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### A Critical Examination of Internal Control Systems in the Public Sector , A Tool for Alleviating Financial Irregularities: Evidence from Ghana

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### Abstract

This paper examined the existence of internal control systems in four (4) government departments located in the central business district of Accra, Ghana. The internal control elements examined included Control environment, Communication and information, Risk Assessment, Monitoring, Control Activities and the functions of the Internal Audit unit, as an agent of good governance, accountability and commitment to ensuring reliable financial reporting. Structured questionnaires were administered to a non-probability sample of 100 respondents from the Administrative department, Finance, Internal Audit, Human resources and other departments. Internal control system was measured using the six elements of the COSO internal control framework developed in 2002. Secondary data was captured from the Auditor General's report on public accounts and analysed using the Statistical Package for Social Scientist (SPSS) and STATA to establish the relationship between the dependent and independent variables based on the research hypothesis. The statistical techniques deployed were regression and correlation. The study concluded that indeed there are significant relationships between internal control systems and effective public sector financial management. The study recommended an independent private audit of all public accounts to supplement the effort of government appointed Auditor General in order to guarantee assurance and transparency. Departments and ministries must practice inter-departmental monitoring to ensure due diligence and reward for outstanding performance.

**Keywords:** Transparency, COSO Internal Control framework, Compliance, Financial irregularities, Public Sector Efficiency.

### 1. Introduction

Lack of transparency, objectivity and accuracy in financial reporting in recent time has called for a standardized mechanism potent enough to address the vulnerability of the financial systems and reporting accounting information to users (Feiveson, 2015). Though the discipline has received much attention in management and financial literature, various scholars highly recommend extensive research in this discipline due to the complex nature of the financial sector, and in an attempt to deal with the dynamics nature of challenges faced by most public institutions (Yapa, 2014). The concept of internal control systems gained much popularity among scholars in finance and corporate governance affairs due to the famous Enron's case in the United States which was considered one of the biggest financial scandals that took the entire business and financial sector by surprise in 2001 (Ofoegbu, 2014).

According to (ter Bogt & Tillema, 2016), in order to maintain confidence and trust in state institutions, efforts must be made to enforce the laws governing the establishment of these public organizations with a conscious effort to adequately sanctions prescribed by these laws. Evaluating the presence of internal control systems in any public institution requires an independent assessment and monitoring mechanisms to ensure compliance to accounting standards, safeguarding assets and maintaining an orderly working environment that will encourage performance according policies and ethical values contained in the mission and vision of the organization (Acheampong, 2016).

The public sector of Ghana is highly characterized by financial irregularities beyond imagination, since Dec, 2009, the nation performed below average according to the Auditors Generals annual report on the procurement and use of public funds so far as accountability is and compliance to ethical practices are concerned (Banyen & Nasamu, 2015). The nation need urgent steps to address the menace as efforts by government and foreign partners failed to yield positive outcome.

Among the fundamental requirements to eliminating internal control deficiencies and weaknesses within an organisation particularly the public sector is information and communication, which forms part of the control elements that focuses primarily on disseminating management policies, laws, procedures and regulations relating to a particular position which must be obeyed to the later (Asiedu & Deffor, 2017). It comes after Control Environment which also outlines the structure and flow of authority and directives within the organisation and reporting procedures (Nana Yaw Simpson, 2014). In the past, successive governments were chastised for failure to demonstrate commitment towards protecting the consolidated fund to ensure state resources in any form are

used judiciously; however a recent joint exercise between government and the IMF in a bid to fight irregularities subsequently lead to the implementation of the mechanized payroll system leading to identification and subsequent removal of 26, 589 ghost names in November, 2016 and 50,000 in April 2015 (Banyen & Nasamu, 2015). Considering the fact that it is mandatory for public employees to adequately abreast themselves with laws pertaining to the establishments they find themselves in, overlooking and failure to comply with the policy recommendations of institutions like the Auditor General and the Parliamentary Accounts committee will not go unsanctioned as it is implies the cause for grievous concerns and must be looked into with urgency (Axelsen, Green, & Ridley, 2017). Various forms of irregularities included cash and other assets not accounted for according to the Auditor General's report, in 2016 the figures were made up of GHc118, 820,175.66, USD\$246,744.24 and GHC136, 084.22 as part of funds allocated for various projects but were later not recorded (Appiah & Abdulai, 2017). The mandate of this study is to test the functionality and existence of internal control systems and re-examined its impacts on compliance and offer recommendations for future reforms.

### 1.1 Statement of the problem.

The weaknesses in the internal control systems in the public sector resources and financial management is a critical area currently lacking attention considering the continuous disregard for control elements therefore subjecting the public sector to massive gross financial irregularities in the management, appropriation and accounting for state resources deployed at various public organisations. Though few studies have confirmed the existence of control mechanisms supported by the constitution and legal frameworks, the public sector of Ghana seem to show no sign of adherence to proper accounting standards to curb misappropriations, inaccurate and unreliable financial records. The situation also include the inability to demonstrate compliance to due diligence , procedures and application of standards practices as far as accountability and safeguarding assets are concerns. Based on existing literature and the research statement, the researcher developed a set of hypothesis base on the COSO internal control framework to establish whether or not internal control elements have a positive relationship with public financial management. (Ge, Koester, & McVay, 2017). Based on the previous literature review, the researcher developed the main hypothesis and the sub-hypotheses as clarified below.



Fig.1 .The Conceptual Framework

Figure 1 Proposed Conceptual framework adopted from literature.

### 2. Literature review

Deficiencies and irregularities of control structures in the public sector gained popularity between 2011-2012, when the country lost Ghc51million to a private businessman, an amount that could have saved the country from borrowing on high interest rates but due to negligence and disregard for internal control systems, the payment was done before verification which later proved the amount was wrongfully paid without due process (Acheampong, 2016; Axelsen et al., 2017). This singular act of negligence has exposed the weaknesses within the control structures and for that matter warrants an urgent study of the phenomenon to determine the degree of relationship

between the elements of internal controls systems and public financial management at the various ministries (Edmonds, Edmonds, Vermeer, & Vermeer, 2017).

The constitutions of Ghana and other laws pertaining to the public sector clearly stipulates the rules governing the use of public resources and in fact those entrusted with these resources are subject to annual evaluation by the Auditor General who conducts a thorough and independent evaluation of government institutions and departments(H. Chang, Chang, Choy, & Choy, 2016). The fundamental principles for basic financial control and accountability demands that, first of all the assets of an organisation must be applied in the interest of the organisation and strictly according to the policies and laid down procures of the organisation (Balaboniene & Večerskiene, 2015).

The public and stakeholders have registered their displeasure regarding the weaknesses in the control structures couple with noncompliance to standard accounting and reporting practices, though several interventions came from the government by making a conscious efforts to deploy resources to ensure that training and education is provided to facilitate compliance and strict implementing Section 404 of the Sarbanes Oxley act which translated into the Public Financial Administrative Act, which directs organisation to strictly go by objective reporting and assessment of their financial statements periodically by independent evaluators for monitoring purposes, millions of Ghana cedis still goes unaccounted for every year (Aziz, Rahman, Alam, & Said, 2015).

The presence of internal control systems simply act as a 'watch dogs' set up by regulators and policy makers to boost public confidence in state institutions to promote objectivity, due process and accountability(Jill & Houmes, 2014). According to Domingues, Lozano, Ceulemans, and Ramos (2017), organisational controls forms part of the corporate strategies and failure to implement them to the later would result in dissatisfaction among stakeholder parties as seen in recent years, the chief executives of Eastman Kodak, General Motors, Xerox, Lucent, Ford Motor, Sunbeam, and Lands End were all forced to step aside when each company's profitability deteriorated because the situation warranted new strategies in a positive direction (Ajao, Evans, & Samuel, 2013). In the case of the public-sector, the system of controls are established laid down structures to coordinate activities of the heads of public institutions, administrative heads, directors, local assemblies, the districts units and the boards in charges of monitoring these agencies (ter Bogt & Tillema, 2016). The overall system of control is an embodiment of three mother institutions established by an act of parliament known as the (1) The legislature, the Administrative arm of government and the judiciary(Caperchione, Demirag, & Grossi, 2017). All the above institutions come together to form the three arms of government however, the Executive arm of government is mainly responsible for executing policies that are meant to protect public interest such as implementing policies of economic and financial reforms, execute capital projects on behalf of the public, provide and manage public utilities, regulate and monitor revenue generating agencies and running the state enterprises among others(Ajao et al., 2013). The question that is left answered is whether the public is getting value for money considering the fact that authorities and scholars in public accountability believe the presence of internal control system will potentially achieve (1) organizational goals, (2) operational efficiencies, (3) compliance with laws, regulations and standard practices (4) safeguard assets against waste, fraud, misuse, and unauthorized use of resources (5) accurate, proper reporting and regards for due process(Blair, 2016).

Disclosures of internal control deficiencies became widely available for the first time following the passing of the Sarbanes-Oxley Act of 2002. Section 404 of this regulation requires managers or public officers to avail detailed records of their activities for evaluation to check conformity to internal controls and applicable policies for fair, accurate reporting (Mandzila & Zeghal, 2016). Since the inception of this law, internal control gained popularity in both public and private sectors, particularly in Ghana, there are a number of institutions established by an act of parliament that are charged with the responsibility to oversee the implementation and enforcement of various forms of financial and administrative controls guided by legislatives instruments (S.-I. Chang, Yen, Chang, & Jan, 2014). One school of thought stated that internal control is simply concerned 'with the efficient use of resources to achieve a previously determined objective, or set of objectives, contained within a plan' .likewise (Rahman, Rahman, Azhar, Omar, & Said, 2015) who explained that internal control in the local government level 'is the measurement of the performance of the activities of subordinates in order to make sure that objectives and plans devised to attain them are being accomplished'. All these definitions attest to the fact that control remains to ensure that organizational objectives are achieved through measurement of performance so far as appropriation of public funds is taking place (Midin, Joseph, & Mohamad, 2016).

Public sector financial management is a matter of comprehensive economic agenda on the part of government to carefully manage the scare resources and taxes that goes into the consolidated fund at the Central bank to meet the budgeted capital projects and other expenditures that are aimed at providing basic services to the citizenry devoid of irregularities(Othman, Aris, Mardziyah, Zainan, & Amin, 2015). Prudent management is the core of effective functionality of the public sector , therefore any short of these will result in risk and deficiency that as stated by (Kromidha & Córdoba-Pachón, 2017), who argue that every public worker requires statutory guidance to carry out their functions and must be properly briefed on the sanctions for breach of the laws pertaining to their

office, for example funds meant for a particular project is subsequently used to organize a seminar or foreign trip not budgeted for and without supporting documents to prove authorization for such expenditure (Babatunde & Dandago, 2014)

Integrity and ethical values are basic requirements when it comes to holding a public office as stipulated in the code of ethics for every public worker. The law demand those discharging their duties on behalf of the state do that in utmost good faith and spending of any resource in the capacity do so conformity to regulatory and approval procedures (Oppong, Arora, Sachs, & Seidu, 2016). Literature has it that transparency advocates often criticise the control systems of public institutions and often point to the fact that the challenges are not posed by the absence of the control mechanism but much is left to be desired when it comes to discipline and general attitude of the typical Ghanaian towards government property. Generally people care more about private investments compared to publicly owned resources, but quite unfortunate

In recent time, efforts have been put in place to ensure transparency and accountability in the management of public monies, physical assets and valuable information. For these reasons, government of Ghana has instituted a robust decentralised financial management to coordinate all the revenue generating departments and those charges with the responsibilities to disburse do so in accordance with the law. According to Edmonds et al. (2017), The standard of performance of any institution whether public or private is largely dependent on the prudent manner resources and assets and finances generated are subsequently managed and controlled according to budget and in line with statutory directives and stakeholders interest.

Leading scholars such as (Thompson, Ravindran, & Nicosia, 2015), believed that Financial controls are said to be efficient when prudent and conscious efforts are put in place in prior to procuring and appropriating resources whether long or short term through laid down structures recognised by law and approved by authorized body. Unfortunately, the management of funds and accountability has over the years become the biggest challenges confronting MMDA's and the public sector of Ghana to a large extent (Edmonds et al., 2017). In an annual general conference held by Chief Directors, Senior Officials from various government Ministries, Department and Agencies (MMDA's) which was attended by The Auditor General of Ghana on December 31, 2015, it was discussed among other things the concern of total disregard for financial regulations, internal control machineries and rampant financial irregularities resulting in unwarranted debts totalling Ghc4, 567,512, 754 million, in 2012. Another alarming figure representing cash irregularities amounted to USD\$912million AS OF Dec, 2016 as contained in the Auditor General's Report (Akotia, 2016).

Detailed checks from the Auditor general's office shows a total of USD912million representing the countries total foreign debt, aside that 30% went into misapplication of funds, embezzlements, unverified payments and unaccredited bank deposits, due to poor control environment and ineffective internal audit practices at various public boards (Ajao et al., 2013; ter Bogt & Tillema, 2016). Further revelations has it that a total of six public corporations and statutory institutions could not equally account for GHc1,975,054,681 in cash, while a recent report has it that out of 365 official vehicles allocated to the seat of government, only 26 were collected from the immediate past officials (Boateng, 2016). This bring to a total 95.5% of all financial irregularities identified by the Auditor General in the financial operations of different public boards and organisations that are mandated to protect state resources . The total loss includes US\$50,309,512 converted into cedis at the prevailing exchange rate of Gh¢1.5467 to the US\$1 as at 31st December 2011.Outstanding debts in the year amounted to 4.8% of the anomalies translating into GH¢ 99,170,464 (Akotia, 2016).

### 2.1 Theoretical and Legal Frameworks

The setbacks to the functioning of internal control systems within the public sector cannot be overemphasised as the deficiencies are not arguable on the basis that individuals working within the system failed to uphold the and demonstrate discipline in the discharge of their duties as a symbol of patriotism (Boateng, 2016). This condition according to a leading authority has left cracks within the control structures rendering it weak and vulnerable, indicating that the existence of internal control mechanism is no guarantee of the absence of financial and administrative irregularities regarding the procurement and appropriation of public resources (Asare, 2016).

Literature suggest that since the concept cannot be devoid entirely of human error and oversights certain provisions have been outlined to inform the decision of policy and law makers to encompass this lapses into the constitution of the Republic of Ghana (Boadu, 2016). The above provisions lead to the establishment of autonomous institutions like the Economic and Organised Crime Office mandated to enforces and apply the laws pertaining due process to eliminate fraudulent and misappropriation of state resources, likewise the Auditor General department whose duty equally ensures supervision and compliance monitoring and the Audit service (Martin, Sanders, & Scalan, 2014).

Ghana has the legal structures and the control environments in place to manage irregularities, there is enough evidence indicating the collaborative effort between the Auditor-General and the Bank of Ghana to ensure all Receipts and Payments are properly accounted for in accordance with Article 187(2) (5) of the 1992 (Aveh, Awunyo-Vitor, & Afriyie, 2016). The Constitution of the Republic of Ghana mandates the Auditor-General to

audit the public accounts of Ghana and of all public offices, including the courts, the central and local government administration, of the universities and public institutions of like nature, of any public corporation or other body or organisation established by an Act of Parliament and report thereon to Parliament (Akotia, 2016).

The Audit service of Ghana and other law enforcement bodies in principle are applying the section 404 of the Sarbanes Oxley Act of , 2002 (Sarbanes, 2002), in dealing with certain obvious limitation associated with every control mechanism . Evidently , Section 41(1) (b) of the Financial Administration Act, 2003 (Act 654) (FAA) and Regulation 191 of the Financial Administration Regulations 2004, (LI 1802) (FAR) mandate the Controller and Accountant-General furnish financial statements of government to the Auditor-General and the Minister of Finance (MoF), the Public Accounts Committee details of transactions it carried out on the behalf of the state for which funding was made from the Consolidated fund after 15days into the first month of every quarter or any reasonable dater scheduled by parliament (Ayee, 2003). For example, in 2016 budget estimates of Ghc 54,027.23 million for government projects was captured and represented on the financial statement was released to on the directives of the Finance Minister was later objected by the Auditor General due to lack of substantial supporting documents to justify the viability of the projects(Ajao et al., 2013). In that same period government, total receipts fell below the budget by GH¢791.54 million. According to Yapa (2014), the Auditor-General has the liberty to do periodic and frequent assessment apart from the annual evaluation purposely to strengthen and promote strict compliance to accuracy in reporting.

Several scholars including Babatunde and Dandago (2014), argued that control systems are said to be efficient when an institution make a conscious effort to cut down and control wrongful payments and stick closely to traditional budget systems of spending. If the above scenario is anything to go by , then it appears the public sector deserve some credit for drastically cutting down on payments of GHC 360.24 million budgeted figure classified under Goods & Services in 2016 .Despite this favourable effort , there was Ghc431.30million debts representing huge irregularities and payments unaccounted for (William Jr, Glover, & Prawitt, 2016).

It's general knowledge that government at the end of each Accounting year, spends close to 70% of the public sector budget on procurement, a clear indication that a stronger institutional reforms and control systems within the public sector are needed to protect the interest of the state in that regard (William Jr et al., 2016). Concerns have been raised by major stakeholders regarding public sector reforms particularly about attitude to work, management of state resources to avoid waste, theft to otherwise inculcate a collective efforts towards revenue generation and safeguarding revenue leakage (Owusu, Owusu, Weir, & Weir, 2016). Other authorities mentioned the issue of payment to public sector workers be based on hourly assessment to determine the salary level of public sector workers instead of a fixed monthly salary (Aveh et al., 2016).

It is appalling to note that expenditures made up of Compensation of Employees, Goods and Services, Consumption of Fixed Capital, Interest, Subsidies, Grants, Social Benefits for the month of November 2015 alone amounted to GH¢2,475.77million as against the budget of GH¢2,455.57million resulting in a deficit of GH¢20.2million representing 0.82% above budget (Haruna & Kannae, 2016). Further disclosures at the Controller and Accountant-General's office as of Dec, 2016 indicate value of Expenditure on Goods and Services amounting to GH¢548.74 million were procured without prior approval by parliament. Meanwhile the 50% the value of the items procured were meant to be distributed among institutions are established by an Act and backed by parliament and Legislative instruments to enforce provisions mandated by the laws of the land (Agyei-Mensah, 2016; Boateng, 2016). A well-known authority and leading author in Finance and Auditing literature believes that over under budgeting is equally a sign of low efficiency on the part of management. Given the fact that the concept of internal control did not provide any limit for value of expenditure every year in the public sector , Kaiser and Streatfeild (2016) believes a reasonable ratio be fixed by law to benchmark spending of public resources even during emergency cases , due process must not be skipped .

Lack of stringent legislative instruments to back the enforcement of sanctions stipulated in the Financial Administrative Act 2003 is the cause for the indiscriminate over bloating budgets, for example an estimated amount of Ghc 579.67 million paid through the Ministry of Finance resulted in deficit of GH¢80.08 million representing 22.16% of total expenditure that could not be accounted for and was not captured in the books of accounts at the Controller and Accountant Generals Department (Le, Yilmaz, & Kwawukume, 2016). The Public Accounts Committee of Parliament represents the symbol of transparency , this they often demonstrate through a public interview of invited state institutions to often give detailed account of their activities relating a specific accounting periods , through which they often raise red flags on certain acts of irregularities (Owusu et al., 2016). There is enough evidence to show that the institutions are there with laid down legal framework however, the enforcement is way becoming an issue of an impossible task taking into account the past and recent that magnitude of irregularities confronting the public service of Ghana, particularly with the basic elements of controls to ensure discipline and positive culture (Wynne & Mear, 2016)

One theory propounded to study the attitude of public sector workers suggest that if change of mind and attitude is possible there will be no need to commit scares resources into deploying independent evaluators to emphasized compliance, integrity, accountability and ethical standards in the public sector governance system

(Steinbórsdóttir, 2004). Looking at the present situation the indicators are not far from; (a) Deficiency of governmental willpower to build strong institutions instead of strong personalities, (b) porous measures and systemic procedures to prevent irregularities, (c) Uncontrolled budget to limit expenditure and waste ,(d) overlapping responsibilities of some institutions (e) Failure to inject some innovation or non-readiness to adapt to change ,(f) Unacceptable work ethics and attitude to time by the entire public workforce ,(g) and to crown it all ineffective supervision and monitoring are the simple lapses that have bedevilled the public sector of Ghana according to Asiedu and Deffor (2017).According (Speklé & Verbeeten, 2014),during his work on public transparency, he mentioned emphatically that the lapses and irregularities were caused by lack of motivation and adequate reward and incentive packages for workers. In another study it was emphasized that managements of these institutions including the boards are less concerned about adequate enforcement of the law, rather focus more on remunerations and entitlements due them after their term of office (ter Bogt & Tillema, 2016).

The laws that established these public institutions adequately made provisions to include the systematic structural controls of activities and in fact the lawmakers in their own wisdom prescribed punishments and disciplinary actions for those who wilfully or unknowingly violate any provision stipulated in these set of laws and particularly leading to any economic loss to the state (Johansson & Siverbo, 2014) . The questions many are asking including stakeholders which remained unanswered is whether sanctions prescribed by the laws have ever been applied or are done selectively? Is the public well informed of the existence of these laws? .The country's Chief Accountant who is the Controller and Accountant General itself failed to exercise due diligence by failing to conduct payroll review on payment vouchers to ensure salaries amounting to GH¢251,805.19 were stopped from being paid to the wrong accounts popularly termed as 'ghost names'. This was menace was according to the Auditor General amounts to a total breakdown of the control structures (Matei & Drumasu, 2015). The Auditor General of Ghana per the powers vested in his by the 1992 Constitution is mandated to periodically conduct assessment and verification of figures to ascertain compliance to financial and ethical accounting practices periodically to ensure conformity, validity and credibility of transactions. He ensures collection of public funds and their appropriations to government are done in manner that are in pursuant of Article 187(5) of the 1992 Constitution of the Republic of Ghana (Arundel, Casali, & Hollanders, 2015). Based on the above mandate, the Auditor General in 2013 discovered tax irregularities amounting to GH¢1,072,001.80 16 which entirely relates to misapplication of tax revenue and failure on the part of the accountants at various ministries to pay statutory deductions on due dates as required by law. Other offenses included non- adherence to provisions in the tax laws, mostly transacting of business with non-VAT registered person (Ajao et al., 2013). while in 2014, Procurement irregularities cost the nation GH¢50,492,451.95 14 simply because several departments undermined the power of the procurement committees therefore authorizing payments for goods and services contrary to the provisions of the procurement ACT,2003;(ACT,663). (Ameyaw, Mensah, & Osei-Tutu, 2012).

### 2.2 Public Financial Management in Ghana

The first point of call when issues of public financial management emerge is the Auditor-General. All statutory institutions, Public Boards, Corporations MDA's are subject to rigorous scrutiny at the end of each accounting year in accordance with the provisions in the Financial Regulation Act of 2004 (Legislative Instrument 1802) which is closely in consonance with the Financial Regulation Act (FAR) of 2003 and other International Accounting standards (Oppong et al., 2016).

A number of interventions have been made to protect the public purse from further leakage; the idea is to facilitate a sound financial management system devoid of irregularities that is causing stagnation and inefficiency across the sector .A classical example of a strong financial control initiative was the implementation of the 'Ghana Integrated Financial Management System (GIFMIS ) in 2009, a project initiated and launch by the Government of Ghana , through the Controller and Accountant General , Ministry of Finance(MoFeP) and support from the World Bank , The European Commission, DFID and The British Government as part the Public Financial Management Reform Agenda (PFMRA) ( (Akotia, 2016). The Controller & accountant –General (CAGD) by default is the department charged to see to the implementation of any form of Financial Reforms but with close supervision under the Auditor-General and the Ministry of Finance & Economic Planning.

The numerous Financial control modalities instituted are geared towards rescuing and mounting a permanent closure to the iniquities surrounding the public financial system, an example is the implementation of the Enterprise Resource Planning (ERP) which was also deployed to streamline public financial management at a central control unit and managed by the Controller and Accountant-General(CAGD) of Ghana .For control and supervision purposes , the ERP is jointly managed by three public institutions who are advocates of reforms and transparency (Haruna & Kannae, 2016) . According the country director of World Bank in an address applauded Ghana for a well-built legislative framework to strengthen the public financial management, following the endorsement and constant review of Public Financial Management laws (PFM) and regulations in recent years.(Wynne & Mear, 2016). These and many other control interventions when duly implemented would save the country from incurring unwarranted public debts and gross irregularities across the public sector.

Below is evidence depicting the state of iniquities identified after the GIFMIS system was deployed to monitor the appropriation of public funds across various ministries. The Financial disclosures depict total breakdown and disregards for Public Financial Administrative Regulations(FAR) resulting in massive irregularities as follows; Ghc3,067,185.70 equivalent to USD\$724,256.00 at the prevailing currency o rate prevailing of 4.00Ghc as at Dec,2016 was not lodged into the Consolidated Fund (Appiah & Abdulai, 2017; Edmonds et al., 2017). Table, 1. Trend of financial irregularities of various departments

s/n	Type of Irregularities	%	Amount GH¢	Amount US\$	Total Amount GH¢	
1	Outstanding Debtors/ Loans/ Recoverable charges		1,696,447,138.54	3,325.0	1,696,453,352.63	
2	Cash Irregularities	5.8	114,953,516.99	745,455.0	116,346,697.84	
3	Payroll Irregularities	-	251,805.19		251,805.19	
4	Procurement Irregularities	2.5	50,492,451.95		116,346,697.84	
5	Tax Irregularities	0.1	1,072,001.80		1,072,001.80	
6	Stores Irregularities	-	629,683.13			
7	Contract Irregularities	7.6	60,497,496.22	50, 000,000,00	153, 942, 496.22	
	Total	100	1,924,344,093.82	50,748,780.00	2,019,188,488.76	

Source (Agyei-Mensah, 2016; Boateng, 2016) Report of the Auditor-General on the Public Accounts of Ghana – Public Boards, Corporations, and Other Statutory Institutions for the period ended 31 December 2016.

It is enshrined in the 1992 Constitution of Ghana in clear terms the ,responsibilities of each arm of Government namely; The Executive, Legislature and Judiciary towards the enforcement of all provisions pertaining to use of public resources (Edmonds et al., 2017). Any individual acting in the interest of the state is mandated to observe such legislations. It is further emphasizing in other Constitutional frameworks such as the Financial Administration Act of 2003 (FAA) and the Audit Service Act (2000). These are supplemented by the Financial Administration Regulation (FAR). The legislative and regulatory framework sets out the fundamental budget and accountability structures (Aziz et al., 2015). With the establishment of all these legal provisions and frameworks, it practically impossible for individuals working in the public sector to deliberately or erroneously breach the control mechanisms without facing the full rigorous of these same laws . This paper sought to explore whether the control elements are effective within the public sector and to determine whether government employees are aware of the control measures and have any regards for those rules. According to (Rahman et al., 2015), that many at times system failure may be due to failure to recognise it use and potential .

In spite of all the vigilance and effort to promote transparency and good governance within the public-sector Ghana suffered the biggest financial scandal involving a businessman Mr Alfred Agbesi Woyome who was wrongfully paid GH¢51.2 million for services the nation never benefited, however due to negligence and disregard for control systems and legal structures such an amount was wrongly approved (Aveh et al., 2016). New policies deployed to strengthen the budgetary disbursement and procurement reforms includes the Internally Generated Fund (IGF) and Statutory Fund (SF) management policy which limits and direct 66% of outflows from the Consolidated fund (CF) to the national budget support (Gyau, Owusu, & Amaning, 2016).

### 2.3 Financial controls

Financial control according to Gitman, Joehnk, and Billingsley (2015) refers to the procedures designed to ensure financial appropriations follow laid down accounting practices to ensure receipts and payments are duly recorded and authorised based on management policy on budgetary allocations in compliance with regulatory instruments which will render financial statements free from errors and omissions Domingues et al. (2017). According to Balaboniene and Večerskiene (2015), financial control is a carefully planned effort by management to spend and within a specific limit in an accounting period In this regard, it is possible for management to practice a static or traditional budget system instead of beyond budgeting model which permit spending officers to incur certain cost at their own discretion in the interest of the organisation efficiently , judiciously and within the frameworks of the law .

In principle, a vibrant financial control system is to promote discipline in spending on projects and investments in order of importance bearing in mind the standard procedures involve in getting the transaction approved. A school of thought claim that, strict adherence to accuracy and accountability is the prime objectives of financial control (Sarbanes, 2002).

In a document titled 'Public Financial Management and Private Sector Competitive Support Program Phase' (PFMPSCSP, 2015) a comprehensive policy program was implemented to strengthen the system of controls in the public sector. The policy was set to encompass fundamental controls such as basic specific letter

of authority from all Chief Executives of MDA's who are by law the spending officers to append signatures authorizing payments and originators of such payments for the sake of accountability (Akotia, 2016). It is believed that financial control does not stop at protecting assets and accuracy of books but the method of supervision with the aid of a robust technology (William Jr et al., 2016).

Base on the recommendations of IMF, the (PFMPSCSP) fiscal control and monetary policy to be implemented under the IMF- World Bank sponsored project will aim at strengthening and widen the domestic revenue generating base to support the local currency from depreciating against other major currencies, with the view of raising sufficient funds for pressing capital projects that will have a long term effect on the country (Appiah & Abdulai, 2017). According to leading authors such as (Lindgren & Jansson, 2013), a robust monitory control will improve Government of Ghana's credit rating on the capital markets both home and international front for easy access to external funding in the form of grants, aids and loans. Major economic growth strategies such as diversification into non-traditional export commodities are likely to promote Ghana to a more competitive platform and access to the European market. The benefits will include, job creation and poverty alleviation only when funds are judiciously used and properly managed (Tricker & Tricker, 2015). Commitment to controls and monitoring of expenditure appropriations will be a major focus during implementation to strengthen the authorization structures and procedures with approval vested in institutions rather than individuals occupying positions. According to the former President of the United States of America, in a speech delivered during his visit to Ghana on the of 8th March, 2012, he emphasized the need for transparency, and accountable governance. He counselled the entire citizenry on the importance of strengthening the institutions rather than nurturing strong personalities (Pitt, 2014). This statement subsequently received a pragmatic response from government by way of programs and reforms(Aziz et al., 2015). A diverse view by renowned management scholars Gitman and Zutter (2012), an institutions system of financial control has a key role in the governance and management of risks that are significant to the fulfilment of its operational objectives. Likewise, a sound system of financial control contributes to safeguarding the stakeholders' investment and the institutions assets against theft, waste, unaccountable appropriations. Ghana as a country is capable of creating and enhancing the already existing framework to the standard of robust financial control in the future to facilitate the effectiveness and efficiency of operations to secure. Among other things the reliability, confidence and trust of the people must be availed in order to demonstrate the existence of internal control compliance with laws and regulations.

Effective financial controls including the maintenance of proper accounting records are important elements of internal control. They help ensure that the institution is not unnecessarily exposed avoidable risk of getting documents into custody of authorised persons or the instances of missing documents. In this regards the PRAAD which is an autonomous institution mandated by law to take custody of valuable documents belonging to state must step up their control and safety mechanisms to join the fight against the deteriorating internal control structures Gitman et al. (2015). The above concept is in accordance with claims of other authorities who believe that to make the entire process complete and robust, document security within the public sector must include financial information detailing special government contracts between other countries and partner institutions but in the form of computerized and electronic system sealed and protected by security codes (Ajao et al., 2013). With time Ghana will write off statements like (Causing financial loss to the state and wilfully misappropriating public resources) those were specific legal charges placed of top governments in 2005 who were in charge of various institutions where Ghana lost its scares resources due to negligence (Speklé & Verbeeten, 2014), However, Are the various activities of the institutions meeting its objectives? Are State properties, like Official Bungalows, vehicles and logistics being used efficiently? To answer these questions, the government Auditor must adequately exercise his duties conferred in him by the 1992 Constitution of Ghana and Public Administrative Act2003 in evaluating performance, identify lapses in the control structures of the public sector (William Jr et al., 2016). If Ghana must achieve economic recovery to match the likes of Rwanda, Tanzania and set a standard in the subregion, Revenues leakages and judicious use of state facilities like vehicles, fuel and salaries packages for public sector workers must correspond to performance and requisite credentials (William Jr et al., 2016). Experts believes that in order to achieve maximum results from the reforms, appointees to certain sensitive control and special installations should be occupied by person with sufficient knowledge in the internal controls and are ready to support the reform strategy.

### 2.4. The Concept of Internal Control Systems

The standard theory of accounting and auditing defines internal control as a systematic and deliberate policy designed by an organization's structural layout depicting the flow of work, span of control, chain of command and management information systems (Wynne & Mear, 2016). It is carefully established to co-ordinate the organization's resources in accordance with the vision and mission for a particular period. The system of internal control is broadly described as a set of mechanisms and procedures which an entity's management establishes and uses to safeguard its assets, provide reliable accounting information, encourage adherence to management policies to achieve maximum contribution and performance which from time to time is being evaluated for necessary.

corrections and non-deviations from the collective objectives (Gitman et al., 2015). Notable literature sources relate internal control systems to functional operation activities, such as KPMG, (UKAPC) The Auditing Practice Committee of UK termed internal control systems as two major functions namely; **Accounting control** and **Operational or Administrative (Gupta, 2008; Larbi, 2006)**, Going by their classification;

Accounting control: in the public sector and a standard business environment refers to a plan, modalities and procedures deployed with a view of enhancing accurate bookkeeping, reliability of financial information and adherence to step-by-step procedures. While operational and Administrative control relate day to day performance evaluation, measuring contribution of each department as well as disseminating timely information to respective departments concerning operations and changes in management policies (Sour, 2017). Another school of thought believes it's a processes to ensure the entire organisation applies laws pertaining to their duties while exercising their authorities and responsibilities at all levels of the organisation to influence every member to contribute as a collective towards the long term objectives (ter Bogt & Tillema, 2016). Administrative control cuts across all levels since management function is directly associated with responsibility for achieving the objectives of the organization including the aim of enhancing efficiency, safety and compliance to service, standard ethics for policy directions (Jill & Houmes, 2014). A section of management literature has it that controls systems is not complete until management willingly subject itself to external assessment and to determine the extent of deviations and conformity to applicable doctrines if stakeholders interest is to be satisfied (Sarbanes, 2002).

According to Gitman et al. (2015) there are two classifications of Accounting and financial controls namely; **Posteriori and** (2) **A Priori Controls**.

- **Posteriori control;** lays emphasis on financial budgetary policies including matching estimates to actuals with the intention of monitoring trends of expenditures and cost. This measure practice accurately and reliably prompt management on excess spending especially when projects are pursued in order of importance and funding.
- **Priori Control**; this concept is referred to as pre-emptive control measure and is implemented in expectation of a possible transaction within an accounting year. It has to do mostly with controlling risks since it helps the organization anticipate the occurrence of a possible risk. This set of controls therefore mostly look into the long term prospects of an organisation to better inform strategic decisions of policy makers as it is confirmed by William Jr et al. (2016).

The guidelines of internal control, International Federation of Accountants (IFAC, 2012) outlined the types of internal control components or elements that are fundamental requirements for a well-defined institution to achieve reasonable assurance(Simpson et al., 2016).

### **Elements of Internal Control Systems**

The COSO 1992 Internal Control Integrated Framework (The Committee of Sponsoring Organizations of the Treadway Commission (COSO).



Fig.2 Source: COSO, 1992 As cited in (King, 2016)

### 2.4.1 Monitoring

Effective control mechanism is a dynamic and systematic process designed strategically for measuring and comparing current performance rate to organizational standard and constantly making adjustments to inefficient and outdate methods and policies that not adding value or not capable of matching current challenges (Gitman et al., 2015).

Leading authorities including (Balabonienė & Večerskienė, 2015), asserted that the system of controls installed and practised by an organisation must be subject to changes over a period of time but must remained consistent with vision and present mission of the organisation . Other scholars and major authorities in finance literature concluded that monitoring is a form of evaluation and testing over a long period of time the potency of system procedures particularly financial reporting practices that call for independent audit to establish assurance, identify deficiencies, review, recommendations and conclusions on the objectivity , transparency and timely accounting information to users (Weerakkody, Omar, El-Haddadeh, & Al-Busaidy, 2016). Monitoring ensures suitable technology deployed are user friendly and handled efficiently without hitches or hindrance to productivity (Appiah & Abdulai, 2017). Irrespective of the form of control whether highly sophisticated or traditional method, the control mechanism should be able to anticipate a possible risk occurrence and adequate rectification.

## H1: Effective monitoring is a positive indicator to safeguarding public resources against irregularities and misappropriations

### 2.4.2 Risk Assessment

Evidence from research has it that enterprise sustainability is largely dependent on the ability of management to envisage and forecast risk in advance to avoid potential occurrences(Johansson & Siverbo, 2014). Authorities in enterprise management have explained risk assessment as a deliberate and systematic policy towards identifying possible breakdown of systems and structures that are likely to have a devastating impact on the long term objectives of the organisation such, liquidity, bankruptcy risk, breakdown of machinery and technological lapses that may have a grievous impacts sustainability (William Jr et al., 2016). Most organisations particularly the public sector of Ghana and few private firms lost billions of dollars to fire outbreaks between 2012-2013 due to lack of proper planning and failure to conduct routine verification in various government offices to provide safety mechanisms to replace old fixtures and fittings that are possible causes of fire according to reports from investigation by Ghana Fire service (Aveh et al., 2016)

In the same vain low productivity within the public sector can be is attributed to inadequate training to replace the traditional document and information storage with modern technology to secure valuable information relating to government transactions and contract agreements against fire, theft and unauthorized access (Le et al., 2016). Risk could emerge from financial misstatements and omissions capable of distorting accurate reporting of financial information and timely updates. The consequences of inaccurate financial reporting have a devastating impact on the organisations future funding and ability to compromise the confidence of stakeholders (Brown, 2016). Risk assessment is equally a potential tool analysing the external business environment and the degree of competitions within an industry and identifying new trends, existence of threats and new opportunities According to public sector management theory, this is suitable for public enterprises that are competing with the private sector (Bolton, Lian, Rupley, & Zhao, 2016). In a business environment the possibility organisations violating laws and standards procedures pertaining to their industry or the environment are highly unavoidable hence the need to constantly assess operations in consonance with present regulations in order avoid the risk of being fined or being blacklisted (Domingues et al., 2017). In the event of unfavourable working conditions, management can face fears and violent confrontations and demonstrations id adequate assessment is not done to secure the support of union leaders to join forces with management or better still meet the demands of workers timely and adequately (Axelsen et al., 2017).

## H2: Commitment to frequent risk assessment in the public sector is a means to safeguard assets. 2.4.3 Control Activities

Control activities are termed as the traditional and technological means of coordinating and managing resource and personnel of an organisation of the organisation to work collectively towards the organisational goal through well-structured format serving as a guide and principles (Banyen & Nasamu, 2015). The procedure mainly focuses and attempt to reduce and prevent risk and unwarranted events that may have a devastating effects on the organisations long term prosperity, couple with day-to-day supervision and instructions from top management to achieve a specific task (Ciak, 2017) In another context, Control activities is termed as laid down policy that serves as a guide and reference point to management and the entire organisation of their purpose of existence thus; the mission and vision while performance is equally measured against standard and compliance to ensure corrections are strictly adhered to effective control systems are a quick reminder and roadmap to working within a particular period with high efficiency (Bryan, 2017). Another similar but specific definition of Control activities involve a number of activities including; authorization, verifications, reconciliations, reviews of operating performance security of assets and segregation of duties (Mandzila & Zeghal, 2016). A good example of checking procurement fraud and financial misappropriations and irregularities in the public sector of Ghana was the reason the government of Ghana in 2009 procured the GIFMIS software to manage budget appropriations within the public sector (Asare, 2016). Control activities in recent time aims at creating a robust mechanism directed towards achieving institutional security, detect errors and fraud and deliberate attempt by suspected individuals who may attempt to outsmart the financial system, distort vital information.

The standard control activities applicable to every organisation particularly the public sector according to

William Jr et al. (2016) includes;

- 1. Segregation of duties
- 2. Supervision
- 3. Approval and Authorization
- 4. Review &Verification

Segregation of Duties :Authorities including Geraets et al. (2016) suggested that a formidable system of control must consider assigning responsibilities and functions for example in the finance office bookkeeping, recording of daily sales or transaction, reconciliation, budget, procurement, payment, cashiering etc. should all be in accordance with the structure of the organisation with a clear directive of authorized persons likely to act on behalf of an absentee or the substantive officer for the safety of information and responsibility. In order to control theft and manipulation of financial figures and to improve security, no single person is allowed to perform more than one responsibility particularly those involving authorization and approval of expenditures, payment, access to vital information (Wynne & Mear, 2016). It is generally acceptable that the audit unit of every organisation should be separated from the finance and accounting department and must not be involved in the preparations of the financial statements. Another classical example is the procurement function and verification of logistics should be a separate function that must not be carried out by a single individual or group of persons from this two units carry out this function together, there is the possibility of manipulations misappropriation as asserted by Mandzila and Zeghal (2016) .In effect, the practice comprise the true and fair, transparent nature of accounting records. The above view confirms the bottom line that each employee must be assigned a distinctive role back by authority, responsibility and the extent to which such authority can be exercised to prevent fraud in a well-defined organisational setting according to William Jr et al. (2016).

Authorization: Approval for payments, access to confidential, secret company installations should be protected and must be depicted and contained in the control activity directives. It includes classification of documents, for example in the public-sector documents classified Restriction are only meant for those required to work on them likewise those classified, Confidential, Secret and Top secret (Xu & Zhou, 2016). This function also relates to approval to implement management policies and major strategies that will have a long term impact of the activities and prospects of the organisation (Brown, 2016).

**Supervision**: this function of control serve as guidance and training ground for employees to develop capacity in order to develop and independent mind to perform on the job. Control in the form of supervision could be done by immediate seniors, departmental directives or periodic monitoring and evaluations of performance by staff. In practicing this role it is important to define the span of control and the particular senior official responsible to deliver supervisory duties over a group of personnel (Aveh et al., 2016). It is important for management to check the possibility of abuse of authority and privileges.

## H3: Control activities have a significant impact on the financial performance of a public sector organisation

### 2.4.4 Internal Audit function

Compliance to ethical, applicable accounting and financial reporting standards is the prime responsibility of the Audit unit of every institution, considering the fact that they are to verify accounting records and evaluate the objectivity and transparency of financial information relating to a particular accounting year. (Geraets et al., 2016). The Internal Audit Division assists management in discharging its responsibilities in terms of the implementation and monitoring of internal controls.

As part of the internal Audit measures to ensure accuracy and consistency of financial records, management conducts thorough checks to authenticate the true value of assets, properties and transactions over a period of time. It is also done for the purpose of planning and evidence of the existence of physical asset on site or designated location as stated in the books of accounts (Tricker & Tricker, 2015). The audit function that confirms the true value of assets and transactions fall within this category of control.

## *H4: A robust internal audit function contributes positively to a sound financial accountability and due process* 2.4.5 Control Environment

An efficient system of control is the type that prescribes a standard code of conduct and generally acceptable culture suitable for an organisation that is applicable to every member of the organisation (Asiama, Akosah, & Owusu-Afriyie, 2014). The control environment of an organisation describes the organisational structure, the flow of command authority and responsibility among various departments. According to (Sarbanes, 2002). Conversional and standard Control environment is non-visible aspect of control, basically organisational ethics that governs the activities of every member to behave in a certain orderly manner collectively decided approved to be a suitable and lawful. Some attributes of control environment determine workers attitude to work, for instance a public servant owes the entire organisation the duty to put up good conduct employees on and off duty (Sarbanes, 2002). A diverse view has it that currently Controls regarding financial decisions covering the organization, method, process and internal audit established by the administration to ensure work is done in compliance with the purpose for which the institution is exist, it also determined good environment, policies and legislation, to

ensure assets and resources are protected, accounting records are kept in an accurate and complete manner and financial and management information is produced in line and in a reliable manner (Domingues et al., 2017). Several authorities explained that control environment prescribes the need for every member of the organisation to maintain a high moral standards, integrity, regards for company ethics, and respect for laws and regulations pertaining to the day-to day operations devoid of lawless abuse of office or comprise official assignment with personal interest (Bryan, 2017). In control Environment is an institutional cultures that defines an organisation , and most often transferred to newly recruited employees during induction training (Edmonds et al., 2017)

# H5: A well-defined control environment is commitment to ensuring ethical standards and integrity in the application public resources.

### 2.4.6 Information and communication

Access to timely information could be in the form of instruction from superior to subordinate or corporate decisions arrived at board level that reflects the long term prospects of the organisation including government policies that affects public institutions and the business environment (Ajao et al., 2013). Looking at the importance of Information and communication form internal control point of view, it is termed a medium of conveying instructions, laws and regulations that a group of people my obey and apply on daily basis to make their perform fall within a certain standard (Meyer & Leixnering, 2015). Without communication and information there will be a wide gap between performance and policies, perhaps the duties that requires technical advice could equally be neglected. Considering claims by Edmonds et al. (2017), Communication and information also comes in the form of rewards, promotion or disciplinary sanctions arrived at by management to deter others from engaging in similar act that will drag the image of the organisation, a conscious effort must be taken to adequately publish useful updates such that the target audience will make meaning of the content and timely feedback. In practical terms according to Agyei-Mensah (2016), Control systems functions effectively and more efficient when the organisational structure clearly defines the channels of communication and directing and coordinating activities. *H6: An efficient channel of communication within the organisation has a significant influence on the* 

performance and contribution of public sector employee and awareness of control mechanisms.

### 3. Methodology

### 3.1 The research design

The design clearly outlines the systematic procedure adopted by the researcher in gathering and processing data relevant for finding answers and solutions to the research problem and hypothesis testing. The style of research design was to prove validity and reliability of the study. The aim of the research design was to coordinate the process of data gathering, analysis and maintain a clear relationship with research questions in order to draw reasonable conclusion(Block, Miller, & Wagner, 2014).

The study design also includes the justification for the choice of the sources of data and procedures applied. A well-structured research design warrants the use of relevant information to the research problem and has bearing on the research objectives (Block et al., 2014). However, there has not been any specified approach to research design since each research area requires peculiar style suitable to reflect a comprehensive outcome for validation. The study employed descriptive and quantitative statistical techniques to explore the details of financial controls and irregularities in (4) public sector departments in the Accra metropolis.

### 3.2 Study population and Sample size.

The public sector of Ghana specifically four (4) ministries made up of the Finance, Justice, Education and the local government ministry were sampled for the study due to the growing nature of irregularities associated with the managing public funds. The study made use of a non-probabilistic, purposive sample size of 100 participants from the Finance department, Administration, Internal Audit, Human resource and other related units whose duties comply with control mechanisms. The four study units are suitable for the study due to the increasing demand for accountability and transparency in the application of public funds to boost public confidence in state institutions.

### 3.3 Data Analysis

Data was analysed using the Spearman rho correlation with the Statistical Package for Social Scientist (SPSS). In order to confirm the output results from SPSS, STATA (version 13) was also used to perform the regression analysis to examine the relationship between the dependent and independent variables. The independent variables were made up of Control Environment, Monitoring, Risk Assessment, and Control Activities, Internal audit and Information and Communication while the dependent variable was termed as compliance.

### **Correlation Results**

Spearman's rho correlation statistical technique was applied to examine whether internal control elements have a significant impact on compliance to effective public financial management.

Table 1 below indicate a strong relationship between the dependent and independent variables. This implies

that, all the six internal control elements are capable of influencing effective financial management in the public sector at a significant level of 0.000 p-values greater 0.05 indicating a rejection of the null hypothesis. However, the result shows a moderate influence of risk assessment and Communication and information on effective public financial management. Both elements recorded p value of 0.317 and 0.094 respectively to the Spearmen's rho t test though appears within the 0.05 benchmark.

The most influential independent factors contributing to effective financial control in the public sector are control Activities (0.000 p-value), Monitoring (0.000). Internal Audit is influencing the dependent variable at (0.014 p-value) while Control environment which is mostly about integrity of the public officer also significant at 0.014 p-values. The degree of association depicts a positive relationship and dependence among the variables per the correlation outputs table 3 & 4.

### Table 2. Correlation (SPSS Spearmen rho)

Compliance to effective control	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
Internal audit	2514062	.1005921	-2.50	0.014	4511622	0516501
Information communication	.1124468	.111672	1.01	0.317	1093116	.3342052
Control Activities	.6777066	.1107996	6.12	0.000	.4576806	.8977326
Risk Assessment	1990229	.1175478	-1.69	0.094	4324495	.0344038
Monitoring	.4445508	.1087447	4.09	0.000	.2286054	.6604963
Control environment	.2696398	.1077362	2.50	0.014	.0556971	.4835826
_cons	-1.570138	.3202523	-4.90	0.000	-2.206096	9341806

.\*\*. Correlation is significant at the 0.01 level (2-tailed).

As clearly indicted in the correlation output, two factors have not been prominent and those are Information & communication and Risk Assessment which must be closely looked at as a country. For the sake of reliability the same test was carried out using STATA v13. The result confirmed the trends of relationships identified in the SPPS Spearmen's rho technique

### Table 3 Correlation output STATA

Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]				
2514062	.1005921	-2.50	0.014	4511622	0516501				
.1124468	.111672	1.01	0.317	1093116	.3342052				
.6777066	.1107996	6.12	0.000	.4576806	.8977326				
1990229	.1175478	-1.69	0.094	4324495	.0344038				
.4445508	.1087447	4.09	0.000	.2286054	.6604963				
.2696398	.1077362	2.50	0.014	.0556971	.4835826				
-1.570138	.3202523	-4.90	0.000	-2.206096	9341806				
pwcorr comp intaud infcom conact risk mon cont									
o intaud	infcom conad	et risk	mon	cont					
·									
0									
2 1.0000									
02 0.9883	1.0000								
07 0.9839 0	0.9862 1.000	0							
4 0.9852 0.	9836 0.9764	1.0000							
5 0.9858 0.	9873 0.9871	0.9865	1.0000						
4 0.9813 0	.9744 0.9820	0.9868	0.981	1.0000					
	2514062 .1124468 .6777066 1990229 .4445508 .2696398 -1.570138 intaud infcon p intaud p intaud 2 1.0000 2 0.9883 1 07 0.9839 (0 4 0.9852 0. 55 0.9858 0.	2514062  .1005921    .1124468  .111672    .6777066  .1107996   1990229  .1175478    .4445508  .1087447    .2696398  .1077362    -1.570138  .3202523    intaud infcom  conact    p  intaud infcom    conact  ri    .20  .9883  1.0000    .20  .9883  1.0000    .20  .9839  0.9862  1.0000    .20  .9839  0.9862  1.0000    .20  .9838  0.9873  0.9871	2514062  .1005921  -2.50    .1124468  .111672  1.01    .6777066  .1107996  6.12   1990229  .1175478  -1.69    .4445508  .1087447  4.09    .2696398  .1077362  2.50    -1.570138  .3202523  -4.90    intaud infcom  conact  risk    p  intaud  infcom  conact    v  .000  .000  .000    12  1.0000  .000  .09839    00  .09839  0.9862  1.0000    01  .09839  0.9862  1.0000    02  0.9833  0.9862  1.0000    03  0.9852  0.9873  0.9871  0.9865	2514062  .1005921  -2.50  0.014    .1124468  .111672  1.01  0.317    .6777066  .1107996  6.12  0.000   1990229  .1175478  -1.69  0.094    .4445508  .1087447  4.09  0.000    .2696398  .1077362  2.50  0.014    -1.570138  .3202523  -4.90  0.000    intaud infcom  conact  risk mon  cont    p  intaud  infcom  conact  risk  mon    00	2514062  .1005921  -2.50  0.014 4511622    .1124468  .111672  1.01  0.317 1093116    .6777066  .1107996  6.12  0.000  .4576806   1990229  .1175478  -1.69  0.094 4324495    .4445508  .1087447  4.09  0.000  .2286054    .2696398  .1077362  2.50  0.014  .0556971    -1.570138  .3202523  -4.90  0.000  -2.206096    intaud infcom  conact  risk mon  cont    00  2  0.9883  1.0000  2  0.9839  0.9862  1.0000    02  0.9833  1.0000  0.9764  1.0000 <td< td=""></td<>				

.\*\*. Correlation is significant at the 0.01 level (2-tailed).

Considering the correlation coefficients of the output, it depicts stronger the relationships. We can confidently emphasize that the public sector of Ghana can focus efforts to strengthen the four (4) significant components of internal control systems that are influential in ensuring a sound financial management in order to reduce irregularities in the public sector.

### **Regression (STATA.v13)**

The regression analysis indicates a high degree of association and dependence. Internal control elements particularly Control environment, Control Activities, Monitoring and Internal Audit have a strong influence over public financial management in the quest to deal with irregularities. Looking at the regression output below, Control environment has a significant coefficient of (.2514062) with t-statistics of (-2.50) and p-value of (0.014)

implying that when there is a well structure control environment people will work with integrity and ethical values.
Table.4 Regression output

Source	SS	df MS	Number of	= 100	
			obs		
		F( 6, 93)	= 1073.22		
Model	3996.91462	6 666.152437	Prob > F	= 0.0000	
Residual	57.7253806	93.620703017	R-squared	= 0.9858	
		Adj R-squared	= 0.9848		
Total	4054.64	99 40.9559596	Root MSE	=.78785	
comp	Coef.	Std. Err. t	P>t	[95% Conf.	Interval]
Control Environment	.2696398	.1077362 2.50	0.014	.0556971	.4835826
Monitoring	.4445508	.1087447 4.09	0.000	.2286054	.6604963
Risk Assessment	1990229	.1175478 -1.69	0.094	4324495	.0344038
<b>Control</b> Activities	.6777066	.1107996 6.12	0.000	.4576806	.8977326
Information & Com	.1124468	.111672 1.01	0.317	1093116	.3342052
Internal Audit	2514062	.1005921 -2.50	0.014	4511622	0516501
_cons	-1.570138	.3202523 -4.90	0.000	-2.206096	9341806

The regression output also indicated that monitoring is an important control factor that can influence performance or people in the public by coefficient value of (0.4445508) with t- statistic of (4.09). Similarly control Activities is a very important element that can have a greater influence by coefficient value of (0.6777066) corresponding to p-value of (0.000) and t-statistic of (6.12).

### 4. Conclusion

This research primary focused on four public sector ministries to examine the presence and impact of internal control systems and how it can mitigate the current state of irregularities in the application of public resources allocated from the national budget. These departments were sampled purposely due the services they render and the amount of taxpayers' money that goes into their operations. Practically the private sector of Ghana is said to be more efficient in managing its limited resources yet productivity is commendable. This study seeks to clarify that with strict adherence to internal control systems the public sector financial management and judicious use of resources can be guaranteed the near future to match the efficiency of the private sector. Four out of the six internal control elements that were tested proved strongly positive to be dominant factors in the fight to achieve a transparent resources management without irregularities such as monitoring, integrity of the public sector worker, controls activities as in the adherence to all financial management standards. Not forgetting the relevance of a robust internal control unit whose mandate is to strengthen assurance, accuracy and compliance of accounting records.

### 5. Recommendations

Though internal control systems are found to be present in the public sector as confirmed by the correlation results, these does not guarantee to absence of irregularities if adequate measures are not taken to strengthen monitoring and compliance to acceptable standards and practices. Despite efforts by government of Ghana which brought about the implementation stiff financial control systems such the GIFMIS which controls all public sector financial disbursement and procurements systems, gross irregularities still persist. Since there is no absolute guarantee that the presence of internal control systems will provide 100 per cent assurance, the study would therefore recommend that monitoring and evaluation of compliance be done frequently to correct deviations and detect misappropriations early enough. Communication and information must be adequate and timely and not restricted to only the high ranking. Communication must convey specific instruction and guidance for each public service employees to beware of the consequences of any omissions.

The internal and external auditors deserve absolute independence of management in order to curb the degree of financial irregularities within the public sector financial management. The auditors must be free from management and their employers to be in the position to pass objective judgement of the state of public accounts to guarantee transparency and assurance.

Considering the prevalent rate of irregularities in the public sector, there is much to be desired. The study would suggest that the monitoring be done by an independent private evaluator such as KPMG a credible auditing firm instead of the auditor general who is a government appointee. Secondly, the concept of internal control should be emphasized at the top level of every public institution and due diligence and compliance must not be limited to only the lower level employees.

Efforts must be made to ensure inter-departmental monitoring. For example, the ministry of Finance can have

their activities closely monitored by the ministry of Justice while a similar check applies to ministry of health and Educations, Ministry of Agriculture and Local government ministry can partner. These exercise will encourage peer review and ensure due diligence. Enforcing compliance to internal control systems must also come with adequate reward packages for outstanding performance though the COSO internal control framework does not prescribe any reward element for a successful implementation of the framework.

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