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# The Impact of Ownership Structure on Dividend Pay-out: Evidence from Listed Companies in the Property Sector in Malaysia

#### Jasmine Lau Huey Huey

Canditate of Bachelor of Finance (Hons.), Faculty of Economics and Business, Universiti Malaysia Sarawak, Sarawak, Malaysia, jasminelhh828@hotmail.com, <u>ORCID</u>

#### Asri Marsidi 🖂

Dr, Senior Lecturer, Faculty of Economics and Business Universiti Malaysia Sarawak, Sarawak, Malaysia, maasri@unimas.my, <u>ORCID</u>

## Abstract

This study investigates the relationship between the ownership structure and the dividend payout for listed firms in the property sector in Malaysia. By examining the correlations between different forms of ownership and the proportions of shareholdings held by a variety of ownership categories, this will help to provide a better picture about how the ownership structure of the companies actually affects the dividend decisions of companies.

46 listed companies from the Malaysian property sector are selected as the sample for this study, between the years 2011 and 2016. This study uses the random effect regression model to express the relationship between the ownership structure and the level of dividend payout for the relevant sample. The dependent variable is the dividend payout amount, and the independent variables include ownership concentration, institutional ownership, managerial ownership, and foreign ownership. Meanwhile, the control variables are firm size and firm leverage. Agency theory, signaling theory, Bird-in-the-Hand theory, and clientele effect theory, are used in this study.

Our results show that ownership concentration and institutional ownership have a positive and significant relationship with dividend payout in Malaysia. By contrast, managerial ownership and foreign ownership revealed an insignificant relationship with the dividend payout. This study may be useful to both academics and professionals in the property and investment segments of developed and developing economies, and concludes with recommendations on potential for future legal and regulatory implications of the findings.

Keywords: ownership structure, dividend pay-out, malaysian properties listed companies

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## Introduction

Dividend policy is one of the most crucial issues in finance [1]. This is due to the fact that dividend payout policy is considered from a long-term perspective and hence has long-term impact on a company [2]. In this regard, [3] argues that the decision to pay dividends is among the most fundamental components of a company's policy. Dividend is principally the amount of money that the firm earns over a fixed period of time and being paid periodically to the shareholders. There are two common ways for firms to pay out cash to their shareholders: one of it is to distribute as a dividend whereas the other is the cash can be used to buy back the outstanding shares [4].

The distribution of dividends has become a topical issue in Malaysia. One of the main reasons could be due to the absence of specific rules and regulations governing the distribution of dividends. In this regard, firms are encouraged to make their own decisions on the dividend payout to their investors or the shareholders. Section 365 of [5] points out that the payment of the dividend should be made from the profits of the firm, but it did not specify whether the distribution of dividends should be from the current profits of the firm or the accumulated profits. This situation results in inconsistency of administration in terms of the dividend payout in Malaysia.

At this juncture, the structure of ownership of a company could be considered as one of the critical factors in examining the firm's distribution of dividend [6]. In this context, different types of ownership structures will lead to different dividend payments. Concentrated ownership, which is defined as where the majority of shares are held by a few shareholders, provides for a good level of control over the company. In this situation, the firm will only increase the dividend payment when there is an increase in the income or the profits of the firm.

Ownership by institutional parties, on the other hand, is oppositely associated with the distribution of the dividend. In this case, the payout will be used less often. The case of managerial ownership often sees a preference to keep the revenue of the company, which can be used for future investments instead of distributing it as the dividend. Foreign ownership correlates with a preference for dividend payments which can be used to lessen free cash flows and also control the behaviour of managers. As such, the payment of the dividend will act as an instrument to discipline the managers.

Considering the importance of ownership structure on dividend payout, no unanimity on the determining factor of dividend policy[6], as well as the lack of studies found looking at emerging markets [7], this study is therefore conducted to examine the relationship between the structure of ownership and the dividend payout in Malaysia.

The paper is organized in 5 sections. The next section presents the literature review and the hypothesis development of the study. This is followed by the research methodology section. Subsequently, the findings and discussions regarding the study are presented. The paper ends with the conclusion of the research.

# Literature Review and Hypothesis Development

Agency theory provides that an agent is someone hired in order to do work that is delegated by a principal [8]. Agency theory is emphasized in terms of settling 'agency problems' in a business, which can be caused by the different directions that principals and agents wish the firm to go in the future. The principal will have different perceptions and goals to the agent, which shareholders wish to use to maximize their wealth. However, the objective of the management team is to maximize or boost the net profit of a firm. As such, a management team will need to set their aim so as to maximize the shareholder's wealth thereby minimizing the agency problem. The situation can also be that an agent's actions prevent the principal from finding out about problems that have occurred, or even preventing their access to relevant informational resources .

The payment of dividends from companies is believed to have the effect of increasing conflicts among the management team and the shareholders, as they have different perspectives on issues of dividend payment. Managers may wish to retain company earnings for the purpose of future company investments, whereas the shareholders may wish to have a dividend payment that would compensate them from taking the high level of risk attached to their own investments in the companies. If a company is not paying dividends to their shareholders, the shareholders may reflexively think that the managers are not effectively managing the company – or even that the managers had used that money for their personal use. Moreover, if dividends are not paid to the shareholders, the excess funds may indeed be used by the managers for their personal use, or they may invest in unprofitable projects, which may lead to losses for the companies in question. Hence, the payment of dividends will help to reduce agency problems among the management team and the shareholders in the companies.

[9] states that the agency problems will be diminished where there is a higher level of managerial ownership in the company. [10] found out that the agency cost of a company was negatively related to the level of managerial shareholdings. [11] stated that with a more concentrated ownership, the agency conflict is open to be reduced and the performance of a company will also be improved. In this regard, [12] notes a positive effect of corporate governance measures on dividend policy.

The signalling theory proposes that there is an information asymmetry between the management team and the company's shareholders. The management team of a company is not willing to share all of the financial information with the shareholders. Hence, by implementing a dividend payment, this will serve to provide information about the performance of the companies to its shareholders [3]. The dividend payout of the company acts as a signal or an instrument to transfer information to the shareholders about the expected performance or the profitability of a company, and the dividend announcement will generally contain information about the future expected performance of the company. Managers will try to convey the information as to whether the future performance of a company is positive or negative, either to the insiders or the public. However, they may be unwilling to provide clear and transparent information to their shareholders and hence the dividend payment can be one of the ways to release information about the future prospects of a company.

Institutional investors tend to prefer the dividend payment as compared to the capital gains of a company. [13] observes that aside from the dividend payment of the companies, institutional ownership is believed to have an impact, and acts as a powerful signalling tool. As such, institutional investors are able to influence companies and can manage firm performance appropriately.

There have also been some theories proposing that the dividend payout of a firm may impact the firm's value. [14] proposed the 'Bird-in-the-Hand' theory, which indicates that a dividend policy can affect the value of a firm. It states that investors prefer dividends to the capital gains of the firms. The dividend actually depends on the demand and the supply of the shares of the firms in trading, whereas capital gains relies more on the performance of a firm – hence the dividend payment is more stable, compared with the earnings of a firm, which are more uncertain.

In this study, the 'Bird-in-the-Hand theory' is used to provide a clear description about the relationship between company ownership structures and dividend payouts in Malaysia. Firms which provide a higher dividend payment to its investors will be more attractive as investors prefer less uncertainty of the investment. This may result in an increase in the demand of a firm's shares and hence will contribute to an increase in the value of the firm. Hence, a better dividend payment to the investors will help to increase the firm's value as well. Shareholders normally prefer a higher dividend payment, as this will be reflected in their compensation regardless of the performance of the company. Shareholders are more likely to choose capital gains for today instead of a future uncertain gain from investment. As such, they tend to prefer a lower risk related to their investment.

[15] developed the 'clientele effect theory', and stated that companies will make their own dividend policy based on the types of investors that such companies wish to attract. There are various types of investors in the market, and different types of investors have different goals for their investors. With different goals, they prefer different types of dividend policies. Clientele groups consist of several types of investors such as institutional investors, individual investors, and foreigner investors. Clientele groups can also be classified by the age of the investors and also their income level. Retired investors prefer the dividends payout of companies which can asssure a regular income to maintain their expenditure, and moreover, they are more likely to be risk averse in general. Institutional investors also prefer the dividend payout option as opposed to the capital gains of the companies. This is because the capital gains of the companies are more uncertain when compared to the dividend payout of the companies.

[15] stated that the dividend decisions of the companies are linked to the clientele effect. Companies will try to change or alter their dividend decisions in order to attract the investors to be invested in the companies. If a company has a high dividend payment, it will attract groups of investors who prefer dividend payments. As such, demand on the company's shares will increase and hence the share price of the company will increase. The higher the dividend payout of the companies, the higher the confidence level of the investors in terms of investing.

Based on the above discussions, the following hypotheses are developed:

H1: There is a positive relationship between ownership concentration and dividend payout in Malaysia.

H2: There is a positive relationship between institutional ownership and dividend payout in Malaysia.

H3: There is a reverse relationship between managerial ownership and dividend payout in Malaysia.

H4: There is a positive relationship between foreign ownership and dividend payout in Malaysia.

## **Research Methodology**

This study is a quantitative study. Companies that have been selected are listed companies from the Malaysian property sector between the years 2011 to 2016. All the selected companies have also been quoted at Bursa Malaysia. The data collected are based on the individual sampled companies and have been assembled according to year.

### **Model Specification**

The present study accesses the relationship between the ownership structure and dividend payout in Malaysia. The estimation model for this study has been illustrated as follows:

$$\begin{split} D_{it} &= \alpha + \beta_1 OWNC_{it} + \beta_2 IOWN_{it} + \beta_3 MOWN_{it} + \\ &= \beta_4 FOWN_{it} + \varepsilon_{it}. \end{split}$$

From the above equation,  $D_{it}$  represents the dividend payout of firm i at the time period, t,  $OWNC_{it}$  represents the ownership concentration for the firm i at the time period, t,  $IOWN_{it}$  represents the institutional ownership of firm i at the time period t,  $MOWN_{it}$  represents managerial ownership for the firm i at the time period t,  $FOWN_{it}$  represents foreign ownership of the firm i at the time period t, and the  $\varepsilon_{it}$  represents the error term that exists in the model.

From the model above,  $\alpha$  is the predicted dividend payout when all the explanatory variables equal zero.  $\beta$  shows the changes in the predicted dividend payout when each unit of the explanatory variables had increased by one unit. The error term in this regression is used to determine the fixed effects or the random effects.  $\beta$  is a good indicator to show the validity of the model in fitting its data to the model parameters and also the confidence interval. The validity of the model can be determined by comparing the observed values of y with the predicted values of y. The changes between these two scores, known as the deviation or the residual of the model, will be a good index to show the validity of the model in predicting each of the data.

## **Data Collection Method**

The secondary data have been used to carry out this study are applied to investigate the relation between the ownership structure and the dividend payout in Malaysia. Secondary data have been extracted from the sources of the annual reports of the selected companies, that is, the audited financial statements and also the annual reports of the companies.

The companies that have been selected are from the property sector between the years 2011 and 2016, and have been quoted at Bursa Malaysia. The data collected are based on the individual sampled companies. There are 46 companies in the property sector in Bursa Malaysia that have been selected as the sample in this study.

#### Variables Measurements

Ownership concentration (OWNC) can be calculated by comparing the number of shares held by the top 5 shareholders with the total number of shares issued. The higher the ownership concentration number, the more concentrated the ownership of the company.

Ownership concentration =

Shares held by top5 shareholders

Total shares issued

Institutional ownership (IOWN) can be measured by the institutional ownership concentration of the company. It can be calculated by comparing the number of shares of the company held by institutional investors with the total number of shares that had been issued by the company.

Institutional ownership concentration =

Shares held by institution

Total shares issued

Managerial ownership (MOWN) defines the amount of shares or the stocks held by the direct shareholders of the company. The higher the managerial ownership concentration of a company, the managerial shareholders will tend to retain more earnings of the company by paying less or reducing the dividend payment of the company.

Managerial ownership concentration =

Shares held by the direct and indirect directors

Total shares issued

Foreign ownership concentration (FOWN) can be measured by comparing the amount of shares held by foreigners to the total number of shares the company has issued. A higher number of shares held by the foreigners indicates a higher foreign ownership concentration of the company. Foreign ownership concentration =

oreign ownersnip concentration

Shares held by foreigners

Total shares issued

Dividend payout (D) is the amount or the proportion of the earnings or income of the firm to pay out as the dividend to its shareholders. The dividend payout ratio can be calculated by dividing the total dividend payment of the firm by the net earnings of the firm attributable to the shareholders.

Dividend payout ratio =

Total dividend payment of the firm

Net Income attributable to the shareholders

## Findings and Discussions

## **Descriptive statistics**

Table 1. Descriptive statistics for the dependent variable, independent variables and control variables

Variables	Mean	Standard Deviation	Minimum Value	Maximum Value
DPO	0.2344828	0.2199674	0	0.9000545
OWNC	0.5501804	0.1909537	0.1387	0.9204
IOWN	0.3113421	0.2174439	0.005	0.957
MOWN	0.0971557	0.1347539	0	0.6721
FOWN	0.0421415	0.0555834	0	0.2989
FS	5.916443	0.5156107	4.751	7.272
FL	0.8775566	0.5643579	0.0317654	2.707531
N		276		
n	46			
Т		6		

The result of the descriptive statistics shows the mean, standard deviation, the minimum value and also the maximum value of each of the variables. This study consists of 46 companies as the sample and together there have 276 observations within the time period of 2011 to 2016. For the dependent variable, which is the dividend payout, it shows an average value of 0.2345. The minimum value for the dividend payout is 0 while the maximum value is 0.900. The standard deviation for the dividend payout is 0.220. The companies that had been selected for the sample are including the companies that are not paying dividends every year for the time period that this study had been carried out so the minimum value for the dividend payout will be zero.

There are four independent variables which include the ownership concentration, institutional ownership, managerial ownership and also the level of foreign ownership. The ownership concentration has a mean value of 0.5502 which shows that the sample of this study has an average number of 0.5502 for the ownership concentration. The ownership concentration has a minimum value of 0.1385 whereas the maximum number is 0.9204. The standard deviation for the ownership concentration is 0.1909.

The institutional ownership has a minimum value of 0.005 and a maximum value of 0.957. The mean for the institutional ownership is 0.3113 and the standard deviation for the institutional ownership is 0.2174. The managerial ownership has an average value of 0.0972 which indicates that the overall sample of this study has an average 0.0972 for managerial ownership in their companies. A low mean value for the managerial ownership has shown that the managerial ownership in Malaysia is not concentrated, or it may be saying that the management team of the companies does not hold the share. The minimum value for the managerial ownership is 0 while the maximum value is 0.6721 and the standard deviation is 0.1348.

Foreign ownership has a mean number of 0.0421 while its minimum value is 0 and the maximum value is 0.2989. The participation of foreign investors in investing in Malaysia is shown to have a very low percentage since the average value of foreign ownership is only 0.0421, and the maximum value for foreign ownership is only 0.2989 As such, it shows a much lower value when compared to other variables in this study. The standard deviation for foreign ownership is 0.0556.

The control variables are the firm size and the firm leverage. The firm size has an average value of 5.916 while the minimum value is 4.571, and the maximum value is 7.272. The standard deviation for the firm size is 0.5156 whereas the standard deviation for the firm leverage is 0.5644. The firm leverage has a mean value of 0.8776. The minimum value for the firm leverage is 0.0318 while the maximum value is 2.7075.

## **Correlation Matrix**

Table 2. Correlation analysis for the variables

	DPO	OWNC	IOWN	MOWN	FOWN	FS	FL
DPO	1.0000						
OWNC	0.1688	1.0000					
IOWN	0.2231	-0.1691	1.0000				
MOWN	0.0016	-0.2195	0.1118	1.0000			
FOWN	0.1457	-0.0172	0.2349	0.2151	1.0000		
FS	0.2589	0.0778	0.1821	-0.0848	0.2682	1.0000	
FL	-0.2551	-0.1869	0.1833	-0.0032	0.0364	0.1747	1.0000

The correlation matrix shows the correlation coefficients of each variable to other variables in the study. The diagonal for the correlation matrix is always equal to one. The correlation of each variable can be determined in either the positive or negative relationship and also either weak or strong correlations with the variables. Variables are said to be strongly correlated to another variable only when the figure in the correlation analysis indicates a value between 50% and 100%. The positive variables which correlated to other variables will have a positive sign in the correlation analysis result whereas a negative correlation will have a negative sign.

Variables which indicate a positive correlation to the dividend payout include ownership concentration, institutional ownership, managerial ownership, foreign ownership and firm size. Among these variables, managerial ownership shows the weakest correlation to the dividend payout, to which the correlation is only 0.16%. The control variable and firm leverage are negatively correlated with the dividend payout with a correlation of -25.51%. The ownership concentration is weakly positively correlated to the dividend payout which only shows 16.88% of correlation. Institutional ownership has a 22.31% value of correlation with the dividend payout value, and foreign ownership also shows a weak positive correlation with the dividend payout with a correlation of 14.57%. The firm size is also one of the control variables, it also shows a weak positive correlation with the dividend payout that equals 25.89% in the correlation analysis. Among the independent variables, the correlation between ownership concentration to institutional ownership shows a negative correlation of -16.91% while the correlation between ownership concentration and managerial ownership is -21.95%. The ownership concentration has a correlation of -1.72% with foreign ownership while the correlation with firm size is 7.78%. The correlation for the ownership concentration to the firm leverage is negative, with -18.69%.

Institutional ownership has a positive correlation with the managerial ownership, foreign ownership, firm size and also firm leverage. Institutional ownership has a correlation of 11.18% with managerial ownership, 23.49% with foreign ownership, 18.21% with firm size and 18.33 for firm leverage. Managerial ownership has a positive correlation of 21.51% with foreign ownership whereas a negative correlation exists between firm size and firm leverage with managerial ownership. The correlation between firm size and firm leverage to the managerial ownership are -8.48% and 0.32% respectively. Foreign ownership has a correlation of 6.82% to firm size and 3.64% to firm leverage. Firm size is positively correlated to firm leverage with 17.47%.

#### **Autocorrelation Test**

 Table 3. Result of autocorrelation

	F-statistic	p-value
Wooldridge Test	1.242	0.2710

The autocorrelation test is used to test whether the residual or the error term of an observation is correlated with the disturbance term of another observation. This will indicate if the mean for the error term in the model will be equal to zero, since the error term of one observation will be covered by another observation. The null hypothesis of the autocorrelation test stated that autocorrelation does not exist in the model, while the alternative hypothesis stated that the autocorrelation problem exists in the model.

The rejection rule for the autocorrelation test will be if the p-value is smaller than the significance level, for example a 5% significance level, and hence the null hypothesis will need to be rejected. On the other hand, if the p-value of the Wool-

### **Random Effect Regression Model**

Table 5. Result of random effect regression model

dridge Test is larger than the significance level, here the conclusion may be that the null hypothesis cannot be rejected.

The probability of the autocorrelation test for this study is 0.2710. The significance level used to compare the p-value is 5%. Since the p-value for the autocorrelation test is larger than a 5% significance level, the null hypothesis cannot be rejected. It can be concluded that there is no autocorrelation problem in the model of this study.

Multicollinearity Test

Table 4. Result of variance inflation factor test

Variable	VIF	1/VIF
OWNC	1.12	0.889722
IOWN	1.14	0.880957
MOWN	1.13	0.886971
FOWN	1.19	0.842971
FS	1.16	0.859361
FL	1.10	0.911957
Mean VIF	1.14	

The multicollinearity problem of a multiple regression can be tested by using the variance inflation factor. Multicollinearity is said to exist in a model when the VIF of the model exceeds 10. The multicollinearity problem exists when there is a high correlation between independent variables which will tend to affect the accuracy of the model.

The ownership concentration, institutional ownership, managerial ownership, foreign ownership, firm size and firm leverage all show a variance inflation factor of smaller than 10. The mean VIF for this study shows a number of 1.14 which shows that the variables have a low correlation and the model exists under ideal conditions. It may be concluded that the multicollinearity problem does not exist in this model since the variance inflation factor does not exceed 10.

DPO	Coefficient	Std. Error	Z	P> z
OWNC	0.1627638*	0.0867006	1.88	0.060*
IOWN	0.2153337***	0.0687005	3.13	0.002***
MOWN	-0.0428293	0.1184986	-0.36	0.718
FOWN	0.1083631	0.2916805	0.37	0.710
FS	0.1114339***	0.0341659	3.26	0.001***
FL	-0.0968898***	0.0255258	-3.80	0.000***

DPO	Coefficient	Std. Error	Z	<b>P</b> >  <b>z</b>
CONSTANT	-0.496 0.2010	7832 )462	-2.47	0.013
R-square		0	.2226	
F-statistics		3	39.88	
p-value		0	.0000	

\*\*\*significant at 1%; \*\*significant at 5%; \*significant at 10%.

The random effects model has been used in this study. From the table above, the ownership concentration shows a positive and significant relationship with the dividend payout in Malaysia for property sector firms. The result is in line with [7] which asserted that concentrated ownerships are significant and positively associated with dividend payouts. Also, the finding is consistent with [16] wherein the authors found that the ownership concentration appears to positively moderate the effect of earnings management on dividend policy. The positive relationship means that when the ownership concentration of a company has increased, this will also tend to increase the dividend payout of the company. The coefficient of the ownership concentration is 0.1627683 which shows that with an increase of 1 unit in the ownership concentration, this will lead to an increase of 0.163 units in the dividend payout of the firms. The standard error for the ownership concentration is 0.0867006.

The probability of the ownership concentration is 0.060 which is less than the significance level of 10%, which shows that the ownership concentration is significant at 10% significance level. The null hypothesis has been rejected since the p-value of the ownership concentration is less than 0.10. The alternative hypothesis H1 is accepted and shows that the ownership concentration has a significant positive relationship with the dividend payout.

The institutional ownership is also said to be positively significant to the dividend payout. The positive relationship with institutional ownership explains that when the institutional ownership increases for a company, this will tend to bring an impact so as to increase the dividend payout of the company. Such a result is in line with [17], which suggested that dividend payout decisions increase with institutional ownership. The standard error for the institutional ownership is 0.0687005. The coefficient for the variable of institutional ownership is 0.2153337 which provides a meaning that with an increase of 1 unit in the institutional ownership, this will also increase the dividend payout of the firms to 0.215 units.

The probability of institutional ownership is 0.002 which is less than the significance level of 1%, so there is enough evidence to reject the null hypothesis and hence accept the alternative hypothesis. The alternative hypothesis H2 is accepted and it may be concluded that the institutional ownership is positively related to the dividend payout with a significant relationship. The level of managerial ownership shows a negative but insignificant relationship to the dividend payout. This finding is in line with [18], where they suggested that the managerial ownership was negatively related to the dividend payout The negative relationship between managerial ownership and the dividend payout shows that when there is an increase in managerial ownership in a company, this will tend to reduce the dividend payout of the company to its shareholders. The standard error for managerial ownership is 0.1184986 and the coefficient for the variable of managerial ownership is negative 0.0428293, which indicates that an increase of 1 unit in institutional ownership will decrease the dividend payout of the companies to 0.0428 units.

The probability of managerial ownership is 0.718, which is larger than the 10% significance level. Hence, there has been enough evidence to not reject the null hypothesis. It can be concluded that there is no significant relationship between managerial ownership and dividend payout.

Foreign ownership is seen to be positively but insignificantly related to the dividend payout. This positive relationship is consistent with [19]. The study showed that foreign ownership had a positive relationship with dividend payout in Nigeria. The positive relationship with institutional ownership explains that when foreign ownership increases for a company, this will tend to bring an impact which increases the dividend payout of the company. The coefficient for the variable of foreign ownership is 0.1083631 which means that with an increase of 1 unit in the foreign ownership this will also increase the dividend payout of the firms to 0.108 units – and that the standard error for the foreign ownership is 0.2916805.

The probability of institutional ownership is 0.710 which is larger than the significance level of 10% so there is enough evidence to not reject the null hypothesis and hence reject the alternative hypothesis. The null hypothesis is accepted and it can be concluded that foreign ownership is insignificant to the dividend payout.

 $R^2$  can measure the variation in the dependent variable, which can be explained by the independent variables. It 22.26% composition of  $R^2$ , which indicates that 22.26% of the dividend payout of a company can be explained by the ownership structure of the firm, which is includes the ownership concentration, institutional ownership, managerial ownership and also foreign ownership. In this study, the relationship between ownership structure and dividend payout is determined through the random effect regression model. The study established the following regression from year 2011 to year 2016 in Malaysian property sector companies.

$$\begin{split} DPO_{i,t} &= -0.4967832 + 0.1627638OWNC_{i,t} + \\ &+ 0.2153337IOWN_{i,t} - 0.0428293MOWN_{i,t} + \\ &+ 0.1083631FOWN_{i,t} + 0.1114339FS_{i,t} - \\ &- 0.4967832FL_{i,t} \end{split}$$

From the regression model above, the intercept for this model is -0.497 which states that the dividend payout will be -0.497 while all the independent variables and control variables are equal to zero. The dividend payout ratio will increase by 0.163 units when there is an increase of one unit in the ownership concentration and the other variables remain constant. This shows that the ownership concentration has a positive relationship to the dividend payout. An increase of one unit in institutional ownership will lead to an increase of 0.215 units in the dividend payout, where other variables remain constant. With an increase of one unit in the managerial ownership, this will reduce the dividend payout by 0.043 units, where other variables are kept constant. The managerial ownership has a negative relationship to the dividend payout, but the effect of managerial ownership on the dividend payout is not that strong. The foreign ownership has a positive relationship to the dividend payout, whereby an increase in one unit for the foreign ownership value will lead to an increase of 0.108 units in the dividend payout, where other variables remain constant. The firm size, which is the control variable, has the positive relationship to the dividend payout whereby an increase of one unit in the firm size will cause an increase of 0.111 units in dividend payout, where other variables remain constant. An increase of one unit in firm leverage will make the dividend payout decrease by 0.497 units, where other variables remain constant.

For the correlation matrix, all the variables have the positive correlation to the dividend payout except for firm leverage, which is negative correlated to the dividend payout. The model has passed the autocorrelation test, therefore it can be said that there is no autocorrelation problem. For the variance inflation factor, the average mean for the model has not exceeded the value of 10 and so therefore it can be concluded that there is no multicollinearity problem in this model.

## Breusch and Pagan Lagrangian Multiplier Test (BPLM)

**Table 6.** Result of Breusch and Pagan LagrangianMultiplier (BPLM) Test

	Chi-Square Statistics	p-value
BPLM Test	30.60	0.0000

The BPLM test is used to test whether the most suitable model for use in the study is either the pooled OLS model or the random effect regression model. The null hypothesis of the BPLM test stated that the suitable model will be the pooled OLS model, while the alternative hypothesis stated that the random effect regression model is the appropriate model to be used in the study.

The rejection rule for the BPLM test will be if the p-value is smaller than 5% significance level, and hence the null hypothesis will be rejected. On the other hand, if the p-value of the BPLM test is larger than the significance level, then the conclusion will be the null hypothesis cannot be rejected.

The probability of the BPLM test for this study is 0.0000. The significance level used to compare the p-value is 5%. Since the p-value for the BPLM test is smaller than 5% significance level, the null hypothesis will be rejected. It can be concluded that the appropriate model for this study will be the random effect regression model.

#### **Hausman Test**

 Table 7. Result of Hausman Test

	Chi-Square Statistics	p-value
Hausman Test	8.02	0.2368

The Hausman test can be used to determine whether the model either is the fixed effect model or the random effect model. The Hausman test has a null hypothesis, that states the model is a random effect model while the alternative hypothesis states that the appropriate model to be used is a fixed effect model.

The rejection rule for the Hausman test will be if the p-value is smaller than 5% significance level, and hence the null hypothesis will be rejected. On the other hand, if the p-value of the Hausman test is larger than the significance level, then the conclusion will be that the null hypothesis cannot be rejected.

The probability of the Hausman test for this study is 0.2368. The significance level used to compare the p-value is 5%. Since the p-value for the Hausman test is larger than 5% significance level, the null hypothesis cannot be rejected. It can be concluded that the appropriate model of this study will be the random effect regression model.

# Conclusion and Implications of the Study

Regarding the relationship between the ownership concentration and the dividend payout, it can be concluded that there is a positive significant relationship between the ownership concentration and the dividend payout at 10% significance level. The hypothesis that stated that there has a positive relation between the institutional ownership and the dividend payout in Malaysia has been accepted at 5% significance level. Under 5% significance level, the hypothesis that postulated the relationship between managerial ownership and the foreign ownership to the dividend payout has been rejected. This study illuminates certain practices of corporate governance in Malaysia with respect to the influence of the ownership structure on companies, affecting the dividend payout to the policy makers and the investors. The ownership structures of the companies are believed to have an impact on the dividend decisions of the companies.

The regulators or the policy makers can have a better perception when developing rules and regulations. From the findings of this study, it shows that when managerial shareholdings are present in a higher percentage, they are more likely to fail to fulfill their responsibilities to protect the interest and the benefits of the minority shareholders. Based on this situation, the policy makers or the regulators in Malaysia should consider this situation and try to amend or revise the current rules to govern the interest of the shareholders either the majority or the minority. By ensuring the interest of all shareholders are protected, this will facilitate a better, more reliable and effective legislation on corporate governance in Malaysia. With better legislation for corporate governance, investors will be more willing to invest and this will create a better investment environment.

In accordance with our research findings, this study can provide a better picture about how the ownership structure of the companies actually affects the dividend decisions of companies. This research proves that ownership concentration, and also institutional ownership, have a positive significant relationship to the dividend payout in Malaysia, which shows that they have direct relationship to the dividend payout. On the other hand, managerial ownership and foreign ownership have an insignificant relationship to the dividend payout. Managerial ownership also shows a negative relationship to dividend payout, and foreign ownership also shows a positive relationship to dividend payout.

This study examines the relationship between the ownership structure and the dividend payout in the Malaysian property sector. There are 46 listed companies in the sample in this study. Since the sample of this study is from only one of the sectors in Malaysia between the years of 2011 and 2016, the results cannot be generalized to other sectors or for other time frames in Malaysia.

Future researchers in this sphere can use a longer time period for their time frame when collecting the data. Further, the sample of the study can be widened by including different types of sectors. By having a sample of various types of sectors, it will perhaps show a more diversified result where different industry sectors are believed to have different types of ownership structures – and hence will have different dividend policies. The sample size can also be increased since a larger sample size can give a broader picture of the current dividend policies across Malaysia.

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