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# Board Size, Outside CEO and Financial Performance in Family Companies with Enterprise Risk Management (ERM) as a Moderating Variable

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# Keywords: board size; outside CEO; Financial Performance:

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11/05/2024 Revised: 17/06/2024 Published: 17/07/2024 **ABSTRACT** This study examines the influence of board size and non-family CEOs (outside CEOs) on the company's financial performance, as well as the moderating effect of enterprise risk management (ERM) in family firms. Financial performance is proxied by return on assets (ROA) as the dependent variable. The sample of this study is family firms from the nonfinancial sector listed on the Indonesia Stock Exchange (IDX) for the years 2017–2021. For testing the hypothesis, this study uses the Ordinary Least Squares (OLS) and Moderated Regression Analysis (MRA) methods with the application IBM SPSS Statistics 22 for Windows. This study's results show that board size has a positive and significant effect on financial performance in family firms. Meanwhile, the presence of an outside CEO does not have a significant influence on financial performance in family firms. Regarding the moderating effect of ERM, this study shows that ERM does not significantly moderate the influence of board size and an outside CEO on financial performance in family firms.

# **INTRODUCTION**

In general, profit-oriented companies want sustainable profits. For this to happen, all the company's business activities must be profitable. A company's business activities are categorized into three main actions: budgeting, investing, and operations. These three focuses are binding and must move sustainably to keep the company running. This means that to streamline operational processes, activities related to budgeting and investment cannot be separated. Investment decisions in appropriate assets can influence production, operational activities, and sales processes (Ismiyanti, 2018).

A firm can be analogized to a vessel that is steered by the captain and crew to navigate toward its objective without any harm. Consequently, the functioning of the organization is contingent upon the individuals who manage and oversee its operations. However, it is not always the case that all stakeholders inside the organization share the same objectives. The diverse personalities and histories of these firm officials result in divergent perspectives, leading to a lack of alignment in their goals.

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Companies are indeed owned by capital owners or shareholders, but sustainable company development is the responsibility of the board of directors, or BOD (Vu et al., 2018), which is why BOD plays an important role in the company's governance structure (Fama and Jensen, 1983). The board of directors is led by a chief executive officer (CEO), usually known in Indonesia as the main director or president director (Putri dan Deviesa, 2017). The CEO's presence exerts significant influence on the company's success due to the decisions he makes. Typically, family-owned businesses hire external CEOs or nonfamily CEOs when they require advanced managerial expertise that is not available from inside the family. Furthermore, corporations find it more convenient to locate experts with the necessary abilities in the labor market rather than from inside their own family network (Sánchez et al., 2019). An external CEO is an individual who is recruited by the family to serve as the primary executive, is entrusted with the task of overseeing the performance of the family company, and does not possess any ownership stake in it (Lardon et al., 2017). Put simply, an external CEO is a primary executive who is not a relative and does not possess any ownership stake.

One of the challenges that the CEO and other members of the Board of Directors must confront in growing the firm is managing the risks that may arise as a result of their decisions. Typically, individuals have a tendency to allocate their resources towards investments that appear to be lucrative, while disregarding those that appear to be less advantageous in the current moment. Nevertheless, it is uncertain; something that appears to be less lucrative may yield greater worth in the future. Hence, it is imperative for the Board of Directors (BOD) and the external Chief Executive Officer (CEO) to possess the ability to capitalize on favorable circumstances that facilitate the company's advancement, while simultaneously ensuring that the risks impacting the company's performance remain within acceptable limits. Companies that disregard risk also disregard the potential for acceptable value.

The concept of risk management within an organization was introduced in the mid-1990s and is commonly referred to as enterprise risk management, or ERM (Bowen 2005). Based on the 2004 research conducted by Chairani and Siregar (2021) on behalf of COSO (Committee of Sponsoring Organizations of the Treadway Commission), Enterprise Risk Management (ERM) is a company-wide process influenced by board members, management, and employees. It is implemented throughout the organization and aims to identify and manage potential events that could impact the company. The ultimate goal of ERM is to provide the company with reasonable assurance in achieving its objectives. Implementing Enterprise Risk Management (ERM) enables firms to gain a comprehensive understanding of the risks associated with all parts of their business operations. This knowledge serves as an unbiased foundation for allocating company resources and enhancing the decision-making process.

The purpose of this study is to examine the impact of board size and the presence of an external CEO on the financial performance of Indonesian family firms, while also considering the moderating role of applying Enterprise Risk Management (ERM). This is due to the distinctive characteristics that family firms possess, which are absent in nonfamily enterprises. The complexities of family connections and family values have a distinct impact on the decision-making process within family-owned businesses. Furthermore, family-owned businesses have unique hazards that are not often encountered by non-family businesses. These risks include potential conflicts of interest arising from the intersection of the owner's personal and company interests, as well as a potential lack of distinction between family and company money.

# LITERATURE REVIEW

#### **Agency Theory**

Agency theory elucidates the challenges that occur inside firms due to the divergence between ownership and management of the organization (Jensen and Meckling, 1976). Following that, this theory endeavors to address issues that emerge due to divergent interests between corporate executives and shareholders (Kyere and Ausloos, 2020). Ownership of a company is vested in individuals or groups through shares, and these shareholders (also known as principals) entrust managers (also known as agents) with the responsibility of operating the business in alignment with the shareholders' interests (Jensen and Meckling, 1976). Nevertheless, it is conceivable that principals and agents may own divergent interests and actively seek distinct objectives (Vu et al., 2018). As stated by Jensen and Meckling (1976), if both parties in a relationship maximize their own utility, it is likely that the agent may not always behave in the best interests of the principal. Agency difficulties, as identified by Panda and Leepsa (2017), arise from divergent goals and interests, resulting in conflicts that ultimately incur agency costs.

Agency costs occur when a corporation delegates decision-making authority to agents who act on behalf of the principal. In some cases, these agents may make decisions that do not align with the best interests of the principal but instead prioritize their own personal welfare (Junarsin and Ismiyanti, 2009). To reduce the deviation from the agent's interests, the principal can establish suitable incentives and bear monitoring expenses specifically geared to restrict the agent's aberrant actions (Jensen and Meckling, 1976).

#### **Board Size and Financial Performance**

Board size, or the number of members of a company's board of directors, is an important component of corporate governance. Large or small board size is considered a determining factor in the proper functioning of the BOD (Vu et al., 2018). A larger board size is often associated with deeper intellectual knowledge (Arora and Sharma, 2016). Each member of the board of directors' diverse expertise will be able to direct the company to make the right decisions toward its goals, resulting in superior financial performance.

Financial performance is commonly employed as a comprehensive indicator to assess the overall financial well-being of a company during a specific timeframe (Fatihudin et al., 2018). The research utilizes financial ratios to portray financial performance, with return on assets (ROA) being employed as a proxy for measuring financial performance. The ratio was selected based on its ability to evaluate the effectiveness of management in generating profits through efficient utilization of firm assets.

The Board of Directors has a crucial role in enhancing financial performance through its policy decisions (Khatib and Nour, 2021). Hence, the magnitude of the board size can potentially impact the financial policies and decisions of the organization. The findings of Kyere and Ausloos (2020), Khatib and Nour (2021), and Vu et al. (2018) demonstrate that the size of the board has a notable and favorable impact on the financial performance of the company. Therefore, it can be inferred that a larger board size possesses a diverse range of information and expertise that proves valuable in decisionmaking and devising effective strategies, consequently enhancing the financial performance of the organization. The first hypothesis is formulated as follows, taking into account these reasons:

H1: Board size has a positive effect on financial performance in family companies.

#### **Outside CEO and Financial Performance**

In family companies, the CEO position is often filled by family members based on their kinship relationships rather than their abilities or expertise (Miller et al., 2014). However, there is a growing trend among family businesses to explore the option of hiring CEOs who are not part of the family. There could be a couple of reasons for this situation: (1) there may not be a successor who is interested in carrying on the family business; or (2) the family company demands advanced skills and expertise to effectively manage the business, which may not be present within the family. CEOs who lack familial connections often place a strong emphasis on profitability as a means of showcasing their skills and capabilities (Sánchez et al., 2019). An external CEO within the organization perusahaan keluarga juga dapat menyeimbangkan tujuan socioemotional wealth from the owner's family to the company's commercial needs (Miller dkk., 2014).

Outside CEOs are generally more concerned with the company's financial performance than socio-emotional rewards and are less likely to be emotionally impacted by family-centered issues. Outside CEOs who are disinterested in the family's affairs, interests, and culture will prioritize the presentation of their capabilities through the publication of favorable financial results. Therefore, the financial performance of the company can be enhanced by the addition of management skills from external CEOs, who can also mitigate the risk of being distracted by the socioemotional agenda of the owner's family.

According to Adams and Jiang's (2016) research findings, outside directors and company executives with finance expertise have a positive and significant effect on financial performance, as proxied by ROA. This is similar to the results of research from Yasuhiro et al. (2019), which states that outside directors have a positive effect on ROA, as well as research by Sánchez et al. (2019), who also stated that outside CEOs have a positive and significant effect on ROA in family companies. Thus, the second hypothesis of this research is formulated as follows:

H2: Outside CEOs have a positive effect on the financial performance of family companies.

# The Moderating Effect of Enterprise Risk Management (ERM) on the Influence of **Board Size on Financial Performance in Family Companies**

The reason companies implement ERM is to achieve a balance between performance and risk management (Olayinka et al., 2017). An optimal balance between risk management and financial performance will enable companies to be strategic in dealing with financial complexity. In addition, the capabilities inherent in ERM will help company management achieve performance targets, increase profitability, and prevent resource losses (Hiles, 2012). When ERM is implemented effectively in a company, more accurate decisions regarding financial risks can be made, and better performance can be achieved (Shatnawi et al., 2022). Regarding events outside the company's control, ERM provides reasonable assurance, allowing management and the board to find out about the company's progress and any obstacles that stand in the way of achieving company goals (Hiles, 2012). In short, ERM can help companies achieve their goals and avoid pitfalls or surprises along the way.

In order for a company to be successful in managing risk, the ERM scheme must be viewed as a board strategic policy that is important in decision-making (COSO, 2004). The board of directors is the company's advocate for risk management and has the final say in implementing it (Shatnawi et al., 2019). An effective board of directors, along with support from senior managers, is necessary to obtain the right resources, focus, and attention for ERM to be effective and result in improvements in company performance (Shatnawi et. all, 2022).

When ERM is implemented effectively in a company, the company will be able to manage risks that arise from a potential event that can affect the company's performance in achieving its goals. Board size is an internal factor that is considered important because it can influence the company's management capabilities (Shatnawi et al., 2019). Large board size is often associated with wider knowledge and experience, so with more BOD members and wider board of director knowledge, more accurate decisions regarding financial risks can be made and better performance can be achieved. In contrast, companies that do not implement ERM may use traditional risk management, which only focuses on risks that arise physically or legally (such as natural disasters, fires, accidents, and lawsuits), so that they are less able to deal with uncertainty. If this is the case, then increasing the number of BOD members will not improve the accuracy of financial risk decisions. Therefore, the third hypothesis of this research is formulated as follows:

H3: Enterprise risk management (ERM) moderates the influence of board size on financial performance in family companies.

# The Moderating Effect of Enterprise Risk Management (ERM) on the Influence of **Outside CEOs on Financial Performance in Family Companies**

The influence of directors on company performance is through policy setting (Khatib et al., 2021). The CEO, as the company's executive leader, is given the authority to make internal company policies and make decisions in the interests of the company by identifying potential events that can affect the company's performance. In family companies, company founders are more reluctant to take high risks (Koji et al., 2020). This argument is based on the idea that the founder of a family company, or the family members who own and control the company, have a strong motivation to create wealth for their successors. This motivation causes company founders and their family members to tend to adopt a long-term view of their investments, which ultimately makes them reluctant to take higher risks in order to generate stable returns for shareholders.

The existence of an outside CEO in a family company can provide a different perspective on risk-taking. According to the analysis by Sánchez et al. (2019), family companies led by outside CEOs have a higher level of total debt than those led by family CEOs. This shows that outside CEOs have a greater willingness to bear debt than family CEOs. Likewise with preferences for risk, where Sánchez et al. (2019) state that family companies with CEOs who come from the family tend to maintain a greater level of shortterm liquidity. This demonstrates that family CEOs' aversion to risk is greater than that of outside CEOs and that family CEOs prefer financial autonomy.

Thus, the level of ROA depends on the strategy, policies, or decisions made by the outside CEO, while all outside CEO decisions should be made by considering the risks that could potentially arise. In accordance with COSO (2004), ERM is designed to identify the potential of a phenomenon that may affect the organization and manage risks within the organization's tolerance in order to provide adequate guarantees regarding the achievement of organizational goals. Thus, companies that implement ERM will be able to manage risks that arise from a phenomenon that might affect the company's performance in achieving its goals. Companies that recruit outside CEOs and implement ERM will be better able to manage the risks that arise so that they are more willing to face hazards, which means they have more opportunities to get higher returns, so they can improve financial performance. Companies that recruit outside CEOs and do not implement ERM may use traditional risk management, which only focuses on risks that arise physically or legally, so they are less courageous in facing risks and tend to be risk avoiders, which ultimately makes companies miss opportunities to achieve success. higher returns. For these reasons, the fourth hypothesis (H4) in this study is formulated as follows:H4: *Enterprise risk management* (ERM) memoderasi pengaruh *outside* CEO terhadap kinerja keuangan di perusahaan keluarga.

The conceptual framework of this research is shown in Figure 1 as follows:

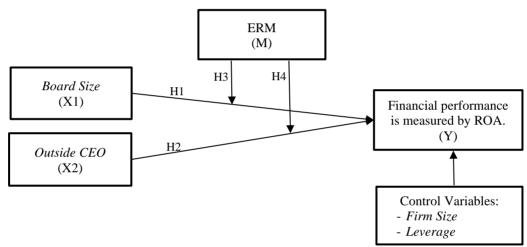


Figure 1. Research Conceptual Framework

#### **METHODS**

This research examined a population of non-financial sector companies listed on the Indonesia Stock Exchange (BEI) for the period 2017–2021. The population in this study consisted of 637 issuers. Sampling was determined using a purposive sampling technique, and after several specific criteria were applied, 1,105 observation data were obtained from 221 family companies. The statistical analysis methods used by this research are multiple linear regression (OLS)) and modified regression analysis (MRA), and the type of data used in this research is time series data.

# Operational definition and variable measurement

Ratio scale data is used for the financial performance variables, board size, and all control variables (firm size and leverage). Meanwhile, nominal scale data is used for the ERM variable and the outside CEO variable, which is measured using a dummy. The measurements of this research variable are presented in Table 1 as follows:

 Table 1: Research Variable Measurement and Operational Definitions

Variable	Measurements	Scale			
Variabel Dependen:					
Kinerja Keuangan (Y)	ROA (Net profit/total assets).				
Independent Variable:					
Board Size (X1)	Total members of the board of directors at company i in year t.	Ratio			
Outside CEO (X2)	1 if the outside CEO or main director is a professional from outside the family circle; otherwise, 0.				
Moderating Variables:					
ERM (M)	<ul> <li>a. 1 if the company has a chief risk officer (CRO); otherwise, 0.</li> <li>b. 1 if the company has formed a risk committee; otherwise, 0.</li> <li>c. Risk assessment frequency: 1 if the company carries out risk assessment and/or risk reporting procedures at least twice a year; otherwise, 0.</li> <li>d. Risk assessment level: 1 if the company carries out risk assessment procedures continuously to the lowest level; otherwise, 0 (e.g., based on a business unit or function).</li> <li>e. Risk assessment method, 1 if the company adopts certain qualitative and quantitative risk assessment methods; otherwise, 0.</li> <li>f. 1 if the company has referred to the COSO (Committee of Sponsoring Organizations of the Treadway Commission) framework; otherwise, 0.</li> <li>g. 1 if the company has referred to the ISO 31000 framework; otherwise, 0.</li> <li>The scores obtained from assessing the seven aspects above will be added up; if the total score is ≥ 4, a value of 1 will be given; otherwise, 0.</li> </ul>	Dummy			
Control Variable Leverage	Total debt/total assets.	Ratio			
Firm Size	Log (total assets)				

# **Analysis Model**

The analysis model in this research is written in the following equation:

Analysis Model 1

$$ROA_{i, t} = \beta_0 + \beta_1 BSIZ_{i, t} + \beta_4 FSIZ_{i, t} + \beta_5 LEV_{i, t} + e_{i, t}$$

Analysis Model 2

$$ROA_{i, t} = \beta_0 + \beta_2 OCEO_{i, t} + \beta_4 FSIZ_{i, t} + \beta_5 LEV_{i, t} + e_{i, t}$$

Analysis Model 3

$$ROA_{i, t} = \beta_0 + \beta_1 BSIZ_{i, t} + \beta_3 ERM_{i, t} + \beta_1 BSIZ_{i, t} * \beta_3 ERM_{i, t} + \beta_4 FSIZ_{i, t} + \beta_5 LEV_{i, t} + e_{i, t}$$

Analysis Model 4

$$ROA_{i, t} = \beta_0 + \beta_2 OCEO_{i, t} + \beta_3 ERM_{i, t} + \beta_2 OCEO_{i, t} * \beta_3 ERM_{i, t} + \beta_4 FSIZ_{i, t} + \beta_5 LEV_{i, t} + e_{i, t}$$

#### Information:

 $ROA_{i,t}$ : The financial performance of company i in year t is

measured by ROA

 $\beta_0$ : Constant

 $\beta_1 - \beta_5$ : Regression coefficient

 $\beta_1 BSIZ_{i,t}$ : Number of members of the board of commissioners of the

company i year t

 $\beta_2 OCEO_{i,t}$ : Outside CEO (dummy variable) company i year t  $\beta_3$ ERM<sub>i, t</sub> : Enterprise risk management company i year t β<sub>4</sub>FSIZ<sub>i, t</sub> : Firm size control variable for company i year t : Control variable for company leverage level i year t  $\beta_5 LEV_{i,t}$ 

 $\beta_1 BSIZ_{i,t} * \beta_3 ERM_{i,t}$ : Interaction between board size and enterprise risk

management in company i year t

 $\beta_2$ OCEO<sub>i, t</sub> \*  $\beta_3$ ERM<sub>i, t</sub> : Interaction between the outside CEO and enterprise risk

management in the company i year t

: Error or residual value of the company i year t  $e_{i,t}$ 

#### **RESULTS AND DISCUSSION**

#### **Results**

This research focuses on non-financial sector family companies listed on the IDX in 2017–2021. Some outlier data has been removed from the research sample in order to obtain more accurate results. So, this research sample changed to 1,025 observation data (previously 1,105 observation data).

# **Descriptive Statistics**

Outside CEO x ERM

Descriptive statistics for each variable used in this research from 2017 to 2021 are presented in Table 2 as follows:

Mean Std. Deviation Minimum Maksimum N **ROA** 0,029 0,077 -0,2760,520 1.025 **Board Size** 4,662 1,927 2 14 1.025 Outside CEO 0,540 0,499 0 **ERM** 0,425 0,495 0 1 0,247 Leverage 0,477 0,013 2,629 1.025 Firm Size 12,526 0,693 9,718 14,254 Board Size x ERM 0,234 0,962 -2,270 5,366 1.025

Table 2. Descriptive Statistics

0,242

-0,310

0,265

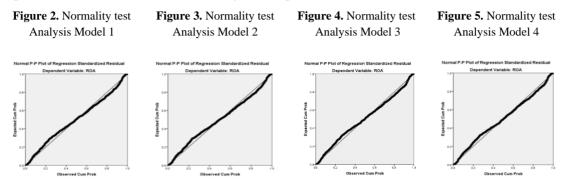
1.025

Source: IBM SPSS Statistics 22 for Windows output results

0,041

### The classic assumption test

In this study, the normality test employs normal probability plot graphic analysis. The normality test results of this research show that the data (points) are spread around the diagonal line and follow the direction of the diagonal line. This means that the regression model meets the normality assumption.



All independent variables in this study received a VIF value < 10 and a tolerance value > 0.1 in the multicollinearity test. This means that the regression model passes the multicollinearity test. The autocorrelation test was carried out by observing the Durbin-Watson (DW) statistical value. The DW statistical values in analysis models 1 and 4 in this study are, respectively, 2.041, 2,082, 2,037, and 2.042, and they do not experience autocorrelation problems. The results of the heteroscedasticity test are shown in Figures 6–9. The scatterplot diagram shows that the points above and below 0 on the Y axis are randomly distributed, and no specific pattern is found, meaning that there is no heteroscedasticity in the regression model. Some of the data appears clustered due to the large amount of data studied, but this situation still indicates the feasibility of using a regression model in this research.

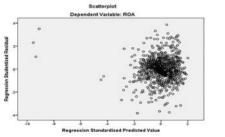
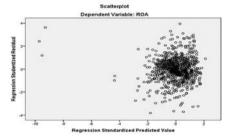


Figure 6. Heterokedasticity test Analysis Models 1



**Figure 7.** Heteroscedasticity test Analysis Models 2

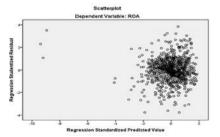
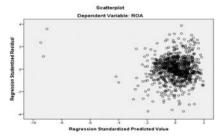


Figure 8. Heteroscedasticity test Analysis Models 3



**Figure 9.** Heterokedasticity test Analysis Models 4

#### **Regression Analysis Results**

Processing research sample data using the ordinary least squares (OLS) multiple linear regression method aims to find out how strong the correlation is between two or more variables. Meanwhile, data processing using the moderated regression analysis (MRA) method aims to find out whether the moderating variable has the effect of increasing or decreasing the influence of the independent variable on the dependent variable. Data processing uses the help of the IBM SPSS Statistics 22 for Windows program application, and results are obtained as presented in tables 3 and 4 below:

Dependent Variable:	Financial Performance (ROA)						
Regression Model:	Analysis Mo	odel 1 (No M	oderation)	Analysis Model 2 (No Moderation)			
	Coefficient	t	Sig.	Coefficient	t	Sig.	
(Constant)	-0,207	-4,868	0,000	-0,243	-6,278	0,000	
Board Size	0,003	2,000	0,046**	-	-	-	
Outside CEO	-	-	-	-0,001	-0,204	0,838	
Firm Size	0,023	6,284	0,000*	0,027	8,650	0,000*	
Leverage	-0,130	-15,120	0,000*	-0,132	-15,387	0,000*	
$\mathbb{R}^2$	0,236			0,233			
F Sig	0.000			0.000			

Table 3. OLS Regression Analysis

Source: IBM SPSS Statistics 22 for Windows output results

Table 4. MRA Regression Analysis

Dependent Variable:	Financial Performance (ROA)						
Regression Model:	Analysis Moo	del 3 (With M	(Ioderation)	<b>Analysis Model 4 (With Moderation)</b>			
	Coefficient	t	Sig.	Coefficient	t	Sig.	
(Constant)	-0,162	-3,689	0,000	-0,188	-4,647	0,000	
Board Size	0,002	1,504	0,133	-	-	-	
Outside CEO	-	-	-	-0,003	-0,757	0,449	
ERM	0,019	4,183	0,000*	0,020	4,425	0,000*	
Board Size * ERM	0,001	0,533	0,594	-	-	-	
Outside CEO * ERM	-	-	-	-0.005	-0,587	0,558	
Firm Size	0,019	4,949	0,000*	0,022	6,635	0,000*	
Leverage	-0,129	-15,067	0,000*	-0,131	-15,343	0,000*	
$\mathbb{R}^2$	0,249			0,247			
F Sig.	0,000			0,000			

Source: IBM SPSS Statistics 22 for Windows output results

According to Table 3, the results of the OLS analysis show that board size has a positive and significant influence on ROA, with a significance value of 0.046 (< 0.05). The R square value is R2 = 0.236, which means that financial performance (ROA) in family companies is influenced by board size, company size, and leverage of 23.6%; the remaining 76.4% is influenced by other variables. Thus, the first hypothesis (H1) is accepted. This research is consistent with Kyere and Ausloos (2020), Khatib and Nour (2021), and Vu et al. (2018), who found that a larger board size can improve the

<sup>\*, \*\*, \*\*\*,</sup> Significant at 1% 1%, 5%, 10%

<sup>\*, \*\*, \*\*\*,</sup> Significant at 1% 1%, 5%, 10%

company's financial performance. Then, for the second analysis model, the significance value for the outside CEO was found to be 0.838 (> 0.05), so it can be concluded that H2 was rejected, which means the outside CEO has no significant effect on financial performance (ROA) in family companies. The R square value for analysis model 2 is 0.233, which shows that financial performance (ROA) in family companies is influenced by the outside CEO, company size, and leverage of 23.3%. The rest is influenced by other variables not examined in this research.

When the ERM moderating variable was included in the regression model (analysis models 3 and 4), the R2 value increased to 0.249 and 0.247. The increase in the R2 value indicates that the ERM moderating variable provides an additional explanation for the dependent variable, financial performance (ROA). However, the interaction between board size and ERM, as well as the interaction between the outside CEO and ERM, show significance values of 0.594 and 0.558, respectively (both > 0.05), so it can be concluded that H3 and H4 are rejected.

In this research, ERM is a type of moderating predictor variable, which means that ERM only plays a role as a predictor (independent) in the relationship model formed. This is indicated by ERM having a positive and significant effect on ROA; however, the interaction between board size and ERM (board size\*ERM) and the interaction between the outside CEO and ERM (outside CEO\*ERM) do not have a statistically significant effect on ROA. Thus, it can be concluded that ERM does not moderate the influence of board size on financial performance in family companies and also does not moderate the influence of outside CEOs on financial performance in family companies.

Research by Sánchez et al. (2019) said that outside CEOs can have a double effect on ROA, namely that there is a negative effect that comes from outside CEOs' preference for debt, which has been proven to worsen the company's profitability. The CEO's outside managerial abilities and focus on profits then have a positive effect. Therefore, the researcher tried to carry out additional regression analysis by eliminating the leverage control variable, and the results are presented in Table 5.

**Dependent Variable:** Financial Performance (ROA) Coefficient Sig. (Constant) -0,299-6,9770,000 Outside CEO 0,002 0,322 0,747 0,000\* Firm Size 0,026 7,588  $R^2$ 0,055 F Sig. 0,000 1.025

**Table 5.** Regression Analysis Without Leverage Variable

Source: IBM SPSS Statistics 22 for Windows output results

\*, \*\*, \*\*\*, Significant at 1%, 5%, 10%

After the leverage control variable is removed, the outside CEO regression coefficient changes to positive at 0.002 but still has no significant effect on ROA. Thus, the results of this study are also in line with the research of Sánchez et al. (2019), which states that outside CEOs can have a dual effect on ROA.

#### **Discussion**

# **Effect of Board Size on Financial Performance (ROA)**

The findings of the OLS analysis model 1 indicate that board size has a statistically significant and favorable impact on the financial performance (ROA) of non-finance sector family enterprises in Indonesia. This implies that by increasing the size of the board, the company has a higher likelihood of attaining better financial performance, namely in terms of return on assets (ROA). A larger board size allows for a diverse range of backgrounds, knowledge, and experience among the members of the board of directors. This diversity can be advantageous in making strategic decisions for the firm and eventually improving the return on assets (ROA). The findings of this research align with the findings of Kyere and Ausloos (2020), Khatib and Nour (2021), and Vu et al. (2018). Increasing the size of the board can facilitate the inclusion of diverse perspectives from individuals with varied backgrounds, leading to enhanced strategic decision-making and therefore increasing financial performance (Koji et al., 2020). Bachiller et al. (2015) found that in family enterprises, a larger board size considers both the family's interests and the interests of all stakeholders. Every member of the board of directors possesses a network or relationship that can be utilized to bring in stakeholders, such as suppliers, to the company. Consequently, a larger board size will result in a greater number of stakeholders acquired through the networks or relationships of the board members. In this manner, the board of directors is required to make choices that effectively reconcile various interests, including those of the family who possesses the company and the stakeholders' interests.

Due to the descriptive statistics (Table 2) of this research, the mean board size in non-financial sector family enterprises in Indonesia is approximately 4–5 individuals. Vu et al.'s research indicates that every member of the board of directors has unique personal traits and managerial skills. This disparity greatly benefits the company's strategic decision-making process as it is informed by diverse perspectives and ideas based on the knowledge of each member of the board of directors. The size of the board, whether it is large or small, can have an impact on the financial policies and actions of the company, which in turn affects the level of return on assets (ROA). Nevertheless, the mean board size value in this study cannot be employed as an unequivocal measure for determining the ideal number of board members for family-owned enterprises in the non-financial sector in Indonesia. The appropriate board size is contingent upon various aspects such as the complexity of the company, company size, nature of the business, company goals (Koji et al., 2020), and other unexplored factors in this research.

Furthermore, the larger size of a board is believed to enhance its supervisory function, in addition to providing opportunities for broader expertise and experience (Kyere and Ausloos, 2020). Fama and Jensen (1983) argue that increasing the size of the board of directors may enhance its effectiveness in overseeing and controlling executive conduct. The board of directors exercises oversight and monitoring over top managers in the company to prevent any opportunistic activity that may harm shareholder interests. Therefore, increasing the size of the board makes it more convenient to oversee corporate managers and ensure their compliance with shareholder expectations.

# The influence of an outside CEO on financial performance (ROA)

The results of OLS analysis model 2 in this study show that outside CEOs do not have a significant effect on financial performance (ROA) in family companies. Apart from that, the results of this study also show a negative relationship between the outside CEO and ROA. Based on these results, it can be interpreted that in family companies, whoever serves as CEO, whether from within (family CEO) or outside the family circle (outside CEO), does not really influence whether ROA is high or low. The results of this study are in line with research by Haque et al. (2022), Koji et al. (2020), and Arosa et al. (2010), where the presence of an outside CEO in a family company is not related to an increase or decrease in financial performance. This is because both outside CEOs and family CEOs have their own motivations and strengths for leading the company. Outside CEOs are often associated with better managerial skills and have the motivation to prove their abilities to shareholders. This makes outside CEOs focus more on high financial results and do not want to be too involved with the principal's family affairs (Sánchez et al., 2019). Meanwhile, the family CEO has the motivation to maintain the company in the long run so that they can pass it on to the next generation (Koji et al., 2020). For family members, the company may be the main asset they own (Arosa et al., 2010), which can fulfill the family's need for security, a sense of belonging, the need for social status, and the need to contribute to social life. So in order to meet his family's needs, the family CEO will try to get good financial results for his family company. According to Haque et al. (2022), family CEOs even perform better than outside CEOs during crisis situations, such as during the COVID-19 pandemic. Because the family CEO knows more about his company's main advantages, this knowledge will be very useful in formulating strategies to compete with other companies and survive crisis situations.

# Moderating Effect of ERM on the Influence of Board Size on ROA

According to MRA analysis model 3, the ERM variable does not significantly strengthen the influence of board size on ROA in family companies. So for this research, it can be said that even though the company has implemented ERM, this does not significantly change the influence of board size on financial performance in family companies. The results of this study are different from the research of Shatnawi et al. (2022) and are in line with the argument from research by Florio and Leoni (2017), which states that dependence on ERM can reduce the courage to take risks to a level that is considered too low by shareholders. Thus, there is a possibility that ERM's inability to significantly strengthen the influence of board size on financial performance is caused by the board of directors being too dependent on the implementation of ERM.

A larger board is usually associated with a wider spectrum of skills, abilities, experience, or knowledge. According to Shatnawi et al. (2019), the BOD, as part of the board structure, is the company's advocate for risk management and has the final say in its implementation. However, with the implementation of ERM in the company, there is a possibility that the board of directors will become too dependent on the results of the risk assessment carried out by the risk committee and follow whatever is suggested by the risk committee without looking for other alternatives that are riskier but more profitable. So, even though a large board size has broader knowledge, if the BOD is too dependent on the implementation of ERM in the company, then this will not increase the accuracy of decisions regarding financial risks.

# Moderating Effect of ERM on the Influence of Outside CEOs on ROA

According to MRA analysis model 4, the ERM moderating variable does not significantly strengthen the influence of the outside CEO on ROA in family companies. So, it can be said that whether by recruiting an outside CEO or a family CEO, the company still has the opportunity to improve financial performance if it implements ERM. The results of this study are in line with research by Martino et al. (2018), who concluded that outside CEOs have a positive effect on the level of entrepreneurial risktaking in family companies, but this effect disappears as the outside CEO's tenure increases. Initially, the outside CEO's courage in facing risks was because the outside CEO was not tied to the family company, so he had no interests related to socioemotional wealth. Outside CEOs have different interests in running the company and must look for other ways to secure their position and job (for example, by investing in innovation and new projects). However, this risk-taking courage decreases as the tenure of the outside CEO increases because the interests of the outside CEO tend to be increasingly aligned with the interests of the family that owns the company.

Apart from that, the results of this study also support the arguments of Ngu and Amran (2020), who concluded that the existence of a risk management committee in a company is believed to be more effective in helping the board of directors manage ESG (environmental, social, and governance) issues. Social and environmental problems have become the main problems faced by companies recently (Chairani and Siregar, 2021). With increasing social and environmental risks, outside CEOs may tend to prioritize the use of ERM to analyze and detect risks related to ESG issues.

#### CONCLUSION

This study aims to see how ERM moderates the influence of board size and an outside CEO on financial performance in family companies listed on the IDX from 2017 to 2021. Firm size and leverage were used as control variables. Furthermore, the results of this research hypothesis testing are summarized in the following points:

- 1. Board size has a positive and significant effect on financial performance (ROA) in family companies, so the first research hypothesis (H1) is accepted. Companies with larger board sizes have greater opportunities to achieve superior financial performance. At a larger board size, this is associated with a wider spectrum of knowledge.
- 2. The outside CEO does not affect financial performance (ROA) in family companies, so the second research hypothesis (H2) is rejected. This can be interpreted as saying that the opportunity to increase a company's financial performance cannot be determined by recruiting an outside CEO or family CEO.
- 3. ERM does not significantly strengthen the influence of board size on the financial performance of family companies, so the third research hypothesis (H3) is rejected. Thus, it can be said that even though the company has implemented ERM, this does not significantly change the influence of board size on financial performance in family companies.
- 4. ERM does not significantly strengthen the influence of outside CEOs on financial performance in family companies, so the fourth research hypothesis (H4) is rejected. Thus, it can be said that whether led by an outside CEO or by a family CEO, the company still has the opportunity to improve financial performance if it implements ERM.

This research implies that family companies in the non-financial sector in Indonesia need to consider the optimal board size to obtain superior financial performance. There is no standard measurement regarding how many members of the board of directors should be in a company because it all depends on many factors, including the complexity of the company, the size of the company, the nature of the business, company goals, and others, which were not examined further by this research. Family companies can also consider recruiting an outside CEO if the criteria and managerial abilities required by the company cannot be found within the family. Finally, the results of this research imply that enterprise risk management (ERM) can help improve the financial performance of companies with both small and large board sizes, and ERM can also help the financial performance of family companies, whether led by an outside CEO or family CEO.

This research is subject to several constraints, including unproven ideas and the inability to precisely calculate the appropriate number of board of directors members. In addition, the analysis conducted in this study failed to distinguish between the periods occurring during the

epidemic and those occurring before the pandemic. Future studies may explore alternative independent variables, such as research and development (R&D), board of directors' performance, risk management, or financial literacy.

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