finance*, 40, 1031-1051.
- Mokaya, S. O., Nyang'ara, D. M., James, L. T. (2013). The Effect of Dividend Policy on Market Share Value in the Banking Industry; the Case of National Bank of Kenya. *International Journal of Arts and Commerce*, 2(2), 91-101.
- Mohanty, P. (1999). Dividend and Bonus Policies of Indian Companies: An Analysis. *Journal of Vikalpa*, 24(4), 35-42.
- Moradi, M., Salehi, M., & Honarmand, S. (2010). *Factors Affecting Dividend Policy: Empirical Evidend from Iran*. Working Papers.

- Morgan, J. P. (2011). *Dividends: The 2011 guide to dividend policy trends and best practices*. Retrieved 19 June, 2014, from https://www.jpmorgan.com/cm/BlobServer/Dividends_The_2011_Guide_to_Dividend_Policy_Trends_and_Best_Practices.pdf?blobkey=id&blobnocache=true&blobwhere=1320534214692&blobheader=application%2Fpdf&blobcol=urldata&blobtable=MungoBlobs.
- Morris, R. D. (1987). Signalling, Agency Theory, and Accounting Policy Choice. *Accounting and Business Research*, 18(69), 47-56.
- Morsy, A. & Rwegasira, K. (2010). Does Demutualization Matter to the Financial Performance of Stock Exchanges? An Investigation of Demutualized Member Stock Exchange of the World Federation of Exchanges. *International Research Journal of Finance and Economics*, (40), 155-167.
- Mundlak, Y. (1961). Empirical Production Function Free of Management Bias. *Journal of Farm Economics*, 43(1), 44-56.
- Murekefu, T. M., & Ouma, O. P. (n.d.). The Relationship between Dividend Payout and Firm Performance: A Study of Listed Companies in Kenya. *European Scientific Journal*, 8(9), 199-215.
- Myers, M., & Bacon, F. (2004). The Determinants of Corporate Dividend Policy. Dividend Policy, Growth, and the Valuation of Shares. *Academy of Accounting and Financial Studies Journal*, 8(3), 17-28.
- Naveed, M. Y., & Ramzan, M. (2013). A View about the Determinants of Changes in Share Prices: a Case from Karachi Stock Exchange (Banking Sector). *Interdisciplinary Journal of Contemporary Research in Business*, 4(12), 41-57.
- Nazir, M. S., Nawaz, M. M., Anwar, W., & Ahmed, F. (2010). Determinants of Stock Price Volatility in Karachi Stock Exchange: The Mediating Role of Corporate Dividend Policy. *International Research Journal of Finance and Economics*, (55), 100-107.
- Nedina. (2010). *Dividend Policy: Malaysian Public Listed Companies 2006 to 2009*. Retrieved from <http://www.articlesbase.com/investing-articles/dividend-policy-malaysian-public-listed-companies-2006-to-2009-3902681.html>.
- Nerlove, M. (2002). *Essay in Panel Data Econometrics*. United Kingdom. The Press Syndicate of The University of Cambridge.
- Nerlove, M. (2007). Comments on: Panel data analysis- advantages and challenges. *Society of Statistics and Operations Research*, (16), 42-46.
- Nguimkeu, P. E., & Rekkas, M. (2011). Third-order inference for autocorrelation in nonlinear regression models. *Journal of Statistical Planning and Inference*, 141(11), 3413-3425.

- Oana, B. L. (n.d.). *Indicators used for measuring shareholders value*. Retrieved 5 May, 2014, from <http://www.dafi.ase.ro/revista/6/Burlacu%20Laura%20Oana%20Indicators%20used%20for%20measuring%20shareholders%20value.pdf>.
- OECD. (2001). *Corporate Governance Corporate Governance in Asia A Comparative Perspective: A Comparative Perspective*. OECD Publishing.
- O'Byrne, S. F., Stewardt, S., & Co. (1996). EVA®AND MARKET VALUE. *Journal of Applied Corporate Finance*, 9(1), 116-125.
- Olowe, R. A., & Moyosore, S. L. (n.d.). *Determinants of Dividend Pay-out in the Nigerian Banking Industry*. Working Papers.
- Pandey, I. M. (2003). Corporate Dividend Policy and Behaviour: The Malaysian Evidence. *Asian Academy of Management Journal*, 8(1), 17-32.
- Pandey, I. M. (2001). *Financial Goals Choices and Performance of Firms in Malaysia*. Indian Institute of Management Ahmedabad, Research and Publication Department. IIMA Working Papers.
- Patuelli, R., Vaona, A., & Grimpe, C. (2013). *Poolability and aggregation problems of regional innovation data : an application to nanomaterial patenting*. Working Papers.
- Pawlina, G., & Renneboog, L. (2005). *Is Investment-Cash Flow Sensitivity Caused by the Agency Costs or Asymmetric Information? Evidence from the UK*. ECGI Working Paper Series in Finance.
- Petrovic, N., Manson, S., & Coakley, J. (2009). Does Volatility Improve UK Earnings Forecasts?. *Journal of Business Finance & Accounting*, 36(9-10), 1148-1179.
- Proffitt, K. A., & Bacon, F. W. (2013). Dividend Policy and Stock Price Volatility in the U.S Equity Capital Market. *Journal of Business and Behavioral Sciences*, 25(2), 63-72.
- Price, J. (2012). Return on Equity Traps and How to Avoid Them. *Equity the Trusted Voice of Shareholders*, 26(3).
- Prusty, S. (2010). *Managerial Economics*. PHI Learning Pvt. Ltd.
- Ranti, U. O. (2013). Determinants of Dividend Policy: A Study of Selected Listed Firms in Nigeria. *Change and Leadership*, (17), 107-119.
- Rashid, A., & Rahman, A. Z. M. A. (2008). *Dividend policy and stock price volatility: evidence from Bangladesh*. *Journal of Applied Business and Economics*, 8(4), 71-81.
- Rozeff, M. S. (1982). Growth, Beta and Agency Costs as Determinants of Dividend Payout Ratio. *The Journal of Financial Research*, 5(3), 249-259.

- Sadiq, M., Ahmad, S., & Anjum, M. J. (2013). Stock Price Volatility in Relation to Dividend Policy; A Case Study of Karachi Stock Market. *Middle-East Journal of Scientific Research*, 13(3), 426-431.
- Salehi, M., Talebnia, G., & Ghorbani, B. (2011). A Study of the Relationship Between Liquidity and Stock Returns of Companies Listed in Tehran Stock Exchange. *World Applied Sciences Journal*, 12(9), 1403-1408.
- Salim, M., & Yadav, R. (2012). Capital Structure and Firm Performance: Evidence from Malaysian Listed Companies. *Procedia - Social and Behavioral Sciences* 6(3), 156-166.
- Sawar, M. S. (2013). Effect of Dividend Policy on Share Holder's Wealth: "A Study of Sugar Industry in Pakistan". *Global Journal of Management and Business Research Finance*, 13(7). 46-54.
- Seoul. (1999). *Corporate Governance in Malaysia An Assessment*. Conference on Corporate Governance in Asia: A Comparative Perspective.
- Seung C, A., & Stuart, L. (1996). A reformulation of the Hausman test for regression models with pooled cross-section-time-series data. *Journal of Econometrics*, 71(1-2), 309-319.
- Shalit, H (2012). Using OLS to test for normality. *Statistics and Probability Letters*, 82, 2050–2058.
- Sharma, R. (2012). *Comparing and Analyzing Financial Statements to Make an Investment Decision: Case Study of Automotive Industry* (Bachelor's Thesis). Aasan Ammattikorkeakoulu University of Applied Science. Retrieved 6 June, 2014, from https://www.theseus.fi/bitstream/handle/10024/43723/SHARMA_RAJU.pdf?sequence=1.
- Shirvani, H., & Wilbratte, B. (1997). An Empirical Investigation of Asymmetric Behavior in Corporate Dividend Policy. *Economic Inquiry*, 35(4), 847-857.
- Shleifer, A. (1986). Do Demand Curves for Stocks Slope Down?. *The Journal of Finance*, 41(3), 579-590.
- Shoemith, J. (2004). *Return on Capital Employed and Return on Equity*. Retrieved 23 April, 2014, from http://www.signet.org.uk/public_pdf/12%20and%2013%20Return%20on%20capital%20employed.pdf.

- Smith, A. (2012). Many FTSE 350 Companies paying no dividend. *Financial Times*. Retrieved 5 May, 2014, from http://www.ft.com/intl/cms/s/16fdf89e-105b-11e2-a5f7-00144feabdc0,Authorised=false.html?_i_location=http%3A%2F%2Fwww.ft.com%2Fcms%2Fs%2F0%2F16fdf89e-105b-11e2-a5f7-00144feabdc0.html%3Fsiteedition%3Dintl&siteedition=intl&_i_referer=#axzz37N3NfnuX.
- Silviana, & Rocky (2013). Analysis of Return on Asset and Earnings per Share on this Stock Market in the Banking Companies in Bursa Efek Indonesia (Indonesia Securities Exchange). *Journal of Global Business and Economies*, 7(1), 119.
- Soter, D., Brigham, E., & Evanson, P. (1996). The Dividend Cut ' Heard Round The World': The Case of FPL. *Journal of Applied Corporate Finance*, 9(1), 4-15.
- Spiegel, M., & Wang, X. (2005). *Cross-sectional Variation in Stock Returns: Liquidity and Idiosyncratic Risk*. Yale ICF Working Paper No. 05-13.
- Ssm.com. (n.d.). *Section 365. Dividends payable from profits only*. Retrieved 3 March, 2014, from <http://www.ssm.com.my/acts/fscommand/act125s0365.htm>.
- Sterman, D. (2013). *The Biggest Companies That Don't Pay Dividends -- But May Be About To*. Retrieved 5 April, 2014 from Yahoo Finance: <http://finance.yahoo.com/news/biggest-companies-dont-pay-dividends180000561.html>.
- Subramaniam, R., & Devi, S. S. (2010,). Corporate Governance and Dividend Policy in Malaysia. *International Conference on Business and Economics Research*, 1, 200-207.
- Sukamolson, S. (n.d.). *Fundamentals of quantitative research*. Working Papers.
- Sulong, Z., & Mat Nor, F. (2008). Dividends, Ownership Structure and Board Governance on Firm Value: Empirical Evidence from Malaysian Listed Firms. *Malaysian Accounting Review*, 7(2), 55-94.
- Tahir, A., & Raja, N. T. S. (2014). Impact of Dividend Policy on Shareholder Wealth. *Journal of Business and Management*, 16(1), 24-33.
- Tee, L. S. (2008). Selected 100 companies: Shareholder wealth creation. *The Star Online*. Retrieved 3 March, 2014, from <http://www.thestar.com.my/Story/?file=%2F2008%2F8%2F30%2Fbizweek%2F1891003&sec=bizweek>.
- Top Yield Highest Dividend stocks. (2014). *KLCI 30 highest dividend stocks*. Retrieved 3 April, 2014, from <http://www.topyields.nl/Top-dividend-yields-of-KLCI30.php>.

- Top Yield Highest Dividend stocks. (2012). *KLCI 30 highest dividend stocks*. Retrieved 3 April, 2014, from <http://2.bp.blogspot.com/-8n5TRafJj6I/UM8amOAUEbI/AAAAAAAAABOY/lfFCw8-jl5M/s1600/high+dividends.bmp>.
- Traub, E. (2001). Using ROE to Analyze Stocks: What You Need To Know About. *AAII Journal*.
- Trueman, B., Wong, M. H. F., & Zhang, X. J. (2003). Anomalous stock returns around internet firms' earnings announcements. *Journal of Accounting and Economics*, 34(1-3), 249–271.
- Vogt, W. P., & Johnson, R. B. (2011). *Dictionary of Statistics & Methodology: A Nontechnical Guide for the Social Sciences*. (4th ed.). SAGE.
- Von, V., Hain, J., & Falk, M. (2010). *Comparison of Common Tests for Normality*. Working Papers.
- Wahab, E. A. A., How, J., & Verhoeven, P. (2008). Corporate Governance and Institutional Investors: Evidence from Malaysia. *Asian Academy of Management Journal of Accounting and Finance*, 4(2), 67-90.
- Waithaka, S. M., Ngugi, J. K., Aiyabei, J. K., Itunga, J. K., & Kirago, P. (2012). Effects of dividend policy on share prices: A case of companies in Nairobi Securities Exchange. *Prime Journal of Business Administration and Management (BAM)*, 2(8), 642-648.
- Wall, E. (2014). Top 20 Dividend Paying Stocks. *Morning Stars*. Retrieved 5 April, 2014, from <http://www.morningstar.co.uk/uk/news/111721/top-20-dividend-paying-stocks.aspx>.
- Walter, J. E. (1957). Determination of Technical Solvency. *The Journal of Business*, 30(1), 30-43.
- Weber, J. E., & Monarchi, D. E. (1982). Performance of the Durbin-Watson Test and WLS Estimation When the Disturbance Term Includes Serial Dependence in Addition to First-Order Autocorrelation. *Journal of the American Statistical Association*, 77(377), 117-128.
- Wet, J., & Mpinda, M. (2013). The Impact of Dividend Payments on Shareholders' Wealth: Evidence from The Vector Error Correction Model. *International Business & Economics Research Journal*, 12(11), 1451-1465.
- Williams, A. S., & Shoemith, F. (2010). *Statistics for Business and Economics*. (2nd ed.). United Kingdom. South-Western Cengage Learning.
- Wyss, R. V. (2012). *Measuring and Predicting Liquidity in the Stock Market*. (Doctoral dissertation). Retrieved 1 July, 2014, from [http://www1.unisg.ch/www/edis.nsf/SysLkpByIdentifier/2899/\\$FILE/dis2899.pdf](http://www1.unisg.ch/www/edis.nsf/SysLkpByIdentifier/2899/$FILE/dis2899.pdf).

- YanXin, Y., Dagang, K., & Xiao, Z. (2007). Shareholder Wealth Effect of Dividend Policy: Empirical Evidence from the Chinese Securities Market. *Front. Bus. Res. Chins*, 1(3), 437-455.
- Yaffee, R. A. (2003). *A Primer for Panel Data Analysis*. Retrieved 10 June, 2014, from http://localgov.fsu.edu/readings_papers/Research%20Methods/Yafee_Promer_for_Panel_Data_Analysis.pdf.
- Yahaya, M. H., & Mahmood, W. M. W. (2011). Creating Wealth for Shareholders: Evaluating the Performance of the Malaysia Property Companies. *International Review of Business Research Papers*, 7(2), 269 – 281.
- Yahoo Finance. (2014). *Malayan Banking Berhad historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=1155.KL&a=00&b=1&c=2013&d=11&e=31&f=2013&g=d&z=66&y=132>.
- Yahoo Finance. (2014). *Maxis Berhad historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=6012.KL&a=00&b=1&c=2013&d=11&e=31&f=2013&g=d>.
- Yahoo Finance. (2014). *British American Tobacco historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=4162.KL&a=00&b=1&c=2013&d=11&e=31&f=2013&g=d>.
- Yahoo Finance. (2014). *CIMB historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=1023.KL&a=00&b=1&c=2013&d=11&e=31&f=2013&g=d&z=66&y=132>.
- Yahoo Finance. (2014). *IOI historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=1961.KL&a=00&b=3&c=2000&d=11&e=31&f=2013&g=d&z=66&y=198>.
- Yahoo Finance. (2014). *Axiata Berhad historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=6888@OM.KL&a=00&b=3&c=2000&d=11&e=31&f=2013&g=d&z=66&y=132>.
- Yahoo Finance. (2014). *Sime Darby Berhad historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=4197@OM.KL&a=00&b=3&c=2013&d=11&e=31&f=2013&g=d&z=66&y=132>.
- Yahoo Finance. (2014). *Telekom Berhad historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=4863.KL&a=00&b=3&c=2000&d=11&e=31&f=2013&g=d&z=66&y=66>.

- Yahoo Finance. (2014). *UMW Holdings historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=4588.KL&a=00&b=31&c=2013&d=11&e=31&f=2013&g=d&z=66&y=66>.
- Yahoo Finance. (2014). *Digi Berhad historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=6947.KL&a=11&b=31&c=2007&d=11&e=31&f=2013&g=d&z=66&y=66>.
- Yahoo Finance. (2014). *Hup Seng Industries historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=5024.KL&a=10&b=3&c=2000&d=11&e=31&f=2013&g=d&z=66&y=66>.
- Yahoo Finance. (2014). *United Malacca historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=2593.KL&a=11&b=31&c=2007&d=11&e=31&f=2013&g=d&z=66&y=66>.
- Yahoo Finance. (2014). *Negeri Sembilan Oil Palm historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=2038.KL&a=00&b=3&c=2000&d=11&e=31&f=2013&g=d>.
- Yahoo Finance. (2014). *Riverview Rubber Estate historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=2542.KL&a=00&b=3&c=2000&d=11&e=31&f=2013&g=d>.
- Yahoo Finance. (2014). *Chin Teck Berhad historical prices*. Retrieved 3 March, 2014, from <https://sg.finance.yahoo.com/q/hp?s=1929.KL&a=00&b=3&c=2000&d=11&e=31&f=2013&g=d>.
- Yahoo Finance. (2014). *Kuala Lumpur Kepong historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=2445.KL&a=00&b=3&c=2000&d=11&e=31&f=2013&g=d&z=66&y=66>.
- Yahoo Finance. (2014). *Nestle Malaysia historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=4707.KL&a=00&b=3&c=2000&d=11&e=31&f=2013&g=d&z=66&y=66>.
- Yahoo Finance. (2014). *Dutch Lady Milk Industries historical prices*. Retrieved 3 March, 2014, from <http://finance.yahoo.com/q/hp?s=3026.KL&a=00&b=3&c=2000&d=11&e=31&f=2013&g=d>.
- Yao, T., Yu, T., Zhang, T., & Chen, S. (2010). *Asset growth and stock returns: Evidence from Asian financial markets*. Working Papers Series.

- Yook, K. C. (2003). Larger Return to Cash Acquisitions: Signaling Effect or Leverage Effect?. *The Journal of Business*, 76(3), 477-498.
- Yap, J. (2012). *Malaysia among the highest in dividend*. Retrieved 6 May, 2014, from BORNEO POST online: <http://www.theborneopost.com/2012/06/27/malaysia-among-the-highest-in-dividend-payouts/>.
- York, R. (2012). Residualization is not the answer: Rethinking how to address multicollinearity. Larger Return to Cash Acquisitions: Signaling Effect or Leverage Effect?. *Social Science Research*, 41(6), 1379-1386.
- Zafar, S. M. T., Chaubey, D. S., & Khalid, S. M. (2012). A Study on Dividend Policy and its Impact on the Shareholders Wealth in Selected Banking Companies in India. *International Journal of Financial Management*, 2(3), 79-94.
- Zakaria Z., Muhammad J. & Zulkifli, A. H. (2012). The Impact Of Dividend Policy On The Share Price Volatility: Malaysian Construction and Material Companies. *International Journal of Economics and Management*, 2(5), 01-8.
- Zameer, H., Rasool, S., Iqbal, S., & Arshad, U. (2013). Determinants of Dividend Policy: A Case of Banking Sector in Pakistan. *Middle-East Journal of Scientific Research*, 18(3), 477-498.
- Zeller, T. L., & Stanko, B. B. (1994). Operating Cash Flow Ratios Measure a Retail Firm's "Ability to Pay". *Journal of Applied Business Research*, 10(4), 51-59.

Appendices I: List of 59 Malaysia's Food Producer Sector

1. AJINOMOTO
2. APOLLO FOOD HOLDINGS
3. ASTRAL ASIA
4. BLD PLANTATION
5. CCK CONSOLIDATED HDG
6. CEPATWAWASAN GROUP
7. CHIN TECK PLANTATIONS
8. COCOALAND HOLDINGS
9. DUTCH LADY MILK
10. FAR EAST HOLDINGS
11. GENTING PLANTATIONS
12. GOLDEN LAND
13. GOPENG
14. GUAN CHONG
15. HAP SENG PLTNSHDG
16. HARN LEN
17. HUAT LAI RESOURCES
18. HUP SENG INDUSTRIES
19. IJM PLANTATIONS
20. IOI
21. KAWAN FOOD
22. KECK SENG (MALAYSIA)
23. KHEE SAN
24. KIM LOONG RESOURCES
25. KLUANG RUBBER
26. KRETAM HOLDINGS
27. KUALA LUMPUR KEPONG
28. KWANTAS

29. LAY HONG
30. LONDON BISCUITS
31. LTKM
32. MALAYAN FLOUR MILLS
33. MHC PLANTATIONS
34. NEGRI SEMBILAN OIL PALMS
35. NESTLE (MALAYSIA)
36. NPC RESOURCES
37. OCB
38. ORIENTAL FOOD INDSHDG
39. PADIBERAS NASIONAL
40. PPB GROUP
41. PREMIUM NALFIN
42. PW CONSOLIDATED
43. QL RESOURCES
44. REX INDUSTRY
45. RIMBUNAN SAWIT
46. RIVERVIEW RUBBER ESTS
47. SARAWAK OIL PALMS
48. SARAWAK PLANTATION
49. SAUDEE GROUP
50. SUNGEI BAGAN RUBBER
51. TDM
52. TEO SENG CAPITAL
53. TH PLANTATIONS
54. THREE-A RES
55. TSH RESOURCES
56. UNITED MALACCA
57. UNITED PLANTATIONS
58. XIAN LENG HDG
59. YEE LEE