





“Quality of financial reporting and the practice of enterprise risk management: Evidence from listed United States industrial companies”

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QUALITY OF FINANCIAL REPORTING AND THE PRACTICE OF ENTERPRISE RISK MANAGEMENT: EVIDENCE FROM LISTED UNITED STATES INDUSTRIAL COMPANIES

Abstract

This study aims to empirically investigate the impact of Enterprise Risk Management (ERM) practices on the quality of financial reporting (QFR) among U.S. industrial firms. It focuses on key ERM practice indicators such as board-level risk oversight, cash flow volatility, and value-at-risk (VaR). A static panel data approach was employed using data from 18 industrial firms registered on the New York Stock Exchange, covering the period from 2014 to 2022. The finding revealed that ERM significantly enhances the quality of financial reporting. Particularly, the board of risk management committees and VaR have a positive and significant influence on the quality of financial reporting. However, volatility in cash flows has an unfavorable and significant influence, thereby reducing the reliability of financial information disclosed by U.S. industrial companies. The study's empirical evidence can deepen prospective research by stimulating in-depth examination into the implementation of ERM, which enriches transparency and alleviates the risk related to financial reporting. It is recommended that regulatory bodies of the United States should rigorously follow the protocols of a corporate setting, COSO context, and all other legislation regarding risk management, thus preventing the dissemination of misleading accounting information and enhancing the reliability and credibility of the financial statements.

Keywords

risk management, performance, volatility, reliability, transparency, disclosure, governance, accuracy

JEL Classification

G32, M41

INTRODUCTION

In recent years, industrial companies have faced an increase in the nature and scale of the risks, which in turn affect the business environment. Economic activities, operational uncertainties, and global market fluctuations have a dynamic nature that ensures the need for strategic and comprehensive risk management. In this regard, financial reporting serves as an effective tool conveying credible information to stakeholders and reflecting risk management effectiveness. Consequently, the need for credible and reliable financial information has increased, and integrating effective risk management practices into corporate reporting has become a primary concern for industrial firms, particularly in developed economies like the United States, where regulatory scrutiny is high and stakeholder trust is paramount.

Enterprise Risk Management (ERM) is a comprehensive framework designed to identify, assess, and mitigate organizational risks across all levels that require substantial attention. However, despite growing recognition of its importance, the extent to which ERM practices contribute to improving the quality of financial reporting (QFR) remains under-researched. In particular, the challenge lies in the lim-

ited empirical evidence that links specific elements of ERM, such as board risk management committee (BRMC), cash flow volatility (CFV), and value-at-risk (VaR), with measurable improvements in QFR, especially in the context of industrial firms operating outside the financial sector.

This gap in the literature raises the need for further investigation into how ERM mechanisms affect the accuracy, transparency, and reliability of financial disclosures. Addressing this issue is crucial for enhancing stakeholder confidence through better risk governance, particularly during economic uncertainty.

1. LITERATURE REVIEW AND RESEARCH HYPOTHESES

Recently, the need for organizations to adopt robust frameworks to identify, assess, and mitigate risks is heightening, especially in light of the current economic and environmental challenges facing the world; thereby, global markets have become more complex and interconnected. Effective risk control is achievable only with a framework that can be realized through ERM, a tool for governance that aligns risk with the strategic objectives of the organization. This provides successful risk management on different levels, thus promoting operational efficiency and financial transparency (Meier, 2000). Within this framework, the notion of ERM has been theoretically described in numerous ways, with researchers providing different definitions and insights (Baloyi & Ozumba, 2020; Zakharzhevskaya, 2022; Lisdiono et al., 2022). Due to the various interpretations and approaches to defining ERM, a reflective integration of existing studies is necessary to highlight important theoretical gaps and empirical inconsistencies.

This study is grounded in a set of complementary theoretical perspectives that collectively offer a robust explanation of the dynamics between ERM, corporate governance, and the quality of financial disclosure. Agency theory (Jensen & Meckling, 1976) suggests that internal monitoring mechanisms such as risk management committees help align the interests of managers with those of shareholders, thereby reducing information asymmetry and enhancing the transparency and reliability of financial reporting. In parallel, signaling theory (Spence, 1973) posits that effective risk disclosures, such as those reflecting stable cash flows or the adoption of ERM frameworks,

serve as positive signals to external stakeholders about a company's financial health and commitment to sound governance practices.

Additionally, resource dependence theory (Pfeffer & Salancik, 1978) emphasizes the importance of securing external expertise and resources to strengthen organizational decision-making and adaptive capacity toward uncertainty. This view highlights the strategic role of governance structures such as independent boards and specialized risk committees in facilitating informed and adaptive responses to emerging risks. Stakeholder theory (Freeman, 1984) further enriches this building block by asserting that companies must consider the interests of a broad range of stakeholders, including employees, customers, suppliers, and the community, to ensure long-term sustainability. ERM is in line with this stakeholder orientation by providing structured processes for identifying and managing risks that could affect diverse stakeholder groups, ultimately fostering trust and mitigating potential conflicts.

The stewardship theory by Donaldson and Davis (1991) and other corporate governance theories integrate these perspectives by suggesting frameworks of leadership that are conducive to positive behavior and accountability within organizations. More specifically, stewardship theory posits that the higher the level of trust and resources provided, the more managers can act in the interests of both the shareholders and other stakeholders. All these theories combined provide a useful perspective on how ERM systems and corporate governance frameworks work together to shape the quality and credibility of corporate disclosures.

Despite the theoretical emphasis on ERM, empirical studies quantifying ERM practices remain limited, prompting further investigation into the

importance of ERM in enhancing risk reporting. Many empirical studies lack detailed quantitative measures of ERM, making it difficult to assess the effectiveness of this system accurately across different contexts. To address this gap, multi-dimensional quantitative measures of ERM were employed by incorporating different proxies, namely, BRMC, CFV, and VaR.

One of the most widely referenced frameworks for ERM implementation is the COSO model, which outlines the importance of a separate BRMC's existence (Committee of Sponsoring Organizations of the Treadway Commission [COSO], 2004). As a result, it would focus on providing technically-centric and analytical risk management, which enhances the organization's operational, strategic, and reporting targets. When ERM is embedded within corporate governance, the internal control environment is significantly strengthened, and the effectiveness of internal audits and financial reporting processes is improved (COSO, 2004).

The intersection of ERM with corporate governance is particularly vital. The importance of stabilizing organizational governance and providing a structured approach to managing risks has been documented. This ensures its integration into core decision-making processes and enhances more transparent and reliable disclosure. Governance structures, including independent audit committees, play a pivotal role in promoting accountability and reducing unethical accounting practices, thus enhancing the trustworthiness of financial reports (Donatella & Tagesson, 2021; Alzeban, 2020).

Empirical evidence from various studies **highlighted this relationship**: Alzeban (2020) investigated the influence of CEOs and audit committees on the QFR, finding positive results in European firms; Sawalqa et al. (2021) adopted a survey approach to identify the nexus between the quality of internal audits and the observance of audit committees with management requisites in Jordan, and found that both were positively and significantly associated; Gao et al. (2025) suggest that, on opportunistic financial behaviour, such as earnings management, effective ERM can act as a constraint. It provides empirical evidence that ERM significantly reduce firms'

future performance volatility and enhances QFR; Haruna et al. (2018) reinforced this relationship by showing that the characteristics of a board committee are effective in lessening the consequences of exercising opportunistic accounting in corporate governance and thus improving the quality of the information in reporting financial records.

The critical integrating role of both internal audit operations and ERM in improving the QFR and reliability in firms listed on the Amman Stock Exchange has been confirmed (Mustafa and Al-Nimer, 2023). Conversely, Song and Kemp (2013) found a statistically insignificant effect of the ERM framework in highlighting the weaknesses in internal audits. This conflict in findings suggests that the ERM framework's effectiveness may vary based on the specific organizational context, such as sector, region, or the maturity of the risk management systems used.

CFV is important not only for internal auditing and improving financial reporting transparency, but also for determining the way firms manage their earnings. Specifically, cash flow instability can undermine financial stability, encouraging managers to manipulate earnings to present a more favorable financial position. For instance, Foroozian and Gaskari (2016) analyze the data of 90 firms on the Tehran Stock Exchange; they report a significant relationship between cash flow fluctuations and increased earnings management. ERM is concerned with such risks and attempts to minimize CFV, thereby reducing opportunities for earnings manipulation. However, when faced with high volatility, some firms may prioritize the appearance of financial stability over transparent disclosure, ultimately compromising the reliability of financial reports. Moreover, ERM also plays a vital role in enhancing the generation of cash flow to better financial predictability (Pagach and Warr, 2010).

Building on this framework, Huang et al. (2015) examined the impact of cash holdings on financial reporting within the Sarbanes-Oxley 404 internal control framework. Their study found that investing in cash, non-cash assets, and securities plays a crucial role in supporting companies with weak internal control.

Companies with weak internal control often use cash reserves to compensate for risk exposure, reflecting a reactive rather than proactive risk posture. In contrast, companies with robust and efficient controls exhibit less reliance on such investments, as their investments are managed better.

In a U.S.-based study, Wei (2018) used the COMPUSTAT database to explore the nexus between the variation in cash flow and the corporate value of the companies. The empirical findings showed that fluctuations in cash flows negatively and significantly affect the firm's value, as uncertainty leads stakeholders to perceive the firm as riskier, thereby reducing its perceived worth.

The increasing risk and complexity in business operations have emphasized the importance of comprehensive risk disclosure across the entire entity. These findings support the view that managing CFV is essential, not only for liquidity but also for enhancing reporting credibility.

Despite the widespread use of VaR models, the existing literature (e.g., Kuester et al., 2006) has criticized their inability to forecast risks accurately, particularly under non-normal market conditions, although they were capable of providing a quantitative measure of potential loss within a given confidence level. These limitations emphasize the need for broader frameworks like ERM to better incorporate risk assessment with financial planning.

Notably, incorporating heteroscedasticity into the estimation process improves the model's reliability, making it a more dependable tool for decision-makers.

In addition to estimation errors, VaR models struggle under conditions of unbalanced or non-normal distributions. In such cases, the measure may fail to provide a comprehensive picture of potential losses, particularly in evaluating the expected shortfall or losses beyond the selected confidence level. Yamai and Yoshihara (2002) demonstrated that VaR may significantly underestimate the risk of securities that follow fat-tailed distributions, leading to misleading conclusions about financial stability.

Further criticisms stem from the method's reliance on historical simulations. For example,

Pérignon and Smith (2010) criticized the VaR reliance on historical simulation because it incorporates limited information, particularly regarding the volatility in the future, and hence fails to adapt to structural changes in market conditions.

Additionally, there has been little to no improvement over time in the quality of VaR disclosures, limiting their usefulness for stakeholders. These critiques suggest that while VaR may serve as a baseline metric, it should be complemented with scenario analysis and stress testing for more comprehensive risk assessments.

In light of the previously mentioned limitations of traditional VaR models in predicting financial risks, organizations have increasingly adopted broader frameworks such as ERM, which integrate risk assessment with strategic financial planning.

Empirical investigations in emerging markets provide additional insights into the evolving nature of ERM. In Nigeria, Adedayo et al. (2019) show that ERM improves accounting information quality, particularly post-ERM implementation. However, more context-specific research is needed to explore ERM's impact in different sectors and regions.

This review highlights the pivotal role of ERM in enhancing the quality of financial reporting, emphasizing the importance of components such as BRMC, CFV, and VaR models. However, the literature reveals notable gaps, particularly in industrial sectors within highly regulated economies like the United States.

Numerous studies continue to provide different results, due to their geographic, industry, and methodological boundaries. At the same time, certain tools, such as VaR, may prove insufficient unless supported by more comprehensive risk assessment frameworks. To fully understand how ERM practices affect financial reporting quality in different institutional and economic environments, integrated research in a context-sensitive manner must be applied.

Based on the above discussion, the following hypotheses were formulated:

- H1: *BRM committee has a positive and significant impact on the QFR-registered industrial corporations in the United States.*
- H2: *CFV has an insignificant influence on the QFR of registered industrial corporations in the United States.*
- H3: *VaR has an insignificant influence on the QFR of registered industrial corporations in the United States.*

2. DATA, MEASUREMENT, AND METHOD

This study employed a quantitative approach within the positivist paradigm, assuming that empirical data are utilized to observe and measure objective reality, and to reflect the research focus on the quality of accounting numbers. The study focused on the financial reports of U.S.-based industrial companies listed on the New York Stock Exchange (NYSE), considering the ERM practices. The study employed a correlational design and utilized balanced panel data drawn from the annual reports of 18 industrial companies listed on the NYSE. The data covered the years 2014 to 2022, representing the most recent and complete reporting period available at the time of analysis. The decision to focus on U.S. companies was justified by the accessibility and reliability of financial and risk management data, as well as the fact that the second and third authors were on academic sabbaticals in the United States during the time they were conducting this research, affiliated with American universities at that time. Moreover, the U.S. financial market is among the most regulated and data-rich environments globally, making it a suitable setting for examining the interplay between ERM and QFR.

The attributes of panel data involve both time series and cross-sectional challenges regarding regression. For example, the sample may demonstrate several similar and dissimilar characteristics, which normally bring multicollinearity and heteroscedasticity into the model and thus cause spurious estimation of the model. In this regard, the Breuch-Pagan/Cook-Weisberg test is used to detect whether heteroscedasticity is present or not

in the model. Furthermore, the variance inflation factor (VIF) is applied to check the multicollinearity. Consequently, to bring out reliable outcomes with panel data, this study employed fixed effect (FE) and random effect (RE) techniques along with pooled Ordinary Least Squares (POLS) regression. The FE employed a demeaned approach to exclude the country-specific effect from the model; however, the random effect RE used the quasi-demeaned approach to account for the country-specific effect. To decide which of the FE or RE models is more appropriate and efficient for our dataset, the Hausman test is employed. Moreover, a further test Breusch-Pagan Lagrange Multiplier (LM) test for RE, is applied to choose between POLS and RE. Data analysis is conducted on the STATA version 15.

Beyond the challenges of estimating discretionary accruals, this study adopts the modified accrual model proposed by Kim et al. (2012), which is considered more robust and reliable for estimating discretionary accruals as proxies of QFR. Unlike traditional models, this approach decomposes total accruals into current and non-current components, enabling more precise identification of earnings management, ultimately enhancing the reliability of financial reporting quality assessment.

Discretionary accruals are estimated as the residuals from a regression model of total accruals. The general specification of the model is presented as follows:

$$TA_{it} = \alpha_0 + \beta_1 \cdot CA_{it} + \beta_2 \cdot NCA_{it} + \varepsilon_{it}, \quad (1)$$

where TA_{it} – Total accruals for firm i in year t , CA_{it} – Total current accruals for firm i in year t , NCA_{it} – Total non-current accruals for firm i in year t , ε_{it} – Residual term, representing discretionary accruals.

A more comprehensive version of the model incorporates scaled changes in balance sheet items to separate the components of accruals more clearly:

$$\frac{TA_{it}}{A_{i,t-1}} = \alpha_0 + \beta_1 \frac{\Delta REV_{it}}{A_{i,t-1}} + \beta_2 \frac{\Delta NREC_{it}}{A_{i,t-1}} + \beta_3 \frac{\Delta PPE_{it}}{A_{i,t-1}} + \beta_4 \frac{\Delta INTG_{it}}{A_{i,t-1}} + \varepsilon_{it}, \quad (2)$$

where TA_{it} – Denotes total accruals for firm i in year t , $A_{i,t-1}$ – Total assets at the beginning of year t , ΔREV_{it} – Proxies current accruals and represent the changes in revenues for firm i in year t , $\Delta NREC_{it}$ – Represent the changes in net receivables for firm i in year t , also serving as a proxy for current accruals, ΔPPE_{it} – Denote changes in property, plant, and equipment as proxies for non-current accruals, $\Delta INTG_{it}$ – Change in intangible assets (proxy for non-current accruals), ε_{it} – Residual term, representing discretionary accruals.

The dependent variable QFR is proxied by the absolute value of the residuals ε_{it} obtained from this model (Dechow & Dichev, 2002). A higher absolute residual indicates greater discretionary accruals and hence lower QFR, reflecting a greater likelihood of earnings management.

This study uses several independent variables, including the BRMC, CFV, and VaR. BRMC is defined as the percentage of board members who are concurrently serving on the firm's risk management committee, a method supported by Klein's (2002) study on audit committee independence. CFV is calculated as the standard deviation of annual operating cash flows, reflecting the firm's ability to manage cash flows, as discussed in Olayinka et al. (2017). VaR is employed as a measure of financial risk, estimated as the weighted portfolio return minus the annual value of the portfolio, following the approach suggested by Olayinka et al. (2017).

The study also controlled for firms' characteristics, including Firm SIZE, GRW, and LEV. Firm SIZE is measured using the natural logarithm of total assets; this measure is widely accepted in accounting research (Klein, 2002). Firm GRW is calculated as the ratio of total sales to total assets, proxied the company's expansion. Lastly, the LEV ratio is computed as the ratio of total debt to total assets, which is commonly used to assess a firm's financial structure (Dechow & Dichev, 2002). The error term (ε_{it}) represents other unobservable factors affecting financial reporting quality.

To empirically examine the relationship between enterprise risk management mechanisms and QFR, the study estimates the following regression model:

$$FRQ_{it} = \alpha_0 + \beta_1 \cdot BRMC_{it} + \beta_2 \cdot CFV_{it} + \beta_3 \cdot VaR_{it} + \beta_4 \cdot SIZE_{it} + \beta_5 \cdot GRW_{it} + \beta_6 \cdot LEV_{it} + \varepsilon_{it}, \quad (3)$$

where QFR_{it} – Financial reporting quality for firm i in year t , $BRMC_{it}$ – Board Risk Management Committee for firm i in year t , CFV_{it} – Cash Flow Volatility for firm i in year t , VaR_{it} – Value-at-Risk for firm i in year t , $SIZE_{it}$ – Firm size for firm i in year t , GRW_{it} – Firm growth for firm i in year t , LEV_{it} – Leverage ratio for firm i in year t , ε_{it} – Error term.

By utilizing this model, the study contributes to the literature by providing a more accurate measure of QFR in the context of risk oversight mechanisms (BRMC, CFV, VaR) that influence financial reporting quality, while controlling for firm-specific characteristics such as SIZE, GRW, and LEV.

3. RESULTS

This section examines the variables by applying descriptive statistics, correlation coefficient matrix, diagnostic test (Breusch and Pagan / Cook and Weisberg for heteroscedasticity; variance inflation factor for multicollinearity), and the findings of the regression analysis.

Descriptive statistics of the studied variable are shown in Table 1. The mean score of the QFR was 0.891, ranging from 0.132 to 4.568. The wide range between the minimum and maximum of QFR indicates a high variability in the financial reporting practices across firms. The average value of BRMC was 1.76, with min and max values of 0.843 and 2.68, respectively. The averages of the CFV of selected firms and VaR were 0.275 and 0.056, with extreme values of 0.067 and -0.023 as min values and 0.799 and 0.893 as max values, respectively. While firm SIZE, GRW, and LEV had average values of 0.169, 0.646, and 0.172, ranging from minimum values of 0.051, 0.32, 0.067 to 0.903, 0.859, and 0.75 maximum values, respectively.

Table 2 shows the correlation between the dependent and all explanatory variables and the correlation between the explanatory variables themselves. It is noticed that QFR was negatively associated

Table 1. Descriptive statistics

Variable	Mean	Std. deviation	Min	Max
QFR	0.891	0.632	0.132	4.568
BRMC	67.1	0.742	0.843	2.68
CFV	0.275	0.169	0.067	0.799
VaR	0.056	0.159	-0.023	0.893
SIZE	0.169	0.212	0.051	0.903
GRW	0.646	0.161	0.32	0.859
LEV	0.172	0.179	0.067	0.75

Table 2. Correlation matrix

Variables	QFR	BRMC	CFV	VaR	SIZE	GRW	LEV	VIF
QFR	1.000							
BRMC	-0.298	1.000						1.27
CFV	-0.386	0.781	1.000					1.12
VaR	0.421	-0.612	0.346	1.000				1.08
SIZE	-0.511	0.795	0.824	-0.196	1.000			1.32
GRW	-0.24	0.211	0.293	-0.023	0.227	1.000		1.59
LEV	-0.187	0.822	0.784	-0.327	0.721	0.278	1.000	1.88

with BRMC, CFV, SIZE, GRW, and LEV, with a correlation coefficient of -0.298, -0.386, -0.511, -0.24, and -0.187, respectively. However, it had a positive association with the VaR variable with a coefficient of 0.421. Moreover, the VIF is also incorporated in Table 2 to examine the multicollinearity between the studied variables. As per the study of Xu and Li (2022), the model did not experience the problem of multicollinearity if the VIF score is less than 5. As it is noticed that the overall value of the VIF score was less than 5, it is concluded that multicollinearity is not a major problem in our analysis.

Heteroscedasticity was tested using the Breusch-Pagan and Cook-Weisberg tests (Breusch & Pagan, 1980; Cook & Weisberg, 1983). Table 3 portrays the results of the heteroscedasticity test, which indicates that Prob > chi2 does not exceed the 5% threshold level, providing evidence of the existence of heteroscedasticity in the model. Therefore, robust standard errors were used to handle the heteroscedasticity problem (White, 1980).

Table 3. Heteroscedasticity tests

Source: Output STATA 15.0.

Test Summary	chi2 (1)	Prob > chi2.
Breusch and Pagan/Cook and Weisberg	6.12	0.033

To select between the FE model and the RE model, the Hausman test was employed, and its findings are presented in Table 4. As shown, the null hypothesis of the Hausman test was not rejected, indicating that the RE is more appropriate.

pothesis of the Hausman test was not rejected, indicating that the RE is more appropriate.

Table 4. Hausman test

Source: Output STATA 15.0.

Test Summary	chi2 (9)	Prob>chi2.
Cross-section random	5.39	0.682

To further choose between the POLS model and the RE model, the Breusch-Pagan LM test is applied. Table 5 revealed the results of the Breusch-Pagan LM test, which showed that the null hypothesis was not rejected as the p-value exceeded 0.05 ($p = 0.963$), suggesting that the RE model does not significantly improve upon the POLS model.

Table 5. Breusch-Pagan LM test

Source: STATA 15.0.

Test Summary	chibar2 (01)	Prob > chibar2
Breusch and Pagan LM	0.19	0.963

While the Hausman test favored the RE model, the LM test indicated no significant panel effects (p -value = 0.963). Since the LM test showed that the RE model is not superior to POLS, the absence of significant panel effects supports using the POLS model as the most appropriate choice.

Table 6 demonstrates the empirical findings highlighting explanatory variables (BRMC, CFV, VaR, SIZE, GRW, and LEV) on the dependent variable QFR. The statistics of R-squared were around 39%,

indicating that 39% of the total variation in QFR was explained by the joint effort of independent variables. In other words, R-squared implies the model's fitness and proper selection of variables, which is verified by the F-statistic of 7.921 with a 1% significance level.

Table 6. Regression results

Variable	Coefficient	t-statistics	p-value
BRMC	4.066	2.93*	0.008
CFV	-3.67	-3.48*	0.002
VaR	0.786	3.92*	0.001
SIZE	-0.239	-0.315	0.925
GRW	-0.124	-0.063	0.562
LEV	-0.097	-1.82	0.25
Constant	2.091	3.66	0.002

F= 7.921
F-prob. = 000
R² = 0.389

Note: * The result is significant at the 0.01 level ($p \leq 0.01$).

The findings showed that the BRMC had a substantial and positive influence on the QFR of selected firms in the United States. In other words, this signifies that for every 1% increase in the BRMC, it improves QFR significantly by 4.06%. By looking at the coefficients of BRMC, hypothesis 1 is supported by this result, since it is statistically significant (p -value = 0.008, ≤ 0.01). That is, BRMC has a positive and significant impact on the QFR-registered industrial corporations in the United States. On the other hand, it was observed that the CFV of selected firms in the United States had a negative but significant effect on the QFR. This implies that every 1% rise in the cash flow of a combination of industrial firms listed in the United States significantly reduces the QFR by 3.6%. Regarding this outcome (p -value = 0.002, ≤ 0.01), hypothesis 2 was not supported, while the alternative was supported. That is, CFV has a significant negative influence on the QFR of registered industrial corporations in the United States. Moreover, VaR had a positive and significant impact on the QFR of composite industrial corporations in the United States (p -value = 0.001, ≤ 0.01). The result indicates that every 1% rise in VaR by the management of composite industrial corporations in the United States significantly improves the QFR (the coefficient of 0.79%). Based on this outcome, hypothesis 3 is also not supported, and the alternative hypothesis would be accepted, that is, VaR has a significant positive impact on the

QFR of registered industrial corporations in the United States. However, according to control variables, firm SIZE, GRW, and LEV had an insignificant influence on the QFR of registered industrial corporations in the United States (p -value > 0.10).

4. DISCUSSION

The findings show that in the presence of a BRMC, the QFR would be positively and significantly affected in US industrial firms. This outcome is not unexpected, it suggests that a well-established risk management structure at the board level strengthens the governance mechanisms and internal controls within the organization, thereby enhancing the credibility and reliability of financial reporting. This result is justified by the role of risk committees in mitigating unethical accounting practices, enhancing risk control, and strategic alignment.

Such findings align with prior research, such as Donatella and Tagesson (2021) and Alzeban (2020), as they revealed that board structures and the audit committee's role are paramount to improving QFR. Likewise, Haruna et al. (2018) demonstrate that important characteristics of board committees enhance the dependability of financial statements and minimize opportunistic accounting behaviors. This supports Agency Theory (Jensen & Meckling, 1976), Signaling Theory (Spence, 1973), Resource Dependence Theory (Pfeffer & Salancik, 1978), and Stakeholder Theory (Freeman, 1984), which emphasize the role of governance mechanisms and internal capabilities in enhancing the credibility of financial reporting, reducing information asymmetry, and signaling transparency to stakeholders. However, the results are in contrast with Song and Kemp (2013), whose findings suggest that ERM frameworks may have an insignificant impact, indicating that the effectiveness of governance mechanisms may vary under different conditions. However, the findings of Song and Kemp (2013) show that the ERM framework has an insignificant impact, suggesting that other factors may affect the effectiveness.

According to the CFV, it appears that it has a negative and significant effect on QFR firms. However, this suggests that improving QFR becomes more challenging when cash flow is volatile. It indicates

that the ability to improve QFR would become lower if the cash flow fluctuates. Thus, this is justified by the uncertainty caused by CFV, causing earnings management or hindering accurate forecasting and reporting. Furthermore, this result aligns with Foroozian and Gaskari's (2016) prior research, which revealed that the fluctuation of cash flows significantly affects earnings management practices, indicating reduced transparency. This result aligns with Agency Theory (Jensen & Meckling, 1976), which highlights how CFV can lead to earnings management and reduced transparency due to managerial opportunism. Furthermore, Resource Dependence Theory (Pfeffer & Salancik, 1978) supports the notion that firms with unstable cash flows face external pressures that can further distort financial reporting. In the same vein, the negative effect of the CFV on firm value is documented by Wei (2018), which demonstrates that it is due to increased perceived risk by stakeholders. Thus, cash flow stability is essential, not only for operational liquidity but also for QFR and reliability, aligning with the core tenets of these theories

Regarding the VaR, in contrast to expectations and some prior studies, the results show that it had a positive and substantial influence on the QFR of composite industrial corporations in the United States. This result is justified as the effective use of the VaR enables the firms to quantify potential losses, thereby improving risk transparency and financial disclosures. This finding aligns with Signaling Theory (Spence, 1973), as the use of advanced risk assessment tools like VaR signals a firm's commitment to transparency and sound risk management practices. Additionally, it supports Stakeholder Theory (Freeman, 1984), as improved risk disclosure through tools like VaR

enhances stakeholders' confidence in financial reporting. This result contradicts some critiques in the literature (e.g., Kuester et al., 2006; Pérignon & Smith, 2010; Yamai & Yoshida, 2002), who emphasized the VaR limitations in capturing tail risks and adapting to structural changes in market conditions. However, the positive impact observed in this study may reflect a more advanced or complementary use of VaR, possibly supported by scenario analysis and stress testing, which enhances its relevance in financial reporting.

Finally, the study suggested that a firm's attributes alone may not be sufficient to determine QFR without robust risk management frameworks in place. The insignificance of firm SIZE, QRW, and LEV on QFR may reflect the overriding influence of ERM structures. This supports the central argument in the literature regarding the effective role of ERM components, as board oversight, cash flow management, and risk quantification tools, which played a more significant role in enhancing QFR than firm-specific characteristics. In other words, ERM mechanisms might standardize risk responses across firms, reducing the variability caused by firm-specific factors.

From an agency theory perspective, larger firms or highly leveraged firms often face greater information asymmetry and potential for managerial opportunism. However, if an effective ERM system is in place, it can mitigate these agency problems, neutralizing the expected negative impact of size or leverage on QFR. Similarly, resource dependence theory suggests that firms develop internal capabilities (like ERM) to manage external risks, potentially making traditional resource-based indicators (like SIZE or GRW) less influential.

CONCLUSION

This study aims to examine the impact of ERM practices on influencing the QFR disclosed by industrial corporations in the USA. The study highlights that ERM practices, especially the existence of a BRMC and VaR, positively influence QFR, while CFV has an unfavorable impact.

Based on these results, it can be concluded that ERM practices have a vital role in enhancing the QFR of industrial companies listed in the United States. In this regard, it is suggested that in selecting board members for the risk management committee, serious attention needs to be paid to enhance the quality of financial information. In addition, it revealed that incorporating structured ERM components into financial disclosure systems is very important.

Furthermore, industrial firms and policymakers are also encouraged to utilize performance reviews of risk committees and integrate advanced digital risk-monitoring technologies periodically, to induce sustainable enhancement in QFR. This strategic approach reinforces investor confidence that goes beyond regulatory adherence and ensures long-term compliance. These insights also emphasize the necessity of organizations to establish a risk-aware, sensitive culture and encourage commitment to governance standards. In conclusion, it is advised that ERM frameworks are continuously enhanced by undergoing systematic reviews and regular updates that will enable emerging risks and business environments, hence providing precise and reliable financial reporting.

AUTHOR CONTRIBUTIONS

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