THE EFFECTIVENESS OF BOD PERFORMANCE AND ERM ON COMPANY'S FINANCIAL PERFORMANCE

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Abstract

The purpose of this research is to examine the correlation between corporate financial performance as assessed by Return on Asset (ROA) and the efficacy of the Board of Directors (BOD), more especially board size, board independence, and board gender. Enterprise Risk Management (ERM) is a moderating variable, and the chief risk officer's function is a surrogate for it in this study. Financial reports of 45 companies registered on the Indonesia Stock Exchange for the years 2018–2022, making up the bulk of the data used in this analysis. According to the findings, ROA is significantly affected by board independence but unaffected by board size or gender. Also, this study finds that ERM has moderating effect on the relationship between board independence and ROA.

Keywords: *Board Size, Board Independence, Board Gender, Return on Asset (ROA), Enterprise Risk Management (ERM)*

1. INTRODUCTION

The Board of Directors is an elected body which is the highest management body representing community stakeholders. Board of Directors have an important and vital role in managing company transactions, determining company management policies, and controlling operations to ensure efficiency (Al-Adeem & Al-Sogair, 2019; Butar-Butar & Indrianto, 2024). One of the most crucial elements of internal corporate governance is the effectiveness of the board, which is determined by board's size, independence, size, non-CEO duality, and meetings frequency (Pugliese et al., 2015).

In order to identify potential impact events, manage risks, and have enough confidence in the accomplishment of organisational objectives, COSO defines enterprise risk management as a process that involves management, the board of directors, and other staff members in creating a strategy that spans the entire company. Enterprise risk management (ERM) was found to significantly increase firm value upon implementation, according to studies that established a correlation between the two (Bertinetti et al., 2013; Hoyt & Andre P., 2010; Hoyt & Liebenberg, 2011; Li et al., 2014).

Several Indonesian public sectors are susceptible to governmental influence over ERM procedures and operations (Shatnawi* et al., 2020). A key component of enterprise risk management (ERM) is the formulation and implementation of policies for the management of operational, financial, and strategic risks. The ultimate choice to apply risk management is made collaboratively by the managers who are responsible for these (Dabari & Saidin, 2016). According to (Shad et al., 2019) and (Zou et al., 2019), organisations typically have an established ERM strategy that covers accounting, rules, expenses, and long-term forecasts in order to successfully manage assets and revenues. This study aims to investigate the following:

- How does the size of the board affect ROA?
- The Effect of an Independent Board on Return on Assets
- Gender Influence on Return on Assets (ROA)
- The relationship between board size and ROA and how enterprise risk management (ERM) moderates it
- How enterprise risk management (ERM) moderates the relationship between board independence and return on assets (ROA)

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- Enterprise risk management (ERM) as a moderator of the gender correlation between board members and return on assets (ROA.

The research is expected to be useful for companies and shareholders that plan to apply enterprise risk management strategies that consider the firm's performance.

2. LITERATURE STUDY

BOD has an important and vital role in managing company transactions, determining company management policies, and controlling operations to ensure company efficiency (Al-Adeem & Al-Sogair, 2019). (Rani & Zergaw, 2017) states that among all financial indicators, return on equity (ROE) is the most important indicator for corporate investors. This ratio measures an investor's return on the money invested in the company. This shows how efficiently the company can generate profits (Kapaya & Raphael, 2016)**.** Therefore, ROE is one of the ratios that prospective investors use as a reference when making investment decisions.

Another ratio that prospective investors consider when making investment decisions is Return on Assets (ROA). (Butar-Butar, 2023; Haque & Arun, 2016) states that ROA is the ratio of profit (profitability) to total assets to measure the return on total assets.

According to COSO, enterprise risk management is a process that entails management, the board of directors, and other staff members to create a strategy that spans the entire company with the goals of identifying potential impact events, managing risks, and having enough confidence in the accomplishment of organizational objectives. (Bertinetti et al., 2013; Hoyt & Liebenberg, 2011; Li et al., 2014) established a connection between enterprise risk management (ERM) and company value, and discovered that implementing ERM significantly increased company value. When faced with possible dangers, risk management is a crucial tool for both mitigation and management (Beasley et al., 2005). In the event that a risk materialises, the company's business risk management is lacking, although PT's punctuality can be demonstrated. Company name: Waskita Beton Precast Tbk (WSBP).

There are a number of ways that businesses' performance can be evaluated, including accounting ratios, market performance, accounting, and overall factor profitability (Achim & Borlea, 2014; Uddin & Kader, 2022). In (Achim & Borlea, 2014), two main ways of measurement are laid out. There are two types of financial performance measures. One type is based on accounting and measures the internal efficiency of the organisation. It includes indicators like growth, profitability, efficiency, liquidity, Return on Sales (ROS), Return on Assets (ROA), Return on Equity (ROE), asset turnover, leverage, equity to fixed assets ratio, working capital, ROIC, market performance (Tobin's Q).

3. RESEARCH METHODOLOGY

This research is research using quantitative approach. In selecting samples, the research used a purposive sampling method. The research uses secondary data, namely company financial reports on LQ45 which are listed on the Indonesia Stock Exchange with the observation year 2018-2022. There are a total of 220 pieces of data utilised in this study, with 44 companies making up the sample.

In Table 1 we can see the research variables, which comprise the following: the dependent variable, ROA; the independent variables, board size, board independence, and board size; and the moderating variable, ERM.

Table 1. Operational Research Variables

Variable	Definition	Measurement
Board size	The total number of directors that make up a company's board is known as its board size (Al-Adeem & Al-Sogair, 2019)	Total board of directors
Board independence	How many directors serve without receiving compensation from the company is one measure of a board's independence (Itan et al., 2024)	Total independent board of directors / total board of directors
Gender Board	Gender, in the context of corporate governance, refers to the representation of men and women on boards and high-level management positions(Al-Adeem & Al-Sogair, 2019)	Total female board of directors / total board of directors
ROA	ROA reflects company's efficiency in utilizing its resources or assets to generate profits (Itan & Angellina, 2023)	Net profit / Total assets
ERM	ERM, or Enterprise Risk Management, refers to an integrated approach to managing all the risks an organization may face (Li et al., 2014)	Dummy variable If the company implements ERM it is considered 1 and if the company does not implement ERM it is considered 0

Source*:* Various sources (2023)

4. RESULT AND DISCUSSION

Descriptive Statistics

Descriptive statistical analysis will provide an overview and description of the research data. The data description will be assessed by looking at the standard deviation, maximum and minimum values, as well as the mean obtained for the research variables. The variables used in this research are independent variables which include board size, board independence, and board gender, ROA, which measures financial performance, and enterprise risk management (ERM), which acts as a moderator, are the two variables in question.

Table 2. Descriptive statistics

Variable	N	Min	Max	Std. Deviation	Mean
Board Size (X1)	220	3.000	15.000	2.5274	6.8818
Board independence (X2)	220	0.000	0.333	0.0719	0.0265
Board Gender (X3)	220	0.000	0.600	0.1610	0.1231
ROA (Y)	220	-0.1858	0.3580	0.06709	0.0588
Enterprise Risk Management (Mo)	220	0.000	1,000	0.3295	0.8767

Source*:* Processed Data (2023)

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As can be seen in Table 2 above, the ROA variable's highest and lowest values are -0.1858 and 0.3580, respectively. The mean ROA stands at 0.0588. A low ROA value illustrates the lack of profit generated by the company in terms of asset utilization. From the Table 2, it shows there are two variables that have a mean value higher than the standard deviation, namely board size and enterprise risk management. This indicates that there is a significant gap between the highest and lowest values and that there are outliers between the data sets.

Table 3. Chow Test Results

Effect Test	Prob.	Results
Chi-square cross-section	0.0000	Fixed Effect Model

Source: Processed Data (2023)

The value of Prob. < 0.05 is evident from Table 3, which shows the results of the chow test. It is clear from the value of Prob. that the fixed effect model is the optimal choice for both the estimates and the model approach. We should conduct the hausman test next.

Table 4. Hausman Test Results

Effect Test	Prob.	Results
Random cross-section	0.2988	Random Effect Model

Source: Processed Data (2023)

Referring to Table 4 which is the result of the Hausman test, it can be seen that the value of Prob. more than 0.05. Based on the value of Prob. Therefore, the Langrange multiplier test is required since the random effect model is the best model approach and the best model for estimate.

Table 5. LM Test Results

Effect Test	Prob.	Results
Breusch-Pagan	0.0000	Random Effect Model

Source: Processed Data (2023)

Based on Table 5 which is the result of the Langrange Multiplier test, it can be seen that the value of Prob. < 0.05. From the value of Prob. It follows that the random effect model is the most appropriate estimating model and methodology to use.

Coefficient of Determination

Finding out how well the independent variables in a regression model explain the dependent variable is what the coefficient of determination is all about. This is what the coefficient of determination test turned out to be.

Table 6.Coefficient of Determination

Dependent Variable	Adjusted R-squared
ROA	0.536764

Source: Processed data (2023)

According to Table 6, the corrected r-squared value is 0.536764, indicating that the board size, board independence, and board gender are able to explain the ROA by 54.67% and the remaining 45.33% is explained by variables outside the research model.

Moderated Regression Analysis

A moderating variable's effect on the strength of the association between the independent and dependent variables is what this analysis is trying to determine.

Table 7. Hypotesis Test Result

	Coefficient	t-Statistics	Prob.	Conclusion
(Constant)	3.8997	-2.289	0.0443	
BODGEN	1.6216	-0.099	0.0790	Non Sig
BODIN	1.9229	-3.2801	0.0257	Sig +
BODSIZE	0.5280	0.8206	0.4128	Non Sig
ERM	1.9067	0.6613	0.0492	Sig +
BODGEN*ERM	3.0581	0.7096	0.0826	Non Sig
BODIN*ERM	8.4727	0.0357	0.0349	Sig +
BODSIZE*ERM	0.3492	-0.5256	0.5697	Non Sig

Source: Processed data (2023)

Based on the results of the MRA analysis, it was found that ERM had a significant effect on the ROA variable. From Table 7 it was found that the effect of the interaction results between the moderator variable ERM and the independent variable board gender on ROA had a prob value is 0.0826, the interaction with the board independence variable is 0.0349, and the interaction with the board size variable is 0.5697. This reflects that the independent variable which is board independence is smaller than 0.05 so board independence have an effect on ROA, while the board gender and board size variable is bigger than 0.05 so they have no effect on ROA. So, ERM moderates the relationship between board independence and ROA, since it acts as a moderator between the two variables. The results of this study are also supported by research conducted by (Butar-Butar & Indrianto, 2024) which states that enterprise risk management (ERM) can be a moderating variable on the relationship between board independence and firm performance. Based on Table 7, it can be seen that:

a. Rejecting H1 is possible because the significance level for the influence of board gender on ROA is 0.0790 > 0.05. This finding disproves the hypothesis that gender on the board significantly affects ROA.
b. We may conclude that H2 is accepted, board independence has a significant effect on ROA, because the influence of board independence on ROA has a significance threshold of 0.0257 < 0.05.
c. A significance level of 0.4128 > 0.05 indicates that the influence of board size on ROA is not significant, leading to the rejection of H3.
d. Since the significance level of 0.0826 < 0.05 for the influence of enterprise risk management (ERM) on board gender relationships on ROA is less than 0.05, we can reject H4. Consequently, we can infer that ERM does not significantly affect ROA.
e. We can conclude that H5 is accepted and that enterprise risk management (ERM) has a significant effect on ROA in the board independence relationship because the influence of ERM on this relationship has a significance level of 0.0002 < 0.05.
f. With a significance level of 0.5912 > 0.05, we can conclude that H6 is rejected when considering the influence of enterprise risk management (ERM) on the relationship between board size and ROA. Therefore, ERM does not significantly affect ROA.

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5. CONCLUSION

Based on the findings of the hypothesis testing, it was found that board independence significantly and positively affected the ROA variable, in contrast to board size and board gender, the two independent factors. Additionally, the moderating impact of the enterprise risk management (ERM) variable in the link between board independence and ROA is demonstrastated by the use of the ERM variable, which is quantified using the Chief Risk Officer (CRO) proxy.

For future researchers, it is recommended to consider several aspects to improve the quality and generalization of research findings. First, researchers can expand the scope of the sample to reflect a wider diversity of industries or business sectors, so that research results can be more generally applied. Second, it is important to expand the variables considered and consider external factors that may influence a company's financial performance, such as market conditions or regulatory changes. This will provide a more comprehensive understanding of the factors that influence the dependent variable. Third, future researchers are advised to pay more attention to data quality and data collection methods. The use of reliable data sources and careful methods can increase the validity of research results. Additionally, using different data collection methods or diversifying data sources can provide a broader perspective. By taking these suggestions into account, it is hoped that future research will make a greater contribution to the understanding of the factors that influence corporate financial performance.

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