MANAGERIAL OWNERSHIP, DEBT POLICY, AND DIVIDEND POLICY: A TEST ON THEORY OF AGENCY

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Abstract: *The problem investigated in this research is the existence (orin-existence) of interdependence among managerial stock ownership, debt policy and dividend policy in testing agency theory. This research is primarily aimed at knowing how is the influence and relation among MOWN, DEBT and DIV. This research uses sample of manufacturing companies listed in Indonesia Stock Exchange in 2005-2007. Purposive sampling method is used to determine the research sample, 33 companies were taken as sample in this research. Equation model used in this research is simultaneous equation, therefore the analysis tool used is 2SLS (Two Stage Least Square). According to the test of 2SLS, the following results are obtained: (1) Debt empiricallyhas influence and negative relationship with MOWN; (2) MOWNempirically has influence and negative relationship with DEBT; (3) DIV empirically has influence and relationship with MOWN; (4) MOWN empirically has influence and relationship with DIV; (5) DIVempirically has no influence yet has positive relationship with DEBT; (6) DEBT empirically has no influence yet has positive relationship with DIV.*

Keywords: *managerial ownership, debt policy, dividend policy, two stage least square.*

INTRODUCTION

A company's goal viewed from the perspective of financial management is to maximize the wealth of the company's owners or stockholders (Brealey et al, 2009). This goal is then often defined as an attempt to maximize value of the firm. Jensen (2001) explained that in order to maximize the value of the firm is not only considered from the equity value, but also all financial claims, such as debt, warrants, and preferred stock.

The uniting of the importance of shareholders, debtholders and management which incidentally is the parties who have an interest in the objectives of the company often creates problems of agency. The problems can be affected by the ownership structure (managerial ownership and institutional ownership). Ownership structure by some

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researchers is believed to be able to affect the continuity of the company, which in turn affects the performance of the company in receiving corporate objectives, namely maximizing the value of the company. This is caused by the presence of the control they have.

Many studies have addressed the relation between managerial stock ownership, debt policy, and dividend policy of the agency theory perspective. Mahadwartha (2003) found a strong control on the ownership structure of the company through the company dimension, the broader the company is, the smaller the percentage gets. Furthermore, a research was conducted by the Putri and Nasir (2006), who examined the simultaneous equations analysis managerial ownership, institutional ownership, risk, debt policy, dividend policy in agency theory perspective. In that study, managerial ownership and debt policy has a significant negative influence. The managerial ownership and dividend showed a significant positive effect, while the effect of debt and dividend policies are not significant. Similarly, stated by Tarjo and Jogiyanto (2003: 278-293), the research found that there is negative and significant relation between managerial ownership and debt policy.

Unlike the research done by Wahidahwati (2002) which examines the influence of managerial ownership and instutitional ownership to debt ratio, the research tended to show that debt policy is significantly influenced by non-financial policies (managerial ownership) and has a positive relationship. In addition, as a control variable, dividend policy has no effect on debt policy.

The agency theory suggested a number of mechanisms that can be used to monitor the conflict or agency problems, including an increase in stock ownership by management. Furthermore, the authors in this study will use the term managerial stock ownership (managerial ownership), the policy of debt (debt financing), and dividend policy (dividend policy). Thus in this study, there will be tendency to test the relation between the variables of managerial stock ownership, debt policy, and dividend policy in agency theory. Other than that, adding related variables, that are ability profit, investment opportunity set, asset structure (ratio of fixed assets to total assets), firm dimension (size of the firm), and firm's growth.

This study is expected to clarify whether there is a significant interdependence relationship between managerial ownership, the debt policy, and dividend policy in the agency theory, and to find whether there is a relationship between exogenous variables on managerial stock ownership, debt policy and dividend policy using a two-stage least squares analysis to a system of equations that includes an equation for each of these policies. The study was conducted during the years of 2005-2007 on the manufacturing companies listed on the Indonesia Stock Exchange.

Agency Theory

A number of researchers have contributed to create a model that can explain the relation between capital structure with agency problems (conflicts of interest between principal

and agent). Jensen and Meckling (1976) stated that the agency relation arises when one or more individuals (employers) hires another individual (the agent or employee) to act on his behalf and also delegates the power to make decisions to agents and employees. In the context of financial management, this relation appears between shareholders (shareholders) and the managers; and also between the shareholders and creditors (bondholders or bond holders).

Jensen and Meckling (1976) identified that there are two types of agency conflicts: between shareholders and managers and also between shareholders and creditors. The first type of conflict between shareholders and managers will cause the cost of the so-called agency costs of equity. This conflict arises because managers have shares of less than 100%.

Agency problems can also arise between shareholders represented by the corporate management with creditors (Atmaja, 2008). Conflict arises when: (1) the management takes projects who have bigger risk than the creditor predicted before, or (2) the company increases the amount of debt to achieve higher levels than the creditor predicted.

Both of the above conflicts will increase the financial risk of the company and also will further decrease the value of debt/ the company's bond that has not yet matured. If the firm dare to take a high-risked project, therefore the creditor will be harmed because it will increase the risk of bankruptcy of the company. On the other hand, if the high-risked projects that deliver great results, the compensation received by the creditor does not go up. A smart creditor will be aware of this so that in general they will make signs for the debtor. They agreed about those rules at the time the loan is given.

Managerial Ownership Equation

The variables affecting managerial stock ownership in this research are a debt policy, dividend policy, ability profit, set of investment opportunities, and firm dimension. According to Chen and Steiner (1999), it mentioned that debt has a negative causal with the ownership of managerial stock. This tends to show a substitutional relaton between debt policy and the ownership of managerial in reducing agency conflict. The relation between dividend and managerial stock ownership is explained through the *free cash-flow* hypothesis (Jensen, et al., 1992) which states that the dividend policy are used to influence managerial stock ownership, thereby reducing agency costs associated with *free cash flow*. This research proves that there is substitutional relation between dividend policy and stock ownership by management.
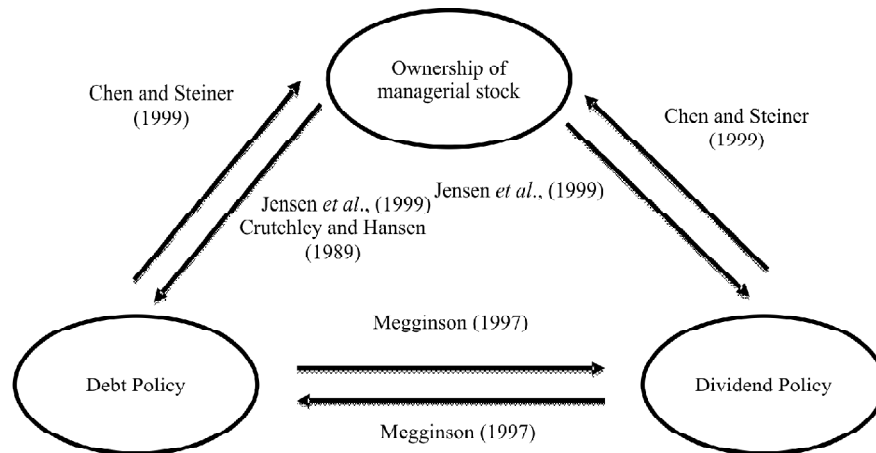
Debt Policy Equation

The variables affecting debt policy in this research are managerial stock ownership, dividend policy, ability profit, asset structure and firm dimension. Empirical studies conducted by Crutchley and Hansen (1989) and Jensen *et al.* (1992: 247-263) stated

that there is a negative relationship between managerial stock ownership and debt policy. Debt financing is one of the management choices to distribute company's risk or business risks, especially in the investment in large projects that generate high return anyway. A large proportion of debt will put managers under the supervision of *debt-holders*, because the creditors assume that getting a high risk of debt doesn't mean it gets higher profits too, since they only receive compensation in the form of interest on the loan. Managers tend to dislike supervision by the debt-holders, so that the effect of managerial stock ownership of the debt policy is negative.

Megginson (1997) stated that the *free cash flow* hypothesis can be used to predict the interdependent relationship between debt policy and dividend policy. Dividends affect debt with a positive relationship. Baskin (1989) stated that the payment of large dividends in the last period will increase the cash requirements in the future. Thus, companies that pay cash dividends or distribute large quantities require additional funds through debt to finance its investments.

Dividend Policy Equation

The variables affecting the dividend in this study are the managerial stock ownership, debt policy, ability profit, firm dimension, and growth rate of the company. The more shares owned by managers will further lower agency costs (agency cost), as stated by Jensen (1986) who argue that dividends will reduce agency costs associated with *free cash flow*. If you want to reduce the agency costs, then you have to do *free cash flow* first. Besides with debt, *free cash flow* can be reduced by increasing dividends. Furthermore, by increasing the dividend, it will increase the possibilites of the company taking the external fund, therefore the company will be as often as monitored by a new investor. In this case, it means that the ownership of managerial stock will negatively influence the dividend policy.

Picture 1: Research Paradigm

Megginson (1997) stated that debt policy will affect dividend policy with a positive relation: where company which has a high debt level agency will strive to reduce its cost of debt by reducing debt. Thus, to finance its investment, financial investment will be necessarily needed to do. In this case, some parts or all part of *return* of the shareholders (dividends) is used to financial investment.

Research Hypothesis

Based on the literature review and framework as mentioned in the previous section, the research hypothesis can be formulated in accordance with the following research issues:

H_{1a}: Debt policy has significantly negative effect on managerial stock ownership.

H_{1b}: Managerial stock ownership has significantly negative effect on debt policy.

H_{2a}: Dividend policy has significantly negative effect on managerial stock ownership.

H_{2b}: Managerial stock ownership has significantly negative effect on dividend policy.

H_{3a}: Dividend policy has significantly positive effect on debt policy.

H_{3b}: Debt policy has significantly positive effect on divident policy

METHOD

Variable Operationalization

To impose the limitation on these variables in this research to avoid any appraiser, these variables need to be defined as operationalization. The causal relation which will be examined involves the independent variable and the dependent variable. Thus, generally, there are 8 variables which consist of 5 exogenous variables and 3 endogenous variables (free-bound).These following table would explain the operationalization of research variables, based on its previous concept.

Population and Research Sample

In this study, the population is all manufacturing companies listed on Indonesian Stock Exchange from 2005 to 2007, while the sampling technique used in this reseach is the considered sample selection techniques (purposive sampling).

Sampling Technique

In this research, the technique used on sampling is a considered sample selection technique. A criteria on research sampling involve 11 manufacture company listed in Indonesia Stock Exchange from 2005-2007. These are the following criteria on sampling.

Table 1
Variable Operationalization

Endogenous Variable				
Variable	*Variable Concept*	*Symbol*	*Indicator*	*Measurement*
Managerial Stock Ownership	Proportion of shareholders from the management which actively participate on decision making.	MOWN	Percentage of common stock ownership possessed by manager stated on the list of shareholders.	Percentage
Debt Policy	Viewed from how far the company is financed on debt.	DER_{it}	The amount of total debt shared with the equity of i company and t period.	Percentage
Dividend Policy	This variable is defined on dividend settlemnet or *dividend payout ratio* abbreviated as DPR.	DPR_{it}	The ratio between the amount of dividend per its pieces of paper shared with its amount of earnings per its pieces of paper	Percentage
		DPS_{it}	Dividend is paid for its pieces of paper by i compainy and t period.	Rupiah
		EPS_{it}	The amount of earning on i company and t period for its pieces of paper.	Rupiah
Exogenous Variable				
Variable	**Variable Concept**	**Symbol**	**Indicator**	**Measurement**
Profitability	Company ability to generate profit during a year, which is calculated from its ratio on *Earning AfterTax* (EAT) on Total Assets.	ROA_{it}	The ratio between net profit shared with the total amount of company assets on i company and t period	Percentage
		EAT_{it}	Net profit on i company and t period	Rupiah
		TA_{it}	Total aktiva perusahaan	Rupiah
Asset structure	Asset structure reflects the wealth of the company. This variable is expressed in the ratio of fixed assets to total assets.	Asset $Structure_t$	The ratio between total fixed asset and the amount of company asset on i company and t period.	Percentage
		Fixed Assets$_{it}$	Total fixed asset on i company and t period	Rupiah
		TA_{it}	Total asset on i company and t period	Rupiah
Set of Investment Opportunity	To calculate the amount of investment on company's main asset compared to its entire asset.	IOS_{it}	Ratio between book value and market value on company's asset	Percentage
Company Dimension	Natural logarythm from the total company asset	$Size_{it}$	Value of natural logarythm from the toal of company asset..	Natural Logarythm
		TA_{it}	Total asset of i company and t period.	Rupiah
Company's Growth Level	This variable discussed about the level of company's growth, calculated by the total asset during a year.	$Growth_{it}$	The ratio between the difference of total assets and previous total assets	Percentage
		TA_t	Total asset of i company and t period	Rupiah
		TA_{t-1}	Total asset of i company and t-1 period	Rupiah

1. There must be a manufacture company which is listing in Indonesia Stock Exchange and is publishing its own financial reports for three years: 2005, 2006 and 2007.

2. There must be a company which has its own information on managerial ownership, dividend payout ratio, total debt, and information on controllable variable (exogenous variable)

3. The company must not change its company policy during the research period, from 2005 to 2007.

RESEARCH METHOD

This study describes the relationship pattern that reveals the influence of two or more dependent variables that have a two-way relationship, and will form more than one equation where the dependent variable (endogenous) in the equation could emerge again as an independent variable (exogenous) in the other equations of the system. This kind of relationship pattern can be analyzed by using a simultaneous equation model. The approach used to estimated in the simultaneous equations system is called a single equation or a method known as the method of limited information (Limited Information Methods) with a model of two-stage least squares equation (Two Stage Least Squares - 2SLS)

Before discussing the stage of the 2SLS analysis to determine the relationship between the endogenous variable for determinig relationship between mown, DEBT and DIV, the first step to be done is to identify the equation. An equation will be stated as "identified" if only the equation is expressed in the form of unique statistics and generate a unique parameter estimatetion. (Sumodiningrat, 2001). Identification of the equation can be done by inserting or adding, or removing some exogenous variables (or endogenous) into equation (Sumodiningrat, 2001). This is intended to determine whether the equation is in the condition as under-identified (not identified), exact-identified (right identified), or over-identified condition (so identified). Those three mentioned conditions can be determined using the following formula.

$$(K - M) \geq (G - 1)$$

where:

K   = the total amount of variables in the equation model (endogenous dan exogenous)

M   = the amount of variables, both endogenous and exogenous, in each equation model

G   = the total amount of equation (total amount of endogenous variable)

if:

$(K - M) > (G - 1)$ = therefore, the equation is determined as over identified

$(K - M) = (G - 1)$ = therefore, the equation is determined as exactly identified, and also;

$(K - M) < (G - 1)$ = therefore, the equation is determined as under identified

These following table describe the steps of formula identification in each equation:

Table 2
Test and Formula Identification

Formula	K – M	G – 1	Result	Explanation
MOWN	(8 – 6)	(3 – 1)	2 = 2	Exactly Identified
DEBT	(8 – 6)	(3 – 1)	2 = 2	Exactly Identified
DIV	(8 – 6)	(3 – 1)	2 = 2	Exactly Identified

The identification result of equation of managerial stock ownership, debt policy, and dividend policy tend show that each of them is exactly-identified equation. This condition certainly fulfilled the requirements of equation identification by using two-stage least squares (2SLS).

RESULTS

Descriptive Analysis of Research Variables

This research focuses on gaining a description and information about managerial stock ownership, debt policy, and dividend policy on the manufacturing companies listed on the Indonesian Stock Exchange.

Table 3
Results Statistic Descriptive

Variable	N	Mean	Median	Standard Deviation
Managerial Stock Ownership	33	0.0382	0.0165	0.0733
Debt Policy	33	1.4998	1.1828	1.0467
Divident Policy	33	0.3263	0.2918	0.1662
Profitability	33	0.0665	0.0603	0.0395
Structure of Assets	33	0.3633	0.3182	0.1834
Investment Opportunity	33	1.1040	3.6880	3.0832
Company Size	33	14.1017	14.0384	1.7188
Company Growth	33	0.2525	0.1276	0.3222

In this research, the managerial stock ownership variables in manufacturing companies have an average value of 3.82%. This value indicates that the under-investigation management company has only 3.82% of the shares issued by the company. Standard deviation variable of managerial stock ownership is only 7.33% which indicates that the proportion of managerial stock ownership in the companies of the investigation almost has the same value.

The result of descriptive analysis of debt policy variable indicates that this variable has an average value of 149.98% with a standard deviation of 104.67%. The high average

value shows that the under-investigation company tends to favor debt as a source of corporate financing. This is understandable, as the company is growing nationally, the movement of macro-economic activity in the sector also increases, therefore many companies are in need of funding. Standard deviation of 104.67% is of considerable value; which means that the value of the debt ratio in manufacturing firms have variative values or has extreme differences. It shows that there are companies that use debt financing with a very large number, on the other hand there are also companies that use debt in a relatively small amount.

Dividend Payout Ratio (DPR) has a statistical average of 32.63 %: this value exceeds its own median of only 29.18 %. This means that if the sample of companies sorted, then a lot of companies will gain the *DPR* much more than its median. Meanwhile, the standard deviation of this variable is 6.62 %.

Profitability variable has an average value of 6.65 %: the value indicates that the rate of return on assets acquired by the under-investigation company is as much 6.65%. The low ratio is due to the low profit margins due to low asset turnover. Standard deviation value of 3.95 % indicates that the value of *return on assets* in manufacturing companies in the period 2005 to 2007 have similar condition.

The structure of corporate assets can reflect on the wealth of the company. Asset structure variable in this research measured by the comparison between *fixed assets* and *total assets* has an average value of 36.63 % with a standard deviation of 18.34 %. According to the value, a manufacturing company learned in this case tend to show a high ratio of *fixed assets*.

Investment Opportunity Sets (IOS) is the current value of company choices to make a future investment. This variable of investment opportunity is measured by the ratio of book value to market value. The average value of IOS statistical variables is equal to 110.40 % with a standard deviation of 308.32 %. The average value of 110.40 % shows a high ratio of book value to market value which indicates the lack of investment opportunity set in the company in this study. However, the deployment of the value is high, therefore the value of investment opportunity set has not been evenly distributed.

The average value of statistical variables from the size of the firm amounted to 14.10 log units with standard deviation of 1.71 log units. It indicate the size of the company at the under-investigation company is not much different.

The decscriptive analysis showed that the variable of company's growth rate has an average value of 25.25 %. This value is far above its median which is only 12.76 %. Seeing the level of standard deviation, that is equal to 32.22 %, it can be said that there is a significant prevalence rate of growth among the sample firms. Being consistent with the difference between the mean and the median, the prevalence was relatively focused on the right of the median of the sample company's sales growth rate.

Table 4
Statistical Test Result

Independent Variable	Prediction	Model 1 (MOWN)		Model 2 (DEBT)		Model 3 (DIV)	
		Coefficient	t stat	Coefficient	t stat	Coefficient	t stat
C		.378	4.027**	1.413	1.128	.373	1.529
DEBT	-	-.023	-2.086**				
DIV	-	-.198	-3.296**				
ROA	+	.006	.081				
IOS	-	-7.338E-6	-.197				
SIZE	-	-.017	-2.489**				
MOWN	-			-4.264	-2.117**		
DIV	+			.172	.244		
ROA	-			-1.245	-2.097**		
FIX ASS	+			-1.565	-2.950**		
SIZE	+			.083	.999		
MOWN	-					-.994	-2.172**
DEBT	+					.010	.325
ROA	+					.093	.439
SIZE	+					.004	.244
GROWTH	-					-.164	-2.814**
N		33	33	33			
R squared		.515	.542	.367			
F statistic		5.736	6.381	3.135			
P value (F Statistic)		.001**	.000**	.023**			

Notes: ** significance at the 5% level (two-part test)

The statistical test results of MOWN model 1 replied simultaneously a hypothesis in this study stating that there are simultaneously influences between debt policy, dividend policy, profitability, investment opportunity set and firm size on managerial ownership that is acceptable or statistically significant. Partially, debt policy affect managerial stock ownership variables are significant, the variable dividend policy affect managerial stock ownership significantly, profitability does not affect the variable of managerial stock ownership, investment opportunity set does not affect the variable managerial stock ownership, and firm size give a significant influences on variables of manegerial stock ownership.

The ability amount of managerial ownership of manufacturing companies listed on Indonesian Stock Exchange is indicated by the coefficient of determination value (R^2) of 51.5 %. It indicates that the variable of debt policy, dividend policy, profitability, investment opportunity set, and the firm size is able to explain 51.5 % of managerial ownership, while the remaining 48.5 % of other variables outside this model describes the managerial ownership.

The statistical test result of 2DEBT model replied simultaneously a hypothesis in this study stating that there are simultaneously influences between managerial stock ownership, dividend policy, profitability, asset structure, and firm size on debt policy which is acceptable or statistically significant. Partially, managerial stock ownership variables affects significantly on debt policy, dividend policy does not affect significantly on debt policy variables, profitability give influence on debt policy, asset structure does not significantly influence on debt policy variable, and firm size does not statistically give any influence on the debt policy variables.

The amount capability of debt policy in the manufacturing companies listed on Indonesia Stock Exchange from 2005 to 2007 was indicated by the coefficient of determination (R^2) of 54.2%. This indicates that the variable managerial stock ownership, dividend policy, profitability, asset structure, and firm size can explain the debt policy variable of 54.2%, while the remaining 45.8% of other variables outside this model describes debt policy.

The statistical test result of 3DIV model replied simultaneously a hypothesis in this study stating that there are simultaneously influences between managerial stock ownership, debt policy, profitability, asse stucture, and the rate of company's growth with the dividend policy which is acceptable or statistically significant. Partially, managerial stock ownership variables affects significantly on dividend policy, debt policy does not affect significantly on dividend policy variables, profitability does not signifantly give influence on dividend policy, the firm size in this mmodel is not statistical, while the rate of company's growth is statistically significant.

The amount capability of dividend policy in the manufacturing companies listed on Indonesia Stock Exchange from 2005 to 2007 was indicated by the coefficient of
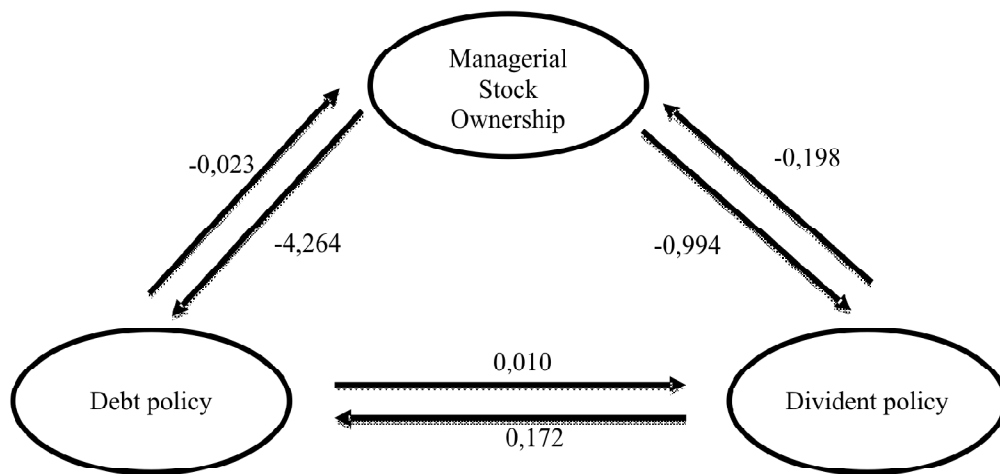
Picture 2
Structural Model of MOWN, DEBT, DIV

determination (R^2) of 36.7%. This indicates that the variable managerial stock ownership, debt policy, profitability, firm size, and rate of company's growth can explain the divident policy variable of 63.3%, while the other remaining variables describes dividend policy.

DISCUSSION

As mentioned before, the overall analysis of the data used to test the hypothesis is to use two-stage least squares (2SLS). The results of the tests that on the main focus in this research is an extraction from a comprehensive structural model tested is as followed.

Debt policy reflected with *debt-to-equity ratio* (DER) has a significant negative effect on managerial stock ownership. It means that hypothesis 1_a is accepted or in other words, the zero hypothesis is denied. This shows statistically that debt policy in Indonesia will affect managerial stock ownership. Parametric estimation is negative and consistent with the empirical study by Chen and Steiner (1999) which states that debt has a negative causal relation with managerial stock ownership. This causal relation also shows a substitutional relation between debt policy and managerial stock ownership in reducing agency conflict. The use of high debt will increase the risk of bankruptcy, therefore as a response, the manager will also reduce the proportion of share ownership. In addition, a significant negative relation between debt policy and managerial stock ownership is supported by previous research by Putri and Nasir (2006) and by Moh'd, *et al.* (1998: 85-98).

Based on the test results obtained using 2SLS, it shows that dividend policy variables in this research were obtained from the ratio of dividend per share to earnings per share. It also has a significant negative relation with the managerial stock ownership, therefore that hypothesis 2_a can be accepted. Through the hypothesis, Jensen et *al.* (1992) stated that the dividend policy is used to influence the ownership of managerial stock, thereby it reduces the agency costs associated with *free-cash flow*.

This study proves the substitutional relation between dividend policy and managerial stock ownership for it can be explained that the higher the level of *dividend payout ratio* (DPR) is, then it will also indicates the level of manager's trust about *retained earnings* as a source of funds of future investment that will be reduced. Therefore, the company had to seek external funds to finance its investment. Manager requires a small dividend share since the company requires substantial funds to finance its investment, thus the managers does not tend to increase its ownership.

The statistical tests showed that company profitability is not significantly influenced and also tend to show a positive direction on managerial stock ownership. In fact, the hypothesis stating that the amount of positive profitability on managerial stock ownership was not naturally proved. The positive parameter estimation according to Myers and Majluf (1984) stated that there is a positive relation between profitability and managerial stock ownership. This indicates that the more profitable a company,

the higher the tendency of management or executives to participate in the ownership of the company. Although the results of the analysis indicating this fact cannot be generalized, the variable was not statistically significant

The variable of *investment opportunity sets* (IOS) doesn't have any significant influence and has negative effect. This empirical research result is not consistnet with the empirical study by Mahadawartha (2003) which gave evidence that the opportunity of company's investment has a negative significant relation with the management's stock ownership. Although the coefficient value has a negative aim of -0.000007338 stated by Mahadawartha (2003) where the negative coefficient indicates that the lower book to market ratio, the higher the investment opportunity set, therefore the tendency of managerial stock ownership is high. This is understandable, with the increasing investment, the company management shows that the company has good target for the future. This condition also indicates the management's optimism about future earnings. Therfore, management will be more interested in involving not only as part of a course manager but also the company's decision makers. However, these facts cannot be generalized in an open manufacturing company in Indonesia, because this variable was not statistically significant.

The company size has negative significant influence on managerial stock ownership. With the increasing size of the company, it will increase the proportion of managerial stock ownership. This study is consistent with empirical studies conducted by Mahadawartha (2003) which provides evidence that the company size can be used to predict the management's stock ownership. In this study, it provides evidence that company's dimension has a negative significant relation to managerial stock ownership. This shows that a level of company's dimension will increase the profitability of the company to increase managerial ownership (Husnan: 2001).

The variable of managerial stock ownership statistically gives negative significant influence on policy. It means that the hypothesis of 1_b can be accepted. This study is consistent with the previous research by Crutchley and Hansen (1989) dan Jensen*et al.* (1992). They stated that there are negative relation between managerial stock ownership and debt policy. Therefore, the higher the ownership gets, the lower the company's debt policy is: on which this study, debt policy is measured by the toal of debt with its own capital or *debt to equity ratio* (DER).

Thus, this is very understandale, with the increasing of ownership of managerial stock, it is possible to increase manager's will so that the shareholders will tend to be worried. One of the solution of the problem is to use debt. The high proposrtion of debt will place a manager in an under-supervision condition by debtholders. For creditors, someone having high debt with high risk does not mean they are able to get a high profir, since they only gets interests on loan as a compensation. The manager tend to dislike the under-supervision, sot that the manager will reduce its proportion of stock ownership.

The hypothesis 3_a stating that dividend policy having a positive significant influence on debt policy is rejected because the statisctical result was significant. Furthermore, individually, the variable of debt policy does not statistically have relational signifance on the percentage level of managerial ownership in the company mentioned on this research.

A positive relation between dividend policy with debt policy, as expected in the research, is also consistent with the empirical study conducted by Megginson (1997) and Baskin (1989). It tends to indicate that a high divend means that Indonesian manufacturing companies will also increse the debt to fund their investment, because most of the earnings are used to pay dividend. Thus, there will be less money saved to developing the business or investment. In conlusion, the management will use the external alternative fund such as debt to fund the company's activity.

The company's profitability measured by ratio of net profit (earning after tax) on the total of company's asset has a negative significant influence. This, according to the empirical study by Myers (1977) having had an evidence that a company would rather choose retained earnings than debt or stock publishing, is known as *Pecking Order Theory*. Thus, in a higher profitability, it will relate with lower *debt-to-equity*. An empirical test on Indonesian manufacturing company showed that there is a negative significant relation between profitability and debt policy. The more profitable the company is, then the more it can run its investment. Therefore, the company does not need to seek for another alternative source out of the company.

A level of company's debt can also be influenced by asset structure. A company which has bigger fixed asset or more proportion than its total asset is expected to earn higher amount of debt. In this research, asset structure granted by the ratio of fixed aaset towards its total asset has a significant negative influence on debt policy. The relation between asset structure and debt policy is way far from the prediction, where this condition is contradictive with the empirical study conducted by Chen and Stainer (1999), dan Jensen and Meckling (1976), Scott (1976) who stated that *fixed asset* is able to be used as an assurance to give to the creditors.

In accordance to the *collateral hypothesis*, it suggest factly that *fixed assets* will provide a promised safety to the creditors who lend sum of money to the companies with a high ratio on its fixed asset. Apart from providing a guarantee to the creditors, *fixed assets* will also reduce the cost of bankruptcy if any case that happens; therefore it still push the flow of *fixed assets* into positive relation/ condition on debt policy. However, a research conducted by Nurfauziah *et al.* (2007) found a negative relation between *asset structure* against debt policy.

The empirical invention on Indonesian manufacturing company shows a significant negative relation and indicates the lending of debt to the company without ever considering its *fixed assets*. Or, in other words, the Indonesian open manufacturing companies have ability to fund its company's development with debt without considering about *fixed assets* as its guarantee.

A company dimension measured by natural logarythm formed by *total assets* shows statisticallly a positive insignificant influence towards debt policy. Its coefficient value is positive, in accordnace to the previous theory by Cruthley and Hansen (1989) where bigger companies can use higher *leverage* better than other smaller companies. Therefore, the bigger the companies are, the higher the debt policy done, because on the other side, the size of company is one of things used to apply debt by creditor to the company. In addition, a huge company has lower risk compared to the small ones. Nevertheless, it cannot be generalized in Indonesian manufacturing company because the result will not be significant.

According to the test result, there is tendency that managerial stock ownership give a significant influence on divident policy; that hypothesis 2_b is acceptable. The coefficient value of negative correlation in this relation of managerial stock ownership and debt policy is consirably appropriate to the theory of Jensen (1986) who stated that dividend reduced the *agency cost* related to free-cash flow. If it's necessary to reduce the *agency cost*, a *free cash flow* needs to be done first. Affirming the previous empirical studies by Nurfauziah *et al.* (2007), Chen and Steiner (1999) who also found a negative relation between managerial stock ownership and divident policy, the study tended to indicate that in an open company, only few stock ownersc can monitor and control the company's decision and activity; if any case, its manager has higher stock. In this condition, the managers will leisurely spend the *free cash flow* instead of investing or sharing them to stock owner or investor.

A hypothesis 3_b stating that debt policy having significantly influenced on dividend is not acceptable. The estimation of positive parameter in a relation between debt policy and dividend policy is suitable to the expected relation. This positive relation then affirms Megginson (1987) who stated that debt policy will give influence to the dividend policy in a positive relation; where a company having a high debt will attempt to reduce its *agency of cost* by reducing debt, therefore to fund its investment, they probably use an internal *cash flow*. In this situation, part or entire retire *return* from divident is used to fund investment. However, this test result cannot be generalized in Indonesian manufacturing companies, because its statistical result showing positive relation between debt policy and dividend policy was not significant.

This research tends to show that profitability will not significantly give effect to divident policy. It shows a positive relation. Its coefficient value showing a positive relation is consistent with the previous study conducted by Fama and French (2000). They found that there are positive significant relation between *profitability* and *dividend pay out ratio* (DPR). This is also strengthened by Jensen and Meckling (1992). The higher the profitability, the higher the company's cash flow. It is expected that a company will pay higher on dividends because they generally have a huge profit on the company whose profit has potential to increase when there is profitability increasing.

The statistical analysis result showed that the variable of company size in this model is not statistically significant. However, the positive coefficient value in the

relation of company size and dividend policy was also supported in this research. Its positive relation between company size and dividend policy is in accordance with Fama & French (2000) which stated that there is positive relation between *dividend pay out ratio* (DPR) and *size*. This research also gets along well with Crutchley and Hansen (1989) which also stated that there are similar empirical evidence and refer that the evidence was consistent with *the diversification cost of effect*. The *effect* stated that the bigger the company is, the lesser the *liquidy cost* to reduce managerial ownership to control *agency cost*, therefore company's managers tend to lean on *leverage* and dividend.

The company's growth showed a positive significant value againts variable of dividend policy. An estimation of negative paremeter in the relation between company's growth and debt policy is also in accordance to the research by Crutchley and Hansen (1989), and Megginson (1997). The *free cash flow hypothesis* argued that the high rate of company's growth will tend to pay divident in a relative small amount (Myers and Majluf: 1984; and Jensen: 1986). Therefore, an expected negative relation between the ratio of company's growth and policy of dividend payments was proved then. This indicates that the Indonesian manufacturing companies having a high level of growth and using the *internally generated fund* will be used by management in funding investment necessity to push its company's growth, by reducing dividend payments.

CONCLUSION

The result of this research showed that there is interdependent relation between all endogenous variables, although in some variables, it tend to show significant relation. However, the presence of in-line aim between variables is also a reflection on interdependent relation between each variables. This research agreed on the *agency theory* where there are substitutional relation between managerial stock ownership, debt policy and dividend policy in controlling/ handling *agency* problems. The further research is expected to use much more observations, use *Three Stage Least Square* to gain much more variative results, and add other exogenous variables to also obtain much more satisfying results.

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