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IMPACT OF INTERNAL CONTROL SYSTEMS ON FINANCIAL IRREGULARITIES IN LOCAL GOVERNMENTS: INSIGHTS FROM THE DEVELOPING WORLD

Impacto dos sistemas de controles internos sobre irregularidades financeiras em governos locais: insights do mundo em desenvolvimento

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ABSTRACT

This study investigates the impact of internal control systems on financial irregularities in 11 municipalities spread across 7 regions in Ghana. Using a descriptive research design and a quantitative approach, data was collected through a structured questionnaire. The study established challenges hindering the implementation of internal control systems as; inadequate resource allocation, unsatisfactory staff rewards, unnoticed misconduct, and collusion among staff. The findings provide valuable insights for management and policymakers in the public sector, offering recommendations to enhance operations by strengthening internal control systems. Recommendations include adopting best practices, providing additional resources and training, integrating internal controls with risk management, conducting regular staff performance audits, and enacting laws and regulations to enforce internal control implementation and report financial irregularities. The study depends hugely on self-reported quantitative information, audit reports, local government reports, and literature. Future studies should consider mixed methods approach to the study. This will offer an opportunity to collect qualitative data to explain the observed patterns.
Keywords: Internal Controls, Local Governments, Financial Irregularities, Public Sector.

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Impact of internal control systems on financial irregularities in local governments: insights from the developing world

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RESUMO

Este estudo investiga o impacto dos sistemas de controle interno sobre irregularidades financeiras em 11 municípios espalhados por 7 regiões de Gana. Utilizando-se um desenho de pesquisa descritivo e uma abordagem quantitativa, os dados foram coletados por meio de um questionário estruturado. O estudo estabeleceu desafios que dificultam a implantação de sistemas de controles internos como; alocação inadequada de recursos, recompensas insatisfatórias da equipe, má conduta despercebida e conluio entre funcionários. Os resultados fornecem insights valiosos para a gestão e os formuladores de políticas no setor público, oferecendo recomendações para aprimorar as operações por meio do fortalecimento dos sistemas de controle interno. As recomendações incluem a adoção de melhores práticas, o fornecimento de recursos e treinamento adicionais, a integração de controles internos com a gestão de riscos, a realização regular de auditorias de desempenho da equipe e a promulgação de leis e regulamentos para aplicar a implementação de controles internos e relatar irregularidades financeiras. O estudo depende enormemente de informações quantitativas auto relatadas, relatórios de auditoria, relatórios do governo local e literatura. Estudos futuros devem considerar a abordagem de métodos mistos para o estudo. Isso oferecerá uma oportunidade de coletar dados qualitativos para explicar os padrões observados.

Palavras-chave: Controles Internos, Governos Locais, Irregularidades Financeiras, Setor Público.

INTRODUCTION

Internal control is an evolving process that is changing to reflect the demands of modern organizations (Muthusi, 2017). Corporate internal controls are a subset of instruments of governance and, it may not matter whether a firm assumes a universal internal control approach or develops its own, the quest to sustain business value should be the focus of a firm's management (Maseko, 2015). An internal control system is considered as the steps imposed by an organization to ensure that the objectives and missions of the organization can be achieved (Attah-Botchwey, 2018). The internal control system is considered to be a reliable instrument for reducing the significant losses often experienced in the public sectors of many developing countries. The implicit functions of the internal control system can help to prevent and identify large expenses recorded in national budget statements, which is a common cause of deficit national budgets in emerging nations like Ghana. Additionally, the internal control system can be used to promote transparency and accountability through the implementation of appropriate standards. According to Njagi and Mwangi (2019), an internal Control System embodies all procedures followed by the management of organizations to ensure sustainable operations by identifying and preventing fraud, as added to the early preparation of all the useful financial information. Internal controls are effective when they guarantee that an organization's processes, conducts, guidelines, and responsibilities, together sustain quality internal control recording, enhance adherence to guidelines and generate operational efficiency.

Internal control has seen a significant advancement in Ghana since 1988, having been further supported in implementation by decentralization in governance through the 1992 Constitution of Ghana. The Ghanaian public sector has suffered from some cases of misappropriation of funds while officials are reported of corrupt practices and efforts to enrich themselves to the disadvantage of the nation. This led to the establishment of the function of internal auditor to ensure that some level of control would be assured in the daily activities within the public sector. The internal audit department undertakes a thorough review of the accounts and other records relating to the operations of the organizations and reports for review on such operations. This mitigates the high level of corruption, misappropriation, and misrepresentation of facts relating to how operations are handled within these organizations. The Institute of Chartered Accountants Ghana (ICAG) in 2010 concluded the need for a Legal Framework for Financial Administration and Transparency in Ghana which will lead to the effective and economical use of public finances. Internal Audit is one of the units set by management to comply with policy instructions and to improve deviations from standards or guidelines set by management.

Financial irregularities are a common problem in many local government organizations around the world, and the implementation of internal control systems is widely recognized as a key strategy to prevent and detect these irregularities (Chen et al., 2020; Wu et al., 2021). Organizations need to take financial irregularities seriously, as they can have serious consequences, both for the organization and for the individuals involved. Abdulai (2018) examined the effectiveness of internal control structures in Ghana's public sector in Northern Region, Ghana for sampled District Assemblies. Amponsah-Tawiah et al. (2018) also evaluated the internal control systems of the Accra Metropolitan Assembly (AMA) and found that the AMA had strong internal control systems in place, but there were some weaknesses in the implementation of these systems. The study recommended that the AMA strengthen its internal audit function and increase staff capacity to improve the implementation of internal control systems.

Similarly, Asante et al. (2016) examined how effective internal control systems are in preventing financial irregularities in the Cape Coast Metropolitan Assembly (CCMA) and found that the CCMA had several systems of internal control in place, but these systems were not always effectively implemented due to lack of resources and staff capacity. The study recommended that the CCMA strengthen its systems of internal control by providing more resources and training to staff. Another study by Uddin et al. (2017) examined the impact of systems of internal control on financial performance in the public sector in Ghana and found that internal control systems had a significant positive impact on financial results. The study recommended that local government organizations in Ghana prioritize the implementation of strong internal control systems to improve financial performance.

However, despite the implementation of internal control systems, financial irregularities continue to occur in many local government organizations in Ghana (Bawuah, 2021; Tetteh et al., 2021). This suggests that there may be gaps or limitations in the implementation or effectiveness of these systems. Bawuah (2021) found that the Weija-Gbawe Municipal Assembly had weak internal control systems in place, which contributed to financial irregularities. The study recommended that the municipality improves its internal control systems by adopting best practices and providing more resources and training to staff. Overall, these studies highlight the importance of implementing and effectively monitoring internal control systems to prevent financial irregularities in local government organizations.

While the aforementioned studies mostly focus on a particular local government unit, this study empirically gathers evidence and insights from 11 different local government units or Metropolitan, Municipal and District Assemblies (MMDAs), spread across 7 regions of Ghana. This offers a more nationally representative perspective than previous studies and thus, enhancing the generalizability of findings. The study sought to identify internal control systems instituted at the MMDAs, the extent to which these systems reduce financial irregularities, and the challenges in the implementation of the internal control systems.

The present study employed a descriptive research design to test an existing theory about the impact of systems of internal control on financial irregularities. The research was conducted in 11 MMDAs, and the main data collection instrument employed was a questionnaire using a five-point Likert scale. Stratified random sampling was employed to sample respondents across the MMDAs. The data gathered was processed and analyzed using IBM SPSS. The study's strengths include the use of a quantitative approach, which is adaptable and economical, and the questionnaire, which could increase the level of honesty and accuracy in responses.

Summarily, the present study affords the following contributions. This study offers fresh insights from a developing country on how internal control system impacts financial irregularities in local government offices. While existing literature, especially from Ghana, mostly focuses on a particular local government unit or particular provincial region, this study empirically gathers evidence and insights from 11 different local government units or Metropolitan, Municipal and District Assemblies (MMDAs), spread across 7 regions of Ghana. This offers a more nationally representative perspective than previous studies. Furthermore, this also grants a fairer basis to generalize findings on internal controls and financial irregularities in the public sector in Ghana. The study adds valuable insight to the public sector literature on internal control systems and financial irregularities. It also provides emerging issues and revelations from which policymakers could make inroads to strengthen public sector internal controls to plug loopholes from which financial irregularities grow.

1 LITERATURE REVIEW

1.1 Theoretical review

The following sets forth the empirical and theoretical reviews pertinent to the impact of internal control systems on financial irregularities.

1.1.1 Institutional Theory

The institutional theory as propounded by Meyer and Rowan (1997), to explain how institutions are set up and function to meet their social expectations visibly and transparently to the public. The theory postulates that an organization's internal operations deemed complex to fathom could take second place regarding external legitimacy. Fogarty (1996) posits that the public image of an institution may be connected directly or indirectly to their adopted operational processes or chosen technology. Fogarty (1996) theorized that this concept offers insights into how institutions could accomplish set goals while being able to set up structures which facilitate the accomplishment of these goals.
Fogarty (1996) further contends that the internal processes and systems deemed visible, influence how institutions operate while other external elements are not very significant in a firm's operations. Advancing with the foregoing makes it important to erect appropriate institutional structures which may allay the scrutiny of external. Thus, the loosening the technology link affords some operational flexibility which might help an institution in successfully addressing external challenges.

Institutional theorists posit that the organizational environment could play a key part in determining the approach used by organizations in erecting formal structures. Adding innovative structures could be crucial and will improve a firm's efficiency which is significantly linked to adopting accepted processes in organizations (Fogarty, 1996). Effective leadership is key in advancing such innovative mechanisms, implying that failing to adopt these mechanisms amounts to negligence. Summarily, the relevance of the theory hinges on the conclusion that to maintain and gain legitimacy within the corporate environment, the institutional environment should accept the order of an organization.

1.1.2 Contingency Theory

The contingency theory was propounded by Austrian psychologist Fred Edward Fiedler in 1964. The contingency theory is fundamentally directed at the character of the principle and the circumstances and conditions under which leaders operate. Fiedler and his team dwelt largely on leaders in diverse contexts but ultimately specified and dwelt on leaders within the military context. The contingency theory argues that in any given context and situation, established and identified situational factors could potentially impact the relationships between the dependent and independent variables in appreciating organizational behavior. Thus, independent variables are the key determinants of change observed in dependent variables while dependent variables are principally impacted by independent variables.

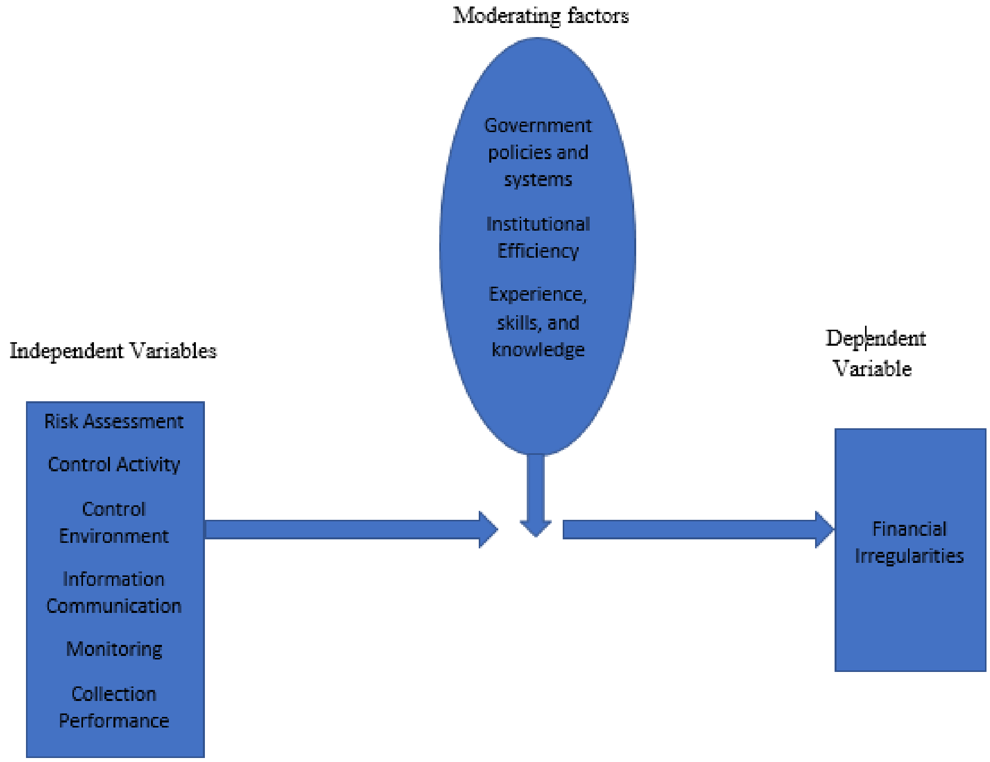
As core examples employed in the treatise of contingency theory, leadership and motivation are enumerated as independent variables, while absenteeism, turnover and productivity are regarded as dependent variables (Kenyon and Tilton, 2006). The contingency theory, in spite of its projected strengths, is not without weaknesses and limitations. This is founded in the inability of the theory to explain why leaders with a particular leadership approach are only functional in certain situations but not all situations.

Fielder's theory has widened the scope of understanding applied to leadership from diverse viewpoints to buttress the best leadership approach which is able to attend to differing interests, opinions and situations in an institution. The contingency theory has, in the same way, created a pathway for ascertaining the explanatory powers employed in determining the forms of leadership that are suitable and functional for specific contexts. The theory has an expectation of leaders to ensure that they remain functional in different circumstances while observing the requirement to arm themselves with prerequisite conditions which are congruent with their leadership approach. The theory’s major fallout is displayed in its effects directed at making sure that the appropriate leadership approach is engaged to address different leadership needs in institutions.

1.2 Conceptual Framework

The study is conceptualized in Figure 1 as an adaptation and modification of Agbenyo et al. (2018). Figure 1 gives a conceptual framework relating internal control systems to financial irregularities. The components of internal controls are identified as risk appraisal, control activities, control environment, information and communication, monitoring and collection performance. These components are all conceptualized to impact financial irregularities. This impact on financial irregularities is also framed to be moderated by government policies, institutional efficiency, and the experience, skills and knowledge of institutional actors.

Figure 1 - Conceptual Framework



Source: Adapted and modified from Agbenyo et al. (2018)

The interrelated components relating to organizations have been identified to include control environment, risk assessment, control activities, information and communication, and monitoring components.

1.3 Empirical Review

Attah-Botchwey (2018) assessed internal control as a mechanism for competent management of revenue mobilization at the Metropolitan, Municipal and District Assemblies (MMDAs) in Ghana using the case of Accra Metropolitan Assembly. After the generation of data from 100 staff through purposive sampling where the key staff was administered with questionnaires, the study concluded on the need for internal controls which the A.M.A. has as part of the setup and directive.

Sigilai and Njiru (2016), considered a study relating to internal control systems' effects on revenue collection at Nakuru Level Five Hospital. Both approaches were used in the study to meet its intended objectives which generally is the determination of the effects of internal controls in revenue collection in level Five Hospital Nakuru. After using data retrieved from 450 employees using both approaches, it concluded that the control environment has no significant influence on revenue collection in Nakuru Level five hospital in Kenya.

Njagi and Mwangi (2019) conducted a study to investigate the effect of Internal Controls on the Revenue Collection of Level Five Hospitals in Kiambu County. The study utilized a descriptive research design. The study sampled three level-five hospitals in Kiambu County namely; Thika, Kiambu, and Gatundu. A declining trend was observed in revenue collection by level five hospitals in Kiambu County since 2013. The study found a substantial positive correlation between collection of revenue and the environment of controls among the hospitals. The study also established a culture of maintaining integrity among the hospitals with a managerial commitment to ethical practices and sound business conduct. Discipline, order and a commitment to competence was also established among the hospitals, spearheaded by management in all cases. This culture was observed to impact the control consciousness of the people in the hospitals.

The study also established that the hospitals' management ensures the prevention of fraud and properly putting in place factors to detect audits and fraud which guarantees the conduct of sound control reporting. The hospitals assess and appraise how effective the systems of management control work and provide reassurance that the systems of internal control are satisfactory. A high direct correlation between revenue collection and internal audit function was ascertained at the level five hospitals. The study further revealed a major relationship between revenue collection and risk assessment. The study proposes regular appraisal of the control activities and environment.

Oduro and Cromwell (2018) investigated the relationship between internal control and fraud prevention in the local government sector in Ghana. Primary data from 35 local government institutions revealed that risk assessment and information technology significantly deter fraud. Control environment, control activities, monitoring and information communication had no significant influence on fraud prevention even though they all had positive effect on fraud prevention. The study found further that poor background checks, monitoring and inaccurate records were some of the major challenges facing internal control in the local government sector. Staff were the worst culprit of fraud in the local government sector.

Agyapong (2018) examined the control environment of the Ghana Post Company, as a public sector agency, ascertaining the presence or otherwise of segregation of duties, proper information and communication between employees and management; and monitoring of policies implemented by management. Outcomes revealed lapses in the internal control system of public sector organizations which makes it a fertile ground for fraudulent activities. It was discovered that the perpetrators do not face any serious sanctions to prevent others from engaging in such fraudulent activities. The recommendations from the study are that the auditors should be allowed to perform their duties and there should be a continuous review of the audit manual of the public-sector organizations.

Abdulai (2018) examined the effectiveness of internal control structures in the public sector of Ghana on sampled district assemblies in Ghana's Northern Region. After considering 57 members of staff from one Municipal Assembly, one District Assembly, and one Metropolitan Assembly through purposive sampling, it revealed an average effective internal control structure existed within the public sector in Ghana.

2 RESEARCH METHODOLOGY

This section details the research design and its associated considerations employed in the study.

2.1 Research Design

This study employed a descriptive survey design to test an existing theory about the impact of internal control systems on financial irregularities. This study makes use of the descriptive research method because it tries to define the primary subject matter of this research and also since a quantitative approach is adopted.

2.2 Sampling

Stratified random sampling technique was used to select sample respondents. This approach will increase the precision of estimates and reduce the sampling error, as it ensures that the sample is more diverse, and accurately reflects the characteristics of the population being studied. Considering the large population of 322 employees of the municipality, Yamane (1967) was adopted for calculating the sample size. At 95% confidence level as P = .05 especially for huge populations;

$n = N/(1+N(e^2)) = 322/(1+322(0.1)^2) = 322/(1+0.87) = 76.303$

Where: n=sample size, e^2 = margin error, N = population.

The research sample consisted of 76 employees. These respondents varied in gender, age, marital status, and years in service. Again, the targeted respondents included 61 senior employees and 15 junior employees.
The questionnaire contained only close-ended questions, most of which were laced with a five-point Likert Scale, where 1= Strongly Disagree, 2= Disagree, 3= Undecided/Uncertain, 4= Agree and 5 = Strongly Agree.

2.3 Data Analysis

The collected data were statistically analyzed using the IBM Statistical Package for Social Sciences (SPSS) software. Representations like tables and graphs were used to ensure easy and quick interpretation of data. Responses were expressed in percentages. Data from the completed questionnaire were checked for consistency. The items were grouped based on the responses given by the respondents and were coded for easy usage of the SPSS.

3 RESULTS AND DISCUSSION

This section presents the descriptive analysis of the variables, the observed relationships and the implied conclusions.

3.1 Descriptive Analysis

The quantitative survey collected data on 68 out of the expected 76 participants producing an 89.5% response rate. Survey participants were drawn from eleven (11) participating MMDAs across the nation. Almost one quarter or 22.1% of respondents from Afadjato South District accounted for the majority. Besides, Ayawaso South municipal is less represented with only 1.5% of its staff participation. The rest are Binduri District (4.4%), West Gonja Municipal (10.3%), Suhum Municipal, Afadjato South District, Shai Osu-Doku District, Weija Gbawe Municipal, Ga South District, and La Nkwantanang Municipal Assembly (details in Table 1).

Table 1 - Participating MMDAs in the survey

	MMDA	Frequency	Percent	Valid Percent
Valid	Agona Nsaba District	6	8.8	8.8
	Afadjato South	15	22.1	22.1
	Ayawaso South	1	1.5	1.5
	Binduri District	3	4.4	4.4
	Ga South Municipal	9	13.2	13.2
	La Nkwntanan Muni.	6	8.8	8.8
	Shai Osu-Doku	4	5.9	5.9
	Suhum Municipal	10	14.7	14.7
	Tano North District	3	4.4	4.4
	Weija-Gbawe Mun.	4	5.9	5.9
	West Gonja Municipal	7	10.3	10.3
	Total	68	100.0	100.0

Source: Field Survey Data (May 2023)

3.1.1 Demographic characteristics of internal control practitioners

The first objective identifies the demographic characteristics of internal control practitioners in the MMDAs. Particularly, respondents' age characteristics, biological identity, marital status, and level of education completed. Besides, associated district assembly, department, role, and years of working experience in the current job role were examined. Table 2 shows that 67.6% of survey respondents are male whilst 32.4% are females. In terms of age distribution, more than half of females (72.7%) and males (60.9%) respectively are in the age bracket 30-39 years accounting for the majority of the respondents. A few 14.7% and 2.9% are at aged 20-29 years and 50-60 years respectively. This finding shows that only a few (2.9%) respondents are nearing retirement age which presupposes that the MMDAs have a youthful workforce with the requisite working expertise to drive the municipality toward its establishment mandate.

Table 2 further indicates that 57.4% (60.9% males and 50.0% females) of survey participants are married and living together with their spouses. Staff working in the MMDAs have requisite academic qualifications. The lowest academic qualification for the MMDAs' staff is Higher National Diploma (HND), and the highest academic qualification is a master's degree. The educational status of respondents revealed that first-degree holders accounted for the majority representing 64.7%. Female first-degree holders are more compared to male first-degree holders.

Table 2 - Sociodemographic of respondents

Age of respondents	**Female**	**Male**	**Total**
20-29 years	18.2% (4)	13.0% (6)	14.7% (10/68)
30-39 years	72.7% (16)	60.9% (28)	64.7% (44/68)
40-49 years	9.1% (2)	21.7% (10)	17.6% (12/68)
50-60 years	0.0% (0)	4.3% (2)	2.9% (2/68)
Total	**32.4% (22/68)**	**67.6% (48/68)**	**100% (68/68)**
Marital Status			
Divorced/separated	**0.0% (0)**	**0.0% (0)**	**0.0% (0)**
Married/living together	50.0% (11)	60.9% (28)	57.4% (39)
Single	41.0% (9)	34.8% (16)	36.8% (25)
Widowed/widower	4.5% (1)	4.3% (2)	4.4% (3)
Never married	4.5% (1)	0.0% (0)	1.5% (1)
Total	**32.4% (22)**	**67.6% (48)**	**100% (68)**
Education	**Female**	**Male**	**Total**
SSCE/WASTE	0.0% (0)	0.0% (0)	0.0% (0)
HND/Diploma	9.1% (2)	8.7% (4)	8.8% (6)
Degree	68.2% (15)	63.0% (29)	64.7% (44)
Masters	22.7% (5)	28.3% (13)	26.5% (18)
Total	**32.4% (22)**	**67.6(46%)**	**100.0% (68)**

Source: Field Survey Data (May 2023)

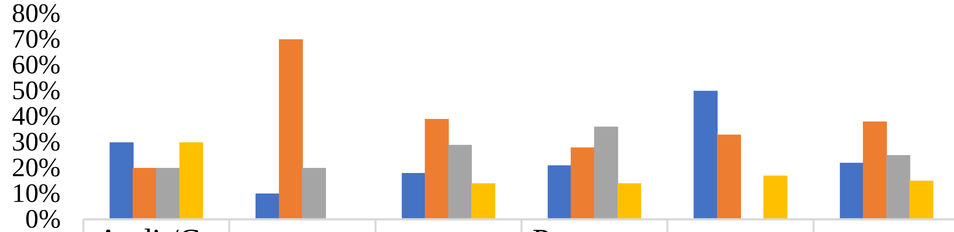
3.1.2 Staff working experience in current role

Assembly staff have low working experience as revealed in Figure 1. More than half (60.0%) have been working with the MMDAs for at most 5 years now. Figure 2 indicates 22.0% and 38.0% have minimum working experience of 0-2 years and 3-5 years respectively. These staff can be found in the Audit/Compliance unit, procurement, budget, and finance units. About 15.0% of survey staff have at least 10 years of working experience in MMDA processes. Of this proportion, 30.0% are in audit and compliance, and 17.0% operate in other departments such as statistics, social work and development, and spatial planning departments.

3.1.3 Staff awareness of occurrences of financial irregularities in the MMDAs

Figure 4 presents the results of staff awareness of financial irregularities in the MMDAs. Less than half (45.6%) are aware of financial irregularities in the MMDAs. Awareness is marginally high for male (45.7%) respondents compared to 45.5% awareness observed in female respondents. Furthermore, 50.0% of males and 40.9% of females are not aware of any financial irregularities in the MMDAs. Besides, some 7.4% reported they do not know of any occurrence of financial irregularities occurrences in the unit where they work.

Figure 2 - Employee working experience in MMDAs

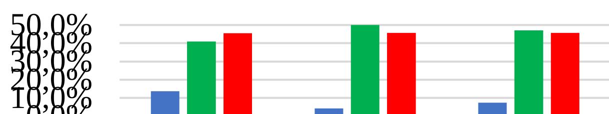


	Audit/Compliance	Budget	Finance	Procurement	Other	Total
0-2 yrs.	30%	10%	18%	21%	50%	22%
3-5 yrs.	20%	70%	39%	28%	33%	38%
6-9 yrs.	20%	20%	29%	36%	0,00%	25%
>=10 yrs.	30%	0,00%	14%	14%	17%	15%

Source: Field Survey Data (May 2023)

Findings revealed staff awareness of financial irregularities in the MMDAs is positively related with years of working experience. This presupposes that staff who have working experience of 0-2 years cannot be able to identify financial irregularities at an early stage of occurrence compared to their counterparts in 3-5 years, 6-9 years, and 10 years and above.

Figure 3 - Occurrence of financial irregularities in MMDAs



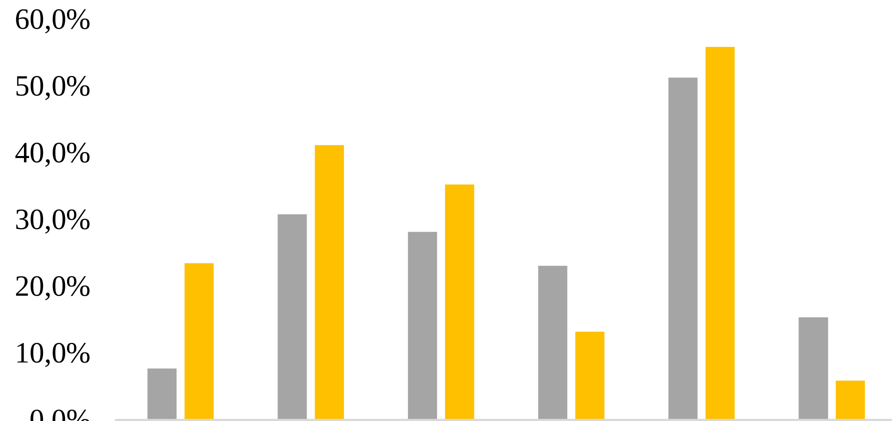
	Female	Male	Total
Don't Know	13,6%	4,3%	7,4%
No	40,9%	50,0%	47,1%
Yes	45,5%	45,7%	45,6%

Source: Field Survey Data (May 2023)

3.1.4 Financial Irregularities in the MMDAs

Regarding financial irregularities and frequency of occurrence in the MMDAs, figure 4 presented misconducts (51.3%), corruption (30.8%), collusion (23.1%), and coercion (23.1%) as financial irregularities occurring in the MMDAs. Besides, the results of multiple-choice responses on most frequent financial irregularities showed that misconduct and corruption accounted for 55.9% and 41.2% respectively. Collusion and fraud occupied third and fourth positions with 35.3 and 23.5 percentage points respectively. The least occurring financial irregularities are coercion (13.2%) and fraud while 5.2% accounted for all other financial irregularities such as not using the MMDAs's approved accounting software for financial transactions, overpayment to suppliers, misapplication of funds, and conflict of interest.

Figure 4 - Financial irregularities and frequency of occurrence



	Fraud	Corruption	Collusion	Coercion	Misconduct	Others
Financial Irregularities	7,7%	30,8%	28,2%	23,1%	51,3%	15,4%
Most Frequent FI	23,5%	41,2%	35,3%	13,2%	55,9%	5,9%

Source: Field Survey Data (May 2023)

3.1.5 Leading causes of financial irregularities in the MMDAs

Table 3 presents the results of the causes of financial irregularities causes in the survey of the MMDAs in Ghana. About 54.4% of respondents attributed financial irregularity to low staff remuneration. Moreover, 51.5% of respondents blame it on low supervision on the part of management, lack of honesty among staff (48.5percent), weak integration of risk management in internal control (44.1%), absence of transparency in reporting system (27.9%) and low-quality staff to detect financial irregularity early (19.1%). These are the leading causes of financial irregularity in the MMDAs. Other causes include the unwillingness of staff to adhere to institutional regulations.

Table 3 - Cause of financial irregularities in the MMDAs

Financial irregularity causes in the MMDAs	Freq.	Percent of Cases
Low staff remuneration	37	54.4%
Low management supervision of staff	37	54.4%
Lack of honesty among staff	33	48.5%
Weak risk management integration in internal control	30	44.1%
Lack of transparent in the reporting system	19	27.9%
Low-quality staff to detect irregularity early	13	19.1%
Other	1	1.5%
Total	169	248.5%

Source: Field Survey Data (May 2023)

3.2 Internal controls and implementation strategies in the MMDAs

3.2.1 Internal Controls in the MMDAs

The study assessed internal control procedures instituted to reduce financial irregularity in the MMDAs. Implementation strategies for internal controls were further examined and results are presented in Table 4 and Table 5. Table 4 indicates sales revenue documentation with a cash registry (66.2%), conduction of bank reconciliation statement (61.8%), pre-numbering of receipt form and invoice (51.5%), having more than one signatories (50.0%), reconciling revenue with the deposit (48.5%), receipt reconciliation (45.6%), periodic management review of financial data (44.1%) as well as issuing a duplicate invoice to customers (44.1%) are some major financial control measures operational in the MMDAs to safeguard financial transaction. Besides, the result further highlighted the practice of duty segregation (39.7%), a delegation of authority (33.8%), conducting unexpected petty cash count (14.7%), and canceling all vouchers to forestall reuse (14.7%) were less applied in the MMDAs.

Table 4 - Internal control procedures in the MMDAs

		Responses		Percent of Cases
		N	Percent	
	Document sales revenue with a cash register	45	12.9%	66.2%
	Conduct bank reconciliation statement	42	12.0%	61.8%
	Pre-numbered receipt form and invoice, etc.	35	10.0%	51.5%
	Issue duplicate invoices to customers	30	8.6%	44.1%
	Reconciled revenue with deposit	33	9.4%	48.5%
	Conduct unexpected petty cash count	10	2.9%	14.7%
	Receipt reconciliation	31	8.9%	45.6%
	Practice duty segregation	27	7.7%	39.7%
	Delegation of authority	23	6.6%	33.8%
	Periodic management review of financial data	30	8.6%	44.1%
	Cancel all vouchers to forestall reuse	10	2.9%	14.7%
	Have more than one signatory	34	9.7%	50.0%
Total		350	100.0%	514.7%

Source: Field Survey Data (May 2023)

3.2.2 Internal Control Awareness

In terms of staff awareness of these financial management controls, the results indicated more than three quarters (94.1%) of staff are aware of the internal control measures. Awareness is high in female staff (100%) compared to 91.3% observed in their male counterparts. Despite high awareness of financial control systems, staff knowledge of particular internal control procedures declined across the female staff. About 86% of female staff know the internal controls to be observed to safeguard quality financial transactions in the MMDAs. This could have stemmed from the fact that some staff working in the MMDAs are just 0-2 years of working experience in the job role hence their inability to know and enforce these internal controls. This is crucial since enforcing internal controls correlates with knowledge of which control measures to enforce, at what time and for which transaction.

3.2.3 Internal Control Implementation Strategy

Table 5 contains descriptive results of internal control implementation strategies for the MMDAs surveyed for the study. The average mean rating, standard deviation, the minimum, and maximum ratings were reported. Besides, the standard error of the mean, as well as skewness, was also computed and reported. An internal control implemented strategy with an average rating score above 3 is adjudged in agreement with the statement while an average score below the neutral point of 3 is also considered respondent not in agreement with the statement. The minimum score is 1 representing strong disagreement with the strategy, the maximum rating is 5 representing strong agreement with the internal control implementation strategy. Table 5 shows that all internal control implementation strategies have an average score above the neutral point of 3 with a positive high standard deviation measuring high variabilities in the rating scores except the management strategy of objectively linking internal control to individual performance which had an average rating score of (mean=2.96; STD= 0.999; skewness= -0.187; min=1, max=5; n=68) less than neutral value of 3 suggesting respondents' disagreement to the statement. This means that, objectively, internal control implementation strategies are not linked to individual performances. Besides, all the strategies showed negative skewness attributes indicating high rating values confirming their agreement with the statement. It is evident from Table 5 that the MMDAs adopted four main internal control implementation strategies to avert financial irregularities in their institutions. These strategies include the determination of staff roles and responsibilities concerning internal control, including the governing body, management at all levels, employees, and internal and external assurance providers, as well as coordinating the collaboration among participants (mean=3.68; STD = 0.921; Skew = -0.717), document sales revenues with a cash register entry for transactions (mean= 3.53; STD = 1.190; Skewness = -0.537), conduct and report periodically on risk profile structure (mean = 3.49; STD = 0.954; Skewness = -0.701), and recruiting sufficient and competent staff to fulfill the internal control systems (mean = 3.41; STD = 1.054; Skewness = -0.430). see table 5 for details.

Table 5 - Internal control implementation strategies in the MMDAs

	N	Min.	Max.	Mean		Std. D.	Skewness	
	Stat.	Stat.	Stat.	Stat.	Std. E.	Stat.	Stat.	Std. E.
Management determines roles and responsibilities with response	68	1	5	3.68	.112	.921	-.717	.291
Document sales revenues with a cash register entry for transactions	68	1	5	3.53	.144	1.190	-.537	.291
Conduct and report periodically on risk profile structure	68	1	5	3.49	.116	.954	-.701	.291
Recruit sufficient and competent staff to fulfill the internal control systems	68	1	5	3.41	.128	1.054	-.430	.291
Strongly integrated internal control as part of risk management	68	1	5	3.26	.127	1.045	-.557	.291
Consciously allocate sufficient resources to carry out internal controls	68	1	5	3.26	.146	1.205	-.426	.291
Regularly communicate internal control system and its out	68	1	5	3.26	.129	1.060	-.246	.291
Design implement and apply controls as a response to expenses	68	1	5	3.19	.135	1.110	-.122	.291
Motivate staff to act in line with risk management strategy	68	1	5	3.13	.136	1.118	-.335	.291
Internal control objectives are linked to individual performance	68	1	5	2.96	.121	.999	-.187	.291

Valid N (listwise)	68

Source: Field Survey Data (May 2023)

3.3 Extent to which internal control systems reduce financial irregularities in the MMDAs

The enquiry also looked into the effectiveness of internal control implementation strategies in preventing financial irregularities, and the result is presented in Table 6. Table 6 contained ten variables subjected to a one-five Likert scale where 1 represents Not Effective, 2 means Low Effective, 3 represents Neutral, 4 means Effective and 5 means Very Effective. Averages and measures of dispersion particularly average mean, standard deviation, maximum, and minimum as well as skewness were determined to assess movement in rated scores. A variable with an average mean of more than 3 is considered effective while an average value below 3 value points means strategy is not effectively implemented. The results show six variables with 3.2 – 3.4 average mean rating scores above 3.0 value points suggesting effective implementation of these internal controls. The internal control effectively undertaken is management determines roles and responsibilities concerning internal control, including the governing body, management at all levels, employees, and internal and external assurance providers, as well as coordinates the collaboration among participants (mean =3.4; STD =0.95; Skew = -0.60), ensure staff is sufficiently competent to fulfill the internal control (mean =3.4; STD =1.11; Skew = -0.51), monitor and evaluate internal control system as whole (mean =3.3; STD =1.06; Skew = -0.14), management regularly communicates internal control system (mean =3.3; STD =1.11; Skew = -0.27), assembly sees internal control as part of risk management (mean =3.2; STD =1.12; Skew = -0.55), and controls are designed implemented and applied (mean =3.2; STD =1.04; Skew = -0.12). This agrees with findings in Oduro and Cromwell (2018) but disagrees with Attah-Botchwey (2018).

These variables come with low standard deviations suggesting that individual rating scores are close to the average mean value. Additionally, these scores are negatively skewed implying that high scores are assigned to these variables. This means the MMDAs placed a high value on these internal control variables in their implementation.

On the other hand, less attention is focused on staff motivation to act in line with risk management strategy (mean =2.9; STD =1.10; Skew = 0.16), sufficient resources allocation for effective monitoring (mean =2.4; STD =1.33; Skew = 0.80), by the MMDAs (See Table 6 for details). Essentially, internal control systems have not significantly reduced the spate of financial irregularities in MMDAs. This finding is in harmony with Oduro and Cromwell (2018) but incongruent with Attah-Botchwey (2018).

Table 6 - Effectiveness of internal control strategies in MMDAs
Descriptive Statistics

	N	min	max	mean		st. Dev.	skewness	
	stat	stat	stat	stat	std. error	stat	stat	std. Error
1. Management and Resposability	68	1	5	3.4	0.12	0.95	-0.60	0.29
2. Staff Competent	68	1	5	3.4	0.13	1.11	-0.51	0.29
3. Monitor control system	68	1	5	3.3	0.13	1.06	-0.14	0.29
4. Management and Internal control system	68	1	5	3.3	0.13	1.11	-0.27	0.29
5. nternal control and risk management	68	1	5	3.2	0.14	1.12	-0.55	0.29
6. Controls are designed implemented	68	1	5	3.2	0.13	1.04	-0.12	0.29
7. Organization's internal control object	68	1	5	3.1	0.13	1.11	-0.34	0.29
8. Report on risk profile and structure	68	1	5	3.1	0.14	1.15	-0.27	0.29
9. Staff on risk management	68	1	5	2.9	0.13	1.10	0.16	0.29
10. Sufficient resources for vehicles offices	68	1	5	2.4	0.16	1.33	0.80	0.29
Valid N (listwise)	68							

Source: Field Survey Data (May 2023)

3.4 Hindrances to effective internal control implementation

The study also established internal control implementation challenges in MMDAs by subjecting sixteen perceived challenges to Likert scale rating scores of 1 to 5 where 1 represents strongly disagree, 2 means disagree, 3 means neutral, 4 means agree and 5 strongly agree. From Table 7, the average mean rating is above 3 value points, pointing out that survey participants perceived these variables as challenges confronting internal control implementation in MMDAs. The results indicate MMDAs are confronted with numerous implementation challenges for internal controls in preventing financial irregularities. This multiplicity of challenges agrees with other studies (Njagi and Mwangi, 2019; Oduro and Cromwell, 2018; Agbenyo et al., 2018; Attah-Botchwey, 2018).
For example, the average mean score (N=68; mean= 3.9; STDV= 1.14; Skew = -0.98) for inadequate resources to carry out internal control, unsatisfactory staff reward challenge effective internal control (N=68; mean= 3.9; STDV= 0.93; Skew = -0.65), unnoticed misconducts among staff (N=68; mean= 3.8; STDV= 0.98; Skew = -0.83), and collusion among staff (N=68; mean= 3.8; STDV= 1.09; Skew = -0.36) inhibits effective internal control above the neutral point on the Likert Scale. Besides, average rating scores come with low standard error and standard deviations indicating the high closeness of the individual rating scores to the mean values. Again, the computed skewness is negatively skewed with low standard error for all the challenges, suggesting high rating variables among survey participants for each of the perceived challenges confronting MMDAs (details in Table 7).

Table 6 - Internal control implementation challenges in MMDAs

	N	Min	Max	Mean		Std. D	Skew	
	Stat	Stat	Stat	Stat	Std. E	Stat	Stat	Std. E
Inadequate resources	68	1	5	3.9	.138	1.14	-0.98	0.29
Unsatisfactory staff reward	68	1	5	3.9	.113	0.93	-0.65	0.29
Unnoticed misconducts	68	1	5	3.8	.118	0.98	-0.83	0.29
Collusion among staff	68	1	5	3.8	.123	1.01	-0.36	0.29
Impunity leads to low	68	1	5	3.7	0.13	1.08	-0.80	0.29
Inadequate fraud control and prevention	68	1	5	3.7	0.14	1.11	-0.64	0.29
Inadequate information and time	68	1	5	3.7	0.13	1.03	-0.41	0.29
Employee pressure challenged	68	1	5	3.7	0.12	0.97	-0.27	0.29

Management override challenges	68	1	5	3.7	0.11	0.87	-0.24	0.29
Low staff quality	68	1	5	3.7	0.14	1.17	-0.83	0.29
Unethical behavior	68	1	5	3.6	0.13	1.08	-0.83	0.29
High bureaucracy	68	1	5	3.6	0.12	1.02	-0.37	0.29
Separation of risk management	68	1	5	3.5	0.12	1.00	-0.18	0.29
Lack of internal control	68	1	5	3.4	0.14	1.14	-0.28	0.29
Staff understanding of controls	68	1	5	3.4	0.12	1.00	-0.26	0.29
Errors or misinterpret orders	68	1	5	3.4	0.12	1.00	-0.08	0.29
Valid N (listwise)	68							

Source: Field Survey Data (May 2023)

CONCLUSION

This study examines internal controls and their impact on financial irregularities in 11 local government units in Ghana. The study interviewed sixty-eight respondents for first-hand quantitative information to respond to the research questions. Data collected realized responses from 68 out of the expected 76 practitioners. It was established that internal control systems operational in the MMDAs have not had the expected impact on the occurrences of financial irregularities. Financial misconduct, corruption, collusion, and coercion are a few examples of irregularities reported by survey participants. The MMDAs had mixed youthful practitioners with diverse academic qualifications and growing expertise to drive forward internal control objectives. Practitioners are aware and have adequate knowledge of financial irregularity constituents for early detection and prevention in the light of prevention measures operational in the MMDAs. Financial irregularities variables such as misconduct, corruption, collusion, coercion, overpayment of suppliers, and willful disuse of instituted robust accounting software are some practitioner-level factors causing financial irregularities in MMDAs. Again, internal control systems exist in MMDAs, yet, not effectively operational to yield their expected impact by reducing financial irregularities in the MMDAs. The implementation of these systems of controls comes with inadequate resources to allocation, unsatisfactory staff reward, unnoticed misconduct among staff, and collusion among staff. These are challenges of effective internal control which undermine efforts to reduce financial irregularity. Additionally, impunity, inadequate fraud control and prevention, inadequate information and time, and employee pressure challenged the effective implementation of measures to reduce financial irregularity in the MMDAs.

It is recommended that authorities take into consideration the overall impact of ineffective financial controls in internally generated funds on its instituted mandate. The Ministry of local government and regional integration should as a matter of urgency design and implement interventions that will make it unpleasant for staff to engage in these financial irregularities. Management should build staff capacity in institutional financial control systems to enhance their knowledge base and skills to enable them to identify financial irregularities and take preventive measures. Additionally, management should make available promptly adequate require resources for effective staff monitoring and regular staff performance audit on internal control compliance for early identification of potential weaknesses in the organization's internal control system. Government should make available in a timely to MMDAs both financial and other resources required to meet their institutional mandate. The Ministry of Local Government and Regional Integration should seek, through Parliament, to enact laws and regulations to require MMDAs to implement internal controls and report financial irregularities quarterly.

The study depends hugely on self-reported quantitative information, audit reports, local government reports, and literature. Future studies should consider mixed methods approach to the study. This will offer an opportunity to collect qualitative data to explain the patterns observed in this study.

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