

THE EFFECT OF INVESTOR SENTIMENT MANAGER BEHAVIOR, AND INVESTMENT OPPORTUNITY SET (IOS) ON COMPANY VALUE WITH DIVIDEND POLICY AS INTERVENING VARIABLES

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ABSTRACT

This study was conducted to examine the effect of investor sentiment, manager behavior, and investment opportunity set (IOS) using the Market Turnover (MTO) proxy, Debt to Equity Ratio (DER), Market Value to Book Value of Equity (MVEBVE) on firm value through policy dividends on LQ45 Index Issuers for the 2016-2020 period. The sample of this study used purposive sampling method with 100 samples of data from 20 LQ 45 index issuers listed on the Indonesia Stock Exchange. The dependent, independent, and intervening variables were measured by a ratio scale. This research uses a quantitative approach with Partial Least Square analysis technique from the SmartPLS program. The results of this study indicate that the independent variables, namely investor sentiment (MTO) and manager behavior (DER) have no significant effect on firm value, while the IOS variable (MVEBVE) has a significant effect on firm value.

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1. INTRODUCTION

A positive company value can convince investors and creditors to invest / lend capital to a company, for creditors, the company's ability to pay its debts is a picture of the value of a company. The agency problem is an important issue in the financial sector. Differences in interests between managers, company owners, and investors are agency problems that can cause agency costs, namely costs that arise due to differences in interests. According to this theory, dividends are considered to be a tool to minimize agency costs. With the payment of dividends, managers are required to produce new shares or use new debt to finance investments. This causes managers to be obliged to manage the company better because investors want good returns on the investments made by the company. In addition, with more investors and new creditors, the supervision of the company's performance will be tighter so that agency problems can be minimized.

The financial results reflected in the financial statements make owners and managers aware of the company's current potential so that they can prepare and decide what to do next[1]. Information received by investors can affect investor behavior[2]. Investor sentiment is an individual's feeling of being optimistic or overly pessimistic about a situation. From this definition, it can be concluded that there are psychological factors that cause stress, namely beliefs or feelings about certain situations[3]. The profit generated by the company is allocated to pay dividends to shareholders[4]. Regarding the Effect of Leverage, Profitability, and Liquidity on Stock Prices (Case Study of the Property and Real Estate Industry Listed on the IDX for the period

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2015-1019) it is known that the leverage variable has no effect on the stock price of the property industry set on the IDX. The profitability of the property and immobilization industries listed on the IDX has a positive effect on stock prices. The level of net profit generated shows that the business is running well, the income is higher[5].

Leverage is a ratio that assesses a company's debt. The variables of leverage and profitability together have a significant effect on firm value [6]. According to [7], financial leverage is the use of sources of funds with fixed costs in the hope that it will provide additional benefits that are greater than the fixed costs, thereby increasing shareholder profits. Leverage is debt used by a company to carry out business activities and company operations. Leverage is also commonly referred to as the solvency ratio, a ratio that shows the company's ability to meet all of its financial obligations in the event of liquidation (Agnes, 2004). The Investment Opportunity Set (IOS) is a choice of future investment opportunities that can affect the growth of company assets or projects that have a positive net present value [8]. The amount of IOS depends on the expenditure set by management in the future when this expenditure is an investment option that is expected to yield higher returns [9]. One of the important components of market value is IOS [10] because IOS affects the way managers, owners, investors and creditors view the company. IOS has a negative but not significant effect on Dividend Policy [11]. The dividend policy which is proxied through the Dividend Payout Ratio (DPR) has a positive effect on the value of the company which indicates that investors are faced with two choices whether the dividend returns are given in cash or in the form of capital gains. There is no influence between dividend policy on firm value. Debt policy as measured by DER does not have an insignificant effect on firm value as measured by PBV [12].

The indicators that researchers use in measuring the research variables are as follows:

Company value through Price Book Value (PBV) with the formula:

$$PBV = \frac{\text{Market price per share}}{\text{Book value per share}}$$

Investor sentiment through Market Turnover (MTO) with the formula:

$$\text{Market Turnover} = \frac{\text{Trading Volume}}{\text{Number of shares circulating}} \times 100$$

Manager behavior through the Debt to Equity Ratio (DER) with the formula:

$$DER = \frac{\text{Total Liabilities}}{\text{Total Equity}} \times 100\%$$

Set investment opportunities through Market value to book value of equity (MVEBVE) with the formula:

$$\frac{MV}{BVE} = \frac{\text{Assets} - \text{Total Equity} + \text{Number of shares outstanding} \times \text{Closing price}}{\text{total equity}}$$

Dividend Policy through Dividend Payout Ratio (DPR) with the formula:

$$DPR = \frac{\text{Dividend Per Share}}{\text{Earnings Per Share}}$$

2. METHOD

This research uses quantitative research with descriptive analysis approach. The type of data used is secondary data. The population of this study is issuers who are members of the LQ 45 index on the Indonesia Stock Exchange for the 2016-2020 period with a total data of 100 samples. The criteria used in this study are as follows:

1. Issuers listed on the Indonesia Stock Exchange for the period 2016-2020 for five consecutive years;
2. Issuers that have published financial reports for the period 2016-2020 for five consecutive years.
3. Issuers who distributed dividends during the 2016-2020 period for five consecutive years.

3. RESULTS AND DISCUSSION

The descriptive statistics of the observed variables were MTO (X1), DER (X2), MVEBVE (X3), DPR (Y1), and PBV (Y2). The data is presented in the following table:

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Table 1 Research Data Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
PBV	100	.57	16.13	2.7930	2.56645
MTO	100	.00	3.43	.1483	.35693
DER	100	.15	17.07	2.3484	3.05268
MVEBVE	100	.57	16.13	2.6674	2.42048
DPR	100	.01	2.68	.5644	.47589
Valid N (listwise)	100				

Source: processed data (2022)

- Firm value variable (PBV) shows that with a sample size of 100, the lowest value is 0.57 and the highest value is 16.13 and the average is 2.7930 with a standard deviation of 2.56645. The average value of 2.7930 shows that to get one share, a sacrifice of 2.7930 times is needed so that the investor's effort must be 2.7 times the price.
- Investor sentiment variable as measured by Market Turnover (MTO) shows that with a sample of 100, the lowest value is 0.00 and the highest value is 3.43, with an average of 0.1483 with a standard deviation of 0.35693. The lowest and highest values are the result of actions taken by investors.
- Manager behavior variable as measured by Debt to Equity Ratio (DER) shows that with a sample of 100, the lowest value is 0.15 and the highest value is 17.07, with an average of 2.3484 with a standard deviation of 3.05268. The lowest and highest values are the result of the behavior performed by managers
- The Investment Opportunity Set (IOS) variable as measured by (MVEBVE) shows that with a sample size of 100, the lowest value is 0.57 and the highest value is 16.13, with an average of 2.6674 with a standard deviation of 2.42048.
- The dividend policy variable as measured by the Dividend Payout Ratio (DPR) shows that with a sample of 100, the lowest value is 0.01 and the highest value is 2.68, with an average of 0.5644 with a standard deviation of 0.47589.

Convergent Validity Test

Convergent validity test is done by looking at the loading factor value of each indicator to the construct. For confirmatory research, the loading factor limit used is 0.7, while for exploratory research the loading factor limit used is 0.6 and for development research, the loading factor limit used is 0.5. Because this study is a confirmatory study, the limit of the loading factor used is 0.7.

Table 2 Table 2 Value of Loading Factor and AVE Construct

Indicator	Loading Factor	Average Variance Extracted (AVE)
MTO	1.000	1.000
DER	1.000	1.000
MVEBVE	1.000	1.000
DPR	1.000	1.000
PBV	1.000	1.000

Source: processed data (2022)

Based on the results of the PLS analysis in the table above, the AVE value of all constructs in the form of dimensions and variables has exceeded 0.5 which indicates that all indicators in each construct have met the required convergent validity criteria.

Discriminant Validity Test

Discriminant validity is carried out to ensure that each concept of each latent variable is different from other variables. The model has good discriminant validity if the AVE square value of each exogenous construct (the value on the diagonal) exceeds the correlation between the construct and other constructs (the value below the diagonal).

Table 3 Results of the Fornell Larcker Method of Discriminant Validity Test

	IOS	Dividend policy	The value of the company	Manager Behavior	Investor Sentiment
IOS	1.000				
Dividend policy	0.178	1.000			
The value of the company	0.796	0.180	1.000		
Manager behavior	-0.169	-0.069	-0.215	1.000	
Investor Sentiment	-0,158	-0.119	-0.144	0.103	1.000

Source: processed data (2022)

The results of the discriminant validity test in the table above show that all indicators and constructs in the PLS model have met the required discriminant validity criteria, for example the firm value variable has an AVE square root value of 1,000, this value is greater than the correlation between firm value and other constructs (of 0.796 to IOS, 0.180 to dividend policy, -0.215 to manager behavior and -0.144 to investor sentiment), this means that the construct of firm value has met the criteria of discriminant validity using the Fornell Larcker method.

Table 4 Discriminant Validity Test Results Cross Loading Method

	IOS	Dividend policy	The value of the company	Manager behavior	Investor Sentiment
DER	-0.169	-0.069	-0.215	1.000	0.103
DPR	0.178	1.000	0.180	-0.069	-0.119
MTO	-0.158	-0.119	-0.144	0.103	1.000
MVEBVE	1.000	0.178	0.796	-0.169	-0.158
PBV	0.796	0.180	1.000	-0.215	-0.144

Source: processed data (2022)

Based on the results of the discriminant validity test in the table above, it can be seen that all indicators have the highest indicators in their constructs not in other constructs so that it can be stated that all indicators have met the requirements of discriminant validity, for example in the DPR construct, the DPR indicator cross loading in measuring company growth is 1,000, while DPR when measuring other constructs, no cross loading is greater than or equal to 1,000 (0.178 when measuring IOS, 0.180 when measuring firm value, -0.069 when measuring manager behavior and -0.119 when measuring investor sentiment), this means that based on the cross loading test the DPR has met the required discriminant validity requirements.

Table 5 Results of Heterotrait-Monotrait Ratio (HTMT) Discriminant Validity Test

	IOS	Dividend policy	The value of the company	Manager Behavior	Investor Sentiment
IOS					
Deviden policy	0.178				
The value of the company	0.796	0.180			
Manager behavior	0.169	0.069	0.215		
Investor sentiment	0.158	0.119	0.144	0.103	

Source: processed data (2022)

Based on the results of the discriminant validity test in the table above, the results of the analysis show that the HTMT value between constructs does not exceed 0.9, which means that all indicators in each construct have met the required discriminant validity criteria.

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Reliability Test

Table 6 Reliability Test Results

	<i>Cronbach's Alpha</i>	<i>Composite Reliability</i>
IOS	1.000	1.000
Dividend policy	1.000	1.000
The value of the company	1.000	1.000
Manager behavior	1.000	1.000
Investor sentiment	1.000	1.000

Source: processed data (2022)

Based on the results of the analysis in the table above, the value of Cronbach's alpha and composite reliability of all constructs has also exceeded 0.7, this indicates that all constructs have met the required reliability, so it can be concluded that all constructs are reliable.

Table 7 Test Results of Path Coefficient Significance

Path	Original Samples (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
· IOS -> Dividend policy	0.158	0.159	0.078	2.014	0.045
· IOS -> the value of the company	0.774	0.760	0.150	5.166	0.000
· Dividen policy -> The value of company	0.035	0.036	0.050	0.707	0.480
· Manager behavior -> Deviden policy	-0.033	-0.052	0.187	0.178	0.859
· Manager behavior -> The value of company	-0.081	-0.084	0.045	1.783	0.075
· Investor sentiment -> Deviden policy	-0.090	-0.072	0.086	1.047	0.296
· Investor sentiment-> The value of company	-0.009	-0.010	0.036	0.249	0.804

Source: processed data (2022)

a. IOS → Dividend policy

In the path that shows the relationship between IOS (MVEBVE) influence on Dividend Policy (DPR), the p value obtained is 0.045 with a t statistic of 2.014 and a positive path coefficient of 0.158. Because the path p value < 0.05, t statistic > 1.96 and the path coefficient is positive, it can be concluded that IOS has a positive and significant effect on dividend policy, the higher the IOS value, the higher the influence on the company's DPR.

b. IOS → The value of the company

In the path that shows the relationship between IOS (MVEBVE) and Firm Value (PBV), the p value obtained is 0.000 with a t statistic of 5.166 and a positive path coefficient of 0.774. Because the path p value < 0.05, t statistic > 1.96 and the path coefficient is positive, it can be concluded that IOS has a positive and significant effect on firm value, the higher the IOS value, the higher the effect on firm value.

c. Dividend policy → The value of the company

In the path that shows the relationship between the effect of dividend policy on firm value (PBV), the p value obtained is 0.480 with a t statistic of 0.707 and a positive path coefficient of 0.035. Because the

- path p-value is > 0.05 , the t statistic is < 1.96 and the path coefficient is positive, it can be concluded that dividend policy has no and no significant effect on firm value.
- d. Manager behavior \rightarrow Dividend policy
In the path that shows the relationship between the influence of manager behavior on dividend policy (DPR), the p value obtained is 0.859 with a t statistic of 0.178 and a negative path coefficient of -0.033. Because the path p value > 0.05 , t statistic < 1.96 and the path coefficient is negative, it can be concluded that manager behavior has a negative and insignificant effect on dividend policy.
- e. Manager behavior \rightarrow The value of the company
In the path that shows the relationship between the influence of manager behavior on firm value (PBV), the p value obtained is 0.075 with a t statistic of 1.783 and a negative path coefficient of -0.081. Because the path p value > 0.05 , t statistic > 1.96 and the path coefficient is negative, it can be concluded that manager behavior has a negative and significant effect on firm value.
- f. Investor sentiment \rightarrow Dividend policy
In the path that shows the relationship between the effect of investor sentiment on dividend policy (DPR), the p value obtained is 0.296 with a t statistic of 1.047 and a negative path coefficient of -0.090. Because the path p value > 0.05 , t statistic > 1.96 and the path coefficient is negative, it can be concluded that investor sentiment has a negative and insignificant effect on dividend policy.
- g. Investor sentiment \rightarrow The value of the company
In the path that shows the relationship between the effect of investor sentiment on firm value (PBV), the p value obtained is 0.804 with a t statistic of 0.249 and a negative path coefficient of -0.009. Because the path p value is > 0.05 , the t statistic is < 1.96 and the path coefficient is negative, it can be concluded that dividend policy has a negative and insignificant effect on firm value.

Table 8 Results of Indirect Influence Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Investor sentiment -> Dividend policy -> The value of the company	-0.003	-0.003	0.006	0.519	0.604
IOS -> Dividend policy -> The value of the company	0.006	0.005	0.009	0.616	0.538
Manager behavior -> Dividend policy -> The value of the company	-0.001	-0.000	0.012	0.099	0.921

Source: processed data (2022)

- h. In the indirect path that connects investor sentiment to firm value through dividend policy (Investor Sentiment Dividend Policy Firm Value) the p value is 0.604 and the t statistic is 0.519. Due to the p value > 0.05 and t statistic < 1.96 , H_0 is accepted and it is concluded that dividend policy cannot mediate the effect of investor sentiment on firm value.
- i. In the indirect path that connects IOS to firm value through dividend policy (IOS Dividend Policy Firm Value) the p value is 0.538 and the t statistic is 0.616. Due to the p value > 0.05 and the t statistic < 1.96 , H_0 is accepted and it is concluded that dividend policy cannot mediate the effect of IOS on firm value.
- j. In the indirect path that links manager behavior to firm value through dividend policy (Manager Behavior Dividend Policy Firm Value) the p value is 0.921 and the t statistic is 0.099. Due to the p value > 0.05 and t statistic < 1.96 , H_0 is accepted and it is concluded that dividend policy cannot mediate the effect of manager behavior on firm value.

Coefficient of Determination (R Square)

The coefficient of determination shows the influence of exogenous variables on endogenous variables. In the PLS analysis, the coefficient of determination is seen from the adjusted R Square value with a value

between 0-1. The higher the adjusted R square, the higher the contribution of exogenous variables to endogenous variables.

Table 9 Coefficient of Determination (R Square)

	<i>R Square</i>	<i>R Square Adjusted</i>
Devidend policy	0.041	0.011
The value of the company	0.641	0.626

Source: processed data (2022)

Based on the results of the analysis in the table above, the results show that the R square value of the dividend policy variable is 0.041, this indicates that 4.1% of the dividend policy variance is influenced by investor sentiment, manager behavior, and IOS, while the remaining 95.9% dividend policy variance is influenced by other factors beyond investor sentiment, manager behavior, and IOS.

Furthermore, on the firm value variable, the analysis results show that the R square value of the firm value variable is 0.641, this shows that 64.1% of the variance in firm value is influenced by dividend policy, investor sentiment, manager behavior, and IOS while the remaining 35.9% variance in firm value is influenced by other factors outside of dividend policy, investor sentiment, manager behavior, and IOS.

4. CONCLUSION

Based on the results of research using data in the 2016-2020 period with the research object of issuers listed in the LQ 45 index, the following conclusions can be drawn: Investor sentiment proxied by MTO concluded that it has no positive and insignificant effect on firm value. The behavior of managers who are proxied by DER can be concluded that there is no significant effect on firm value. IOS as proxy by MVEBVE concluded that IOS has a significant effect on firm value. Dividend policy which is proxied with DPR concluded that it has no significant effect on firm value either as a direct variable or as an intervening variable.

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