Cuadernos de Economía (2024) Volume 47, Issue 133, 82-90

Asociación Cuadernos de economía

Cuadernos de economía

www.cude.es

ARTÍCULO

Audit Quality and Firm Specific Characteristics impact on Saudi Arabia manufacturing Firms values: Mediating Role of Earning Management

Mohammed Abdullah Ammer[1]*, Abdurrahaman Adamu Pantamee[2]

[1]Department of Finance, School of Business, King Faisal University, Al-Ahsa 31982, Saudi Arabia.
Email: mammer@kfu.edu.sa
[2]Department of Accounting, University of Nizwa, Oman
Email: a.pantamee@unizwa.edu.om

Corresponding Author: Email: mammer@kfu.edu.sa

Jel Codes:

Keywords:
Audit Quality, Firm Value, Earning Management, Saudi Arabia, Manufacturing Companies

Abstract: The valuation of a firm serves as a pivotal indicator of its financial well-being, thereby guiding stakeholders' decision-making processes. The assurance of financial data reliability through audit quality, coupled with the influence of firm-specific attributes on growth potential and risk management, significantly impacts firm valuation. Concurrently, the structure of corporate governance plays a vital role in bolstering both audit quality and firm-specific characteristics, consequently enhancing firm value. Thus, this empirical inquiry seeks to examine the interplay between audit quality, firm-specific attributes, and the firm value of manufacturing firms in Saudi Arabia, while considering the mediating influence of earnings management. Data spanning from 2014 to 2023, sourced from annual reports and the Saudi Arabia Stock Exchange, were employed for analysis. Employing a longitudinal research design and a quantitative approach, panel data regression analysis was conducted. Findings reveal a positive and statistically significant relationship between audit quality and firm value, as well as firm-specific characteristics and firm value. Moreover, earnings management exhibits a positive and significant impact on firm value, thus serving as a mediator between audit quality, firm-specific characteristics, and firm value among Saudi Arabian manufacturing companies. This substantial mediating effect underscores the study's contribution to the literature, paving the way for further exploration and yielding valuable insights for policymakers and managers regarding the pivotal role of audit quality and firm-specific characteristics in enhancing firm value through effective earnings management strategies.

Author Correspondence: mammer@kfu.edu.sa

https://doi.org/10.32826/cude.v47i133.1309

Introduction

The contemporary global economic landscape is undergoing profound transformations across multiple dimensions, spurred by environmental factors. These shifts, exacerbated by persistent crises, particularly affect emerging economies, garnering increased scrutiny from decision-makers regarding the financial and non-financial disclosures provided by businesses and markets (Salehi & Arianpoor, 2021). The reliability of this information, characterized by its consistency, objectivity, and transparency, holds paramount importance (Wagner & Blom, 2011). However, amidst these challenges, certain business managers resort to earnings management (EAM) to fulfil personal objectives. EAM entails manipulating financial returns to achieve specific aims, such as tax optimization or portraying a distorted view of the firm's prospects to stakeholders (Ahmad et al., 2023). While some instances of EAM may conform to global accounting standards, they risk compromising the integrity of accounting information, potentially leading to misguidance of users (Ahmad et al., 2023). Consequently, the ability of decision-makers to make well-informed and high-quality decisions is impeded (Almubarak et al., 2023). EAM contributes to a deterioration in the quality of accounting information, thereby negatively influencing the decisions of stakeholders (Du & Shen, 2018). Hence, the examination of earnings management has become a focal point in the current milieu. Accordingly, robust auditing and stringent quality monitoring enhance the credibility of financial information, instilling greater confidence among shareholders and other stakeholders (Le & Moore, 2023), thereby potentially augmenting firm value (Shahzad et al., 2023). Furthermore, firm-specific characteristics such as leverage, profitability, and size significantly shape EAM (Chi & Gooda, 2024; ElRabat et al., 2023), consequently impacting firm value. Elevated leverage levels may induce aggressive accounting practices to meet debt obligations, while larger firms may encounter heightened complexities in financial reporting, potentially affecting performance (Mamatzakis et al., 2023). Moreover, levels of profitability and firm size may influence the incentives for earnings manipulation, ultimately affecting the financial well-being and long-term viability of the firm (Mamatzakis et al., 2023).

In this context, both audit quality and firm-specific characteristics emerge as crucial factors influencing EAM, thereby contributing to the enhancement of firm values. Hence, inadequate levels of audit oversight exacerbate instances of EAM (Le & Moore, 2023). Corporate governance practices assume a central role in shaping EAM dynamics and the quality of accounting information, as posited by asymmetric and agency theory (Shahzad et al., 2023). For instance, firms governed by personal affiliations inadvertently facilitate EAM practices, exerting a detrimental impact on market valuation (Shahzad et al., 2023). Furthermore, empirical evidence suggests that firms experiencing deficiencies in audit quality (AQ) are prone to engaging in precarious EAM activities, consequently distorting accounting information and diminishing firm values (Le & Moore, 2023; Shahzad et al., 2023). Similarly, misrepresentation of firm-specific attributes, such as overstated profitability or understated leverage, can distort financial performance metrics, leading to erroneous investment decisions. Such misrepresentation undermines the perceived worth of the firm, resulting in reduced market capitalization and restricted access to capital (Yusuf et al., 2023). Ultimately, such discrepancies between reported and actual performance may trigger market corrections, adversely affecting the firm's long-term viability and shareholder wealth. The findings of prior research underscore the imperative for scholars to delve into the significance of audit quality and firm-specific characteristics in mitigating EAM practices, thereby fostering an improvement in firm value.

Empirical investigations into the direct impacts of audit quality (AQ), firm-specific characteristics, EAM, and firm value have yielded divergent results. Some studies have observed a positive correlation between firm size and firm value (Hardi et al., 2023; Yusuf et al., 2023), while others have encountered mixed or inconclusive findings (Pertiwi et al., 2023). Similarly, the relationship between leverage and EAM has exhibited varying outcomes, with certain research indicating a positive association (Hardi et al., 2023; Yusuf et al., 2023), and others finding no significant impact (Ibrahim & Isiaka, 2020). Conversely, some investigations have revealed a positive and significant influence of audit quality on firm values, suggesting that higher-quality audits enhance investor confidence and elevate market valuations (Pertiwi et al., 2023). Nevertheless, previous studies have also reported inconclusive findings regarding the association between audit quality and firm value (Le & Moore, 2023; Wijaya, 2020). Likewise, the link between audit quality and EAM has produced diverse outcomes in empirical research (Alyaarubi et al., 2021; Awuye, 2022). Moreover, the efficacy of audit quality in mitigating earnings management may hinge upon contextual factors such as regulatory frameworks and industry dynamics, leading to disparate findings across studies (Le & Moore, 2023). Furthermore, prior research has primarily focused on other countries, with limited attention given to the manufacturing sector of Saudi Arabia. Additionally, existing literature has predominantly concentrated on the individual impacts of audit quality or firm-specific factors on earnings management and firm values, overlooking the combined effects of audit quality and firm-specific factors on firm value through earnings management. The incongruities in these studies underscore the need to address the complexities of relationships among firm-specific characteristics, audit quality, firm values, and earnings management within a unified and comprehensive model.

In light of our prior discourse, it is imperative to recognize the pivotal role of EAM in elucidating the nexus between audit quality, firm-specific attributes, and firm values within the operational framework of Saudi Arabian manufacturing companies. EAM functions as a conduit through which firms can adjust their reported financial performance to align with market expectations or strategic imperatives (Awuye, 2022). Consequently, probing into the mediating function of EAM offers a lens through which to comprehend the underlying mechanisms through which firm-specific attributes shape firm values. By delineating the indirect pathway by which firm characteristics and audit quality influence EAM, thereby impacting firm values, scholars can cultivate a more holistic understanding of the intricate dynamics among these variables. Furthermore, acknowledging the mediating role of earnings management can furnish practitioners and policymakers with insights into the potential ramifications of interventions aimed at firm-specific attributes on the integrity of financial reporting and investor trust. Furthermore, inconsistencies in findings prompt scholars to explore alternative theoretical frameworks or moderators that may yield deeper insights into the multifaceted interplay among these variables. The study is further delineated into four sections: a literature review, research methodology, data analysis and discussion, and implications and avenues for future research.

Literature Review

Theoretical Framework

The current scholarly inquiry is grounded in three prominent theoretical frameworks: agency theory, information asymmetry theory, and organizational theory, with the aim of elucidating the intricate dynamics among AQ, firm-specific attributes, EAM, and firm value. Agency theory, as expounded by (Aghion et al., 1997), illuminates the principal-agent predicament inherent in corporate structures, wherein managers (agents) may pursue objectives incongruent with those of shareholders (principals). Control mechanisms have the potential to mitigate this conflict, thereby possibly diminishing instances of EAM (Jiraporn et al., 2008). Information asymmetry theory, delineated by (Löfgren et al., 2002), underscores the disparity of information between managers and investors, which could engender adverse selection issues in financial markets. If investors possess asymmetric information, investment opportunities might be curtailed due to their limited insight into the EAM practices of companies (Mehr, 2020). Conversely, organizational theory, according to (Czarniawska-Joerges, 1999), delves into the behavioural dynamics within organizations and the strategies employed for performance appraisal.

The preceding theories have elucidated that AQ and firm-specific characteristics play pivotal roles in influencing EAM, thereby potentially enhancing firm value. Numerous studies have corroborated this assertion, particularly within the framework of agency theory, wherein AQ emerges as a critical factor in bolstering firm values through the amplification of shareholder interests (Alsmady, 2023). Similarly, within the realm of asymmetric theory, firm-specific attributes such as leverage, firm size, and profitability assume significance in augmenting EAM, consequently enhancing firm value. For instance, leverage may exacerbate agency conflicts by imposing financial constraints, thereby incentivizing EAM to meet debt obligations, thus underscoring the pertinence of agency theory (Murni et al., 2023). Conversely, organizational theory posits that larger firms may present auditors with greater challenges in ensuring the accuracy of financial disclosures, while smaller firms may encounter resource limitations that heighten susceptibility to earnings management practices (Qulyubi et al., 2023). These dynamics underscore the nuanced interplay among firm-specific characteristics, theoretical frameworks, and their influence on EAM vis-à-vis firm value enhancement. Consequently, building upon prior research, a conceptual framework has been devised and is depicted in Figure 1.

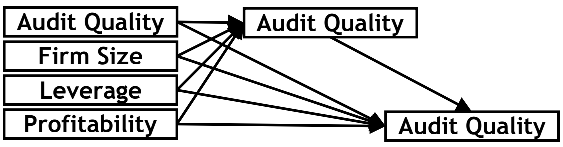

Figure.1: Theoretical Framework.

Hypothesis Development

Audit Quality and Firm Value

Previous research has extensively examined the impact of AQ on firm value, yielding varied results across different contexts. El-Deeb et al. (2023) highlighted the significant role of AQ in enhancing the quality of financial information, subsequently improving firm value. Likewise, Awuye (2022) demonstrated a positive association between higher levels of AQ and firm value. Wijaya (2020) emphasized the increasing awareness of AQ's importance in light of escalating accounting scandals, further corroborating its positive influence on firm values. Additionally, AQ is recognized as a cornerstone of efficient financial markets, ensuring the integrity of information within financial reports (Abu Afifa et al., 2023). Larger firms, often audited by specialized auditors, exhibit stronger associations between accruals and profits, indicating higher perceived quality of financial information (Huang et al., 2014). Investor perception of earnings quality and company valuation is also influenced by audit efficiency (Wijaya, 2020). Audit firm rotation and auditor specialization are crucial indicators of audit efficiency, contributing to the improvement of financial statement quality and subsequently enhancing firm value (El-Deeb et al., 2023; Huang et al., 2014). These studies collectively underscore the significance of AQ as a determinant of firm value. Therefore, based on this background, the following hypothesis is formulated;

H1: Audit quality significantly influence to firm value.

Firm Specific Characteristics and Company Value

Within organizational contexts, various firm-specific characteristics serve as intrinsic attributes influencing performance and strategic decisions within industries or markets. Existing literature underscores the pivotal role of these characteristics in determining firm value, which may be augmented by factors such as leverage, profitability, and firm size. Among these factors, leverage, often quantified by the debt-to-equity ratio, impacts a company's risk profile and its cost of capital. The Modigliani-Miller theorem posits that leverage alters a firm's value through changes in its capital structure and tax benefits. However, excessive leverage can elevate financial risk, potentially precipitating financial distress and diminishing valuation. Thus, discerning the optimal leverage level is imperative for maximizing firm value. Conversely, Ghardallou (2023) highlights the trade-off between tax advantages associated with debt and the costs linked to financial distress in capital structure decisions, which can influence firm value. Empirical studies have identified a negative relationship between leverage and firm values. Moreover, firm size emerges as another significant predictor of firm value. Larger firms capitalize on economies of scale to reduce fixed costs, enhancing their value. Additionally, their market power and bargaining leverage afford competitive advantages and higher valuations. Conversely, smaller firms leverage flexibility, innovation, and niche market strategies to create value. While empirical evidence suggests a positive correlation between firm size and value, its nature may vary across industries and economic conditions. Nurseha et al. (2024) corroborate the positive and significant impact of firm size on firm value.

Moreover, firm profitability stands out as a crucial determinant of firm value. Companies generating higher revenues tend to exhibit greater profitability, thereby enhancing return on investment and subsequently increasing firm value (Nurseha et al., 2024). Among various profitability metrics, return on assets (ROA) holds particular significance as it assesses financial performance and correlates closely with firm value (Nurseha et al., 2024). This assertion finds further support in studies revealing a positive relationship between profitability and firm value (Sa'adah & Indana, 2023). However, it is imperative to acknowledge that profitability alone may not suffice for value creation if it lacks sustainability or fails to translate into cash flows. Hence, firms must not only prioritize profitability but also ensure efficient management of assets and liabilities to maximize long-term shareholder value (Sa'adah & Indana, 2023). Appah et al. (2023) also underscore the importance of sustainable profitability and cash flow generation in augmenting firm value. These findings underscore the pivotal role of firm-specific characteristics in determining firm value, thereby forming the basis for the following research hypotheses.

H2: Firm size significantly influence to firm value.
H3: Firm profitability significantly influence to firm value.
H4: Firm leverage significantly influence to firm value.

Earnings Management Acts as Mediating Role

The examination of EAM, involving the manipulation of accruals and actual events, has garnered significant attention in academic discourse. While EAM can be perceived as advantageous when aligned with company interests, it may be considered opportunistic if detrimental (Jiraporn et al., 2008). Despite prevalent negative portrayals of EAM as a means to mislead investors, there is evidence suggesting that prudent managerial judgment can enhance the consistency, predictability, and utility of earnings, thereby bolstering company valuation (Yusuf et al., 2023). Leaders may strategically employ EAM to improve company performance, indicating a positive relationship between EAM and firm value (Folajimi et al., 2023). Furthermore, EAM can significantly impact the integrity of financial statements and capital allocation, with compulsory accruals potentially augmenting firm value (Anderson et al., 2024). However, empirical studies have also underscored the adverse effects of EAM on firm value. For instance, Garanina (2023) observed a negative impact on firm value as managers manipulate earnings through accruals to minimize taxes and fees, thereby diminishing company valuation. Additionally, Habib (2023) concluded that while high earnings quality may reduce share market value, companies that distribute dividends are priced considerably higher. Empirical evidence suggests that control mechanisms such as audit quality and corporate governance negatively and significantly affect EAM, while positively influencing financial performance, thus contributing to improved company valuation (Le & Moore, 2023). The application of control mechanisms influences the firm's fiscal performance (Kusuma & Malau, 2023), with earnings quality partly mediating the relationship between audit quality and share price (Lustrilanang et al., 2023). Furthermore, it has been found that enhanced quality may lead to an increase in EAM (Huang et al., 2014), suggesting that EAM can augment firm value when organizations prioritize audit quality procedures. Moreover, management of firm characteristics such as leverage, firm size, and profitability can significantly influence EAM, thereby contributing to improved firm value. Effective leverage management enables companies to control earnings, attracting investors and enhancing company values through increased investment opportunities (Tannady et al., 2023). Additionally, maintaining an optimal leverage ratio can enhance financial flexibility, allowing firms to undertake value-enhancing projects while mitigating the risk of financial distress (Hardi et al., 2023). Consequently, effective leverage management may increase investor confidence and, consequently, enhance firm value.
Conversely, firm size and profitability emerge as crucial determinants in managing a company's EAM, potentially augmenting firm values. Larger companies possess greater access to resources, enabling them to implement effective EAM strategies (Fahlevi et al., 2023). Additionally, studies suggest that larger firms are better positioned to increase revenues and adhere to rigorous earnings reporting regulations, thereby enhancing shareholder value or firm value (Putra et al., 2023). Furthermore, a focus on sustainable profitability and cash flow generation by managers can enhance the transparency and credibility of financial statements, thereby reducing investor uncertainty and decreasing the cost of capital (Nurseha et al., 2024). Through effective management of firm size and profitability, managers can align EAM practices with long-term value creation objectives, ultimately maximizing firm value. In another study, it was found that firm size has a positive and significant impact on EAM (Ghofir & Yusuf, 2020), with arguments suggesting that an improvement in EAM leads to an increase in firm value. Conversely, Hapsoro & Bahantwelu (2020) employed EAM as a mediating variable between capital structure and firm value, finding a significant mediating effect of EAM on capital structure. They further argue that the mediating effect of EAM can be extended to other firm-specific characteristics and relationships with firm value across different countries and sectors. Thus, based on the preceding discussion, it is hypothesized that,

H5: Earning management significantly influence to firm value.
H6: Earning management significantly mediating influence between audit quality and firm value.
H7: Earning management significantly mediating influence between firm size and firm value.
H8: Earning management significantly mediating influence between firm profitability and firm value.
H9: Earning management significantly mediating influence between firm leverage and firm value.

Data and Methods

The research conducted a comprehensive analysis utilizing panel data obtained from the annual reports of 50 distinct manufacturing companies in Saudi Arabia spanning from 2014 to 2023. The focus on this particular sector was driven by variations in regulatory obligations; for instance, while financial institutions adhere to standards established by the Saudi central bank, industrial enterprises must conform to sector-specific regulations. Furthermore, some companies were excluded from the analysis due to incomplete data availability, resulting in a final sample of 50 manufacturing firms being scrutinized over the period from 2015 to 2023, yielding a total of 500 observations. The data, sourced from the Saudi Arabia stock exchange database, underwent panel data analysis. Panel data is particularly suitable when multiple entities have data spanning different time frames, as it encompasses both time series and cross-sectional data (Han et al., 2023). Given the collection of data over various time periods, a longitudinal research design was deemed more appropriate compared to a cross-sectional approach (Kotut et al., 2024). Moreover, the study employed an explanatory research design, testing hypotheses based on previously established theories (Johannesson et al., 2023).

Variables Measurements and Econometrics Models

The research endeavours to examine the influence of audit quality and firm-specific characteristics on firm value, with a focus on the mediating effect of EAM. Abu Afifa et al. (2023) propose that audit quality tenure serves as a viable measure of this construct. Accruals-based earnings management practices (EMP) have commonly been assessed using the modified Jones model, as demonstrated in prior studies (Sawarni et al., 2023). This model facilitates the quantification of non-compulsory accruals, aiding in the detection of EMP (Islam et al., 2011). Furthermore, firm value, as the dependent variable, is often assessed using annual stock market stock prices (Adiputra & Hermawan, 2020). Additionally, firm-specific characteristics such as return on assets, firm size, and leverage are examined. Yusuf et al. (2023) suggest that leaders of large-sized firms wield significant potential to manipulate earnings due to the scale of transactions they oversee. Moreover, (Liu et al., 2022) propose that leverage, firm size, and profitability indicators provide leaders with opportunities for earnings manipulation. Among these characteristics, return on assets is calculated by dividing net income by total assets (Wang et al., 2020), leverage is assessed by dividing total debts by total assets (Wang et al., 2020), and firm size is quantified using the natural logarithm of total assets (Wang et al., 2020). These aforementioned variables are integrated into the following four models.

Model-1 FV= $\beta 0 + \beta 1IAQ + \beta 2ROA + \beta 3LEVER + \beta 4FS + \beta 5IFRS + \varepsilon.$

Model-2 EAM= $\beta 0 + \beta 1IAQ + \beta 2ROA + \beta 3LEVER + \beta 4FS + \beta 5IFRS + \varepsilon.$

Model-3 FV= $\beta 0 + \beta 1IAQ + \beta 2ROA + \beta 3LEVER + \beta 4FS + \beta 5IFRS + \varepsilon.$

Model-4 FV= $\beta 0 + \beta 1IAQ + \beta 2ROA + \beta 3LEVER + \beta 4FS + \beta 5IFRS + \beta 5EAM + \varepsilon.$

In the equations presented above, the dependent variable is denoted by FV, representing firm values. The independent variables include AQ for audit quality, lever for leverage, FS for firm size, and ROA for return on assets. EAM, signifying earnings management, serves as the mediating variable, while IFRS, standing for International Financial Reporting Standard, is included as a control variable.

Descriptive Statistics

This section presents the results of descriptive statistics, providing central tendency values for the statistics. The mean firm value (FV) is 17.428, with a standard deviation (SD) of 1.675, indicating relatively low variability around the mean. AQ has a mean of 0.783, suggesting that audits generally have a high success rate. Earnings management (EM) has a mean of 0.075, indicating minimal engagement on average by firms. Leverage (LEVER) exhibits a mean of 37.45, suggesting moderate leverage across firms, with low variability reflected by the low standard deviation of 0.274. Firm size (FS) has a mean of 6.26, with a standard deviation of 0.673, indicating moderate variability in firm sizes. Return on assets (ROA) has a mean of 0.531, indicating a moderate return on assets on average, with a standard deviation of 0.089, reflecting relatively low variability. International financial reporting standards (IFRS) have a mean of 0.582, indicating a significant degree of adherence to these standards on average by firms. These results are summarized in Table 1.

Table.1: Descriptive Statistics.

	Mean	SD	Min	Max
FV	17.428	1.675	21.372	12.150
AQ	0.783	0.407	1	0
EM	0.075	0.130	0.000	0.824
Lever	37.45	0.274	0.244	85.33
FS	6.26	0.673	5.578	9.36
ROA	0.531	0.089	−0.54	0.815
IFRS	.582	0.772	0	1

Note: FV-Firm Value, AQ-Audit Quality, EM-Earning Management, LEVER-Leverage, FS-Firm Size, ROA-Return on Assets, IFRS-International Financial Reporting Standard.

Correlational Matrix

Table 2 presents the correlation matrix results. The analysis reveals that FV demonstrates a strong positive correlation with EM at 0.521, moderate positive correlations with leverage (LEVER) at 0.363, FS at 0.421, ROA at 0.242, and IFRS at 0.171. AQ exhibits a weak negative correlation with firm value at -0.11. Earnings management shows moderate positive correlations with firm size (0.231) and leverage (0.671). Return on assets displays weak to moderate positive correlations with firm size (0.341) and leverage (0.381). These numerical values quantify the relationships between the financial variables, delineating the degree and direction of their associations within the dataset. The detailed results are summarized in Table 2.

Table.2: Correlation Results.

	VIF	FV	AFT	EM	LEVER	FS	ROA	IFRS
FV	…	**1.00**						
AQ	2.29	-0.11	**1.00**					
EM	2.82	0.521	0.231	**1.00**				
Lever	1.94	0.363	-0.344	0.671	**1.00**			
FS	1.78	0.421	0.185	-0.786	0.571	**1.00**		
ROA	2.89	0.242	-0.236	-0.432	0.381	0.341	**1.00**	
IFRS	3.90	0.171	0.082	-0.282	-0.263	0.243	0.511	**1.00**

Note: FV-Firm Value, AQ-Audit Quality, EM-Earning Management, LEVER-Leverage, FS-Firm Size, ROA-Return on Assets, IFRS-International Financial Reporting Standard

Diagnostics Test

Table 3 presents the results of various diagnostic tests conducted, including unit root, autocorrelation, heteroscedasticity, normality, and cointegration tests. Across all four models (M1, M2, M3, and M4), significantly negative values with extremely significant p-values were observed in the unit root tests, indicating that the data is stationary (Liu et al., 2022). Moreover, insignificant p-values in the autocorrelation and heteroscedasticity tests suggest the absence of autocorrelation or heteroscedasticity issues (Hsiao et al., 2012). The normality values indicate adherence to normality assumptions (Ghaderi et al., 2022). Additionally, the panel cointegration test results reveal very low p-values (both less than 0.001), indicating a strong relationship between variables across different panels and suggesting co-integration in panel data. These comprehensive results are summarized in Table 3.

Table.3: Results Diagnostics.

Models	Unit Root Test	Autocorrelation Test	Heteroscedasticity Test	Normality Test	Panel Cointegration
M1	-4.3351 (0.000)	.983 (0.654)	1.410 (0.510)	.683 (.376)	-2.406 (0.009)
M2	-5.3083 (0.000)	.672 (0.212)	2.557 (0.314)	.531 (.551)	-3.222 (0.000)
M3	-3.1241 (0.000)	0.842 (0.654)	0.317 (0.620)	.733 (.376)	-2.427 (0.009)
M4	-5.673 (0.000)	0.567 (0.212)	1.589 (0.314)	.562 (.541)	-5.243 (0.000)

Regression Results

The research tested hypotheses across four models. In Model 1, AQ displayed a positive and significant impact on FV, supporting the hypothesis. FS and ROA exhibited positive and significant effects on FV, whereas LEVER had a negative and significant influence on FV, aligning with the study's hypotheses. Similarly, EAM showed a negative and significant impact on FV. The results also indicated that EAM positively and significantly mediates the relationships between AQ, FS, ROA, and FV, while also negatively and significantly mediating the impact of LEVER on FV, supporting the proposed mediating effect hypothesis. These findings are summarized in Table 4.

Table.4: Hypothesis Results.

	Model-1 (FV)	Model-2 (FV)	Model-3 (EAM)	Model-4
AQ	0.25 (0.001)			
FS	0.30 (0.005)			
ROA	0.40 (0.000)			
LEVER	-0.15 (0.001)			
EAM		-0.10 (0020)		
AQ			0.330 (0.002)	
FS			0.492 (0.000)	
ROA			0.562 (0.001)	
LEVER			-0.170 (0.001)	
AQ				0.20 (0.010)
FS				0.25 (0.012)
ROA				0.35 (0.003)
LEVER				-0.12 (0.025)
R-squared	0.364	0.4128	0.451	0.671
Breusch pagan	0.002	0.003	**0.041**	0.001
Hausman Test	0.031	0.121	**0.031**	0.000

Discussion and Conclusion

The research aimed to assess the influence of audit quality and firm-specific characteristics on the firm value of Saudi Arabia's textile industry, with a focus on the mediating role of earnings management. Data were gathered from annual reports of manufacturing firms. Panel data analysis revealed that within Saudi Arabia's manufacturing sector, audit quality has a significant and positive impact on firm value, as evidenced by prior studies (Abu Afifa et al., 2023; El-Deeb et al., 2023). This relationship holds particular importance in manufacturing, where accurate financial information is crucial for informed decision-making amidst competitive dynamics. Furthermore, these findings suggest that high-quality audits not only ensure financial statement reliability but also help alleviate information asymmetry between managers and investors. Thus, it can be inferred that manufacturing firms in Saudi Arabia maintain robust audit processes, enhancing investor confidence and shareholder wealth. Additionally, the study uncovered a significant and positive association between firm size and firm value. This aligns with findings from Putra et al. (2023) and Junaidi et al. (2024), indicating that firm size positively impacts firm value. In Saudi Arabia's manufacturing sector, this relationship is particularly noteworthy due to the diverse range of companies, spanning from small-scale enterprises to large corporations. Larger manufacturing firms often benefit from economies of scale, enhanced market recognition, and greater resource access, all contributing to their increased valuation. Investors perceive larger manufacturing companies as more resilient to market fluctuations, leading to elevated firm valuations. Consequently, within Saudi Arabia's manufacturing landscape, firm size emerges as a significant determinant of firm value.

Further analyses reveal that profitability exerts a positive and significant influence on firm value within the manufacturing companies of Saudi Arabia. These results indicate that as the profitability of Saudi Arabian manufacturing firms increases, so does their firm value. This finding is corroborated by relevant studies (Appah et al., 2023; Sa'adah & Indana, 2023), which also highlight the positive and significant impact of profitability on firm value. Based on these findings, it can be posited that profitability serves as a crucial predictor, particularly in large-scale businesses such as Saudi Arabian manufacturing firms. Profitable manufacturing entities not only demonstrate operational efficiency but also signal financial robustness and growth potential to investors. Consequently, investors tend to assign higher valuations to profitable manufacturing firms, reflecting their confidence in long-term value creation and market competitiveness.

Furthermore, firm leverage significantly influences firm value. Research conducted by Putra et al. (2023) and Sa'adah & Indana (2023) underscores the notable impact of leverage management on the valuation of manufacturing companies in Saudi Arabia. Their findings highlight a negative relationship between firm leverage and firm value in Saudi Arabian listed companies. In the manufacturing industry, characterized by capital-intensive operations, leverage could be a double-edged sword. While debt financing facilitates expansion and pursuit of growth opportunities, excessive leverage may increase financial risk and erode investor confidence. Therefore, it is argued that maintaining optimal leverage levels tailored to industry dynamics is essential for preserving firm value and sustaining long-term growth trajectories in Saudi Arabia's manufacturing sector.

Earnings management also exhibits a positive and significant impact on firm value. While specific investigations within Saudi Arabia's manufacturing sector are limited, broader literature underscores the adverse consequences of earnings management on firm value (Agustina & Malau, 2023; Folajimi et al., 2023), yielding similar results. Unethical practices related to earnings manipulation have the potential to diminish investor trust and distort perceptions of a company's financial well-being (Agustina & Malau, 2023). Thus, in the manufacturing industry, where market volatility and competitive pressures prevail, transparent financial reporting is imperative for upholding investor confidence and preserving firm value. Regulatory oversight and ethical corporate governance practices play pivotal roles in mitigating the detrimental effects of earnings management on firm value in Saudi Arabia's manufacturing sector. Consequently, it can be argued that manufacturing firms in Saudi Arabia play a crucial role in managing their earnings to enhance firm value. Moreover, the indirect effect results reveal that earnings management significantly mediates the relationship between audit quality and firm value. These findings suggest that high-quality audits in manufacturing firms are expected to foster transparency and reliability in financial reporting, thereby reducing the incentives for earnings management and ultimately improving firm value. Conversely, lower audit quality may create opportunities for earnings manipulation, potentially influencing firm valuations (Agustina & Malau, 2023). Thus, the study's findings underscore the importance of manufacturing companies in Saudi Arabia prioritizing audit quality to mitigate earnings management practices and enhance firm value. These findings are consistent with previous research indicating that earnings management significantly and positively mediates firm value (Al-Shouha et al., 2024).

The findings further reveal that the relationship between firm size and firm value within Saudi Arabia's manufacturing companies is mediated by earnings management practices. Larger manufacturing firms typically encounter heightened scrutiny and regulatory oversight, potentially deterring overt earnings manipulation. Conversely, smaller firms may perceive greater flexibility in managing earnings to meet investor expectations or address financial constraints. These arguments find support in previous studies (Al-Shouha et al., 2024), suggesting that larger manufacturing companies play a pivotal role in providing transparent information regarding earnings, thus enhancing firm value. These findings are corroborated by relevant studies indicating significant mediation by earnings management (Lajnef & Ellouz, 2024).

Additionally, earnings management significantly and positively mediates the relationship between profitability and firm value. Profitable manufacturing companies may be incentivized to manage earnings to sustain or enhance perceived financial performance, thereby influencing investor perceptions and firm valuations. Conversely, less profitable firms may resort to earnings management to conceal underlying financial weaknesses or meet debt obligations, impacting their market valuation. These arguments are supported by relevant research (Hussain et al., 2023), suggesting that the majority of manufacturing companies in Saudi Arabia are profitable and accurately present their earnings in financial statements, thus enhancing firm value. These findings align with previous studies indicating significant mediation by earnings management (Hussain et al., 2023; Ivone & Alvina, 2023).

Furthermore, the results demonstrate that earnings management negatively and significantly mediates the relationship between firm leverage and firm value. This could be attributed to highly leveraged textile companies facing pressure to manage earnings to alleviate financial distress or maintain investor confidence. Conversely, companies with lower leverage levels may have reduced incentives for earnings manipulation, potentially affecting their market valuation differently. This argument finds support in relevant research (Yusuf et al., 2023), suggesting that manufacturing companies in Saudi Arabia, particularly focused on leverage, may engage in earnings manipulation, leading to a decline in firm value. These findings are consistent with previous studies indicating significant mediation by earnings management (Ivone & Alvina, 2023; Yusuf et al., 2023). Based on these findings, it can be concluded that audit quality and firm-specific factors serve as important indicators for increasing firm values through earnings management as a mediating effect.

Implications and Future Directions

The study has implications both theoretically and practically. Theoretical implications include shedding light on the combined effect of firm-specific factors and audit quality, as well as exploring potential mediating effects in Saudi Arabia's manufacturing industry. This deepens understanding of value creation mechanisms unique to textile companies in Saudi Arabia and contributes to theoretical models of firm valuation. Moreover, the study offers insights into decision-making processes within the manufacturing sector, providing a better understanding of value creation dynamics in Saudi Arabia's business landscape. Additionally, the extended model of the study offers a framework for further research in this area.

The practical perspective of the study offers significant contributions to stakeholders in Saudi Arabia's manufacturing companies, both internally and externally. Firstly, the findings assist managers in formulating strategies by understanding how firm-specific characteristics and audit quality contribute to increasing firm value. Secondly, insights into the mediating role of earnings management inform corporate governance practices and regulatory policies, ensuring the integrity of financial reporting. Thirdly, the study promotes transparency and accountability, fostering a conducive environment for sustainable value creation, benefiting investors, businesses, and the broader economy. Lastly, the findings extend beyond individual firms to encompass regulatory frameworks and industry practices, facilitating informed decision-making and value creation strategies within Saudi Arabia's manufacturing sector.

The study, despite its significant results, has some limitations. Firstly, reliance solely on data from annual reports may limit analysis depth and overlook industry-specific factors, suggesting the need for future research to incorporate additional data sources and qualitative interviews. Secondly, focusing on firm-specific factors and audit quality may overlook broader macroeconomic or regulatory influences, indicating opportunities for future research to explore interactions between firm-specific determinants and external variables. Thirdly, longitudinal studies, comparative analyses, and qualitative research methods offer promising avenues to deepen understanding of value creation dynamics, inform strategic decision-making processes, and address complexities in Saudi Arabia's manufacturing industry.

Funding

This work was supported by the Deanship of Scientific Research, Vice President for Graduate Studies and Scientific Research, King Faisal University, Saudi Arabia [Grant A046].

References

Abu Afifa, M. M., Saleh, I., & Taqatqah, F. (2023). Mediating influence of earnings management in the nexus between audit quality and company value: new proof from Jordanian market. *Accounting Research Journal, 36*(2/3), 148-165. doi: https://doi.org/10.1108/ARJ-03-2021-0102

Adiputra, I. G., & Hermawan, A. (2020). The effect of corporate social responsibility, firm size, dividend policy and liquidity on firm value: Evidence from manufacturing companies in Indonesia. *International Journal of Innovation, Creativity and Change, 11*(6), 325-338. Retrieved from https://ijicc.net/images/Vol11iss6/11629_Adiputra_2020_E1_R.pdf

Aghion, P., Dewatripont, M., & Rey, P. (1997). Agency costs, firm behavior and the nature of competition. Retrieved from https://publications.ut-capitole.fr/id/eprint/1913/1/agency_costs.pdf

Agustina, E., & Malau, M. (2023). Financial Distress, Earnings Management, and Leverage Effect on Firm Value with Firm Size as a Moderation Variable. *International Journal of Social Service and Research, 3*(3), 856-868. doi: https://doi.org/10.46799/ijssr.v3i3.295

Ahmad, G., Subhan, M., Hayat, F., & Al-Faryan, M. A. S. (2023). Unravelling the truth: A bibliometric analysis of earnings management practices. *Cogent Business & Management, 10*(1), 2194088. doi: https://doi.org/10.1080/23311975.2023.2194088

Al-Shouha, L., Khasawneh, O., Ismail, W. N. S. W., & Rashid, N. M. N. N. M. (2024). The Mediating Effect of Accrual Earnings Management on The Relationship Between Ownership Structure and Firm Value: Evidence from Jordan. *Innovations, 21*(1), 317-330. Retrieved from https://www.businessperspectives.org/images/pdf/applications/publishing/templates/article/assets/19722/IMFI_2024_01_Al-Shouha.pdf

Almubarak, W. I., Chebbi, K., & Ammer, M. A. (2023). Unveiling the connection among ESG, earnings management, and financial distress: Insights from an emerging market. *Sustainability, 15*(16), 12348. doi: https://doi.org/10.3390/su151612348

Alsmady, A. A. (2023). The moderating role of audit quality between earning management and sustainable investment opportunities: Evidences from gulf cooperation council countries. *International Journal of Applied Economics, Finance and Accounting, 16*(1), 18-32. doi: https://doi.org/10.33094/ijaefa.v16i1.874

Alyaarubi, H. J., Alkindi, D. S., & Ahmed, E. R. (2021). Internal Auditing Quality and Earnings Management: Evidence from Sultanate of Oman. *Journal of Governance and Integrity, 4*(2), 115-124. doi: https://doi.org/10.15282/jgi.4.2.2021.6054

Anderson, M., Hyun, S., & Warsame, H. (2024). Corporate social responsibility, earnings management and firm performance: evidence from panel VAR estimation. *Review of Quantitative Finance and Accounting, 62*(1), 341-364. doi: https://doi.org/10.1007/s11156-023-01203-

Appah, T. R., Yuniarti, S., Sisharini, N., Sunarjo, S., & Yahya, N. (2023). Does Profitability Matter in the Relationship between Intellectual Capital and Firm Value? *Media Ekonomi Dan Manajemen, 38*(1), 57-70. doi: https://doi.org/10.56444/mem.v38i1.3255

Awuye, I. S. (2022). The impact of audit quality on earnings management: Evidence from France. *Journal of Accounting and Taxation, 14*, 52-63. doi: https://doi.org/10.5897/JAT2021.0514

Chi, G., & Gooda, A. R. (2024). Internal control, debt risk, CEO education and earnings management evidence from China. *Journal of Financial Reporting and Accounting, 22*(1), 52-78. doi: https://doi.org/10.1108/JFRA-05-2023-0237

Czarniawska-Joerges, B. (1999). *Writing management: Organization theory as a literary genre*. Oxford University Press, USA.

Du, Q., & Shen, R. (2018). Peer performance and earnings management. *Journal of Banking & Finance, 89*, 125-137. doi: https://doi.org/10.1016/j.jbankfin.2018.01.017

El-Deeb, M. S., Ismail, T. H., & El Banna, A. A. (2023). Does audit quality moderate the impact of environmental, social and governance disclosure on firm value? Further evidence from Egypt. *Journal of Humanities and Applied Social Sciences, 5*(4), 293-322. doi: https://doi.org/10.1108/JHASS-11-2022-0155

ElRabat, M. M., Abdel-Fattah, H. A.-N., & Mohamed, M. A.-A. (2023). The moderating role of firm size on the relationship between financial distress and earnings management. *The Academic Journal of Contemporary Commercial Research, 3*(1), 42-60. doi: https://doi.org/10.21608/AJCCR.2023.293122

Fahlevi, M., Moeljadi, M., Aisjah, S., & Djazuli, A. (2023). Assessing the Sustainability of Firm Value: The Impact of Board Composition, Firm Size, and Earnings Manipulation in the LQ45 Index. In *E3S Web of Conferences* (Vol. 426, pp. 02042). EDP Sciences. doi: https://doi.org/10.1051/e3sconf/202342602042

Folajimi, A. F., Aguguom, T. A., Ajah, C. C., Busari, T. A., Desi, A., & Obasi, M. O. (2023). Corporate Fraud, Earnings management and Firm Value: Empirical Application of M-Scores. *Journal of Law and Sustainable Development, 11*(4), e612-e612. doi: https://doi.org/10.55908/sdgs.v11i4.612

Garanina, T. (2023). CSR disclosure and state ownership: implications for earnings management and market value. *Journal of Accounting in Emerging Economies*. doi: https://doi.org/10.1108/JAEE-06-2022-0175

Ghaderi, Y., Didar, H., & Heydari, M. (2022). The Role of Corporate Governance on the Efficiency of Banks Considering the Mediating Role of Financial Health. *Iranian Journal of Accounting, Auditing and Finance, 6*(1), 35-51. doi: https://doi.org/10.22067/IJAAF.2022.41457

Ghardallou, W. (2023). The heterogeneous effect of leverage on firm performance: a quantile regression analysis. *International Journal of Islamic and Middle Eastern Finance and Management, 16*(1), 210-225. doi: https://doi.org/10.1108/IMEFM-12-2021-0490

Ghofir, A., & Yusuf, Y. (2020). Effect of firm size and leverage on earning management. *Journal of Industrial Engineering & Management Research, 1*(3), 218-225. Retrieved from https://www.researchgate.net/profile/Yusuf-Yusuf-5/publication/354529449

Habib, A. M. (2023). Does real earnings management affect a firm's environmental, social, and governance (ESG), financial performance, and total value? A moderated mediation analysis. *Environment, Development and Sustainability*, 1-30. doi: https://doi.org/10.1007/s10668-023-03809-6

Han, E., Miller, M. R., DeVeaux, C., Jun, H., Nowak, K. L., Hancock, J. T., et al. (2023). People, places, and time: a large-scale, longitudinal study of transformed avatars and environmental context in group interaction in the metaverse. *Journal of Computer-Mediated Communication, 28*(2), zmac031. doi: https://doi.org/10.1093/jcmc/zmac031

Hapsoro, D., & Bahantwelu, M. I. (2020). Does earning management mediate the effect of capital structure on company value? *Jurnal Ekonomi Dan Bisnis, 23*(1), 53-68. doi: https://doi.org/10.24914/jeb.v23i1.2531

Hardi, I., Idroes, G. M., Hardia, N. A. K., Fajri, I., Furqan, N., Noviandy, T. R., & Utami, R. T. (2023). Assessing the Linkage Between Sustainability Reporting and Indonesia's Firm Value: The Role of Firm Size and Leverage. *Indatu Journal of Management and Accounting, 1*(1), 21-28. doi: https://doi.org/10.60084/ijma.v1i1.79

Hsiao, C., Pesaran, M. H., & Pick, A. (2012). Diagnostic tests of cross-section independence for limited dependent variable panel data models. *Oxford Bulletin of Economics and Statistics, 74*(2), 253-277. doi: https://doi.org/10.1111/j.1468-0084.2011.00646.x

Huang, Y.-T., Liu, C. Z., & Wang, Y.-F. (2014). Audit quality of the integrated supply chain-Evidence from Taiwan electronic industry. *Journal of Accounting and Finance, 14*(4), 104. Retrieved from http://www.na-businesspress.com/JAF/LiuCZ_Web14_4_.pdf

Hussain, R. T., Akhtar, K., Ahmad, F., Salman, A., & Malik, S. (2023). Examining the intervening effect of earning management in governance mechanism and financial misstatement with lens of SDG and ESG: a study on non-financial firms of Pakistan. *Environmental Science and Pollution Research*, 1-17. doi: https://doi.org/10.1007/s11356-023-30128-0

Ibrahim, U. A., & Isiaka, A. (2020). Effect of financial leverage on firm value: Evidence from selected firms quoted on the Nigerian stock exchange. *European Journal of Business and Management, 12*(3), 124-135. Retrieved from https://core.ac.uk/download/pdf/287192837.pdf

Islam, M. A., Ali, R., & Ahmad, Z. (2011). Is modified Jones model effective in detecting earnings management? Evidence from a developing economy. *International Journal of Economics and Finance, 3*(2), 116-125. Retrieved from https://epe.lac-bac.gc.ca/100/201/300/intl_journal_economics_finance/2011/IJEF-V3N2-All.pdf#page=118

Ivone, I., & Alvina, A. (2023). Analysis of the Effect of CSR on Corporate Value Mediated with Profit Management. *Jurnal Akuntansi, 15*(2), 343-352. doi: https://doi.org/10.28932/jam.v15i2.7567

Jiraporn, P., Miller, G. A., Yoon, S. S., & Kim, Y. S. (2008). Is earnings management opportunistic or beneficial? An agency theory perspective. *International Review of financial analysis, 17*(3), 622-634. doi: https://doi.org/10.1016/j.irfa.2006.10.005

Johannesson, E., Ohlson, J. A., & Zhai, S. W. (2023). The explanatory power of explanatory variables. *Review of Accounting Studies*, 1-31. doi: https://doi.org/10.1007/s11142-023-09781

Junaidi, R., Lumbanraja, M. M. M., Berampu, L. T., & Firmansyah, S. (2024). The Moderating Effect of Firm Size on Determinant Factor of Firm Value of IDX F&B's Subsector. *Journal of Applied Business Administration, 8*(1), 131-143.

Kotut, L., Bhatti, N., Hassan, T., Haqq, D., & Saaty, M. (2024). Griot-Style Methodology: Longitudinal Study of Navigating Design With Unwritten Stories. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (Honolulu, HI, USA)(CHI'24). Association for Computing Machinery, New York, NY, USA* (pp. 1-13). Retrieved from https://faculty.washington.edu/kotut/papers/CHI2024-Griot-Style-Methodology.pdf

Kusuma, M. A., & Malau, M. (2023). Analysis of Audit Quality, Bonus Mechanism, and Company Size on Earning Management with Managerial Ownership as Moderating. *Journal of Economics, Finance and Accounting Studies, 5*(3), 58-64. doi: https://doi.org/10.32996/jefas.2023.5.3.5

Lajnef, K., & Ellouz, S. (2024). Mediation effect of earnings management techniques on the relationship between CSR and corporate performance: evidence from the civil law countries. *International Journal of Disclosure and Governance*, 1-21. doi: https://doi.org/10.1057/s41310-023-00219-y

Le, B., & Moore, P. H. (2023). The impact of audit quality on earnings management and cost of equity capital: evidence from a developing market. *Journal of Financial Reporting and Accounting, 21*(3), 695-728. doi: https://doi.org/10.1108/JFRA-09-2021-0284

Liu, Y., Wu, H., Wang, J., & Long, M. (2022). Non-stationary transformers: Exploring the stationarity in time series forecasting. *Advances in Neural Information Processing Systems, 35*, 9881-9893. Retrieved from https://proceedings.neurips.cc/paper_files/paper/2022/hash/4054556fcaa934b0bf76da52cf4f92cb-Abstract-Conference.html

Löfgren, K.-G., Persson, T., & Weibull, J. W. (2002). Markets with asymmetric information: the contributions of George Akerlof, Michael Spence and Joseph Stiglitz. *The Scandinavian Journal of Economics*, 195-211. Retrieved from https://www.jstor.org/stable/3441066

Lustrilanang, P., Suwarno, S., Arif, B., & Subowo, H. (2023). The effect of auditing quality and internal control on financial resilience in public sector organi-zations: Information quality as the mediating factor. *International Journal of Data and Network Science, 7*(4), 1573-1580. doi: https://doi.org/10.5267/j.ijdns.2023.8.006

Mamatzakis, E., Pegkas, P., & Staikouras, C. (2023). The impact of debt, taxation and financial crisis on earnings management: The case of Greece. *Managerial Finance, 49*(1), 110-134. doi: https://doi.org/10.1108/MF-01-2022-0052

Mehr, A. M. (2020). Investigating the relationship between earnings management, information disclosure and information asymmetry in the listed companies in Tehran Stock Exchange. *Journal of Management and Accounting Studies, 8*(1), 9-14. doi: https://doi.org/10.24200/jmas.vol8iss1pp9-14

Murni, S., Rahmawati, R., Widagdo, A. K., Sudaryono, E. A., & Setiawan, D. (2023). Effect of family control on earnings management: The role of leverage. *Risks, 11*(2), 28. doi: https://doi.org/10.3390/risks11020028

Nurseha, N., Elwisam, E., & Digdowiseiso, K. (2024). The Effect of Profitability and Firm Size on Firm Value with Capital Structure as an Intervening Variable in Lq 45 Companies on The Indonesia Stock Exchange For The Period 2014-2016. *Journal of Social Science, 5*(3), 922-934. doi: https://doi.org/10.46799/jss.v5i3.841

Pertiwi, S., Rahmawati, I. Y., Darmawan, A., & Innayah, M. N. (2023). Effect of Profitability, Firm Size and Liquidity on Firm Value With Capital Structure as Intervening Variable. *Media Ekonomi, 22*(2), 37-58. doi: https://doi.org/10.30595/medek.v22i2.13846

Putra, H. N., Salim, U., & Aisjah, S. (2023). EFFECT OF DEBT, FIRM SIZE, AND DIVIDEND POLICY ON FIRM VALUE MEDIATED BY CASH HOLDINGS. *Jurnal Aplikasi Manajemen, 21*(4), 1061-1073. doi: https://doi.org/10.21776/ub.jam.2023.021.04.15

Qulyubi, A., Suprayitno, E., Asnawi, N., & Segaf, S. (2023). Effect of company size ownership concentration auditor reputation board of commissioners and risk management committee on disclosure of enterprise risk management. *Enrichment: Journal of Management, 13*(3), 1851-1860. doi: https://doi.org/10.35335/enrichment.v13i3.1495

Sa'adah, U. N. m., & Indana, R. (2023). Analysis of Capital Structure and Profitability on Firm Value of Companies Listed on the Sharia Stock List. *Journal of Accounting Inquiry, 2*(2), 096-104. doi: https://doi.org/10.14421/jai.2023.2.2.096-104

Salehi, M., & Arianpoor, A. (2021). The relationship among financial and non-financial aspects of business sustainability performance: evidence from Iranian panel data. *The TQM Journal, 33*(6), 1447-1468. doi: https://doi.org/10.1108/TQM-08-2020-0175

Sawarni, K. S., Narayanasamy, S., & Padhan, P. C. (2023). Impact of earnings management on working capital management efficiency. *Finance Research Letters, 54*, 103778. doi: https://doi.org/10.1016/j.frl.2023.103778

Shahzad, A., Nazir, M. S., Qamar, M. A. J., & Abid, A. (2023). Impact of corporate governance on firm value in the presence of earning quality and real earnings management. *International Journal of Business Excellence, 29*(3), 409-436. doi: https://doi.org/10.1504/IJBEX.2023.129103

Tannady, H., Pahlawi, N., Hernawan, M. A., Arta, D. N. C., & Yusuf, S. D. (2023). Role of Stock Performance as an Intervening Variable in a Relationship Between Profitability, Leverage, Growth and Company Value. *JEMSI (Jurnal Ekonomi, Manajemen, dan Akuntansi), 9*(2), 220-225. doi: https://doi.org/10.35870/jemsi.v9i2.1016

Wagner, M., & Blom, J. (2011). The reciprocal and non-linear relationship of sustainability and financial perfor mance. *Business Ethics: A European Review, 20*(4), 418-432. doi: https://doi.org/10.1111/j.1467-8608.2011.01622.x

Wang, Y., Abbasi, K., Babajide, B., & Yekini, K. C. (2020). Corporate governance mechanisms and firm performance: evidence from the emerging market following the revised CG code. *Corporate Governance: The international journal of business in society, 20*(1), 158-174. doi: https://doi.org/10.1108/CG-07-2018-0244

Wijaya, A. L. (2020). The effect of audit quality on firm value: a case in Indonesian manufacturing firm. Retrieved from https://www.um.edu.mt/library/oar/handle/123456789/49952

Yusuf, A., Ratnawati, T., & Brahmayanti, I. A. S. (2023). The Effect of Leverage, Liquidity and Firm Size on Firm Value with Earning Management as Mediator and Good Corporate Governance as Moderator of Real Estate, Property and Building Construction in The Indonesia Stock Exchange. *Growth, 6581*, 48. Retrieved from https://ijefm.co.in/v6i1/Doc/17.pdf