



Jurnal Nominal Barometer Riset Akuntansi dan Manajemen

URL: <https://journal.uny.ac.id/index.php/nominal>



The Effect of Board of Commissioners' Size and Managerial Ownership on Refined Economic Value Added with Female Representation as Moderator

Felicia Clarissa ^{a,1,*}, Tarsisius Renald Suganda ^{b,2}, Lalu Rahmat Sohdi ^{c,3}

^{a,b,c} Ma Chung University, Indonesia

¹ ffcia04@gmail.com; ² renald.suganda@machung.ac.id; ³ lalu.rahmat@machung.ac.id

* corresponding author

ARTICLE INFO

Article history

Received

Revised

Accepted

Keywords

Board of Commissioners' Size

Corporate Governance

Firm Value

Female Representation

Managerial Ownership

Kata Kunci

Ukuran Dewan Komisaris

Tata Kelola Perusahaan

Nilai Perusahaan

Representasi Perempuan

Kepemilikan Manajerial

ABSTRACT

This study analyzes the effect of board size and managerial ownership on firm value, as proxied by REVA, with female representation as a moderating variable. The sample consists of 14 non-financial sector companies in the ESG Leaders index during the 2020–2024 period, with a total of 70 company-year observations analyzed using a fixed-effects panel data regression model (LSDV). The results show that board size has a positive effect on REVA, while managerial ownership has no effect. Female representation weakens the relationship between board size and firm value but strengthens the effect of managerial ownership. This finding implies that the effectiveness of corporate governance is conditional, while expanding the measurement of firm value through REVA. Practically, this finding is intended for companies in achieving a critical mass of women.

ABSTRAK

Penelitian ini menganalisis pengaruh ukuran dewan komisaris dan kepemilikan manajerial terhadap nilai perusahaan yang diprosikan melalui REVA dengan representasi perempuan sebagai variabel moderasi. Sampel terdiri dari 14 perusahaan sektor non-keuangan di indeks ESG Leaders selama periode 2020–2024 dengan total 70 observasi tahun perusahaan yang dianalisis melalui regresi data panel model efek tetap (LSDV). Hasil menunjukkan bahwa ukuran dewan komisaris berpengaruh positif terhadap REVA, sedangkan kepemilikan manajerial tidak berpengaruh. Representasi perempuan melemahkan hubungan antara ukuran dewan komisaris dan nilai perusahaan tetapi memperkuat pengaruh kepemilikan manajerial. Temuan ini menyiratkan bahwa efektivitas tata kelola perusahaan bersifat kondisional sekaligus memperluas pengukuran nilai perusahaan melalui REVA. Secara praktis, temuan ini ditujukan bagi perusahaan dalam mencapai tingkat massa kritis perempuan.

This is an open-access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



1. Introduction

Corporate governance remains a crucial issue in enhancing corporate value, as evidenced by major corporate failures and financial scandals that have re-ignited global attention to governance practices (Wijaya & Memarista, 2024). The post-pandemic period has further intensified these concerns, reflected in the OECD (2021) report on the future of corporate governance after the COVID-19 crisis, coupled with regulatory pressures such as POJK 51/POJK.03/2017 on sustainability reporting (POJK, 2017). Unfortunately, corporate governance implementation in Indonesia ranks lowest among 12 Asian countries (Harinurdin & Safitri, 2022). This indicates a persistent gap between regulatory compliance and actual governance effectiveness. Strengthening good corporate governance practices is crucial for achieving corporate value (Anggraini, Annisa, & Zefriyenni, 2023). Companies that are able to generate economic added value above the cost of invested capital can reflect the effectiveness of management in using company resources (Manullang, Arum, Sunarni, Suryani, & Budiasih, 2024; Dewri, 2022).

Achieving optimal firm value is closely linked to two key governance elements: board size and managerial ownership. The board of commissioners plays a crucial role in providing strategic oversight and advice to management (Septiana & Aris, 2023). A larger board of commissioners facilitates stronger oversight and increases efficiency in corporate disclosure, as increasing the number of board members broadens the scope of oversight, ultimately contributing to firm value (Yanti, Endiana, & Pramesti, 2021). Simply put, the efficiency of company value supervision will be influenced by the growth in the number of board members (Khoirunnisa, 2022).

Likewise, the element of managerial ownership also serves as a form of internal governance that can strengthen the company's supervisory function (Putra, Manuari, & Puspayanti, 2022). Managerial share ownership aligns managerial interests with shareholders, encouraging more cautious, transparent, and value-oriented decision-making (Suwisma, Rais, Haykal, & Razif, 2023). In other words, when managers hold shares, they are more motivated not to act arbitrarily, as every decision they make directly affects their own financial condition (Nabila, Yusuf, & Prihatni, 2024). This fosters a self-monitoring mechanism, making the oversight process more effective beyond external board supervision.

The effectiveness of oversight in governance mechanisms ultimately depends on diversity in the decision-making process (Kang, Kim, & Oh, 2022). From the perspective of organizational psychology, diversity in decision-making has been shown to produce more comprehensive considerations because it involves a variety of perspectives, experiences, and

leadership styles (Adams & Ferreira, 2009; Knippenberg & Schippers, 2007). This diversity is not only limited to educational backgrounds but also includes demographic dimensions such as gender, particularly the female representation in companies (Miller & Triana, 2009). According to Maghfiroh & Utomo (2019), female representation on boards of commissioners as well as in managerial ownership is considered to significantly increase company value. Unfortunately, the percentage of women has experienced instability from year to year and remained around 30% during the 2021-2023 period (BPS, 2024). This situation is reinforced by the fact that women occupy less than a quarter (23.3%) of board seats worldwide, which has implications for achieving greater gender representation (Delloite, 2024). In fact, global agendas such as the fifth Sustainable Development Goal (SDG) on gender equality encourage increased participation of women in leadership positions (PBB, 2024).

In relation to agency theory, female representation can reduce agency problems through more effective oversight (Mahardini & Framita, 2022). Women are more likely to involve their subordinates in the decision-making process. They also tend to be patient in responding to situations, whereas men tend to adopt a hierarchical approach (Rakrismawati & Butar, 2023). A study by the International Finance Corporation (IFC) discussing gender diversity on corporate boards in ASEAN also stated that companies with more women on their boards tend to deliver better corporate value (IFC, 2020). This is in line with the findings of the study conducted by Pradana & Khairusoalihin (2021), which showed significant results concerning the representation of women on firm value. Furthermore, Roihanah & Akbar (2024) in their research also confirmed that women's representation has an influence on firm value. Different results were shown in research focusing on the financial performance of manufacturing companies, which revealed that gender diversity does not affect financial value (Setyasari, Rahmawati, Naelati Tubastuvi, & Aryoko, 2022). The study by Manuela & Sandra (2022) also revealed that gender diversity does not have a positive effect. Furthermore, the research findings by Wijaya & Memarista (2024) indicate that women's representation as a moderator does not affect the relationship between the number of boards of commissioners and the performance of publicly listed Indonesian companies.

Further exploration of the relationship between the size of the board of commissioners, managerial ownership, and firm value with female representation acting as a moderating factor needs to be conducted due to research results that are still inconsistent and varied. Differences in research findings compared to expectations based on agency theory provide a gap for further study (Ardito, Dangelico, & Petruzzelli, 2020; Bhakar, Sharma, & Kumar,

2024; Lu, Ntim, Zhang, & Li, 2022; Rafie, Sihombing, Nasution, & Muda, 2025; Zhou, Chen, Liao, & Wang, 2025). In addition, measuring firm value by considering the relationship between governance elements and refined economic value added is still rarely examined (Omneya, Ashraf, & Eldin, 2021). Very few or none of the studies have considered corporate governance and REVA combinedly to measure firm value (Dewri, 2022), particularly in the Asian context (Nakhaei, Hamid, Anuar, & Nakhaei, 2016), which can help fill the empirical gap and provide strong reasons why REVA was chosen as an indicator for measuring company value.

In addition, Bacidore et al. (1997) also proposed using REVA to measure firm value instead of EVA. This is because REVA considers the physical market value of assets and growth strategies, while EVA includes the book value of assets. They argued that a firm's WACC should be measured based on current market prices, rather than the book value of assets, because capital commitments by external financiers (investors, creditors, and suppliers) are based on current market values rather than book values of assets, as well as earnings growth (Bacidore et al., 1997; Bodie, Kane, & Marcus, 2014). Researchers identified that REVA is significantly related to firm value (Bacidore et al., 1997; Lee & Kim, 2009; Pourali & Roze, 2013; Shah, Haldar, & Rao, 2016).

Research must also consider the selection of various time periods. Previous research periods are no longer relevant due to changes in the business environment and corporate governance policies that have also evolved. Considering that not long ago there was the COVID-19 pandemic, whereas the current period is the phase of global economic recovery from that pandemic (Ismoyo, 2021). The representation of women has become more important nowadays due to ongoing regulatory pressures (Gibert & Fedorets, 2025; Mazza, Furlotti, Mediolli, & Tibiletti, 2024).

This research focuses on the ESG Leaders index in the non-financial sector during the period 2020–2024. According to research by IDX in 2024, the ESG Leaders index consists of 30 highly liquid stocks with the largest market capitalization that have implemented good corporate governance (IDX, 2024). Companies in this index have better reporting transparency and more comprehensive access to information regarding their governance structure (Pasha, 2023). Explicitly, this index selects companies based on integrated Environmental, Social, and Governance performance, making considerations of corporate governance practices within it reliable for measuring company value.

This research is practically important because it can serve as a reference for companies and regulators in formulating strategies to strengthen governance through the composition

of the board of commissioners and management. Theoretically, this study also aims to contribute to expanding the academic literature on the role of gender and governance element characteristics in enhancing firm value, particularly in the context of developing countries like Indonesia, by positioning female representation as a moderating variable.

2. Literature Review

2.1. Agency Theory

The agency theory developed by [Jensen & Meckling \(1976\)](#) explains the contractual relationship between principals (owners/shareholders) and agents (managers) in corporate decision-making ([Manuela & Sandra, 2022](#)). The difference in interests between agents and principals creates an agency conflict, which also means that agents will not always act in the best interest of the principal. This condition leads to agency costs ([Hadiprajitno, 2013](#)). Agency costs can be reduced through external monitoring mechanisms in the form of a board of commissioners. A larger board size encourages more intensive oversight, there by minimizing deviant behavior from managers ([Dalton, Daily, Johnson, & Ellstrand, 1999](#)). Furthermore, managerial ownership also serves as an effective monitoring mechanism. This occurs when managers own a significant number of shares in the company ([Jensen & Meckling, 1976](#)). Managerial share ownership functions as a credible guaranteed mechanism because managers stake their personal wealth on the company's success. These two monitoring mechanisms in agency theory will encourage an increase in the company's value. The more effective the monitoring mechanisms, the lower the resulting agency costs, which will impact on the increase in the company's value.

2.2. Board of Commissioners' and Refined Economic Value Added (REVA) Relationship

The size of the board of commissioners reflects the total number of members who play a role in the corporate governance mechanism ([Susmanto, Daryanto, & Sasongko, 2021](#)). A larger board of commissioners has a more effective monitoring capacity because it can distribute tasks and responsibilities more proportionally in performing oversight ([Arifina, 2019](#)). In the context of agency theory, the board of commissioners' function as a monitoring mechanism to reduce opportunistic behavior of managers and minimize agency conflict which in turn can enhance the company economic value.

[Marini & Marina \(2017\)](#) found that the size of the board of commissioners has a positive effect on firm value and it's indicated that the greater the number of members on the board of commissioners, the better the management oversight mechanisms will be, thereby increasing shareholder confidence. Similarly, [Nurahma & Budiharjo \(2022\)](#) and [Ahmad,](#)

Lullah, & Siregar (2020) also confirmed that a larger board of commissioners significantly improves firm value by reducing fraud in finance reporting and enhancing monitoring effectiveness. In addition, Syahrani (2019) showed that the size of board of commissioners positively influences corporate governance quality, which ultimately contributes to increasing firm value. These findings suggest that a larger board of commissioners not only strengthens the monitoring function but also improves the overall governance mechanism, leading to higher value creation. Therefore, based on the perspective of agency theory and prior empirical evidence, the hypothesis proposed is:

H1: The board of commissioners' size has a positive effect on firm value as measured by Refined Economic Value Added (REVA).

2.3. Managerial Ownership and Refined Economic Value Added (REVA) Relationship

Managerial ownership reflects the proportion of shares owned by managers, which serves as a mechanism to align the interests between managers and shareholders (Jensen & Meckling, 1976). A higher level of managerial ownership indicates stronger alignment of interest as managers directly benefit from the company's performance. This condition encourages managers to avoid opportunistic behavior and make decisions oriented towards creating company value (Harahap & Rizal, 2023). In line with agency theory, managerial ownership can reduce agency conflicts by motivating managers to act in the best interests of shareholders. Reduction in agency conflict also decreases agency costs which are directly able to encourage an increase in the value of the company, including REVA.

Refined Economic Value Added (REVA) is an economic based performance measure that reflects the company's ability to generate value after considering the cost of capital (Bakar, 2010). With greater managerial ownership, managers tend to emphasize operational efficiency, optimal capital allocation, and strategic investment decisions that contribute to higher REVA. Darmayanti, Sanusi, & Widya (2018) found that managerial ownership has a positive effect on firm value because managers who simultaneously act as shareholders will enhance the firm's value to increase their own wealth. The findings of Dewi & Abundanti (2019) and Sari & Wulandari (2021) indicate that the larger the proportion of managerial ownership, the more diligently managers tend to work for the benefit of shareholders, thereby increasing firm value. Rivandi (2018) added that managerial ownership is an effective mechanism to address agency problems, where managers are motivated to improve company performance, which positively impacts profitability and firm value. These findings indicate that managerial ownership strengthens the alignment of interest and encourages value-

creating decisions, which ultimately contributes to higher REVA. Therefore, based on theory and findings from previous research, the hypothesis can be stated as follows.

H2: Managerial ownership has a positive effect on firm value as measured by Refined Economic Value Added (REVA)

2.4. The Moderating Effect of Female Representation on Commissioners' Board Size and Refined Economic Value Added (REVA) Relation

Board size reflects the capacity of the board of commissioners in carrying out monitoring and strategic functions, where a larger board tends to enhance oversight effectiveness and decision-making quality (Coles, Daniel, & Naveen, 2008; Dalton, Daily, Johnson, & Ellstrand, 1999). However, the effectiveness of board size is also influenced by board composition, particularly gender diversity. Female representation on the board is associated with stronger monitoring, higher ethical standards, and more comprehensive decision-making processes (Adams & Ferreira, 2009; Carter et al., 2003).

Empirical evidence shows that gender diversity improves firm performance and governance effectiveness. Post & Byron (2015) found that female board representation positively affects firm performance, while Liu, Wei, & Xie (2014) indicated that women directors enhance strategic decision-making and monitoring quality. Furthermore, Roihanah & Akbar (2024) and Tanujaya & Teresa (2021) also said if female representation has an influence on firm value. The presence of female commissioners can therefore strengthen the effectiveness of board size in improving firm value. In the context of economic value creation, this strengthened governance mechanism is expected to enhance the company's ability to generate value as reflected in Refined Economic Value Added (REVA). Therefore, it is possible that female representation moderates the relationship between commissioners' board size and REVA. Thus, the hypothesis proposed in this study is:

H3: The female representation moderates the positive relationship between commissioners' board size and firm value as measured by Refined Economic Value Added (REVA)

2.5. The Moderating Effect of Female Representation on Managerial Ownership and Refined Economic Value Added (REVA) Relation

Managerial ownership reflects the alignment of interests between managers and shareholders, where higher ownership encourages managers to act in the best interests of shareholders and increase firm value (Jensen & Meckling, 1976). This alignment motivates

managers to improve performance and make value-oriented decisions. However, the effectiveness of managerial ownership is also influenced by the composition of the board of directors, particularly gender diversity. Female representation on the board of directors is associated with stronger oversight and improved decision-making quality (Adams & Ferreira, 2009; Nielsen & Huse, 2010).

Empirical evidence shows that gender diversity improves governance quality and corporate outcomes. Berger (2011) found that female directors with a significant proportion of shares in the company consistently strive to increase the informativeness of company performance through better oversight. This finding also supports Campbell & Mínguez-Vera (2008) and Townsend et al., (2021) finding that female representation positively affects firm value. The dual role mechanism that arises due to the female representation in the company is also able to reduce the reinforcing effect that may arise from managerial ownership (Torchia, Calabrò, & Huse, 2011). These findings suggest that the presence of female commissioners can strengthen the effectiveness of managerial ownership in aligning managerial actions with shareholder interests. In the context of economic value creation, these improved alignment and monitoring mechanisms are expected to enhance a company's ability to generate value, as reflected in Enhanced Economic Value Added (REVA). Therefore, it is possible that female representation moderates the relationship between managerial ownership and REVA. Therefore, the hypothesis proposed in this study is:

H4: The female representation moderates the positive relationship between managerial ownership and firm value as measured by Refined Economic Value Added (REVA)

3. Research Methods

3.1. Research Approaches and Sample

This study uses causal quantitative research types. Quantitative research is a research method based on positivist philosophy to study a certain population or sample, data collection uses research instruments, and data analysis is quantitative/statistical in nature with the aim of testing the established hypothesis. The process of quantitative research with a causal approach is through observation of current effects and determining the causal elements, or simply in the form of observing cause-and-effect relationships.

3.2. Operational Definition and Variable Measurement

This study applies firm value as the dependent variable. Firm value will be evaluated through the economic value added it provides. In this study, the measurement of economic value added will be measured using a single main indicator, namely the REVA scale. REVA

is a development of the EVA (Economic Value Added) measurement method (Mariyani & Novida, 2023). REVA measures management's effectiveness in creating shareholder value by repurposing EVA but market value-based returns and cost of capital (Dewri, 2022). This results in a more accurate calculation in depicting the creation of company value. When the REVA value is positive, the company is considered successful in creating value (Qatrunnada, 2025). The REVA scale is measured using the following formula (Syawal, 2021; Yan & Wang, 2016).

$$\text{REVA SCALE} = \frac{\text{REVA}}{\text{Total Assets}}$$

$$\text{REVA} = \text{NOPAT} - (\text{WACC} * \text{MV})$$

Furthermore, this study has two independent variables, namely the size of the board of commissioners (BCSZ) and managerial ownership (MOWN). The size of the board of commissioners refers to the total number of commissioners employed by a company each year. The absolute number is widely used in corporate governance literature as a valid proxy for supervisory complexity (Dalton, Daily, Johnson, & Ellstrand, 1999). The size of the board of commissioners is calculated using the following formula (Wijaya & Memarista, 2024).

$$\text{BCSZ} = \text{Total members of board commisssioners in year-t}$$

Meanwhile, managerial ownership in this study is measured through the proportion of shares owned by the board of directors relative to the total shares outstanding each year. The percentage of managerial ownership is widely used as an indicator of alignment between management and shareholders (Shleifer & Vishny, 1997). Managerial ownership is calculated using the following formula (Nabila, Yusuf, & Prihatni, 2024).

$$\text{MOWN} = \frac{\text{Number of shares owned by the manager}}{\text{Number of shares outstanding}} \times 100\%$$

The moderating variable in this study is the female representation. This moderating variable will be tested using a single indicator, namely FPROP (Female Percentage). FPROP will measure the proportion of female commissioners and managers relative to the total. FPROP is used as the main proxy because it controls board size differences and more accurately reflects women's representation in corporate oversight (Agustin, 2020). Specifically, FPROP allows for fair comparisons between companies with different structures, making the analysis results more relevant. FPROP is formulated as follows (Wijaya & Memarista, 2024).

$$\text{FPROP} = \frac{\text{Number of female commissioners} + \text{female managers}}{\text{Total members of the board of commissioners} + \text{managers}}$$

This study has four control variables, namely company age, company size, leverage, and ROA. Firm age was measured by the natural logarithm of the difference between the research year and the year of establishment, firm size by the natural logarithm of total assets, leverage by the debt to assets ratio (DAR), and ROA as an indicator of profitability. These four variables were chosen because they reflect operational experience, economies of scale, financial risk structure, and firm performance, all of which have the potential to influence firm value.

3.3. Research Analysis Technique

In this study, panel data regression was chosen as the method of data analysis, and the model used for the analysis was the fixed effects regression model or the least squares dummy variable (LSDV) regression model. This regression method is employed to control the effects of unidentified industry and year characteristics as well as to address the issue of omitted variables (Bacidore et al., 1997; Boubaker, Cellier, Manita, & Saeed, 2020; Cho, Chung, & Young, 2019; Choi, Ahn, & Choi, 2021; Khan, Ali, Zahid, Huo, & Nazir, 2022). The data analysis methods used include descriptive statistics, data quality tests, and hypothesis testing. This study has the following statistical equation model.

$$FV (REVA) = \alpha + \beta_1 BCSZ + \beta_2 MOWN + \beta_3 FPROP + (\beta_4 BCSZ * FPROP) + (\beta_5 MOWN * FPROP) + \beta_6 FSIZE + \beta_7 FAGE + \beta_8 LEV + \beta_9 ROA + \epsilon$$

This research will go through stages of descriptive statistics, panel data model selection, classical assumption tests specifically for FEM and REM models, and hypothesis testing. The determination of the best panel data model will involve tests such as the Chow test, Hausman test, and Lagrange multiplier test. The hypothesis testing consists of t-tests, F-tests, and tests of the coefficient of determination.

4. Results and Discussion

Companies in the ESG Leaders index listed on the Indonesia Stock Exchange that have good governance practices and integrated Environmental, Social, and Governance (ESG) performance from 2020–2024 are the subjects of this study. Based on table 1, during the 2020–2024 period, researchers found 14 companies that met the research criteria out of a total of 30 companies each period so there is 70-year observation. The details of the sample selection based on the predetermined criteria are as follows.

Table 1. Sample Criteria Results

No.	Description	Total
1.	Companies in the ESG Leaders index listed on the Indonesia Stock Exchange during the 2020–2024 period.	30
2.	Companies in the ESG Leaders index that were delisted during the study period.	(12)
3.	Companies that are not included in the non-financial sector in the ESG Leaders index.	(4)
Total Sample Companies		14
Total Observation		70

For the explanation of the descriptive statistical results for each variable in table 2 is elaborated as follows (1) REVA as an indicator of firm value measurement has a minimum value of -5.347, a maximum value of 0.052, an average value of -0.223 indicating that companies have not been able to create optimal economic value in general; (2) BCSZ has a minimum value of 3, a maximum value of 11, an average value of 4.943 indicating variations in the number of board members between companies; (3) MOWN has a minimum value of 0, maximum value of 1.301, an average value of 0.134 reflecting differences in the level of managerial ownership; (4) FPROP has a minimum value of 0, a maximum value of 0.600, an average value of 0.282 indicating that the level of female representation on board is still varied.

Table 2. Descriptive Test Results

Variable	Mean	Median	Maximum	Minimum	Std. Dev	Skewness	Kurtosis
REVA	-0.223	-0.011	0.052	-5.347	0.777	-4.932	29.81
BCSZ	4.943	5.000	11.000	3.000	1.918	1.448	4.931
MOWN	0.134	0.043	1.301	0.000	0.259	3.370	14.61
FPROP	0.282	0.268	0.600	0.000	0.162	0.196	2.299
F(AGE)	3.396	3.314	4.511	2.485	0.445	0.611	3.660
F(SIZE)	31.123	31.03	33.332	29.54	0.943	0.533	2.951
LEV (DAR)	0.497	0.511	0.866	0.081	0.209	-0.166	2.051
ROA	0.076	0.054	0.349	-0.033	0.069	2.291	8.554

4.1. Model Selection Test

Next, after the descriptive statistics are conducted, the process will continue with the stage of selecting a panel data model. The model selection test is conducted to choose the best model for testing the panel data regression equation. The first test to be conducted is the Chow test. The model selected from the Chow test results will determine the subsequent test to be used, whether it is the Hausman test or the Lagrange Multiplier test. The Hausman test will be conducted when the P-Value < 0.05, and the Lagrange Multiplier test will be conducted when the P-Value > 0.05. The following is a summary table of the model testing results for this regression equation.

Table 3. Model Test Results

Model Selection Test	P-Value	Decision
Chow test	0.276	>0.05 (CEM)
LM test	0.031	<0.05 (FEM)
Hausman test	0.044	<0.05 (FEM)
Model selected		FEM

Based on the results of the model testing, the selected model is the Fixed Effect Model (FEM). The determination of the FEM as the best model for regression testing is based on the P-Value (probability) values from the Lagrange multiplier and Hausman tests, both of which are less than 0.05. According to (Kuncoro, 2013), the use of the FEM in regression testing requires performing classical assumption tests in the form of multicollinearity and heteroscedasticity tests.

4.2. Classical Assumption

Multicollinearity was tested using VIF and heteroscedasticity based on probability values. The control variable firm size was not included in the test because it only serves as a supporting parameter and does not affect the estimation of the main variables (Nieuwenhuis, 2012). Hünermund & Louw (2025).

Table 4. Multicollinearity Result

Variable	VIF
BCSZ (X1)	2.078
MOWN (X2)	1.600
FAGE	2.836
Leverage	4.106
ROA	1.577

Based on the results of the multicollinearity test, all Variance Inflation Factor (VIF) values are below 10, which means the test is free from multicollinearity problems.

Table 5. Heteroscedasticity Result

Heteroskedasticity Test: Glejser			
F-statistic	1.9671	Prob. F (10,59)	0.0536
Obs*R-square	17.5026	Prob. Chi-Square (10)	0.0640

Based on the results of the Glejser test in the table above, the Chi-Square Prob. value (10) for Obs*R-squared is 0.0640, which is greater than 0.05 ($0.0640 > 0.05$), so it can be concluded that the research model also passes the heteroscedasticity test.

4.3. Model Fit Test

The model fit test aims to determine whether the multiple linear equation model used in this study is feasible. The model feasibility test in this study will examine several components, namely the coefficient of determination (R²) and the F statistic.

Table 6. Model Fit Test

Model	R-squared	F-statistic	Prob (F-Statistic)
H1	0.7766	5.8561	0.0005
H2	0.7707	5.9929	0.0004
H3	0.8159	4.7125	0.0006
H4	0.7922	4.1192	0.0016

Table 6 shows that R-squared value in the four models ranges from 77.07% to 81.59% which means that the independent variables can explain most of the variation in REVA, while the rest is influenced by other factors outside the study. In addition, the F test results on all models show a probability value below 0.0t so the model is declared fit and have a significant effect on REVA.

4.4.Hypothesis Testing

Hypothesis testing aims to determine the extent of the influence of the independent variable on the dependent variable. The results of the hypothesis testing are as follows.

Table 7. Hypothesis Testing

Variable	Coefficient	T-Statistic	Prob. (1-tailed)	Description	Decision
BCSZ	0.0339	1.6057	0.05675**	Positive effect	Significant
MOWN	0.0355	0.3132	0.3776	Positive effect	Not significant
BCSZ*FPROP	-0.8476	-2.3427	0.01125	Negative effect	Significant
MOWN*FPROP	3.8622	2.3152	0.01205	Positif effect	Significant
Year Dummies			Yes		
Entity Dummies			Yes		

** indicates that the confidence level is at 90%.

Hypothesis testing was carried out using a one-tailed t-test, with decision-making based on the Prob. (1-tailed) value. The first hypothesis predicts that board size has a positive effect on firm value (REVA). The results in table show that BCSZ has a Prob. (1-tailed) of 0.05675; $t = 1.6057$, $\beta = 0.0339$. At a 90% confidence level, this value is below 0.1 with a positive coefficient, indicating a significant positive effect. Thus, Ha1 is supported. The second hypothesis predicts that managerial ownership has a positive effect on firm value (REVA). The results in table show that MOWN has a Prob. (1-tailed) of 0.3776; $t = 0.3132$, $\beta = 0.0355$. This value exceeds 0.05, indicating no significant effect. Thus, Ha2 is not supported. The third hypothesis predicts that female representation positively moderates the relationship between board size and firm value (REVA). The results in table show that BCSZ*FPROP has a Prob. (1-tailed) of 0.01125; $t = -2.3427$, $\beta = -0.8476$. Although significant, the negative coefficient indicates that female representation weakens rather than strengthens this relationship. Thus, Ha3 is not supported. The fourth hypothesis predicts that female representation positively moderates the relationship between managerial ownership and firm

value (REVA). The results in table show that MOWN*FPROP has a Prob. (1-tailed) of 0.01205; $t = 2.3152$, $\beta = 3.8622$. This value is below 0.05 with a positive coefficient, confirming a significant positive moderating effect. Thus, Ha4 is supported.

4.5. Discussion

Based on the results of the tests that have been carried out, the discussion to answer the hypothesis is as follows.

4.5.1 The Effect of Board Commissioners' Size on Firm Value

This study predicts that a larger board of commissioners has a positive effect on firm value as measured by REVA. The results of the t-test show a probability value (1-tailed) of 0.05675 with a positive coefficient ($\beta = 0.0339$), which, at a 90% confidence level, leads to the acceptance of Ha1. These findings are consistent with the initial prediction and support the view that a larger board of commissioners can enhance the capacity for monitoring management, thereby encouraging an increase in corporate value (Ahmad et al., 2020; Jensen & Meckling, 1976; Marini & Marina, 2017; Nurahma & Budiharjo, 2022).

This finding is in line with agency theory proposed by Jensen & Meckling (1976), which posits that conflicts of interest between principals (shareholders) and agents (managers) are a fundamental source of agency problems. One of the primary mechanisms for addressing agency problems is through effective oversight of managerial behavior, with the board of commissioners acting as an internal control mechanism representing shareholder interests. The larger the board, the stronger its oversight capacity, as diverse perspectives and experiences enhance the quality of strategic decision-making. (Pearce & Zahra, 1992). Furthermore, a larger board allows for more effective division of monitoring tasks through the formation of specific committees focused on key areas, such as audit, risk, and remuneration (Dalton, Daily, Johnson, & Ellstrand, 1999). This enhanced monitoring function reduces the opportunistic behavior of managers, ultimately contributing to value creation as measured by REVA.

Research by Coles et al. (2008) shows that companies with high operational complexity require larger boards for effective oversight. In the context of non-financial companies in the ESG Leaders index, a larger board of commissioners is essential for comprehensive ESG oversight, thereby enhancing company value through more optimal oversight mechanism. As an empirical illustration, PT Telkom Indonesia (Persero) Tbk (TLKM), one of the sample companies in the non-financial sector of the ESG Leaders index, has the largest board of commissioners with an average of 9 to 11 board members during the 2020–2024 period. As a company with high operational complexity and broad reach, a large board size allows for

increased oversight capacity, clearer division of duties, and more effective risk management and decision-making. This supports economic value creation (REVA), which indicates that a board size appropriate to the company's characteristics has a positive impact on company value.

4.5.2 The Effect of Managerial Ownership on Firm Value

This study predicts that managerial ownership has a positive effect on firm value as measured by REVA, based on the assumption that ownership by managers aligns their interests with those of shareholders and reduces agency conflicts. However, the t-test results show a probability value (1-tailed) of 0.3776 with a positive but insignificant coefficient ($\beta = 0.0355$), leading to the rejection of H_{a2} . These findings contradict the initial prediction and are inconsistent with several previous studies that found managerial ownership to be positively associated with firm value (Dewi & Abundanti, 2019; Rivandi, 2018; Sari & Wulandari, 2021).

This finding is not fully consistent with agency theory as proposed by Jensen & Meckling (1976), which states that managerial ownership can align the interests of managers and shareholders and reduce opportunistic behavior. However, the effectiveness of this mechanism is highly dependent on the size of the ownership proportion. Therefore, when managerial ownership is too low, the incentives created are not strong enough to encourage managers to act to maximize firm value. As a result, agency conflicts persist, and managerial ownership becomes less effective as a governance mechanism.

The results of this study indicate that managerial ownership in Indonesia is not yet strong enough to create the alignment effect envisioned by agency theory. This is due to its relatively low proportion, averaging around 6% (Lubis et al., 2025). This low level of ownership means that managers do not have sufficiently strong incentives to align their interests with shareholders. These findings align with Pradana & Khairusoalihin (2021) and Setyasari et al. (2022) which show that low managerial ownership is unable to motivate increased firm value. Furthermore, Sudyatno, Puspitasari, Suwarti, & Asyif (2020) found that the high but uneven distribution of managerial ownership in Indonesia makes it difficult to create a consistent positive impact on firm value.

In the non-financial sector of the ESG Leaders index during the 2020–2024 period, managerial shareholding by managers ranged only between 1–10%, and in many cases, managerial parties held no company shares at all. Only TBIG demonstrated a relatively high level of managerial ownership at approximately 35–38%, yet this concentration remained an outlier rather than the norm. The uneven and predominantly low distribution of managerial

ownership across sample companies confirms that this governance mechanism has yet to reach a level sufficient to meaningfully influence firm value as measured by REVA. Therefore, it can be concluded that managerial ownership does not affect firm value in this context.

4.5.3 The Effect of Board Commissioners' Size on Firm Value with Female Representation as A Moderating Variable

This study predicts that female representation on the board of commissioners positively moderates the relationship between board size and firm value (REVA), on the expectation that women bring effective monitoring quality and diverse perspectives that reinforce the supervisory function of a larger board (Roihanah & Akbar, 2024; Tanujaya & Teresa, 2021). However, the t-test results show a probability value (1-tailed) of 0.01125 with a negative coefficient ($\beta = -0.8476$), indicating that female representation significantly moderates the relationship but in a weakening direction. Consequently, H_{a3} is rejected. This finding is consistent with those of Wijaya & Memarista (2024), who similarly found that female board representation does not always strengthen governance outcomes.

From an agency theory perspective, the board of commissioners acts as a monitoring mechanism to reduce managerial opportunism, the effectiveness of which can be increased by the presence of women because they are considered more thorough, ethical, and independent (Torchia et al., 2011). In theory, female representation should strengthen board oversight and increase company value, but this study's findings suggest the opposite, actually weakening it. This indicates that this oversight potential has not been realized, likely because the quality and independence of female commissioners do not align with theoretical assumptions.

The failure of women's representation as a moderating variable is caused by the low proportion of women on the board which has not reached critical mass (less than 15%), so that their role tends to be symbolic and limited in decision-making (Torchia et al., 2011). As a result, female representation on the board of commissioners tends to reflect tokenism. This problem is evidenced by national data showing that women occupy only 8.3% of board of commissioners' positions, 5.2% of board chair positions, and 3.1% of CEO positions in Indonesia (Deloitte, 2024). Moreover, Indonesia has experienced a 1% decline in women on boards since 2018 and a 2.4% decrease in board chair positions, indicating a regressing trend compared to other Southeast Asian countries.

This problem is exacerbated by the structural nature of appointing female commissioners in Indonesia, who often come from the owner's family and lack independence (Darmadi,

2011), thus limiting their contribution to the oversight function. Furthermore, female representation remains low, with many companies lacking any, with empirical evidence in the ESG Leaders index for the 2020-2024 period, with the highest value found only in CTRA, which had four female commissioners in 2021. Consequently, female representation has not been able to moderate the relationship between board size and firm value, even though the company is included in the ESG Leaders index.

4.5.4 The Effect of Managerial Ownership on Firm Value with Female Representation as A Moderating Variable

This study predicts that female representation positively moderates the relationship between managerial ownership and firm value (REVA), based on the expectation that the dual role of women — simultaneously as commissioners and as shareholders — can strengthen the value-enhancing effect of managerial ownership. The t-test results show a probability value (1-tailed) of 0.01205 with a positive coefficient ($\beta = 3.8622$), confirming that Ha4 is accepted. Female representation significantly and positively moderates the relationship between managerial ownership and firm value, meaning it strengthens the positive impact of managerial ownership on REVA.

These findings align with agency theory, which emphasizes the importance of aligning interests between managers and shareholders, where managerial ownership becomes less effective when the proportion is low. The presence of female commissioners who also own shares enhances the control mechanism through their dual role as supervisors and owners. This combination strengthens oversight and is more effective in mitigating agency conflicts than using either mechanism alone.

This finding is supported by [Devika & Yuliana \(2020\)](#) and [Torchia et al. \(2011\)](#), who jointly revealed that the presence of women in companies can increase firm value through a dual-role mechanism that reduces the entrenchment effects that may arise from managerial ownership. Research by [Townsend et al. \(2021\)](#) in Latin American countries similarly demonstrates that the presence of at least one woman in a managerial position is positively associated with company value. [Rubino, Tenuta, & Cambrea \(2021\)](#), using a sample of Italian companies, further reinforce these findings, showing that the unique characteristics women bring tend to improve company value. Collectively, these studies indicate that female representation in managerial roles is a meaningful governance enhancement that companies worldwide can leverage to drive value creation.

The success of female representation in strengthening these relationships can be explained by their characteristics of being more patient, proactive, and effective in supervision, as well

as their tendency to avoid risks and opportunistic behavior (Mahardini & Framita, 2022; Rakrismawati & Butar, 2023). Furthermore, women also increase companies' sensitivity to sustainability and social responsibility. This strengthens the aligning effect of managerial ownership through increased oversight and ethical discipline. As empirical evidence, the company in the ESG Leaders index for the 2020–2024 period with the highest female representation is UNVR, with six women in managerial positions in 2020, 2022, and 2023, far above the average of only one to four for other companies. This high representation, combined with managerial ownership, suggests that strong gender diversity can increase firm value. Therefore, this finding supports that female representation strengthens the positive relationship between managerial ownership and firm value (REVA).

5. Conclusion

This study shows that the size of the board of commissioners positively influences firm value (REVA), while managerial ownership proves ineffective in aligning managerial and shareholder interests in the Indonesian context. Female representation has a different moderating role, namely weakening the relationship between board size and firm value because it has not reached critical mass but strengthening the influence of managerial ownership through its dual role. From a literature contribution, this study extends corporate governance and gender diversity research by introducing REVA as a firm value proxy within the ESG Leaders index, addressing inconsistencies in prior findings regarding the conditional effectiveness of governance mechanisms. REVA was selected over conventional proxies because it incorporates the market value of assets rather than book value and thus better reflects the actual capital commitments made by investors and creditors and its application in the context of corporate governance is still rarely explored. From an empirical contribution, this study provides evidence that the effectiveness of governance mechanisms is highly context-dependent, particularly in the Indonesian institutional setting where managerial ownership remains low and female representation has yet to reach a substantive level. Despite these contributions, this study has limitations, including the use of a single firm value proxy sensitive to market volatility, a small and homogeneous sample restricted to 14 ESG Leaders companies, and a combined measure of female representation that does not distinguish between supervisory and executive functions. Future research may consider using multiple firm value proxies, expanding the sample to broader indices, separating female representation by board function, and incorporating more comprehensive ownership structure variables to better capture the complexity of agency relationships in Indonesia.

References

- Adams, R. B., & Ferreira, D. (2009). Women in The Boardroom and Their Impact on Governance and Performance. *Journal of Financial Economics*, 94, 291–309. <https://doi.org/10.1016/j.jfineco.2008.10.007>
- Agustin, S. M. (2020). Pengaruh Gender Dewan Komisaris, Struktur Kepemilikan dan Family Control terhadap Nilai Perusahaan. *Jurnal Ilmu dan Riset Akuntansi*, 9(11), 1–25. <https://jurnalmahasiswa.stiesia.ac.id/index.php/jira/article/view/3788>
- Ahmad, G. N., Lullah, R., & Siregar, M. E. S. (2020). Pengaruh Keputusan Investasi, Keputusan Pendanaan, Kebijakan Dividen, dan Ukuran Dewan Komisaris terhadap Nilai Perusahaan Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2016-2018. *JRMSI - Jurnal Riset Manajemen Sains Indonesia*, 11(1), 169–184. <https://doi.org/10.21009/JRMSI.011.1.09>
- Anggraini, F., Annisa, A., & Zefriyenni, Z. (2023). Pengaruh Keragaman Gender Dewan, dan Earnings Management terhadap Kinerja Keuangan Perusahaan. *Jurnal Proaksi*, 10(4), 437–449. <https://doi.org/10.32534/jpk.v10i4.4534>
- Ardito, L., Dangelico, R. M., & Petruzzelli, A. M. (2020). The Link Between Female Representation in The Boards of Directors and Corporate Social Responsibility: Evidence from B Corps. *Wiley*, 28(2), 704–720. <https://doi.org/https://doi.org/10.1002/csr.2082>
- Arifina, Y. (2019). Peran Tata Kelola Perusahaan dan Risiko Pelaporan Keuangan dalam Pembentukan Komite Manajemen Risiko yang Terpisah. *Jurnal Akuntansi Bisnis*, 15(2), 246. <https://doi.org/10.24167/jab.v16i1.1365>
- Bacidore, J. M., Boquist, J. A., Milbourn, T. T., & Thakor, A. V. (1997). The Search for the Best Financial Performance Measure. *Financial Analysts Journal*, 53(3), 11–20. <https://doi.org/10.2469/faj.v53.n3.2081>
- Bakar, A. (2010). Analisis Perbandingan Kinerja Perusahaan Telekomunikasi dengan Menggunakan EVA, REVA, FVA, dan MVA. *Jurnal Itenas Rekayasa*, 14(1), 19–27. <https://ejurnal.itenas.ac.id/index.php/rekayasa/article/view/50>
- Berger, P. G. (2011). Challenges and Opportunities in Disclosure Research—A Discussion of The Financial Reporting Environment: Review of The Recent Literature'. *Journal of Accounting and Economics*, 51(1–2), 204–218. <https://doi.org/10.1016/j.jacceco.2011.01.001>
- Bhakar, S., Sharma, P., & Kumar, S. (2024). Ownership Structure and Firm Performance: A Comprehensive Review and Empirical Analysis. *Journal of the Knowledge Economy*, 15(4), 19824–19865. <https://doi.org/10.1007/s13132-024-01893-1>
- Bodie, Z., Kane, A., & Marcus, A. (2014). *Investment* (10th ed.). Mc Graw Hill Education. <https://books.google.co.id/books?id=BMsvEAAAQBAJ&printsec=frontcover&hl=id#v=onepage&q&f=false>
- Boubaker, S., Cellier, A., Manita, R., & Saeed, A. (2020). Does Corporate Social Responsibility Reduce Financial Distress Risk? *Economic Modelling*, 91, 835–851. <https://doi.org/10.1016/j.econmod.2020.05.012>
- BPS. (2024). Proporsi perempuan yang berada di posisi managerial menurut provinsi, 2021-2023. In *Badan Pusat Statistik*. <https://www.bps.go.id/id/statistics-table/2/MjAwMyMy/proporsi-perempuan-yang-berada-di-posisi-managerial-menurut-provinsi.html>
-

- Campbell, K., & Mínguez-Vera, A. (2008). Gender Diversity in the Boardroom and Firm Financial Performance. *Journal of Business Ethics*, 83(3), 435–451. <https://doi.org/10.1007/s10551-007-9630-y>
- Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate Governance, Board Diversity, and Firm Value. *Financial Review*, 38(1), 33–53. <https://doi.org/10.1111/1540-6288.00034>
- Cho, S. J., Chung, C. Y., & Young, J. (2019). Study on The Relationship Between CSR and Financial Performance. *Sustainability*, 11(2), 343. <https://doi.org/10.3390/su11020343>
- Choi, B.-K., Ahn, J.-Y., & Choi, M.-C. (2021). Corporate Social Responsibility, CEO Compensation Structure, and Corporate Innovation Activities. *Sustainability*, 13(23), 13039. <https://doi.org/10.3390/su132313039>
- Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does One Size Fit All? *Journal of Financial Economics*, 87, 329–356. <https://doi.org/10.1016/j.jfineco.2006.08.008>
- Dalton, D. R., Daily, C. M., Johnson, J. L., & Ellstrand, A. E. (1999). Number of Directors and Financial Performance: A Meta-Analysis. *Academy of Management Journal*, 42(6), 674–686. <https://doi.org/10.2307/256988>
- Darmadi, S. (2011). Board Members' Education and Firm Performance: Evidence from a Developing Economy. *Indonesia Financial Services Authority (OJK)*, 1–38. <https://ssrn.com/abstract=1904762>
- Darmayanti, F. E., Sanusi, F., & Widya, I. U. (2018). Pengaruh Kepemilikan Manajerial, Kepemilikan Institusional dan Kebijakan Hutang Terhadap Nilai Perusahaan (Studi Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2011-2015). *Sains: Jurnal Manajemen dan Bisnis*, 11(1), 1–20. <https://doi.org/10.35448/jmb.v11i1.4284>
- Delloite. (2024). *Women in the Boardroom: A Global Perspective (8th Edition)*. https://www.deloitte.com/content/dam/insights/articles/2024/glob176823_board_effectiveness_wob/glob176823-women-in-the-boardroom-2.pdf
- Devika, F., & Yuliana, I. (2020). Peranan Kepemimpinan Perempuan dalam Memoderasi Pengaruh Corporate Social Responsibility Disclosure dan Scoring Good Corporate Governance terhadap Nilai Perusahaan. *Indonesian Journal of Environmental Education and Management*, 5(2), 70–99. <https://doi.org/10.21009/IJEEM.051.06>
- Dewi, L. S., & Abundanti, N. (2019). Pengaruh Profitabilitas, Likuiditas, Kepemilikan Institusional dan Kepemilikan Manajerial terhadap Nilai Perusahaan. *E-Jurnal Manajemen Universitas Udayana*, 8(10), 6099–6118. <https://doi.org/10.24843/EJMUNUD.2019.v08.i10.p12>
- Dewri, L. V. (2022). A Critical Assessment of Interrelationship Among Corporate Governance, Financial Performance, Refined Economic Value Added to Measure Firm Value and Return on Stock. *Journal of the Knowledge Economy*, 13(4), 2718–2759. <https://doi.org/10.1007/s13132-021-00808-8>
- Gibert, A., & Fedorets, A. (2025). Lifting Women Up: Gender Quotas and the Advancement of Women on Corporate Boards. *Corporate Governance: An International Review*, 33(3), 407–435. <https://doi.org/10.1111/corg.12609>
- Hadiprajitno, P. B. (2013). Struktur Kepemilikan, Mekanisme Tata Kelola Perusahaan, dan Biaya Keagenan di Indonesia (Studi Empirik Pada Perusahaan di Bursa Efek

- Indonesia). *Jurnal Akuntansi & Auditing*, 9(2), 97–127. <https://doi.org/https://doi.org/10.14710/jaa.9.2.97-127>
- Harahap, I. O., & Rizal, M. (2023). Moderasi Kepemilikan Manajerial Pada Hubungan Investment Opportunity Set, Perilaku Oportunistik dan Mekanisme Pengawasan Terhadap Manajemen Laba. *Temu Dosen FDAP*, 1–14. https://www.researchgate.net/publication/373236655_Moderasi_Kepemilikan_Manajerial_Pada_Hubungan_Investment_Opportunity_Set_Perilaku_Oportunistik_dan_Mekanisme_Pengawasan_Terhadap_Manajemen_Laba
- Harinuridin, E., & Safitri, K. A. (2022). Tata Kelola Perusahaan Tercatat di Indonesia. *Jurnal Vokasi Indonesia*, 10(1), 46. <https://doi.org/10.7454/jvi.v10i1.1178>
- Hünermund, P., & Louw, B. (2025). On the Nuisance of Control Variables in Causal Regression Analysis. *Organizational Research Methods*, 28(1), 138–151. <https://doi.org/10.1177/10944281231219274>
- IDX. (2024). *Panduan dan Metodologi Indeks IDX ESG Leaders*. IDX. <https://www.idx.id/media/zdebmnr/lampiran-panduan-metodologi-indeks-idxesgl-2-0.pdf>
- IFC. (2020). Penelitian IFC: Perusahaan-perusahaan Asia dengan Perempuan di Dewan Menunjukkan Kinerja Keuangan yang Lebih Baik. In *International Finance Corporation*. <https://www.ifc.org/in/pressroom/2019/25742>
- Ismoyo, B. (2021). Ada Lima Fase Menuju Pemulihan Ekonomi Setelah Dihajar Pandemi, Indonesia Baru di Fase Ini. In *Tribunnews*. <https://www.tribunnews.com/bisnis/2021/06/25/ada-lima-fase-menuju-pemulihan-ekonomi-setelah-dihajar-pandemi-indonesia-baru-di-fase-ini>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics* 3, 3(4), 305–360. [https://doi.org/https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/https://doi.org/10.1016/0304-405X(76)90026-X)
- Kang, J.-K., Kim, S., & Oh, S. (2022). Does Board Demographic Diversity Enhance Cognitive Diversity and Monitoring? *The Accounting Review*, 97(6), 385–415. <https://doi.org/10.2308/TAR-2020-0702>
- Khan, M. K., Ali, S., Zahid, R. M. A., Huo, C., & Nazir, M. S. (2022). Does Whipping Tournament Incentives Spur CSR Performance? An Empirical Evidence from Chinese Sub-national Institutional Contingencies. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.841163>
- Khoirunnisa, S. (2022). Pengaruh Ukuran Dewan Komisaris, Dewan Direksi dan Komite Audit Terhadap Nilai Perusahaan Pada Indeks Kompas100 Bursa Efek Indonesia (BEI) Periode 2018-2020. *SNAM PNJ*, 1–12. https://repository.pnj.ac.id/id/eprint/8809/3/Artikel%20SNAM_Syifa%20Khoirunnisa_1804441043_Manajemen%20Keuangan.pdf
- Knippenberg, D. Van, & Schippers, M. C. (2007). Work Group Diversity. *Annual Review of Psychology*, 58(1), 515–541. <https://doi.org/10.1146/annurev.psych.58.110405.085546>
- Kuncoro, M. (2013). *Metode Riset untuk Bisnis & Ekonomi: Bagaimana Meneliti dan Menulis Tesis?* (4th ed.). Erlangga.
- Lee, S., & Kim, W. G. (2009). EVA, Refined EVA, MVA, or Traditional Performance Measures for The Hospitality Industry? *International Journal of Hospitality Management*, 28(3), 439–445. <https://doi.org/10.1016/j.ijhm.2009.01.004>

- Liu, Y., Wei, Z., & Xie, F. (2014). Do Women Directors Improve Firm Performance in China? *Journal of Corporate Finance*, 28, 169–184. <https://doi.org/10.1016/j.jcorpfin.2013.11.016>
- Lu, Y., Ntim, C. G., Zhang, Q., & Li, P. (2022). Board of directors' attributes and corporate outcomes: A systematic literature review and future research agenda. *International Review of Financial Analysis*, 84, 102424. <https://doi.org/https://doi.org/10.1016/j.irfa.2022.102424>
- Lubis, R. K., Darmadi, S., Pratiwi, T. A., Falaqia, P., Lutvian, S., & Firas, R. (2025). Managerial Ownership as A Corporate Governance Mechanism in Shaping Leverage Decisions: Insights from Indonesia. *Cogent Business & Management*, 12(1), 1–22. <https://doi.org/10.1080/23311975.2025.2473043>
- Maghfiroh, V. D., & Utomo, D. C. (2019). Pengaruh Diversitas Gender pada Struktur Dewan terhadap Kinerja Keuangan Perusahaan. *Diponegoro Journal of Accounting*, 8(3), 1–9. <http://ejournal-s1.undip.ac.id/index.php/accounting>
- Mahardini, N. Y., & Framita, D. S. (2022). Financial Distress: Studi Jumlah Dewan Komisaris, Karakteristik CEO, dan Leverage Perusahaan Manufaktur di Indonesia. *Journal of Applied Management Research*, 2(2), 81–90. <https://doi.org/http://dx.doi.org/10.36441/jamr>
- Manuela, A., & Sandra, A. (2022). Pengaruh Diversitas Gender dalam Dewan Direksi, Dewan Komisaris, dan Komite Audit, serta Kepemilikan Manajerial dan Kepemilikan Institusional terhadap Agresivitas Pajak. *Journal of Applied Managerial Accounting*, 6(2), 187–203. <https://doi.org/10.30871/jama.v6i2.4244>
- Manullang, R. R., Arum, R. A., Sunarni, Suryani, R., & Budiasih, Y. (2024). Evaluasi Peran Economic Value Added (EVA) Sebagai Penilaian Kinerja Manajemen Perusahaan dalam Era Bisnis Kontemporer. *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam*, 5(9), 4475–4487. <https://doi.org/10.47467/elmal.v5i9.5018>
- Marini, Y., & Marina, N. (2017). Pengaruh Good Corporate Governance terhadap Nilai Perusahaan. *Jurnal Humaniora*, 1(1), 7–20. <https://doi.org/https://doi.org/10.30601/HUMANIORA.V1I1.37>
- Mariyani, D., & Novida, D. R. (2023). Pengaruh Economic Value Added (EVA), Market Value Added (MVA), Refined Economic Value Added (REVA) terhadap Harga Saham dan Return Saham pada Perusahaan Manufaktur yang Tercatat di Bursa Efek Indonesia. *Jurnal Ilmiah Indonesia*, 3(12), 1201–1212. <https://doi.org/10.36418/cerdika.xxx>
- Mazza, T., Furlotti, K., Medioli, A., & Tibiletti, V. (2024). Mandatory gender quotas: the impact on board and committee meetings. *Management Research Review*, 47(1), 45–63. <https://doi.org/10.1108/MRR-03-2021-0243>
- Miller, T., & Triana, M. D. C. (2009). Demographic Diversity in the Boardroom: Mediators of the Board Diversity–Firm Performance Relationship. *Journal of Management Studies*, 46(5), 755–786. <https://doi.org/10.1111/j.1467-6486.2009.00839.x>
- Nabila, A. S., Yusuf, M., & Prihatni, R. (2024). Kepemilikan Institusional, Kepemilikan Manajerial, dan Risiko Bisnis Terhadap Struktur Modal dengan Ukuran Perusahaan Sebagai Moderasi. *Jurnal Akuntansi, Perpajakan dan Auditing*, 5(2), 420–438. <https://doi.org/10.21009/japa.0502.13>
- Nakhaei, H., Hamid, N. I. N., Anuar, M. A., & Nakhaei, K. (2016). Is Refined Economic Value Added More Associated with Stock Return than Accounting Measures? The Malaysian Evidence. *Society and Economy*, 38(1), 69–85. <https://doi.org/10.1556/204.2016.38.1.5>

- Nielsen, S., & Huse, M. (2010). The Contribution of Women on Boards of Directors: Going Beyond the Surface. *Corporate Governance: An International Review*, 18(2), 136–148. <https://doi.org/10.1111/j.1467-8683.2010.00784.x>
- Nieuwenhuis, R. (2012). *Questions Regarding Control Variables*. ResearchGate. https://www.researchgate.net/post/Questions_regarding_control_variables
- Nurahma, S., & Budiharjo, R. (2022). Pengaruh Keputusan Pendanaan, Ukuran Perusahaan, Ukuran Dewan Komisaris, dan Return on Asset terhadap Nilai Perusahaan. *Jurnal Riset Manajemen dan Bisnis*, 7(1), 35–48. <https://doi.org/10.36407/jrmb.v7i1.364>
- OECD. (2021). *The Future of Corporate Governance in Capital Markets Following the COVID-19 Crisis*. Corporate Governance. https://www.oecd.org/en/publications/the-future-of-corporate-governance-in-capital-markets-following-the-covid-19-crisis_efb2013c-en.html
- Omneya, A.-K., Ashraf, S., & Eldin, B. B. (2021). Financial Performance Appraisal Using Economic Values Added in Emerging Markets: Evidence from Egyptian Listed Firms. *Open Journal of Social Sciences*, 9, 415–434. <https://doi.org/10.4236/jss.2021.93027>
- Pasha, A. R. (2023). IDX ESG Leaders - Pengertian dan Daftar Terbarunya. In *Cermati*. <https://www.cermati.com/artikel/bei-luncurkan-idx-esg-leaders-ini-daftar-30-saham-yang-terpilih>
- PBB. (2024). Kerja kami pada Tujuan Pembangunan Berkelanjutan di Indonesia. In *PBB Indonesia*. <https://indonesia.un.org/id/sdgs>
- Pearce, J. A., & Zahra, S. A. (1992). Board Composition from A Strategic Contingency Perspective. *Journal of Management Studies*, 29(4), 411–438. <https://doi.org/10.1111/j.1467-6486.1992.tb00672.x>
- POJK, 51/POJK.03/2017 15 (2017). <https://peraturan.bpk.go.id/Details/129651/peraturan-ojk-no-51poj032017-tahun-2017>
- Post, C., & Byron, K. (2015). Women on Boards and Firm Financial Performance: A Meta-Analysis. *Academy of Management Journal*, 58(5), 1546–1571. <https://doi.org/10.5465/amj.2013.0319>
- Pourali, M., & Roze, Z. (2013). *The Relationship between Market Value Added with Refined Economic Value Added and Performance Accounting Criteria in The Firms listed in The Tehran Stock Exchange*. <https://api.semanticscholar.org/CorpusID:201920913>
- Pradana, M. T., & Khairusoalihin, K. (2021). Pengaruh Board Diversity, Kompensasi Dewan Direksi dan Kepemilikan Manajerial Dewan Direksi terhadap Nilai Perusahaan. *Analisis*, 11(1), 1–20. <https://doi.org/10.37478/als.v11i1.824>
- Putra, I. G. C., Manuari, I. A. R., & Puspayanti, N. K. D. (2022). Pengaruh Corporate Governance Terhadap Profitabilitas dan Nilai Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia (BEI). *Wacana Ekonomi (Jurnal Ekonomi, Bisnis dan Akuntansi)*, 21(1), 105–118. <https://doi.org/10.22225/we.21.1.2022.105-118>
- Qatrunnada, K. (2025). Economic Value Added (EVA) Mengukur Nilai Tambah Ekonomi Perusahaan. In *Binus University Business School*. <https://binus.ac.id/malang/ebc/economic-value-added-eva-mengukur-nilai-tambah-ekonomi-perusahaan/>
- Rafie, M. P., Sihombing, I., Nasution, F. N., & Muda, I. (2025). Theoretical Foundations of Corporate Governance and Board of Directors: A Systematic Literature Review. *Indonesia Economic Journal*, 1(2), 1861–1870. <https://ojs.indopublishing.or.id/index.php/iej>

- Rakrismawati, G., & Butar, S. B. (2023). Pengaruh Metode Valuasi Aset, Independensi Dewan Komisaris, Diversitas Gender, dan Kepemilikan Institusional Terhadap Manajemen Laba. *Jurnal Akuntansi Bisnis*, 21(2), 92–103. <https://doi.org/10.24167/jab.v21i2.10207>
- Rivandi, M. (2018). Pengaruh Intellectual Capital Disclosure, Kinerja Keuangan, dan Kepemilikan Manajerial terhadap Nilai Perusahaan. *Jurnal Pundi*, 2(1), 41–54. <https://doi.org/10.31575/jp.v2i1.61>
- Roihanah, N. N., & Akbar, F. S. (2024). Pengaruh Dewan Komisaris, Dewan Direksi, Diversitas Gender Dewan Komisaris Dan Ukuran Perusahaan Terhadap Kinerja Keuangan Perusahaan (Studi Pada Perusahaan LQ45 Yang Terdaftar Di BEI Pada Tahun 2020-2023). *Journal of Economic, Bussines and Accounting (COSTING)*, 7(4), 1251–1263. <https://doi.org/10.31539/costing.v7i5.11810>
- Rubino, F. E., Tenuta, P., & Cambrea, D. R. (2021). Five Shades of Women: Evidence from Italian Listed Firms. *Meditari Accountancy Research*, 29(7), 54–74. <https://doi.org/10.1108/MEDAR-10-2020-1057>
- Sari, D. M., & Wulandari, P. P. (2021). Pengaruh Kepemilikan Institusional, Kepemilikan Manajerial, dan Kebijakan Dividen terhadap Nilai Perusahaan. *Tera Ilmu Akuntansi*, 22(1), 1–18. <https://doi.org/10.21776/tema.22.1.1-18>
- Septiana, N., & Aris, M. A. (2023). Analisis Proposi Dewan Komisaris Independen, Ukuran Dewan Direksi, Komite Audit, Blockholder Ownership terhadap Kinerja Keuangan. *Jurnal Akuntansi, Keuangan, dan Manajemen*, 4(2), 101–114. <https://doi.org/10.35912/jakman.v4i2.1051>
- Setyasari, N., Rahmawati, I. Y., Naelati Tubastuvi, N., & Aryoko, Y. P. (2022). Pengaruh Kepemilikan Manajerial, Kepemilikan Institusional, Board Diversity, Profitabilitas Dan Ukuran Perusahaan Terhadap Nilai Perusahaan (Studi Empiris Pada Perusahaan Manufaktur Yang Listing Di Bursa Efek Indonesia Tahun 2016 - 2020). *Master: Jurnal Manajemen dan Bisnis Terapan*, 2(1), 61–74. <https://doi.org/10.30595/jmbt.v2i1.14046>
- Shah, R., Haldar, A., & Rao, N. (2016). Economic Value Added: Corporate Performance Measurement Tool. *Corporate Board Role Duties and Composition*, 11(1), 47–58. <https://doi.org/10.22495/cbv11i1art5>
- Shleifer, A., & Vishny, R. W. (1997). A Survey of Corporate Governance. *The Journal of Finance*, 52(2), 737–783. <https://shleifer.scholars.harvard.edu/sites/g/files/omnuum10626/files/shleifer/files/surveycorpgov.pdf>
- Sudiyatno, B., Puspitasari, E., Suwarti, T., & Asyif, M. M. (2020). Determinants of Firm Value and Profitability: Evidence from Indonesia. *The Journal of Asian Finance, Economics and Business*, 7(11), 769–778. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO11.769>
- Susmanto, A., Daryanto, A., & Sasongko, H. (2021). Pengaruh Karakteristik Dewan Komisaris terhadap Kinerja Keuangan Perusahaan: Studi Kasus pada BUMN Persero Terbuka Tahun 2014-2018. *Jurnal Aplikasi Bisnis dan Manajemen*, 7(2), 498–511. <https://doi.org/10.17358/jabm.7.2.498>
- Suwisma, S., Rais, R. G. P., Haykal, M., & Razif, R. (2023). Pengaruh Kepemilikan Institusional, Kepemilikan Manajerial dan Pengungkapan Corporate Social Responsibility Terhadap Nilai Perusahaan (Studi Pada Perusahaan Manufaktur Yang

- Terdaftar di Bursa Efek Indonesia 2019-2021). *Jurnal Akuntansi Malikussaleh (JAM)*, 2(2), 252. <https://doi.org/10.29103/jam.v2i2.11749>
- Syahrani, T. (2019). Pengaruh Profitabilitas, Kualitas Audit, Nilai Perusahaan, Dewan Komisaris Independen dan Ukuran Dewan Komisaris terhadap Manajemen Laba Perusahaan Manufaktur yang Terdaftar di BEI. *Jurnal Fairness*, 9(1), 45–58. <https://doi.org/10.33369/fairness.v9i1.15221>
- Syawal, E. (2021). *Perhitungan Economic Value Added (EVA)*. YouTube. https://www.youtube.com/watch?v=mNFNDh_KH5M
- Tanujaya, K., & Teresa, R. (2021). Pengaruh Penghindaran Pajak dan Tata Kelola Perusahaan terhadap Pengungkapan CSR dengan Peran Direksi Wanita sebagai Moderasi: Kasus Perusahaan di Bursa Efek Indonesia. *Financial: Jurnal Akuntansi*, 7(2), 184–197. <https://doi.org/10.37403/financial.v7i2.295>
- Torchia, M., Calabrò, A., & Huse, M. (2011). Women Directors on Corporate Boards: From Tokenism to Critical Mass. *Journal of Business Ethics*, 102(2), 299–317. <https://doi.org/10.1007/s10551-011-0815-z>
- Townsend, P. L., Rodriguez, W., Idrovo, S., & Pulga, F. (2021). Female Board Participation and Firm's Financial Performance: A Panel Study from A Latin American Economy. *Corporate Governance*, 21(5), 920–938. <https://doi.org/10.1108/CG-07-2019-0235>
- Wijaya, H., & Memarista, G. (2024). Board Size and Firm Performance: The Moderating Role of Female Representation. *Jurnal Akuntansi Dan Keuangan*, 26(1), 18–28. <https://doi.org/10.9744/jak.26.1.18-28>
- Yan, Q., & Wang, Y. (2016). REVA-based Value Analysis on Listed Companies of Power Industry. *Proceedings of 2016 International Conference on Modeling, Simulation and Optimization Technologies and Applications (MSOTA2016)*. <https://doi.org/10.2991/msota-16.2016.82>
- Yanti, N. L. E. K., Endiana, I. D. M., & Pramesti, I. G. A. A. (2021). Pengaruh Ukuran Perusahaan, Ukuran Dewan Komisaris, Kepemilikan Institusional, Leverage, dan Profitabilitas terhadap Pengungkapan Corporate Social Responsibility. *Jurnal Kharisma*, 3(1), 42–51. <http://ejournal-s1.undip.ac.id/index.php/accounting>
- Zhou, H., Chen, A., Liao, S., & Wang, W. (2025). Board of Directors and Corporate Governance. *Advances in Economics, Management and Political Sciences*, 213(1), 48–55. <https://doi.org/10.54254/2754-1169/2024.26703>