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The Role of Board Member Characteristics in Shaping Corporate Performance: Evidence from Indonesia

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Abstract

Boards of directors have a significant impact on firm performance. With the growing emphasis on diversity, it is essential to explain how demographic diversity among leaders relates to firm performance. The paper examines the relationship between demographic diversity, age, gender, tenure, and the performance of Indonesian manufacturing firms. The writers adopt Resource Dependency Theory as the theoretical basis for this research. Although studies on board diversity exist, the influence of board diversity on manufacturing firms, which is becoming increasingly crucial in Indonesia, is rarely discussed. The writers analyzed secondary data from 2016 to 2022 using Ordinary Least Squares regression. Results show that age and tenure diversity have a positive impact on the performance of larger firms, but no effect on smaller firms. These results add practical implications for manufacturing firms seeking to enhance decision-making with diverse leadership.

Keywords: Demographic Diversity, Gender Diversity, Age Diversity, Tenure Diversity, Firm Performance.

1. Introduction

In the dynamic world of manufacturing, the board of directors plays a significant role in shaping the firm's performance. Establishing a mission, vision, and strategies, as well as determining strategic options, are examples of the role of the board of directors (Liao et al., 2015). Hasan and Islam (2022) highlight that board diversity, encompassing various attributes like age, gender, and tenure, has been increasingly scrutinized for its potential influence on corporate governance and, consequently, on firm performance. Furthermore, this confirmed connection underscores the need for practitioners to understand how to optimally utilize the benefits of diverse board members while mitigating harms related to the mismanagement of board diversity (Mayo et al., 2016). According to Kagzi and Guha (2018), when the board of directors shares similarities in age, gender, and tenure, they are more likely to think homogeneously, which may potentially influence firm-level performance.

Indonesia's manufacturing sector is the most significant contributor to the nation's economy, prompting the government to prioritize its development and leverage it as a leading force to stimulate growth across other sectors (Bondoyudho et al., 2022; Novianti & Mulatsih, 2021). The Ministry of Industry (Kemenperin, 2020) states that the manufacturing sector is crucial in Indonesia's economy. In 2020, the industrial sector contributed 19.8%, exceeding the global industry average of 16.5%. The manufacturing industry in Indonesia is a major contributor to the nation's economic growth, and it requires strong leadership to remain effective. Thus, increasing firm performance is necessary to maintain a competitive advantage, which, in this context, fosters board diversity, emerging as a crucial strategy. According to research by Ararat et al. (2015), specific demographic diversity indicators—such as gender, age, country, and others—are considered superior indicators of the diverse viewpoints people may offer to organizations.

The concept of "diversity of boards" emphasizes the fundamental components of board diversity, whereas "diversity in boards" refers to the demographic characteristics of directors (Veltri et al., 2021). Demographics, including gender, age, and tenure, influence the diversity of the board in a firm (Hasan & Islam, 2022). First, board gender diversity has long been considered a moral dilemma, with the claim that it is unethical to exclude individuals based on their gender, regardless of aptitude. This ethical concern stems from the principles of fairness and equality, which imply that the board of directors should have equal opportunities, regardless of gender. Likewise, literature on board age diversity draws upon various concepts, including agency, resource dependency, and human capital. The frameworks highlight the potential benefits of diversity, including increased creativity, enhanced problem-solving abilities, multiple perspectives, deeper market understanding, and broader connections (Arioglu, 2020). Furthermore, the idea of tenure length diversity emphasizes that if a firm preserves a combination of directors with varied lengths of service, including both long-term and newly elected members, it may derive advantages from the longevity of expertise (Peng, H., Sun, H., et al., 2021). These variables are crucial for fostering high-quality decision-making in manufacturing firms, particularly in the energy, mining, and coal sectors.

Studies related to age, gender, and tenure that examine demographic diversity at both group and individual levels are inadequate (Chattopadhyay et al., 2016). The vast majority of reviews discuss diversity in a broad sense, without mentioning any specific forms (Guillaume et al., 2014). The studies highlight the need for comprehensive analysis, noting that previous research has primarily examined diversity at a single level of analysis— at the group, individual, or organizational level (Salloum et al., 2019; Li & Chen, 2018). However, in contrast to the abundance of research on board gender diversity, fewer studies have investigated the influence of age and tenure diversity on firm performance (Amini et al., 2017; Guillaume et al., 2017; Fernández-Temprano & Tejerina-Gaite, 2020; Khidmat et al., 2020). Most reviews discuss diversity as a concept in general, rather than focusing on a specific area; some primarily focus on gender and education, while excluding other relevant factors such as age and tenure (Guillaume et al., 2014).

In line with this perspective, Khatib et al. (2021) emphasized the need to examine all aspects of board diversity, rather than focusing solely on one aspect. According to Appiadjei et al. (2017), companies face a dynamic and complex macroenvironment that calls for leadership from various groups of people who can offer a wide range of resources that blend well with the firm's culture. Concerning the implications of gender, age, and the significance of tenure length diversity to firm performance in Indonesia, this research aims to analyze the relationship between board demographic diversity and firm performance. This research examines the demographic diversity in terms of age, gender, and tenure, making both practical and theoretical contributions.

First and foremost, this research presents an intriguingly broad diversity of directors, focusing on age, gender, and tenure demographic diversity, which adds to the existing literature. Second, it emphasizes objective demographic diversity, providing a comprehensive perspective on board diversity within publicly listed manufacturing firms in Indonesia as an emerging country from 2016 to 2022. The contribution to Indonesia's firms presents third, novel areas of study, informing shareholders, firms, and the government about the influence of board demographic diversity on firm performance. Despite existing research on board diversity, significant gaps exist, particularly regarding Indonesia's manufacturing sector. Many studies have focused primarily on gender diversity, neglecting other demographic factors, such as age and tenure.

Additionally, previous analyses often examine diversity at a single level rather than across multiple levels of analysis. This study addresses these gaps with the following research questions: How does demographic diversity among board members affect the performance of Indonesian manufacturing firms? Are there differences in this impact between larger and smaller firms? How do age, gender, and tenure diversity compare in their influence on firm performance? By establishing clear, testable, and concise propositions, this research will contribute to future studies, allowing researchers to delve deeper into the unexplored aspects of the phenomenon.

2. Literature Review

Board diversity is more suited to fulfilling advisory roles due to the varied backgrounds of its members, who offer a wealth of skills, knowledge, experience, and external networks (Loukil et al., 2019). Perspective diversity is particularly well-suited for fulfilling advisory roles, as it allows the board to provide holistic guidance and anticipate potential challenges from different angles.

According to recent research, a positive connection has been consistently found between the diversity within the board and the effectiveness of the board of directors (Ali et al., 2021), and ultimately, a company's success, as stated by Foster et al. (2023) and Molla et al. (2021). This diversity encompasses differences in gender, age, professional experience, nationality, and skill sets. As Katmon et al. (2019) argue, a board with greater diversity offers a broader range of resources, expertise, and viewpoints, thereby improving company performance. Similarly, Farooq et al. (2023) highlight how diverse boards can contribute positively to a firm's resource access, thereby reducing external reliance and uncertainty, and fostering a more substantial reputation, which in turn contributes to better company value.

2.1. Firm Performance

Previous studies have demonstrated a sustained interest in the relationship between diverse boards and a range of business results, encompassing firm performance (Zona et al., 2013; Levi et al., 2014). Taouab and Issor (2019) define firm performance as a firm's ability to achieve better financial outcomes, market position, and a lasting competitive advantage. According to Herciu and Serban (2018), firm performance refers to assessing a firm's success and efficiency in accomplishing its financial and non-financial objectives. From a strategic leadership perspective, firm performance depends on numerous factors, including directors' ability to make informed decisions and ensure the company operates effectively within its business landscape (Singh et al., 2016).

According to Akpan and Amran (2014), the board will gain advantages from appointing directors of

diverse ages, as they can provide valuable insights into the priorities of shareholders within their respective age groups, ultimately enhancing the company's performance. Similarly, various genders influence firm outcomes by introducing multiple skills, knowledge, expertise, values, and leadership approaches, affecting firm performance (Galbreath, 2018; Hoobler et al., 2018; Richard et al., 2013; Velte, 2017). Furthermore, a higher number of women in board positions is associated with an improved culture and a perception of more stringent ethical standards within the firms (Landry et al., 2016). Aligned with these perspectives, Khan et al. (2023) suggest that tenure diversity is crucial in assessing the contributions and performance of directors to a firm's financial success. Additionally, Ali et al. (2022) and Katmon et al. (2019) suggest that directors with longer terms naturally develop a deeper understanding of the firm's operations and regulations.

2.2 Age Diversity

Agustia et al. (2022) point out that diverse experiences, cultural norms, habits, and personal characteristics that might influence the decision-making processes are commonly expected to be valued and appreciated by individuals of different ages. Numerous firms recognize the advantages of having a multigenerational workforce, such as employing older board members as mentors to share their expertise with the younger colleagues on the board (Mande, 2019). Although directors of diverse ages may have different behaviors when viewed collectively, these differences could contribute to value creation (Arioglu, 2021). According to Backes-Gellner and Veen (2015), firms prioritizing routine over creative work will likely see substantial benefits from age diversity that outweigh the growing costs of a more age-diverse workforce. Furthermore, Boehm and Kunze (2015) argue that a workforce comprising a diverse range of ages yields a diverse set of skills, cognitive styles, values, and preferences, which could potentially lead to increased productivity. Consequently, enhancing the board's experience, resources, expertise, and networking capabilities could lead to the organization's increased profitability and financial success (Talavera et al., 2018).

Ararat et al. (2015) show a relationship between age dimension, board diversity, and increased passion for work and audacity. The core principle of the Resource Dependency Theory (RDT) is that boards are implied to facilitate resources by maintaining proper leverage, thus reinforcing the significance of resource control for a firm's performance (Perrault, 2014; Kabir et al., 2023). Due to these occurrences and modifications, directors spanning various age groups who have grown up in diverse political, economic, or cultural environments may harbor distinct values and possess varied experiences that could negatively impact their ability to make collective decisions in boardrooms (Talavera, Yin, & Zhang, 2018). Comparable to other dimensions of demographic diversity, namely gender, a properly leveraged age composition can enhance monitoring effectiveness and improve decision-making (Ali et al., 2014). Studies conducted by Fernandez-Temprano and Tejerina-Gaite (2020), Goergen et al. (2015), and Ali et al. (2014) suggest that board members with age diversity increase firms' financial performance. According to the discussion above, we can argue that:

H_1: Age diversity influences firm performance.

2.3 Gender Diversity

The connection between gender diversity and firm performance arises from higher decision-making quality, increased creativity and innovation, improved market understanding, and added value (Isola et al., 2020; Jyothi & Mangalagiri, 2019). Gender diversity, as emphasized by Guizani and Abdalkrim (2023), Loukil et al. (2019), and McGuinness et al. (2017), is crucial in escalating the effectiveness of the board. The effectiveness is notably accomplished by encouraging diverse insights, competencies, and viewpoints, fostering directors' commitment to social and environmental issues, and facilitating comprehensive oversight. Furthermore, better management is projected as an outcome of the gender-neutral board member selection procedure (Galia, Lentz, Max, Sutan, & Zenou, 2017).

Prior literature by Kagzi and Guha (2018) emphasizes that Resource Dependency Theory (RDT) broadly suggests that gender diversity enhances board efficiency and improves company performance. Building upon that theory, Reguera-Alvarado, de Fuentes, and Laffarga (2017 assert that gender diversity increases access to financial capital. On the other hand, gender diversity strengthens human and relational capital (Shaukat, Qiu, & Trojanowski, 2016) and firm credibility and reputation (Kılıç & Kuzey, 2016). Building on these advantages, Dang et al. (2015) found that appointing female directors can enhance a firm's credibility. Therefore, the relationship established by female directors to external resources of dependence can significantly enhance crucial resourcing, consequently improving a firm's performance (Reguera-Alvarado et al., 2017). Given the previously mentioned studies, we conclude that :

H_2: Gender diversity influences firm performance.

2.4 Tenure Diversity

The composition of a board of directors has a significant impact on a firm's performance. While

diversity in background characteristics is well-established, the length of a director's service, or tenure, also emerges as a significant consideration (Khan & Subhan, 2019; Khan et al., 2023). According to Khan and Subhan (2019), tenure diversity is the length of time a director has served on the board of an organization. Directors with longer tenures naturally develop a more profound understanding of the company's operations, day-to-day activities, and relevant regulations (Ali et al., 2022; Katmon et al., 2019). This translates into valuable experience and expertise, often making them more substantial contributors than newer board members (Farooq et al., 2023). The complexity of managing a company requires a varied board; therefore, Tenure diversity can enhance oversight, mitigate agency conflicts, and ultimately escalate firm performance (Post & Byron, 2015). Directors with longer tenures often have diverse external connections that can enhance access to resources, improving financial and social performance in the long run. Thus, the variety of directors' experiences enhances the firm's access to resources through various external relationships, thereby contributing to its long-term financial success (Farooq et al., 2023).

However, Katmon et al. (2019) and Ali et al. (2022) suggest potential downsides to overly long tenure. Boards with long-tenured directors may struggle to embrace fresh perspectives and adapt to rapid technological advancements (Jia, 2017). Their established norms and practices can hinder innovation and a broader market perspective. On the other hand, directors with shorter tenures often bring fresh ideas and a dynamic approach. They tend to be more open-minded and understand current technological trends strongly (Harjoto et al., 2015). Combining directors with different tenure lengths may, therefore, enhance top management monitoring, which would strengthen firm outcomes (Huang & Hilary, 2018; Khan et al., 2023). Although different tenure lengths may bring fresh ideas and new perspectives, research by Pozen and Hamacher (2015) highlights that newer directors may initially face challenges in supervising and overseeing effectively due to a lack of deep understanding of the company's history and operations. Referring to the discussions previously mentioned, we argue that:

H_3: Tenure diversity influences firm performance.

3. Methods

The financial and annual reports found on company websites, the Refinitiv database, and the Indonesia Stock Exchange (IDX) are the sources of all the observations utilized in this study. The number of observations consists of Indonesian manufacturing firms publicly listed from 2016 until 2022, grouped

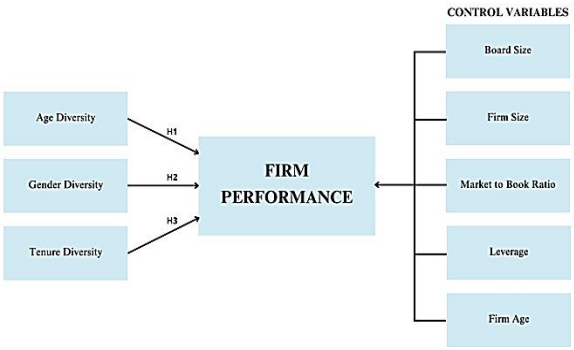

Figure 1. Research model

based on the classifications provided by the IDX Industrial Classification. This paper features six different types of manufacturing industries, with 611 observations from Indonesian firms in this study, spanning the period from 2016 to 2022, excluding 38 companies with incomplete data or information. Additionally, three companies have negative common equity, and three were suspended during the research period. The study's board diversity variables, as defined by Khan et al. (2019), before their work, included age, tenure, and gender diversity, as measured by Blau's (1977) heterogeneity index.

$$BI = 1 - \sum_{i=1}^{n} Pi^2 \quad (1)$$

Blau's Index (BI) is used to measure diversity, where P represents the proportion of board members in each firm, i represents the category, and n represents the total number of directors on the board of each firm. Directors are divided into two age groups by (AGE): those under 50 and those 50 or older. Gender divides directors into two groups: male and female directors. TENURE categorizes directors based on their length of service, with five categories: less than three years, three to less than six years, six to less than nine years, nine to less than 15 years, and 15 years or more (Farooq et al., 2023).

3.1 Model Specification

$$FPit = \alpha + \beta 1 BlauAgeit + \beta 2 BlauGenderit + \beta 3 BlauTenureit + Controls + \varepsilon \quad (2)$$

Where $FPit$ for the firm i in the year, t that is measured by Return on Assets (ROA), the constant (often symbolized as α) represents the predicted value of the dependent variable when all independent variables are zero. In the regression model, the board of diversity is assessed using the Blau Index, which is classified into three categories: Blau Ageit, Blau Genderit, and Blau Tenureit. $\beta 1$ It is the coefficient of BlauAge. BlauAgeit is the Blau index of age in the firm.

i It is the coefficient for the Blau index of age diversity within a firm in a given year. Furthermore, $\beta 2$ the coefficient represents the Blau index of gender diversity in a firm i in the year [year].

Meanwhile, $\beta 3$ β is the coefficient for the Blau index of tenure diversity in a firm i in a given year. The term "$Controls$additional independent variables" refers to variables included in the regression model that are not the primary variables of interest but are considered important factors that may influence firm performance. The control variables are presented in Table 1 of the study. In addition, ε Denotes the error or residual term. It captures the variability in firm performance that is not explained by the Blau indices (BlauAge, BlauGender, BlauTenure), control variables, or the constant α. To analyze Equation (1), the method employed is Ordinary Least Squares (OLS) with Industry and Year Fixed Effects, and the results are presented in Table 4.

Table 1. Control variable data

Variable	Obs	Mean	Std. Dev.	Min	Max
Size	611	12.586	.742	10.179	14.616
Lev	611	.331	.299	0	3.54
Age	611	18.355	9.434	.014	41.468
MTB	611	2.372	3.913	.048	42.685
ROA	611	.059	.147	-1.189	1.319
BoardSize	611	4.797	2.178	1	15
BlauAge	611	.318	.193	0	.96
Tenure	611	.368	.277	0	.888
Gender	611	.203	.206	0	.98

4. Result

Table 2. Descriptive statistics

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) Size								
(2) Lev	-0.114							
(3) Age	0.073	-0.131						
(4) MTB	-0.020	0.095	-0.124					
(5) ROA	0.168	-0.242	-0.034	-0.053				
(6) BoardSize	0.546	-0.175	-0.025	-0.014	0.190			
(7) BlauAge	-0.057	0.018	-0.150	-0.053	0.020	0.101		
(8) Tenure	0.188	-0.022	-0.004	-0.015	0.074	0.275	0.024	
(9) Gender	-0.012	0.197	0.082	0.012	-0.015	-0.023	-0.042	0.087

Table 2 presents the summary statistics of 611 observations from 2016 to 2022. The mean value of the ROA is 0.057 (5.7%), indicating that most companies are on the lower end of the scale in terms of Return on Assets. The control variables, such as Market-to-Book (MTB), Leverage (Lev), Firm Age (Age), Firm Size, and Board Size, are evenly distributed according to the high Standard Deviation (SD). The Blau Index data, including BlauAge, BlauTenure, and BlauGender, shows that age and tenure are evenly distributed. However, the Blau Index for Gender has revealed that most firms are not as diversified, implying that males typically hold the highest positions in Indonesian companies.

Table 3. Pearson Correlation

Variable Name	Symbol	Measurement	Description
Board Size	BSize	Total number of directors (male + female)	Total number of members serving on a firm's board.
Firm Size	FSize	Log (Market Capitalization)	A measurement of a firm's size.
Market to Book	MTB	Market Capitalization/Book Value	A ratio for investors to identify over- or undervalued stocks of a company.
Leverage	LEV	Total Debt/Total Equity	A measure of a company's equity financed by debt.
Age	Age	Log (Initial Public Offering Date)	To represent how long the company has existed since the initial public offering date.

Table 4. Regression result

	Full Sample	High-Size Group	Low-Size Group
BoardSize	0.0024	0.0001	0.0054
	(0.002)	(0.004)	(0.004)
BlauAge	0.0196	0.0598*	-0.0100
	(0.020)	(0.030)	(0.027)
Tenure	0.0181	0.0568*	-0.0020
	(0.015)	(0.022)	(0.022)
Gender	-0.0004	-0.0462	0.0178
	(0.022)	(0.028)	(0.030)
FirmSize	0.0197**	0.0211	0.0498**
	(0.007)	(0.015)	(0.015)
Lev	-0.1473***	-0.1291***	-0.1511***
	(0.022)	(0.027)	(0.029)
Age	-0.0005	0.0003	-0.0018*
	(0.000)	(0.001)	(0.001)
MTB	0.0032	0.0150***	-0.0023
	(0.002)	(0.003)	(0.002)
dConstant	-0.1538	-0.2099	-0.4938**
	(0.084)	(0.194)	(0.177)
N	611	277	334
adj. R^2	0.187	0.263	0.172
Prob > F	0.00	0.00	0.00
Industry Fixed Effect	Yes	Yes	Yes
Year Fixed Effect	Yes	Yes	Yes

Robust Standard errors in parentheses * $p <$ 0.05, ** $p < 0.01$, *** $p < 0.001$

Table 3 shows that ROA relates to various variables, with each control variable's correlation less than 0.8 (Gujarati & Porter, 2020). From the analysis, it can be concluded that none of the variables in this study displays multicollinearity.

In Table 4, Ordinary Least Squares (OLS) with Industry and Year Fixed Effects are used.

5. Discussion

Using OLS regression to process data from 2016 to 2022 for manufacturing firms, Table 4 reports the mean coefficients across 611 industry observations, grouped by firm, and p-values derived from robust standard errors to mitigate the issue of heteroscedasticity.

In correspondence with the results, it has been demonstrated that both H1 and H3 are statistically significant, while H2 is not. The proof lies in the findings of the entire sample, where the results for all the interest variables are not important. Based on the research findings, only the control variables are substantially related to firm performance, with the two being Firm Size (p-value < 0.07) and Leverage (p-value < 0.022). Thus, to facilitate the research, the samples are divided into two categories, namely high-size groups and low-size groups. Large-sized groups are firms with sizes greater than the median firm size of all samples. On the contrary, small-sized groups are firms with sizes less than or equal to the median. Referring to the high-size group result in Table 4, BlauAge has a coefficient of 0.0598 and is significant, which indicates that companies with a wide range of ages among their directors typically influence firm performance (Talavera et al., 2018; Mande, 2019; Ararat et al., 2015).

Furthermore, tenure diversity has a significant influence on firm performance, specifically return on assets (ROA), with a coefficient of 0.0568 (p-value < 0.022). This implies that in larger firms, a board with greater diversity in terms of tenure influences firm performance (Farooq et al., 2023; Khan & Subhan, 2019; Post & Byron, 2015). Therefore, corresponding to the results discussed in the earlier section, Hypothesis 1 is proven to be significant. It shows consistent results with the previous studies (Farooq et al., 2023; Huang & Hilary, 2018; Khan et al., 2023).

Based on the results in Table 4, none of the control variables in the low-size group significantly influence the firm's performance. To illustrate, BlauAge, tenure, and gender do not show statistically significant influences on the dependent variable (p-value > 0.05), a finding also supported by previous studies (Hafsi & Turgut, 2013; Yang et al., 2019). Our findings, in line with those of Vairavan and Zhang (2020), suggest that a diverse board may not enhance firm performance due to a significant hierarchical gap, thereby weakening the board's signaling effect. Furthermore, larger firm size as the control variable significantly influences firm performance, with a coefficient of 0.0498 and a standard error of 0.015, which is significant at the 1% level. Referring to the regression analysis, the coefficients for leverage (-0.1511), age (-0.0018), and constant (-0.4938) each show significant impacts on firm performance in low-size groups. According to a study by Abbasi and Malik (2015), large firms often exhibit greater diversification, which can enhance their performance. Research in organizational economics (Dosi et al., 1995; Jovanovic, 1982 in Abbasi and Malik, 2015) has explored the relationship between firm size and growth, while studies on diversity (Palepu, 1985; Choi and Russell, 2005 in Abbasi and Malik, 2015) have examined its impact on organizational outcomes. Diversified firms often have a more diverse workforce, leading to a broader range of perspectives and potentially innovative solutions (Pandya and Rao, 1998, in Abbasi and Malik, 2015).

In the entire sample, the p-value for all control variables is not statistically significant, indicating that these variables have no substantial impact on the dependent variable when considering the whole dataset. However, leverage has a negative and significant effect on all samples (p-value < 0.001). This result suggests that, across all business sizes, higher leverage has been associated with worse firm performance, indicating lower ROA for all group sizes. In addition, the coefficient of firm size is 0.0197, significant at the 1% level (p-value < 0.01), suggesting that larger firms tend to perform better or have higher values of the dependent variable.

These findings provide evidence regarding the three hypotheses on board diversity and firm performance. Hypothesis 1, which conceives that age diversity influences firm performance, is supported for larger firms, with a significant positive coefficient of 0.0598 for BlauAge, indicating that age diversity among the board of directors enhances decision-making and strategic outcomes. Hypothesis 2, suggesting that gender diversity influences firm performance, is not supported across any sample groups, revealing no statistically significant effect and highlighting the complex nature of gender dynamics in board composition. Hypothesis 3, which proposes that tenure diversity influences firm performance, is also supported for larger firms, with a significant coefficient of 0.0568 indicating the impact of tenure diversity on ROA. This demonstrates that boards with varied lengths of service contribute valuable perspectives that drive performance. Primarily, the findings underscore the moderating role of firm size, with diversity effects more pronounced in

larger firms. In comparison, smaller firms show no significant influence of these diversity factors on performance.

6. Conclusions

According to underlying theories on board of directors diversity practices, this study identified a variance in board diversity theory among Indonesian manufacturing firms. This research contributes to the ongoing investigation into how board diversity, encompassing age, gender, and tenure, affects firm performance. It specifically examines the manufacturing industry in Indonesia and how broad demographic diversity affects firm performance. The findings aim to discover whether a more diverse board, with a mix of age, gender, and tenure, leads to improved financial performance for companies. By dividing the firm size into high- and low-sized firms, this research has revealed that age and tenure diversity impact firm performance significantly in high-sized firms. On the other hand, gender diversity has yet to impact firm performance.

Meanwhile, for small-sized firms, all three variables have yet to significantly impact firm performance. By understanding the roles of diversity, the findings of this research can empower manufacturing industries, especially high-size groups, by helping them assess how board diversity, namely age, and tenure, might influence a firm's performance, along with improving corporate management practices by emphasizing the possible advantages of fostering diversity on boards of directors. In addition, this study reveals a deficiency in the Gini coefficient in Indonesia's manufacturing sector, according to the results. Thus, it is essential to note that this research has limitations, including incomplete data during observations and the absence of a robustness test, which raises concerns about the replicability of the results.

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