

## The Impact of Independent Board of Commissioners, Institutional Ownership, on ROE through Managerial Ownership

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### Abstract

*The aim of the research is to determine the influence of the Independent Board of Commissioners, Institutional Ownership, on ROE through Managerial Ownership both simultaneously and partially. Quantitative research methods look for the influence of relationships between variables. The results of the research are an insignificant influence of the Independent Board of Commissioners (IBC) on ROE, an insignificant influence of the Independent Board of Commissioners (IBC) on Managerial Ownership (MO), a significant influence of Institutional Ownership (IO) on ROE, a significant influence of Institutional Ownership (IO) on Managerial Ownership (MO), there is a significant influence of Managerial Ownership (MO) on ROE.*

**Keywords:** *Independent Board of Commissioners, Institutional Ownership, ROE, Managerial Ownership*

### INTRODUCTION

Institutional ownership with significant ownership continually improves quality management by reducing excessive investment and using executive compensation linked to options and relative performance (Velte, 2024) as also stated by (Celik, 2023) Companies with low managerial capabilities and specialist CEOs, the influence of stable institutional owners on product quality failure is more obvious (Jiang et al., 2024) and (Gutiérrez-Ponce & Wibowo, 2023). Empirical evidence shows that stable ownership by active investors is greater than passive and other stable institutional ownership in terms of reducing product withdrawals (Le & Nguyen, 2024). Institutional ownership as a boundary between sustainability disclosure and board committee attributes (Blay et al., 2024) is in accordance with findings conducted by (Bian et al., 2023).

Taking into account that institutional ownership is a long-term investor, it is reasonable to consider the dampening impact of the relationship between negative performance feedback and green innovation performance, as well as the dampening impact on high-performing companies (Yang & Chen, 2024). Joint institutional ownership benefits from capital market information sources and management experience (Blay et al., 2024). On the one hand, shared institutional ownership can help encourage strategic collaboration and information sharing between companies in the same industry, as well as improve product market performance and competitiveness (Ding, 2024).

With more manager ownership, managers bear most of the costs of dodging, spending on benefits, and other value-destroying actions (Pu & Zulkafli, 2024). Additionally, with greater manager ownership, there is less of a problem of different horizons between owners and managers if share prices change rapidly according to the

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intrinsic value of the company (Alves, 2023) . According to this view, firms that are more susceptible to takeovers should have higher levels of managerial ownership because it reduces agency costs (Chatjuthamard et al., 2023) .

To increase the company's value in the eyes of the public and investors, an independent board of commissioners must help management implement and implement environmental accounting (Hidayat et al., 2023) . The composition of the independent board of commissioners and the number of meetings of the board of commissioners have a negative and significant effect on fraudulent financial reporting. The influence of external auditors on fraudulent financial reporting can be strengthened by the quality of the auditor (Sudarman et al., 2019) .

The significant and negative relationship between Managerial Ownership risk confirms that managers need to own company shares to align their interests with those of shareholders (Chikosi & Mutezo, 2023) . We argue that, because the audit committee has direct access to audit services, the existence of a more independent commissioner (Larasati et al., 2019) .

ROE is calculated by dividing net profit after tax by total assets and equity. Therefore, both show the influence of all income and expense items, both operational and non-operational (Yilmaz & Samour, 2024) . In addition, ROE shows the company's ability to generate profits relative to its capital (Elfan Kaukab, 2024) in accordance with research by (Istaiteyeh et al., 2024) . The return on capital ratio (ROE) shows how well a company uses the capital provided by shareholders to generate profits (Rahim et al., 2024) . In accordance with research by (Serzante & Stankevych, 2024) .

The aim of the research is to determine the influence of the Independent Board of Commissioners, Institutional Ownership, on ROE through Managerial Ownership both simultaneously and partially.

## **RESEARCH METHODS**

The variance-based Structural Equation Modeling (SEM) method is known as the Partial Least Square (OUTER) method. The reasons behind the choice of the PLS analysis model are:

PLS is a full power analysis method that is not based on many assumptions and allows analysis of various latent variable indicators, reflexive and formative indicators.

The PLS method is easier to operate, because PLS does not require certain distribution assumptions, does not require index modifications and goodness of fit can be seen in Q-Square Predictive

PLS SEM provides flexibility for users to use measurement scales other than intervals such as nominal, ordinal and ratio data, which is not permitted in covariance-based SEM which we know as covariance based SEM (CBSEM) with Amos and Lisrel software.

### **Partial Least Square Assumption**

PLS assumptions in particular are only related to structural modeling, and are not related to hypothesis testing, namely:

The relationship between latent variables in the inner model is linear and adaptive

The structural model is recursive. Apart from that, it is related to sample size, so the sample in PLS can be estimated with ten times the number of structural paths in the inner model.

Small sample size 30-50 or large sample size more than 200.

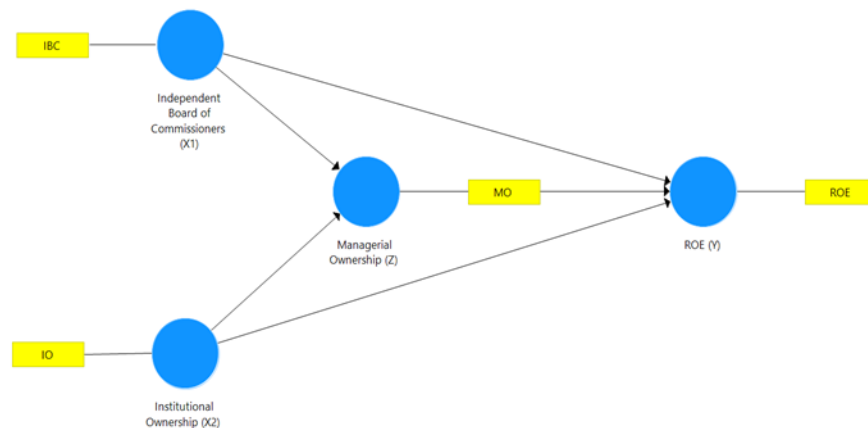
Goodness of Fit for the inner model is evaluated by looking at the percentage of variance explained, namely by looking at R2 (R-square of exogenous variables) for the latent construct, measuring how much observation value is generated by the model and also the estimated parameters. The Q-square value shows that the model has predictive relevance, whereas if the Q-square value is low, it shows that the model has less predictive relevance.

The results of the Partial Least Square Analysis can be grouped into 2 stages, namely measuring indicators (outer model) and testing the structural model (inner model).

Indicator measurement (Outer Model) is carried out by looking at Convergent validity, Construct Reliability, Average Variance Extracted-AVE, Discriminant validity, cross loading and unidimensionality of the model.

1. Convergent validity: is measuring the validity of indicators as measuring variables which can be seen from the outer loading of each variable indicator. An indicator is said to have good reliability if the outer loading value for each indicator is  $> 0.70$  (in research in undeveloped fields, 0.5-0.6 can be used). If the standard value of Convergent Validity  $> 0.70$  is used, then the loading value below 0.70 is removed from the model.
2. Construct Reliability is measuring the reliability of the latent variable construct. The value that is considered reliable must be above 0.70. Construct reliability is the same as Cronbach's alpha .
3. Average Variance Extracted-AVE is used to determine whether discriminant validity requirements are achieved. The minimum value to state that reliability has been achieved is 0.50 .
4. Discriminant validity aims to test to what extent the latent construct is truly different from other constructs. A high discriminant validity value provides an indication that a construct is unique and able to explain the phenomenon being measured. A construct is said to be valid by comparing the root value of AVE with the correlation value between latent variables. The root value of AVE must be greater than the correlation between latent variables .
5. Cross-loading is another method to determine discriminant validity, namely by looking at the cross-loading value. If the loading value of each item on the construct is greater than the cross loading value.
6. Unidimensionality Model. The unidimensionality test is to ensure that there are no problems in measurement. The unidimensionality test was carried out using composite reliability indicators and Cronbach's alpha. For these two indicators the cut-value is 0.7 .

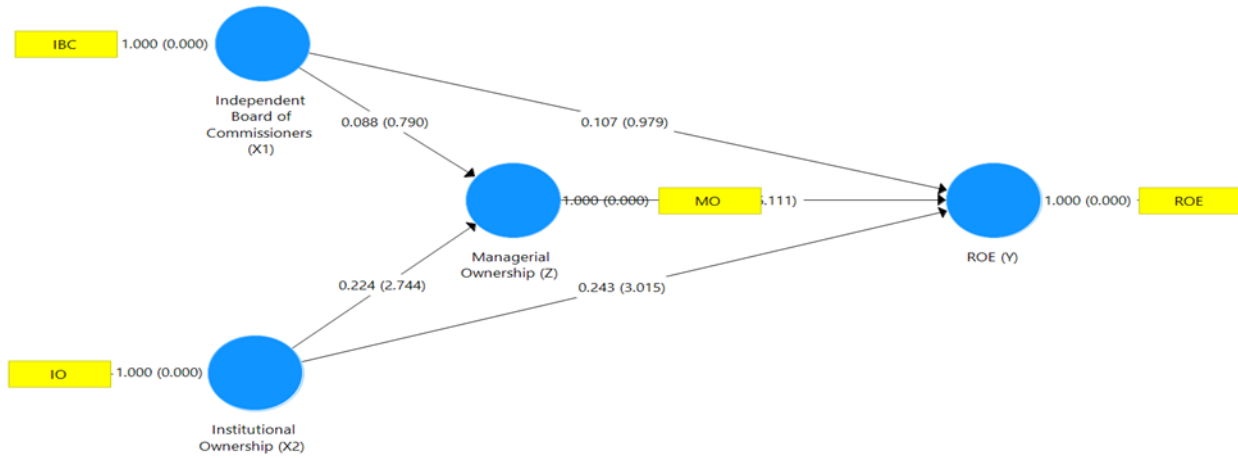
### Research Model is



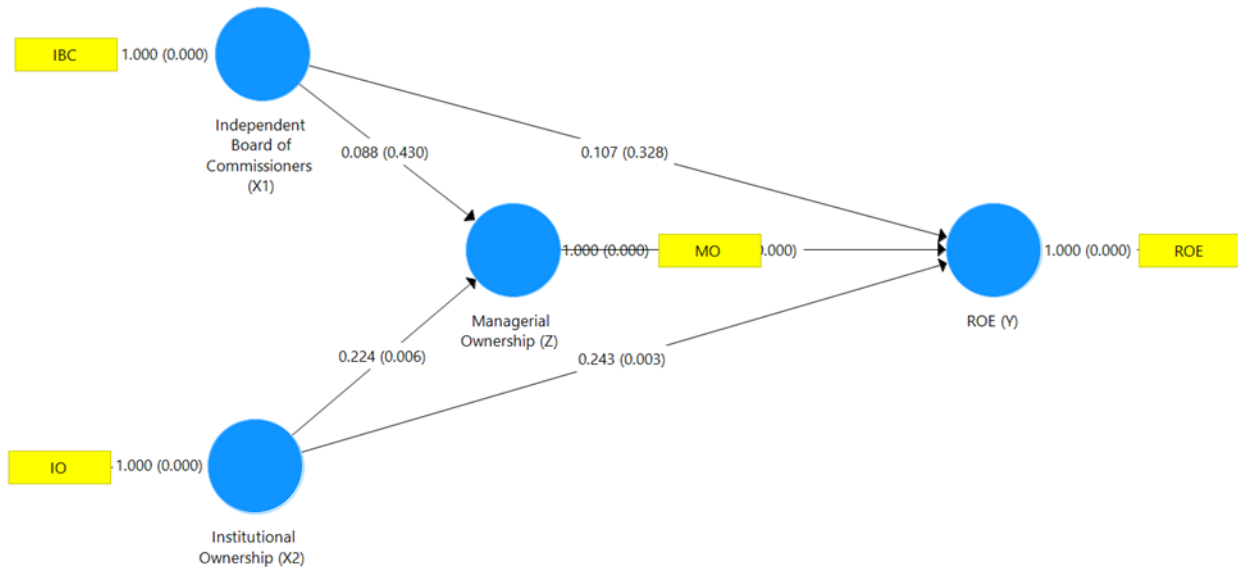
Based on the diagram above , the path model in This research has 2 models in it , namely : Model of the influence of the Independent Board of Commissioners (IBC) and Institutional Ownership (IO) on Managerial Ownership (MO) variable So Managerial Ownership (MO) as endogenous latent variables , while the Independent Board of Commissioners ( IBC) and Institutional Ownership (IO) as exogenous latent variable . The model of influence of the Independent Board of Commissioners (IBC), Institutional Ownership (IO), Managerial Ownership (MO) on ROE variable So ROE as endogenous latent variables , while the Independent Board of Commissioners (IBC), Institutional Ownership (IO ), Managerial Ownership (MO) as exogenous latent variable .

**Results and Discussion**

Result of analysis at the inner level is as follows : ( Calculated T value from loading factor and path coefficient)



And when it is displayed is The p value of the loading factor and path coefficient is as following :



From the diagram above , you can explained in a way detailed as following :

Path Coefficient or coefficient analysis track

**Direct Effects**

Below shows the direct effect or effect directly each independent variable construct to the dependent variable:

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Decision
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Independent Board of Commissioners (X1) -> Managerial Ownership (Z)	0.088	0.080	0.111	0.790	0.430	Not Significant (pvalue > 0.05)
Independent Board of Commissioners (X1) -> ROE (Y)	0.107	0.098	0.110	0.979	0.328	Not Significant (pvalue > 0.05)
Institutional Ownership (X2) -> Managerial Ownership (Z)	0.224	0.224	0.082	2,744	0.006	Significant (pvalue <0.05)
Institutional Ownership (X2) -> ROE (Y)	0.243	0.248	0.081	3,015	0.003	Significant (pvalue <0.05)
Managerial Ownership (Z) -> ROE (Y)	-0.435	-0.444	0.071	6.111	0,000	Significant (pvalue <0.05)

Taken from Inner Stage data .

In the Output Path Coefficient like appears in the table above is see big influence direct (DIRECT EFFECT) of each variable independent ( exogenous ) to the dependent variable (endogenous).

The size parameter coefficients for variable Independent Board of Commissioners (IBC) against Managerial Ownership (MO) is 0.088 which is significant there is influence negative Independent Board of Commissioners (IBC) against Managerial Ownership (MO) . Or can interpreted that the more Good mark Independent Board of Commissioners (IBC) then Managerial Ownership (MO) will the more decrease . Improvement One unit Independent Board of Commissioners ( IBC) will lower Managerial Ownership (MO) is 8.8%. Based on calculation with using bootstrap or resampling, where coefficient test results estimate Independent Board of Commissioners (IBC) against Managerial Ownership (MO) bootstrap results are 0.080 with the calculated t value is 0.790 then the p value is 0. 430 > 0.05 so Accept H0 or the meaning influence direct Independent Board of Commissioners (IBC) Against Managerial Ownership( MO) no meaningful or not significant in a way statistics .

So in model 1, the Independent Board of Commissioners (IBC) does not significant its influence to Managerial Ownership (MO) and ROE because p value > 0.05.

**Indirect Effects**

Indirect or indirect effect is independent variable effect to the dependent variable through intermediate variables . In this model that becomes intermediary is variable Y1.

Below is results indirect effects analysis :

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Conclusion
Independent Board of Commissioners (X1) -> Managerial Ownership (Z) -> ROE (Y)	-0.038	-0.038	0.051	0.749	0.454	Not Significant (pvalue > 0.05)
Institutional Ownership (X2) -> Managerial Ownership (Z) -> ROE (Y)	-0.098	-0.102	0.046	2,114	0.035	Significant (pvalue <0.05)

Taken from Inner Stage data .

Based on the table above , then all indirect influence significant or meaningful marked with pvalue with green blocks .

**Total Effects**

The total effects are the total effect which is combined or summation effect direct and indirect . Because there is n't any indirect effect , then automatic the total effect is the same value with effect direct . Below shows the total effects :

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Independent Board of Commissioners (X1) -> Managerial Ownership (Z)	0.088	0.080	0.111	0.790	<b>0.430</b>
Independent Board of Commissioners (X1) -> ROE (Y)	0.069	0.061	0.120	0.575	<b>0.565</b>
Institutional Ownership (X2) -> Managerial Ownership (Z)	0.224	0.224	0.082	2,744	<b>0.006</b>
Institutional Ownership (X2) -> ROE (Y)	0.145	0.145	0.075	1,932	<b>0.054</b>
Managerial Ownership (Z) -> ROE (Y)	-0.435	-0.444	0.071	6.111	<b>0,000</b>

Taken from Inner Stage data .

In the Output Path Coefficient like appears in the table above is see big Total influence (TOTAL EFFECT) of each variable free to bound . So based on the table above , then Some big the total effect is significant or meaningful marked with pvalue with green blocks .

Testing Output other to the model is carried out with see R value - Square is a goodness-fit-model test as in the picture following : ( Taken from OUTER Stage Model data )

The coefficient of determination (R2 ) is a way to assess how much an endogenous construct can be explained by an exogenous construct. The coefficient of determination (R2 ) is expected to be between 0 and 1. R2 values of 0.75 , 0.50, and 0.25 indicate that the model is strong, moderate, and weak (Sarstedt et al ., 2017). Chin provides criteria for R2 values of 0.67, 0.33 and 0.19 as strong, moderate and weak (Chin, 1998 in Ghozali and Latan, 2015).

**R-Square**

	R Square	R Square Adjusted
Managerial Ownership (Z)	0.062	0.036
ROE (Y)	0.206	0.172

Taken from Outer Stage data .

For example, the R Square Value of influence in a way together Against Z is of 0.062 with adjusted r square value 0.036, then can explained that all independent variables in a way simultaneously affects Z by 0.036 or 3.6%. Therefore Adjusted R Square 3.6% <19% then influence all independent variables against Z incl weak . Likewise influence against Y incl weak 17.2% < 19%

**F Square**

Apart from assessing whether or not there is a significant relationship between variables, a researcher should also assess the magnitude of the influence between variables with Effect Size or f-square (Wong, 2013). The f2 value is 0.02 as small, 0.15 as medium, and the value 0.35 as large. Values less than 0.02 can be ignored or considered to have no effect (Sarstedt et al ., 2017).

	Independent Board of Commissioners (X1)	Institutional Ownership (X2)	Managerial Ownership (Z)	ROE (Y)
Independent Board of Commissioners (X1)			<b>0.008</b>	<b>0.014</b>
Institutional Ownership (X2)			0.053	0.070

Managerial Ownership (Z)				0.224
ROE (Y)				

Taken from Outer Stage data .

So based on the table of F Square values above , the effect size is large is influence of Z on Y. X2 on Z and Y incl medium size effect , meanwhile other including small effect size or can ignored.

### Relevance Prediction or Q Square (Q 2 )

Cross-validated redundancy (Q 2 ) or Q-square test was used to assess predictive relevance. A Q2 value > 0.05 indicates that the model has accurate predictive relevance for a particular construct, while a Q2 value < 0.05 indicates that the model lacks predictive relevance (Sarstedt et al ., 2017).

Relevance predictions is For evaluate whether whether the predictions obtained are relevant or not. The calculation in PLS SEM using Q Square. Following result :

	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
Independent Board of Commissioners (X1)	75,000	75,000	
Institutional Ownership (X2)	75,000	75,000	
Managerial Ownership (Z)	75,000	71,876	0.042
ROE (Y)	75,000	60,426	0.194

Taken from Stage data Blinfoldding .

So based on Q Square value above , prediction to Y is relevant or accurate because Q Square value > 0.05. Whereas predictions to Z is irrelevant or inaccurate because Q Square value < 0.05.

### Inner Model Multicollinearity

SmartPLS v.3.2.7 2018 uses Variance Inflation Factor (VIF) to evaluate collinearity. Multicollinearity is quite often found in statistics. Multicollinearity is a phenomenon where two or more independent variables or exogenous constructs are highly correlated, causing the model's predictive ability to be poor (Sekaran and Bougie, 2016). The VIF value must be less than 5, because more than 5 indicates collinearity between constructs (Sarstedt et al ., 2017).

Multicollinearity or exists intercorrelation strong between independent variables shown in VIF Inner model values below :

	Independent Board of Commissioners (X1)	Institutional Ownership (X2)	Managerial Ownership (Z)	ROE (Y)
Independent Board of Commissioners (X1)			1,009	1,017
Institutional Ownership (X2)			1,009	1,063
Managerial Ownership (Z)				1,066
ROE (Y)				

Taken from Outer Stage data .

Based on The VIF value in the table above does not exist VIF value > 10 then there is none problem multicollinearity . That fact supported in its absence correlation between strong independent variables .

### CONCLUSION

The p value of the influence of the Independent Board of Commissioners (IBC) on ROE is 0.328 where > 0.05 so accept H0 means there is insignificant influence of the Independent Board of Commissioners (IBC) on ROE.

The p value of the influence of the Independent Board of Commissioners (IBC) on Managerial Ownership (MO) is 0.430 where  $> 0.05$  so accept H0 means there is insignificant influence of the Independent Board of Commissioners (IBC) on Managerial Ownership (MO).

The p value of the influence of Institutional Ownership (IO) on ROE is 0.003 where  $< 0.05$  so accept H1 means there is significant influence of Institutional Ownership (IO) on ROE.

The p value of the influence of Institutional Ownership (IO) on Managerial Ownership (MO) is 0.006 where  $< 0.05$  so accept H1 means there is significant influence of Institutional Ownership (IO) on Managerial Ownership (MO).

The p value of the influence of Managerial Ownership (MO) on ROE is 0.000 where  $< 0.05$  so accept H1 means there is significant influence of Managerial Ownership (MO) on ROE.

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