



Executive Work Experience and Company Investment Efficiency

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Abstract

Objective - The growth as well as the longevity of a firm are determined by the investment in fixed assets. This strategy requires a competent manager to ensure the optimal utilization of investment options. According to the upper echelon theory, performance can be influenced by experience. Managerial experience and competence can result in effective resource allocation, reduce resource wastage, increase profitability, and accelerate company growth. Our study aims to investigate how the job experience in accounting and/or finance of the Chief Executive Officer (CEO) and Chief Financial Officer (CFO) affects investment efficiency.

Design/Methodology - The study was conducted on 171 manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2015 to 2019. We used generalized least square regression to test the hypotheses.

Results - The study found that CEOs with work experience in accounting and/or finance tend to reduce inefficient investments. However, this relationship does not hold true for CFOs.

Research limitations/implications - The study indicates that the CEO's accounting and financial expertise is vital in facilitating effective investment choices. Therefore, companies should consider work experience, particularly in the field of accounting and/or finance, to enhance managerial performance in achieving investment efficiency, consequently leading to an increase in profitability and growth for the company.

Novelty/Originality - Prior research examined the influence of the work experience of CEOs and CFOs as auditors on the efficiency of a company's investments. This study incorporates the work experience of CEOs and CFOs in accounting and/or other financial domains.

Keywords: Efficiency, CEO Characteristics, CFO Characteristics, Investment Decisions.

1. Introduction

Globalization intensifies business competition, compelling companies to generate growth to remain competitive (Hill et al., 2014; Hitt et al., 2020). Company growth is influenced, in part, by investments in fixed assets, a decision that necessitates managerial competence (Hitt et al., 2020; Naeem & Li, 2019; Pogue, 2010). Managerial competence is crucial in efficiently selecting investment opportunities with the available capital, fostering profitability and growth (Kang et al., 2022; Naeem & Li, 2019; Pogue, 2010). However, a lack of experience and managerial competence can result in investment inefficiencies (García-Sánchez & García-Meca, 2018; Xie, 2015). Investment inefficiencies lead to wastage of resources, declining profitability (Pogue, 2010), and hindered company growth (Balakrishnan et al., 2014; Goodman et al., 2014).

Achieving efficient investment involves the role of managers as decision-makers (Hitt et al., 2020; Hodgson et al., 2000). Managers play a crucial role in determining and implementing policies such as financial and investment plans (He et al., 2020; Huang & Kisgen, 2013). Managerial policies can be influenced by their characteristics,

such as work experience, which impacts company performance (Hambrick & Mason, 1984). Work experience can enhance competence, aiding better decision-making, and creating efficiency (Hitt et al., 2020). Knowledge and values gained from experience are used by managers to interpret information, forming the basis for decision-making, ultimately impacting organizational performance (Hambrick & Mason, 1984).

Investment selection requires managers with accounting and/or financial competence (Goodman et al., 2014; Ying & He, 2020). Competent managers in this field are essential as they act as the decision makers of investments, a fundamental financial policy (Hitt et al., 2020; Sugeng, 2017). This competence can be acquired through work experience, providing managers with financial competence crucial for optimal investment decisions (Gan, 2019; Li et al., 2021; Ngelo et al., 2022). Previous research indicates that managers with work experience in accounting and/or finance make better investment decisions (Hoitash et al., 2016; Li et al., 2021; Ngelo et al., 2022). CEOs with experience as auditors can enhance investment efficiency due to their business knowledge and critical thinking in financial assessment (Ngelo et al., 2022). CFOs with experience as accountants avoid excessive investments due to their conservative nature and risk-averse approach to finances (Hoitash et al., 2016). Moreover, management teams with financial expertise tend to reduce inefficient investments by utilizing their financial competence to select appropriate discount rates in capital budgeting (Li et al., 2021). This accounting and/or financial competence is valuable for monitoring, evaluating, and analyzing finances, thus supporting the selection of optimal investments (Li et al., 2022).

Prior research examined the influence of the work experience of CEOs and CFOs as auditors on the efficiency of a company's investments (Ngelo et al., 2022). This study is different as it incorporates criteria related to the work experience of CEOs and CFOs in accounting and/or other financial domains. Additionally, the calculation of investment efficiency employs a different model, which is the accounting-based measure of growth opportunity (Richardson, 2006). Thus, this research aims to determine the impact of CEOs and CFOs with work experience in accounting and/or finance on a company's investment efficiency.

This study contributes to the accounting and finance literature by considering the influence of managerial work experience on a company's investment efficiency. Previous studies analyzed the work experience of CEOs and CFOs as auditors in relation to investment efficiency. This study extends this by adding experience in other accounting and/or financial domains, thereby broadening the scope of work experience related to a company's investments. Theoretically, this study contributes to the theory by confirming the Upper Echelon theory, which suggests that managerial work experience can affect a company's performance. CEOs with experience in accounting and/or finance tend to be more capable of reducing inefficient investments. As decision-makers, CEOs utilize the knowledge and values gained from their experience to make more optimal investment decisions.

The results of this study provide insights for company management to consider work experience in supporting managerial performance in achieving investment efficiency of assets. Efficient investments create profitability and are a prerequisite for a company's growth. Furthermore, this research is beneficial for investors in selecting companies with competent and experienced managers. Managers with experience and financial competence can enhance a company's performance, minimizing potential losses in investing if the company is led by a competent individual.

2. Literature Review, Theoretical Framework, and Hypotheses Development

2.1 Literature Review

The Upper Echelon theory asserts that a company's performance is influenced by the characteristics of its managers (Hambrick & Mason, 1984). However, limitations arise because managers perceive work situations only within their known domains (Hambrick & Mason, 1984). Managers cannot comprehend every aspect of the organization and its environment, leading to limited perceptions (Hambrick & Mason, 1984). Therefore, managers use the knowledge and values acquired from their experience to interpret information, form perceptions, and make decisions, thus impacting the company's performance (Hambrick & Mason, 1984).

A company's performance is viewed as a reflection of managerial competence derived from experience and past work results (Hambrick & Mason, 1984). Work experience can instill confidence, minimizing doubts in decision-making (Wang et al., 2016). Experienced managers tend to be more bold in effecting changes that can enhance the company's performance (Wang et al., 2016). Managerial competence is also considered a unique and difficult-to-replicate resource that is expected to enhance a company's performance (Barney, 1991; Hitt et al., 2020).

When faced with situations requiring crucial and rapid decision-making, managers also tend to rely on their experience (Hambrick, 2007). Managerial experience and competence can aid in selecting appropriate investment projects amid capital constraints and high competition (Alkaraan, 2020; Pogue, 2010). Complex investment decisions also necessitate companies to rely on managerial assessments as decision-makers (Alkaraan, 2016).

Making investment decisions requires relevant competence in the fields of accounting and/or finance, which can be acquired through work experience (Gan, 2019; Goodman et al., 2014; Ying & He, 2020). Work experience not only provides theoretical knowledge but also skills from direct implementation (Custódio & Metzger, 2014). From the Upper Echelon theory perspective, knowledge gained from work experience in specific functional positions remains and is expected to influence performance (Hambrick & Mason, 1984). Therefore, a company's investment decisions can be related to the functional experience in the accounting and/or financial domains of managers (Custódio & Metzger, 2014).

Work experience is a process of learning and improving the ability to understand the organizational environment and achieve positive results through work (Esen, 2016; Gaol, 2022). In addition, work experience is defined as something embedded and accumulated during work practice that a person uses to solve problems or perform tasks in the workplace and increase productivity (Baum & Ruhm, 2016; Paloniemi, 2006). In contrast to work experience, competencies are a group of knowledge, skills, and attitudes required to perform and achieve desired results in work (Bound & Lin, 2013; Chouhan & Srivastava, 2014). Competencies underlie a person's ability to produce effective performance in a job (Boyatzis, 2008). However, there is an important relationship between work experience and competency because work experience is one of the main prerequisites for building competency and skill development (Paloniemi, 2006). Competencies are considered as something that is formed from work experience that develops an understanding of the job (Bound & Lin, 2013). Competencies are developed mainly through on-the-job learning which is considered as a source of knowledge and skills needed in the job (Paloniemi, 2006). Through work experience, the competencies required for a job can be identified and assist in the development of a person's work competencies (Paloniemi, 2006).

Managers who previously had careers in accounting and/or finance possess expertise in evaluating financial risks (Custódio & Metzger, 2014). Additionally, competence in accounting and/or finance makes managers better at monitoring, assessing, and analyzing finances (Jelic et al., 2019; Li et al., 2022; Liu et al., 2020). Managers with this competence also produce high-quality financial reports (Rashid, 2020), presenting financial information to aid capital allocation for optimal investments (Biddle et al., 2009; Chen et al., 2011).

From the Upper Echelon theory perspective, experience gained from previous employment has a long-term impact on shaping one's character and competence (Hambrick & Mason, 1984). Thus, the character and competence of managers who previously had careers in accounting and/or finance are expected to remain ingrained (Ngelo et al., 2022). This competence will support managers in investment assessments, making a company's decisions more efficient (Li et al., 2021; Ngelo et al., 2022). Therefore, managers competent in accounting and/or finance significantly influence a company's investment efficiency (Bedard et al., 2014; Li et al., 2021; Ngelo et al., 2022).

Investment decisions are made by allocating resources to the most profitable projects, aiming to foster growth for the company (Xie, 2015). Corporate investments involve substantial financial resources (Lee et al., 2018; Sugeng, 2017; Zhang et al., 2019) and represent the most crucial financial decisions (Pogue, 2010). Hence, meticulous fund allocation planning is necessary to avoid losses and investment inefficiencies, whether it be inadequate (underinvestment) or excessive (overinvestment) investments (Biddle et al., 2009; Sugeng, 2017). Underinvestment involves investing below the potential investment project opportunities the company can undertake (Biddle et al., 2009). Conversely, overinvestment entails investment expenditure surpassing the outlay needed to maintain the company's assets and finance new project investments (Liu et al., 2022). Therefore, to achieve investment efficiency, managers must possess the ability to select the most optimal investment opportunities (Ullah, et al., 2020).

2.2 Research Hypothesis

2.2.1 Chief Executive Officer (CEO) and Company Investment Efficiency

In corporate management, the CEO holds the highest, most influential position, and is a performance determinant (Bouaziz et al., 2020; Peni, 2014; Ullah et al., 2021). The company's performance is influenced by the CEO's performance, which mirrors their individual characteristics, such as career experience (Mun et al., 2020; Serfling, 2014). According to the Upper Echelon theory, work experience can impact managerial performance (Hambrick & Mason, 1984). The CEO's professional career experience shapes superior management competence, thus enhancing performance (Ngelo et al., 2022). Experience enables CEOs to make better decisions compared to those with less experience (Bouaziz et al., 2020). CEOs with minimal experience are deemed to lack sufficient competence to make critical decisions (Bouaziz et al., 2020). Several previous studies found that CEO experience and competence positively influence company performance (Lee et al., 2018; Lo & Shiah-Hou, 2022; Ngelo et al., 2022). Experience equips CEOs with competence and a deeper understanding of decision-making processes and operations, thereby enhancing company performance (Aboramadan, 2020).

Previous research discovered that competent CEOs can generate high revenues, thus gaining better investment opportunities and fostering company growth (Lee et al., 2018). CEOs with accounting expertise also produce higher quality and reliable financial reports (Rhodes & Russomanno, 2020). High-quality financial reports produced by competent CEOs provide additional beneficial information for investment decision-making (Roychowdhury et al., 2019).

The findings of other studies indicate that CEOs with experience in accounting and/or finance tend to reduce inefficient investments by selecting the appropriate discount rate in capital budgeting (Li et al., 2021). CEOs with auditing backgrounds also tend to make more efficient investment decisions as they possess business knowledge and are accustomed to financial evaluation (Ngelo et al., 2022). With accounting and/or financial experience, CEOs have the competence to identify the most optimal investment opportunities (Li et al., 2021; Ying & He, 2020). Therefore, the hypothesis developed in this study is as follows:

H1. CEOs with work experience in accounting and/or finance are likely to enhance the investment efficiency of the company.

2.2.2 Chief Financial Officer (CFO) and Company Investment Efficiency

In addition to the CEO, another crucial executive in a company is the CFO (Hoitash et al., 2016; Li et al., 2022). The role and responsibilities of the CFO go beyond overseeing financial reporting (Hoitash et al., 2016). The CFO is responsible for and plays a role in the company's financial decisions (Ge et al., 2011; Hoitash et al., 2016). Moreover, the CFO is involved in shaping and executing the company's strategies alongside the CEO (Liu et al., 2021). The CFO also participates in investment selection (Liu et al., 2021; Rhodes & Russomanno, 2020) and provides financial information to the directors, assisting in investment decision-making aligned with the company's interests (Liu et al., 2021).

The financial performance of a company is closely related to the performance of the CFO (Hiebl, 2014). According to the Upper Echelon theory, a manager's performance is influenced by characteristics such as work experience and can impact the company's performance (Hambrick & Mason, 1984). Work experience enables managers to understand situations and make appropriate decisions compared to those with less experience (Bouaziz et al., 2020; Hambrick, 2007). Furthermore, individual skill development is also shaped and contributed to by work experience (Hiebl, 2014). Previous career experience provides knowledge that helps managers sift through information to identify and evaluate decisions made (Wang et al., 2016).

Prior research found that CFOs with experience as accountants tend to avoid overinvestment as they tend to be more conservative, efficient in capital management, and avoid financial risks (Hoitash et al., 2016). CFOs with financial competence also tend to reduce inefficient investments as they can identify and estimate projects that have the potential to enhance the company's value (Liu et al., 2021). Based on the CFO's role and competence in financial decision-making, the second hypothesis in this study is as follows:

H2. CFOs with work experience in accounting and/or finance are likely to enhance the investment efficiency of the company.

3. Research Method

This study examines the relationship between CEOs and CFOs with work experience in accounting and/or finance and investment efficiency in companies within the subsectors of basic materials, consumer cyclicals, consumer non-cyclicals, healthcare, and industrials (n=180) from 2015 to 2019. These subsectors play a key role in the economic development of developing countries (Haraguchi et al., 2017), and competition among companies within them is increasing (KPPU, 2019). Companies under suspension (n=9) were excluded due to insufficient data to calculate the dependent variable. The final sample consisted of 171 companies with 855 observational data. The year 2015 was chosen because global competition among companies increased with the implementation of the ASEAN Economic Community (Hidayah & Roisah, 2017). The year 2019 was chosen as the cutoff because it was the year before business activities and the economy were disrupted due to COVID-19 (Kemnaker, 2020; Machmudi, 2021).

In this study, the CEO is the chief executive officer or president director, while the CFO is the director responsible for the company's finances. Work experience in accounting and/or finance includes roles such as auditor (Ngelo et al., 2022), accounting and finance staff, banker, financial and investment analyst, accounting and finance manager and assistant manager, financial controller, assistant finance director, and finance director (Li et al., 2021). Data on the CEO and CFO's work experience were obtained from annual reports and the LinkedIn social media platform, while financial data were obtained from the OSIRIS database. The independent variable, experienced CEO (CEOAccFin), is measured by assigning a value of 1 if the CEO has work experience

in accounting and/or finance and 0 otherwise. The same procedure is applied to the independent variable, experienced CFO (CFOAccFin), where 1 indicates work experience in accounting and/or finance and 0 otherwise.

The dependent variable in this study is investment efficiency. Richardson (2006) measures investment efficiency using the accounting-based measure of growth opportunity. This model is chosen as it can gauge investment efficiency at the company level (Chen et al., 2021; Gao & Yu, 2020). To calculate investment efficiency, Richardson (2006) divides total investment (ITotal) into asset maintenance investment (IMaintenance) and new investment (INew). The model to calculate investment efficiency is contained in equation 2. The calculation of stock returns in equation 2 uses the closing stock price on 31 March following the annual financial report reporting regulations that must be submitted no later than three months after the date of the annual Audited Financial Statements (Marsudi, 2018; OJK, 2022). The model to determine investment efficiency is as follows:

$$INew = ITotal - IMaintenance \quad (1)$$

$$INew_{i,t} = \alpha + \beta_1 \frac{V}{P_{i,t-1}} + \beta_2 Leverage_{i,t-1} + \beta_3 Cash_{i,t-1} + \beta_4 Age_{i,t-1} + \beta_5 Size_{i,t-1} + \beta_6 StockReturns_{i,t-1} + \beta_7 INew_{i,t-1} + \varepsilon_{i,t} \quad (2)$$

Whereby:

α	: constant
β_{1-7}	: regression coefficients
i	: company
t	: year
ITotal	: total capital expenditure (difference between total current and prior amount of Plant, Property and Equipment plus total depreciations), expenditure for acquisitions, research and development expense, minus sales of fixed assets divided by total assets of the previous year
IMaintenance	: total amortization and depreciation divided by total assets of the previous year
V/P	: book value per share divided by stock price
Leverage	: total debt divided by total assets
Cash	: corporate cash divided by total assets
Age	: natural log of company age
Size	: natural log of total assets
Stock Returns	: difference in stock prices between the current year and the previous year divided by stock price in the previous year
ε	: error

Residual value (ε_t) in equation 2 serves as a proxy for investment inefficiency (ININVEST). A positive residual value indicates overinvestment, while a negative value indicates underinvestment. The farther the residual value deviates to the right or left from zero, the lower the investment efficiency.

Control variables are included in this study to prevent distortion of the relationship between independent and dependent variables due to other factors that could affect regression results (Hair et al., 2010). This study includes gender control variables for the CEO (CEOGen) and CFO (CFOGen) as the gender of executives can influence investment decisions. For instance, female executives, perceived as more risk-averse and less confident, tend to decrease overinvestment (Liu et al., 2022). Gender variables are measured by assigning a value of 1 if the CEO or CFO is female and 0 if male. Additionally, a control variable for sales growth (SalesGrowth) is used, as sales growth affects revenue and fund availability for investment (Helmold, 2020).

SalesGrowth is calculated as the difference in sales between the current year and the previous year, divided by sales in the previous year. The regression model equations are as follows:

$$ININVEST = \alpha + \beta_1 CEOGen_{i,t} + \beta_2 CFOGen_{i,t} + \beta_3 SalesGrowth_{i,t} + \varepsilon_{i,t} \quad (3)$$

$$ININVEST = \alpha + \beta_1 CEOAccFin_{i,t} + \beta_2 CFOAccFin_{i,t} + \beta_3 CEOGen_{i,t} + \beta_4 CFOGen_{i,t} + \beta_5 SalesGrowth_{i,t} + \varepsilon_{i,t} \quad (4)$$

Where:

ININVEST : investment inefficiency

I : company

t : year

α : constant

β_{1-5} : regression coefficients

ε : error

After obtaining the data, data screening was conducted to prevent bias in statistical analysis (Hair et al., 2019). The data screening results showed univariate outliers, but no multivariate outliers. To address univariate outliers, winsorizing technique was applied to bring the data closer to other non-outlier data (Buckley & Georgianna, 2001). Next, classical assumption tests were conducted, including tests for normality, multicollinearity, heteroskedasticity, and autocorrelation (Hair et al., 2019). Multicollinearity and autocorrelation tests were met. Multicollinearity test yields Variance Inflation Factor (VIF) values less than 10, indicating no multicollinearity in the data (Hair et al., 2019). Autocorrelation test using Wooldridge test resulted in p-value>0.05, indicating absence of autocorrelation in the data (Wooldridge, 2016). However, the other two tests, normality and heteroskedasticity, were not met. The normality test using Shapiro-Wilk yields p-value<0.01, suggesting the data is not normally distributed (Wijekularathna et al., 2019). The heteroskedasticity test using Wald test yield p-value<0.01, indicating the presence of heteroskedasticity (Wooldridge, 2013). Therefore, this study used Generalized Least Square (GLS) to test the hypotheses. GLS is more effective than Ordinary Least Square (OLS) in estimating data with heteroskedasticity issues (Gujarati & Porter, 2008). Hypothesis testing was conducted using F-test and t-test (Hair et al., 2019). A p-value<0.05 in the F-test indicates a good fit of the regression model. In the t-test, if the p-value<0.05, it means the alternative hypothesis is not rejected, and vice versa (Gujarati & Porter, 2008).

4. Results

From Table 1 Panel A, only 21.52% of CEOs have experience in accounting and/or finance. The limited presence of CEOs with experience in this field could be attributed to the CEO role, which emphasizes general managerial skills over specific expertise (Kaplan & Sorensen, 2021; Mishra, 2014).

Description	N	%	Mean	Median	Z	p-value ⁺
Panel A CEO Work Experience						
Accounting and/or finance	184	21.52	-0.011	-0.028	-2.292	0.022*
Non-accounting and/or finance	671	78.48	0.002	-0.017		
Panel B CFO Work Experience						
Accounting and/or finance	513	60.00	-0.002	-0.021	-0.861	0.389
Non-accounting and/or finance	342	40.00	0.000	-0.013		
Panel C CEO Gender						
Female	53	6.20	-0.001	-0.018	-0.164	0.870
Male	802	93.80	0.000	-0.019		

Table 1.
Investment
Inefficiency
Based on CEO
and CFO
Characteristics

Panel D Gender CFO						
Female	166	19.42	-0.007	-0.026	-1.328	0.184
Male	689	80.58	0.000	-0.017		

Note: *significant at $p < 0.05$, +difference test using Mann-Whitney U test

Based on Table 1 Panel B, 60% of CFOs have previously worked in accounting and/or finance, indicating the need for relevant experience in this role. The CFO position requires an individual with knowledge and expertise in relevant accounting and/or financial aspects (Agrawal et al., 2013). This requirement for competence is grounded in the CFO's role and responsibility for the company's finances (Ge et al., 2011; Hoitash et al., 2016; Xu & Zhao, 2016).

Panels C and D show male dominance, with only 5.20% of female CEOs and 19.30% of female CFOs. This could indicate the difficulty women face in reaching top positions, likely due to gender stereotypes that view women as less suitable for leadership roles, considering them to be less confident, ambitious, dominant, and independent (Arvate et al., 2018; Brescoll, 2016; Liu et al., 2022). These stereotypes can hinder women from reaching top positions within organizations (Arvate et al., 2018; Clarke, 2020).

The Mann-Whitney U test in Table 1 highlights differences in investment inefficiency between CEOs with experience in accounting and/or finance and those without. This suggests differing performance regarding the investment choices made by CEOs with relevant experience compared to those without. In contrast to CEO experience, the results did not reveal a difference in investment inefficiency based on CFO experience and CEO and CFO gender.

Table 2 presents the average positive inefficiency in a company's investments, indicating overinvestment. Overinvestment can be triggered by the characteristics of manufacturing companies, which require significant investments in fixed assets to support production activities and meet market demands for sustainability and competitiveness (Nahmias & Olsen, 2015). In the digitalization era with intense competition, the manufacturing sector requires substantial fixed assets, especially high-value specialized equipment, to support its operational automation (Buffa & Sarin, 2010). Companies also increase investments in fixed assets to stay competitive through innovation in products, processes, and technology (Alkaraan, 2020). The use of outdated equipment can lead to production inefficiencies, making the company less competitive and resulting in losses (Nahmias & Olsen, 2015). The need for high-value assets can trigger overinvestment in a company's assets.

Table 2.
Descriptive
Statistics

Variable	N	Min	Max	Mean	Std. Deviation
Investment Inefficiency	855	-0.31986	0.30175	0.00016	0.08796
Sales Growth	855	-0.99883	33.97993	0.19070	1.78546

Note: This table is based on raw data, not winsorized data. Positive investment inefficiency values indicate overinvestment, while negative values indicate underinvestment.

The smallest underinvestment value, -0.31986, is held by PT Mandom Indonesia Tbk in 2015, as the company sold and disposed of fixed assets worth IDR 394.4 billion that year. Additionally, the company experienced a 2% decrease in fixed asset value (IDR 21 billion) due to a fire incident (Mandom, 2015). The highest overinvestment value, 0.30175, is held by PT Tira Austenite Tbk in 2016, as the company added fixed assets amounting to IDR 4.4 trillion that year (Tira, 2016). Sales growth shows a positive average, suggesting that the growth of the manufacturing sector is on the rise. This indicates a growing market that positively demands and receives the company's products (Helmold, 2020).

Furthermore, there is a positive correlation between investment inefficiency and sales growth with a correlation value of 0.148 ($p < 0.01$). The positive correlation between sales growth and investment inefficiency indicates that the revenue obtained by a company can trigger inefficient investments. Investment inefficiency can be triggered by the availability of funds that a company has for investment. The more funds available, the higher the investment a company can make, thus triggering inefficient investments.

Table 3 presents significant F-values ($p < 0.001$), indicating that the regression models are sound and suitable for use. Model 2 has a lower AIC value than Model 1, signifying that it is the most fitting model (Schermer & Martin, 2019). The t-tests in Table 3 confirm the negative impact of CEOs experienced in accounting and/or finance on investment inefficiency. This negative impact suggests that CEOs with this experience tend to reduce inefficient investments, making the company's investments more efficient (Gan, 2019). However, there is no significant influence of CFOs experienced in accounting and/or finance on investment inefficiency.

Variable	Model 1		Model 2	
	Coefficient	p-value	Coefficient	p-value
$X_1_CEOAccFin$			-0.013	0.038*
$X_2_CFOAccFin$			0.000	0.965
C_1_CEOGen	0.001	0.884	0.003	0.756
C_2_CFOGen	-0.009	0.149	-0.010	0.138
$C_3_SalesGrowth$	0.057	0.000**	0.056	0.000**
Constant	0.000	0.741	-0.001	0.687
Wald χ^2	20.09		24.60	
F	0.000**		0.000**	
AIC	-1951.637		-1952.035	

Note: Coefficients significant at ** $p < 0.01$, * $p < 0.05$

Table 3.
GLS Regression
Results

Table 3 Model 2 indicates that female CEOs and CFOs have no significant impact on a company's investment inefficiency. This could be due to the low representation of female CEOs and CFOs in executive positions (Baker, 2014; Brueckner et al., 2021). Additionally, Table 3 shows that sales growth has a positive influence on investment inefficiency. This effect implies that increasing sales will enhance investment inefficiency. The growth in sales boosts revenue and the funds available for investment (Erdoğan, 2018; Helmold, 2020), potentially leading to overinvestment and increased investment inefficiency.

5. Discussion

5.1 The Influence of CEO's Work Experience in Accounting and/or Finance on Company Investment Efficiency

This study found a negative relationship between the CEO's work experience and investment inefficiency. The presence of CEOs with experience in accounting and/or finance tends to reduce inefficient investments, making the company's investments more efficient, supporting H1. Having an experienced CEO in manufacturing companies contributes to achieving investment efficiency. Work experience provides CEOs with the ability to delve deeper into financial information, aiding in fund allocation and executing more efficient investment projects (Li et al., 2021; Liu et al., 2020; Rashid, 2020).

The manufacturing sector necessitates efficient asset investment management to operate and remain productive (Buffa & Sarin, 2010; Nahmias & Olsen, 2015). The research results demonstrate that CEOs with experience in accounting and/or finance in manufacturing companies can manage the company's investments more efficiently. This finding supports prior research, indicating that CEO experience in accounting

and/or finance enhances a company's investment efficiency (Li et al., 2021; Ngelo et al., 2022).

As top-level executives, CEOs wield significant influence over a company's performance (Hambrick, 2007; Peni, 2014; Ullah et al., 2021) and therefore must possess execution skills and a broad perspective (Kaplan & Sorensen, 2021). Experience and competence can boost a CEO's confidence in processing information for decision-making purposes, including the optimal selection of investments (Aboramadan, 2020; García-Sánchez & García-Meca, 2018; Wang et al., 2016). Financial competence in CEOs is crucial, given that investments constitute critical financial decisions involving substantial funds (Lee et al., 2018; Sugeng, 2017; Zhang et al., 2019).

The research findings highlight that the accounting and/or finance expertise of CEOs is linked to a company's financial policies. In determining a company's investments, the role of a CEO with accounting and financial competence is irreplaceable. Even though a company can hire professional consultants, risks such as valuation errors or fraud still exist (Ying & He, 2020). Therefore, CEO competence relevant to accounting and finance is crucial in the selection of a company's investment decisions (Goodman et al., 2014). Armed with accounting and financial competence, CEOs can manage finances more proficiently and actively engage in investment management and monitoring (García-Sánchez & García-Meca, 2018; Jelic et al., 2019).

The results of this study confirm the Upper Echelon theory, stating that work experience of managers significantly affects company performance. Work experience greatly contributes to an individual's skill development (Hiebl, 2014). The competencies possessed by managers through work experience aid in the decision-making process, impacting the company's performance (Hambrick, 2007; Hambrick & Mason, 1984). In corporate management, CEOs tend to dominate as decision-makers (Bouaziz et al., 2020; Lo & Shiah-Hou, 2022). Complex investment decisions rely on the CEO's assessment as the primary decision-maker, making their competence crucial in achieving efficient investments (Alkaraan, 2016; Lee et al., 2018; Li et al., 2021). Financial competence in CEOs is vital to support the implementation of strategies for achieving investment efficiency (Bedard et al., 2014; Custódio & Metzger, 2014; Ying & He, 2020).

5.2 The Influence of CFO's Work Experience in Accounting and/or Finance on Company Investment Efficiency

This study did not find any significant influence of CFO's work experience on the inefficiency of company investments, thus rejecting the second hypothesis of this research. This result aligns with Ngelo et al.'s (2022) study, which found that CFOs with work experience in accounting do not affect the efficiency of company investments. The lack of influence of CFOs in investment decision-making suggests that despite their financial responsibilities, CFOs are not the decision-makers regarding investments, as their position within the company is subordinate to the CEO (Ge et al., 2011; Hoitash et al., 2016).

CFOs play a role in presenting financial references and information, making the CEO's competence more influential as the investment decision-maker (Ngelo et al., 2022). The core responsibilities of CFOs include financial reporting and presentation, auditing and compliance, planning, treasury, and capital structure (Agrawal et al., 2013; Li et al., 2022; Liu et al., 2021). Over time, the CFO's role has expanded to involvement in strategic formation and guiding the CEO in making company decisions (Datta & Datta, 2014; Ginesti et al., 2021). However, the research results indicate that investment efficiency is not influenced by the CFO but by the CEO as the decision-maker of the company. This could be because investment decision-making is a fundamental strategy faced by any manufacturing sector (Nahmias & Olsen, 2015). Therefore, CFOs' work experience does not influence investment efficiency because their role and responsibilities do not involve investment decision-making.

These results have not confirmed the Upper Echelon theory, which states that managers' career experience can influence company performance. Managerial work experience shapes competencies and instills confidence, minimizing doubts in decision-making (Gan, 2019; Wang et al., 2016), thereby supporting better performance (Barney, 1991; Hitt et al., 2020). Hence, managers' ability to make decisions will determine the company's future performance (Hambrick, 2007). In relation to this, the decision-maker's position plays a key role. From this research, it can be concluded that CFOs are not the decision-makers in the selection of company investments.

6. Conclusion and Limitation

This study investigated the role of CEOs and CFOs with work experience in accounting and/or finance on the efficiency of company investments. The research found that CEOs with this experience tend to reduce inefficient investments in the company. Work experience provides CEOs with the ability to understand financial information more deeply, aiding in allocating funds and executing investment projects more efficiently. However, the presence of a CFO with similar experience does not affect investment efficiency. This indicates that CFOs do not play a role in the selection of company investment decisions. Therefore, the accounting and financial competencies of CFOs do not influence investment efficiency. The CFO's role is more dominant in financial reporting, accounting standards, funding, and providing financial information but not as the primary decision-maker in financial policy.

This research has implications for companies and stakeholders, especially investors. First, companies should pay attention to work experience, particularly in accounting and/or finance, to support managerial performance in achieving investment efficiency in their assets. Efficient investments create profitability and are a prerequisite for company growth. Second, investors should be selective in choosing companies for their investment decisions. Besides fundamental aspects of company performance, investors should also consider the background of the managers. Experienced managers with financial competencies can enhance company performance, especially its financial performance. This can minimize potential losses in investment when the company is led by a competent individual.

This research contributes to the accounting and finance literature by considering the influence of managerial characteristics, particularly work experience, on investment efficiency. Previous studies analyzed work experience as auditors for CEOs and CFOs concerning investment efficiency. This study added work experience in other accounting and/or financial roles, thus broadening the scope of work experience related to company investment. Work experience provides managers with competence in investment selection, steering the company away from suboptimal investments that lead to investment inefficiencies. Additionally, this research contributes to confirming the Upper Echelon theory, which states that managerial work experience can influence company performance. CEOs with experience in accounting and/or finance tend to reduce inefficient asset investments. CEOs acting as decision-makers use the knowledge and values acquired from their experience to make more optimal investment decisions.

This research provides a new perspective for managers and stakeholders regarding the impact of CEOs' work experience as top managers on financial performance, especially investment decisions. The availability of information on CEOs' and CFOs' work experience from annual reports and LinkedIn is still limited. Therefore, future research is recommended to use additional sources, such as direct interviews.

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Executive
Work
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