# The Role Of Dividend Policy And Management Ownership In Moderating Free Cash Flow And Interest Rate On Firm Value

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### Abstract

Firm value in the manufacturing industry for the 2013-2018 period shows the average value of fluctuations as a result of stock price uncertainty. The purpose of this study is to investigate that firm value during the study period fluctuated, so that researchers were motivated to conduct studies on these various issues. The variables used to detect the firm value are free cash flow and interest rates. This study also examines the role of dividend policy and managerial ownership in moderating the effect of free cash flow, interest rates on firm value. The companies studied are manufacturing industries listed on the Indonesia Stock Exchange for the period 2013 – 2018. This research method is explanatory research. Samples were taken based on purposive sampling from the manufacturing industry population that met the sample criteria. This study concludes that interest rates have a significant positive effect on firm value and managerial ownership moderates positively significantly on the relationship between interest rates and firm value. Free cash flow has the potential to cause company failure, causing a decrease in firm value. Managerial ownership moderates the relationship between free cash flow and firm value.

Keywords: Free Cash Flow, Interest Rates, Firm Value, Dividend Policy, Managerial Ownership.

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# I. Introduction

Firm value is an important concept for investors, because it is considered an indicator for the market to assess the company as a whole. High company value will affect investor confidence is also higher. This is due to investors' assessment of the company's good prospects in the future, seen from its high share price.

The rise and fall of stock prices in the capital market is an interesting phenomenon to talk about today. The global economic crisis that occurred in 2008 had a significant impact on the capital market in Indonesia, this was reflected in the decline in stock prices by 40-60 percent from the initial position in 2008 (Kompas, November 25, 2008). This phenomenon is caused by the action of releasing shares by foreign investors who need liquidity and this happens to domestic investors who also release shares in groups. This condition is considered to affect the value of the company because the value of the company is reflected in its share price.

All sample companies experience fluctuations in firm value that go up and down. Moreover, in 2008, all company values decreased. It is interesting to study what causes fluctuations in the value of companies in Indonesia after the crisis period. Companies that experience a decline in company value as much as possible immediately make improvements, so as not to reduce the company's credibility in the eyes of investors.

Shareholders want the excess cash (free cash flow) to be distributed in the form of returns as a consequence of the capital investment invested in the company. Managers are required to provide better performance by taking advantage of the investment opportunities they have so as to provide maximum financial performance. Therefore, managers tend to make unprofitable investments and carry out illegal accounting practices by manipulating financial statements (Chung et al., 2005b).

Based on the problems associated with excess cash flow funds, it is necessary to resolve conflicts by the company through internal control so as to reduce conflicts of interest that occur (Farooque et al., 2007). Internal control is meant to monitor the activities of managers so that it minimizes the use of funds for activities that are not profitable or for the personal interests of managers (Jensen, 1986; Cullen et al., 2006).

The phenomenon on the Indonesia Stock Exchange shows the minimal number of companies that have positive free cash flow. Many companies in Indonesia are in a low or negative free cash flow position (Yudianti, 2003). The free cash flow has not been maximized into an investment opportunity for the benefit of the company (Yudianti, 2003).

Agency problems that arise due to information inequality require resolution through internal performance mechanisms (Farooque et al, 2007). The resolution of agency problems through dividend policies and forms of ownership is an interesting phenomenon to study (Murhadi, 2008). This phenomenon is related to the structure of share ownership that requires supervision of manager activities and dividends as a form of increasing firm value.

### Firm Value: Concepts and Theories

Firm value is very important because it reflects the company's performance which can affect investors' perceptions of the company. A high company value will make the market believe about the current state of the company or the prospects of the manufacturing industry in the company's future at this time or the company's prospects in the future (Wijaya, 2015). For the manufacturing industry that issues shares in the capital market, the price of shares traded on the Indonesian stock exchange is an indicator of company value. The higher the stock price of a company, the higher the value of the company, this has an impact on the greater prosperity of the owner of the company. The higher the stock price of a manufacturing industry, the higher the value of the company which has an impact on the prosperity of the owner of the company. In this study, firm value can be measured using Tobin'Q.

The main indicator of the value of the company can be measured from various points of view. The value of the company is said to be good when viewed from a certain point of view. Firm value can be seen from free cash flow, interest rate, dividend policy, managerial ownership. Based on this the researcher wants to know the effect of free cash flow, interest rate on firm value and if moderated by dividend policy, and managerial ownership.

### Free Cash Flow and Company Value

Free cash flow owned by the company has great benefits in an effort to increase the value of the company. These benefits include improving the welfare of shareholders and managers in the form of dividend distribution, as a source of internal funding through company operational financing. The results of the study (Rofizar & Arfan, 2013) show that free cash flow has a significant positive effect on firm value. The results of research that do not support are (Murhadi, 2008) showing that free cash flow has a significant negative effect on stock prices, because the availability of high free cash flow allows moral hazard to management, so it can reduce firm value. The results of Muhardi's research are in accordance with the results of research (Arieska & Gunawan, 2011) which show that free cash flow has a negative and significant effect on firm value. (Zeitun et al., 2007) found that free cash flow has a positive and significant impact on company failure. The results of this study support the agency theory, especially the free cash flow theory that the higher the free cash flow will have a negative impact on firm value and increase the potential for misuse of corporate cash flows. The high free cash flow owned by the company will indicate that the company is healthier, because the company has free cash available indicating that the company is in good condition. Research conducted by Al Zararee (2014), Tommy (2010) shows that free cash flow has a significant positive effect on firm value. The hypotheses proposed in this study are:

H1: The influence of Free cash Flow on the value of the company

### Dividend Policy Plays a Moderate Role in the Effect of Free Cash Flow on Company Value

The free cash flow variable is a source of conflict of interest between shareholders and managers (Oprea, 2008). , 2003). Dividend policy is needed to strengthen the relationship between free cash flow and firm value. The role of dividend policy with efforts to reduce conflict between principal and agent as a signaling function. Based on the results of previous studies in accordance with agency theory, the following hypothesis is formulated:

H1.1: Dividend Policy strengthens the relationship between Free Cash Flow with Company Value

# Managerial Ownership Moderates the Effect of Free Cash Flow on Company Value

The existence of a conflict of interest between shareholders and managers as well as asymmetric information causes agency costs to be incurred by the company so that in the long term it will reduce the company's financial performance. This information inequality causes moral hazard and adverse selection by management. Management assumes that the contract they entered into with the company did not work as expected. This condition creates asymmetric information between managers and shareholders regarding the use of free cash flow so that it has the potential to cause a conflict of interest and have an impact on the company's financial performance. Efforts to reduce conflicts between principals and agents include the role of managerial

ownership structure as a monitoring function. The role of managerial ownership is expected to increase firm value.

H1.2: Managerial Ownership strengthens the relationship between Free Cash Flow with Company Value

# Interest Rate and Firm Value

The results of the research presented (Tandelilin, 2010) show that high interest rates affect the present value of the company's cash flows, so that existing investment opportunities are no longer attractive. This makes investors no longer interested in investing which results in stock prices and company value also decreasing. The results of this study are in line with research conducted by (Sujoko and Ugy Soebiantoro, 2007) which says that the interest rate variable has a negative and significant effect on firm value. Rising interest rates will encourage people to save, and not invest in the real sector. The increase in interest rates will also be borne by investors, namely in the form of an increase in interest costs for the company. People do not want to risk making investments with high costs, as a result investment will not develop. Many companies experience difficulties in maintaining their lives, and this causes the company's financial performance to decline. The decline in the company's financial performance can result in a decrease in stock prices, which means the value of the company will also decrease. Erlina's research (2015) states that interest rates have a significant effect on firm value. H2 : The influence of interest rates on firm value

### Dividend Policy plays a role in moderating the effect of interest rates on firm value

(Setiani, 2013), if interest rates increase, investors are more interested in investing their funds in the banking sector and reduce investor interest in investing their funds in the capital market. If the demand for shares decreases, the share price decreases and the value of the company also decreases, as a signal for investors to invest. Therefore, dividend policy and managerial ownership are needed to strengthen the relationship between interest rates and firm value. The hypothesis that is built based on previous research and signaling theory is formulated as follows:

H2.1: Dividend Policy strengthens the relationship between Level

### **Interest Rate with Firm Value**

Managerial Ownership Plays a Moderate Role in the Effect of Interest Rates on Firm Value Increased managerial ownership helps to link the interests of managers and shareholders towards better decision-making and increases firm value (Ruan, 4 Tian & MA, 2011). With managerial ownership, managers in managing the company are more careful in making decisions because they share in the consequences of making decisions when increasing the value of the company. The hypotheses built based on previous research and monitoring theory are formulated as follows:

H2.2: Managerial Ownership strengthens the relationship between Interest Rates and Firm Value

Based on the theoretical basis and empirical studies regarding firm value, free cash flow, interest rates, dividend policies, managerial ownership, as well as previous studies, the following empirical research model is presented to determine the partial direct effect of free cash flow, interest rates on value companies that are moderated by dividend policy, and managerial ownership, so that the empirical research model can be described as follows:

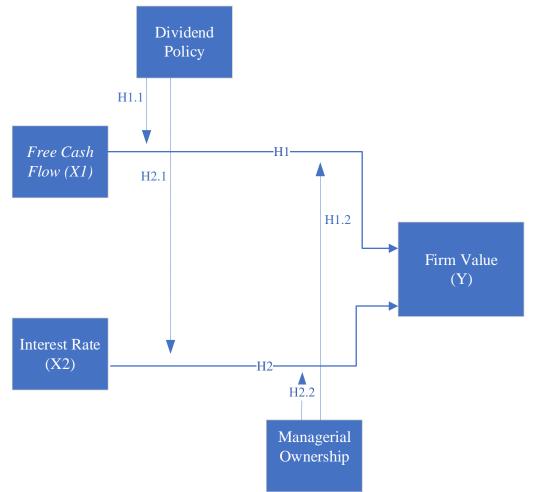


Figure 1. Empirical Research Model

# II. Method

# Research design

The design of this research is literature study and the type of research used is explanatory research, namely research that aims to test a theory or hypothesis in order to strengthen or even reject the existing theory or hypothesis of research results. This explanatory research is basic and aims to obtain information, data information about things that are not yet known. The results of this study are expected to provide an accurate explanation related to the research objectives to be achieved.

# **Population and Sampling Procedure**

The population in this study are manufacturing industrial companies listed on the Indonesia Stock Exchange (IDX) for 6 periods, 2013 to 2018. The determination of the sample used is purposive sampling based on special criteria, namely

# Variable Operations

This study uses two independent variables, namely the Free Cash Flow variable and the Interest Rate, while the dependent variable is the firm value variable and two moderating variables.

Table 1 variable Operations				
Variable	Proxies	Pengukuran	Scale and Reference	
Dependent				
Firm Value (Z)	Tobins'Q	Tobins'Q = Market Capitalization Ratio + total liabilities + inventory - current aset Total asset	Ratio (Reeves et al, 2012, Keown, 2004)	
Independent				
Free Cash Flow (X1)	RETA	RETA =	Ratio	

**Table 1 Variable Operations** 

	(Retained Earning to Asset)	Retained earnings Total Assets	(Chen and Steiner, 1999) in (Nuringsih, 2005)
Interest Rate (X2)	Nominal Interest rate	Nominal interest rate = real interest rate + inflation	Ratio (Brigham, 2010)
Moderating			
Dividend Policy (M1)	DDPR (Dummy-Dividend Payout Ratio)	Companies that pay dividends are given a number 1, and vice versa if do not pay dividends will be given a number 0.	Nominal, variabel dummy (Deshmukh, 2005)
Managerial Ownership Structure (M2)	MANAJ	MANAJ = Number of shares owned by the manager Number of shares outstanding	Rasio (Chen and Steiner, 1999) in (Nuringsih, 2005)

### Analysis Technique

The analysis technique used in this study is panel data regression, which combines time series data with cross section data so that panel data is data consisting of several individual units observed over a certain period of time. If each cross section unit has the same number of time series observations, it is called a balanced panel, while if the number of observations is different for each cross section unit, it is called an unbalanced panel.

This study contains 102 cross sections (manufacturing industry companies) with the same time series / balanced (annually starting from 2013 to 2018), namely 6 (six) periods. This method using panel data can be used to overcome various data problems in time series such as the lack of a number of research time periods and also to overcome the problem of lack of observation units in cross section data so that by using panel data better estimation results are obtained through increasing the number of observations that have an impact on increasing degrees of freedom. This panel data is also intended to increase the number of research observations when using time series or cross section data the number of observations is limited.

# III. Results And Discussion

The initial stage is testing the classical assumptions which consist of tests for normality, multicollinearity, heteroscedasticity, and autocorrelation. The empirical data used in this study shows that the research model has fulfilled all the assumptions so that the interpretation of the panel data regression equation can be carried out.

# Hypothesis test

To test the simultaneous significance of the effect of the independent variable (X) on the dependent variable (Y), the F test was performed. Meanwhile, to partially test the significance of the effect of the independent variable (X) on the dependent variable (Y), the t-test was performed. While multiple regression analysis is used to determine whether there is an influence between two independent variables (X) namely Free Cash Flow (X1), Interest Rates (X2) with the dependent variable (Y) namely Firm Value, and if moderated by dividend policy (M1) and managerial ownership (M2)

<b>Table2.</b> Test Result Phase T Goodness of Fi							
Hypotesist Test	Koefisien	Std. Error	t value	Sign			
Constant	0.2823	0.007652	36.89638	0.0000			
X1	- 0.0002	1.89E-05	- 8.391543	0.0000			
X2	0.0490	0.013167	3.719586	0.0002			
X1*M1	-7.70E-05		- 0.315349	0.7526			
X1*M2	0.000831		2.211168	0.0275			
X2*M1	-7.70E-05		- 0.315349	0.7526			
X2*M2	0.000831		2.211168	0.0275			
R Square	0.4067						
Adjusted R Square	0.2864						
F Statistic	3.3807						
F Statistic Significance	0.0000						

Table2	. Test Res	sult Phase	1 God	odness of I	Ft
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a. Dependent Variable: TOBINS'Q

Based on statistical parameters, it shows that the t-statistics of free cash flow (X1) is 8.391543 which is greater in the t-table of 1.645 at a significance of 0.05 or a significant probability value of 0.00 is smaller at

0.05, then the decision H01 is rejected, meaning that free cash flow has a significant effect on the value company. Meanwhile, the t-statistical interest rate (X2) is 3.719586, which is greater in the t-table of 1.645 at a significance of 0.05 or a significant probability value of 0.00 is smaller at 0.05, so the decision H02 is rejected, meaning that interest rates have a significant effect on firm value.

The effect of free cash flow and interest rates when moderated by dividend policy (M1) and managerial ownership (M2) shows the t-statistics of dividend policy (M1) of 0.315349 which is smaller on t-table of 1.645 at a significance of 0.05 or a significant probability value of 0.7526 greater than 0.05, the decision H01.1 is accepted, meaning that the dividend policy does not moderate the relationship between Free Cash Flow and Firm Value. While the t-statistic of managerial ownership (M2) is 2.211168, which is greater in the t-table of 1.645 at a significance of 0.05 or a significant probability value of 0.0275 is smaller at 0.05, the decision H01.2 is rejected, meaning that managerial ownership moderates the relationship between Free Cash Flow and the value of the company. Likewise, the effect of interest rates when moderated by dividend policy, managerial ownership on firm value.

# IV. Conclusion

1. Effect of Free Cash Flow on company value that Free cash flow has a significant negative effect on company value, meaning that unhealthy free cash flow is applied in the Manufacturing Industry so that it does not increase company value, because the free cash flow of each manufacturing industry during the period 2013 to with 2018 not yet fully implementing efficiency, effectiveness, economy in cash management after deducting investments. Effectiveness of cash management can be done by increasing efficiency and economizing on operating cash flows and investment cash flows that are carried out appropriately, in accordance with the budget and work programs that have been determined by each department on operating cash flows in the form of cash flow receipts and cash flow payments as well as cash flows. investment cash and financing cash flows. Free Cash Flow has a significant negative effect on firm value, identifying that high free cash flow will increase agency conflict and reduce firm value.

1.1. Free Cash Flow to Firm Value when moderated by dividend policy does not strengthen the relationship of free cash flow to firm value. This means that the size of the Free Cash Flow of the manufacturing industry in Indonesia from 2013 to 2018 cannot increase company value when moderated by dividend policy, because dividend policy has not been able to moderate the causal relationship between free cash flow and firm value. This is because the dividend policy is a decision whether the profits earned by the company are distributed to shareholders as dividends or will be retained in the form of retained earnings for investment financing in the future. If the company chooses to distribute profits as dividends, it will reduce retained earnings and will further reduce the total sources of internal funds or internal financing.

1.2. Free Cash Flow to Firm Value when moderated by Managerial Ownership strengthens the relationship of free cash flow to firm value. This means that the size of the free cash flow of the manufacturing industry in Indonesia from 2013 to 2018 can increase the value of the company. This managerial ownership serves as an internal monitoring function of the company and can minimize conflicts between management and shareholders and reduce agency costs.

2. Interest rates have a significant positive effect on firm value. This indicates that the interest rate is not a direct factor for investors' considerations in investing their capital in stocks. Investors see other factors that can be good indicators if they are going to invest in the company. Investors assume that the high interest rate to suppress the rate of inflation.

The findings in this study that interest rates have a significant positive effect on firm value. The interest rate is not a direct factor that can be considered for investors to invest in stocks. Investors see other factors that can be good indicators if they invest their capital in the company. Investors see more of the long-term viability of the company. This is not in accordance with the hypothesis which states that interest rates have a significant negative effect on firm value, due to high interest rates which causes investors not to divert their funds to other instruments such as bonds and others so that firm value will still be used in measuring market performance. share price and return on a number of investments as a form of return given to investors.

2.1. The effect of interest rates on firm value when moderated by dividend policy has no significant effect on firm value. This means that the high interest rate of the manufacturing industry in Indonesia from 2013 to 2018 cannot increase company value when moderated by dividend policy, because dividend policy is underutilized to spur investment activities of companies that have a positive net present value.

2.2. The effect of interest rates on firm value is moderated by managerial ownership having a significant effect on firm value. This means that the size of the interest rate of the manufacturing industry in Indonesia from 2013 to 2018 can increase the value of the company, because management share ownership can optimally function as internal control in controlling interest rates to maintain the company's survival.

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