

THE EFFECT OF THE BOARD OF DIRECTORS ON FIRM PERFORMANCE: THE MODERATING ROLE OF FAMILY OWNERSHIP

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ABSTRAK

Penelitian ini bertujuan untuk menguji secara empiris pengaruh dewan direksi terhadap kinerja perusahaan dengan kepemilikan keluarga sebagai variabel moderasi. Metode pengambilan sampel yang digunakan dalam penelitian ini adalah purposive sampling pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia periode 2018-2022, sehingga menghasilkan 721 observasi sebagai sampel. Teknik analisis yang digunakan untuk menguji hipotesis adalah Moderated Regression Analysis (MRA). Studi ini menunjukkan secara empiris bahwa direktur perempuan dan dewan direksi dengan ukuran lebih besar akan meningkatkan kinerja perusahaan. Namun kepemilikan keluarga mengurangi dampak positif direktur perempuan terhadap kinerja perusahaan. Terakhir, kepemilikan keluarga tidak memperkuat pengaruh ukuran dewan komisaris terhadap kinerja perusahaan. Penelitian ini memberikan pandangan menarik mengenai peran moderasi perusahaan keluarga terhadap pengaruh dewan direksi terhadap kinerja perusahaan yang dianalisis secara komprehensif menggunakan dua proksi pengukuran.

Kata Kunci: Dewan direksi, kepemilikan keluarga, kinerja perusahaan

ABSTRACT

This study aims to empirically test the influence of the board of directors on company performance with family ownership as a moderating variable. The sampling method used in this research was purposive sampling of manufacturing companies listed on the Indonesia Stock Exchange during the 2018-2022 period, resulting in 721 observations as a sample. The analysis technique applied to test the hypothesis is moderated regression analysis (MRA). This study empirically shows that female directors and larger boards will improve firm performance. However, family ownership reduces the positive impact of female directors on firm performance. Finally, family ownership does not strengthen the influence of board size on firm performance. This research provides an interesting view regarding the moderating role of family ownership on the effect of the board of directors on firm performance, which is analyzed comprehensively using two measurement proxies.

Keywords: *Board of directors, family ownership, firm performance*



1. Introduction

The connection between corporate governance (CG) and company performance has attracted significant attention from researchers worldwide (Rahman & Chen, 2022; Tran et al., 2022). Corporate governance has an essential effect on firm performance. This is because effective management will maintain stakeholders' trust in the company and reduce agency costs (Shahwan & Fathalla, 2020). In addition, directors are essential for implementing the Principles of Good Corporate Governance and attaining optimal company performance (Ararat & Yurtoglu, 2021; Fatma & Chouaibi, 2021).

Improving company performance is primarily determined by the board of directors. As explained by the upper echelons theory, the state of the firm board primarily determines the firm operation (Diaz & Armadani, 2024; Donatella & Tagesson, 2021). The board of directors plays a crucial impact in deciding whether a firm will engage in specific activities within its operations (Díaz-Fernández et al., 2020; Diaz & Armadani, 2024). Thus, analyzing the board of directors' characteristics is essential in determining company performance.

Previous research has found interesting factors that can affect firm performance, particularly the number of female directors and board of directors size. Several previous studies found conflicting findings, so they could not be concluded. Female directors are considered to be able to improve company performance (Campos-garcía, 2022; Provasi & Harasheh, 2021). Women's expertise in coordinating company operational and strategic tasks and their analytical abilities have been proven to improve company performance (Nyeadi et al., 2021; Simionescu et al., 2021). However, several previous studies also show that the presence of female directors can hurt company performance. Female directors are considered to slow down decision-making due to debates about expressing opinions, even though quick decisions are necessary for very dynamic market conditions (Singhania et al., 2022).

A similar result was observed in the impact of the board size on company performance. Multiple studies have discovered a significant link between the board's size and the corporation's performance (Al-Okaily & Naueihed, 2020). A large board of directors tends to have more muscular control over its members in implementing the firm's established strategy, thereby improving its performance (Agwili & Gerged, 2020). On the other hand, several studies have also found that a large board harms a company's financial performance (Alzeban, 2021; Fatma & Chouaibi, 2021; Salem et al., 2019). Smaller boards of directors are seen as having a higher level of effectiveness because communication, coordination, and decision-making are easier (Fatma & Chouaibi, 2021; Kao et al., 2019; Salem et al., 2019).

Since there is still a gap in the results of previous studies, this study is motivated to re-examine the link between the board of directors and company performance by filling in the weaknesses in previous studies. In general, previous studies still test the direct influence of the directors on company performance. Therefore, their findings still need to be more conclusive. Previous studies need to improve in providing a deeper and more comprehensive understanding because they only analyze direct influences. We identify the possibility of moderating variables in the two variables. In addition, we assessed

suggestions from previous researchers to use moderating variables to make the research more comprehensive (Musallam, 2020).

This research raises family ownership as a moderating variable. There are two main reasons for promoting family ownership. Firstly, family ownership is an exciting phenomenon in Asian countries, especially Indonesia. The history of family ownership in Indonesia is very long. Claessens et al. (2000) found evidence of extreme values, namely 16.6% of capital market capitalization on the IDX has the highest control in just one large family, and the ten most prominent families in Indonesia control half of the market capitalization in Indonesia. Wati et al. (2019) also found that families control 54% of public companies. Furthermore, the average value of family ownership in manufacturing companies reaches 92% (Momon et al., 2021). Second, family ownership will undoubtedly impact the board of directors' ability to achieve company performance.

This study aims to analyze the effect of the board of directors on company performance in manufacturing firms in Indonesia. We also examine the role of family ownership in enhancing or diminishing the board of directors' influence on company performance. The manufacturing sector was chosen because of its significance as the most significant contributor to Indonesia's Gross Domestic Product (GDP). Data from BPS shows that the manufacturing sector contributed 20.61% in 2020, 20.55% in 2021, and 20.47% in 2022 to total GDP (BPS, 2022). With the significant contribution of this sector to GDP, it is hoped that this research will make a significant contribution in theory and practice. This study differs from previous research, which solely examined the direct impact of the board of directors on company performance. Consequently, this study makes several important contributions: firstly, it advances the field of accounting literature by offering demonstrated proof that elucidates the moderating role of family ownership in shaping the nexus between directors and firm outcome, particularly within Indonesian companies. This evidence adds to the understanding of how family ownership structure can affect the effectiveness of the board of directors in carrying out its functions and how this factor impacts the overall performance of the firm. Second, this study also adopts the sight of upper echelons theory, which accentuates the effect of corporate leaders' characteristics on corporate decisions and outcomes. Thus, this study enriches the existing literature review by providing a more in-depth theoretical perspective on how ownership factors and leadership characteristics interact in determining firm performance. Third, in practical terms, the results of this research also have important repercussions for corporate stakeholders. The results of this study can guide stakeholders in designing and implementing good corporate governance, taking into account the influence of family ownership. By considering these factors, companies can improve the board of directors' effectiveness and ultimately achieve higher corporate performance.

2. Literature Review and Hypothesis Development

Upper Echelon Theory, as a grand theory in this research, provides a comprehensive framework for understanding how top management influences an organization's direction and performance. This theory emphasizes that an organization's

reflection and operational style are profoundly shaped by the personal characteristics of its leaders and those in their immediate circle (Hambrick & Mason, 1984; Moreno-Gómez et al., 2017). In this context, leadership style, background, and top management's values are critical factors shaping the organization's strategic decisions.

The essence of upper echelons theory is that the strategic decisions made by top executives are not merely responses to the situations they face but are also profoundly influenced by their values, character, and personal experiences (Moreno-Gómez et al., 2017). Every decision made by the board of directors, representing the highest level of leadership in a company, is crucial in shaping its strategic direction. In this capacity, they are responsible for ensuring that the steps taken by the company align with its long-term vision and are aimed at achieving optimal performance. Thus, the upper echelons theory offers a robust explanation of the impact of the directors in influencing firm achievement, as the decisions made by these leaders have far-reaching implications for how the company is managed and developed (Díaz-Fernández et al., 2020).

The agency theory proposed by Jensen & Meckling (1976) is the primary basis for explaining the relationship between corporate governance and company performance (Fatma & Chouaibi, 2021). This theory describes the interest difference between managers and shareholders. The separation of power between the managers and the shareholders creates information asymmetry in which the agent has an information advantage over the principal. This information asymmetry can give rise to a conflict of interest between the principal and the agent (Devie et al., 2020). Furthermore, the superior information possessed by agents, namely managers, allows them to carry out more profitable activities, often ignoring shareholders' interests (Gupta & Mahakud, 2021; Musallam, 2020).

Upper echelons theory states that the characteristics of top managers significantly shape organizational outcomes, including firm performance (Hambrick & Mason, 1984). This theoretical perspective is instrumental in understanding the role of female directors in regulatory compliance and risk mitigation (Díaz & Armadani, 2024; Mensah & Onumah, 2023). Female directors, often characterized by a solid adherence to regulations, play a critical role in ensuring their companies operate within established legal frameworks. It heightened compliance not only aligns the company with legal requirements but also positions female directors as crucial figures in mitigating risks associated with non-compliance.

By adhering closely to regulatory standards, female directors help to minimize the potential for legal infractions that could lead to costly sanctions or financial penalties. Such compliance-driven governance contributes to the overall stability of the organization, reducing the likelihood of disruptions caused by legal challenges. Additionally, this approach fosters long-term sustainability by ensuring that the company's operations are consistent with external legal expectations, thus safeguarding its reputation and financial health in the competitive marketplace.

According to upper echelons theory, personal characteristics such as gender, values, and experience of directors can influence strategic decisions and company outcomes. Female directors often demonstrate high competence in coordinating critical tasks and analyzing key issues within the board (Nyeadi et al., 2021). This expertise enables them

to lead more effectively, drive better performance, and maintain the company's operational integrity (Fatma & Chouaibi, 2021). In addition, their tendency to be more prepared and pay more attention to essential details during meetings has a positive impact, ultimately strengthening the company's competitive position in the market (Khemakhem et al., 2022). Based on this explanation, the hypothesis proposed is:

H₁: Female directors improve company performance.

Upper echelons theory emphasizes that the size of a company's board of directors will significantly determine its ability to achieve company performance. The larger the board of directors, the more effective and efficient their duties in running the company will be in achieving good company performance (Fatma & Chouaibi, 2021). On the other hand, companies that have a smaller board size will experience overload in the duties and responsibilities they carry out, making their performance ineffective (Hussain et al., 2018). It is because a board with more directors will be linear with a diversity of experience, ideas, expertise, and knowledge, which will positively impact a quality decision-making process. Furthermore, the task of the board of directors in coordinating the tasks of the ranks below it will become more accessible when the number of boards of directors is more significant. When all elements of the company that are the directors' responsibility work optimally, the firm's performance will increase.

The upper echelons theory states that the characteristics and composition of a company's top management team significantly affect organizational outcomes. In this context, the board size plays a crucial role in shaping the effectiveness and efficiency of corporate governance. Fatma & Chouaibi (2021) state that a larger board size can improve company performance by allowing diverse perspectives, experiences, and expertise. This diversity in the boardroom can lead to a more comprehensive and balanced decision-making process, which is essential to dealing with a complex business environment. A giant board also means that responsibilities can be distributed more evenly among directors, reducing the possibility of individual overload and ensuring that all critical areas of the company receive adequate attention.

Previous studies have revealed that board size positively impacts a firm's performance. Studies by Alodat et al. (2022) and Boachie (2021) found that companies with larger boards tend to achieve better financial performance compared to companies with smaller boards. This can be explained by the ability of a giant board of directors to exercise control functions more effectively, allowing for more profound and comprehensive oversight of the company's operations. Larger boards of directors often comprise members with varied backgrounds, contributing diverse perspectives and expertise to decision-making. This diversity can lead to more informed and strategic decision-making, as more viewpoints are considered before making a decision. In addition, with a more significant number of members, responsibilities can be distributed more evenly, reducing the risk of individual overload and ensuring that essential aspects of the company receive adequate attention. Research by Agwili & Gerged (2020) and Noja et al. (2021) also support this finding, stating that larger boards of directors can exercise their oversight functions better, contributing to improved company performance.

H₂: A larger board of directors size improves a company's financial performance.

Agency theory posits that corporate directors frequently act in their interests, disregarding the interests of shareholders due to their access to superior information (Jagoda & Wojcik, 2019; Shahwan & Fathalla, 2020; Xue et al., 2020). This condition creates the potential for opportunistic behavior, where managers prioritize personal goals that may conflict with the interests of shareholders. Therefore, the role of monitoring is very important to reduce the risk of such behavior and ensure that managers remain focused on achieving corporate goals that are aligned with shareholder interests.

In this context, family ownership is often considered a form of ownership with solid control over the company. Family owners tend to be more able to carry out tight and long-term monitoring because they have a significant interest in the firm's sustainability and success. This intense monitoring can strengthen the positive effect of female directors on the firm's performance. Women directors are known to have characteristics that align with good governance, such as compliance with regulations, strong analytical skills, and good organizational abilities. When these characteristics are combined with tight monitoring from family ownership, the positive effect on corporate performance becomes even more vital.

Female directors often have characteristics that support good corporate governance, such as higher compliance with regulations, superior analytical skills, and strong organizational capabilities. These characteristics significantly contribute to improved corporate performance. Studies by Bennouri et al. (2018) and Mensah & Onumah (2023) show that female directors tend to be more thorough in the decision-making process, more focused on details, and more disciplined in carrying out their roles, which ultimately results in better and more effective strategic decisions. Anderson & Reeb (2003) and Broccardo & Zicari (2018) state that family owners usually try to maintain the company's value in the long term, so they are more active in supervising management and avoiding decisions that can harm the company in the future. Thus, combining competent female directors and intense family supervision can create synergies that improve overall corporate performance.

H₃: Female directors can improve company performance with family ownership of the company.

Family ownership can strengthen the positive effects of corporate board size and financial performance. A giant board of directors typically brings diverse ideas, expertise, and experience, which can enhance the board's ability to control and guide the company effectively. However, the positive impact of a large board on company performance is magnified when accompanied by solid monitoring, such as that provided by family ownership (Fatma & Chouaibi, 2021; Kiharo & Kariuki, 2018).

Agency theory highlights the potential for opportunistic behavior from the board of directors, which could negatively impact the company's financial performance (Chijoke-Mgbame et al., 2020; Dhifi & Zouari, 2022). Robust control mechanisms are necessary to reduce conflicts and agency costs, ensuring that the interests of the directors align with those of the shareholders (Almarayeh, 2021; Suprianto & Setiawan, 2018).

Family ownership plays a crucial role in this context, as families have a significant incentive to closely monitor the company's directors. Their long-term interest in the sustainability of the business, often motivated by a desire to pass the company on to the next generation, makes them more likely to engage in active oversight (Anderson & Reeb, 2003; Broccardo & Zicari, 2018). This alignment of interests between the family and the firm's performance can enhance the board's effectiveness, particularly in larger companies. Therefore, the hypothesis proposed is:

H4: The large size of a company's board of directors can further improve company performance with family ownership of the company.

3. Research Method

This research is a quantitative study that uses a population of manufacturing companies in Indonesia (2018 – 2022). A purposive sampling technique was used to select companies that meet the following criteria: (1) listed on the IDX during that period; (2) have an annual report that includes information that is relevant for this research, and (3) show positive financial performance. Sample selection can be seen in Table 1.

Table 1. Sampling Criteria

No.	Criteria	2018	2019	2020	2021	2022
1.	Manufacturing firms listed on the IDX from 2018 to 2022.	168	181	178	214	227
2.	Manufacturing companies that did not find annual reports with complete information required for this study for the period 2018–2022	(26)	(28)	(23)	(45)	(60)
3	Companies that have negative financial performance	(18)	(10)	(11)	(13)	(13)
	Number of samples	124	143	144	156	154
	Total observations				721	

Table 2. Variables Measurements

Variables	Measurement	Source
<i>Dependent:</i>		
Company Performance	Price to Book Value (PBV) = $\frac{\text{Stock market price}}{\text{book value per share}}$	(Bustani et al., 2021)
	Market-to-book ratio (MBR) = $\frac{\text{total market capitalization}}{\text{total equity}}$	(Armadani & Zarefar, 2023)
<i>Independent:</i>		
Female Director	Female director (BODGEN) = $\frac{\text{Number of female directors}}{\text{total directors on the board of directors}}$	(Wang et al., 2022).

Variables	Measurement	Source
Board of Directors Size	Board of Directors Size (BODSIZE) = total directors	(Tran et al., 2021).
<i>Moderating:</i> Family ownership	Family ownership (FAMOWN) = Percentage of family ownership in a company	(Lodh et al., 2014)
<i>Control:</i> Leverage	Leverage (LEV) = $\frac{\text{total liabilities}}{\text{Total assets}}$	(Karim et al., 2022)
Company Size	Company size (FSIZE) = Natural logarithm of total assets	(Wahyudin & Solikhah, 2017)
Company Age	Company age (FAGE) = The age of the company since its founding	(Karim et al., 2022)

The dependent variable in this study is company performance as measured using price-to-book value (PBV), and market-to-book ratio (MBR) for the robustness test. Company performance refers to how effectively and efficiently a company achieves its goals and objectives (Diaz & Armadani, 2024). The independent variable is female directors (FEMBOD), which refers to the ratio of women on the board of directors (Wang et al., 2022). The second independent variable is the board size, which indicates the total number of directors within a company (Tran et al., 2021). The moderating variable in this study is family ownership, which refers to the percentage of family ownership in the company (Lodh et al., 2014). Referring to previous studies, the control variables in this study are leverage, company size, and company age. Leverage is the ratio of a company's assets to debts (Karim et al., 2022). Company size refers to the size of the company's assets (Wahyudin & Solikhah, 2017). Finally, company age refers to its age since its founding (Karim et al., 2022). The measurements of the variables used in this research can be seen in Table 2.

The moderated regression analysis (MRA) approach tests research hypotheses. The following is the empirical model in this research:

$$\begin{aligned}
 \text{PBV}_{it} &= \alpha + \beta_1 \text{FEMBOD}_{it} + \beta_2 \text{BODSIZE}_{it} + \beta_3 \text{LEV}_{it} + \beta_4 \text{FSIZE}_{it} + \beta_5 \text{FAGE}_{it} + \epsilon \\
 \text{PBV}_{it} &= \alpha + \beta_1 \text{FEMBOD}_{it} + \beta_2 \text{BODSIZE}_{it} + \beta_3 \text{FAMOWN}_{it} + \beta_4 \text{LEV}_{it} + \beta_5 \text{FSIZE}_{it} + \\
 &\quad \beta_6 \text{FAGE}_{it} + \epsilon \\
 \text{PBV}_{it} &= \alpha + \beta_1 \text{BODGEN}_{it} + \beta_2 \text{BODSIZE}_{it} + \beta_3 \text{FAMOWN}_{it} + \beta_4 \text{BODGEN} * \text{FAMOWN}_{it} \\
 &\quad + \beta_5 \text{BODSIZE} * \text{FAMOWN}_{it} + \beta_6 \text{LEV}_{it} + \beta_7 \text{FSIZE}_{it} + \beta_8 \text{FAGE}_{it} + \epsilon
 \end{aligned}$$

(Where: PVB = Price to Book Value; MBR = Market to Book Ratio; FEMBOD = Female director; BODSIZE = Board of Directors Size; FAMOWN = Family ownership; FLEV = Firm leverage;FSIZE= Company Size; FAGE = Company Age; α = Constant; β = Coefficient Regression).

4. Results and Discussion

Throughout the research period, company performance tended to be low, as seen from the average, which was in the range of 2.547 (Table 3). Female directors of manufacturing firms have an average of 13%, which shows that the proportion of women on the company's board of directors is still very small. The size of the board of directors has a minimum of 2 people and a maximum of 11 people, while the average is 4 people. Family ownership has a percentage of 20% which shows a fairly high figure. This family ownership will certainly provide a distinctive style for the company.

Table 3. Descriptive Statistics

Variables	Obs	Min	Max	Mean	Std. Dev.
PBV	721	0.00890	54.853	2.547	5.178
MBR	721	0.00029	46.915	2.186	4.727
FEMBOD	721	0	0.667	0.133	0.176
BODSIZE	721	2	11	4.515	2.054
FAMOWN	721	0	0.927	0.209	0.309
LEV	721	0.87	93.89	54.768	20.989
FSIZE	721	8.265	16.346	11.937	1.738
FAGE	721	5	105	40.911	19.305

Table 4. Pearson Correlation Test

Variables	PBV	FEMBOD	BODSIZE	FAMOWN	LEV	FSIZE	FAGE
PBV	1.000						
FEMBOD	0.1056	1.000					
BODSIZE	0.1120	-0.0284	1.000				
FAMOWN	-0.0751	-0.0794	-0.424*	1.000			
LEV	-0.1450	0.0788	-0.025	-0.0221	1.000		
FSIZE	0.0294	-0.1684	0.6519	-0.0165	-0.1252	1.000	
FAGE	0.2641	-0.0346	0.2136	0.261	-0.0625	0.3384	1.000

The Pearson correlation test assesses multicollinearity in the research model, with a threshold of no more than 0.8 for all coefficient values of the independent variables (Habtoor, 2020; Gujarati, 2003). Based on Table 4, the results of the Pearson correlation test show that there is no relationship between independent variables that exceeds the threshold. These results indicate that there is no multicollinearity problem in the model.

Based on Table 5 below, female directors significantly improve company performance, and hypothesis 1 is accepted. These findings suggest that companies with more female directors on their boards tend to perform better. The upper echelons theory highlights the crucial role of the board of directors in shaping the organization's ability to meet its performance goals (Luanglath et al., 2019). A board of directors that includes a certain percentage of women has the potential to make a positive contribution to company performance. Female directors are known to have a higher level of compliance with regulations, so they can ensure compliance with applicable regulations, reducing potential risks that could harm the company. In addition, the board of directors needs

the expertise to coordinate tasks and analytical skills to determine the company strategy female directors possess. Therefore, female directors will improve company performance.

Table 5. Moderated Regression Analysis (MRA) Results

Variables	PBV	PBV	PBV
Intercept	5.526*** (3.105)	5.878*** (3.187)	5.696*** (3.020)
FEMBOD	3.015** (1.965)	2.837* (1.863)	4.065** (2.061)
BODSIZE	0.420** (2.120)	0.413** (2.091)	0.424* (1.824)
FAMOWN		-1.247*** (-2.666)	0.381 (0.209)
FAMOWNxFEMBOD			-7.956** (-2.184)
FAMOWNxBODSIZE			-0.155 (-0.454)
LEV	-0.038*** (-3.336)	-0.038*** (-3.364)	-0.040*** (-3.410)
FSIZE	-0.527*** (-2.965)	-0.531*** (-2.968)	-0.527*** (-3.002)
FAGE	0.076*** (3.716)	0.076*** (3.748)	0.076*** (3.751)
Adj.R ²	0.12	0.12	0.12
N	721	721	721
F-stat	3.433	2.893	2.305

As the upper echelons theory highlights, the traits of top management, particularly female directors, play a crucial role in shaping the company's trajectory toward achieving its performance goals. (Hambrick & Mason, 1984). Female directors who have good analytical skills and a soft approach to subordinates tend to be able to make more precise and strategic decisions. This analytical ability allows them to quickly understand complex data and information, making more decisions based on facts and in-depth analysis. Meanwhile, a soft or gentler approach to leadership helps create a supportive and collaborative work environment where subordinates feel heard and appreciated. It can increase subordinate motivation, job satisfaction, and trust, ultimately encouraging them to work more effectively and efficiently. This leadership approach also allows female directors to manage teams more flexibly and responsively to change, facilitate open communication, and constructively improve conflict resolution. By combining strong analytical skills with an approach that values interpersonal relationships, they can create synergies within teams that drive innovation, creativity, and productivity, which in turn contribute to achieving good company performance (Nyeadi et al., 2021; Mensah & Onumah, 2023). Furthermore, female

directors on a company's board will bring new ideas and perspectives to determining company policy. It can significantly enrich a company's strategic decision-making. The diversity of views brought by female directors improves the quality of decisions by considering different perspectives. Thus, the decisions taken have a greater chance of success in achieving company performance targets. This finding is consistent with previous research, stating that female board directors contribute positively to the firm's financial performance (Khemakhem et al., 2022).

The regression results show that the board of directors' size positively affects company performance; hypothesis 2 is accepted. This finding means companies with a giant board of directors will improve performance. These results align with upper echelons theory, which states that directors have a crucial role in achieving targeted company achievement. Companies need a board of directors who can formulate appropriate strategic policies to achieve company performance.

Companies with a large board of directors will provide benefits to the company. Directors in the company will provide more excellent expertise, experience, knowledge, and other conveniences for the company. A large board of directors has the potential to include members with a wide range of backgrounds, skills, and experiences. This diversity can bring richer views and innovative solutions to a company's problems. The company will have a broad view and various ideas in determining the strategy that the company must carry out to take the proper steps. In addition, the board can have more experts in various fields, allowing for more effective monitoring of various aspects of the company's operations and finances. They will also have a lower workload than companies with small board directors. The board of directors' task of overseeing the company's running by coordinating with its staff and subordinates will be much easier. In other words, they can ensure that all elements of the company work as they should in achieving the expected company performance. Lastly, with more members, the board of directors can provide more resources and networks. It can assist companies in gaining access to capital, business opportunities, and other support. The results of this study align with earlier research that indicated a larger board of directors enhances a company's financial performance (Agwili & Gerged, 2020; Fatma & Chouaibi, 2021; Noja et al., 2021; Zhou et al., 2018).

The moderation test revealed that family ownership weakens the positive influence of women directors on company performance; hypothesis 3 is rejected. The outcomes of this research contradict the principles of agency theory, which views that robust monitoring by family ownership in companies will reduce agency conflicts and prevent company managers from taking actions that prioritize their interests over those of shareholders (Xue et al., 2020). It may occur because of a conflict of interest between the family and other owners. When family interests tend to be prioritized, it will become another conflict of interest. Female directors in family firms may face pressure to agree to decisions that benefit the family, even if those decisions are not in the firm's long-

term interests. The power of the family and personal relationships can reduce their independence and ability to act objectively. The role of female directors, which should be able to improve company performance, cannot be strengthened by family monitoring, which tends to lead to conflicts of interest with other owners.

The moderation test (BODSIZExFAMOWN) results on company performance revealed that family ownership does not significantly moderate; hypothesis 4 is rejected. The results of this research are inconsistent with agency theory, which sees that monitoring is needed to reduce conflicts of interest in companies (Almarayeh, 2021). In this context, researchers see that there is a possibility of failure to overcome challenges when the number of directors is more extensive because the size of the number on the board of directors is linear with the complexity of activities and communication in the company. To gain profits from having many directors, effective monitoring must be carried out. Family members who serve on a board of directors may face a conflict of interest between their interests as owners of the company and their responsibilities as board members to carry out their fiduciary duties in the interests of all shareholders. Furthermore, family ownership may hinder board directors' independent decisions, reducing board effectiveness (Amin et al., 2022; Ararat et al., 2015).

Table 6. Robustness Test Results

Variables	Model 1 (MBR)	Model 2 (MBR)	Model 3 (MBR)
Intercept	4.579*** (2.724)	4.891*** (2.812)	4.643*** (2.625)
FEMBOD	2.614** (2.125)	2.457** (2.005)	3.290** (2.083)
BODSIZE	0.387** (2.192)	0.380** (2.165)	0.407** (1.977)
FAMOWN		-1.107** (-2.524)	0.634 (0.393)
FAMOWNxFEMBOD			-5.539* (-1.831)
FAMOWNxBODSIZE			-0.244 (-0.793)
LEV	-0.034*** (-3.402)	-0.034*** (-3.426)	-0.035*** (-3.445)
FSIZE	-0.473*** (-2.757)	-0.477*** (-2.763)	-0.470*** (-2.757)
FAGE	0.074*** (3.816)	0.075*** (3.842)	0.074*** (3.773)
Adj.R ²	0.12	0.13	0.13
F-stat	3.512	2.957	2.251

We conduct a robustness test to ensure the regression results are robust (Table 6). We use the MBR proxy to measure company performance. The regression results are in line with the findings of the main model, so this study's results are robust.

5. Conclusion, Implications, and Limitations

This research examines the moderating role of family ownership on the impact of the board of directors on firm performance. The study found that firm performance was improved by female directors and larger board sizes. An intriguing finding is that family ownership reduces the influence of female directors on firm performance. In addition, the effect of a large number of board directors on company performance is not moderated by family ownership.

These findings add a new dimension to the literature on corporate governance by showing that not only the formal structure of the board matters but also the gender ratio and size of the board make good performance. The practical implications of this study suggest that companies need to consider the gender composition and size of the board more as part of their strategy to achieve optimal performance. In addition, this study underlines the importance of an effective board structure in reducing conflicts of interest and improving oversight functions.

However, this study has several limitations. First, the sample of this study is still limited to manufacturing companies, so the findings need to be fully generalizable to other industries. Therefore, further research can expand the scope of the sample by analyzing companies from various sectors, both at the national and regional levels, to obtain more comprehensive results. Second, this study only analyzes the role of female directors and board size on firm performance. Future research could expand the variables used by including directors' educational background or other relevant characteristics, such as work experience, age, or special competence, while still considering the moderating effect of family ownership.

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