

THE DETERMINANTS OF DIVIDEND POLICY OF PUBLIC LISTED COMPANIES IN MALAYSIA

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Abstract

This study was conducted to identify the determinants of dividend policy of public listed companies in Malaysia. The first objective of this study is to identify the relationship between earnings, cash flow, debt, investment opportunity, firm size, growth and dividend policy. The second objective is to identify the factors influencing dividend policy of public listed companies in Malaysia. The data were collected from annual report of 26 public listed companies in Bursa Malaysia starting from 2005 until 2015. The dependent variable is the dividend per share which represents dividend policy. The independent variables were earnings, cash flow, debt, investment opportunity, firm size and growth. Using panel data analysis, the finding shows that earnings, cash flow, firm size, investment opportunity and growth have positive relationship while debt has negative relationship with dividend policy. The result revealed that only earnings and cash flow have the significant effect on the dividend policy, while firm size, investment opportunity, growth and debt were found to have insignificant effect towards dividend policy of public listed companies in Malaysia.

Keywords: dividend policy, cash flow, earnings, debt, investment opportunity, firm size, growth

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Introduction

Dividend policy refers to the dividend decision that manager of a firm would decide to pay to the investors or shareholders which is commonly known as dividend per share. The continuous payment of dividend is important for the investors to ensure they have a longer holding period for shares. This implies that the decision to continuously pay the dividend is directly associated with dividend policy. Paying out dividend to shareholder is very crucial to maintain a firm's good review. The decision of paying the dividend will give an impact on the firm's earnings. Generally, the dividend will be paid from a part of earning after taking retained earning into account. Paying out the dividend shows the ability of the firm in handling the equity and debt. This study will extend the evidence from previous literatures which have come out with empirical results on the determinants of dividend policy. The dependent variable of this study is the dividend policy while the independent variables are earnings, cash flow, debt, investment opportunities, firm size and growth. The dividend per share is used as a proxy of dividend policy. The dividend is paid by the firm to the shareholder as a return to the shareholder for their investment on the firm. The earnings are the company's profit that is after tax profit where the dividend is paid from a part of earnings. Cash flow was referred as the amount of money that flows into and out of the company from revenue and expenses. Debt which is also known as leverage is basically defined as the amount of money borrowed from one party from another. When a company is making investments by selling bonds and shares, the company is owing the investors and the amount they get from the investors are part of the debt. Investment opportunity can be explained as the chances for the company to have a greater gain in the future as the company is willing to put some amount of money today. The return from investment will affect the dividend decision. Firm size is determined by calculating the total assets of the company. A larger firm size indicates huge assets values. Same as other variables, firm size may also affect the dividend policy of a company. Lastly, the growth of company is referring to the sales growth made by the company year by year.

In particular, this study aims to investigate the relationship between earnings, cash flow, debt, investment opportunity, firm size, growth and dividend policy and also to study the determinants of dividend policy of public listed companies in Malaysia. The samples of the study are selected based on 26 public listed companies in Bursa Malaysia Securities Berhad which have continuous dividend payment made to the shareholders starting from 2005 until 2015.

Literature Review

Dividend acts as a medium of payment to the shareholders as part of their contribution for investment activities in the companies. Dividends may be in the form of cash or stock. Some companies are paying lesser dividends to their shareholders due to future business expansion plan. Some companies afford to pay higher dividend which reflect the stability of earnings and profitability.

i) Earnings

Generally, earnings have significant results on the dividend policy where the high dividend payment to the shareholders come from high earnings (Ahmed and Javid, 2009; Yusniliyana and Suhaiza, 2014; Kowalewski, Stetsyuk and Talavera, 2007; Al-Malkawi, 2007; and Juma'h and Pacheco, 2008). However, Anil and Kapoor (2005) found that the earnings have negative relationship with the dividend payment. Similar result was also found in a few

studies conducted by Gill et al. (2010), Appannan and Sim (2011) which showed that earnings of the company have insignificant effect on dividend policy.

ii) **Cash Flow**

Cash flow refers to the operating funds that have been allocated to each share. Generally, higher cash flow will result in higher dividend. Capozza and Seguin (1998) found that the cash flow and dividend payment have parallel movements; that is, when the cash flow is having an upward movement, the same situation happens to dividend payment. Juma'h and Pacheco (2008), Al-Malkawi (2007), Bradley et.al (1998), and Charitou (1999) discover that cash flow have positive relationship with dividend payment. In addition, some other studies found that there is a negative relationship and insignificant influence of cash flow on the dividend policy. The higher the cash flow will lead to the lower dividend paid to the shareholders (Rashid et al., 2014, and Gill et al., 2010).

iii) **Debt**

According to M. Alden (2010), a company that has a lot of debt is viewed as unattractive investment by the shareholders. However, some companies are using debt for their advantage. For instance, Coca Cola and Johnson are companies that have been around for ages and could have paid off any debt decades ago. However, they still keep modest amount of debt on their balance sheets anyway, because they know they can use that money to get better rates of return. According to Yusniliyana and Suhaiza (2014), firms with high debt need more cash to settle debt obligations, thus leading them to reduce the dividend payment to shareholders. Firms with debt financing will need more cash to settle the debt where it will affect the dividend paid to the shareholders. Besides that, Al-Malkawi (2007), found that there is a significant negative result of debt financing on dividend policy and concluded that higher level of debt will lead to lower payment of dividend which has proven the inverse relationship between debt and dividend. This result is supported by Faccio, Lang, and Young (2001); Foroghi, Karimi, and Momeni (2011); Kaźmierska-Jóźwiak (2015); Tahir and Mushtaq (2016) and Kinfé (2011).

iv) **Investment Opportunities**

Firms with higher investment opportunities will pay higher dividends to their shareholders; as a result investment opportunity has a positive significant effect on dividend policy. Foroghi et al. (2011) and Al-Malkawi (2007) discovered that investment opportunities have positive significant effects on dividend payment. However, in contrast, other studies by Tahir and Mushtaq (2016), Ahmed and Javid (2009), Al-Kuwari (2010) revealed that there is an insignificant effect between investment opportunity and dividend payment.

v) **Firm Size**

In the previous studies proved that firm size has a positive relationship with dividend payment. Al-Kuwari (2010) found a positive effect of firm size on dividend payment. Al-Malkawi (2007); Faccio et al., (2001); Foroghi et al., (2011); Kaźmierska-Jóźwiak (2015), Arumba (2014), Kinfé (2011), and Tahir and Mushtaq (2016) also concluded the same result. In contrast, other studies by Rashid et al. (2014) discovered insignificant negative relationship between firm size and dividend payment.

vi) **Growth**

Firms with lower sales growth will have higher dividend payment to the shareholders as the companies do not have financial opportunities. In short, lower growth will increase the dividend payment. Ahmed and Javid (2009), Al- Kuwari (2010) and Jensen (1986) in their

study found that firms with larger investment opportunities where they wanted to grow more will provide fewer dividends to the shareholders as they will use the funds to support the investment for company's growth. However, Al-Malkawi (2007) reported that the growth of the firm has a positive relationship and significant effect on the dividend policy of the firm. It clarifies that, the larger financial opportunities will lead to the bigger growth of the firm and thus it will affect the dividend policy to increase. This result was consistent with Foroghi et al. (2011) and Yusniliyana and Suhaiza (2014).

Materials and Methods

i) Data collection and samples

This study uses panel data in which the data is obtained from published annual report of public listed companies in Bursa Malaysia Securities Bhd. As a sample of the study, 26 public listed companies which continuously paid dividend were selected for further analysis. The study period is 11 years starting from 2005 to 2015. The dependent variable is dividend policy while the independent variables are earnings, cash flow, debt, firm size, investment opportunity, and growth. Table 1 shows the measurement of the variables of the study.

Table 1: Measurement of the variables

| Variables | Represent by | Proxy variables |
|-------------------------------|---------------------|----------------------------------|
| Dividend | D | Dividend per share |
| Earnings | E | Earnings per share |
| Cash flows | CF | Cash flow per share (operations) |
| Debt | DEBT | Total liabilities/total assets |
| Size | SIZE | Log of total assets |
| Investment opportunity | INV | Retained earnings/total assets |
| Growth | GR | Sales growth |

ii) Descriptive statistical analysis

Descriptive statistical analysis is used to describe the mean, median and standard deviation of the study. Correlation and Ordinary Least Square (OLS) analysis were performed to achieve the objectives of the study. Pooled, Fixed, and Random effect models are used in order to get the best significant result. Diagnostics testing was also done prior to the correlation and Ordinary Least Square (OLS) analysis.

iii) Correlation Analysis

To achieve the first objective of the study, correlation analysis is applied by using Eviews 9.0. The following hypotheses are developed based on the research objectives.

H₁: There is a positive relationship between dividend per share and earnings of the firm.

H₂: There is a positive relationship between dividend per share and cash flow of the firm.

H₃: There is a negative relationship between dividend per share and debt of the firm.

H₄: There is a negative relationship between dividend per share and investment opportunities of the firm.

H₅: There is a positive relationship between dividend per share and size of the firm.

H₆: There is a negative relationship between dividend per share and growth.

iv) **Ordinary Least Square (OLS)**

Ordinary Least Square (OLS) is applied to attain the second objective of the study. Pooled, Fixed, and Random effect models are used in order to get the best significant result. Diagnostics testing was also done prior to the correlation and Ordinary Least Square (OLS) analysis. The basic regression model is as follows:

$$DPS_{it} = \alpha_{it} + \beta_1 E_{it} + \beta_2 CF_{it} + \beta_3 DEBT_{it} + \beta_4 INV_{it} + \beta_5 SIZE_{it} + \beta_6 GR_{it} + \varepsilon_{it}$$

Where,

DPS = dividend per share

E = earnings

CF = cash flow

DEBT = debt

INV = investment opportunity

SIZE = firm size

GR = sales growth

v) **OLS Estimation Method**

Likelihood Ratio, Lagrange Multiplier Test and Hausman Test were used to choose the appropriate model. To achieve the second objective that is to identify the factors influencing the dividend policy, the following hypothesis is developed.

H₇: At least one of the factors which are earnings, cash flow, debt, investment opportunities, growth or firm size will influence the dividend per share.

Results

i) **Descriptive Statistic**

Table 2: Descriptive Statistic of Dividend Policy for Each Year during the Period 2005-2015

| Year | Mean | Median | Standard Deviation |
|------|--------|--------|--------------------|
| 2005 | 0.1899 | 0.0613 | 0.2965 |
| 2006 | 0.2009 | 0.0800 | 0.3089 |
| 2007 | 0.2389 | 0.0550 | 0.4779 |
| 2008 | 0.2592 | 0.0500 | 0.4236 |
| 2009 | 0.2215 | 0.0805 | 0.3892 |
| 2010 | 0.2368 | 0.0883 | 0.3820 |
| 2011 | 0.2478 | 0.0600 | 0.3775 |
| 2012 | 0.2055 | 0.0900 | 0.2723 |
| 2013 | 0.2314 | 0.1250 | 0.3751 |
| 2014 | 0.1775 | 0.0950 | 0.2007 |
| 2015 | 0.1822 | 0.0575 | 0.2955 |

Table 2 illustrates the descriptive statistics of dividend policy for each year from 2005 until 2015. The result shows that, the lowest mean is RM0.1775 in 2014 and the highest mean is

RM0.2592 in 2008. The lowest and the highest median are RM0.0500 in 2008 and RM 0.1250 in 2013 respectively. Besides, the standard deviation varies between RM 0.2007 and RM 0.4779. The lowest standard deviation is RM 0.2007 in 2014 and the highest standard deviation is RM 0.4779 in 2007. It shows that there is large dispersion between these two years. Furthermore, higher value of standard deviation showed higher volatility where the dispersion is large around the mean and it is not a good sign and vice versa.

ii) Correlation Analysis

Table 3 Correlation matrix for overall sample

| | D | E | CF | DEBT | INV | SIZE | GR |
|------|---------|--------|--------|---------|---------|--------|--------|
| D | 1.0000 | | | | | | |
| E | 0.7411 | 1.0000 | | | | | |
| CF | 0.3897 | 0.4648 | 1.0000 | | | | |
| DEBT | -0.1294 | 0.0049 | 0.3480 | 1.0000 | | | |
| INV | 0.4372 | 0.3582 | 0.3491 | -0.4832 | 1.0000 | | |
| SIZE | 0.5166 | 0.5136 | 0.3572 | 0.3365 | -0.0019 | 1.0000 | |
| GR | 0.0642 | 0.0692 | 0.1419 | 0.0047 | -0.0327 | 0.1058 | 1.0000 |

Table 3 is presented in order to determine the multi-collinerity problem and relationship between earnings, cash flow, debt, investment opportunity, growth, firm size and dividend policy. Based on the result, the values of correlation matrix among independent variables are less than $r=0.80$, thus it can be concluded that there is no problem of multi-collinearity. The result from the above table is also used to achieve the research objective which is the relationship between earnings, cash flow, debt, investment opportunity, growth, firm size and dividend. The hypotheses of the study are as below:

Earnings

H₁: There is a positive relationship between earnings of the firm and dividend per share.

The result shows that earning per share has strong positive correlation with dividend per share as the correlation value is 0.7411. Therefore, it can be concluded that H₁ is supported.

Cash Flow

H₂: There is a positive relationship between cash flow of the firm and dividend per share.

There is positive correlation between cash flow per share with dividend per share as the correlation value is 0.3897. The more cash flow generated from operation activities, more money are used for the payment of tax, thus will affect the payment of dividend for their shareholders. Therefore, it can be concluded that H₂ is accepted.

Debt

H₃: There is a negative relationship between debt of the firm and dividend per share.

It shows that there is a weak negative correlation between debt and dividend per share has occurred with a value of -0.1294. More debt or liabilities will lead to decreasing in profit because of the cost of borrowing, thus it will affect the payment of dividend to their shareholders. Therefore, it can be concluded that H₃ is accepted

Investment Opportunity

H₄: There is a negative relationship between dividend per share and investment opportunities of the firm.

The result above demonstrated that dividend per share and investment opportunities of the firm have positive relationship at 0.4372. Therefore, it can be concluded that H₄ is rejected

Firm Size

H₅: There is a positive relationship between size of the firm and dividend per share.

Regarding the results above, dividend per share and size of the firm has a positive relationship at 0.5166. Therefore, this study accepts H₅.

Growth

H₆: There is a negative relationship between growth and dividend per share.

Regarding the results above, there is a positive relationship between dividend per share and growth of the firms at 0.0642. Therefore, it can be concluded that H₆ is not supported and this study rejects H₆.

Ordinary Least Square (OLS)

The overall results of Ordinary Least Square are as follows:

Table 4 Ordinary Least Square Regression Result

Panel A: Pool Effects Model of the panel regression. Dependent Variable: Dividend per share

| Variable | Coefficient | Std. Error | t-Statistic | P> t | Level of significance |
|----------|-------------|------------|-------------|--------|-----------------------|
| E | 0.543726 | 0.051048 | 10.65136 | 0.0000 | *** |
| CF | 0.032633 | 0.029178 | 1.118401 | 0.2644 | |
| DEBT | -0.155739 | 0.047526 | -3.276924 | 0.0012 | *** |
| INV | 0.114035 | 0.042320 | 2.694562 | 0.0075 | *** |
| SIZE | 0.200945 | 0.031134 | 6.454169 | 0.0000 | *** |
| GR | -0.000586 | 0.004202 | -0.139530 | 0.8891 | |
| C | -2.508559 | 0.308348 | -8.135484 | 0.0000 | *** |

The estimation model result is specified as below.

$$DPS = -2.508559 + 0.543726E + 0.032633CF - 0.155739DEBT + 0.200945SIZE + 0.114035INV - 0.000586GR$$

From Table 4 in Panel A, it shows that earnings, debt, investment opportunity and firm size have significant effect towards the dividend policy in the company where it is significant at 1% as the p-value is less than alpha, α (0.05). The cash flow and growth has insignificant integration with the dividend policy. From this Pool Effect regression, it can be concluded that earnings, debt, investment opportunity and firm size have strong influence on dividend policy decision as they have significant result.

Panel B: Fixed Effects Model of the panel regression. Dependent Variable: Dividend per share

| Variable | Coefficient | Std. Error | t-Statistic | P> t | Level of significance |
|----------|-------------|------------|-------------|--------|-----------------------|
| E | 0.243012 | 0.034993 | 6.944638 | 0.0000 | *** |
| CF | 0.055652 | 0.025431 | 2.188394 | 0.0296 | ** |
| DEBT | -0.017740 | 0.036265 | -0.489163 | 0.6252 | |
| INV | 0.035691 | 0.033533 | 1.064360 | 0.2882 | |
| SIZE | 0.031289 | 0.034766 | 0.899991 | 0.3690 | |
| GR | 0.000255 | 0.002853 | 0.089475 | 0.9288 | |
| C | -1.122673 | 0.305628 | -3.673327 | 0.0003 | *** |

The estimation model result is specified as below.

$$DPS = -1.122673 + 0.243012E + 0.055652CF - 0.017740DEBT + 0.031289SIZE + 0.035691INV + 0.000255GR$$

Results from the Fixed Effect in Panel B shows that only earnings and cash flow have significant effect at 1% and 5% respectively as the P-values are less than alpha, α (0.05). Thus, it can be said that earnings and cash flow have significant effect towards dividend policy. In contrast, other variables which are debt, investment opportunity, firm size and sales growth have insignificant impact toward dividend policy which mean that these variables do not affect the decision of dividend policy in public listed companies in Malaysia. Overall, only earnings and cash flow affect the dividend policy decision.

Panel C: Random Effects Model of the panel regression. Dependent Variable: Dividend per share

| Variable | Coefficient | Std. Error | t-Statistic | P> t | Level of significance |
|----------|-------------|------------|-------------|--------|-----------------------|
| E | 0.277703 | 0.034256 | 8.106758 | 0.0000 | *** |
| CF | 0.058718 | 0.024421 | 2.404429 | 0.0169 | ** |
| DEBT | -0.028482 | 0.035329 | -0.806209 | 0.4208 | |
| INV | 0.051482 | 0.032620 | 1.578226 | 0.1157 | |
| SIZE | 0.074493 | 0.031604 | 2.357062 | 0.0191 | ** |
| GR | 9.15E-05 | 0.002811 | 0.032550 | 0.9741 | |
| C | -1.475878 | 0.289494 | -5.098124 | 0.0000 | *** |

The results which are significant at 10% significance level are marked *, at 5% significance level marked **, and at 1% significance marked ***.

The estimation model result is specified as below.

$$DPS = -1.475878 + 0.277703E + 0.058718CF - 0.028482DEBT + 0.074493SIZE + 0.051482INV + 9.15E-05GR$$

Panel C shows the Random Effect results test. It was found that that three variables which are earnings, cash flow and firm size have significant integration towards dividend policy at 1% as the P-value is less than 0.01 and less than alpha, α (0.05). While for other variables which are debt, investment opportunity and sales growth have insignificant effect towards dividend policy. In this case, it can be summed up that the earnings, cash flow and investment opportunity play the main role to influence the dividend policy made by a firm.

Table 5 Summary of OLS Estimation Method

| Test | P> t | Best Model |
|---------------------|-----------|---------------------|
| Likelihood Ratio | 0.0000*** | Fixed Effect Model |
| Lagrange Multiplier | 0.0000*** | Random Effect Model |
| Hausman Test | 0.0002*** | Fixed Effect Model |

The results significant at 10% significance level are marked *, at 5% significance level marked **, and at 1% significance level marked ***

From Table 5 above, it was found that the Likelihood Ratio and Hausman Test demonstrate similar results. As such, it can be concluded that Fixed Effect model is an appropriate model for this study.

Table 6 Fixed Effects Model of the panel regression. Dependent Variable: Dividend per share

| Variable | Coefficient | Std. Error | t-Statistic | Prob. | Level of significance |
|-------------------------|-------------|------------|-------------|--------|-----------------------|
| E | 0.243012 | 0.034993 | 6.944638 | 0.0000 | *** |
| CF | 0.055652 | 0.025431 | 2.188394 | 0.0296 | ** |
| DEBT | -0.017740 | 0.036265 | -0.489163 | 0.6252 | |
| INV | 0.035691 | 0.033533 | 1.064360 | 0.2882 | |
| SIZE | 0.031289 | 0.034766 | 0.899991 | 0.3690 | |
| GR | 0.000255 | 0.002853 | 0.089475 | 0.9288 | |
| C | -1.122673 | 0.305628 | -3.673327 | 0.0003 | *** |
| No. of obs | | | 285 | | |
| F-stat | | | 85.10085 | | |
| Prob>F | | | 0.0000 | | |
| R ² | | | 0.912491 | | |
| Adjusted R ² | | | 0.901768 | | |

The results significant at 10% significance level are marked *, at 5% significance level marked **, and at 1% significance level marked ***.

Table 6 shows the regression analysis result based on Fixed Effect Model in order to identify the factors influencing the dividend policy.

R² value is 0.912491 which indicates that 91.25% variations of dividend per share (proxy for dividend policy) can be explained by the variations in independent variables which are earnings, cash flow, debt, investment opportunity, firm size and sales growth while the remaining of 8.75% were explained by other factors that are not included in this study.

F-statistic describes the overall fitness of the model. The test statistics is F (85.10) with p-value (0.0000) which is less than alpha, α (0.05), supports the claimed hypothesis which is at least one of the factors which are earnings, cash flow, debt, investment opportunities, growth or firm size will influence dividend per share.

T-test result shows that there are two variables that have significant p-value less than alpha, α (0.05) which are earnings ($p\text{-value}=0.0000$) and cash flow ($p\text{-value}=0.0296$). It can conclude that earnings and cash flow have significant effect on dividend policy in the public listed companies in Malaysia and thus, H₇ is accepted.

This can clarify that even though the company is said to have higher or lower debt, firm size, investment opportunity and growth, it would not be able to determine the dividend policy as the dividend policy is mostly depending on the earnings and cash flow of the company. As such, if the companies have greater earnings and cash flow even though the companies have higher debt, they still manage to pay high dividend to their shareholders. When earnings increase by RM1, the dividend per share will be increase by RM0.2430, while an increase RM1 in cash flow will increase the dividend per share by RM0.0557. Thus, the following equation model has been generated for this study.

Research Model:

$$\text{DPS} = -1.122673 + 0.243012E + 0.055652CF - 0.017740\text{DEBT} + 0.031289\text{SIZE} + 0.035691\text{INV} + 0.000255\text{GR}$$

Discussion

The aim of this study is to identify the relationship between dividend policy and earnings per share, cash flow, debt, investment opportunity, firm size and sales growth and to identify the factors influencing dividend policy of public listed companies in Malaysia.

As expected, the coefficient of correlation shows that earnings, cash flow and firm size have positive relationships, while debt has a negative relationship with dividend policy. The result is consistent with the hypotheses made in the earlier study.

Basically, the earnings, cash flow and firm size have positive relationships with dividend policy as the higher the earnings, cash flow and firm size literally will increase the amount for dividend because these factors are contributing to the decision of dividend policy. Normally, when firms have larger and stable earnings, the dividend paid to the shareholder will be higher. This result was supported by Ahmed and Javid (2009); Kowalewski et al. (2007); Al-Malkawi (2007) and Juma'h and Pacheco (2008). Cash flow also has a positive relationship with dividend policy. It is understood that when there is higher operating cash flows in the company, there will be higher dividend payout as these two variables move in the same direction. This result came out similar with research conducted by Ahmed and Javid (2009); Bradley et al. (1998); Charitou (1999); Juma'h and Pacheco (2008) and Al-Malkawi (2007). Firm size also resulted in a positive relationship with dividend policy. It is due to the larger the firm size, the higher the dividend payments as it indicates that the firms have good earnings and stable financial position. This result is proven by Yusniliyana and Suhaiza (2014); Al-Malkawi (2007); Faccio et al. (2011); Foroghi et al. (2011); Kaźmierska-Jóźwiak (2015) and Tahir and Mushtaq (2016). The negative relationship between debt and dividend policy confirms the findings reported by several prior studies such as Yusniliyana and Suhaiza (2014), Al-Malkawi (2007); Faccio et al. (2001); Foroghi et al. (2011); Kaźmierska-Jóźwiak (2015); Tahir and Mushtaq (2016) and Kinfé (2011). In general when companies have higher debt, they are not being able to pay high dividend to the shareholders. The reason is because the companies need to fulfill their obligations to settle the debt first in order to maintain the company's financial stability. Logically, if the companies have higher debt, they will pay lesser dividends or may not pay dividend to their shareholders at all. The analysis reports that the investment opportunity and growth reveal positive relationships with dividend policy. This result contradicts with the hypotheses made in the earlier study. The positive relationship between investment opportunity and dividend policy can be simplified that when firms have investment opportunity they will tend to decide a better dividend policy

as they expect good return from the investment. Moreover, firms seize the investment opportunity with an intention to have high return and as a result, they will be able to give part of the return to the shareholders as the dividend. This result is consistent with the previous findings by Yusniliyana and Suhaiza (2014); Al-Malkawi (2007) and Foroghi et al. (2011). Growth of the company shows a positive relationship with dividend policy. When a firm is having a sales growth, it shows the firm has a good financial position and expansion of the business, as a result, the firms are able to pay higher dividend to their shareholders. This finding was supported by Al-Malkawi (2007); Foroghi et al. (2011) and Yusniliyana and Suhaiza (2014).

From Fixed Effect Model of the panel regression, it was found that only two variables which are earning per share and cash flow have significant affect toward dividend policy. Therefore, it can be concluded there are two main factors determining dividend policy of public listed companies in Malaysia which are earnings per share and cash flow. This result was supported by Brunzell et al. (2014) and Yusniliyana and Suhaiza (2014), where dividend and earnings tend to move simultaneously as the larger the earnings, the dividend per share will increase accordingly. Earnings of the company are very important in determining the dividend decision to be paid to the shareholders. Thus, it is very crucial to have good earnings in order to maintain the dividend policy of a company. As mentioned above, cash flow also has a significant effect towards dividend policy. This result is consistent with Ahmed and Javid (2009), Bradley et al. (1998), Charitou (1999); Juma'h and Pacheco (2008). They found that the decision of dividend policy was impacted by cash flow. The good flow of fund is important for the company to run their business operation and able to maintain the dividend policy. Lastly, the remaining variables which are debt, firm size, investment opportunity and growth have insignificant results where it indicates that the variables do not affect the dividend policy.

REFERENCES

- Adams, R. (2017, May 23). Normality Testing - Skewness and Kurtosis. Retrieved from <https://help.gooddata.com/display/doc/Normality+Testing+-+Skewness+and+Kurtosis>
- Ahmed, H., & Javid, A. Y. (2007). The Determinants of Dividend Policy in Pakistan. *Economic Policy*, (2116).
- Al-Kuwari, D. (2010). To Pay or Not to Pay : Using Emerging Panel Data to Identify Factors Influencing Corporate Dividend Payout Decisions. *International Research Journal of Finance and Economics*, 42(42), 19–36.
- Al-Malkawi, H.-A. N. (2007). Determinants of Corporate Dividend Policy in Jordan: An Application of the Tobit Model. *Journal of Economic and Administrative Sciences*, 23(2), 44–70.
- Anil, K., & Kapoor, S. (2008). Determinants of Dividend Payout Ratios-A Study of Indian Information Technology Sector, 15(15).
- Appannan, S., & Sim, L. W. (2011). A Study on Leading Determinants of Dividend Policy in Malaysia Listed Companies for Food Industry under Consumer Product Sector, 945–976.
- Arumba, O. G. (2012). Determinants of Dividend Payout for Companies Listed At the Nairobi Securities Exchange (October).
- Best countries for Business. (2016, Dec). Forbes. Retrieved from <https://www.forbes.com/places/malaysia/>

- Bradley, M., Capozza, D. R., & Seguin, P. J. (1998). Dividend Policy and Cash Flow Uncertainty.
- Brown, S. (2016, May 22) Measures of Shape: Skewness and Kurtosis. Retrieved from <https://brownmath.com/stat/shape.htm>
- Brunzell, T., Liljeblom, E., Loflund, A., & Vaihekoski, M. (2014). Dividend Policy in Nordic Listed Firms. *Global Finance Journal*, 25(2), 124–135.
- Charitou, A. (1999). The Impact of Losses and Cash Flows on Dividends: Empirical Evidence for Japan.
- Faccio, M., Lang, L. H. P., & Young, L. (2001). Dividends and Expropriation. *American Economic Review*, 91(1), 54–78.
- Foroghi, D., Karimi, F., & Momeni, Z. (2011). The Investigation Relationship of Dividend Behavior and Likelihood of Paying Dividend with Financial Variables in Tehran Stock Exchange. *Interdisciplinary Journal of Contemporary Research in Business*, 3(8), 390–397.
- Gill, A., Biger, N., & Tibrewala, R. (2010). Determinants of Dividend Payout Ratios: Evidence from United States. *The Open Business Journal*, 3, 8–14.
- Irny, S.I. and Rose, A.A. (2005) Designing a Strategic Information Systems Planning Methodology for Malaysian Institutes of Higher Learning (isp-ipta), *Issues in Information System*, 6 (1).
- Issa, A. I. F. (2015). The Determinants of Dividend Policy : Evidence from Malaysian Firms, 6(18), 69–87.
- Juma'h, A. H., & Pacheco, C. J. O. (2008). The Financial Factors Influencing Cash Dividend Policy, 4(2), 23–43.
- Każmierska-Jóźwiak, B. (2015). Determinants of Dividend Policy: Evidence from Polish Listed Companies. *Procedia Economics and Finance*, 23(October 2014), 473–477.
- Kinfe, T. (2011). Determinants of Dividend Payout : An Empirical Study on Bank Industry in Ethiopia (June).
- Kowalewski, O., Stetsyuk, I., & Talavera, O. (2007). Corporate Governance and Dividend Policy in Poland, (July).
- M. Hafidz, M. (2016, December 9). TNB Revises Dividend Policy to Ensure Adequate Reserves. *The Star*. Retrieved from <http://www.thestar.com.my/business/business-news/2016/12/09/tnb-revises-dividend-policy-to-ensure-adequate-reserves/#BPTjMz6AhFCsfV4i.99>
- Rashid, S., Ayesha, R., Rab, N. L., Hafiza, M. M., & Amber, I. (2014). Determinants of Dividend Payouts in Financial Sector of Pakistan, 4(2), 33–42.
- Tahir, M., & Mushtaq, M. (2017). Determinants of Dividend Payout : Evidence from listed Oil and Gas Companies of Pakistan, 1–11.
- The American Economic Review, Papers and Proceedings of the Ninety-Eighth Annual Meeting of the American Economic Association, 76(2), 323–329.
- Yusniliyana, Y., & Suhaiza, I. (2016). Determinants of Dividend Policy of Public Listed Companies in Malaysia.