



## Forensic Auditing as a Tool for Detecting and Prosecuting Financial Crimes in Zimbabwean State-Owned Enterprises



Tatenda Marshal Mutizira<sup>ID</sup>, McArthur Fundira\*<sup>ID</sup>, Ngonidzashe Chimwani<sup>ID</sup>, Charles Mbohwa<sup>ID</sup>

Centre for Sustainability Engineering and Future Technologies, College of Science Engineering and Technology, University of South Africa, 1709 Roodepoort, South Africa

\*Correspondence: McArthur Fundira (mcfundira@gmail.com)

**Received:** 10-17-2025

**Revised:** 12-01-2025

**Accepted:** 12-15-2025

**Citation:** Mutizira, T. M., Fundira, M., Chimwani, N., & Mbohwa, C. (2025). Forensic auditing as a tool for detecting and prosecuting financial crimes in Zimbabwean State-Owned Enterprises. *J. Account. Fin. Audit. Stud.*, 11(4), 213–221. <https://doi.org/10.56578/jafas110402>.



© 2025 by the author(s). Published by Acadlore Publishing Services Limited, Hong Kong. This article is available for free download and can be reused and cited, provided that the original published version is credited, under the CC BY 4.0 license.

**Abstract:** State-Owned Enterprises (SOEs) are essential for economic development but frequently suffer from endemic corruption and financial mismanagement, particularly in developing economies where traditional auditing mechanisms fail to detect complex financial crimes. This study investigated the primary determinants of fraudulent financial reporting by empirically validating the Fraud Hexagon Theory within the distinct institutional context of Zimbabwe. Adopting a quantitative causal-comparative research design, the study utilized multiple linear regression to examine the influence of six governance indicators and analyzed data from 38 SOEs listed on the Zimbabwe Stock Exchange between 2015 and 2024. The results demonstrated that the model explained 67.5% of the variance in fraudulent reporting, hence confirming the holistic applicability of the Fraud Hexagon Theory. Crucially, external financial pressure stemming from unsustainable debt emerged as the strongest predictor of fraud, followed significantly by collusion in government projects and executive ego. Furthermore, the findings revealed that while frequent change of directors degraded institutional memory and increased the risk of fraud, mandatory rotation of auditors acted as a significant deterrent. It was concluded that financial fraud in Zimbabwean SOEs was not merely an individual behavioral issue but a systemic outcome of unfunded government mandates and state capture. These findings suggested that safeguarding public resources necessitated a strategic shift from routine compliance to targeted forensic auditing, alongside the strict enforcement of meritocratic board appointments and transparency in the procurement process.

**Keywords:** Corporate governance; Financial stability; Forensic auditing; Fraud Hexagon Theory; Fraudulent financial reporting; State-owned enterprises; Zimbabwe Stock Exchange

**JEL Classification:** H83; G34; M41; M42

### 1. Introduction

Globally, State-Owned Enterprises (SOEs) play a vital role in providing essential public services, such as energy, transportation, healthcare, and water, while simultaneously driving industrialization and creating employment opportunities (Abdullahi et al., 2023; Madzivire et al., 2020). However, in many developing economies, SOEs are synonymous with financial mismanagement, corruption, and governance inefficiencies (Omukaga, 2021; Owusu et al., 2022). These persistent challenges underscore the limitations of traditional auditing mechanisms in addressing complex financial crimes, such as procurement fraud, embezzlement, and resource misappropriation (Albizri et al., 2019; Khamainy et al., 2022). Consequently, forensic auditing has gained prominence as an effective tool for detecting, preventing, and prosecuting financial crimes by applying advanced investigative techniques and data analytics to enhance governance (Akinleye & Olaoye, 2021; Dada & Jimoh, 2020; Nouraldeen, 2025). International frameworks such as the G20 High-Level Principles for Preventing Corruption and the United Nations Convention against Corruption (UNCAC) emphasise the urgent need for forensic auditing to foster transparency and accountability (Owusu et al., 2022).

The complexity of fraud in the public sector is context-specific. In Nigeria, corruption is often localised (Ojo, 2019); in Kenya, it centres on procurement (Omukaga, 2021); while in South Africa, it is defined by state capture (Owusu et al., 2022). In Zimbabwe, however, the context is uniquely characterised by a volatile multi-currency regime, hyperinflation, and impactful political interference in operational management (Akbar et al., 2022; Musvoto & Mukonza, 2021). Corruption in SOEs is endemic, as reflected in Zimbabwe's low rankings on governance indices. Notable scandals, including the 300-million-U.S. dollar National Social Security Authority (NSSA) property deal and the 180-million-U.S. dollar solar power tender fraud (Staff Reporter, 2019), highlight these vulnerabilities. Auditor-General reports between 2015 and 2020 revealed systemic governance failures that eroded public trust (Nouraldeen, 2025; Organisation for Economic Co-operation & Development, 2018). The PricewaterhouseCoopers (PwC) Global Economic Crime Survey showed that 57% of financial crimes in Zimbabwean SOEs were internally perpetrated (Cusack, 2020).

While forensic auditing is confirmed as an efficacious detection tool in Africa (Mokhomole, 2023; Sunday & Juliana, 2016), the existing literature has often focused on this tool as a solution rather than an in-depth and qualitative understanding of the unique causal factor. Traditional fraud models, such as the Fraud Triangle and the Fraud Diamond, focus narrowly on individual factors. However, the complexity of fraud in the public sector in Zimbabwe necessitates a comprehensive framework, such as the Fraud Hexagon Theory (FHT). The applicability of advanced models is context-dependent, and existing FHT studies in other jurisdictions (Yadiati et al., 2023) have yielded mixed results.

This study addressed a crucial gap by empirically validating the FHT in the distinct institutional context of Zimbabwean SOEs, quantifying how specific governance failures act as catalysts for fraudulent financial reporting (FFR). This study moved beyond general regional calls for reforms to provide a clear quantitative differentiation from existing work by focusing on the unique pressure of the Zimbabwean public sector. Therefore, this study advanced a two-fold systematic understanding of fraud drivers; firstly, contributing theoretically by incorporating all six FHT elements (stimulus, capability, opportunity, ego, collusion, and rationalisation); and secondly, enriching the literature of financial fraud in developing economies by testing the predictive power of the FHT in this distinct institutional context.

## 1.1. Theoretical Literature Review

The theoretical foundation of this study drew on the FHT, which builds upon the earlier Fraud Triangle Theory (FTT) and Fraud Diamond Theory (FDT) to provide a comprehensive framework for explaining the drivers of fraudulent behaviour.

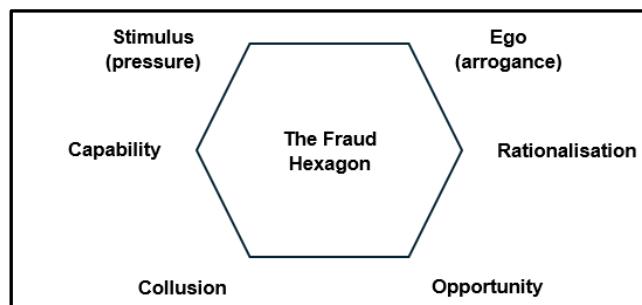
### 1.1.1 Fraud Triangle Theory

The Fraud Triangle Theory, introduced by Cressey (1953), remains one of the earliest and most widely referenced frameworks in the field of fraud studies (Achmad et al., 2022; Homer, 2020). It identifies pressure, opportunity, and rationalisation as the three core conditions that must coexist for fraud to occur. While the FTT has shaped much of modern auditing practice, its limitation lies in ignoring the role of individual capability (Wolfe & Hermanson, 2004).

### 1.1.2 Fraud Diamond Theory

To address this gap, Wolfe & Hermanson (2004) expanded the FTT by proposing the Fraud Diamond Theory, which adds capability as a fourth element. They argued that even with pressure, opportunity, and rationalisation, fraud often requires a person with the skills, authority, and confidence to commit and conceal wrongdoing (Yadiati et al., 2023).

### 1.1.3 Fraud Hexagon Theory



**Figure 1.** Likelihood of fraud from the Fraud Hexagonal perspective

Note: This figure illustrates the six interrelated elements of the FHT: stimulus, capability, opportunity, ego, collision, and rationalization.

The FHT, developed by Vouzinas (2019), integrates prior models while introducing six interrelated factors: stimulus (pressure), capability, opportunity, ego, collusion, and rationalization (Achmad et al., 2022; Inawat & Arief, 2022; Owusu et al., 2022; Tarjo et al., 2021). This holistic model provides a more nuanced explanation of fraudulent behaviour, especially within complex organisational settings such as SOEs (Figure 1).

The FHT illustrates six interrelated elements. Stimulus (pressure) arises from financial strains such as debt. Capability refers to authority and technical knowledge to conceal fraud. Opportunity emerges where weak governance exists. Ego (arrogance) reflects an inflated sense of entitlement, often found in powerful CEOs. Collusion highlights the collaboration of multiple actors, particularly in government contracts. Finally, rationalization enables perpetrators to justify their behaviour (Charlopova et al., 2020).

## 2. Methodology

This study adopted a quantitative research design with a causal-comparative approach to examine the relationship between governance indicators and FFR in Zimbabwean SOEs (Sekaran & Bougie, 2019).

### 2.1 Procedures of Data Collection

Data were sourced from annual reports and audited financial statements of SOEs listed on the Zimbabwe Stock Exchange (ZSE) between 2015 and 2024. These were supplemented with Auditor-General reports to triangulate governance failures (Creswell & Creswell, 2017).

### 2.2 Sampling Strategy

The population included all 42 SOEs listed on the ZSE (Zimbabwe Stock Exchange, 2024). Purposive sampling with systematic filtering was employed (Dane & Carhart, 2022; Williams et al., 2021). The exclusion criteria were:

- (a) Firms missing annual reports or incomplete disclosure of corporate governance for more than three years;
- (b) Currency inconsistency, i.e., firms reporting exclusively in USD when local currency is mandatory;
- (c) Variable gaps regarding director changes.

The final sample comprised 38 SOEs observed across ten years, yielding 380 firm-year observations.

### 2.3 Data Analysis

Descriptive statistics were calculated to summarise variables. The primary analysis used multiple linear regression to estimate the influence of independent variables on FFR. The model included Financial Stability ( $X_1$ ), External Pressure ( $X_2$ ), Nature of Industry ( $X_3$ ), Change of Auditors ( $X_4$ ), Change of Directors ( $X_5$ ), CEO Pictures ( $X_6$ ), and Cooperation with Government ( $X_7$ ).

## 3. Results

### 3.1 Overview of Variables in the Research

Descriptive analysis was conducted to characterize the dataset for each variable as in Table 1.

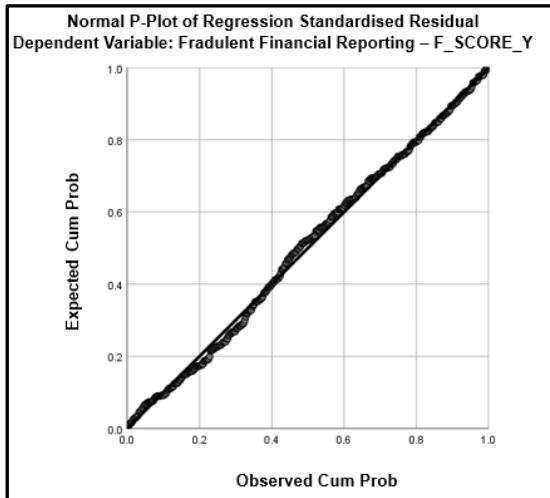
Table 1 reveals that the Nature of Industry ( $X_3$ ) exhibits the highest variability (Std. Dev = 28.308912), indicating diverse operational contexts. External Pressure ( $X_2$ ) reflects firms with high financial leverage. Corporate with Government Projects ( $X_7$ ) has a high mean of 0.78, suggesting substantial engagement in government projects.

**Table 1.** Descriptive analysis of variables in the research

Variable	Minimum	Maximum	Mean	Std. Deviation
Financial stability ( $X_1$ )-ACHANGE	-0.100000	0.922337	0.220429	0.199232
External pressure ( $X_2$ )-DER	0.090000	11.400000	2.817139	2.495860
Nature of industry ( $X_3$ )-RECEIVABLE	-18.610000	92.233720	13.302335	28.308912
Change of auditors ( $X_4$ )-CPA_CHANGE	0	1	0.20	0.399
Change of directors ( $X_5$ )-DIR_CHANGE	0	1	0.28	0.452
CEO picture ( $X_6$ )	2	4	2.97	0.573
Corporate with government projects ( $X_7$ )-POLITICAL	0	1	0.78	0.417
Fraudulent financial reporting-F_SCORE_Y	-0.435707	9.585782	3.862297	1.713582

### 3.2 Assessment of Model Assumptions

The normality assumption was tested using the P-plot in Figure 2, which indicated that data points aligned with the reference line, hence supporting the assumption of normality.



**Figure 2.** P-plot of normality test

#### 3.2.1 Multicollinearity test

To ensure the regression coefficients were not distorted, a multicollinearity test was conducted (Table 2). All Tolerance and Variance Inflation Factor (VIF) values were below the threshold of 10, thus confirming no serious multicollinearity.

**Table 2.** Results of multicollinearity test

Variable	Tolerance	VIF
Financial stability ( $X_1$ )	0.612	1.634
External pressure ( $X_2$ )	0.548	1.825
Nature of industry ( $X_3$ )	0.789	1.267
Change of auditors ( $X_4$ )	0.810	1.234
Change of directors ( $X_5$ )	0.654	1.529
CEO picture ( $X_6$ )	0.720	1.389
Corporate with government projects ( $X_7$ )	0.601	1.664

### 3.3 Determinants of Fraudulent Financial Reporting

Analysis from multiple linear regression was used to determine the individual impact of independent variables on FFR (Table 3).

**Table 3.** Coefficients of multiple linear regression

Model	Unstandardized Coefficients		Standardized Coefficients		<i>t</i>	Sig.
	<i>B</i>	Std. Error	Beta			
(Constant)	0.149	0.304			0.489	0.625
Financial stability ( $X_1$ )	1.436	0.255	0.167	5.625	0.000	
External pressure ( $X_2$ )	0.498	0.020	0.725	24.420	0.000	
Nature of industry ( $X_3$ )	0.010	0.002	0.171	5.721	0.000	
Change of auditors ( $X_4$ )	-0.551	0.129	-0.128	-4.281	0.000	
Change of directors ( $X_5$ )	0.983	0.113	0.259	8.684	0.000	
CEO picture ( $X_6$ )	0.344	0.090	0.115	3.827	0.000	
Corporate with government projects ( $X_7$ )	0.853	0.122	0.208	6.994	0.000	

Note: Dependent variable: fraudulent financial reporting (F\_SCORE\_Y).

Crucially, all independent variables were statistically significant ( $p < 0.001$ ). External Pressure (Debt) emerged as the strongest predictor [Standard ( $\beta = 0.725$ )], followed by Change of Directors and Government Projects.

### 3.4 Explanatory Power of the Model

The model obtained an  $R^2$  of 0.675 in Table 4, indicating that the independent variables collectively explain 67.5% of the variance in FFR.

**Table 4.** Summary of the model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.822 <sup>a</sup>	0.675	0.669	0.9857646

Table 5 presents the results of partial hypothesis testing, which confirmed that every element of the FHT played a distinct role in the Zimbabwean SOE context.

**Table 5.** Results of partial hypothesis testing (*t*-test)

Model	<i>t</i> <sub>count</sub>	<i>t</i> <sub>table</sub>	Adjusted R Square	Sig. <i>t</i>	Decision	Conclusion
$X_1 \rightarrow Y$	5.625	1.968	0.05	0.000	Reject $H_0$	Significant
$X_2 \rightarrow Y$	24.420	1.968	0.05	0.000	Reject $H_0$	Significant
$X_3 \rightarrow Y$	5.721	1.968	0.05	0.000	Reject $H_0$	Significant
$X_4 \rightarrow Y$	-4.281	1.968	0.05	0.000	Reject $H_0$	Significant
$X_5 \rightarrow Y$	8.684	1.968	0.05	0.000	Reject $H_0$	Significant
$X_6 \rightarrow Y$	3.827	1.968	0.05	0.000	Reject $H_0$	Significant
$X_7 \rightarrow Y$	6.994	1.968	0.05	0.000	Reject $H_0$	Significant

Note: The Sig. *t* values for  $X_1, X_3, X_4, X_5, X_6, X_7$  in this table have been corrected to reflect their significance ( $p < 0.001$ ) as presented in the detailed regression coefficients table (Table 2), which is the authoritative source for *p*-values in multiple regression.

Finally, the F-test in Table 6 confirmed the simultaneous influence of the variables ( $F_{\text{count}} = 110.465 > F_{\text{table}}$ ).

**Table 6.** ANOVA table

Model	Sum of Squares	DF	Mean Square	F	Sig.
Regression	751.398	7	107.343	110.4	0.000*
Residual	361.484	372	0.972	65	
Total	1112.882	379			

Note: Dependent variable: fraudulent financial reporting (F\_SCORE\_Y).

(\* Predictors: constant, corporate with government projects ( $X_7$ )-POLITICAL, nature of industry ( $X_3$ )-RECEIVABLE, financial stability ( $X_1$ )-ACHANGE, change of auditors ( $X_4$ )-CPA\_CHANGE, external pressure ( $X_2$ )-DER, change of directors ( $X_5$ )-DIR\_CHANGE, CEO picture ( $X_6$ )-CEOPICT\_X.

## 4. Discussion

The empirical findings provided a robust interpretation of FFR within the distinct economic and institutional context of Zimbabwean SOEs. The quantitative results validated the FHT, thus confirming its superiority over earlier models by demonstrating a convergence of systemic governance weaknesses and collusive network driven fraud.

### 4.1 Reconciling Results with Fraud Hexagon Theory

The results highlighted a severe dual-stimulus environment within Zimbabwean SOEs. External Pressure (Debt) emerged as the single strongest predictive factor of FFR ( $X_1, \beta = 0.725$ ). This immense pressure, stemming from unfunded government mandates, forces SOEs into reliance on unsustainable debt to mask insolvency, a classic stimulus for FFR. This pronounced effect is notably more substantial than typically observed in stable international contexts. Paradoxically, Financial Stability also showed a significant positive association ( $\beta = 1.436$ ). While this partial finding aligns with results in Indonesian SOEs (Yadiati et al., 2023), in the Zimbabwean context, this stability likely reflects politically motivated *slush funds* for patronage, hence suggesting that well-capitalized SOEs are not immune but may be politically captured (Owusu et al., 2022).

The elements of Collusion and Ego were empirically supported. Involvement in Government Projects ( $X_7$ ) is a significant predictor ( $\beta = 0.208$ ), reflecting the pervasive tenderpreneurship culture in which complex procurement processes are manipulated to enable collusion between SOE executives, contractors, and political officials. This finding validated the Collusion element and aligned with patterns of state capture widely observed across Southern Africa (Mutize & Tefera, 2020). The significance of CEO Pictures ( $X_6$ ) ( $p < 0.001$ ) served as an effective proxy for Ego/Arrogance, demonstrating that high executive visibility reflects political capital and a perceived sense of

impunity, which enables executives to override internal controls and believe their status protects them from prosecution (Akbar et al., 2022) and enabling executive dominance (Majeed et al., 2023; Newman et al., 2023).

Furthermore, the study confirmed the importance of Capability and Rationalization. Frequent Changes of Director ( $X_6$ ) significantly increased the risk of fraud ( $t = 8.684$ ). This instability strips SOEs of institutional memory and oversight capacity, actively creating the capability gap that fraudsters exploit. Conversely, Mandatory Auditor Changes ( $X_4$ ) significantly reduced fraud ( $t = -4.281$ ), supporting their efficacy in disrupting the cozy relationships that facilitate long-term rationalization. This finding contradicted the result from Indonesian SOEs (Yadiati et al., 2023) but strongly supported the enforcement of mandatory rotation as a key safeguard in volatile governance environments.

#### 4.2 Empirical Rigor and Justification of the Variables

The claim that External Pressure ( $X_2$ ) as the strongest driver was substantiated by its highest standardized Beta coefficient ( $\beta = 0.725$ ), thus confirming its quantitative magnitude in predicting FFR compared to all other variables. The use of CEO Pictures as a proxy for Ego/Arrogance was robustly justified by linking executive visibility to the political cronyism prevalent in SOE appointments, where political capital superseded merit, thus lowering the perceived risk of misconduct and enabling executive dominance (Newman et al., 2023).

#### 4.3 Implications for Corporate Governance and Forensic Practice

The findings underscored that FFR in Zimbabwean SOEs reflected a systemic governance crisis, demanding a strategic shift from reliance on traditional audits, which have failed to curb corruption despite being carried out (Eliezer & Emmanuel, 2015; Madzivire et al., 2020), to targeted forensic auditing. The significant impact of External Pressure and government projects requires forensic investigations to prioritize debt management and procurement processes. This aligns with the international consensus that SOEs are especially vulnerable to corruption due to their finance-intensive nature (Keulen, 2020).

Crucially, the recommendations from this study for forensic auditing must be viewed in light of regional challenges. Studies in Nigeria and South Africa confirmed that forensic auditing competence and techniques were highly effective in detecting fraud (Abu et al., 2022; Akinleye et al., 2023; Mvunabandi, 2023; Oyerogba, 2021). However, the Zimbabwean context revealed significant barriers to implementation and mirrored findings in local authorities, where 80% of auditors saw forensic accounting as valuable; however, they did not endorse it due to political meddling, judicial delays (Transparency International Zimbabwe, 2021), and a lack of training/tools (Zhou et al., 2022). This highlights that while forensic auditing is statistically effective, the political and legal framework should be strengthened to allow its effective practice, a recommendation echoed across studies in Nigeria and South Africa (Ejike, 2018; Mokhomole, 2023; Sunday & Juliana, 2016).

The proven negative relationship between Change of Auditors and fraud risks ( $t = -4.281$ ) emphasized that auditor independence is a key safeguard, hence reinforcing the need for strict enforcement of rotation rules to enhance accountability. The positive link between Change of Directors and fraud risks underscored the need for merit-based appointments to rebuild the governance capability that has been eroded by political interference (Mutize & Tefera, 2020). This multi-layered approach, combining structural governance reform with the technical expertise of forensic auditing, is essential for breaking the cycle of impunity and restoring public trust.

### 5. Conclusions

This study empirically validated the FHT within the distinct institutional context of Zimbabwean SOEs, demonstrating that FFR was not merely a result of individual misconduct but a systemic outcome of specific governance failures and economic volatility. The regression model, which accounted for 67.5% of the variance in FFR, confirmed that the FHT provided a superior diagnostic framework for developing economies compared to traditional fraud models. This finding successfully quantified the interplay between financial pressure, political influence, and governance instability.

The main conclusion of this research was that External Pressure (Stimulus) served as the most potent driver of financial fraud in Zimbabwean SOEs. The high statistical significance of financial leverage indicated that the burden of unfunded government mandates and unsustainable debt forced entities to manipulate financial reports to mask insolvency. Furthermore, the study substantiated the critical roles of Collusion and Ego. The strong correlation between government project involvement and FFR quantified the impact of tenderpreneurship and state capture. At the same time, the predictive power of CEO visibility confirmed that unchecked executive arrogance facilitated the override of internal controls. Additionally, the findings revealed a divergence in governance mechanisms: while frequent changes in directors degraded institutional memory and increased fraud risk (Capability), the mandatory rotation of external auditors acted as a significant deterrent (Rationalisation), which effectively disrupted long-term collusive relationships.

These findings held profound significance for policymakers and forensic practitioners. They suggested that traditional auditing mechanisms are insufficient for the Zimbabwean public sector. Instead, an aggressive shift toward forensic auditing is required, specifically targeting procurement lifecycles and debt management strategies. To mitigate corruption, governance reforms should prioritize meritocratic board appointments to reduce instability and strictly enforce auditor rotation to preserve independence.

Despite these contributions, the study faced limitations regarding data consistency due to the volatile multi-currency regime in Zimbabwe. The exclusion of firms reporting exclusively in USD during periods of local currency mandates narrowed the sample size, potentially limiting the generalizability of findings across all unlisted parastatals. Future research should extend this analysis to non-listed SOEs and adopt a qualitative approach to investigate the legal and political barriers that hinder the implementation of recommendations related to forensic auditing in politically exposed environments.

### **Author Contributions**

T.M.M.: Writing original draft, conceptualization, methodology, software, validation, and formal analysis; M.F.: Formal analysis, investigation, resources, and data curation; N.C.: Writing original draft, investigation, methodology, and data curation; C.N.: Writing, reviewing, editing, supervision, project administration, and resources. All authors have read and agreed to the published version of the manuscript.

### **Data Availability**

The data used to support the research findings are available from public records of Zimbabwe Stock Exchange and the Office of the Auditor-General.

### **Acknowledgements**

The authors would like to express their gratitude to all individuals and institutions that provided valuable insights and data for this study. Special thanks go to the regulatory bodies and financial reporting institutions for their assistance in making the data of relevant financial statements readily available.

### **Conflicts of Interest**

The authors declare no conflicts of interest.

### **References**

- Abdullahi, F. A., Mamuda, A. U., & Kauji, M. B. (2023). Feasibility of implementing forensic accounting in fraud detection and prevention in the public sector: Evidence from Borno State. *Int. J. Soc. Sci. Humanit.*, 11(6), 118–128.
- Abu, S. O., Mohammed, A. M., & Mike, M. E. E. (2022). Does forensic auditing provide the necessary requirements for the reduction of fraudulent financial practice in Nigeria? *Glob. J. Account. Econ. Res.*, 3(2), 165–186.
- Achmad, T., Ghozali, I., & Pamungkas, I. D. (2022). Hexagon fraud: Detection of fraudulent financial reporting in state-owned enterprises Indonesia. *Economies*, 10(1), 13. <https://doi.org/10.3390/economics10010013>.
- Akbar, R. N., Zakaria, A., & Prihatni, R. (2022). Financial statement analysis of fraud with hexagon theory fraud approach. *J. Akunt. Perpajakan Auditing*, 3(1), 137–161. <https://doi.org/10.21009/JAPA.0301.09>.
- Akinleye, G. T. & Olaoye, A. A. (2021). Forensic audit techniques and curbing public sector's white collar crimes in Nigeria. *Glob. Manag. Rev.*, 15(1), 39–56.
- Akinleye, G. T., Olatunji, O. F., Bolaji, Y. A., & Dauda, A. A. (2023). Combating financial crimes through forensic audit: Evidence from Nigeria. *Brit. J. Manag. Mark. Stud.*, 6(4), 54–62. <https://doi.org/10.52589/BJMMS-SRPHNYLN>.
- Albizri, A., Appelbaum, D., & Rizzotto, N. (2019). evaluation of financial statements fraud detection research: A multi-disciplinary analysis. *Int. J. Discr. Gov.*, 16, 206–241. <https://doi.org/10.1057/s41310-019-00067-9>.
- Charlopopova, I., Andon, P., & Free, C. (2020). How fraud offenders rationalize financial crime. In *Corporate Fraud Exposed* (pp. 39–59). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-78973-417-120201004>.
- Cressey, D. R. (1953). The criminal violation of financial trust. *Am. Sociol. Rev.*, 15(6), 738–743. <https://doi.org/10.2307/2086606>.
- Creswell, J. W. & Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications.

- Cusack, J. (2020). *Zimbabwe Country Threat Assessment by FCN—Summary*. Financial Crime News. <https://thefinancialcrimenews.com/zimbabwe-country-threat-assessment-by-fcn-summary/>
- Dada, S. O. & Jimoh, F. B. (2020). Forensic accounting and economic stability in the Nigerian public sector. *J. Account. Tax.*, 12(4), 118–125. <https://www.doi.org/10.5897/JAT2020.0417>.
- Dane, F. C. & Carhart, E. (2022). *Evaluating Research: Methodology for People Who Need to Read Research*. SAGE Publications.
- Ejike, S. I. (2018). The relevance of forensic accounting: Issues in accounting and auditing practice in Nigeria. *IOSR J. Humanit. Soc. Sci.*, 23(7) 17–24.
- Eliezer, O. & Emmanuel, B. (2015). Relevance of forensic accounting in the detection and prevention of fraud in Nigeria. *Int. J. Account. Res.*, 2(7), 67–77.
- Homer, E. M. (2020). Testing the fraud triangle: A systematic review. *J. Financ. Crime*, 27(1), 172–187. <https://doi.org/10.1108/JFC-12-2018-0136>.
- Inawat, W. A. & Arief, M. A. B. (2022). The influence of fraud hexagon perspective on fraud financial statement. In *Proceedings of the 3rd Asia Pacific International Conference on Industrial Engineering and Operations Management* (pp. 4072–4081). <https://doi.org/10.46254/AP03.20220656>.
- Keulen, S. (2020). *Auditing State-Owned Enterprises*. [https://www.researchgate.net/publication/343615171\\_Auditing\\_State-Owned\\_Enterprises](https://www.researchgate.net/publication/343615171_Auditing_State-Owned_Enterprises)
- Khamainy, A. H., Amalia, M. M., Cakranegara, P. A., & Indrawati, A. (2022). Financial statement fraud: The predictive relevance of fraud hexagon theory. *J. Account. Strategy. Financ.*, 5(1), 110–133. <https://doi.org/10.33005/jasf.v5i1.249>.
- Madzivire, E. T., Nyamwanza, L., Mushonga, W., Takachicha, M. T., & Mulonda, D. (2020). An investigation on the effectiveness of forensic audit as a tool for fraud detection and prevention. *J. Account. Bus. Financ. Res.*, 10(2), 49–67. <https://doi.org/10.20448/2002.102.49.67>.
- Majeed, M. A., Xie, S., Ullah, I., Fu, J., & Wang, C. (2023). Do powerful CEOs affect qualitative financial disclosure? *Res. Int. Bus. Financ.*, 66(1), 102026. <https://doi.org/10.1016/j.ribaf.2023.102026>.
- Mokhomole, T. D. (2023). The role and impact of forensic investigations unit in the fight against fraud, corruption, irregularities, financial misconduct and maladministration in the public sector of South Africa. *Khazanah Hukum*, 5(1), 18–32. <https://doi.org/10.15575/kh.v5i1.22605>.
- Musvoto, C. & Mukonza, R. N. (2021). An analysis of corruption in the Grain Marketing Board, Zimbabwe. *J. Public Adm.*, 56(3), 474–487.
- Mutize, M. & Tefera, E. (2020). The governance of state-owned enterprises in Africa: An analysis of selected cases. *J. Econ. Behav. Stud.*, 12(2), 9–16. [https://doi.org/10.22610/jebs.v12i2\(J\).2992](https://doi.org/10.22610/jebs.v12i2(J).2992).
- Mvunabandi, J. D. (2023). Effectiveness of forensic auditing in fighting fraud among non-government organisations in South Africa. *Int. J. Environ. Sustain. Soc. Sci.*, 4(3), 680–694. <https://doi.org/10.38142/ijesss.v4i3.388>.
- Newman, W., Tshuma, Z., & Sitsha, L. (2023). An analysis of effects of forensic auditing in detecting fraud in state owned enterprises: A case study of ZESA. *J. Account. Financ. Audit. Stud.*, 9(3), 85–107. <https://doi.org/10.32602/jafas.2023.025>.
- Nouraldeen, R. M. (2025). Competent and independent auditors but cannot detect fraud!! Do they exercise professional skepticism? *Int. J. Discl. Gov.*, 1–17. <https://doi.org/10.1057/s41310-025-00296-1>.
- Ojo, J. S. (2019). e-Governance and anti-corruption war in Africa: The Nigeria experience. In *E-Services*. IntechOpen. <https://doi.org/10.5772/intechopen.87012>.
- Omukaga, K. O. (2021). Is the fraud diamond perspective valid in Kenya? *J. Financ. Crime*, 28(3), 810–840. <https://doi.org/10.1108/JFC-11-2019-0141>.
- Organisation for Economic Co-operation & Development. (2018). *State-Owned Enterprises and Corruption: What Are the Risks and What Can Be Done?* [https://www.oecd.org/en/publications/state-owned-enterprises-and-corruption\\_9789264303058-en.html](https://www.oecd.org/en/publications/state-owned-enterprises-and-corruption_9789264303058-en.html)
- Owusu, G. M. Y., Koomson, T. A. A., Alipoe, S. A., & Kani, Y. A. (2022). Examining the predictors of fraud in state-owned enterprises: An application of the fraud triangle theory. *J. Money Laund. Control*, 25(2), 427–444. <https://doi.org/10.1108/JMLC-05-2021-0053>.
- Oyerogba, E. O. (2021). Forensic auditing mechanism and fraud detection: The case of Nigerian public sector. *J. Account. Emerg. Econ.*, 11(5), 752–775. <https://doi.org/10.1108/JAEE-04-2020-0072>.
- Sekaran, U. & Bougie, R. (2019). *Research Methods for Business: A Skill Building Approach*. Jossey-Bass.
- Staff Reporter. (2019). *ZESA Forensic Audit: Six Executives Bounce Back, 10 New Officials Face Probe*. Zim Morning Post. <https://zimmorningpost.com/zesa-forensic-audit-six-executives-bounce-back-10-new-officials-face-probe/>
- Sunday, A. A. & Juliana, M. I. (2016). Relevance of forensic auditing as an investigative tool in curbing financial crimes in public sectors organization. *J. Account. Financ. Manag.*, 2(3), 40–59.
- Tarjo, T., Anggono, A., & Sakti, E. (2021). Detecting indications of financial statement fraud: A hexagon fraud theory approach. *AKRUAL J. Akunt.*, 13(1), 119–131. <https://doi.org/10.26740/jaj.v13n1.p119-131>.

- Transparency International Zimbabwe. (2021). *Judicial Corruption in Zimbabwe*. <https://tizim.org/wp-content/uploads/2021/11/Judicial-Corruption-in-Zimbabwe.pdf>
- Vousinas, G. L. (2019). Advancing theory of fraud: The S.C.O.R.E. model. *J. Financ. Crime*, 26(1), 372–381. <https://doi.org/10.1108/JFC-12-2017-0128>.
- Williams, M., Wiggins, R., & Vogt, P. R. (2021). *Beginning Quantitative Research*. SAGE Publications. <https://doi.org/10.4135/9781529682809>.
- Wolfe, D. T. & Hermanson, D. R. (2004). The fraud diamond: Considering the four elements of fraud. *CPA J.*, 74(12), 38–42.
- Yadiati, W., Rezwiandhari, A., & Ramdany (2023). Detecting fraudulent financial reporting in state-owned company: Hexagon theory approach. *J. Akunt. Kaj. Ilm. Akunt.*, 10(1), 128–147. <https://doi.org/10.30656/jak.v10i1.5676>.
- Zhou, S., Mazhambe, Z., & Njaya, T. (2022). An evaluation on the use of forensic accounting in curbing fraud in the public sector: A case study of local authorities in Masvingo Province. *Res. J. Econ. Manag. Stud.*, 2(2).
- Zimbabwe Stock Exchange. (2024). *Listed Companies*. <https://www.zse.co.zw/abc/>