
Crisis Accounting and Financial Irregularities: Do Ethical Considerations Play a Role?

Edmund Animley

University of Professional Studies, Accra, Ghana
10292830@upsamail.edu.gh

John Kwaku Mensah Mawutor

University of Professional Studies, Accra, Ghana
john.mensah@upsamail.edu.gh

Isaac Ofoeda

University of Professional Studies, Accra, Ghana
Isaac.ofoeda@upsamail.edu.gh

Abstract

In periods of crisis, organizations and nations experience heightened demands to achieve financial targets, which result in unethical conduct such as the manipulation of financial data and the misrepresentation of financial information or funds. The study aimed at assessing the relationships between Crisis Accounting, Ethical Considerations and Financial Irregularities and establish the moderating role of Ethical Consideration in the relationship that exists between Crisis Accounting and Financial Irregularities. Data from 309 accountants were used to establish the relation between the variables using Partial Least Square - Structural Equation Modeling (PLS-SEM) analysed in SmartPLS 3. The results revealed a positive relationship between Crisis Accounting and Financial Irregularities and also significant impact in the relationship between Ethical Consideration and Financial Irregularities. The results also revealed a strong moderating role of ethical consideration on the relation between Crisis Accounting and Financial Irregularities. The study, therefore, recommends that ethical standards and considerations should be enhanced in accounting practice to limit or deter financial irregularities in crisis situations.

Keywords: *Crisis Accounting, Financial Irregularities, Ethical Considerations, Structural equation modelling (SEM)*

Suggested Citation:

Animley, E., Mawutor, J.K.M. & Ofoeda, I. (2023). Crisis Accounting and Financial Irregularities: Do Ethical Considerations Play a Role? *International Journal of Accounting, Business and Finance*, 2 (2), 1-14.

1. Introduction

The field of accountancy is of paramount importance in guaranteeing the accuracy, precision and openness of financial data and information, which are indispensable for the advancement of a country (Ugoani & Ibeenwo, 2022). Financial reporting's credibility and transparency have faced questioning recently due to corporate failures, accounting irregularities, and financial inconsistencies (Ugoani & Ibeenwo, 2022). The incidents, marked by dishonest actions and unethical behavior, have had significant impacts on both businesses and financial systems (Ali & Khan, 2022).

The term "crisis accounting" pertains to the accounting methodologies utilized in times of crises, which are frequently associated with financial improprieties (Buchetti et al., 2021). Comprehending the essence of crisis accounting and its impact on financial irregularities is of paramount importance, and this subject matter has been extensively scrutinized in academic literature (Buchetti et al., 2022; Montesdeoca et al., 2019). A fundamental inquiry in this domain pertains to the causation of financial irregularities during periods of crisis. Numerous scholarly articles featured in esteemed academic publications have provided insights into this matter.



Research has indicated that in periods of crisis, organizations and nations may experience heightened demands to achieve financial targets (Jaiswal & Dubey, 2021), which can result in unethical conduct such as the manipulation of financial data and the falsification of financial information (Buchetti et al., 2021). Moreover, the presence of ambiguity and disorder linked to crises can establish a setting that is favourable for fraudulent behaviours. Moreover, the imperative to restore stability and financial well-being could prompt certain individuals to partake in unethical conduct for their own benefit, while disregarding the enduring repercussions (Montesdeoca et al., 2019). These factors are influential in the occurrence of financial irregularities during times of crisis.

Scholars have investigated the concepts of ethical principles and accounting procedures during periods of crisis, analysing the extent to which the ethical standards of accountants can mitigate or intensify the incidence of financial irregularities (Buchetti et al., 2021). Also, numerous empirical investigations have been undertaken to examine the impacts the concepts of crisis accounting, ethical considerations, and financial irregularities have on each other (Buchetti et al., 2021; Montesdeoca et al., 2019). The studies have yielded significant findings regarding the determinants of financial irregularities in times of crisis, as well as the ethical considerations that can help to alleviate these irregularities. Buchetti et al. (2021) conducted an empirical analysis of crisis accounting practices and their impact on financial irregularities. The study emphasized the significance of ethical considerations in reducing fraudulent activities.

The ethical considerations of accountants can exert a significant influence on the impact of crisis accounting on financial irregularities. The possibility of financial irregularities arising from crisis accounting is acknowledged, however, the existence of ethical standards and conduct within the accounting profession serves as a mitigating element (Maduka, 2022). Accountants who adhere to ethical principles place a high value on upholding integrity and transparency, prioritizing stakeholder interests, ensuring accountability, and demonstrating professional competence (Maduka, 2022). Through this action, individuals make a valuable contribution towards reducing the frequency of financial improprieties in times of emergency, thereby upholding the precision and dependability of financial documentation.

The extant scholarly literature has thoroughly investigated the ethical considerations and crisis accounting, as well as ethical considerations and financial irregularities. Nonetheless, a gap exists in scholarly literature regarding the moderating influence of ethical Consideration on crisis accounting and financial irregularities. Prior research has analysed the variables in isolation. However, it is imperative to explore the potential moderating effect of ethical considerations between crisis accounting and financial irregularities.

The present research endeavours to investigate the potential moderating effect of ethical considerations on the link between crisis accounting and financial irregularities. While contributing to the previous literature on crisis accounting, ethical consideration and financial irregularity, this study positions ethical consideration as a very key factor in fighting financial irregularities in times of crisis. It brings home the idea for the need for strong ethical standards as a major preventive measure to financial irregularities in such situations especially from the Ghanaian perspective where financial crime is on a rise across various public and private organisations.

The rest of the paper is structured as follows: Section 2 presents a literature review with the hypothesis, Section 3 discusses the data and research methodology, Section 4 presents the results and discussion, and Section 5 concludes the study by summarizing the findings, discussing their implications, and outlining future research directions.

2. Literature review

2.1 Theoretical Literature Review

The theoretical lens for this paper is the deterrence theory. Deterrence theory, rooted in criminology and behavioural psychology, proposes that individuals are less likely to engage in criminal behaviour if they perceive the potential costs as outweighing the benefits (Beccaria, 1764). Rational decision-making considers the likelihood of getting caught, severity of punishment, and potential gains. The theory aims to discourage crime by establishing a credible and significant threat of punishment, encompassing specific deterrence based on an individual's prior experiences and general deterrence through the observed consequences (Becker, 1968).

Considering the scope of accounting practice and crisis, we define crisis accounting as 'specialized accounting practices used by organizations and financial institutions during disruptions, emergencies, or crises. It adapts accounting principles to address challenges and uncertainties in such situations, aiming to ensure accurate, transparent, and reliable financial reporting despite crisis-related turmoil. This encompasses timely recording of transactions, risk assessment, clear communication of financial data, and potential adjustments to financial statements to reflect crisis impacts on an organization's financial status.'

In the context of Crisis Accounting and Financial Irregularities, the deterrence theory takes on a practical role, converging with the objective to curtail unethical practices and cultivate an environment steeped in unwavering ethical commitment. This endeavour casts accounting professionals in the lead, entrusted with the essential task of strengthening the safeguards against misconduct. A symphony of proactive measures, including vigilant oversight, robust accounting enforcement mechanisms, and the shadow of punitive actions, collectively erects formidable barriers that raise the perceived costs of engaging in financial improprieties (Becker, 1968). The study therefore holds the position that, with ethical consideration as deterrence, financial irregularities will be minimal in crisis periods.

2.2 Empirical Literature Review and Hypothesis Development

2.2.1 Crisis Accounting and Financial Irregularities

The intricate relationship between crisis accounting and its impact on financial irregularities has garnered substantial attention in the contemporary landscape of financial management. Crisis accounting, a specialized set of accounting practices deployed during periods of disruptions or emergencies, plays a pivotal role in shaping the occurrence and magnitude of financial irregularities.

Crisis situations, whether stemming from economic downturns, global pandemics, or other unforeseen events, introduce a unique set of challenges and uncertainties for countries and organisations. As highlighted by Abanyam and Angahar (2015) and Nemeč and Špaček (2020), the accurate representation of financial information becomes paramount during these periods. Crisis accounting serves as a strategic tool to adapt traditional accounting principles to address the emergent complexities and risks, aiming to maintain the transparency and reliability of financial reporting. This adaptability ensures that financial statements accurately capture the impact of the crisis on an organization's assets, liabilities, and overall financial health. In their investigation of the effects of global financial crises on public sector accounting, they emphasize the significance of transparent reporting and improved resource management to mitigate the risks posed by fiscal and debt challenges.

Furthermore, Nemeč and Špaček (2020) in the context of the COVID-19 pandemic sheds light on the consequences of inadequate crisis accounting strategies. Their study reveals the inequitable allocation of financial resources by municipalities, leading to financial anomalies and burden on regional budgets. This highlights the critical role of crisis accounting in ensuring proper resource distribution and preventing irregularities that can arise from mismanagement or inadequate oversight during times of crisis.

These findings highlight the importance of robust financial reporting practices, effective risk management, and regulatory oversight in mitigating financial irregularities during crises. This study therefore postulates that:

H₁. Crisis accounting has a positive impact on financial irregularities.

2.2.2 Ethical Considerations and Financial Irregularities

Ethical considerations are crucial in preventing financial irregularities within the accounting and finance domain. In the context of the study, ethical considerations pertain to ‘the fundamental principles and values that guide the conduct of accounting professionals during crisis accounting. These ethical standards include integrity, honesty and transparency and are critical measures to prevent financial misconduct and ensure the accuracy of financial reporting. Literature has confirmed that upholding ethical values, such as integrity and honesty, serves as a preventive measure against fraudulent activities and promotes the production of accurate and reliable financial reports (Frémeaux et al., 2020). Studies have revealed the link between ethical considerations and financial irregularities, emphasizing the significance of advocating ethical behavior to prevent financial misconduct (Marjan et al., 2017; Saona & Muro, 2018). Factors such as personal codes of ethics, government policies, organizational ethical codes, ethical climate, and social pressures have also been indicated as influential on the ethical conduct of accounting professionals (Dunn & Sainty, 2020).

Ethical regulation and procedures play a crucial role in mitigating financial irregularities (Saona & Muro, 2018). Accountants who prioritize ethical values are more likely to produce accurate and dependable financial statements, upholding high levels of financial reporting standards (Fernandhytia & Muslichah, 2020).

The studies provide evidence in favor of the second postulation of the researchers, which is that:

H₂. Ethical Considerations has a significant effect on Financial Irregularities.

2.2.3 Ethical considerations, Crisis accounting and financial irregularities

Following the established relationships between the various variables, the study delves into the intricate relationship between Crisis Accounting, Ethical Considerations, and Financial Irregularities. Ethical considerations are identified as a pivotal moderating factor within this dynamic interplay. There is an indispensable role of ethical values in crisis accounting, underscoring their efficacy in deterring financial irregularities during times of crisis (Dirani et al., 2020; Harland et al., 2021; Fearn et al., 2021).

In the midst of relaxed standards, ethics provide a regulatory framework guiding decision-making and actions (Kiradoo, 2020). Specific ethical values such as transparency promotes efficient financial resource utilization and instil proper use of such resources in times of crisis (Emeneka & Oranefo, 2022; Yao et al., 2017). Accountability, integrity and professionalism emerges as other critical ethical consideration, fostering responsibility and robust monitoring systems that enhance good practice in times of crisis (Williamson et al., 2020; Kohler & Dimancesco, 2020, Fernandhytia & Muslichah, 2020; Comer & Schwartz, 2017). The review illuminates their role in reducing the likelihood of fraud and misuse of funds (Comer & Schwartz, 2017; Avakian & Fotaki, 2022). By fostering these ethical principles, crisis accounting practices contribute to social justice and resource efficiency, while deterring unethical behaviour such financial irregularities (Avakian & Fotaki, 2022).

This comprehensive understanding of the interplay between ethical considerations and crisis accounting informs the study's hypothesis, proposing that Ethical Consideration moderates the relationship between Crisis Accounting and financial irregularities.

H₃. Ethical Consideration moderates the relationship between Crisis Accounting and financial irregularities.

Figure 1 presents the conceptual model.

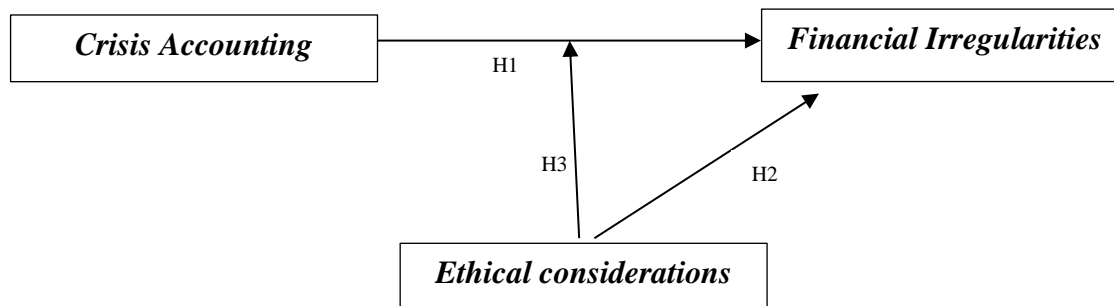


Figure 1. Research Model

3. Data and Methodology

3.1 Data

The study used Structural Equation Modelling to test the hypothesis (Hair et al. (2019). The data for the study was collected from Accountants on the Institutes of Chartered Accountant, Ghana online pages with an online based survey instrument. The study followed the principles of PLS-SEM and applied the "10-times rule" to estimate the minimum sample size (Hair et al., 2019). Based on this rule, a minimum of 90 respondents would be required for the study, considering the maximum number of indicators (nine) for the highest construct.

In Smith's study (2020), the researcher needed to determine the sample size based on the confidence interval, which measures how much the sample mean can deviate from the population mean. To calculate the necessary sample size, the researcher considered the confidence level, standard deviation, and margin of error. Using the formula Necessary Sample Size = $(Z\text{-score})^2 - \text{StdDev} * (1 - \text{StdDev}) / (\text{margin of error})^2$ (Smith, 2020).

For this study, the researcher chose a 95% confidence level, a standard deviation of 0.5, and a margin of error (confidence interval) of +/- 5%. Plugging these values into the equation, we get $((1.96)^2 \times 0.5(0.5)) / (0.05)^2$, which simplifies to $(3.8416 \times 0.25) / 0.0025$, resulting in $0.9604 / 0.0025$. Therefore, the necessary sample size for the study was determined to be 385 respondents.

In total 345 respondents answered the questionnaire out of which 309 were acceptable as complete after cleaning. The data collection period took 2 weeks, from 28th May 2023 to 10th June 2023. The study utilized Partial Least Square - Structural Equation Modeling (PLS-SEM) to investigate the links established by the hypothesis (Hair et al., 2019). The selection of PLS-SEM was based on its capacity to depict empirical data, detect regularities in extensive datasets, generate justifications, and assess conjectures (Hair et al., 2019). Additionally, PLS-SEM presents distinctive benefits, including effect size and predictive relevance metrics, which are not present in alternative quantitative methodologies. The PLS-SEM methods were utilized to assess the reliability of indicators, internal consistency, convergent validity, and discriminant validity (Hair et al., 2019).

The positivist paradigm is adopted in this study, which posits that reality is constant, external, and subject to rules (Corry et al., 2019). It enables researchers to gain an objective understanding of reality and acknowledges the existence of a reality beyond human cognition (Brierley, 2017). A quantitative research approach is employed in this study to obtain indisputable evidence. The survey method is chosen as it utilizes numerical data to explain attitudes and opinions, allowing for the study and monitoring of a sample from the total population (Sovacool et al., 2018). The design of the questionnaire was informed by the conceptual framework and hypotheses proposed in the study. The survey instrument is bifurcated into two distinct sections. The initial section is dedicated to gathering demographic

information, whereas the subsequent section is designed to elicit responses pertaining to the variables of Crisis Accounting, Ethical Consideration, and Financial Irregularities. The survey items employ a Likert scale consisting of five points, with the lowest point being 1 (Strongly Disagree) and the highest point being 5 (Strongly Agree). The scale for Crisis Accounting was self-developed by the researchers, Ethical consideration was adapted from (Ahinful et al., 2017; Alnasser et al., 2014; Karasioğlu et al., 2021) and financial irregularities was self-generated. Validity and reliability of the latent variables are established by the analysis as indicated in Table 2 with the Cronbach’s Alpha, composite reliability and Average Variance Extracted.

4. Results and discussion

4.1 Demographic characteristics

The demographic characteristics of study subjects are analysed in Table 1. The areas considered included gender, age, level of education, employment status, knowledge of crisis accounting, instances of financial irregularities observed, and the number of times the respondents had an encounter with financial irregularities during a crisis. Frequency and percentages were used to measure the outcomes from the data.

Table 1. Demographic characteristics

Demographics	Frequency	Percentage
Gender		
Male	174	56.31%
Female	135	43.69%
Age		
18-25 years	88	28.48%
26-35 years	111	35.92%
36-45 years	68	22.01%
46 years and above	42	13.59%
Level of Education		
Diploma Degree	90	29.13%
Bachelor's Degree	86	27.83%
Master's Degree	122	39.48%
Doctorate	11	3.56%
Employment		
Full Time	272	88.03%
Part Time	37	11.97%
Knowledge of Crisis Accounting		
Yes	309	100%
No	-	
Instances of financial irregularities		
Yes	309	100%
No	-	
Count of FI encounter		
Less than 5 times	299	96.76%
10-20 times	2	0.65%
More than 10	8	2.59%

Note: This table describes the characteristics of the respondents

The demographic characteristics of the study participants reveal key insights into the sample composition. The study included 309 participants, with 56.31% identifying as male and 43.69% as female. Regarding age, the largest proportion of participants fell within the 26-35 years category (35.92%), followed by the 18-25 years category (28.48%). Educational backgrounds varied, with 39.48% holding a Master’s degree, 29.13% having a Diploma degree, and 27.83% possessing a Bachelor's degree. Furthermore, 88.03% of participants reported full-time employment. Notably, all participants indicated knowledge of crisis accounting and reported instances of financial irregularities. The diverse representation in terms of gender, age,

education, and employment enhances the external validity of the study, allowing for broader generalizations of the findings and providing valuable context for interpreting the results.

4.2 Measurement model

The assessment of indicator reliability, internal consistency, convergent validity, and discriminant validity was conducted in this study. The indicators measuring Crisis Accounting, Ethical Consideration, and Financial Irregularities exhibited strong loadings on their respective latent constructs, ranging from 0.703 to 0.868, as presented in Table 2. It is recommended to consider indicator loadings of 0.708 and above, as they indicate that the construct explains more than 50% of the indicator's variability, ensuring satisfactory reliability of the item (Hair et al., 2019). The high loadings in this study indicate that the indicators effectively capture the intended constructs.

To assess construct reliability, Cronbach's Alpha and Composite Reliability were utilized. The Cronbach's alpha values for the constructs ranged from 0.849 to 0.910, surpassing the recommended threshold of 0.7, as indicated in the table (Taber, 2018). A higher value of Cronbach's Alpha suggests that the indicators within the latent variable have similar ranges and values (Cronbach, 1951). This indicates a high level of internal consistency and reliability within each construct, indicating that the items consistently measure the same underlying concept. Additionally, the composite reliability values for the constructs ranged from 0.892 to 0.926, as shown in Table 2, indicating excellent reliability (Purwanto & Sudargini, 2021). These values reflect the extent to which the indicators collectively measure the latent construct reliably (Henseler et al., 2015).

Table 2. Loading, Reliability and Validity

Factors	Loadings	Cronbach's Alpha	Composite reliability	Average Variance Extracted
CA1	0.785	0.849	0.892	0.624
CA2	0.722			
CA3	0.782			
CA4	0.845			
CA5	0.812			
EC1	0.776	0.910	0.926	0.581
EC2	0.800			
EC3	0.779			
EC4	0.766			
EC5	0.737			
EC6	0.750			
EC7	0.703			
EC8	0.749			
EC9	0.796			
FI1	0.716	0.874	0.909	0.668
FI2	0.818			
FI3	0.868			
FI4	0.840			
FI5	0.836			

Note: This Table shows the Loading, Reliability and Validity of the constructs (CA- Crisis Accounting, FI – Financial Irregularities and EC- Ethical Consideration)

Convergent validity refers to the extent to which different items that reflect a particular concept converge or align with each other compared to items measuring a different construct. The Average Variance Extracted (AVE) is a measure used to assess convergent validity across all the items related to a specific construct (Sarstedt et al., 2016). The recommended threshold for AVE is 0.50, indicating that 50% of the construct's variability in the items is acceptable for convergent validity (Hair et al., 2019). In this study, Table 2 presents the AVE values, which range from 0.581 to 0.668, surpassing the recommended threshold of 0.5. These results indicate

that the constructs under investigation explain a significant amount of variance in their respective indicators, demonstrating strong convergent validity. Discriminant validity was evaluated using three criteria: Indicator cross loading the Fornell and Larcker criterion and the Heterotrait-Monotrait ratio (HTMT).

Table 3. Indicator Item Cross Loading

	Crisis Accounting	Ethical Consideration	Financial Irregularities
CA1	0.785	0.626	0.512
CA2	0.722	0.395	0.448
CA3	0.782	0.480	0.527
CA4	0.845	0.669	0.627
CA5	0.812	0.654	0.537
EC1	0.593	0.776	0.545
EC2	0.608	0.800	0.547
EC3	0.550	0.779	0.544
EC4	0.526	0.766	0.486
EC5	0.475	0.737	0.472
EC6	0.573	0.750	0.554
EC7	0.539	0.703	0.551
EC8	0.520	0.749	0.627
EC9	0.567	0.796	0.648
FI1	0.564	0.618	0.716
FI2	0.574	0.602	0.818
FI3	0.525	0.590	0.868
FI4	0.519	0.570	0.840
FI5	0.569	0.598	0.836

Note: CA- Crisis Accounting, FI – Financial Irregularities and EC- Ethical Consideration)

As shown in Table 3, the outer loading indicators are more than its correlations (cross-loadings) on other constructs for all variables showing that discriminant validity is established (Rönkkö & Cho, 2022). In Table 4, the Fornell and Larcker criterion also confirms that the square root of the construct's AVE is greater than the correlations between constructs (Henseler et al., 2015). This suggests satisfactory discriminant validity.

Table 4. Fornell and Larcker criterion

Constructs	CA	EC	FI
CA	0.790		
EC	0.723	0.762	
FI	0.676	0.732	0.817

Note: values in italics represent the square root of AVE (CA- Crisis Accounting, FI – Financial Irregularities and EC- Ethical Consideration).

Furthermore, Table 5 presents the HTMT ratios, which are below the recommended threshold of 0.90 (Hair et al., 2019). The HTMT ratios provide additional evidence supporting discriminant validity by indicating that the correlations between constructs are smaller than the correlations within the constructs.

Table 5. HTMT ratio

	Crisis Accounting	Ethical Consideration	Financial Irregularities
CA			
EC	0.811		
FI	0.777	0.811	

Note: CA- Crisis Accounting, FI – Financial Irregularities and EC- Ethical Consideration

4.3 Structural Model Assessment

After the measurement model was successfully evaluated throughout the data analysis process using smartPLS-SEM (Hair et al., 2019), the structural model was evaluated. The research model's proposed routes are reflected in the structural model. R^2 , Q^2 and the significance of paths are essentially used to evaluate the structural model (Sarstedt et al., 2016). According to Pealver et al. (2018), the strength of each structural route is assessed using the dependent variable's R^2 value, and the value of R should be equal to or greater than 0.1 (Falk & Miller, 1992). According to Table 6's findings, the R^2 value is more than 0.1. Consequently, the capacity to forecast is developed. The predictive significance of the endogenous constructs is further shown by Q^2 . The model has predictive significance when the Q^2 is greater than 0. The findings in Table 6 demonstrate the importance of the constructions' prediction. Furthermore, SRMR was used to evaluate the model's fit. The SRMR value was 0.072, which is less than the necessary value of .10 but indicates a good model fit (Hair et al., 2017).

To determine the importance of the association, hypotheses were tested and the goodness of fit was further evaluated. Based on the findings and using a 95% confidence interval, a critical value of 1.65 is advised for a significance level of 10% in a two-tailed test (Hair et al., 2016). H1 assesses if CA has a significant effect on FI. According to the findings, CA significantly impacts FI ($\beta = 0.357$, $t = 5.853$, $p < .000$). H1 was thus supported. Once again, H2 assesses if EC significantly impacts FI. According to the findings, EC significantly affects FI ($\beta = 0.566$, $t = 10.705$, $p < .000$). H2 was thus supported. Table 5 displays the 95% confidence intervals that were produced by the 5000 resamples used in this investigation. When the confidence interval is not zero, there is a meaningful association. The results of testing hypotheses are reported in Table 5. The effect size F^2 shows whether or not the independent variables has a noticeable influence on the dependent variable. The F^2 values between 0.020 and 0.150, 0.150 and 0.350, and greater than 0.350 suggest that the independent variable or exogenous latent variable has a small, medium, or large impact on the dependent construct, respectively (Cohen, 1988; Chin, 1998; Gefen et al., 2005; Hair et al., 2020). From results, Crisis Accounting has a small effect on Financial Irregularities whiles Ethical considerations has a medium level effect on financial irregularities.

Table 6. R^2 , Q^2 , F^2 and the significance of paths

	β	Standard Deviation	T Statistics	P Values	5.00%	95.00%
CA -> FI	0.357	0.061	5.853**	0	0.260	0.457
EC -> FI	0.566	0.053	10.705**	0	0.470	0.643
	R^2	Q^2				
FI	0.594	0.384				
	F^2					
Construct	Effect on FI					
CA	0.108					
EC	0.295					

Note: CA- Crisis Accounting, FI – Financial Irregularities and EC- Ethical Consideration

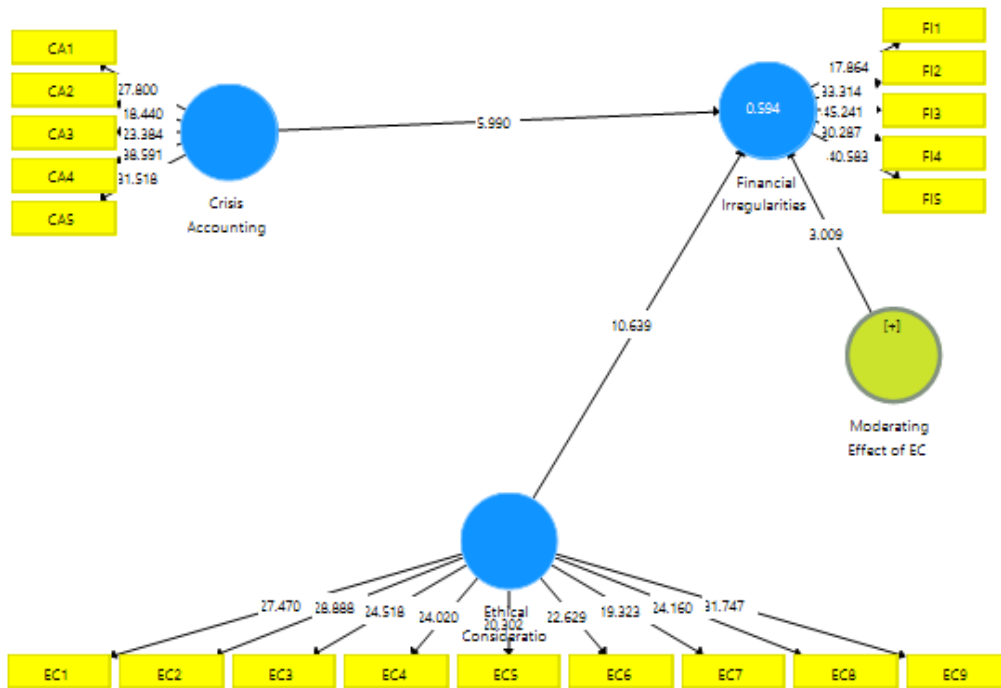


Figure 2. Structural model (Hypothesis for Direct Effect (Bootstrapping))

From the findings in Table 6 and Figure 2 (which shows the Bootstrapping results), the results show that crisis accounting has a substantial influence on financial irregularities. This implies that avoiding or minimizing financial errors during times of crisis depends critically on competent crisis accounting methods. According to the findings, establishments with strong crisis management accounting practices are more likely to have fewer instances of financial fraud and manipulation and vice versa.

In the same regard, ethical consideration was seen to have a very high effect which is positive on financial irregularities (10.705). The results have significant ramifications for several parties. It emphasizes the need of putting solid crisis accounting standards and ethical considerations in place as a way to reduce the incidence of financial irregularities. The results confirm the studies of Abanyam and Angahar (2015), Nemec and Špaček (2020) and Feghali et al. (2020) who found a strong relationship between crisis accounting and financial irregularities.

4.4 Moderating Analysis

The moderating effect of EC on the link between CA and FI was investigated through moderating analysis. The results of the analysis showed that EC significantly moderated the link between CA and FI, as shown in Table 7. ($\beta = 0.566$, $t = 10.705$, $p < .000$). the analysis was done with the postulation that a critical value of 1.65 is recommended for a significance level of 10% in a two-tailed test based on the results, relying on a 95% confidence interval (Hair et al., 2020).

Table 7: Moderation analysis

H3	β	Standard Deviation	T Statistics	P Values	5.00%	95.00%
Mod CA - EC -> FI	0.106	0.035	2.985	0.001	0.052	0.169

Note: CA- Crisis Accounting, FI – Financial Irregularities and EC- Ethical Consideration

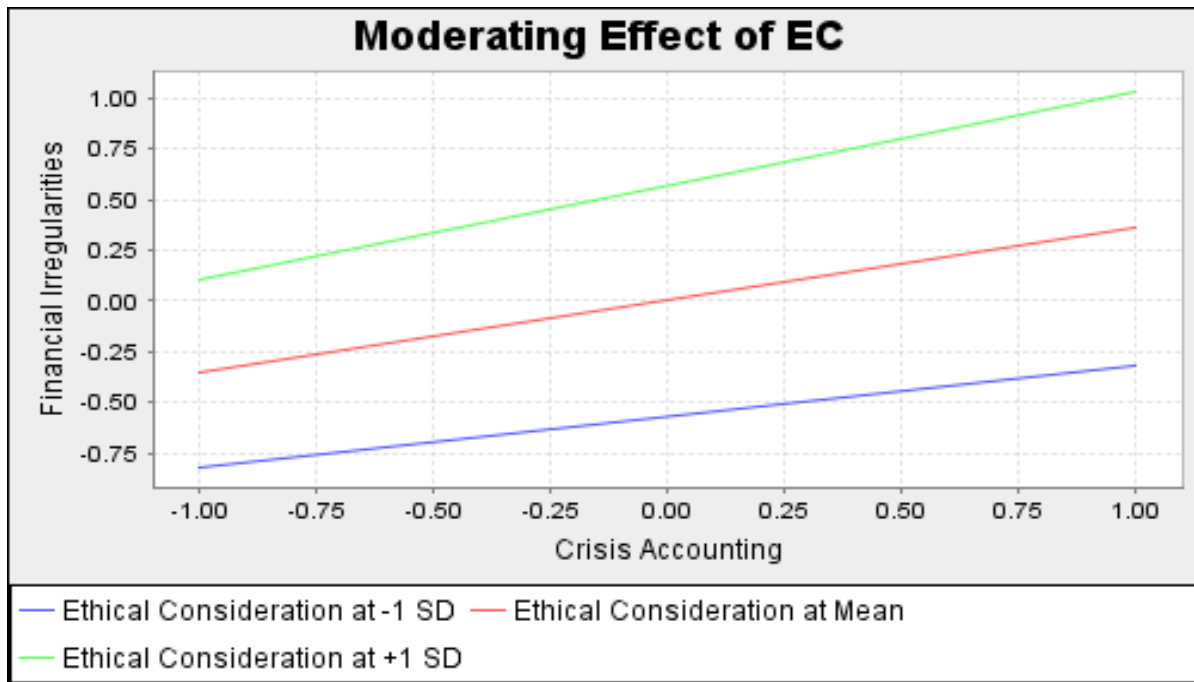


Figure 3. The moderating effect of EC

From Figure 3, it is deduced that as EC increases there is a high impact of CA on FI. Meanwhile as EC reduces there is a lower impact of CA on FI. The moderation results indicate the significant need for ethical consideration in times of crisis to ensure the balance between crisis accounting and financial irregularities. Odar et al. (2017) established the need for openness, responsibility, integrity, and professionalism as a way to enhance accounting and these ethical variables are key to improving accounting practice.

5. Discussion of results

The study's findings confirm and extend the understanding of the relationships between crisis accounting, ethical considerations, and financial irregularities during periods of crisis. Accurate financial reporting becomes difficult to achieve in times of crisis, however, the positive impact of crisis accounting on financial irregularities in crisis emphasizes the importance of proper crisis accounting practices to ensure transparent financial representation (Abanyam & Angahar, 2015; Nemec & Špaček, 2020). The study's results highlight that the absence of crisis accounting practices can exacerbate the occurrence of financial irregularities, reflecting the potential consequences of irregularities stressed by Ugoani and Ibeenwo (2022) and Ali and Khan (2022).

Ethical considerations emerge as a significant factor in preventing financial irregularities, in line with the extensive literature on ethics in financial reporting (Frémeaux et al., 2020; Marjan et al., 2017; Saona & Muro, 2018). The study's findings provide empirical support for these assertions, reinforcing the understanding that adherence to ethical principles acts as a deterrent against fraudulent activities. The presence of ethical values safeguards against financial irregularities, as demonstrated by the study's results. This echoes the views of Maduka (2022) and emphasizes the need for ethical standards to maintain the integrity and accuracy of financial reporting.

The main contribution of the study reflects in the exploration of the moderating role of ethical considerations. This aligns with the evolving discussions in the field, stressing the importance of understanding how variables interact within complex systems. The findings that ethical considerations moderate the relationship between crisis accounting and financial irregularities reflect the nuanced perspectives discussed by Dirani et al. (2020) and Harland et

al. (2021) on the impact of ethical principles on decision-making during crises. This study's empirical evidence adds depth to these discussions and highlights the crucial role of ethical values in shaping the effectiveness of crisis accounting practices. The emphasis on the negative implications of going against ethical considerations would serve as deterrence to financial accountants in times of crisis. The reward for following ethical considerations including professional integrity and reputation, trust and credibility and career advancement serve as motivation to ensure its application in times of crisis.

6. Conclusions, Limitations, and Future Scope

The research demonstrates that moral concerns (ethical considerations) are important in discouraging financial irregularities because people are more likely to desist from dishonest or unethical conduct when they feel that their behaviours are in line with moral principles. Financial irregularities are less likely to occur when accountants emphasize ethical norms because they are more likely to generate accurate and reliable financial accounts.

The study's call for organizations to establish and uphold strong ethical standards within their financial practices echoes the insights of Kiradoo (2020) regarding the need for ethical regulation in decision-making processes. These practical implications underscore the relevance of the study's findings for organizations aiming to maintain financial integrity, especially during challenging times (Odar et al., 2017).

The use of a cross-sectional survey technique is one of the research's drawbacks, which makes it difficult to establish causation. Future research may use longitudinal designs to understand how dynamics change over time. Because the study sample was limited to accounting professionals from Ghana, there may be a limit on how broadly the findings may be applied. Future studies may examine the efficacy of certain preventative strategies, such as monitoring, enforcing, and punishing violations, in preventing financial irregularities during crises.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding information

The author declared no financial support for the research, authorship, and/or publication of this article.

Acknowledgments: None

References

- Abanyam, E. I., & Angahar, P. A. (2015). The effect of the global financial crisis and the Sovereign debt crisis on public sector accounting: A contextual analysis. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 5(1), 72-79.
- Ahinful, G., Addo, S., Boateng, F., & Danquah, J. (2017). Accounting ethics and the professional accountant: The case of Ghana. 2017. *International Journal of Applied Economics, Finance and Accounting*. 1(1), 30-36. <https://doi.org/10.33094/8.2017.11.30.36>
- Ali, N., & Khan, K. I. (2022). Governing the corporation: Regulations in the era of scandals and globalization. *Journal of Accounting and Finance in Emerging Economies*, 8(1), 153-164. <https://doi.org/10.26710/jafee.v8i1.2235>
- Alnasser, N., Shaban, O. S., & Al-Zubi, Z. (2014). The impact of accounting ethics in improving managers' behavior and decision making in the Jordanian Companies. *Fundamental and Applied Studies in the Pacific and Atlantic Oceans Countries*. Oxford Economic papers 186. 942 -960
- Avakian, S., & Fotaki, M. (2022). Accounting for Failure Through Morality: The IMF's Involvement in (Mis) managing the Greek Crisis. *Journal of Business Ethics*, 1-25. <https://doi.org/10.1007/s10551-022-05312-w>
- Becker, G. S. (1968). Crime and punishment: An economic approach. *Journal of political economy*, 76(2), 169-217.

- Brierley, J. A. (2017). The role of a pragmatist paradigm when adopting mixed methods in behavioural accounting research. *International Journal of Behavioural Accounting and Finance*, 6(2), 140. <https://doi.org/10.1504/IJBAF.2017.086432>
- Buchetti, B., Parbonetti, A., & Pugliese, A. (2022). Covid-19, corporate survival and public policy: The role of accounting information and regulation in the wake of a systemic crisis. *Journal of Accounting and Public Policy*, 41(1), 106919. <https://doi.org/10.1016/j.jaccpubpol.2021.106919>
- Comer, D. R., & Schwartz, M. (2017). Highlighting moral courage in the business ethics course. *Journal of Business Ethics*, 146, 703-723. <https://doi.org/10.1007/s10551-015-2919-3>
- Corry, M., Porter, S., & McKenna, H. (2019). The redundancy of positivism as a paradigm for nursing research. *Nursing Philosophy*, 20(1), e12230. <https://doi.org/10.1111/nup.12230>
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334. <https://doi.org/10.1007/BF02310555>
- Dirani, K. M., Abadi, M., Alizadeh, A., Barhate, B., Garza, R. C., Gunasekara, N., ... & Majzun, Z. (2020). Leadership competencies and the essential role of human resource development in times of crisis: a response to Covid-19 pandemic. *Human Resource Development International*, 23(4), 380-394. <https://doi.org/10.1080/13678868.2020.1780078>
- Dunn, P., & Sainty, B. (2020). Professionalism in accounting: a five-factor model of ethical decision-making. *Social Responsibility Journal*, 16(2), 255-269. <https://doi.org/10.1108/SRJ-11-2017-0240>
- Emeneka, O. L., & Oranefo, P. C. (2022). Accounting ethics and global economic meltdown: the Nigerian experience. *Research Journal of Management Practice*, 2(1), 81-95
- Erickson, M. L., & Gibbs, J. P. (1978). Objective and perceptual properties of legal punishment and the deterrence doctrine. *Social Problems*, 25(3), 253-264. <https://doi.org/10.2307/800063>
- Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling*. University of Akron Press. Ohio
- Fearne, A., Wagner, B., McDougall, N., & Loseby, D. (2021). The power of purpose—lessons in agility from the Ventilator Challenge. *Supply Chain Management: An International Journal*, 26(6), 753-766. <https://doi.org/10.1108/SCM-09-2020-0468>
- Feghali, K., Najem, R., & Metcalfe, B. D. (2022). Financial auditing during crisis: Assessing and reporting fraud and going concern risk in Lebanon. *Accounting and Management Information Systems*, 21(4), 575-603. <http://dx.doi.org/10.24818/jamis.2022.04004>
- Fernandhytia, F., & Muslichah, M. (2020). The effect of internal control, individual morality and ethical value on accounting fraud tendency. *Media Ekonomi Dan Manajemen*, 35(1), 112-127. <http://dx.doi.org/10.24856/mem.v35i1.1343>
- Frémeaux, S., Puyou, F. R., & Michelson, G. (2020). Beyond accountants as technocrats: A common good perspective. *Critical Perspectives on Accounting*, 67, 102054. <https://doi.org/10.1016/j.cpa.2018.07.003>
- Gefen, D., & Straub, D. (2005). A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communications of the Association for Information systems*, 16(1), 5.
- Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101-110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems*, 117(3), 442-458. <https://doi.org/10.1108/IMDS-04-2016-0130>
- Harland, C. M., Knight, L., Patrucco, A. S., Lynch, J., Telgen, J., Peters, E., ... & Ferk, P. (2021). Practitioners' learning about healthcare supply chain management in the COVID-19 pandemic: a public procurement perspective. *International Journal of Operations & Production Management*, 41(13), 178-189. <https://doi.org/10.1108/IJOPM-05-2021-0348>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. *Journal of the academy of marketing science*, 43, 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Jaiswal, K. K., & Dubey, K. K. (2021). Impact of the global financial crisis on the Indian economy. *International Journal of Accounting, Business and Finance*, 1(1), 15-23.
- Karasioglu, F., Humta, H., & Gokturk, I. E. (2021). Investigation of Accounting Ethics Effects on Financial Report Quality & Decision Making: Evidence from Kabul-based Logistic Corporations. *International Journal of Management, Accounting and Economics*, 8(3), 122-142. ISSN 2383-2126
- Kiradoo, G. (2020). Ethics in accounting: Analysis of current financial failures and role of accountants. *International Journal of Management*, 11(2), 241-247.

- Kohler, J. C., & Dimancesco, D. (2020). The risk of corruption in public pharmaceutical procurement: how anti-corruption, transparency and accountability measures may reduce this risk. *Global health action*, 13(1), 1694745. <https://doi.org/10.1080/16549716.2019.1694745>
- Maduka, I. K. N., Mustapha, L. O., & Ajunwa, B. O. (2022). Global Ethical Consideration and Accounting Practices in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 10(9), 36-57. <https://www.eajournals.org/>
- Montesdeoca, M., Sánchez Medina, A. J., & Blázquez Santana, F. (2019). Research topics in accounting fraud in the 21st century: A state of the art. *Sustainability*, 11(6), 1570. <https://doi.org/10.3390/su11061570>
- Nemec, J., & Špaček, D. (2020). The Covid-19 pandemic and local government finance: Czechia and Slovakia. *Journal of Public Budgeting, Accounting & Financial Management*, 32(5), 837-846.
- Odar, M., Jerman, M., Jamnik, A., & Kavčič, S. (2017). Accountants' ethical perceptions from several perspectives: evidence from Slovenia. *Economic research*, 30(1), 1785-1803.
- Purwanto, A., & Sudargini, Y. (2021). Partial Least Squares Structural Squation Modeling (PLS-SEM) Analysis for Social and Management Research: A Literature Review. *Journal of Industrial Engineering & Management Research*, 2(4), 114–123. <https://doi.org/10.1007/s11747-014-0403-8>
- Rönkkö, M., & Cho, E. (2022). An updated guideline for assessing discriminant validity. *Organizational Research Methods*, 25(1), 6-14.
- Saona, P., & Muro, L. (2018). Firm-and country-level attributes as determinants of earnings management: An analysis for Latin American firms. *Emerging Markets Finance and Trade*, 54(12), 2736-2764. <https://doi.org/10.1080/1540496X.2017.1410127>
- Sarstedt, M., Hair, J. F., Ringle, C. M., Thiele, K. O., & Gudergan, S. P. (2016). Estimation issues with PLS and CBSEM: Where the bias lies!. *Journal of business research*, 69(10), 3998-4010. <https://doi.org/10.1016/j.jbusres.2016.06.007>
- Sovacool, B. K., Axsen, J., & Sorrell, S. (2018). Promoting novelty, rigor, and style in energy social science: Towards codes of practice for appropriate methods and research design. *Energy Research & Social Science*, 45, 12-42. <https://doi.org/10.1016/j.erss.2018.07.007>
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, 48, 1273-1296.
- Ugoani, J., & Ibeenwo, G. I. (2022). External Audit Process Failures: Unethical Practices and Business Demise. *Business, Management and Economics Research*, 8(1), 1-11.
- Williamson, V., Murphy, D., & Greenberg, N. (2020). COVID-19 and experiences of moral injury in front-line key workers. *Occupational Medicine*, 70(5), 317-319. <https://doi.org/10.1093/occmed/kqaa052>
- Yao, P. L., Yusheng, K., & Bah, F. B. M. (2017). A critical examination of internal control systems in the public sector, a tool for alleviating financial irregularities: evidence from Ghana. *Revista de investigación de finanzas y contabilidad*, 8, 22.