



FORENSIC ACCOUNTING PRACTICES – A MEANS OF MITIGATING CORRUPTION :A CASE STUDY OF THE GAMBIA PUBLIC SECTOR PERSPECTIVE

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Abstract:

The aim of this research is on how forensic accounting practice could mitigate public sector corruption through fraud, bribery and embezzlement prevention. Review of relevant literature was carried out in order to gain deeper insight and understanding of the subject matter. Questionnaires were administered in order to generate the necessary primary data and were descriptively analyzed. Three hypotheses were identified and a Pearson's Correlation, regression and a coefficient analysis tests were conducted to test the hypothesis statements. The result revealed that fraud prevention, bribery prevention and embezzlement prevention all shows positive significant influence on public sector financial corruption mitigation. This implies that public sector financial stakeholders should give a great value of consideration to fraud, bribery and embezzlement prevention in the efforts of public sector financial corruption mitigation in the Gambia. To this effect, the research recommends that forensic accounting must be introduced as a compulsory tool in dealing with financial sector corruption in order to promote corporate governance. The government should encourage the practice of forensic accounting by providing adequate training and resources to forensic accountants such that they become an expert in their particular field of expertise and develop new courses at tertiary institutions relating to forensic accounting practices.

Keywords: Forensic Accounting, Public Sector Accounting, Corruption mitigation Fraud prevention, Bribery prevention and Embezzlement prevention

1.1 Background of the Study

Many people presume "Africa" as synonymous to corruption and corrupt practices (Malgwi, 2004). As many cases of corrupt practices affecting the continent or its citizens have drawn international attention. Corruption has been the greatest threat to the survival of African many countries or nation states (Agbiboa, 2012). Though the continent is blessed with abundant natural resources and enormous human resources capital, yet remains largely underdeveloped (Ogbeidi, 2012). According to (TI, 2013), corruption is defined as the abuse of entrusted power for private

gain. This definition encompasses corrupt practices in both the public and private sectors. The Corruption Perceptions Index (CPI) ranks countries according to the perception of corruption in the public sector. (Ofiafoh, 2013) mention that, corruption have serious negative effect on human capital and infrastructural development in developing economies, especially list development countries where the menace has become endemic. Therefore, public sector corruption is a global phenomenon that has raised concern worldwide. Corruption practices in public sector includes crimes such as, fraudulent practices, bribery of public officials, embezzlement, nepotism, political corruption, extortion, money laundering, no asset declaration, window dressing of books of accounts and concealment. As a result, for any country to attain a proper economic development, its public sector needs to fight for a free corrupt practices environment.

However, modern organized corporate frauds are sophisticated, and well-resourced by managers, entrepreneurs, civil servants and politicians to mention but a few. By extension, there is widespread growth in white-collar crimes evidenced by both fraudulent financial reporting and misappropriation of assets. Racketeering and terrorist groups often rely on money-laundering schemes to conceal and disguise their activities such as identity theft, present new challenges to accountants. According to (Mazumder, 2011), law enforcement personnel are becoming more aware of white-collar crimes but lacks training and expertise in fighting these crimes, they are better trained in investigation of violent crimes but not economics crimes which requires the knowledge of accounting. (Liodorova, 2018) added that, governments should encourage the practice of forensic accounting by providing adequate training and resources to forensic accountants such that they become an expert in their particular field of expertise and develop new courses related to forensic accounting. Furthermore, (Ozili, 2015) mention that, today, forensic accounting is one of the fastest emerging areas in law enforcement. The research concluded that, by utilizing accounting forensic financial irregularities, money laundering, embezzlement, and other fraudulent activities can be detected which otherwise would have a

devastating impact upon the businesses or organizations in the long run. In the light of the foregoing discussion, is a need to respond to this changing criminal threat and the skills of non-traditional investigators like accountant and the legal experts are needed to combat the corporate ill, this has arouse the call for forensic accounting practices.

According to (Crumbley, 2009), forensic accounting is define as an action of identifying, recording, settling, extracting, sorting, reporting and verifying past financial data or accounting activities for settling legal disputes. The research of (Shah, 2018) concluded that, forensic accounting must be introduced as a compulsory tool in dealing with financial fraud and corruption in to promote corporate governance. Similarly, (Olajide, 2014) described forensic accounting has to do with the use of accounting discipline to help determine issues of fact in financial litigation. The research also reported that, it involves the application of accounting, business, legal and financial skills in settling commercial or legal disputes. Also, (Jayadas, 2017) remark that, Forensic accountants play a significant role in analyzing current financial standards and processes, which can lead to the identification of more efficient solutions. Still, (Popoola, 2017) concluded that, forensic accountant knowledge and mindsets on fraud risk assessment in the public sector will enhance the corporate governance and accountability practices among public sector accountants and auditors in Nigeria. Likewise, (Olukowade,2015) concluded that, the role of a forensic accountant under contemporary conditions no doubt is very important because they help lawyers, courts, the police, regulatory bodies and other institutions in investigating and documenting frauds. Therefore, the impact of forensic accounting practices in the fight against public sector corruption has been dramatic over the last decade. This has created many job opportunities in the accounting profession at government agencies, such as The Central Bank department of National Treasury, the revenue authority and the office of the inspector general; all have an increased impact on accountants and others with forensic accounting investigation skills.

To fight corruption in the Gambia, many laws have been passed, tribunals set, and commissions of inquiries have been put in place but still yet bear meaningless fruit. The recent multi-million dalasis public finance embezzlement in the Gambia (Jannah Commission, 2019) have shaken the business world, International community and the Government of the Gambia. The public and governmental reaction to these events has been enormous. It has triggered congressional action that resulted in legislation (The Gambia Government Whitepaper, 2019) and auditing standards (Statement of Accounting Standard No. 99) that require public establishments and their auditors to be more aggressive in detecting and preventing fraud, which in turn, has elevated the importance of the forensic accounting profession in protecting the integrity of the financial system in order to prevent such fraud and embezzlement. To this effect, the focal point of this research work is on how forensic accounting practices could aid forensic accounting techniques as a means of mitigating corruption through fraud, bribery and embezzlement of reduction in the public sector accounting perspective of the Gambia.

1.2 Statement of the Problem and its Justification

The failure of statutory audit to prevent and reduce misappropriation of corporate fraud and an increase in corporate crime in the Gambian public sector environment has put pressure on the professional accountant and legal practitioner to find a better way of exposing crime in the public sector accounting of the Gambia. The specific problem which this research intends to address is: Can forensic accounting practices helps to mitigate corruption in the public sector perspective of the Gambia through fraud, bribery and embezzlement reduction?

1.3 Objective of the Study

The main objective of this study is to investigate whether forensic accounting practices can help in mitigating corruption in the public sector perspective of the Gambia through the following ways.

- a) To investigate whether forensic accounting practices can help in mitigating public sector bribery.
- b) To investigate whether forensic accounting practices can help in mitigating public sector fund embezzlement.
- c) To investigate whether forensic accounting practices can help in mitigating public sector fund mismanagement.
- d) To increase the knowledge and awareness of forensic accounting practices within the public sector stakeholders.

1.4 Scope of the Study

The focus of this study is on forensic accounting practices with special emphasis on mitigating corruption through fraud, bribery and mismanagement of fund reduction in the public sector perspective of the Gambia. Data will be obtained from various stakeholders in the public accounting sector of the Gambia.

1.5 Significance of the Study

When viewed from the perspective of forensic accounting practices in both the public sector as well as the business environment of the Gambia, the significance of this research will be appreciated.

The primary focus of this research is to investigate how public sector corruption can be mitigate through fraud, bribery and embezzlement of public fund minimization within the public sector of the Gambia with the use of forensic accounting practices.

Future researchers on this field will find this work as a very good reference material and will create a better insight into the relationship between forensic accounting practices and corporate fraud in general.

1.6 Hypotheses

Hypotheses shall be developed and tested to ensure a more effective and result oriented work. The null hypothesis (H_0) and the alternative hypothesis (H_1) will be used for the purpose of this study.

Hypothesis (1)

H₁: Fraud of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices

H₀: Fraud of public fund prevention will not significantly ensure effective mitigation of corruption through the application of forensic accounting practices

Hypothesis (2)

H₂: Bribery of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices

H₀: Bribery of public fund prevention will not significantly ensure effective mitigation of corruption through the application of forensic accounting practices

Hypothesis (3)

H₃: Embezzlement of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices.

H₀: Embezzlement of public fund prevention will not significantly ensure effective mitigation of corruption through the application of forensic accounting practices.

2.0 LITERATURE REVIEW

This section addresses the first secondary research objective namely to execute an in-depth analysis of secondary sources dealing with forensic accounting practices - a means of mitigating corruption, public sector perspective by officials; and the independent variables shown in the hypothetical statements. The analysis of secondary sources covers Concept of Corruption, Concept Forensics Accounting, Forensic Accounting: Past and Present Perspectives, Forensic Accounting is not the same as audit, Statutory Auditing Versus Forensic Auditing, Objectives of Forensic Auditing, Techniques and tools of forensic auditing, Importance of Forensic Accounting, Applications of Forensic Accounting, The Roles/Functions of a Forensic Accountant, When can a Forensic Accountant be employed, Forensic Accounting Practices, Forensic Accounting and Fraud Detection & Prevention, Forensic Accounting and Bribery Prevention and Forensic Accounting and Embezzlement/Mismanagement of Public Fund.

2.1 Concept of Corruption

Since the mid-1990s, many countries, international aid and development organizations have become interested in issues related to the problem of corruption. Many people presume that “Africa” is synonymous to corruption and corrupt practices (Malgwi, 2004). As many causes of corrupt practices affect its citizens have drawn international attention. Corruption has been the greatest threat to the survival of many African nation states (Agbibo, 2012). Though the continent is blessed with abundant natural resources and enormous human resources capital, yet remains largely underdeveloped (Ogbeidi, 2012). Defining corruption has proven to be such a difficult challenge that many contemporary analysts pass over the question as quickly as possible. But while definitions are too important to be dismissed as an analytical concern, a single one-dimensional definition that will satisfy all observers will never be found. Rather than proposing yet another definition, there are five dimensions of the concept: corruption as social decline, as deviant behavior, as logic of exchange, as a system of measurable perceptions, and

corruption as “shadow politic”. All these dimensions help us view corruption within actual social settings; all lend further detail to the sorts of contrasts among concepts and usages. In the end one of the most important aspects of the issue is that of trust, which not only helps us understand how corruption functions in actual cases but also underscores the reasons why we must continue to fight it (Alemann, 2004).

According to (Boatright, 1999), corruption is an unfair criminal act through which a bribe-recipient’s betrayal of trust exists between an employee and employer, practiced systemically by high-ranking public officials preventing the development of fair and efficient market. (Ataman, 2007), summit that corruption does not only means stealing money but also leakage of official confidential information, unfair practices in procurement and delays in fulfilling tasks. (Aluko, 2006), added that corruption is a multidimensional concept, thus differ from one work of life to another. This research finding further revealed that corruption is a moral depravity and perversion of integrity through bribery or favor, a well conscious plan act for a person or group private gain at the expense of the general public.

In addition, (El-Rufai, 2003), report that corruption covers a wide range of social misconducts including fraud, extortion, embezzlement, bribery, nepotism, influence peddling, bestowing of favor to friends, rigging of elections, abuse of public property, the leaking of a government secret and sale of expired as well as defective goods such as drugs, food plus electronic and spare parts to the public. This study concluded that corruption include fraud, bribery and embezzlement of public fund. Meanwhile, the study of (Annan, 2004), remark that corruption is a deceptive infection that has a wide range of destructive effects on societies, undermines democracy and the rule of law, leads to violations of human rights, misleads markets, wear down the quality of life and allows organized crime, terrorism and threats to human security. The study further alluded that, corruption is found in both developed and developing countries and is a major obstacle to poverty alleviation and development.

2.2 Concept Forensics Accounting

Forensic accounting is the domain area of the accountancy profession which defines engagements that result from actual or predicted disputes or litigation. “Forensic” means “suitable for use in a court of law”, and it is to that standard and potential outcome that forensic accountants usually have to work (Crumbley, 2009). Forensic accounting can also be seen as a segment of accounting that is suitable for legal review and offering the highest level of assurance (Apostolou, 2001). The inexorable series of embarrassing audit failures over the past several decades has stimulated a paradigm move in accounting. Remarkably, in the mid – 20th century, when the fight from fraud detection was at its height, a few scholars forecast that in the future there will be recognition of the general responsibility of the auditor to execute tests to detect substantial defalcations and errors if they exist (Brown, 1962).

According, (Crumbley, 2003), forensic science may be defined as application of laws of nature to the laws of man. Also, (Zysman, 2004), reported that, forensic accounting provides accounting analysis that can be appropriate to the court which forms the basis for discussion, debate and ultimately dispute resolution. This study further revealed that, the long existence of forensic accounting and the growing complication of the business environment as well as growing of business related investigation, the need for forensic accounting professionals are highly vital to the contribution in the investigation of financial and business correlated issues. Still, (Dhar, 2010), (Ramadhan, 2015) and (Sorunke, 2016) all revealed that, forensic accounting is a science that deal with the application of accounting facts and theories collected through auditing methods, techniques and procedures to resolve legal besides related problems which requires the integration of investigative, accounting and auditing skills. (Adegbe, 2012) held the view that, forensic accounting practice use auditing and investigating skills to assist evidence in legal matters as well as establish administrative proceedings. Furthermore, (Oyedokun, 2013) that, forensic accounting is a scientific accounting method of uncovering, resolving, analyzing

and presenting fraud matters in a manner that is acceptable in the court of law. (Owolabi, 2013), share similar conclusion.

Furthermore, (Grippio, 2003) forensic accounting is a science (i.e., a department of systemized knowledge) that deal with the application of accounting facts gathered through auditing methods and procedures to resolve legal problems. This author added that, forensic accounting is very different from traditional auditing and the main purpose of a traditional audit is to examine the financial statements of an organization and express an opinion on the fairness of the financial statements. Similarly, forensic accounting sometimes referred to as forensic auditing, is used in the pursuit of justice in court proceedings and to protect people from fraudulent activities (Jayadas, 2017). This research added that, there are many applications of forensic accounting specialty – from preparing analytical data for litigation and testifying in a court of law as needed, conducting forensic analysis of financial data, performing forensic research to trace funds to identifying assets for recovery. Correspondingly, the term “forensic accounting” can refer to anything from the execution of a fraud analysis to the recreation of “true” accounting records after the discovery that they have been manipulated. As noted by (Boleigha, 2011), forensic accounting is not “accounting for dead people”, rather it is the application of a wide range of accounting, auditing, and investigative skills to measure and verify economic damages and resolve financial disputes. Likewise, (DiGabriele, 2015) defines forensic accounting as the integration of specialized accounting knowledge and positive mental attitude to resolve legal issues.

Based on the previous scholars, this research describe forensic accounting as the application of auditing, accounting, statistics, research and economic concept as well as techniques in investigations aim at solving legal or corruption matters in a form of bribery, fraud, embezzlement, that occur through economic or financial transaction. Therefore, accountants’

undertaken forensic accounting assignment or investigation should understand the legal process because the forensic accounting exercise result can serve as evidence in court action.

2.3 Forensic Accounting: Past and Present Perspectives

Without studying the history of a particular phenomenon, one cannot understand this phenomenon in its modern sense, which was confirmed by Professor I. F. Krilov in the 20th century (Gasparyan, n.d.). Historians believe that record keeping originated about 4000 B.C., when ancient civilizations in the near East began to establish organized governments and businesses (Montgomery, 1998). It has been revealed that the accounting records came about to capture the most significant facts of economic life that had an impact on the legal consequences. Such consequences were often evidence of disputes initially addressed at the domestic level, but with the emergence of courts – at the legal level (Gasparyan, n.d.). The legal approach to bookkeeping had an impact on its personalization, thereby accounting objects are no longer just objects, but the rights and obligations of an economic entity. There are numerous examples in the ancient world of auditing and control procedures employed in the administration of public finance systems. The Shako dynasty of China (1122–256 B.C.), the Assembly in Classical Athens, and the Senate of the Roman Republic – all demonstrate early belief on formal financial controls (Montgomery, 1998).

In the middle ages, for the consideration of property disputes in court instances, competent persons who represented one of the parties began to be invited for accountancy. With the development of the accountant profession in the 13th century, the court practice widely used the conclusions of knowledgeable accountants in the handling of claims for damages, late payment, etc. (Gasparyan, n.d.). Much later, in the 12th and 13th centuries, the auditing work was performed in England, Scotland, Italy, and France. The audits in Great Britain, performed before the 17th century, were primarily directed towards ensuring the accountability of funds entrusted

to public or private officials (Montgomery, 1998). Those audits were not designed to test the quality of the accounts, the inaccuracies point to the existence of fraud. Economic changes between 1600 and 1800, which saw the beginning of widespread commerce, introduced new accounting concerns focused on the ownership of property and the calculation of profit and loss in a business sense. At the end of the 17th century, the first law prohibiting certain officials from serving as auditors of a town was enacted in Scotland, thus introducing the modern belief of auditor independence (Montgomery, 1998). Along with the development of audit, to resolve financial disputes, it began popular to attract other professional auditors and inspectors to replace accounting examination with audit in countries based on the *Anglo-Saxon legal system* and the *Romano-Germanic legal system*.

One of the most well-known cases of forensic accountancy is the capture of Al Capone, where a team of forensic accountants gathered information in an undisputable case against Capone in 1931 (Dreyer, 2014). In 1949, Edwin Sutherland published his first edition of White-Collar Crime, in which he detailed the criminal behaviors of the largest US corporations at the time (Salinger, 2013), highlighting the new field of issue. Forensic accounting proved its importance after the Second World War, but its procedures were only introduced in the 1980s when scientific research was published in this area (Ozkul, 2012). The development of forensic accounting in Great Britain and the USA was related to the loud fraud scandals in the 1970s, such as the Enron case, in which investors of audited companies lost millions. As a result, requirements for bookkeeping and internal control systems were reinforced by separating auditors from accounting experts (Stevenson, 2015). In France, these differences are mainly due to the early inclusion of accounting in the judicial system. By focusing on determining the role of the state in the economy in order to prevent fraud and legal conflicts with offenders, the requirements for bookkeeping with regard to commercial law had already been introduced in the French Code of Commerce in 1673 (Labelle, 2008). According to research by (Crumbley, 2003),

forensic accounting was started in France in 1817, when the accountant was used as an expert witness in the court case of Meyer v. Sefton in 1817, related to bankrupt estate (Labelle, 2008); (Dreyer, 2014).

In Russia, the development of forensic accounting has a different path from other countries. Forensic accounting in the territory of the former Russian Empire is the result of the Great Judicial Reform in 1864 launched by Alexander II, summarizing the experience of Prussian, Austrian, Belgian and French control systems (Zavyagin, 2013).

In Latvia, the first step in the creation of independent audit was taken in 1938, creating the Latvian Institute of Sworn Auditors, which operated under the supervision of the Latvian Chamber of Commerce and Industry. This institute was liquidated in 1940, but their duties and materials were given to state control (Ponomarjovs, 2005). In the Soviet period, since 1940, with the exception of the Second World War, the control system in Latvia had been carried out in accordance with the laws and regulations of the USSR (Malderis, 2004). In 1991, after restoration of the independence of the Republic of Latvia, the previously existing system was taken over.

As a result, requirements for bookkeeping and internal control systems were reinforced by separating auditors from accounting experts (Stevenson, 2015). Today, forensic accounting technique is fast becoming popular in providing evidence in the prosecution of corruption and in disputes resolution. It provides an accounting analysis that is suitable to the court which will form the basis for discussion, debate and ultimately dispute resolution. Forensic Accounting encompasses both litigation support and investigative accounting (Olajide, 2014).

2.4 Forensic Accounting is not the same as audit

In the settings of a market economy and an advanced audit, the services of not only forensic experts but also other experts, auditors are often used to conduct accounting examinations.

According to this consideration, a question arises: what is the difference between forensic accounting and auditing? Apparently, auditing and forensic accounting operate in one area, but each goes its own way. An audit is an examination of a subject, in forensic accounting; the subject is financial (Loper, n.d.). Forensic accounting is a financial examination within the judicial system (Loper, n.d.). The subject of forensic accounting is the action of identifying, recording, settling, extracting, classifying, reporting and verifying past financial data or other accounting activities to solve current or potential legal disputes, or using such past financial data to project future financial data to solve disputes (Crumbley, 2013).

At the present time, there are many types of performers in forensic accounting, such as forensic expert, forensic accountant, forensic auditor, fraud examiner, fraud investigator, etc. The working area of all these performers is specific, but it is based on common principles. In the international area, criminal accounting is called forensic accounting (Santos Filho, 2017).

2.5 Statutory Auditing Versus Forensic Auditing

The International Education Standard (IES) No. 8: Competence requirements for Audit Professionals defines auditing as a structured process that: (1) involves the application of analytical skills, professional judgment and professional skepticism; (2) is usually performed by a team of professionals, directed with managerial skills; (3) uses appropriate forms of technology and adheres to a methodology; (4) complies with all relevant technical standards, such as International Standards on Auditing (ISAs), International Standards on Quality Control (ISQCs), International Financial Reporting Standards (IFRS), International Public Sector Accounting Standards (IPSAS), and any applicable international, national or local equivalents; and (5) complies with required standards of professional ethics. Auditing is an unbiased examination and evaluation of the financial statements of an organization to expedite expression of opinion on its truth and fairness. It can be done internally (by employees of the organization) or externally (by an independent professional firm).

On the other hand, a forensic audit is a review and evaluation of the financial information of a firm or individual for use in court as evidence. To prosecute a party for fraud, misappropriation or other financial claims, a forensic audit may be conducted (Supriya, 2019). Forensic audit is conducted by an expert or specialist in the field for information verification, determination of valuations, investigation of fraud and fraudulent activities, agreement with government regulations, contracts and also the investigating and reporting on other matters and the report of the forensic auditor must be suitable for use in the court room. It is done for third parties benefit and is documented to be presented in a law court (Minniti, 2008). (Ohaka, 2017), believes that personnel to execute forensic investigation “are specialists in the field with strong skill in criminology, accounting, anticorruption laws, communication and investigation with the ability to think like a criminal.”

2.5.1 The Comparison of Forensic Accounting and Auditing

Position	Forensic accounting		Auditing
Legal system	Romano-Germanic law	Anglo-Saxon law	Both cases
Performer	Forensic expert	Forensic accountant Fraud examiner	Auditor
Legislation	Law, Code of ethics	Code of ethics	Law, Code of ethics
Accountability	Justice system	Professional association	Professional association
Aims	Participation in litigations; Fraud investigation	Participation in litigations; Fraud investigation; Professional services	Financial report auditing; Professional services

Position	Forensic accounting		Auditing
Tasks	Evidences determination	Evidences determination	Financial auditing
Methodology	Internal methods of forensic investigation under justice system	Principles based; International guideline under audit rules	Audit standards
Product	Forensic examination conclusion	Fraud case report; Forensic audit report	Audit opinion

2.5.2 Objectives of Forensic Auditing:

Following are objectives of Forensic Auditing

- Using the conclusions of the forensic accountant to facilitate settlement, claim or jury award by decreasing the financial element as an area of ongoing debate
- Preventing fraud and theft
- Rebuilding degraded public trust
- Formalizing and forming a comprehensive corporate governance policy
- Establishing a positive business environment.

2.6 Techniques and tools of forensic auditing

The Chartered Institute of Management Accountants (CIMA, 2008) identified two major tools for anti-fraud professionals (Forensic Accountants) in fraud fighting which are stated on the ability

to think and act logically. The tools are; training and experience, and the necessary mindset. (CIMA, 2008), also suggested everyday techniques that are available to help in identifying irregularities which may be fraud, and research the anomaly to decide whether further action should be taken. These techniques are:

1. **Benchmarking:** contrast of one period's financial results with another or the performance of one cost Centre or company with another and overall business performance with its pre-decided norms.
2. **Analysis of the ratio:** recognizing any unusual trends and changes.
3. **System analysis:** to analyze existing models and identify any vulnerabilities that may be possibilities for fraudsters.
4. **Software specialist:** such as audit methods for examining matching data.
5. **Exception reporting:** Generate unquestionable automatic reports to determine deviation from the standards.
6. **Background reading:** It is important to keep up to date with fraud trends and issues. The general press can be a useful source of information for this, along with technical magazines, which often carry articles on fraud and financial irregularity. The Internet is also a valuable, and vast, research tool.
7. **Risk assessment:** undertake a fraud risk assessment and design specific tests to detect the significant potential frauds identified through the risk assessment. Act on irregularities which raise a concern.

2.7 Importance of Forensic Accounting

Business and criminal activities have become so complex that lawyers and criminal investigators often do not have the expertise necessary to discharge their responsibilities, plus the marked increase in white-collar crime, marital and business disputes which have created the need for

Forensic Accounting (Golden. 2006), (Olajide, 2014), (Grippio, 2003), (Enofe, 2013), (Modugu, 2011),(Eliezer.2015) and some of its main necessities are as follows:

➤ **Minimized Losses**

The primary benefit of strong forensic accounting is the way in which it can help minimize and prevent unnecessary loss. Fraudulent activity and general financial discrepancies which may cost the business community extraordinary sums of money. The forensic accountant ensures this is not allowed to happen.

➤ **Improved Efficiency**

Forensic accountants play a key role in examining and investigating current financial processes and standards, which can help in the identification of more effective and efficient solutions. The whole process is one of detecting problems and areas of improvement for the benefit of the business.

➤ **Reduced Exploitation Risk**

By proactively patching any obvious 'gaps' in current financial operational standards, the forensic accountant can ensure that risk of future exploitation is significantly reduced. It's a case of protecting the best interests of the business before fraudulent activity can take place.

➤ **Avoidance of Legal Problems**

Dealing with instances of fraud (internal or external) can be spectacularly disruptive and costly for the business. In an ideal situation, forensic accountancy can be used to avoid such scenarios from ever occurring by both preventing fraudulent activity and nipping any problems detected in the bud.

➤ **Improved Brand Reputation and Authority**

A brand that leaves itself wide open to manipulation and fraud is a brand that is very difficult to respect, trust and work with. Fraud can do the kind of reputational damage

that is borderline impossible to repair – hence the importance of thorough and ongoing forensic accountancy.

2.8 Applications of Forensic Accounting

According to the literature review (Golden. 2006), (Olajide, 2014), (Grippio, 2003), (Enofe, 2013), (Modugu, 2011), (Eliezer.2015), forensic accounting is applicable in a number of situations, including, but not limited to the following:

- **Business valuations:** A forensic accountant evaluates the current value of a business for various personal or legal matters.
- **Personal injury and fatal accident claims:** A forensic accountant may help to establish lost earnings (i.e., those earnings that the accuser would have accrued except for the actions of the defendant) by gathering and analyzing a variety of information and then issuing a report based on the outcome of the analyses.
- **Professional negligence:** A forensic accountant helps to determine if a breach of professional ethics or other standards of professional practice has occurred. (e.g., failure to apply generally accepted auditing standards by a CPA when performing an audit). In addition, the forensic accountant may help to quantify the loss.
- **Insurance claims evaluations:** A forensic accountant may prepare financial analyses for an insurance company of claims, business income losses, expenses, and disability, liability or workmen's compensation insurance losses.
- **Arbitration:** A forensic accountant may sometimes assist with alternative dispute resolution (ADR) by acting as a mediator to allow individuals and businesses to resolve disputes in a timely manner with a minimum of interference.

- **Partnership and corporation disputes:** A forensic accountant may be asked to help settle disputes between partners or shareholders. Detailed analyses are often necessary of many records spanning a number of years. Most of these disputes relate to compensation and benefit issues.
- **Civil and criminal actions concerning fraud and financial irregularities:** These investigations are usually performed by the forensic accountant for police forces. A report is prepared to assist the prosecutor's office.
- **Fraud and white-collar crime investigations:** These types of investigations can be prepared on behalf of police forces as well or for private businesses. They usually result from such activities as purchasing/kickback schemes, computer fraud, labor fraud, and falsification of inventory. The investigation by the forensic accountant often involves fund tracing, asset identification, and recovery.

2.9 The Roles/Functions of a Forensic Accountant

The primary role of a Forensic Accountant as an expert is to Analyze, Interpret, Summarize and Present Complex Business and Financial deals in a logical, understandable manner supported with facts. By extension, an expert forensic accountant is a witness, who by virtue of education, training, skill, or experience, is believed to have knowledge in a particular subject beyond that of the average person, sufficient that others may officially and legally rely upon the witness's specialized scientific, technical or other opinion about an evidence or fact issued within the range of their expertise, referred to as the expert opinion (Grippio, 2003). Expert forensic accountant may also deliver expert evidence about facts from the domain of their expertise. The Forensic Accountant must (a) Investigate and analyze financial information, (b) Develop computerized applications (if applicable) to assist in the analysis and presentation of financial information (Amadiabube, 2008). In addition, an Expert Forensic Accountant must:

- Communicate findings in the form of a report and supporting documents.
- Assist in any legal proceedings.
- Assist in obtaining documentation necessary to support or negate a claim.
- Review of the relevant documentation to form an initial assessment of the case and identify areas of loss.
- Assist with examination for findings including the formulation of questions to be asked regarding the financial evidence.
- Attend the examination for findings to review the testimony, assist with understanding the financial issues and to formulate additional questions to be asked.
- Review of the opposing expert's damages report and reporting on both the strengths and weaknesses of the positions taken.
- Assist with settlement discussions and negotiations.
- Attend trial to hear the testimony of the opposing expert and to provide assistance with cross-examination.

2.10 When can a Forensic Accountant be employed

According to the literature, the services of a forensic accountant is highly needed but not limited to the following:

2.10.1 Litigation Support

This is a situation where the forensic accountant is asked to give an opinion either on known facts or facts yet to be discovered. The forensic accountant is an integral part of the legal team, helping to prove allegations, analyze facts, dispute claims, and develop motives (Golden, 2006). The amount of involvement and the point at which the forensic accountant gets involved varies from case to case. Sometimes the forensic accountant is called upon from the beginning of the case; other times the forensic accountant is summoned before the case is scheduled to go to

court. Therefore, in litigation support, the forensic accountant assists in obtaining documentation to support or dismiss a claim, to review documentation to give an assessment of the case to the legal team, and/or to identify areas where loss occurred (Eliezer, 2015). Furthermore, the forensic accountant may be asked to get involved during the discovery stage to help formulate questions and may be asked to review the opposing expert's witness report to give an evaluation of its strengths and weaknesses. During trial the forensic accountant may serve as an expert witness, help to provide questions for cross-examination, and assist with settlement discussions after the trial (Enofe, 2013).

2.10.2 Investigations

Investigations most often involve fraud and are associated with criminal matters. Typically, an investigative accounting assignment would result from a client's suspicion that there is employee fraud (Grippo, 2003). Other parties, such as regulatory agencies, police forces, and attorneys, may retain a forensic accountant to investigate securities fraud, kickbacks, insurance fraud, money-laundering schemes, bribery, embezzlement, asset search and analysis (Golden, 2006).

2.11 Forensic Accounting Practices

Every forensic accounting job is unique. Therefore, the actual approach adopted and the procedures performed will be specific to it. Forensic Accounting Practices will include the following steps below, According to Golden (2006):

- Meet with the client
- Perform a conflict check
- Perform an initial investigation
- Develop an action Plan
- Obtain the relevant evidence
- Perform the analysis: The actual analysis performed will be dependent upon the nature of the assignment and may involve :

- Calculating economic damages;
 - Summarizing a large number of transactions;
 - Performing a tracing of assets;
 - Performing present value calculations utilizing appropriate discount rates;
 - Performing a regression or sensitivity analysis;
 - Utilizing a computerized application such as a spread sheet, data base or computer model;
 - Utilizing charts and graphics to explain the analysis.
- Prepare the report of a forensic activity or exercise

2.12 Forensic Accounting and Fraud Detection & Prevention

According to (Modugu, 2013), financial fraud has been variously described in literature, thus no one description suffices. Wikipedia lexicon describes Fraud as crimes against property, involving the unlawful conversion of property belonging to another to one's own. Williams (2005), incorporates corruptions to his description of financial crimes. However, (Albrecht, 2003), argued that fraud is rarely seen. He said that the symptoms of fraud are usually observed. The symptoms do not necessarily mean fraud is being undergone as it may be caused by mistakes. This research cautions investigators or forensic accountant to be careful because not all fraud reported are true, some may be false allegations. Fraud is not easily proven since frauds have themselves at a safe line where authority could not convict them. This shows that the author is explaining that the fraud defaulters are getting smarter due to the possible mistakes human can cause. This has made detecting and proving fraud a hard work for a forensic accountant.

There is a need for deeper understanding on how these defaulters work their fraudulent act.

Without constant involvement of the public and improvement in forensic accounting, fraud cases will be hard to detect and thus lead to greater success in financial fraud, which also translates

into the failure to meet the expectations of the public, shareholders or even other stakeholders. (Ramaswamy, 2005), alluded that poor corporate governance and accounting failure is one of the reasons why fraud cases emerge. This is because poor corporate governance will lead to the ability of certain individual or a group of people with the same interest to act upon it to commit fraudulent activities in the company. He also states that the problems within the corporate reporting system as a reason because of lack of well implemented policy of corporate governance. This can be reinforced by the fact that top level management should follow the policies of the firm which will help the company to perform better. The problem comes from the fact that certain corporate leaders do not have positive attitude regarding the policies.

Therefore, lack of honesty and transparency in reporting financial statement is another problem. It is agreeable that an auditor does not have the absolute duty to uncover fraud, but they should practice fair and true reporting to ensure that the interests of the public as well as the employees are protected. With the use of forensic accounting guidelines, auditors can act as forensic accountants in cases of suspicious fraud or criminal activities in a company or an institution. Ineffective and inefficient system of internal control which is stated by the author points out that a weak management cannot be changed with internal control system. Even if an entity applies good internal control systems, the management will still be the major factor influencing the implementation.

Corporations should look towards new approaches rather than follow the traditional approach as forensic accounting may be the next best alternative in resolving problems. (Ramazani, 2010), studied the accountants' perception of prevention methods of fraud. In this research they examined accountants' perception of forensic accounting which demonstrates the low extent of accountant's perception of forensic accounting. Forensic accounting is considered as one of the factors in fraud prevention. (Bierstaker, 2006), carried out a study on the evaluation of forensic accountants to planning management fraud risk detection procedures. The study reveals that

forensic accountants effectively modify the extent and nature of audit test when the risk of management fraud is high, forensic accountants propose unique procedures that are not proposed by auditors when the risk of management fraud is high, forensic accountants can make to the effectiveness of an audit plan when the risk of management fraud is high, involving forensic accountants in the risk of management fraud assessment process leads to better results than simply consulting them. (KPMG, 2003) reveals that more companies are: recently experiencing incidents of fraud than in prior years; taking measures to combat fraud; and launching new antifraud initiatives and programs in response to the Sarbanes- Oxley Act of 2002 (KPMG, 2003).

PricewaterhouseCoopers' (PWC) 2003 Global Crime Survey indicates that 37 percent of respondents in 50 countries reported significant economic crimes with the average loss per company of \$2,199,930 (PWC 2003). These survey results underscore the importance of forensic accounting practice and education. Prior research (Rezaee, 2002); (Crumbley, 2003) and (Crumbley, 2009); (Peterson, 1999), (Peterson, 2001); (Rezaee, 1996); (Rezaee, 1997) reviews the literature on forensic accounting practices, certifications, and education. These studies also provide evidence indicating that forensic accounting education has evolved from being limited, to continuing professional education sessions for practicing accountants, to a current state of being offered as a credit course by several universities. (Buckhoff, 2000), finds, "adding a forensic accounting course to the accounting curriculum can greatly benefit the three major stakeholders in accounting education—academic institutions, students, and employers of accounting graduates."

Empirical evidence from a study by (Boritz, 2008) confirms that forensic accountants could detect significantly higher number of fraud than auditors. (Srivastava, 2003) in their study found that forensic audit procedures significantly lowered fraud risks. Furthermore, research has also proven that proactive forensic data analysis using computer based sophisticated analytical tests

can detect fraud that may remain unnoticed for years (Brown, 2007). A study by (Bierstaker, 2006) researched accountants' perception regarding fraud detection and prevention methods. The findings revealed that organizational use of forensic accountants was the least often used of any anti-fraud method but had the highest effectiveness rating. This is similar to the findings of (Ernst, 2003) worldwide fraud survey, which states that only 20% of organizations employed forensic accountants although the satisfaction level for the service 88% was the highest.

According to the US General Accounting Office (USGAO, 1996), there is now a strong emphasis on fraud prevention and detection during statutory audits. In fact the United States and international standards setters have increased the responsibility of auditors to consider the risks of fraud while conducting audits of financial statements. There is even a call for stronger forensic skills in those who perform these audits. This has been collaborated by (Enyi, 2009) who submits that all normal statutory audits should contain some elements of forensic enquiry as the evidence of fraudulent activities can be easily discovered if a thorough evaluation of the adequacy and compliance of the internal control mechanism is made. All these are aimed at fraud prevention and detection. However, this may not be achieved by an auditor without some understanding of forensic accounting methods (Efiong, 2012).

2.13 Forensic Accounting and Bribery Prevention

According to (Shah, 2018) the root causes of all financial problems in the public sector is an inefficient and poor corporate governance and a strong corporate governance is essential for the smooth running of an organization. (Williams, 2005) description of corruption does not only include fraud but also bribes cronyism, nepotism, political donation, kickbacks, artificial pricing and frauds of all kinds. As indicated by (Ramaswamy, 2005), bribery cases are due to poor corporate governance as it is more likely that a fraud may be committed. The absence of well-established accounting policies within an organization further weakens the corporate reporting

system and it is the responsibility of the auditor to discover bribery committed and access the transparency of financial reports provided by the top management. (Bhasin, 2016) investigated the rise of forensic accounting due to widespread financial corruption and identified the main duties (auditing, accounting, and investigative) of a forensic accountant in dealing with frauds and bribery. As such, forensic accountants make valuable additions to corporate governance by creating a conducive working environment leading to fraud and bribery prevention, investigation of dubious cases and effective communication. (Karwai, 2002) and (Ajie, 2000) are of the view that financial scam in organizations vary widely in nature, character and method of operation in general. Scam may be classified into two broad ways: nature of fraudsters and method employed in carrying out the fraud.

On the basis of the nature of the shams, scam may be categorized into three groups, namely; internal, external and mixed frauds. Internal scam relates to those committed by members of staff and directors of the organizations while external fraud is committed by persons not connected with the organization and mixed fraud involves outsiders colluding with the staff and directors of the organization. (Karwai, 2002) reported that the identification of the causes of scam is very difficult. He stated that modern day organizations scams usually involve a complex web of conspiracy and deception that often mask the actual cause. (Ajie, 2000) are of the view that studies have shown that on the average out of every 10 staff would look for ways to steal if given the opportunity and thus only 4 could be normally honest. In this regards, there is a need for legislation and implementation of a multidisciplinary practice concept in the public sector, one of which is forensic accounting tools and practices.

2.14 Forensic Accounting and Embezzlement/Mismanagement of Public Fund

According to the International Public Sector Accounting Standard Board (IPSASB, 2012), the term “public sector” refers to national governments, regional (for example, state, provincial,

territorial) governments, local (i.e., city, town) governments and related governmental entities (e.g., agencies, boards, commissions and enterprises). The public sector can also be defined as all organizations which are not privately owned and run, but all organizations which are established, operated and financed by the government on behalf of the public. It suffices to say that organizations which are under the control of the public, but provide services where profit is not a primary motive (Bammeke, 2008); (Adams, 2004). In like manner, public sector accounting can be defined as a process of recording, communicating, summarizing, analyzing, and interpreting government financial statements and statistics in aggregate and in details; the receipts, custody and disbursement and rendering of stewardship of public funds entrusted (Adams, 2004). According to (Rezaee, 2005) 'Financial statement fraud is a deliberate attempt by public corporations to deceive or mislead users of published financial statements, especially the central government and general public or citizens, by preparing and disseminating materially misstated financial statements'. An extensive literature on fraud, mismanagement and embezzlement of public fund exists e.g. (Apostolou, 2001); (Rezaee, 2002); (Ozkul, 2012), etc.).

Equally, the literature show some consensus that fraud, mismanagement and embezzlement of public fund may involve:

1. the alteration or manipulation of material financial records, supporting documents, or business transactions;
2. intentional misstatements, omissions, or misrepresentation of events, transactions, accounts or other significant information from which financial statements are prepared;
3. deliberate misapplication and misinterpretation of accounting standards, principles, policies and methods used to measure, recognize, and report economic events and business transactions;
4. Intentional omissions and disclosures or presentation

5. The use of aggressive accounting techniques such as illegitimate earnings management strategies;
6. The manipulation of accounting practices under rule-based or principle-based accounting standards that allow companies to hide the economic substance of their performance.

To this effect, forensic accounting and audit should be introduced to replace traditional accounting plus statutory audit in the public sector (Shah, 2018).

3.0 RESEARCH METHODOLOGY

This research is aimed at investigating whether forensic accounting practices can help mitigate corruption in the public sector perspective of the Gambia. The primary objective of this research therefore, is to examine the perception of public sector accountants in mitigating corruption through fraud, bribery and embezzlement of public fund prevention. The Gambia is one of the smallest in-land countries in Africa with a population of two (2) million (official, 2016). In such a small country with a small public sector labour force, there is an increasing number evidence of public sector financial corruption in the country.

According to the 2013 Corruption Perceptions Index reported by Transparency International (TI, 2013), Gambia is rank as the 96 least corrupt nations out of 180 in the world. Compared to 2012 the level of corruption decreased a bit. In the long term, it has also declined moderately in recent years. So, compared to other countries it is slightly below average but the recent multi-million dalasis public finance embezzlement in the Gambia (Jannah Commission, 2019) have shaken the business world, International community and the Government of the Gambia. This clearly shows the failure of statutory auditor in mitigating public sector corruption and has put pressure on the professional accountant and legal practitioner to find a better way of exposing crime in the public sector accounting of the Gambia, thus forensic accounting is a potential answer to this phenomenon.

However, lack of literature on the context of the Gambia to support those information that forensic accounting practice can mitigate public sector corruption through bribery, fraud and embezzlement of public fund prevention, is the motivation of this research. Therefore, this research analyzed the perception of public sector financial stakeholders on the practice of forensic accounting as a mitigation option of public sector financial corruption through prevention of bribery, fraud and embezzlement of public fund. The study is primarily base on the opinion of public sector Accountants, Auditors, Accounting Officers, Accounting Academicians, Auditing firms and the Gambia Association of Accountant (GAA) members rather than theoretical meaning or expectations of Forensic Accounting practices.

3.1 Research Hypotheses Development

A broad evaluation of preceding researches done within the zone of Forensic Accounting Practices - a means of mitigating corruption: the Gambia Public Sector Perspective has headed to the development of an accumulative hypothesis for this empirical study. The hypothesis put forward in this study is divided into three (3) concepts, which will be subjected to statistical examination to assess the reliability and validity of the variables, regarding which specific factors forms Public Sector financial stakeholders perception of mitigating corruption through fraud, bribery and embezzlement of public fund prevention.

In testing these hypotheses, a Pearson Correlation would be used to test the hypotheses developed for this empirical study. In order to have an enhanced understanding of Forensic Accounting Practices - a means of mitigating corruption: the Gambia Public Sector Perspective, as well as seek to address the research questions earlier underscored above, a hypothesis summary is represented in a diagram below for this empirical study. This research hypothesis adopts fraud prevention, bribery prevention and embezzlement of public fund prevention as particular factors that can mitigate public sector corruption.

3.1.1 Fraud prevention

According to (Modugu, 2013), there is a need for deeper understanding on how these defaulters work their fraudulent act. (Williams, 2005), added without constant involvement of the public and improvement in forensic accounting, fraud cases will be hard to detect and thus lead to greater success in financial fraud, which also translates into the failure to meet the expectations of the public, shareholders or even other stakeholders. (Ramaswamy, 2005), alluded that poor corporate governance and accounting failure is one of the reasons why fraud cases emerge. This is because poor corporate governance will lead to the ability of certain individual or a group of people with the same interest to act upon it to commit fraudulent activities in the company. He also states that the problems within the corporate reporting system as a reason because of lack of well implemented policy of corporate governance. This can be reinforced by the fact that top level management should follow the policies of the firm which will help the company to perform better. The problem comes from the fact that certain corporate leaders do not have positive attitude regarding the policies. Based on the above discussion, I propose the following hypothesis.

H₁: Fraud of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices.

3.1.2 Bribery Prevention

According to (Shah, 2018) the root causes of all financial problems in the public sector is an inefficient and poor corporate governance and a strong corporate governance is essential for the smooth running of an organization. (Williams, 2005) description of corruption does not only include fraud but also bribes cronyism, nepotism, political donation, kickbacks, artificial pricing and frauds of all kinds. As indicated by (Ramaswamy, 2005), bribery cases are due to poor

corporate governance as it is more likely that a fraud may be committed. The absence of well-established accounting policies within an organization further weakens the corporate reporting system and it is the responsibility of the auditor to discover bribery committed and access the transparency of financial reports provided by the top management. (Bhasin, 2016) investigated the rise of forensic accounting due to widespread financial corruption and identified the main duties (auditing, accounting, and investigative) of a forensic accountant in dealing with frauds and bribery. As such, forensic accountants make valuable additions to corporate governance by creating a conducive working environment leading to fraud and bribery prevention, investigation of dubious cases and effective communication. (Karwai, 2002) and (Ajie, 2000) are of the view that financial scam in organizations vary widely in nature, character and method of operation in general. Scam may be classified into two broad ways: nature of fraudsters and method employed in carrying out the fraud. Based on the above discussion, I propose the following hypothesis.

H₂: Bribery of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices

3.1.3 Embezzlement Prevention

According to the International Public Sector Accounting Standard Board (IPSASB, 2012), the term “public sector” refers to national governments, regional (for example, state, provincial, territorial) governments, local (i.e., city, town) governments and related governmental entities (e.g., agencies, boards, commissions and enterprises). The public sector can also be defined as all organizations which are not privately owned and run, but all organizations which are established, operated and financed by the government on behalf of the public. It suffices to say that organizations which are under the control of the public, but provide services where profit is not a primary motive (ICAN, 2009; (Bammeke, 2008); (Adams, 2004). In like manner, public sector accounting can be defined as a process of recording, communicating, summarizing, analyzing,

and interpreting government financial statements and statistics in aggregate and in details; the receipts, custody and disbursement and rendering of stewardship of public funds entrusted (Adams, 2004). According to (Rezaee, 2005) ‘Financial statement fraud is a deliberate attempt by public corporations to deceive or mislead users of published financial statements, especially the central government and general public or citizens, by preparing and disseminating materially misstated financial statements’. An extensive literature on fraud, mismanagement and embezzlement of public fund exists e.g. (Apostolou, 2001); (Rezaee, 2002); (Ozkul, 2012). Based on the above discussion, I propose the following hypothesis:

H₃: Embezzlement of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices.

Figure 1 shown below is the summary of hypothesis statements based on the above discussion of the literature review:

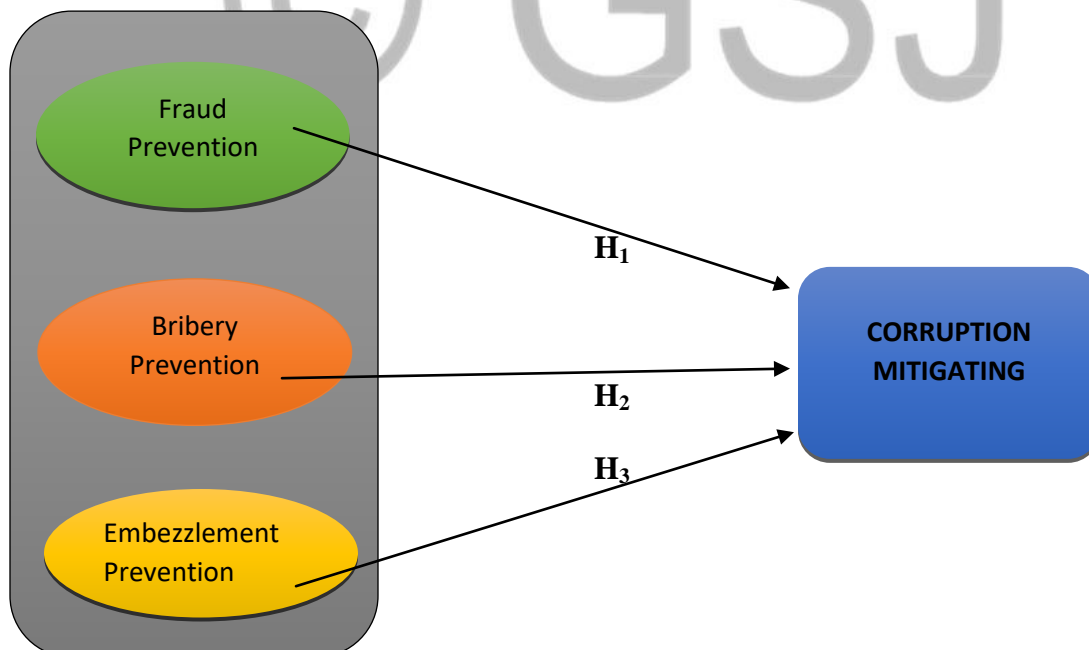


Figure 1 Research Model

3.2 Summary of Hypothesized statements of the study

H₁: Fraud of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices

H₀: Fraud of public fund prevention will not significantly ensure effective mitigation of corruption through the application of forensic accounting practices

H₂: Bribery of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices

H₀: Bribery of public fund prevention will not significantly ensure effective mitigation of corruption through the application of forensic accounting practices

H₃: Embezzlement of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices.

H₀: Embezzlement of public fund prevention will not significantly ensure effective mitigation of corruption through the application of forensic accounting practices.

3.3 Questionnaire Design

Several questions were developed and included in the questionnaire (Appendix 1). According to (Saunders, 2007), there are different types of questions to use, depending on which data you want to collect. The questionnaire was divided into five parts. The first part of the questionnaire contained questions on the demographic profile of the respondents. The second part of the questionnaire contained questions on the dependent variable of the research- corruption mitigation in public sector. The third part of the questionnaire contains questions on fraud prevention another independent variable of the study. In addition, the fourth part of the questionnaire contain questions on bribery prevention one of the independent variable of the

study. Also, the fifth part of the questionnaire contains questions on embezzlement of public fund prevention, the last among the three independent variable of the study. The data collected is quantitative in nature. The questionnaires were self-administered by the respondents during working hours in their various offices.

However, from the second and fifth parts of the questionnaire is the main focus of the research where these expect to collect data that will enable us to answer the research question. In order to collect data on public sector financial stakeholders' opinions, we used rating type of questions since we wanted to measure forensic accounting as a means of mitigating public sector corruption through fraud, bribery and embezzlement of public fund prevention in the public sector perspective. Meanwhile, the study finds out that a Likert type rating scale with values ranging from (1 – 5) to be very suitable and appropriate for this empirical study. For each question, the respondents are given the same set of alternatives to choose from based on what suits their perception with the scales range from (1-5) . According to (Saunders, 2007), this method encourages respondents to give their opinions and motivations that are relevant to the study. The questions in this questionnaire are closed ended questions which makes the potential answers predetermined by the researcher. This will help the study to further suggest more issues as recommendations for effectively mitigating public sector financial corruption in The Gambia. After the data collection from the target number of respondents, the questions are pre-coded into SPSS Statistical Package for processing and subsequent analysis.

3.4 Defining Measurement Scales

The scales of measurement comprise of the questions that are used for the data collection of this empirical research. Based on the literature review three variables are selected to be used precisely for this study. These variables are: fraud prevention, bribery prevention and embezzlement of public fund prevention. These constructs were adopted from the prominent

research findings after a detailed evaluation of the existing literature on the area of consumer preference of petrol station service outlet selection. All the variables of this empirical study were measured using five (5) point Likert point scale.

Table 2: Measurement scales used in this study

Variables	Scale Items
Corruption Mitigation	<ol style="list-style-type: none"> 1. Corruption is the abuse of entrusted power for private gain. 2. Corruption is the misuse of public power, office or authority for private benefit through bribery, extortion, influence peddling, nepotism, fraud, speed money or embezzlement. 3. Any activity carried out by a public sector employee to influence a government institutional policies and decision in favor of a specific cause or outcome aid corruption.
Fraud Prevention	<ol style="list-style-type: none"> 1. Forensic accounting is an effective fraud detection tool. 2. Forensic Accounting is solely enough as a tool to detect suspicious or

Variables	Scale Items
	fraudulent transactions. 3. Risk assessment processes under forensic accounting cover risk of fraud.
Bribery Prevention	1. Accepting gifts by public sector employees is a means of bribery. 2. Application of forensic accounting is an effective internal control of bribery mitigation. 3. Falsifying document by public sector employees aids bribery and corruption.
Embezzlement Prevention	1. Forensic accounting can detect misappropriated public fund. 2. Forensic accounting can identify reversible insider transactions. 3. Forensic accounting can be used to locate diverted public funds or assets. 4. Forensic accounting application helps to discover acts of intentional deception in order to gain unfair or illegal advantage.

3.5 Data Collection Techniques

In this study, the researcher uses a combination of both primary and secondary source of information as a background to this research process. According to Joseph et al. (2007), a multi-method style of data collection ensures the extrapolation of substantial population size and adds to the generality of results to a wide category of respondents. The primary source involve empirical data collection technique of structured survey administered questionnaire to measure specific variables (constructs) that were identified for the study from the previous literature of forensic accounting as a means of mitigating public sector corruption through fraud, bribery and embezzlement of public fund prevention are tested. Primary data is the first time data which is original and collected for certain study purposes (Kothari, 2004). It plays an important role in an evaluation by providing information useful to understanding the process behind observed result and assessing changes in people's perceptions (Churchill, 1991). The secondary source of data was acquired when a contextual review of the appropriate literature on forensic accounting as a means of mitigating public sector corruption through fraud, bribery and embezzlement of public fund prevention , which enables the researcher to get an in-depth understanding of the area as well as the topic.

Meanwhile, for the purpose of this study, a survey structured questionnaires was used to obtain information from the specific variables. These questionnaires were self -administered by the target respondents in the various public sector financial domains in The Gambia. These questionnaires were developed and administered to respondents using convenience sampling method.

Furthermore, this study uses Liker's five (5) point scales ranging from 1-5, as a form of questioning in this study. This method encourages respondents to give their opinion and motivations relevant to the study (Saunders, 2009). This form of questioning would generate degree to which forensic accounting as a means of mitigating public sector corruption through

fraud, bribery and embezzlement of public fund prevention in the public sector perspective of the Gambia is based on predetermine set of scale.

3.6 Population definition and Sampling

The population interest of this study is the stakeholder group of public sector finance in the Gambia. The sample respondent category include public sector Accountants, Auditors, Accounting Officers, Accounting Academicians, Auditing firms and the Gambia Association of Accountant (GAA) members. This research adopted a non-probability research method. The data was collected from 70 respondents from the target sample population. In addition, convenience sampling techniques was used in the study.

4.0 DATA ANALYSIS

According to (Cooper, 2006)analysis of data is the practice of excision and decreasing the collected data to smaller manageable size, identifying easy array, writing the data summary and analyzing the data through statistical packages. Conversely, this particular section of this empirical study, we aim to show the analysis and interpretation of the results of the research. As point out by methodology chapter, the questionnaires was developed and distributed among the respondents. The population sample of the respondents covers public sector Accountants, Auditors, Accounting Officers, Accounting Academicians, Auditing firms and the Gambia Association of Accountant (GAA) members rather than theoretical meaning or expectations of Forensic Accounting practices.

However, in an attempt to effectively evaluate the objectives of the study, 70 questionnaires administered to the target are finally selected and coded for the data analysis in the SPSS package. Meanwhile, the IBM Statistical Package for Social Science (SPSS) software version 22 was used for the analysis of the research data collected. Furthermore, in the direction of

evaluating the availability of the relationship concerning fraud prevention, bribery prevention and embezzlement of public fund prevention with public sector corruption mitigation, numerous statistical techniques were used. These techniques comprise of Pearson Correlation, coefficient and linear regression.

4.1 Descriptive Analysis

Respondent demographic profile

4.1.1 Gender

The analyzed data was based on the total sample size of 70 completed questionnaires of which 47 represent male (67.1% of the total respondents) while 23 represent female (32.9% of the total respondents). This shows a gender bias parity of more male respondent over the female category.

Table 1 Gender

Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	47	67.1	67.1	67.1
Female	23	32.9	32.9	100.0
Total	70	100.0	100.0	

Figure 2 Gender

4.1.2 Age

The ages of the respondents were categorized into clustered groups such as 18 – 24, 25 – 34, 35 – 40 and above 40. The age category of 25 –34 and above registered the highest frequency value of 34 from a total of 70 (recording 48.6% of the total respondents). This is followed by 35-40 and above categories each registered a frequency 15of out total respondent of 70 (representing

21.4% of the total respondents respectively). The lowest frequency of 6 was recorded by 18 – 24 age category (indicating 8.6% of the total respondents).

Table 2 Age

Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18-24	6	8.6	8.6	8.6
25-34	34	48.6	48.6	57.1
35-40	15	21.4	21.4	78.6
Above 40	15	21.4	21.4	100.0
Total	70	100.0	100.0	

Source: SPSS

Figure 3 Age

4.1.3 Educational Level

On the other hand, the bachelor’s degree category of the respondents educational qualification recorded frequency majority value of 42 (60.0%) while diploma degree holders seconded the bachelor holders and accounts for 13 (18.6%). The master’s cluster comprised of 12 (17.1%) whereas high school certificate holders indicate a lowest frequency of 3 (4.3%). This result shows that significant number of the respondents hold a bachelor’s degree among the public sector stakeholders.

Table 3 Education Level

Education level

	Frequency	Percent	Valid Percent	Cumulative Percent
High school certificate	3	4.3	4.3	4.3
Diploma	13	18.6	18.6	22.9
Valid Bachelors	42	60.0	60.0	82.9
Masters	12	17.1	17.1	100.0
Total	70	100.0	100.0	

Source: SPSS

Figure 4 Education Level

4.1.4 Marital Status

Among the respondents 44 (62.9%) frequency indicate those in the married category whereas 26 (37.1%) represents single and category respectively. This indicates that great number of public sector financial stakeholders is in married status than single status.

Table 4 Marital Status

Marital Status

	Frequency	Percent	Valid Percent	Cumulative Percent
Married	44	62.9	62.9	62.9
Valid Single	26	37.1	37.1	100.0
Total	70	100.0	100.0	

Source: SPSS

Figure 5 Marital Status

4.1.5 Employment Status

Meanwhile, permanently employed respondents scored the highest frequency of 68 (97.1 %) among all the respondents whereas self-employed comprised of 2 (2.6%). Those who are casually employed consisted of 9 (5%) but respondents who are not employed at all entailed 5 (2.8%). This result shows 97.1 % of the public sector financial stakeholders are permanently employed.

Table 5 Employment Status

Employment Status

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Permanently employed	68	97.1	97.1	97.1
Self employed	2	2.9	2.9	100.0
Total	70	100.0	100.0	

Source: SPSS

Figure 6 Employment Status

4.2 Pearson’s Correlation Analysis

According to (Hair JF, 2006), Pearson correlation analysis is used to assess the magnitude of linear association between two variables. The correlation coefficient of all the constructs tested did not exceed **0.74** which shows that the constructs are disperse and do not overlap with each

other. In order to analyze the relationship between variables, a Pearson Correlation statistics was conducted.

4.2.1 Test of Significance

Hypothesis (1)

H₁: Fraud of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices

H₀: Fraud of public fund prevention will not significantly ensure effective mitigation of corruption through the application of forensic accounting practices

In testing our hypotheses, a correlation technique was used to ascertain the relationship between the independent variables and the dependent variable. The test results for the first hypothesis shows that the correlation between fraud prevention and corruption mitigation through forensics accounting was significant at the 0.00 level (2-tailed, $p < 0.05$). This indicates that fraud of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices; hence the alternative hypothesis H₁ is supported whereas the null hypothesis H₀ is rejected.

Hypothesis (2)

H₂: Bribery of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices

H₀: Bribery of public fund prevention will not significantly ensure effective mitigation of corruption through the application of forensic accounting practices

A correlation was used to test the degree of association between bribery prevention and corruption mitigation through the application of forensics accounting. The test results indicated a significant correlation at the level of 0.05(2-tailed, $p = 0.05$). This demonstrates that bribery of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices. Furthermore, this gives us all the reasons to reject

the null hypothesis H_0 as there is substantial statistical evidence to support the alternative hypothesis H_2 above.

Hypothesis (3)

H₃: Embezzlement of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices.

H₀: Embezzlement of public fund prevention will not significantly ensure effective mitigation of corruption through the application of forensic accounting practices.

In testing the third hypothesis, again a correlation technique was used to test the relationship between embezzlement prevention and corruption mitigation with respect to forensics accounting. The results generated after the analysis shows that the correlation was significant at a level of 0.01(2-tailed, $p < 0.05$). This implies that embezzlement of public fund prevention will significantly ensure effective mitigation of corruption through the application of forensic accounting practices. This result avail us the opportunity to dismiss or discard the null hypothesis H_0 , thereby confirming the alternative hypothesis H_3 as it was supported.

Table 6 Pearson’s Correlation Analysis

Model	T	Sig.
(Constant)	5.037	.000
Fraud prevention	.529	.000
Bribery prevention	.733	.005
Embezzlement prevention	3.393	.001

Source: SPSS

4.3 Multicollinearity Analysis

According to (Hair JF, 2006), high levels of collinearity increase the probability that a good predictor of the outcome will be found insignificant and rejected from the model. To this effect, a collinearity analysis was conducted to evaluate the variables by observing the Variance Inflation Factor (VIF) as well as the tolerance level. The maximum acceptable VIF value suggested by (Hair JF, 2006) was **5.0** and a tolerance level not less than **0.10** becomes a concern (Table 7).

Therefore based on the information in the table above, the Variance Inflation Factor (VIF) for all the variables were less than 5.0, while the Tolerance level ranges from 0.775, 0.802 and 0.915 respectively according to the table. This result demonstrates that multicollinearity was not a problem for this research as vividly shown in the table above.

Table 7 Multicollinearity Analysis

Model	Collinearity Statistics	
	Tolerance	VIF
Fraud prevention	.775	1.290
Bribery prevention	.802	1.246
Embezzlement prevention	.915	1.093

Source: SPSS

4.4 Multiple Regression Analysis

Heppner and Heppner (2004) stated that the objective of multiple regression analysis is to predict the single dependent variable by a set of independent variables. In addition to a Pearson's correlation analysis, a multiple regression analysis was conducted to further test the three hypotheses identified for this study (Tables 8).

The study shows that by reducing corruption prevention through forensics accounting by 1 unit will subsequently increase fraud prevention by 0.055 with the other independent variables being constant. An increase in corruption prevention through forensics accounting by 1 unit will increase bribery prevention by 0.074, with the other independent variables remaining constant. In addition, increasing corruption prevention through forensics accounting by 1 more unit will increase embezzlement prevention by 0.399 while the rest of the independent variables remain unchanged. Moreover, the result also indicates that embezzlement prevention has a higher influence on corruption prevention through forensics accounting with a standardized coefficient β value of 0.399. This is followed by bribery prevention with standardized coefficient β value of 0.092 and finally fraud prevention with a standardized coefficient β value of 0.068.

Table 8 Multiple Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(Constant)	2.890	.574	
Fraud prevention	0.055	.103	.068
Bribery prevention	0.074	.108	.092
Embezzlement prevention	0.399	.118	.399

Source: SPSS

4.5 Model Summary

Based on the result in Table 9 below, the coefficient of determination (R^2) is 0.766 which implies that (76%) of the total variable in corruption prevention through forensics accounting in

the Gambia. This means that fraud prevention, bribery prevention and embezzlement prevention explain (76%) of total public sector financial corruption mitigation, thus leaving only (24%) of the model is not capture by the variables.

Table 9 Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.408 ^a	.766	.728	.58619	.766	4.386	3	66	.005

a. Predictors: (Constant), embezzlement prevention, bribery prevention, fraud prevention

b. Dependent Variable: corruption mitigation through the application of forensic accounting

Source: SPSS

4.6 Coefficient correlations

The coefficient correlation shows that there is a positive correlation amongst the variables. It also means that all the variable move in the same direction with respect to the dependent variable. This means that the constructs use in this study are link to one another and move in parallel direction.

Table 10 Coefficient Correlations

Coefficient correlations ^a

Model		Embezzlement prevention	Bribery prevention	Fraud prevention
1	Correlations			
	Embezzlement prevention	1.000	.102	.210
	Bribery prevention	.102	1.000	.402
	Fraud prevention	.210	.402	1.000
	Covariance's			
	Embezzlement prevention	.014	.001	.003
	Bribery prevention	.001	.012	.004
Fraud prevention	.003	.004	.011	

a. Dependent Variable: corruption mitigation through the application of forensic accounting

Source: SPSS

4.7 Chapter Summary

To summarize, all three hypotheses that were identified specifically for this research, were supported and confirmed. Running a regression analysis shows that fraud prevention have a major influence on Corruption mitigation through the application of Forensics Accounting. This is followed by bribery prevention and embezzlement prevention. A Pearson's Correlation Analysis was conducted to test the relationships between the various constructs, as well as a step wise multiple regression analysis to assess the strength of the predicting variables.

CHAPTER FIVE

CONCLUSION

SUMMARY

The purpose of empirical study is to investigate how forensic accounting practice could mitigate public sector corruption through fraud, bribery and embezzlement prevention. Three hypotheses were identified and a Pearson's Correlation Analysis was conducted to test the hypothesis statements. The result revealed that fraud prevention, bribery prevention and embezzlement prevention all shows positive significant influence on public sector financial corruption mitigation with p. values of 0.00 level (2-tailed, $p < 0.05$), 0.05(2-tailed, $p = 0.05$) and 0.01(2-tailed, $p < 0.05$) respectively.

In addition, the study also conducts a regression analysis and the results revealed that fraud prevention, bribery prevention and embezzlement prevention with coefficient β scores of 0.068, 0.092 and 0.399 respectively have positive influence on the mitigation on public sector financial corruption in the Gambia. This explains that public sector financial stakeholders should give a great value of consideration to fraud, bribery and embezzlement prevention in the efforts of public sector financial corruption mitigation in the Gambia.

Furthermore, a collinearity analysis was also conducted to evaluate the variables and the result shows that the Variance Inflation Factor (VIF) for all the variables were less than 5.0, while the Tolerance level ranges from 0.775, 802 and 0.915 respectively, indicating that multicollinearity was not a problem for this research. This is further vindicated by the coefficient (R^2) value of 0.766, which means that fraud prevention, bribery prevention and embezzlement prevention explains (76%) of total public sector financial corruption mitigation, thus leaving only (24%) of the model unexplained by the variables.

This empirical result is comparatively in uniform with the previous literatures such as (Olajide, 2014), (Ozili, 2015).

5.1 Research Implication and Recommendations

The research tenacity of this particular empirical study was to explore the forensic accounting practice as a means of mitigating public sector corruption through fraud, bribery and embezzlement preventions; it is prudent for the research have both theoretic and managerial impact otherwise known as implication. The theoretic implication of this research is that this research conclusion is in consonant with previous first-hand investigations such as (Olajide, 2014), (Ozili, 2015). Theoretic implication of studies give rise managerial implications within the environment in which the study is conducted, thus this research is not an exception. Therefore, this research put forward managerial impact as well as recommendations for stakeholders as discuss below. From the study, it can be found that forensic accounting must be introduced as a compulsory tool in dealing with financial sector corruption in order to promote corporate governance. The government should encourage the practice of forensic accounting by providing adequate training and resources to forensic accountants such that they become an expert in their particular field of expertise and develop new courses related to forensic accounting.

Therefore, it is recommended that professional bodies in the Gambia like the Gambia Accountant Association should encourage the formalization and specialization in the field of forensic accounting. In addition, government should develop more interest in forensic accounting for monitoring and investigating suspected culprits in fraud, bribery and embezzlement preventions as earlier cited. Also, our laws should be up to date with latest advancement in technology to ensure admissibility of evidence in a law court for successful prosecution of criminal and civil cases. Government should have an effective plan with other countries in extraditing run away

fraudsters from anywhere around the globe. Lastly, it is also recommended that government should ameliorate the expenses involved in engaging the services of a forensic accountant.

Also, the Government and its regulatory authorities should ensure the provision of standards and guidelines to regulate forensic activities and above all Gambians should embrace integrity, objectivity, fairness and accountability in their day-to-day activities. This will help public sector financial stakeholders to adapt forensic accounting as financial strategy towards curbing economic and financial crimes in the Gambia.

Furthermore, Forensic auditing should be made a field of specialization in the Universities especially in the post graduate schools and the government of the Gambia through the National Assembly should enact a law to make forensic accounting/audits a statutory requirement for public sector enterprises.

Likewise, the study can recommended that forensic accounting must be introduced as a compulsory tool in dealing with financial fraud and corruption in to promote corporate governance. The government should encourage the practice of forensic accounting by providing adequate training and resources to forensic accountants such that they become an expert in their particular field of expertise and develop new courses related to forensic accounting.

Correspondingly, forensic auditor as an expert witness should at all times bring its education, training, skill, or experience to bear so that their specialized opinion about an evidence or fact issued within the scope of their expertise (expert opinion), as an assistance to the fact-finder can be relied upon, and the anti-graft agencies should consider engaging the services of forensic accountants to assist them in court cases involving economic or financial crimes.

It is hoped that if these recommendations are implemented and culprits treated without favoritism; the occurrence of public sector financial corruption will be mitigated drastically within the public sector finance which ultimately should impact on our global rating by transparency international.

5.2 Limitation and Suggestion for Future Research

It is relatively evident that this study has numerous limitations such as:

This empirical research sample size is moderately lesser in comparison with the previous studies sample size. As a result, the outcome of this empirical study may show concerns of representation due to insufficient sample size to denote the whole population of public sector finance of the Gambia. Additionally, it is restricted to merely the public sector accounting of the Gambia. In this regard, future studies in this premise can increase the sample size ranging from 500-1000 respondents and extend the study to private sector.

Also, this study used a convenience sample rather than a random sample i.e. the study adopts non probability sampling and not probability sampling. Therefore, future studies should use probability sampling like random or stratified sampling in order to generalize results obtained to a larger population.

Moreover, future studies should employ longitudinal survey rather than cross sectional survey because in cross sectional survey, data is collected at a single time but does not consider the issues of causality, so future studies should use longitudinal in which the researcher will administer a survey to one set of respondents over multiple time points and issues of causality can be determined.

Furthermore, the survey used quantitative method which is based on questionnaires. One key benefit of using questionnaires or quantitative analysis is that hypotheses can be directly tested based on the empirical data collected from questionnaires. However, a future study should incorporate qualitative analysis which will further explore this research. In-depth interviews utilizing open-ended questions could allow for deeper exploration of these measures. Further research should focus on other sectors and lastly compare between the different sectors.

Another limitation of this study is that, the gender profile of male and female respondents is not equally distributed. A total sample Size of 70 out of which 47 represent male (67.1% of the total

respondents) while 23 represent female (32.9% of the total respondents). Therefore, the profile of gender is biased as a smaller percentage of female respondents take part in this study, thus future studies should strive for gender balance of respondents.

Besides, there is limited empirical study conducted on the premise of this area in the Gambia-mitigation of financial corruption in public sector perspective, leading to precise lesser existing references for this research. Therefore, there is a need for speedy increase in research in this domain.

The study was based on stakeholders opinion rather than theoretical meaning or expectations of forensic accounting, this give us courage that the variances would be statistically significant. This would help comprehend the influential variables of the public sector corruption mitigation.



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