

INTERNAL CONTROL AND CRISIS MANAGEMENT: INSIGHTS FROM STATE AND PRIVATELY-OWNED ENTERPRISES IN GHANA

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Abstract

The paper discusses the level of adherence to internal control measures focusing on the 2013 COSO Model as well as the relationship between internal controls and crisis management. The authors employed a survey and cumulative percentage research approach with 20 enterprises from five sectors, namely: transport, service, energy, financial, and manufacturing, with 120 respondents from both State and Privately-Owned Enterprises in Ghana. The results indicate that less than ¼ of surveyed enterprises perform excellently with the 2013 COSO internal control model and the performance of privately owned enterprises is better than that of state-owned enterprises. The study also finds a weak positive correlation between internal controls and crisis management in both state- and privately-owned enterprises in Ghana and recommends that internal controls must be taken seriously with special attention on the appointment of Boards members and management which should be based on competence rather than political and other social ties.

Keywords: Crisis Management, Internal Control, state-owned enterprises, private enterprises, Ghana

INTRODUCTION

Entities' resilience to the crisis is a key factor to their continuous existence. The emergence of a crisis in enterprises in most cases is not a sudden occurrence but due to failure of management practices. Weak Internal Control mechanisms over some time could be responsible for the poor management of the crisis. Scholars have offered different meanings to internal control. We align with the conceptualization of [1] that internal controls are measures instituted by an organization to ensure the entity's objectives, goals, and missions are achieved. He further posited that internal controls are a set of policies and procedures used by an institution in ensuring that transactions

or activities are carried out appropriately devoid of waste, theft, and misuse of organization resources. The British Standards Institute (BSI), and the European Guidance on Crisis Management as cited by [2] and [3] define a crisis as "an unprecedented or extraordinary event or situation that threatens an organization and requires a strategic, adaptive, and timely response to preserve its viability and integrity." The crisis could emanate from varied sources, and the need for dynamism to build, integrate, and reconfigure both external and internal competencies to ensure enterprise continuity is very critical [4, 5]. For this discussion, it is worth noting that crisis management should not be seen as a remedy during the period of distress but should be a full measure that involves the enterprises' day-to-day activities. It should include actions before, during, and after the crisis. Crisis management activities and processes should be initiated long before an organization experiences a crisis. Crisis management deals with actions before, during, and after it has occurred. This process involves identifying, assessing, understanding, and coping with a crisis [6]. It is also seen as an integral part of the broader organisation's resilience measures and not merely something to deploy when all other options have failed [7]. Therefore, the process focuses on all three internal controls, namely: prevention, detective, and corrective control procedures. The control systems serve as a reliable means for which crisis can either be prevented or effectively managed to avoid shutdowns or incur preventable losses. However, most Ghana industries are not able to effectively adhere to all the internal control guidelines as enshrined in the 2013 Committee of Sponsoring Organizations of the Treadway Commission's model (COSO). This challenge has led to a shutdown of some enterprises in Ghana while others run into crisis. Also, enterprises in Ghana cannot identify suitable crisis management practices due to weak internal control systems that have contributed significantly to these crises. A good number of state-owned enterprises and some privately-owned enterprises have performed poorly over the years due to weak internal controls. Therefore, there is a need to investigate the level of adherence and the role of internal controls in state-owned enterprises compared to the private sector. More so, the information available to address issues of this nature in Ghana is inadequate and lacking. Hence, the decision to undertake this study to help fill the existing gap by proposing recommendations and policy guidelines. The paper's main objective is to examine the level of adherence to internal control systems and their role in crisis management in state and privately owned enterprises in Ghana and establish the relationship between internal controls and crisis management [8-12]. This paper contributes to the literature by addressing management challenges and inform managers on the need to implement robust internal control systems to manage a crisis in State and privately owned enterprises in Ghana. In this light, the paper discusses the relevant internal control measures put in place as a means of crisis management in both State and privately owned enterprises in Ghana, with a special emphasis on how the internal controls can prevent, detect, and control these crises. This paper recognizes the importance of the 2013 COSO model as a working document for crisis management for institutions throughout the world for which Ghana is not an exception. Internal control is one of the COSO model frameworks as a means of ensuring the better financial performance of organizations. The paper takes a look at the level of compliance to these five (5) components comprising of the control environment, risk assessment, information and communication, monitoring activities as a means of measurement in establishing the relationship between internal controls and Crisis management. Looking at the diverse and broad nature of the crisis, the paper focuses on three major crisis that is common to all the enterprises in Ghana namely: financial, human resource, and power/electricity. The paper is arranged in the following order: introduction, literature review, methodology, results, discussions, and conclusions.

LITERATURE REVIEW*Theoretical underpinnings**Administrative Theory*

To resolve the deficiencies in organisations, Henry Fayol propounded the Administrative theory as a means to promote management to best manage risks and possible crises that may result from maladministration. The theory encompasses management, leadership, and ethical theories, which are anchored on the following six functions: Forecasting, Planning, Organising, Commanding, Coordinating, and Controlling [13]. Others who argued in favour of this theory are [14]. However, scholars have detected some limitations of this theory as well by stating that leadership cannot be taught. The critics of the theory stated that using leadership as a base for theorising about disaster and crisis can be likened to a house built on sand or in other words, an exercise in futility. However, some scholars are of the view that if the content of the literature is for disaster and crisis management, which could form a symbiotic relationship but not a theory [15-20].

Theories of Crisis Management

As a means of addressing crisis-related issues, several scholars propounded theories intending to explain the phenomenon and went further to establish some solutions. Some of the theories that are deemed to be appropriate for the study are as follows:

Decision Theory

[21] Decision theory has been a leading model under risk and was championed by Cohen, March and Olsen, among others in 1972 [22]. This theory is seen to reach utilitarian goals but suffered criticism for disregarding the processes for arriving at the goals. However, the theory is seen to be coherent and consistently seen to reflect the goals and intent of early scholarship [23]. However, [24] argue that classical theory cannot continue to be used as the standard for assessing and evaluating all decision behaviour. According to them, the theory undoubtedly has its place in practice. However, its use as a single standard may have once been justified because so little was known about decision making and human cognition. They have concluded that human circumstances have changed, and therefore the theory, as well as its modes of implementation, must also change [25-31].

To deal with a crisis, different scholars developed different life cycle theories. First of all, [32] develop a crisis management model and method, which has four stages, namely: Start-Up Phase, Growth Stage, Mature Stage, and the Recession Stage. The theory explains the Start-Up phase as the stage where a particular crisis begins to spring up with visible signs in an enterprise that calls for the needed attention. The crisis then moves to Growth Stage when not attended to on time. At this stage, the crises begin to cause visible impacts on the operations of the enterprise. When the crisis is still not dealt with, it then moves to the Mature Stage. At this stage, the crisis begins to have a significant impact and capable of affecting the enterprise's operations, leading to the destabilization of the enterprise. The Recession Stage is the lowering ebb of an enterprise where the impact of the crisis begins to affect the profitability or the gains of the enterprise. This occurs when the first three stages are not properly handled.

Economic theory

Economic theorists propounded theories that had no focus on outcomes but rather focused on abstractions, which gave understanding or coping mechanisms to people with some aspects of disaster or crisis within a broader context. The major criticism about the economic theory is that it is considered not to have approaches to theories

on disaster and crisis such as natural disasters like hurricane Katrina and November 9 [33]. This can also be related to the current Coronavirus situation, which has a significant impact on many industries throughout the world. [33] has, however, acknowledged few scholars such as [34] who have written scholarly articles to have covered disaster or crisis management, which was a major limitation in the economic theory even though they could not discuss them into detail

Social Theory

Theorists as [35] emphasize disaster and crisis conceptualization from a social policy standpoint. The study has further emphasized the need for long-term political commitment to disaster management. This theory is often criticized as being narrowly focused by relying on issues of a specific geography, geopolitical framework, or disaster citing [36] as an example. Besides, scholars such as [37] canvass for the need for sociologists to propound theories that will cover the field of conflict theory, political sociology. [37] advances his argument by stating the need for sociologists to research disaster /crisis as a means of appreciating "aspects of social structures and processes" which in his view may be hidden in daily affairs.

Life Cycle Theory of Crisis in Dynamic Environment

This theory states that enterprises have their unique characteristics and crisis incentives in different life cycles. As such, organisations will receive better results if they passively respond by using enterprise resources in conformity with the organisation's objectives. These objectives must aim to derive the maximum economic benefit and, therefore, make a two-dimensional analysis structure by combining the organisational life cycle and enterprise crisis. The theory proposes that crisis will be much more coordinated at different developmental stages when crises are managed in this manner, as shown in figure 1. [38] further contributes to the discussion by proposing the life cycle theory. The paper states that enterprise crisis management is combined to form a more accurate enterprise crisis management model and methods. Further, [39] asserts that organisations need to take advantage of social media, most especially in this era where data is much available to promote their thinking model. [39] believes that enterprises can apply the benefits of social media to promote development in various periods and fields.

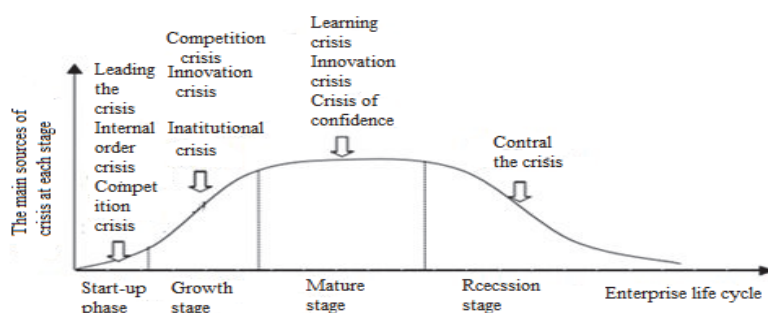


Figure 1. The main source of crisis at all stages of the enterprise life cycle

Source: [40]

2.2 Internal Control Structures

[41] point out the importance of internal control systems in which recognises the need for comprehensive internal control systems to conduct an effective external audit. It is also noted that it is difficult for external auditors to rely on small and medium-scale enterprises' internal control systems. In his view, this is because such business entities have not established a comprehensive system of internal controls. There is no adequate segregation of duties or responsibilities. There are no assurances as to the accuracy of records regarding business transactions. The paper advances the argument further by stating that small entities' ongoing monitoring activities are more likely to be informal and typically performed as part of the overall management of the

entity's operations. [42] emphasize the relevance of internal control mechanisms and management's role. In his view, management's close involvement in operations often will identify significant variances from expectations and inaccuracies in financial data leading to corrective action to the controls [43-46].

Elements of Internal Control: Internal control systems are purposed to function at different levels of effectiveness. Establishing whether a particular internal control system is effective is based on the feedback that one derives from assessing the following five components: Control Environment, Risk Assessment, Control Activities, Information and Communication, and Monitoring. The five components' effectiveness is based on their presence and how they can function [47]. For this study, all the five internal control components; control environment, control activities, Information and Communication, risk assessment as well as monitoring will be considered [48]

Control Environment: [49] state that the control environment is established by the organization's administration to set the tone of an institution and influence the control consciousness of its people. control environment factors include: integrity and ethical values, the commitment to competence; leadership philosophy and operating style; the way management assigns authority and responsibility, as well as organizes and develops its people. The paper further states that, management attitude must be committed to ethical business practices and following the laid down control procedures. The control environment is also seen as the foundation for all other internal control components, providing discipline and structure for operation.

Control Activities: Control activities are laid down policies and procedures that help management in carrying out directives. They aim to ensure that all the needed actions are taken to help resolve risks and to facilitate the achievement of the organization's aims and objectives. These activities are not a one-time affair but rather a regular one that should be carried out throughout the organization, at all levels, and in all functions. Control activities are varied or diverse and involve giving approvals and authorisations, verifications, reconciliations, reviews of operating performance, the security of assets, and segregation of duties. The two key elements of Control activities involve a policy establishing what ought to be done and procedures or how to affect the policy [48, 49].

Monitoring of Controls: Monitoring is critical in ensuring a well-functioning internal control system. It is a process that assesses or evaluates the quality of the system's performance over time. There is a need for ongoing monitoring in the normal course of operations. This includes but not limited to regular management and supervisory activities to promote quality of internal control system performance [40, 41]. The effectiveness of ongoing monitoring procedures could be determined by the scope and frequency of separate evaluations, which, to a very large extent, depend on the outcome of risk assessment. To effectively deal with a potential crisis, lapses or shortfalls in internal control need to be reported to those in authority such as administrators and the Board of Governors without delay. Internal control systems are not static but are susceptible to change over time to meet current trends.

Crisis Management

The crisis from the onset begins like risks and eventually develops into a crisis with the potential of running down an enterprise when not corrected with the right measures [50]. It is very important to note that enterprises face a diverse and enormous crisis in Ghana. This paper finds it unrealistic to discuss all the relevant issues at a time and therefore decides to narrow the scope by discussing energy/ electricity, human resource, and financial crises, which have consistently affected enterprises in Ghana from 2008 to 2020. In crisis management, there is the need for a corporate custodian that ensures plans and skills are up to date throughout the organization, focusing on how to tackle issues that can erode the gains of the enterprise. As a means of resolving organisational crisis, [51] contribute to the discourse by recommending merging as an option for organizations that are in crisis. Merging involves the unification of two or

more previously independent entrepreneurial structures into a new unified enterprise. Merger as a process prohibits previous enterprises from existing, and a new entrepreneurial structure developed. Merging is a result of different enterprise stakeholders acting in good faith in seeking their profit. In 2014, [52] also contribute to the discussion by recommending two ways, namely:

(a) Transformation: This mechanism is meant to change the organizational and legal form of the enterprise.

(b) Division of an enterprise: this method is adopted by taking away a structural element from an entrepreneurial structure. This method advocates for the elimination or the removal of a unit, division, or a branch from the main enterprise while the main enterprise continues to function together with a new autonomous subject. [53] propose absorption as an option for enterprises facing a crisis. In this case, absorbed enterprise loses its legitimacy and therefore ceases to exist as an independent enterprise but rather becomes a part of another entrepreneurial structure. This occurs under mandatory acquisition with a serious negative economic impact on an enterprise that is being absorbed. As a means of resolving crises effectively, [54] suggest the need to pay attention to an early warning system based on a pre-treatment plan to eliminate all potential crises before they begin to affect the enterprise's operations. The theory raises that managers set a signal reporting mechanism capable of sensing crisis during early (latency and the precursory) periods with special emphasis on information collection. The need to assess the information collected, crisis prediction, crisis warning, and crisis pre-treatment, are all considered to play critical but different roles in resolving the potential crisis. They further suggested the formation of crisis management teams in enterprises that should be incorporated in the organizational structure to facilitate the crisis's resolution in a more orderly manner. This follows their disagreement with the new theory of the crisis life cycle and the countermeasures. They posited that the three-stage model: pre-crisis, crisis and post-crisis and the four-stage model: prodromal, breakout or acute, chronic and resolution; The five-stage model (also known as the M model): signal detection stage, detection, and prevention stage, control damage stage, recovery stage, learning stage; The six-stage model: the stage of crisis prevention, crisis management preparation stage, the crisis recognition stage, the stage of crisis control, the stage of crisis resolution, the profit from the crisis stage. [54] argue that the four methods stated above are not focusing on prominent crisis management because they are too simple and have therefore come out with the model as presented in figure 2 and table 1, respectively.

Internal Controls and Crisis

Failure of internal control systems has a debilitating effect on financial performance, leading to a financial crisis in most cases. Various scholars have extensively discussed the theoretical basis for establishing a relationship between financial performance and internal control systems. For instance, [38] affirms that internal control systems such as organisation, segregation of duties, physical authorization and approval, arithmetical and accounting, personnel, supervision, management, acknowledgment of performance and budgeting are very critical, and this assertion is in line with the five components of the 2013 COSO model as having a relationship with the financial performance of organisations. Adherence to internal controls promotes the attainment of pre-set goals of organisations to a very large extent. It is very important to establish a direct correlation between internal controls and crises in organisations. Internal controls are, therefore, considered as one of the efficient ways of managing crises. Internal control involves methods and procedures embedded in the company's organisation and adopted by management to ensure the proper functioning of all business functions of the company. In other words, it is a process, which forms the company management, senior management, and staff which aims at obtaining reasonable assurance for the attainment of objectives such as ensuring: the reliability

of financial reporting, compliance with laws and other regulations, efficiency and effectiveness of business operations and protection of property [55].

The model in Figure 2 represents the proposed model for the role of internal controls and crisis management in both State and privately-owned enterprises as well as crisis resolution mechanisms



Figure 2. Internal Control and crisis management link model

The research questions are developed.

1) Do State and Privately Owned Enterprises in Ghana comply with the 2013 COSO model?

2) What is the correlation between internal controls and crisis management?

Hypothesis are as follows

H₁: State and Privately Owned Enterprises do not comply with the 2013 COSO Internal Control Model

H₂: There is a positive correlation between Internal Controls and Crisis Management

METHOD

Several enterprises such as Ghana Libya Arab Holdings, the Electricity Company of Ghana, and Ghana Gas Company have performed poorly over the years. Their financial performances are not yielding the desired benefit to the State. They record Negative Net Profit margins, but, on a few occasions, recorded some positives (Ministry of Finance [56]). In dealing with a crisis of such magnitude, successive governments in Ghana since 1987 sold State-owned enterprises to private individuals under the Divestiture Implementation plan with an excuse of running losses [57]. The Government of Ghana currently has varying equity interests in about eighty-four (84) Companies, comprising forty-four (44) wholly-owned State-owned enterprises (SOEs) and forty (40) Joint Venture Companies (JVCs). Many of these companies have not been performing compared to their objectives, while others are incurring losses. More so, the expected returns to Government from the SOEs and JVCs have not been commensurate with the level of investments that have been channeled into them. The [58] observes that Ghanaian SOEs continued to make significant losses due to weak internal controls as one of the reasons with a caution that the development could add to the government's risk of debt distress and further constrain growth. Even though all business enterprises, both State and private ones, try to put up some good practices regarding internal controls, State-Owned enterprises in Ghana only comply with the minimal governance issues as stated in the legal frameworks that establish them. They demonstrate a lot of weaknesses in the areas of board performance evaluation, criteria

for board appointment, the balance of Executive Directors and Non-Executive Directors, and other board characteristics indicating a departure from general practices, which eventually leads to human, financial, and energy crisis. The claim that staffs and management lack the technical capacity and commitment to manage some of these enterprises compelled enterprise owners (both State and private) to introduce several interventions such as capital injections, capacity building training/ workshops, signing of performance contracts as well as dismissals. However, all these yielded little or no results. The enterprises' poor performance has led to the non-regular payment of salaries, laying-off of workers, mergers, and total shutdowns in some cases. It is very intriguing to note that some State-owned enterprises such as Tema PSC Shipyard, which were privatised due to low returns, were eventually bought back by the State because private institutions which took over, performed worse. It is imperative to note that various scholars (e.g [59]) have outlined and recommended management practices and models to fully address the peculiar needs of the Ghanaian entrepreneur and the shareholders of enterprises. The 2013 COSO model has been designed as the latest model to support enterprise growth. However, adhering to the model is becoming a challenge to enterprises in Ghana. Whilst others assign various reasons for the poor performance of these enterprises, the IMF and the Ministry of Finance categorically mentioned ineffective internal controls as a major reason.

Sample and Procedure

The authors conducted a web-based survey, which was further followed up with emails to individuals to participate in the study. The e-survey Microsoft theme software was used to collect data from respondents between August 2020 and October 2020. The 20 enterprises, together with the 120 employees of both State and privately owned enterprises, were stratified based on the type of services, roles in their respective enterprises, and gender. Our sample included 20 enterprises from five sectors, namely: transport, service, energy, financial, and manufacturing. The data was collected by administering online questionnaires and having one-on-one interviews with some key informants on internal controls and crisis management. A random sampling method was then employed to select the respondents for the study. A total of 124 questionnaires were issued; however, 122 were returned. Finally, 120 of the responses were accepted for the study accounting for 96.8%. A response rate of 96.8 % is adequate for data analysis and concluding [38, 39, 60].

Statistical Analysis

SPSS version 16 software was used in the analyses. The study also used the Pearson correlation matrix in revealing the strength of association and relationship among the variables. Chi-Square analyses were further used in calculating the critical as well as 'P' value, which was based on 0.05 and 3 as the level of significance and degree of freedom, respectively. The authors employed comparative analysis on a five-point Likert scale using Pearson's chi-square non-parametric analysis method with chi-square and critical value of 4.145247 and 7.814728, respectively at 95% confidence level in concluding the study.

The results were based on the chi-square formula:

$$\chi^2 = \sum \frac{(fo - fe)^2}{fe}$$

fo= the frequency observed; **fe** = the frequency expected and **Σ** = the total sum.

RESULTS AND DISCUSSION

Table 1

Chi-Square results of State and privately owned enterprises in Ghana

		EXCELLENT	ACCEPTABLE	NOT-ACCEPTABLE	TOTAL
OBSERVED	POES	10	12	38	60
	SOES	5	7	48	60
	TOTAL	15	19	86	120
EXPECTED	POES	7.5	9.5	43	60
	SOES	7.5	9.5	43	60
	TOTAL	15	19	86	120
CHI SQUARE VALUE	POES	0.833	0.66	0.58	2.07
	SOES	.833	0.66	0.58	2.07
	TOTAL				4.14

Data is presented as figure with corresponding observed and expected values in parenthesis

Degree of freedom= $(r-1) * (C-1) = 1 * 3 = 3$

Significant level is 0.05

Critical value: 7.814728

With the P-value approach, $\alpha = 0.05$

And the p-value is 0.125855

Hypothesis Testing

H₁: State and privately owned Enterprises do not adhere to the 2013 COSO Internal Control Model.

To test the above hypotheses, the authors employed Chi-Square Statistical Analyses. The critical value was 7.814728, while the chi-square value 4.145247, with a probability of 0.05. The hypothesis was therefore accepted since the critical value was greater than the chi-square value

Table 2

Correlation between internal controls and crisis management in Ghana

	INT. CONTROL SOEs	INT. CONTROL POEs	CRISIS MGT. SOEs
INT. CONTROL SOEs	1		
CRISIS MGT. SOEs	0.135		
INT. CONTROL POEs		1	0.1212

Furthermore, the sectoral comparison between State and Privately Owned Enterprises indicates that the figures of 0.134894 and 0.121242 are almost identical.

However, the strength of State-Owned Enterprises is marginally higher than that of the privately owned. This, therefore, suggests that, when Internal Controls are enforced, there is an indication that crisis management will also be better. Table 2 support H₂: There is a positive correlation between internal controls and crisis management.

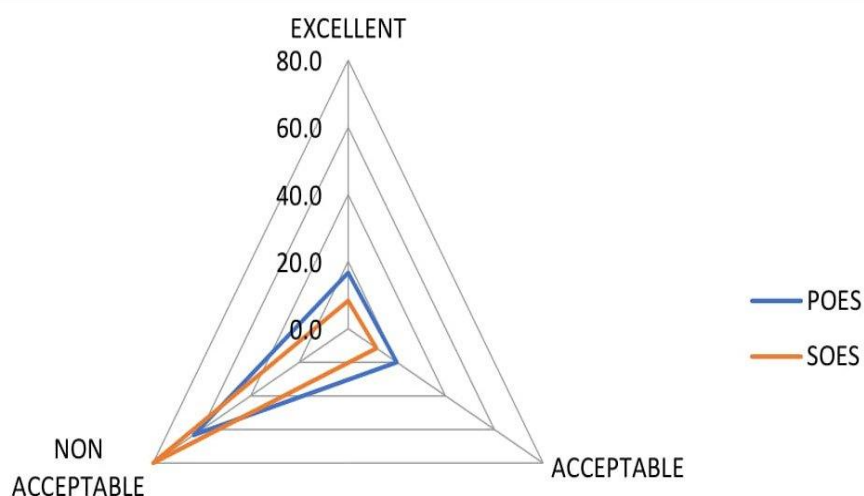


Figure 3. level of adherence to internal controls by state and privately owned enterprises in Ghana
 Source: *Field Survey, 2020*

Discussion

The study affirms that both State and privately owned enterprises in Ghana have faced at least one of the following crisis: electricity/power, financial, and human resource. The relationship between internal controls and enterprises' crisis management mechanisms in both State-and privately-owned enterprises featured significantly in the data collection and analysis. Table 1 displays the results of a chi-square, which was used in the analyses. Table 2 shows the results of the correlation between internal controls and crisis management. Figure 3 represents the level of adherence to Internal Controls by State and privately owned Enterprises, subsequently used in the discussion. The data gathered and represented in figure 3 confirms the hypothesis which indicates that the majority of both State and privately owned enterprises in Ghana do not adhere to the 2013 COSO internal control model. The results show that just a very few of the respondents (less than a quarter) are satisfied with the level of adherence. These respondents by a cumulative average point scored their respective institutions as having 80 % and above. This implies that the general internal control mechanism amongst the Ghanaian enterprises is not efficient and can be seen as a major threat to the survival of these enterprises since they are exposed to the crisis. This confirms the perception of manipulation and interference of government and state officials as well as nepotism and corruption which dominated the appointment of boards and employees in both state and privately owned enterprises in [59]. For excellent performance, it is important to note that the performance of privately owned enterprises is seen to be better than that of State-owned enterprises (Table 1). The study establishes that the performance of privately owned enterprises is twice better than State-owned enterprises. This result once again confirms the already held perception that privately-owned enterprises are better managed since individuals and the owners have a direct interest in the success or failure of these enterprises. There is a similarity in the results from the Ghanaian Setting as compared to a study in Peru. Just as in the case of Ghana, the Peruvian internal control guidelines and tools are up to international standards, however, there

seem to be limitations and challenges on how substantially and efficiently the Peruvian public administration owns and implements internal control and risk/ crisis management policies and processes (OECD 2017) and the case of Ghana is not different. The second hypothesis in table 2 looks at the correlation between internal controls and crisis management. The data shows that there is a weak positive correlation between internal controls and crisis management in Ghana. This means that an effective internal control mechanism will reduce State and privately Owned enterprises' exposure to crisis or vice versa. This result buttresses (MOF 2016; IMF 2019) which states among other things that the significant losses and non-performance by enterprises in Ghana is due to weak internal controls and also caution that the development could add to the government's risk of debt distress and further constrain growth. This finding is in line with [38] who establish a positive correlation between internal controls and operational risk. The degree of correlation is, however, different. Whilst this study establishes a weak positive correlation, [42] established a strong positive correlation.

Managerial implications

The paper adds to the literature on the relevance of internal controls and crisis management in Ghana. The paper's findings fill the information gap, which long existed by comparing how Internal Controls and crisis management are prioritized. The paper established these facts by exploring the link between Internal Controls and crisis management by comparing the level of adherence to internal controls and its relationship with crisis management from the perspective of management and staff of twenty institutions. To the best of the authors' knowledge, this is one of the few such attempts. This study provides a good opportunity for policymakers, managers, and Chief executive officers to strategize in dealing with the crisis in the various institutions. The empirical results suggest that decision-makers should give attention to the strategy formulation process in enforcing internal controls, affirming in the studies of [5, 60] who submit that firms in emerging markets must adjust their strategic orientations to deal with uncertainty. However other variables need to be taken into consideration if enterprises are to remain in business. This study is equally relevant for making strategic decisions in other companies and public sectors in Ghana and beyond.

CONCLUSION

The comparative study between State and privately owned enterprises in Ghana establishes that there is a positive correlation between internal controls and crisis management. It has also measured the level of adherence to the 2013 COSO model and finds that only a quarter of the respondents agree that their institutions strictly adhere to these internal controls whilst the majority of the respondents have a contrary view. The study further established a positive correlation between internal controls and crisis management. The study offers the following recommendations:

Internal Controls must be taken seriously. This can be done through Governing Boards and management. Appointments of Board Members of enterprises should be based on competence rather than political and other social ties. This will promote efficiency and objectivity in the decision-making process. It will help protect the interest and sustainability of the enterprises as compared to the current arrangement where decisions are made to suit the interest of the appointing authorities which leads to a conflict of interest. Further, crisis management teams should be retooled and trained to offer apt responses before the enterprises begin to experience a recession. From the information gathered, most of the enterprises do not have regular crisis prevention meetings due to resource constraints. They rather meet when a crisis arises and this arrangement leaves little room for adequate steps to be taken since most of the

decisions are taken at the spur of a moment. Following the complexities that surround enterprises and their exposure to the crisis, the management of the various enterprises needs to prioritize strict measures by adhering to internal controls as a means of dealing with the crisis. Issues of electricity/ power, human resource, and finance/ capital must be well addressed through regular reviews to ensure efficiency. Institutions should also partner with one another to enjoy economies of scale and reduce the cost of production. The regular occurrence of crisis in the Ghanaian enterprises as well as its management which is seen as a daunting task for managers can be well addressed when internal controls take precedence over any other form of practice. It is obvious from the data collected that the skill for crisis management is not adequate and the level of adherence has not been encouraging. A lot of professional efforts are needed to reverse the current trend to protect the rest of the enterprises which are currently operating from suffering the same fate.

5.1 Limitation and suggestions for future studies

The authors have identified the following limitations of this study so that the findings can be interpreted within the right context. The limitation of the study covers areas such as sample and data. This study used a sample of 120 employees from 20 selected State and Privately Owned Enterprises which covered only five sectors namely: service, energy/power, transport, financial, and manufacturing. Furthermore, the study is limited to three major crises in Ghana: financial, human resource, and electricity/energy. Thus, one of the reasons the researcher may not be able to generalize the results to all the State and privately owned enterprises in Ghana. The sample size is tiny and cannot generalize all the enterprises' overall performance in Ghana. Despite the limitations stated above, the applicability of this study adds to the literature as it relates to internal controls and crisis management in a developing country context. The authors are of the view that these results provide an interesting basis for further debate and empirical study. This study, in particular, could be further expanded by examining the connection between, financial performance, Boards, and crisis management among others. A longitudinal study could also help improve the finding of the study by capturing changes in the internal controls and crisis management which occurred over the periods and the possible factors influencing the changes.

REFERENCES

1. Eisenberg, E. and E.Y. Levanon, *Human housekeeping genes, revisited*. *TRENDS in Genetics*, 2013. **29**(10): p. 569-574 DOI: <https://doi.org/10.1016/j.tig.2013.05.010>.
2. Bogadi, N.P., M. Banović, and I. Babić, *Food defence system in food industry: perspective of the EU countries*. *Journal für Verbraucherschutz und Lebensmittelsicherheit*, 2016. **11**(3): p. 217-226 DOI: <https://doi.org/10.1007/s00003-016-1022-8>.
3. Bundy, J., et al., *Crises and crisis management: Integration, interpretation, and research development*. *Journal of management*, 2017. **43**(6): p. 1661-1692 DOI: <https://doi.org/10.1177/0149206316680030>.
4. Di Stefano, G., M. Peteraf, and G. Verona, *Dynamic capabilities deconstructed: a bibliographic investigation into the origins, development, and future directions of the research domain*. *Industrial and corporate change*, 2010. **19**(4): p. 1187-1204 DOI: <https://doi.org/10.1093/icc/dtq027>.
5. Nwachukwu, C. and H.M. Vu, *Strategic flexibility, strategic leadership and business sustainability nexus*. *International Journal of Business Environment*, 2020. **11**(2): p. 125-143.
6. Christensen, T., P. Lægheid, and L.H. Rykkja, *Organizing for crisis management: Building governance capacity and legitimacy*. *Public Administration Review*, 2016. **76**(6): p. 887-897 DOI: <https://doi.org/10.1111/puar.12558>.
7. Vale, L.J., *The politics of resilient cities: whose resilience and whose city?* *Building Research & Information*, 2014. **42**(2): p. 191-201 DOI: <https://doi.org/10.1080/09613218.2014.850602>.
8. Afifah, I. and E.P. Isra, *Analysis of Forest and Land Fire with Hotspot Modis on Various Types of Land Cover in Central Kalimantan Province*. *AgBioForum*, 2021. **23**(2): p. 13-21.

9. Adak, D., N. Bairagi, and R. Hakl, *Accounting for multi-delay effects in an HIV-1 infection model with saturated infection rate, recovery and proliferation of host cells*. BIOMATH, 2020. **9**(2): p. 2012297 DOI: <https://doi.org/10.11145/j.biomath.2020.12.297>.
10. Amirbek, A., et al., *THE CENTRAL ASIAN COUNTRIES IN THE GLOBAL ECONOMY: THE CHALLENGES OF ECONOMIC INTEGRATION*. Central Asia & the Caucasus (14046091), 2020. **21**(1) DOI: <https://doi.org/10.37178/ca-c.20.1.09>.
11. Abdeljaber, O., et al., *The role of Trade Integration and Cross-Border Entrepreneurship in International Relations: A moderating role of IT Infrastructure*. Croatian International Relations Review, 2021. **27**(87): p. 63-94.
12. Arau, J.H., *The economic-financial crises of contemporary capitalism*. Cuadernos de Economía, 2020. **43**(123): p. 359-381 DOI: <https://doi.org/10.32826/cude.v43i123.302>.
13. Boin, A. and P.t. Hart, *Public leadership in times of crisis: mission impossible?* Public administration review, 2003. **63**(5): p. 544-553 DOI: <https://doi.org/10.1111/1540-6210.00318>.
14. James, E.H. and L.P. Wooten, *Leadership as (Un) usual.: how to display competence in times of crisis*. Organizational Dynamics, 2005. **34**(2): p. 141-152 DOI: <https://doi.org/10.1016/j.orgdyn.2005.03.005>.
15. Heland-Kurzak, K., *Bad Practice Affecting and Limiting the Education of Students: A Study of Pedagogical Myths in Pedagogy Students*. Educational Sciences: Theory & Practice, 2020. **20**(4): p. 36-50.
16. Balbay, S., *Review of Innovations and Challenges in Language Learning Motivation*. Eurasian Journal of Applied Linguistics, 2020. **6**(3): p. 543-547.
17. Acar, A. and M.N. Kayaoglu, *MOODLE as a Potential Tool for Language Education under the Shadow of COVID-19*. Eurasian Journal of Educational Research, 2020. **90**: p. 67-82 DOI: <https://doi.org/10.14689/ejer.2020.90.4>.
18. Bashirzadeh, M., *Green synthesis of quinoxaline derivatives at room temperature in ethylene glycol with H2SO4/SiO2 catalyst*. European Chemical Bulletin, 2020. **9**(1): p. 33-37 DOI: <https://doi.org/10.17628/ecb.2020.9.33-37>.
19. Angus, D.A.P. and M.L.S. Carson, *Mental Illness and Moral Discernment: A Clinical Psychiatric Perspective*. European Journal for Philosophy of Religion, 2020. **12**(4) DOI: <https://doi.org/10.24204/ejpr.v12i4.3530>.
20. Hassan, A. and D. Meyer, *Financial development–income inequality nexus in South Africa: a nonlinear analysis*. Int. J. Econ. Financ, 2021. **12**: p. 15-25 DOI: <https://doi.org/10.32601/ejal.775801>.
21. Von Neumann, J. and O. Morgenstern, *Theory of games and economic behavior*, 2nd rev. 1947.
22. Etner, J., M. Jeleva, and J.M. Tallon, *Decision theory under ambiguity*. Journal of Economic Surveys, 2012. **26**(2): p. 234-270 DOI: <https://doi.org/10.1111/j.1467-6419.2010.00641.x>.
23. Milner, E. and P. Joyce, *Lessons In Leadership: Meeting The Challenges Of Public Services Management*. by Routledge 2 Park Square. Milton Park, Abingdon, Oxon, OX14 4RN, 2005.
24. Beach, L.R. and R. Lipshitz, *Why classical decision theory is an inappropriate standard for evaluating and aiding most human decision making*". In G. A. Klein, J. Orasanu, R. Calderwood, & C. E. Zsombok (Eds.), *Decision making in action: Models and methods* (p. 21–35). Ablex Publishing. 2015.
25. Ajah, B.O., I.A. Ajah, and C.O. Obasi, *Application of virtual reality (VR) and augmented reality (AR) in the investigation and trial of Herdsmen terrorism in Nigeria*. International Journal of Criminal Justice Sciences, 2020. **15**(1): p. 1-20.
26. Akanle, O. and B.R. Shadare, *Why has it been so difficult to Counteract Cyber Crime in Nigeria? Evidence from an Ethnographic Study*. International Journal of Cyber Criminology, 2020. **14**(1): p. 29-43.
27. Altounjy, R., et al., *Moving from bricks to clicks: Merchants' acceptance of the mobile payment in Malaysia*. International Journal of eBusiness and eGovernment Studies, 2020. **12**(2): p. 136-150 DOI: <https://doi.org/10.34111/ijebeq.202012204>.
28. Antoni, X.L., A. Dlepu, and N. Notshe, *A comparative study of financial literacy among undergraduate commerce and arts students: A case of a South African University*. International Journal Of Economics And Finance, 2020. **12**(2): p. 563-580.
29. Amarulla Octavian, J.W., I Nengah Putra, A. Kukuh Susilo, Okol S. Suharyo, *Risk Analysis of Islamic State (IS) Network Development in Southeast Asia Based on 3D Matrix*. International journal of operations and quantitative management, 2020. **26**(3): p. 195-223 DOI: <https://doi.org/10.46970/2021.26.3.3>.

30. Auriacombe, C.J. and T. Sithomola, *The use of participatory action research in a participative democracy: In critique of mechanisms for citizen participation*. International Journal of Social Sciences and Humanity Studies, 2020. **12**(1): p. 50-65.
31. Lavazza, A., *An Evolutionary Explanation for Change in Religious Institutions*. Journal for the Philosophy of Science, 2012. **63**(3).
32. Silva, J., et al., *Nanog is the gateway to the pluripotent ground state*. Cell, 2009. **138**(4): p. 722-737 DOI: <https://doi.org/10.1016/j.cell.2009.07.039>.
33. Sementelli, A., *Toward a taxonomy of disaster and crisis theories*. Administrative Theory & Praxis, 2007. **29**(4): p. 497-512 DOI: <https://doi.org/10.1080/10841806.2007.11029615>.
34. Korac-Kakabadse, N., A. Kouzmin, and A. Kakabadse, *Knowledge management: strategic change capacity or the attempted routinization of professionals?* Strategic Change, 2002. **11**(2): p. 59 DOI: <https://doi.org/10.1002/jsc.576>.
35. Henstra, D. and G. McBean, *Canadian disaster management policy: Moving toward a paradigm shift?* Canadian Public Policy/Analyse de Politiques, 2005: p. 303-318 DOI: <https://doi.org/10.2307/3552443>.
36. Kelly, P., *A critique of critical geopolitics*. Geopolitics, 2006. **11**(1): p. 24-53 DOI: <https://doi.org/10.1080/14650040500524053>.
37. Richmond, A.H., *Sociological theories of international migration: the case of refugees*. Current Sociology, 1988. **36**(2): p. 7-25 DOI: <https://doi.org/10.1177/001139288036002004>.
38. Mueller, D.C., *A life cycle theory of the firm*. The Journal of Industrial Economics, 1972: p. 199-219 DOI: <https://doi.org/10.2307/2098055>.
39. Brandtzaeg, P.B., et al., *Emerging journalistic verification practices concerning social media*. Journalism Practice, 2016. **10**(3): p. 323-342 DOI: <https://doi.org/10.1080/17512786.2015.1020331>.
40. Guo, Y.G., J.S. Hu, and L.J. Wan, *Nanostructured materials for electrochemical energy conversion and storage devices*. Advanced Materials, 2008. **20**(15): p. 2878-2887 DOI: <https://doi.org/10.1002/adma.200800627>.
41. Corstjens, P.L.A.M., et al., *Tools for diagnosis, monitoring and screening of Schistosoma infections utilizing lateral-flow based assays and upconverting phosphor labels*. Parasitology, 2014. **141**(14): p. 1841-1855 DOI: <https://doi.org/10.1017/S0031182014000626>.
42. Akhmetshin, E.M., et al., *Internal control system in enterprise management: Analysis and interaction matrices*, 21(2), 728-740. 2018 DOI: <https://doi.org/10.35808/ersj/1036>.
43. Alvinus, A., *The inadequacy of bureaucratic organizations: organizational adaptation through boundary spanning in a civil-military context*. Res militaris, 2012. **3**(1): p. 1-23.
44. Hong, L., *Challenges in application of German higher vocational education mechanism in Chinese School-enterprises*. Revista de psicología del deporte, 2020. **29**(4): p. 115-125.
45. Duke, E.O. and S.E. Osim, *The culture of slavery in traditional context and globalised society*. socialspacejournal. eu, 2020: p. 145.
46. Kyurkchiev, N., *A new class of activation functions. Some related problems and applications*, Biomath, 2020. **9** DOI: <https://doi.org/10.11145/j.biomath.2020.05.033>.
47. Lämsiluoto, A., A. Jokipii, and T. Eklund, *Internal control effectiveness—a clustering approach*. Managerial Auditing Journal, 31(1), 5-34. , 2016 DOI: <https://doi.org/10.1108/MAJ-08-2013-0910>.
48. Dickins, D. and R.G. Fay, *COSO 2013: Aligning internal controls and principles*. Issues in Accounting Education, 2017. **32**(3): p. 117-127 DOI: <https://doi.org/10.2308/iace-51585>.
49. Kinyua, J.K., et al., *Effect of internal control environment on the financial performance of companies quoted in the Nairobi Securities Exchange*. International Journal of Innovative Finance and Economics Research, 2015. **3**(4): p. 29-48.
50. Demirgüç-Kunt, A. and E. Detragiache, *The determinants of banking crises in developing and developed countries*. Staff Papers, 1998. **45**(1): p. 81-109 DOI: <https://doi.org/10.2307/3867330>.
51. Popkova, E.G., et al., *Marketing strategy of overcoming of lag in development of economic systems*. World Applied Sciences Journal, 2013. **26**(5): p. 591-595.
52. Pokotylo, I.V., et al., *Influence of 24-epibrassinolide on lipid signalling and metabolism in Brassica napus*. Plant growth regulation, 2014. **73**(1): p. 9-17 DOI: <https://doi.org/10.1007/s10725-013-9863-y>.
53. Skiter, N., V. Semenychev, and T.N. Litvinova, *Model of economic growth in Russia under conditions of integration into the world economy*. Applied econometrics and international development, 2015. **15**(2): p. 63-70.

54. Nocco, B.W. and R.M. Stulz, *Enterprise risk management: Theory and practice*. Journal of applied corporate finance, 2006. **18**(4): p. 8-20 DOI: <https://doi.org/10.1111/j.1745-6622.2006.00106.x>.
55. Lutz, J., *Committee of sponsoring organizations of the treadway commission: Internal control; integrated framework mit besonderer berücksichtigung der änderungen in der neuauflage 2013*. 2015.
56. Kirchon, A., et al., *From fundamentals to applications: a toolbox for robust and multifunctional MOF materials*. Chemical Society Reviews, 2018. **47**(23): p. 8611-8638 DOI: <https://doi.org/10.1039/C8CS00688A>.
57. Amo, H.F. and S. Gyamerah, *The Pre and Post Financial Performance of Privatized*. Research Journal of Finance and Accounting, 2016. **7**(19): p. 100-107.
58. Sonnenfeld, A., et al., *Survey of gravitationally-lensed objects in HSC imaging (SuGOHI)-III. Statistical strong lensing constraints on the stellar IMF of CMASS galaxies*. Astronomy & Astrophysics, 2019. **630**: p. A71 DOI: <https://doi.org/10.1051/0004-6361/201935743>.
59. Simpson, A., *Community*, in *The Brand Strategist's Guide to Desire*. 2014, Springer. p. 19-49.
60. Nwachukwu, C. and H. Chladkova, *FIRM RESOURCES, STRATEGIC ANALYSIS CAPABILITY AND STRATEGIC PERFORMANCE: ORGANISATIONAL STRUCTURE AS MODERATOR*. International Journal for Quality Research, 2019. **13**(1): p. 75-94. DOI: <https://doi.org/10.24874/IJQR13.01-05>.