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Managerial Ownership in Indonesia

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***Abstract*—This study aimed to analyse the effect of the relationship Investment Opportunity Set (IOS), Dividend Pay-out Ratio, Growth, Market Value of Equity and Institutional Ownership affect the level of managerial stock ownership. This type of this research is quantitative research. The study population consists of Indonesian firms listed at Indonesia Stock Exchange. Data collected from financial statements of manufacturing companies during 2016 to 2018 and using panel data method which data or values are taken from the average for each company during the study period and also this research using descriptive and verification method because this study aims to get an overview and information about managerial ownership in the company. Multinomial logistic regression is used in statistical analysis. The study found that IOS, Dividend Pay-out Ratio, Market Value of Equity affect the level of managerial stock ownership, in the other hand Growth and Institutional Ownership did not affect managerial stock ownership.**

Keywords: managerial ownership, multinomial logistics, BEI

I. Introduction

Empirical study Claessens et al shows the Indonesian companies have a little different characteristic from Asian companies [1]. Asian companies historically and sociologically are owned and controlled by family members. Even though the company grew and became a public company, the control still held by the family significantly. Furthermore Claessens et al stated that the market capitalization of shares owned by 10 family member companies in Indonesia, Philippines and Thailand have a percentage of family ownership as shown in Table 1 [1]:

TABLE I. Percentage of Family Ownership in Ten (10) Listed Company

Num.	**Country**	**Percentage of Family Ownership (%)**
1	Indonesia	57.70
2	Filipina	52.50
3	Thailand	46.20
4	Malaysia	28.30

Disentangling the Incentive and Entrenchment Effects of Large Shareholdings, Journal of Finance.

In the other hand, Figure 1 shows that the ownership structure of companies in Indonesia still concentrated in block holders, although the number of shares actually owned by the public is only 27.20 percent or even relatively small in practice. The percentage of managerial share ownership is relatively large when compared to shares owned by cooperatives. The interesting point from this tabulation is the average of managerial share ownership is relatively high when compared to the same average value that occurs in foreign capital markets. This structure becomes more concentrated in reality, because the founders of the company still have ownership in their subsidiaries, so the percentage of ownership will be higher. This following figure explains how the company's ownership structure has diffused ownership structure.

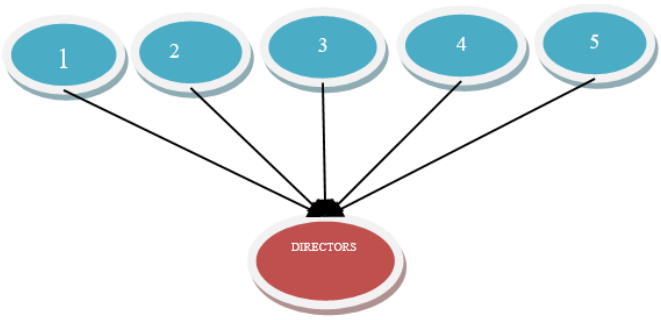

Fig. 1. Diffused ownership structure. 1-5 is stock ownership.

The implementation of good corporate governance will be able to reduce or even to minimize the potential for conflicts of interest that arise between company controllers and outside investors (public shareholders), especially in companies with a concentrated ownership structure as shown in Figure 2.

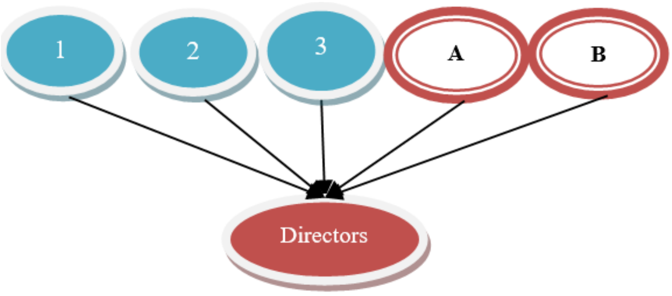

Fig. 2. Controllling shareholder structure in concentrated shareholders. 1-3 is stock ownership, A-B is controlling shareholder.

Figure 2 shows that there is a group of shareholders who control the company. The direction of firm’s policy and strategy is relatively representing of the direction or interests of the majority shareholders, so this condition will increase the probability of the emergence of the interests of the majority shareholders towards minority shareholders.

Empirical studies conducted by Crutchley and Hansen shows if company has a high book to market ratio the firm's probability to investment will be lower [2]. Low investment opportunities will reduce the attractiveness of managers, in other words managers will reduce their stockownership if the company has a high book to market ratio. The results of research provide evidence of a company's investment opportunity proxied by book to market value that can be used to predict managerial stock ownership [3]. Furthermore Mahadwartha provides evidence that a company's investment opportunity has negative and significant relationship to managerial stock ownership, this shows that the lower the book to market ratio or the higher the investment opportunity will increase the desire of managers to increase their stockownership in the company [3].

The relationship between dividends and managerial stock ownership is explained through the free cash flow hypothesis. Jensen, Solberg, Zorn through this hypothesis states that dividend policy is used to influence managerial stock ownership thereby reducing agency costs associated with free cash flow [4]. This study proves the substitution relationship between dividend policy and managerial stock ownership. The mechanism for reducing agency problems is done by: (i) Using free cash flow to pay cash dividends so as to avoid allocations to unprofitable actions; (ii) Increase dividends to strengthen the company's position in seeking additional funds from the capital market. The company is overseen by a capital market supervisory team or creditors so that managers are motivated to maintain or improve performance; (iii) Increase dividends to satisfy some stockholders who like large dividends or adherents of the bird in the hand theory.

An empirical study conducted by Jensen et al states that a small amount of earnings is available to the owner because the dividend-cut will show or represent the pessimistic attitude of management regarding the company's future prospects, this can lead to the emergence of negative signals from investors or the market [4]. This will affect the interest of management to own company shares. Conversely, when management is able to increase dividend payments for current company owners (which managerial ownership exists), the market will also appreciate positively, so this will increase the percentage of managerial shares.

The market value of equity shows the market's appreciation of the company's overall performance. This appreciation is a courage of investors in valuing the company with all its business consequences. For owners or shareholders in the short term they expect from capital gains, i.e. the difference between the purchase price and the selling price. Thus, when the equity market price rises, they gain gains, but several studies show that even though the stock price (common stock) increases, a number of investors will not sell it.

The results conducted by Mahadwartha provide evidence that company size can be used to predict managerial stock ownership [3]. This result is confirmed by studies conducted by Luciana and Meliza [5]. Meanwhile, research conducted by Mahadwartha and Luciana provides evidence that firm size has a negative and significant relationship to management shareholding, this shows that a low level of company size will increase the probability of a company to increase managerial stock ownership.

Empirical studies conducted by Tandelilin and Wilberforce show the results that institutional ownership or holding investment has a negative correlation with managerial stock ownership [6]. These results are consistent with studies conducted by Bathala, Chenchuramaiah, Moon, and Rao [7]. They found the result that institutional ownership functions as one of the control mechanisms that can be carried out by other parties on the possibility of moral hazard committed by insider investors, so that these two variables have a negative relationship. These results are also consistent with previous studies conducted by Crutchley and Hansen [2]. They stated that institutional ownership can function as one mechanism for controlling agency conflicts. They found a negative correlation between institutional holdings with leverage and managerial stock ownership.

II. RESEARCH METHODS

This type of research is quantitative research where the main purpose of this study is to analyse the effect of the relationship IOS, Dividend Pay-out Ratio, Growth, Market Value of Equity and Institutional Ownership affect the level of managerial stock ownership. Data were obtained from financial statements of manufacturing companies during the study period, 2016 to 2018 and it can be obtained at www.idx.co.id and Indonesia Capital Market Directory (ICMD). This research using panel data method which data or values are taken from the average for each company.

Dependent variable in this study is managerial stock ownership and independent variables in this study are IOS, Dividend Pay-out Ratio, Growth, Market Value of the Equity and Institutional Ownership.

A. *Dependent Variable*

Managerial stock ownership as dependent variable in this research using nominal scale, which is consists of 3 categories:

Y = 1, there is no managerial stock ownership (null, managerial stock ownership = 0)

Y = 2, managerial stock ownership in medium category (0 <Managerial stock ownership <mean)

Y = 3, managerial stock ownership in high category (managerial stock ownership ≥ mean)

B. *Independent Variable*

The independent variable in this study consisted of five variables:

1) Investment Opportunity Set (IOS): IOS is used to measure the size of investment in the company's main competitiveness compared to overall assets. The IOS formula is:

$$IOS = \frac{Book\ Value}{Market\ Value}\ x\ 100\%$$

2) Dividend Payout Ratio (DPR): DPR is the amount of dividend per share given to earnings obtained for each share. The DPR formula is:

$$DPR = \frac{DPS}{EPS} \; x \; 100\%$$

3) Company growth rate: Growth indicates the level of growth of the company's wealth which is calculated from the total assets of one year.

$$GROWTH = \frac{Total\ Asset\ at - t}{Total\ Asset\ at - (t-1)}$$

4) Equity Market Value (EMV): EMV calculated from the multiplication between the annual closing price with the number of shares outstanding on the company's stock in t-period.

$$EMV = \ln\left(Closing\ price\ x\ Total\ Share\ Outstanding\right)$$

5) Institutional stock ownership: Institutional stock ownership is the proportion of shares owned by institutions (foundations, domestic and foreign bank and non-bank financial institutions and cooperatives) or blookholders at the end of the year.

$$ISO = \frac{Institutional\ Ownership}{Tot\ all\ Outstanding\ Share}$$

The research method is descriptive and verification, because this study aims to get an overview and information about managerial ownership from companies listed in Indonesia Stock Exchange. Descriptive method is done by describing each variable along with the mathematical formulation. The purpose of the description is to get the tendency of direction of movement and the pattern of each variable to support the results of verification analysis. Descriptive research aims to get clearly about a particular situation, descriptive research methods have some characteristics: (i) focusing on actual problems, and (ii) describing facts and accompanied by rational interpretation.

In the other hand, verification method aims to determine relationship of variable. This type of research is an associative causality research that aims to explain the relationship between the variables. The data analysis of verification methods in this study using multinomial logistic regression analysis because the type of data is nominal (categorize form).

III. Results

A. Multinomial Regression Result

To select one or more variables that have good ability to be able to distinguish the composition of share ownership by management. Multinomial Logit Regression provides a set of coefficients for each of the two classification comparisons. The coefficients for the reference group are zero (0), according to the reference group coefficients for dummy variables that have been coded (dummy coded variables). Multinomial Logit Regression approach used when the dependent variable is in the form of a set of categories or classifications, where the categories cannot be grouped or ordered in a particular sense, thus the dependent variable is in the form of non-metric.

B. Model Suitability Test

The analysis using the person method shows the model is fit (0.894), it indicates that the model which is formulated in this study is feasible or has a good value to used. The results can be seen in table 2.

TABLE II. GOODNESS OF FIT MODEL

	Chi-Square	Df	Significance
Pearson	69.700	154	0.896
Deviance	60.915	154	0.887

Source: Data processing result 2019

C. Coefficient of Determination

The result shows Cox and Snell value is 67.4%, while the Nagelkerke value is 73.3% and McFadden value is 51.55%. By using the values in Pseudo R Square there are three common outputs from the results of the Multinomial Logit Regression analysis: 1.) Nagelkerke; 2.) Cox; and 3.) Snell and McFadden. Based on Nagelkerke's value, the ability of independent variables consisting of IOS variables, Dividend Pay-out Ratio, Market Value of Equity Growth and Institutional Ownership can explain the level of change dependent variable (the level of managerial stock ownership) in 73.3%, it means 26.7% explained by other variables outside the research model that are able to explain how trends in share ownership by management occur.

D. Hypotesis Testing

Based on results in hypothesis testing it indicate that IOS, Dividend Pay-out Ratio, Market Value of The Equity affect the level of managerial stock ownership whereas Growth and Institutional Ownership have no effect on the level of managerial stock ownership. Hypothesis test results can be seen in table 3.

TABLE III. HYPOTHESIS TESTING

Variables	Significance	Result
IOS → Managerial stock ownership	0.006	Significant
DPR → Managerial stock ownership	0.034	Significant
Growth → Managerial stock ownership	0.345	No significant
EMV → Managerial stock ownership	0.000	Significant
Institutional stock ownership → Managerial stock ownership	0.098	No significant

Source: Data processing result 2019

IV. Discussion

A. Effect of IOS on Managerial Stock Ownership

The results showed that the IOS affected the managerial stock ownership. Research conducted by Mahadwartha [3] provide evidence of a company's investment opportunity proxied by book to market value that could be used to predict managerial ownership. Their research provides evidence that corporate investment opportunities have a negative and significant relationship to managerial ownership, it means when book to market ratio get lower or when investment opportunity get higher it will encourage manager to increase their ownership in the company.

The equity market value shows appreciation from market for company's performance. This appreciation is a courage of investors in valuing the company with all its business consequences. For owners or shareholders, in the short term, they expect from capital gains, that is the difference between purchasing price and selling price. Thus, when the equity market price going up, they have profit, but several studies show that even though the stock price rises, some investors will not sell it.

B. Effect of DPR on Managerial Stock Ownership

The results showed DPR affect the managerial stock ownership. It explains that the rational logic that can be explained from the relational ratio of dividend payments to managerial stock ownership is in general, the condition of the behaviour relative shareholders prefers receiving dividend quickly (right now) rather than delaying it into reinvestment at companies in retained earnings form. Therefore, the results of the analysis of these variables prove they support the argument of bird in the hand theory.

The relationship between dividends and managerial stock ownership is explained through the free cash flow hypothesis. Jensen et al [4] through this hypothesis states that dividend policy used to influence managerial stock ownership so it can reduce agency costs which is related with free cash flow. This study proves the substitution relationship between dividend policy and stock ownership by management. The mechanism for reducing agency problems are: (i) using free cash flow to pay cash dividends so it can avoid from bad actions; (ii) increasing dividends to reinforce the company's position in seeking additional funds from capital market. The company monitored by capital market supervisory team or creditors so managers are motivated to maintain or improve their performance; (iii) increasing dividends to satisfy stockholders who like a lot of dividends or follower of bird in the hand theory.

C. The Effect of Company's Growth Rate on Managerial Stock Ownership

The results showed that the company's growth rate did not affect the managerial stock ownership. The results of empirical studies show company's growth rate has statistically significant on managerial stock ownership. The reason can be stated based on fact that companies that has a significant growth in assets or in sales will cause the firm size going larger. This increasing causes the business portfolio strategy to be less effective, so company with significant growth will cause the cost control more expensive. Another rational reason is there are some large companies which is a diversification result become over-leverage.

Empirical study conducted by Jensen, Solberg, Zorn, [4] state that there is a small amount of earnings available for owners because the dividend-cut will show or will represent the pessimistic attitude of management regarding the company's prospects, this result will impact the emergence of negative signals from investors or market. It will affect the management's interest to have their company stock. Conversely, when management is able to increase dividend payments for current company owners (which managerial ownership exists), the market will also appreciate positively, so it will increase the percentage of managerial stock ownership because positive respond form market.

D. Effect of EMV on Managerial Stock Ownership

Results showed that EMV affected the managerial stock ownership. The results of the analysis show that EMV which is calculated using the natural logarithm (Ln) which is multiplication between closing price with the outstanding share has statistically significant at alpha level in 5%. These results indicate that equity market value partially has a statistically significant relationship to managerial stock ownership. Equity market value is an indicator of market performance. This value represents the amount of market appreciation to company, although this value is only obtained from the result of multiplication between closing price with outstanding-share, but it is often a barometer of the issuer's performance at market, particularly in capital market.

E. Effects of Institutional Share Ownership on Managerial Share Ownership

The results showed institutional ownership does not affect managerial stock ownership. institutional ownership gets higher, the external control will stronger over the company and reduce the existences from agency problem, so the company will use low dividends as one of the control mechanisms. With tight controls, will causing managers to use debt at a low level to anticipate the possibility of financial distress and bankruptcy risk.

Kose and Williams put forward the concept of the demand and supply hypothesis [8]. Demand hypothesis explains that companies which is controlled by insiders use large amounts of debt as a financing. With a large percentage of ownership, insiders want to maintain control effectiveness over the company. Supply hypothesis explains that companies which is controlled by insider have a small debt agency cost, so it can increase the use of debt.

Empirical study conducted by Crutchley and Hansen states a company that has a high book to market value means the company has a low investment opportunity [2]. This condition will reduce the attractiveness of managers from company that has a high investment opportunity, in other words managers will reduce their ownership in the company if the company has a high book to market ratio. Research conducted by

Mahadwartha provide evidence of company investment opportunities proxied by book to market value that can be used to predict managerial stock ownership [3]. Furthermore, Mahadwartha provides evidence that the company's investment opportunities have negative and significant relationship to share managerial stock ownership, this shows when book to market ratio get lower or the investment opportunity get higher, it will increase the desire of managers to increase their ownership in company [3].

Empirical studies conducted by Tandelilin and Wilberforce show institutional ownership or holding investment has a negative correlation with managerial stock ownership [6]. These results are consistent with studies conducted by Bathala, Moon, and Rao [7], they found the result that institutional ownership has a function as one of the control mechanisms that can be carried out by other parties on the possibility of moral hazard committed by insider investors, so that these two variables have a negative relationship. This result is also consistent with previous studies conducted by Crutcley and Hansen [2]. They stated that institutional holdings can functionate as one mechanism for controlling agency conflicts. They found a negative correlation between institutional holdings with leverage and managerial stock ownership.

V. Conclusion

This type of research is quantitative research where the purpose of this study is to analyse the relationship effect for IOS, Dividend Pay-out Ratio, Growth, Market Value of Equity and Institutional Ownership affect the level of managerial stock ownership. The results showed that the multinomial regression test was able to explain well the relationship between IOS, Dividend Pay-out Ratio, Market Value Equity affects the level of managerial stock ownership. It can indicate by the significant value from suitability test and the coefficient of determination value which is quite high. Hypothesis test show that IOS, Dividend Pay-out Ratio, Market Value of Equity affect the level of managerial stock ownership, whereas Growth and Institutional Ownership have no effect on the level of managerial stock ownership. Furthermore, the other researcher can use other proxies of each variable so that the results of the study are able in general as a reference to changes in managerial stock ownership.

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