

INVESTMENT EFFICIENCY AND FINANCIAL PERFORMANCE: HOW BOARD GENDER DIVERSITY AND GLOBAL EXPERIENCE MAKE A DIFFERENCE

Odeneska J.A. Purba¹, Syaiful Rahman Soenaria², Anies Lastiati³

Universitas Padjadjaran, Indonesia

Email: Odeneska15001@mail.unpad.ac.id

ABSTRACT

The presence of women on the board of directors is believed to enhance the quality of investment decision-making through more diverse and risk-sensitive perspectives. These perspectives contribute to more effective investment management and have the potential to support improved corporate financial performance. Meanwhile, the CEO, as a strategic decision-maker, plays a crucial role in determining the company's investment direction, where the CEO's international exposure can broaden their insight in addressing global challenges. This study aims to analyze the influence of board gender diversity and CEO international exposure on investment efficiency and corporate financial performance. This research employs the Partial Least Square – Structural Equation Modelling (PLS-SEM) method with a sample of 154 manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2023. Secondary data were obtained from Refinitiv, the Indonesia Stock Exchange website, and annual reports. Control variables such as company size and operating cash flow were included to enhance the validity of the analysis results. The findings indicate that CEO gender does not affect either investment efficiency or financial performance. Conversely, CEO international exposure has a positive influence on investment efficiency and financial performance. Investment efficiency plays a significant role in improving financial performance and mediates the effect of CEO international exposure on financial performance. However, control variables company size have no effect, while operating cash flow positively impacts investment efficiency.

KEYWORDS

Board Gender Diversity, CEO International Exposure, Investment Efficiency, Financial Performance



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International

INTRODUCTION

The Chief Executive Officer (CEO) is the highest-ranking position in a company, responsible for leading the organization and making critical decisions that ensure its sustainability. In today's competitive business environment, companies face rapid technological advancements, shifting consumer preferences, and pressure from global competitors (Ahmadi et al., 2018; Berns et al., 2021; Budita & Fidiana, 2023; Jing & Moon, 2021; Nath & Bharadwaj, 2020). To maintain a competitive edge, large companies—such as Intel Corporation, Booz and Company, and Apple Inc.—invest substantial economic resources in long-term projects or assets. Efficient investment decisions made by CEOs are crucial, as the success of these investments significantly influences company performance and long-term viability. Investments are made with expectations of future gains, and companies must ensure they are efficient by avoiding *overinvestment* and *underinvestment*. Underinvestment occurs when companies miss opportunities with a positive Net Present Value (NPV), while overinvestment leads to losses when NPV is

negative (Artell, 2023; Dobrowolski & Drozdowski, 2022; Gallo, 2015; Investopedia, 2023; López-Marín et al., 2021). Research suggests that CEO characteristics significantly influence investment efficiency. Many companies in emerging markets like Indonesia seek CEOs with international exposure, which can enhance investment efficiency and overall performance.

In Indonesia, the market's growing interest in adopting international best practices through CEOs with global experience is becoming increasingly relevant. Data from UNESCO (2023) show that many Indonesian students pursue studies abroad, and professionals seek global exposure before returning home. Additionally, the government supports these initiatives through scholarship programs. Multinational corporations (MNCs) often have a competitive advantage over domestic firms due to their global market access, economies of scale, and superior technological innovation. CEOs with MNC experience bring valuable global insights and best practices in innovation, technology, and risk management, which can significantly enhance a company's competitiveness and investment efficiency. Liang et al. (2024) indicate that CEOs with international experience can positively influence company performance by contributing advanced knowledge, managerial skills, and strong international networks. However, the impact of such experience may vary depending on its application within different organizational contexts. Specifically, CEOs with global expertise tend to make more efficient investment decisions, promoting innovation, growth, and competitive advantage—especially in emerging markets.

Board diversity, particularly gender diversity, has become a key area of interest in organizational demographics. Stewman (1988) introduced the concept of organizational demographics, highlighting the importance of workforce composition in relation to an organization's mission, vision, values, policies, and strategic decisions. The board of directors plays a pivotal role in strategic planning, goal-setting, and performance evaluation. Despite progress, a 2023 survey by the Indonesia Stock Exchange (IDX) revealed that only 15% of IDX200 companies have female representation on their boards, and only 4% have female CEOs. Research, including studies by Ullah et al. (2020) and Baik et al. (2024), suggests that female CEOs contribute to better corporate governance, increased investment efficiency, and improved financial performance. Triana and Asri (2017) also emphasize that female leadership enhances organizational success. However, Jannah (2018) notes that financial performance can be influenced by gender due to differing decision-making styles between men and women.

Companies make investment decisions to optimally allocate financial resources toward assets expected to generate future returns. Nguyen & Nguyen (2020) argue that investment strategies tied to financial resources significantly affect performance and revenue. Yang & Liu (2022) support this, finding that effective investment strategies positively correlate with organizational profitability. Researchers often evaluate company performance through financial reporting, with Return on Assets (ROA) serving as a key metric of asset utilization for profit generation. Efficient investments positively impact financial outcomes by avoiding resource misallocation. Firms generally see better

financial performance when they have diverse and well-evaluated investment alternatives. Banerjee et al. (2023) demonstrate that skilled managers can balance working capital needs with long-term investments, ensuring profitability while maintaining liquidity for daily operations.

Overall company performance improves when short-term needs and long-term goals are effectively balanced. This study aims to examine how board gender diversity and CEO international exposure affect investment efficiency and corporate financial performance.

Literature Review

The Upper Echelons Theory (UET), introduced by Hambrick and Mason in 1984, posits that organizations reflect the characteristics of their top managers. It emphasizes that executives' backgrounds, especially those of CEOs, can predict strategic decisions and organizational outcomes. UET challenges earlier views that organizations are primarily shaped by external forces, instead asserting that leaders' experiences, values, and perceptions play critical roles in strategic decision-making. Given the complexity and ambiguity of strategic contexts, the theory suggests that individual traits significantly shape investment decisions and, by extension, performance. Therefore, understanding managerial backgrounds is essential for evaluating how resources are allocated and how financial performance is achieved.

Behavioral Corporate Finance merges psychology and economics to analyze how companies make decisions under uncertainty. This field highlights the influence of cognitive and emotional biases on financial decision-making. According to Baker and Wurgler (2013), CEOs may deviate from rational behavior when making investment and financing decisions. Traditional governance models often neglect the impact of managerial personality on corporate outcomes. Bertrand and Schoar (2003) found that CEOs' personal styles—such as preferences for leverage or mergers—shape a company's capital structure. Behavioral Corporate Finance thus underscores the role of psychological factors in shaping critical investment decisions.

Human Capital Theory views education, experience, and skills as vital company assets. Human Resource Accounting builds on this view, with scholars like R.H. Hermanson and Theodore Schultz asserting that investing in people yields economic value. Schultz contends that workers are productive assets and should be developed to drive growth. In terms of gender diversity, women on boards contribute broader perspectives, innovation, and sustainable practices, further reinforcing corporate growth and global competitiveness.

Resource Dependence Theory Stewman (1988) argues that companies rely on external resources to thrive, and risks from this dependency can be reduced through strategic connections, including gender-diverse boards. Female directors provide legitimacy, strategic communication, and improved relationships with stakeholders. Hillman et al. (2007) found that diverse boards enhance a company's ability to manage dependencies and external pressures, improving overall performance and resilience.

The UK Corporate Governance Code's disclosure-based system may foster a *tick-box compliance* culture, where women are added to boards for symbolic purposes without being empowered. In male-dominated boards, informal discussions often exclude women's voices. The *critical mass* theory posits that a minimum of three women is necessary for meaningful participation. Kanter (1977) categorizes groups as uniform, skewed, tilted, or balanced. *Skewed groups* (under 20% women) face stereotyping and exclusion, while *tilted groups* (20–40% women) allow for greater impact and improved performance. Balanced gender representation fosters collaboration, adaptability, and better outcomes.

CEOs with international experience can build global networks and better manage external dependencies. Global exposure enhances understanding of foreign markets, cultures, and regulations. This exposure helps companies access resources and expansion opportunities, and equips leaders to manage international risks, providing strategic advantages in a globalized economy.

Theoretical Framework and Hypothesis Development

This study examines how board gender diversity and CEO international exposure influence investment efficiency and corporate financial performance. It analyzes the relationships among independent variables (board gender diversity and CEO international exposure), the dependent variable (financial performance), and the mediating variable (investment efficiency), while controlling for firm age and operating cash flow.

Board Gender Diversity and Efficient Investment

Farooq et al. (2012) found that female directors enhance investment efficiency by actively engaging in board activities, aligning with CEOs through stewardship, and reducing information asymmetry. This supports the *critical mass* theory, showing that at least three female directors significantly impact investment decisions. Chang & Yu (2023) similarly found that gender-diverse boards reduce overinvestment. Farooq et al. (2022) reported that gender-diverse boards outperform peers due to enhanced oversight and more cautious investment in uncertain projects.

CEO International Exposure and Efficient Investment

Liang et al. (2024) support Human Capital Theory, emphasizing the long-term value of skills and experience in business growth. Dong et al. (2024) show that CEOs with international exposure improve governance, reduce asset misuse, and promote long-term strategies. Peng & Chiu (2021) affirm that such CEOs make sustainable, value-added investments, fostering company success.

Investment Efficiency and Firm Financial Performance

Yang & Liu (2022) and Nguyen & Nguyen (2020) found that efficient investment strategies increase profitability and resource utilization. Signaling theory suggests that efficient investment reflects financial strength and leads to higher ROA and NPM. These practices help firms balance growth and liquidity while maximizing return.

Board Gender Diversity and Firm Financial Performance

Mohsni et al. (2021) found that gender-diverse boards reduce risk and enhance performance. Triana and Asri (2017) echo this, attributing success to inclusive decision-

making. Jannah (2018) noted that female CEOs process information more meticulously, focusing on long-term impact and improving outcomes.

CEO International Exposure and Firm Financial Performance

Downes & Barelka (2023) found that international CEOs adapt to global trends, manage diversity effectively, and develop innovative strategies. This improves productivity, HR development, and stakeholder satisfaction—boosting financial performance both domestically and internationally.

Board Gender Diversity and CEO International Exposure on Financial Performance through Investment Efficiency

Adams & Funk (2012) confirmed that gender diversity enhances governance and reduces inefficient investments. Female directors foster cautious yet effective decision-making, supporting long-term sustainability. Huong & Vu (2023) found that international experience in CEOs—especially with longer tenures—leads to superior investment decisions and business success, aligning with behavioral finance theories.

RESEARCH METHOD

This study examines the relationship between board gender diversity, international exposure, and corporate financial performance using several variables. The independent variables include board gender diversity (X_1), measured by the proportion of female directors to the total number of directors, and international exposure (X_2), an indicator variable that assesses the CEO's background in foreign education, international work experience, and experience in multinational companies. International exposure can be measured using the following index:

CEO's International Education: 1: No foreign education; 2: Only participated in short-term programs; 3: Completed undergraduate (Bachelor's) education abroad; 4: Completed postgraduate (Master's/PhD) education abroad; 5: Completed both undergraduate and postgraduate education abroad.

International Work Experience: 1: Never worked abroad; 2: Worked abroad for less than 1 year; 3: Worked abroad for 1-3 years; 4: Worked abroad for 3-5 years.; 5: Worked abroad for more than 5 years.

Experience in Multinational Companies: 1: Never worked in a multinational company; 2: Worked in a multinational company in Indonesia for less than 1 year; 3: Worked in a multinational company in Indonesia for 1-3 years; 4: Worked in a multinational company in Indonesia for 3-5 years; 5: Worked in a multinational company in Indonesia for more than 5 years.

The intervening variable, Investment Efficiency (Z) measures is predicted based on the growth opportunities of the company. This variable is measured by the absolute value of residuals (ϵ), which indicates the degree of deviation of the company's investment from the expected investment.

$$INV_{t+1} = \beta_0 + \beta_1 * Sales\ growth_{t-(t-1)} + \epsilon_{t+1}$$

INV_{t+1} is total of Capital Expenditures, Acquisition, Research & Development Expenses, minus Sale of PPE. All variables are divided by the total assets in t-1.

Sales Growth annual percentage sales growth from year t-1 to t.

The dependent variable, Corporate Financial Performance (Y), is assessed using profitability ratios, specifically Return on Assets (ROA) and Net Profit Margin (NPM). Here are the measurements for Return on Assets (ROA) and Net Profit Margin (NPM)

$$\text{Return on Asset} = \frac{\text{Earning After Tax}}{\text{Total Asset}} \times 100\%$$

$$\text{Net Profit Margin} = \frac{\text{Net Income}}{\text{Net Sales}} \times 100\%$$

Additionally, control variables such as operating cash flow and firm size are included to eliminate bias and ensure that the observed results are solely influenced by the variables under study.

This study uses online research to gather data from reliable sources like Refinitiv, IDX, and company websites for 2023, focusing on manufacturing companies listed on the Indonesia Stock Exchange. The research applies Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze the data, which is suitable for handling multiple variables, small sample sizes, and non-normal distributions. The analysis consists of two steps: the measurement model, which tests validity and reliability, and the structural model, which assesses model fit and evaluates hypotheses using path coefficients. The R-Squared (R²) value indicates how well the model fits the data, and the effect size (f²) measures the contribution of each predictor. Indirect effects are assessed using the Sobel test.

RESULT AND DISCUSSION

This section presents the research results and discussion based on secondary data analysis, which served as the primary source for this study. The secondary data was obtained from several sources, including the Refinitiv database, the Indonesia Stock Exchange, and manufacturing company websites. The research sample consists of 154 manufacturing companies listed on the Indonesia Stock Exchange

Descriptive Analysis

Descriptive analysis is used to enrich the discussion by examining the conditions of the variables being studied. According to Cooper & Schindler (2014:401), descriptive analysis can be conducted through central tendency measures and variability measures. In this study, the central tendency measure (mean value) is used to describe the condition of each variable. The variability measures, including standard deviation, maximum, and minimum values, are also used to further explain the data.

Table 1. Descriptive Analysis

Variable	N	Minimum	Maximum	Mean	Std. Deviation	Variance
	statistic	statistic	statistic	statistic	Std. Error	statistic
X1_Board gender diversity	154	0	0.7	0.124	0.040	0.175
X2.1_Eksposur_Pendidikan	154	1	5	3.40	0.120	1.493
X2.2_Eksposur_Bekerja	154	1	5	2.81	0.157	1.950
X3.3_Eksposur_MNC	154	1	5	2.29	0.147	1.828
Z_Efisiensi_Investasi	154	0.00218	25.62917	0.781951	0.19274395	2.39188947
Y_Kinerja_Kuangan	154	-0.93684	0.41618	0.0215635	0.01103519	0.13694307
C1_Operating_Cashflow	154	-0.32214	0.40695	0.0607936	0.00803227	0.10031072
C2_Firm_Size	154	25.06246	33.69361	28.5682925	0.13146792	1.63147398

Source: Cooper & Schindler (2014:401)

The variable X1, board gender diversity (BGD), is measured by the proportion of female CEOs on the board. The minimum value is 0, found in 91 companies with no female CEOs, while the maximum is 0.7, observed in PT Tempo Scan Pacific Tbk, where 70% of the board are women. The average proportion is 0.124, indicating low female representation. With a standard deviation of 0.175 and variance of 0.13, the data shows considerable variation in female CEO representation across companies.

Second, the international exposure of CEO (EKS) is measured using three indicators:

1. International Education (X2.1): The average score of 3.40 shows that most CEOs have substantial international education experience, with a standard deviation of 1.49, indicating notable variation in education backgrounds.
2. Experience abroad (X2.2): The average score of 2.81 reflects moderate experience abroad, with high variation (SD = 1.83), as some CEOs have no experience, while others have over 5 years.
3. Experience in MNCs (X2.3): The average score of 2.29 shows that most CEOs have limited experience in multinational companies, with significant variation (SD = 1.49).

Third, the investment efficiency (INV) has an average value of 0.78, but with a large standard deviation of 2.39, showing considerable differences in investment strategies across companies. Fourth, financial performance (KIN), measured by return on assets (ROA), has an average of 0.021 with a standard deviation of 0.13, suggesting diverse financial performance across firms. Fifth, the operating cash flow (OCF) ratio has an average of 0.06 and a standard deviation of 0.10, indicating variation in operational

efficiency across companies. Lastly, firm size (SIZE), measured by the logarithm of total assets, has an average value of 28.56, with a standard deviation of 1.63, reflecting significant differences in company sizes.

Measurement Model Evaluation

The measurement model explains the relationship between latent variables and manifest variables, where the manifest variables represent unmeasurable latent variables. This study involves six latent variables: CEO Gender, International Exposure, Investment Efficiency, Financial Performance, Operating Cash Flow, and Firm Size.

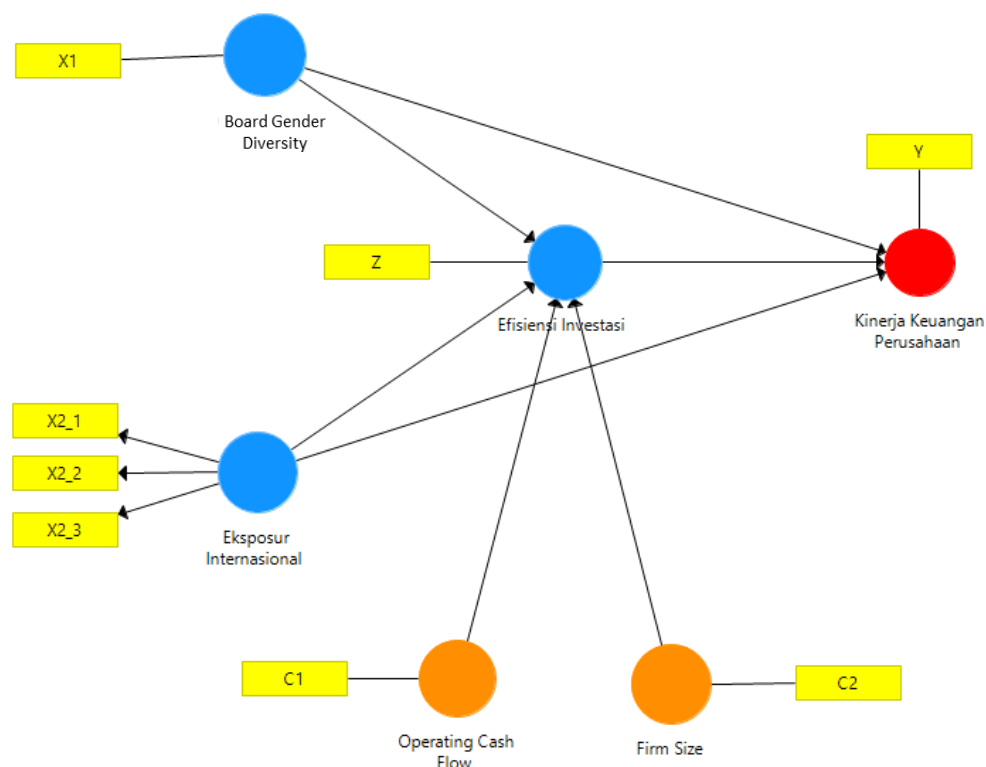


Figure 1. Standardized Coefficients Full Model
Source: by Researcher

Structural Model Evaluation

The structural model connects exogenous latent variables with endogenous latent variables, or relationships between endogenous variables. This study evaluates the model using path coefficient tests, goodness of fit tests, and hypothesis testing. The path coefficient measures the strength and direction of the relationship between independent and dependent variables in the model. This information helps understand the direct effects of independent variables on dependent variables. Additionally, the coefficient of determination (R-Square) is evaluated to assess how much of the variance in endogenous variables is explained by exogenous variables. R-Square values are categorized as follows: 0.67 (substantial), 0.33 (moderate), and 0.19 (weak). These classifications help interpret the strength of relationships in the model.

Table 3. R-Square Test Results

	R Square	Adjusted R Square
INV (Z)	0.416	0.401
KIN (Y)	0.267	0.246

Source: by Researcher

These results indicate that about 41.6% of the variance in investment efficiency can be explained by independent variables, while 26.7% of the variance in company financial performance can be explained by relevant independent or intervening variables. The calculation of Q-Square and Goodness of Fit (GoF) further supports the model's reliability. The Q² value was found to be 0.5719, indicating the model has a moderate to good ability to explain company financial performance, contributing 57.19%. For GoF, the value was calculated as 0.570, which is categorized as large, indicating that the model is robust and suitable for hypothesis testing. Overall, the model meets the R², Q², and GoF criteria, confirming its high reliability in explaining relationships between the variables.

Hypothesis Testing

The hypothesis testing in this study used Partial Least Square (PLS) to examine relationships between variables. The results of the path coefficients and bootstrapping procedure were used to assess whether relationships were significant, considering the T-statistics and P-values.

Table 4. Hypothesis Testing Result

	Sampel Asli (O)	Rata-rata Sampel (M)	Standard Deviasi (STDEV)	T Statistic (O/STDEV)	P Values
INV (Z) => KIN (Y)	0.324	0.326	0.074	4.408	0.000
EKS (X2) => INV (Z)	0.336	0.038	0.080	4.446	0.000
EKS (X2) => KIN (Y)	0.286	0.291	0.090	3.196	0.002
SIZE (C2) => INV (Z)	0.072	0.074	0.073	0.984	0.396
BGD (X1) => INV (Z)	-0.084	-0.088	0.059	1.416	0.189
BGD (X1) => KIN (Y)	0.016	0.020	0.069	0.227	0.823
OCF (C1) => INV (Z)	0.591	0.587	0.067	8.884	0.000

Source: by Researcher

Influence of Board Gender Diversity on Investment Efficiency

Based on the analysis in Table 4.3 path coefficient, the relationship between board gender diversity (X1) and investment efficiency (Z) was found to be insignificant. This is evident from the T-statistic value of 1.416, which is lower than the T-table value of 1.976 (at a 5% significance level, $\alpha = 0.05$). Additionally, the P-value of 0.159 is greater than 0.05, further supporting the conclusion that the relationship is not statistically significant. The direction of the relationship is negative, as indicated by the original sample value of -0.084, suggesting a tendency for higher gender diversity on the board to be associated with lower investment efficiency. However, since the relationship is not statistically significant, the hypothesis Ha1, which posits a positive effect of board gender diversity on investment efficiency, is rejected.

This finding contrasts with the results of Mohsni et al. (2021), who found a negative relationship between board gender diversity and operational and financial risks, but a positive link to company performance. However, it aligns with Ramadhani & Adhariani (2017), who reported no significant impact of board gender diversity on investment efficiency. The study found that investment efficiency was more influenced by control variables such as company size, the proportion of independent commissioners, and debt levels. Additionally, Ramadhani & Adhariani (2017) highlighted that the relatively small number of women on boards may limit their contribution to investment efficiency. In some cases, women's appointments to the board may be more based on family ties than professional competence, weakening their ability to enhance investment efficiency significantly.

Influence of CEO International Exposure on Investment Efficiency

The results in Table 4.3 indicate that CEO International Exposure (X2) has a significant impact on Investment Efficiency (Z). This is evidenced by the T-Statistic value of 4.446, which exceeds the T-Table value of 1.976, and the P-Value of 0.000, which is below the 0.05 significance level. The direction of the relationship between CEO International Exposure (X2) and Investment Efficiency (Z) is positive, with an original sample value of 0.336. This suggests that the greater the international exposure of a CEO, the higher the level of investment efficiency a company can achieve, approaching a residual value of zero. In line with upper echelon theory, a leader's background, values, and experiences influence strategic decision-making. A CEO's international exposure contributes to more precise and strategic investment decisions, as cross-cultural experience and global insight enhance the perspective on effectively managing company resources.

These findings align with Peng and Chiu (2021), who emphasize the crucial role of CEOs in ensuring investment efficiency and sustainable company growth. CEOs with international experience are able to make smarter investment decisions and avoid wasting company resources. International experience provides a richer perspective for assessing risks and opportunities, enabling more careful and measured investment decisions. Experienced CEOs can effectively monitor and oversee investment decisions, ensuring

they are not only efficient but also generate significant value for the company. Therefore, international exposure and CEO experience play an essential role in guiding companies toward investment efficiency and long-term sustainable growth.

Influence of Investment Efficiency on Financial Performance

The results in Table 4.3 path coefficient indicate that the relationship between Company Investment Efficiency (Z) and Company Financial Performance (Y) is significant. This is evidenced by a T-statistic value of 4.408, which is greater than the T-table value of 1.976, and a P-value of 0.000, which is smaller than 0.05 ($\alpha = 5\%$). The relationship between Investment Efficiency (Z) and Financial Performance (Y) is positive, with an original sample value of 0.324. This means that the more efficiently a company manages its investments, the better its financial performance will be. These findings suggest that investment efficiency plays a key role in improving a company's financial performance, as well-managed investments can support the achievement of financial targets and enhance profitability. Therefore, hypothesis Ha3, which states that Investment Efficiency significantly affects Company Financial Performance, is accepted.

This result is consistent with the findings of Yang & Liu (2022), which show that efficient investments have a positive impact on financial performance. Their study found that companies that manage investments efficiently can increase profitability and create value for shareholders. Good investment management allows companies to allocate resources more optimally, improve operational performance, and reduce waste, ultimately boosting financial performance. As explained in signaling theory, companies that demonstrate good and efficient investment management send a positive signal to investors and the market, which in turn strengthens the company's position in the market and increases its value.

Influence of CEO Gender on Financial Performance

The results in Table 4.3 path coefficient indicate that the relationship between Board gender diversity (X1) and company financial performance (Y) is not significant, with a T-statistic value of 0.227, which is smaller than the T-table value of 1.976, and a P-value of 0.821, which is greater than 0.05 ($\alpha = 5\%$). This suggests that there is insufficient evidence to support a significant influence of Board gender diversity on company financial performance. The direction of the relationship is positive, but the original sample value is only 0.016, indicating a very small effect that is not strong enough to significantly impact financial performance. Therefore, hypothesis Ha4, which posits that Board gender diversity affects company financial performance, is rejected.

This may be due to the insufficient proportion of women on the board to make a tangible impact on strategic decisions. Additionally, tokenism may still be occurring, where women on the board are viewed symbolically without being given significant roles in decision-making processes. As a result, their perspectives and contributions are less considered, limiting their impact on company performance. On the other hand, factors such as macroeconomic conditions, company strategy, and managerial experience are likely to have a more dominant influence. These findings differ from those of Triana and

Asri (2017), who found a positive and significant impact of female representation on the Board of Directors on financial performance. However, they align with Namanya et al. (2021), who found that gender diversity on the board does not always significantly impact financial performance, with factors such as market dynamics, macroeconomic conditions, business strategy, and industry competition playing a more dominant role. These findings also support Wang et al. (2024), which reported that female directors negatively affected the financial performance of public companies in Japan between 2006 and 2023, particularly in smaller firms with higher leverage or lower institutional ownership, and in regulated and consumer-oriented industries.

Influence of CEO International Exposure on Financial Performance

The results in Table 4.3 path coefficient indicate that the relationship between CEO international exposure (X2) and company financial performance (Y) is significant, as shown by the T-statistic value of 3.196, which is higher than the T-table value of 1.976, and a P-value of 0.002, which is less than 0.05 ($\alpha = 5\%$). This suggests that CEO international exposure has a strong influence on the company's financial performance. The relationship is positive, with an original sample value of 0.286, meaning that the higher the CEO's international exposure, the better the company's financial performance.

In line with the upper echelon theory, CEOs with international experience generally contribute more to effective strategic decision-making due to the insights and knowledge gained from operating in dynamic and competitive global markets. This experience affects how they handle challenges and opportunities, ultimately contributing to better company performance. Based on these results, hypothesis Ha5, which states that CEO international exposure positively affects financial performance, is accepted. CEO international experience significantly impacts the effectiveness of decision-making, which ultimately contributes to improved financial performance. These findings align with those of Huong and Vu (2023), who found that companies led by CEOs with international experience tend to perform better. Their research also highlighted that the positive impact of international experience is stronger when the CEO has a longer tenure, allowing them to integrate their international experience with a deeper understanding of the company and market, strengthening their ability to make growth-oriented strategic decisions.

Influence of Board Gender Diversity on Financial Performance Through Investment Efficiency

Since the testing results directly show that board gender diversity does not affect investment efficiency and does not influence the company's financial performance, the mediation test with investment efficiency as the mediating variable was not conducted. This is because the fundamental requirement for testing mediation—having a significant effect between the independent variable (board gender diversity), the mediating variable (investment efficiency), and the dependent variable (financial performance)—was not met.

Influence of CEO International Exposure on Financial Performance Through Investment Efficiency

Based on Figure 4.3 above, the Sobel test value obtained is 6.47, which is greater than the T-table value of 2.43, indicating that the indirect or mediation effect is statistically significant. Therefore, hypothesis Ha7 in this study is accepted, meaning that CEO international exposure indeed has an indirect impact on the company's financial performance through investment efficiency as an intervening variable. CEO's international experience enriches their perspectives in making more efficient investment decisions, which in turn enhances the company's financial performance.

These findings align with the research of Peng and Chiu (2022), which shows that a CEO's international experience plays a role in ensuring investment efficiency and sustainable company growth. With international experience, CEOs can better understand global market dynamics, enabling them to make more strategic and precise investment decisions. This can increase efficiency in resource allocation and decision-making, supporting the company's financial performance. Additionally, these findings are supported by Yang & Liu (2022), who indicate that efficient investments positively impact a company's financial performance, improving profitability and creating added value. Moreover, signaling theory explains that companies managing investments efficiently send positive signals to investors and the market, which enhances the company's financial performance. Thus, CEO international exposure through international experience can improve investment efficiency, ultimately contributing to improved financial performance.

Influence of Operating Cash Flow on Investment Efficiency

The test results in Table 4.6 path coefficient indicate that the relationship between the control variable, Operating Cash Flow (C1), and Investment Efficiency (Z) is significant. This is shown by a T-Statistic of 8.884, which is greater than the T-table value of 1.976, and a P-Value of 0.000, which is less than 0.05 ($\alpha = 5\%$). This indicates a significant impact of Operating Cash Flow on Investment Efficiency. The relationship between Operating Cash Flow (C1) and Investment Efficiency (Z) is positive, with an original sample value of 0.591, suggesting that the higher the company's Operating Cash Flow, the higher the level of Investment Efficiency achieved by the company.

Operating Cash Flow reflects the company's ability to generate cash from its operational activities, which can be used to fund investments. With higher Operating Cash Flow, a company has more internal resources to make more efficient investments, reducing the likelihood of unproductive or non-value-adding investments. The results show that Operating Cash Flow positively affects Investment Efficiency. This is in line with findings from Ahmad et al. (2020), which state that companies with better operating cash flows tend to have higher Tobin's Q ratios, indicating higher investment efficiency. Positive Operating Cash Flow reflects the company's ability to finance ongoing operations without relying on external debt, enabling the company to allocate resources more efficiently into investments that provide added value.

Influence of Firm Size on Investment Efficiency

The test results in Table 4.6 path coefficient show that Firm Size (C2) does not have a significant impact on Investment Efficiency (Z), with a T-Statistic of 0.984, which is smaller than the T-table value of 1.976, and a P-Value of 0.327, which is larger than 0.05 ($\alpha = 5\%$). This indicates that the relationship between firm size and investment efficiency is not strong enough to be considered significant in this research model.

Although the direction of the relationship between Firm Size (C2) and Investment Efficiency (Z) is positive, with an original sample value of 0.072, its effect is not statistically significant enough to conclude that firm size affects investment efficiency. A T-Statistic value lower than the T-table and a P-Value greater than 0.05 suggest that Firm Size does not contribute significantly to explaining investment efficiency. Thus, this study finds that firm size does not affect investment efficiency. This is consistent with research by Nurdiana (2019), which also found that firm size does not have a significant impact on investment efficiency. The study concluded that investment efficiency is more influenced by internal factors such as managerial policies and risk management, rather than the firm's size. Although larger companies have more resources, they are not necessarily more efficient in managing investments. Conversely, smaller, more agile companies may be more efficient at capitalizing on available opportunities. This contrasts with the findings of Ahmad et al. (2020), which found a positive and significant relationship between firm size and investment efficiency.

CONCLUSION

Based on the research, the following conclusions were made. The empirical analysis reveals that board gender diversity does not significantly affect either investment efficiency or company financial performance. This may be due to the low proportion of women on the board of directors, which limits their ability to influence strategic decision-making effectively. Additionally, tokenism, where women are present on the board merely symbolically without substantial roles, may hinder the impact of gender diversity on investment efficiency and performance. On the other hand, CEO international exposure positively impacts both investment efficiency and company financial performance. CEOs with international experience possess a better understanding of global market dynamics, access to international best practices, and the ability to identify more strategic investment opportunities, which enhances decision-making and financial outcomes.

Furthermore, investment efficiency plays a significant role in improving financial performance, as companies that manage investments efficiently can achieve better profitability and shareholder value. The study also found that CEO international exposure influences financial performance by strengthening managerial capabilities and decision-making, enabling CEOs to navigate global challenges and seize international opportunities. Additionally, investment efficiency mediates the relationship between CEO international exposure and financial performance, demonstrating that international experience enhances investment decisions, which in turn improves financial results.

However, no mediation analysis was conducted for board gender diversity due to its lack of impact on both investment efficiency and financial performance.

For companies, the study suggests focusing on the competencies and managerial abilities of the board, such as strategic decision-making and strong analytical skills, rather than solely considering gender diversity, as it was found to have no direct impact on investment efficiency or financial performance. Companies should also manage operating cash flow optimally, as it can significantly improve investment efficiency. Additionally, CEOs with international experience have a positive effect on company performance, making it beneficial to consider international background when selecting CEOs or strategic leaders. For future research, it is recommended to explore other factors that influence investment efficiency and financial performance, such as the board's decision-making capabilities and leadership skills, and to extend the observation period for a more comprehensive analysis. Furthermore, future studies could expand the control variables and mediation factors, considering aspects like capital structure, risk management policies, or corporate culture, to provide a more thorough understanding of the factors affecting investment efficiency and company performance.

REFERENCES

- Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94(3), 291-309. <https://doi.org/10.1016/j.jfineco.2008.10.007>
- Ahmadi, A., Nakaa, N., & Bouri, A. (2018). Chief executive officer attributes, board structures, gender diversity and firm performance among French CAC 40 listed firms. *Research in International Business and Finance*, 44, 218–226. <https://doi.org/10.1016/j.ribaf.2017.07.083>
- Artell, J. V. (2023). Net present value (NPV). In *Dictionary of Ecological Economics: Terms for the New Millennium*. <https://doi.org/10.4337/9781788974912.N.26>
- Berns, J. P., Gupta, V. K., Schnatterly, K. A., & Steele, C. R. (2021). Chief executive officer dismissal: A multidisciplinary integration and critical analysis. *Group and Organization Management*, 46(2). <https://doi.org/10.1177/1059601120987452>
- Budita, D. M. S., & Fidiana, F. (2023). Pengaruh kinerja environmental, social, governance dan kekuatan chief executive officer terhadap kinerja keuangan. *Jurnal Ilmu Dan Riset Akuntansi (JIRA)*, 12(8).
- Dobrowolski, Z., & Drozdowski, G. (2022). Does the net present value as a financial metric fit investment in green energy security? *Energies*, 15(1). <https://doi.org/10.3390/en15010353>
- Downes, M., & Barelka, A. J. (2023). CEO international experience and firm performance revisited: What's culture got to do with it? *Journal of Global Mobility*, 11(4), 554-573.
- Farooq, S., Gan, C., & Nadeem, M. (2022). Boardroom gender diversity and investment inefficiency: New evidence from the United Kingdom. *Corporate Governance: An International Review*. <https://doi.org/10.1111/corg.12443>

- Gallo, A. (2015). A refresher on net present value. *Harvard Business Review*.
- Huong, N. T., & Vu, H. P. (2023). CEO foreign experience and firm performance: Does CEO tenure matter? *The University of Danang - Journal of Science and Technology*, 7–11.
- Jing, L., & Moon, J. (2021). Airline chief executive officer and corporate social responsibility. *Sustainability (Switzerland)*, 13(15). <https://doi.org/10.3390/su13158599>
- López-Marín, J., Gálvez, A., Del Amor, F. M., & Brotons, J. M. (2021). The financial valuation risk in pepper production: The use of decoupled net present value. *Mathematics*, 9(1). <https://doi.org/10.3390/math9010013>
- Marianne Bertrand, & Antoinette Schoar. (2003). Managing with style: The effect of managers on firm policies. *The Quarterly Journal of Economics*, 118(4), 1169–1208. <https://doi.org/10.1162/003355303322552775>
- Mohsni, S., Otchere, I., & Shahriar, S. (2021). Board gender diversity, firm performance and risk-taking in developing countries: The moderating effect of culture. *Journal of International Financial Markets, Institutions and Money*, 73, 101360. <https://doi.org/10.1016/j.intfin.2021.101360>
- Namanya, D., Wakaisuka-Isingoma, J., & Atwiine, J. (2021). The influence of gender diversity and company financial performance in East Africa. *African Journal of Business Management*, 15(5), 152-164.
- Nguyen, T. N. L., & Nguyen, V. C. (2020). The determinants of profitability in listed enterprises: A study from Vietnamese stock exchange. *The Journal of Asian Finance, Economics and Business*, 7(1), 47–58. <https://doi.org/10.13106/jafeb.2020.vol7.no1.47>
- Nurdiana, S. (2019). Pengaruh ownership structure dan corporate governance terhadap efisiensi investasi pada perusahaan manufaktur yang terdaftar di BEI.
- Peng, C.-W., & Chiu, S.-C. (2022). The impact of international work experience, functional background and career concerns on CEO investment decisions. *Pacific Accounting Review*, 34(2), 310-332.
- Pradip Banerjee, & Soumya G. Deb. (2023). Capital investment, working capital management, and firm performance: Role of managerial ability in US logistics industry. *Transportation Research Part E: Logistics and Transportation Review*, 176, 102-115.
- Ramadhani, Z. I., & Adhariani, D. (2017). Semakin beragam semakin baik? Isu keberagaman gender, keuangan, dan investasi perusahaan. *Jurnal Keuangan dan Perbankan*, 21(1), 1-13. <https://doi.org/10.26905/jkdp.v21i1.1222>
- Stewman, S. (1988). Organizational demography. *Annual Review of Sociology*, 14, 133-158. <https://doi.org/10.1146/annurev.so.14.080188.001133>
- Ullah, I., Majeed, M. A., Fang, H.-X., & Khan, M. A. (2020). Female CEOs and investment efficiency: Evidence from an emerging economy. *Pacific Accounting Review*, 32(4), 443-460.

Wang, K., Ma, J., Xue, C., & Zhang, J. (2024). Board gender diversity and firm performance: Recent evidence from Japan. *Journal of Risk and Financial Management*, 17(1), 20. <https://doi.org/10.3390/jrfm17010020>