

**QUALITY STANDARDS ENFORCEMENT
MECHANISMS AND THE FORENSIC ACCOUNTING
PROFESSION IN NIGERIA**

BY

FAGBORO, GABRIEL DAMILOLA
B.Sc. (Hons.), M.Sc. Accounting (UNILAG)

NOVEMBER 2015

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**A THESIS IN THE DEPARTMENT OF ACCOUNTING,
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APPROVAL

This Research Work, titled “**Quality Standards Enforcement Mechanisms and the Forensic Accounting Profession in Nigeria**”, has been approved for the Department of Accounting and the School of Postgraduate Studies, University of Lagos, Nigeria.

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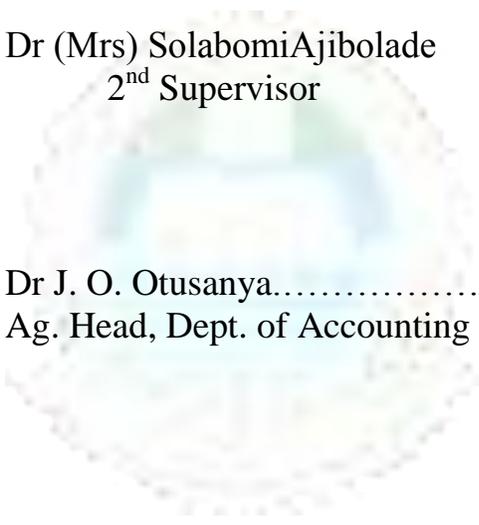
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Date



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Dedication

This Thesis is dedicated to the Glory of the Almighty God, Alpha and Omega, for His mercies and unfailing love over my life and family.



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I give glory and praises to the Almighty God for the success of this academic programme.

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Abstract

This research effort is a baseline study, designed to obtain empirical evidence on the current state of the forensic accounting profession in Nigeria; and the level of compliance of the profession with the International Quality Assurance Accreditation Standards (IQAAS). It is an evaluation of the extent of quality standards enforcement mechanisms (QSEM) in the profession in Nigeria. The study used both primary and secondary data. The primary data source consisted of a set of questionnaire designed for completion by the forensic accounting professionals in Nigeria. The secondary data were obtained from the official websites and records of the accounting profession regulators in the Country. Descriptive statistics were used to analyse the data obtained from 161 respondents; and hypotheses were tested with t-test and regression analysis (at $\alpha = 0.05$). A Compliance Index was used to measure the level of compliance of the profession in Nigeria with the IQAAS. The outcome revealed a significant difference between the current state of the forensic accounting profession in Nigeria and the requirements of the IQAAS. The study found that the profession rests on weak QSEM to ensure compliance with the IQAAS; it revealed a lack of statutory regulatory institution, enabling legal framework; and uniform coordination, training, certification and accreditation standards. The study also found that there is an acute shortage of qualified professionals in the practice; many of the existing practitioners lack the requisite skills to effectively function in the field of specialisation. The result further showed that the contribution of the Nigerian universities to the development of the discipline is not significant, mainly owing to insufficient qualified academics and facilities. These shortcomings have contributed to low quality of service delivery in the profession, putting its probative value in doubt. It is thus concluded that the profession in Nigeria has not provided expected impact on the fight against the economic and financial crimes; that without QSEM in place in Nigeria, the forensic accounting profession would remain a futile armour against the economic and financial crimes in the Country. The study, therefore, recommends that the Nigerian Federal Government and relevant bodies should, as a matter of priority, establish forensic regulatory institutions, such as National Institute of Forensics (NIF); Nigerian Academy of Forensics (NAF); Certified Institute of Forensic Accountants of Nigeria (CIFAN); and Nigerian Association of Professional Forensic Accountants (NAPFA). These bodies, in co-operation with the Judiciary and the National Universities Commission (NUC) will ensure that the forensic accounting profession in Nigeria is based on best practices, in compliance with the requirements of the IQAAS. The Nigerian universities, in collaboration with relevant professional bodies, should give continued attention to the development of the forensic accounting academic programmes at all levels.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The accounting profession is in the age of transition (Davis, Farrell & Ogilby, 2014). Its environment has undergone changes in the last two decades, and an accelerating rate of change is in prospect. The changing social attitude with the adoption of new management philosophies and the growing intensity of competition, in a knowledge driven global economy, are impacting on the environment in which the profession presently operates. These have created the need to re-evaluate its objectives from a wide perspective. The profession is moving away from its traditional procedural base toward a role which emphasises its social welfare importance (Tanko, 2013). The social welfare viewpoint is reflected in the development of social accounting, where the interests of stakeholders are expected to exert a dominating influence on the development of improved accounting policies and practices. However, literature has suggested that the accounting profession, historically regarded as society's watchdog, is gradually losing the society's confidence consequent to widespread fraud cases resulting in corporate scandals and collapses which the traditional auditors have failed to uncover (Ajibolade, 2008). Thus, the social welfare theory of accounting requires that the traditional imbalance between the profession and the society must be corrected.

Globally, economic and financial crimes have been acknowledged as antithetical to economic development and growth. The recent experience of Nigeria on corruption cases appears to have validated this statement. From inception in 1996, the Transparency International Annual Corruption Perception Index (ACPI) has been consistently rating Nigeria as one of the most corrupt nations in the world. In the year 2000 ACPI, Nigeria was ranked as the most corrupt

country in the world out of the ninety countries the agency studied. In the 2014 ACPI, Nigeria scored 2.8 points on a scale of 10 points (Transparency International, 2000 & 2014; The Vanguard Newspaper, 2015). Furthermore, the Socio-Economic Rights and Accountability Project (SERAP) (2015) described Nigeria's ranking in the Transparency International's global Corruption Perception Index (CPI) as a reality check, confirming that the Country's fight against corruption has lost track. The group argued that "the Nigerian Government may see the global corruption index as a pain in the neck, but the index provides some indicators as to the reality in the country and it cannot simply be wished away (p.3).

In response to the corruption cases in Nigeria, the immediate past Minister of Finance and Co-ordinating Minister for the Economy, Ngozi Okonjo-Iweala (2015, p.7), argued that:

"Corruption persists in the Country because Nigeria lacks the institutions, systems and processes to prevent it. The absence of the relevant systems and institutions that should help check corruption has created opportunities for people to engage in the act".

According to Omolehinwa (2012, p.59):

"..... without proper accounting there can be no accountability and without accountability we cannot turn back the tide of corruption and without the tide of corruption being turned back, our country stands the risk of being a failed state".

Earlier, the United Nations (UN) (2005, p.7) had broadly defined economic and financial crime as "*any non-violent crime that results in a financial loss*". In this regard, the Institute of Chartered Accountants of Nigeria (ICAN) (2013, p.1) posited that "the basic audit and the traditional investigation tools are no longer sufficient to unravel these types of crime". In effect, a new set of skills are required to prevent, detect, investigate and establish the occurrence of the economic and financial crimes, and related offences; and document evidence capable of presentation in a legal setting (Efiong, 2012; Hall, 2013). As a result, there has been public

increasing concern about the relevance of the conventional accounting profession to the societal needs and problems (Albrecht & Sack, 2000; Otusanya & Lauwo, 2010; Owolabi, 2012; Fouché, 2013). The American Association of Certified Fraud Examiners (ACFE) (2014, p.11) reported that “the accounting profession is presently being pulled and sharpened by contending forces”. The profession is faced not only with the need to increase the knowledge requirement of its members, but also a progressive increase in the public expectation about the scope, relevance and quality of its work (Adeyemi & Fagboro, 2013; (Davis et al., 2014; Chen, Hu, Lin & Xiao, 2015).

Consequently, studies have challenged the conventional accounting profession; in particular financial accounting and traditional auditing, for providing a narrow image of the interaction between the profession and [society](#); thereby artificially constraining the subject matter of the profession (Fagboro, Gordon & Ehie, 2011; Okaro & Okafor, 2013; ACFE, 2014; The Forensic Careers, 2014). On the basis of this, The Forensic Careers (p.27) concluded that: “in a situation where the needs of the society are not met, there is need to open up a new area of research within the existing principles and practices of the affected profession”. To fill this expectation gap in knowledge, the forensic accounting profession emerged as a response to economic and financial crimes, and related vices, and failure of the traditional audit to tackle the menace (ICAN, 2013; Fagboro, Ajibolade & Akerele, 2014; The American International Institute of Certified Forensic Investigation Professionals (IICFIP), 2014). According to the IICFIP (2014), to determine the depth and scope of economic and financial crimes and related matters, forensic accounting investigations should be conducted in order to find when, where, what and how they are being perpetrated and by whom.

'Forensics', at its most basic level, is best explained as "*science in service to the courts*" (The Centre for Forensic Science & Medicine, 2013, p.1). By extension, the emerging forensic accounting has been defined as "the scientific investigation of economic and financial crimes and related matters, with a view to providing indisputable evidence at trials" (IICFIP, 2014, p.11). Forensics is a broad array of disciplines cutting across both natural and social sciences. Each discipline has its own methods and practices, as well as its strengths and weaknesses (Gauch & Blind, 2014). In particular, each forensic specialisation varies in its level of scientific development and in the degree to which it follows the principles of scientific procedures (Polick, 2008; Chakravarty, 2010). Notwithstanding, in every forensic specialisation, adherence to the basic scientific principles and global best practices, through quality standards enforcement mechanisms (QSEM) is important (The **American Academy of Forensic Sciences, 2013**).

To this end, **the International Quality Assurance Accreditation Standards (IQAAS) (2014)** identified three **components of the quality standards enforcement mechanisms (QSEM)** as: (i) **Institutional regulation**, (ii) **Legal framework**, and (iii) **Judicial admissibility criteria and standards for the forensic profession**. The Centre for Forensic Science and Medicine (**2013, p.17**) **maintained** that "for any forensic discipline to attain the world-class status, its structures must be established on the QSEM". In line with this argument, The Forensic Careers (2014) specified four structures of forensics as: (i). Academic programme and research. (ii). Professional training and certification process. (iii). Professional practice and engagement. (iv). Mandatory continuing professional education and development (MCPED). This study, therefore, argues that for the emerging forensic accounting profession in Nigeria to fulfill its expected role, there is a need to pay attention to deliver its structures on the global best practices in line with the IQAAS, through functional QSEM.

1.2 Statement of the Problem Globally, the forensic profession has been facing challenges that stretch its resources to their limits. The profession has long been subjected to scathing criticisms. For instance, the report produced by the Committee of the American National Academy of Sciences (2009) on *Identifying the Needs of the Forensic Science Community*, painted a bleak picture of the state of the profession and cast doubt on the quality and credibility of evidence provided by the experts in the field. The Committee, therefore, called for sweeping reforms after concluding that the judiciary is often swayed by false or misleading testimony from forensic experts using unproven scientific methods. The Committee opined that:

“A group of non-science forensic science disciplines has developed over the past century. These are fields within the broader forensic sciences that have little or no basis in actual science. They are not applications of established basic sciences, they have not systematically tested their own hypotheses, and they make unsupported assumptions and exaggerated claims” (The American National Academy of Sciences, 2009, p.31).

Edwards (2011), when testifying before the USA House and Senate Judiciary Committees, submitted that the forensics community had been plagued with serious problems that could not be cured without significant concerted action. He suggested that what was needed was a massive overhaul of the practice. Edwards noted that: “there is no empirical research to prove most forensic tenets, with the exception of Nuclear Deoxyribonucleic Acid (DNA) evidence and some chemical analyses” (p.8).

Neufeld & Garrett (2009) found that forensic analysts often overstated evidence in wrongful conviction cases. The pair spent over a year reviewing one hundred and thirty seven (137) DNA exoneration cases in which forensic experts testified at trials. The authors found that in sixty percent (60%) of those cases, the forensic experts gave invalid testimony. Besides, Neufeld & Garrett also carried out a review of the role of forensics in the wrongful convictions. The review went beyond transcripts of testimony to analyse all forensic evidence used in the cases. They

found that in more than fifty percent (50%) of the first two-hundred and twenty-five (225) DNA exonerations, unvalidated or improper forensics played a role in the wrongful conviction. The authors, therefore, concluded as follows:

"It is clear that change and advancements, both systematic and scientific, are needed in a number of forensic disciplines to ensure the reliability of work, establish enforceable standards, and promote best practices with consistent applications" (p.31).

Polick (2008, p.17) had found that:

"The theory of forensic evidence is a field wrought with dispute. Many of these disputes stem from the limits of human knowing, a field known as [epistemology](#)".

Bohan (2010, p.5) concluded that:

"The undeniable reality is that the community of forensic professionals has not done nearly as much as it reasonably could have done to establish either the validity of its approach or the accuracy of its practitioners' conclusion and the courts have been 'utterly ineffective' in addressing this problem".

Chakravarty (2009) reported wide variability across forensic disciplines. Not only with regard to techniques and methodologies; but also with regard to reliability, error rates, reporting, research foundations, general acceptability, and published material. The author found that many of the forensic techniques used in courtroom proceedings, such as questioned documents, and examination of writings, rested on a foundation of very weak science. The author said that virtually no rigorous research to strengthen this foundation was being done. Instead, the public is witnessing a growing body of unreliable research with a strong interest in promoting the validity of these techniques. Chakravarty argued further that: "*These same forensic professions differ significantly from what most scholars consider forensics to be*" (p.11). He, therefore, suggested that: "*there is a critical need for the forensic profession to build a base of rigorous research to establish its reliability*" (p.11).

The American Academy of Forensic Sciences (2013) argued that some forensic disciplines were no longer generally accepted within the relevant investigative community. Gauch & Blind (2014), arguing from the social science perspectives, observed that “admitting ‘soft science’ testimony as an opinion rather than scientific testimony, seems to rest on the backwards assumption that if expert testimony is less intellectually rigorous than science, it is entitled to be judged by a less rigorous admissibility standard” (p.143). However, Kassina, Drorb & Kukuckaa, (2013) maintained that it would be tantamount to rewarding non-science forensics for not developing scientific foundations for its claims. Leo & Gould (2010) stated that “the law requires two attributes from the forensic profession: i). Valid and reliable methodologies that enable the accurate analysis of evidence and reporting of results. ii). Practices that minimise the risk of results being dependent on subjective judgments or tainted by error or the threat of bias.

Akindede (2009, p.4) argued that “In Nigeria, since the economic and financial crimes are a violation of the law, they are offences punishable in a court of justice”. In other words, the forensic expert must prove that an act meeting the relevant legal definition of the crime has been committed by the suspect (Fagboro & Olofinsola, 2007). Furthermore, Kendall (2013) noted that “the concept of forensics is related to the notion of authentication”. That is, to determine whether an evidence is what it purports to be, or is alleged to (Gauch & Blind, 2014). To this end, Misinger & Sacks (2006) concluded that “poor quality activities at any stage of the process will lead to failure to recover or reliably analyse traces of valuable evidence”. This in turn will lead to failed investigations, prosecutions and even miscarriages of justice (Akpan, 2010). In this context, Ngex (2010, p.13) submitted that “the advancement of forensics both in general and within specific disciplines is growing increasingly more important, and must be subjected to greater public evaluation.

Consequently, the quest to strengthen the emerging forensic accounting profession to effectively fulfill its expected role has led to a regime of global debate on the need for high quality standards in the field of specialisation. However, the debate has not attracted much research efforts. In Nigeria, the debate is critical as the question of the mechanisms to enforce standards in the profession is yet unanswered. The forensic accounting profession in Nigeria has been facing credibility challenges in recent time; for instance, studies have provided evidence that a significant gap exists between the current state of the profession and what the IQAAS require (Fagboro, 2005; Fagboro et al, 2011; Fagboro et al., 2014; Keshi, 2014;). This has negatively impacted on the quality of service delivery, and consequently put the probative value of the profession in doubt in Nigeria.

These developments have subjected the validity, reliability, credibility and admissibility of the forensic accounting evidence in the Nigerian courts to increased scrutiny by lawyers and judges (Ribadu, 2006; Fagboro & Olofinshola, 2007; Osipitan, 2009; Ngex, 2010). Thus, relating the judicial submission on the Akolade Arowolo vs. The Lagos State Commissioner of Police's (2014) case to the forensic accounting profession; this study argues that high quality standards in forensic accounting profession are integral to the criminal justice system (The Punch Newspaper, 2014). In other words, quality of forensic evidence is important, since the guilty may go unpunished or, equally, an innocent person may lose his/her liberty, if first-rate evidence is not submitted in the court of law (The Innocent Project, 2014). That is, if the courts of law do rely on the forensic evidence to deliver judgments; then, such evidence must not be controverted.

Given the depth and complexity of the transnational organised economic and financial crimes in the technological advancement age; the need for QSEM in the forensic accounting profession in Nigeria is of critical importance. This is so, because a search for and recovery of forensic

evidence has reached levels of analytical sophistication and capability such that all parts of the process (deconstruction and reconstruction of crimes and criminal activities) must be valid, reliable and credible.

However, globally, empirical studies on the need to strengthen the emerging forensic accounting profession for effective service delivery and credibility are very rare. Most of the previous works on the forensic quality improvement were designed for the core science based forensics, with the advanced economies in mind (Oberholzer, 2002; Polick, 2008; Chakravarty, 2009; Neufeld & Garrett, 2009; Bohan, 2010; The Innocent Project, 2014). These studies were presumed to apply as well to the developing nations; whereas, the developing nations have their own problems and peculiarities which must be solved and handled in ways distinctively applicable to them (Adeyemi & Fagboro, 2013). Moreover, the studies at various times only investigated the effect of individual QSEM component on compliance of the forensic profession with the IQAAS. For instance, Strutin (2009) and Kendall (2013) examined the influence of institutional regulation; and Oberholzer (2002) and Kassina, Drorb & Kukuckaa (2013) evaluated the impact of enabling legal framework; Misinger & Sacks (2006) while as well as Leo & Gould (2010) investigated the effect of judicial admissibility criteria and standards for the forensic profession on compliance of the forensics with the IQAAS.

The outcomes of these studies revealed a low statistically significant effect of individual QSEM component on compliance of the forensics with the IQAAS. These results appear to have created a gap in knowledge on the need for empirical studies on the effect of combined QSEM components on the compliance of the forensic accounting profession with the IQAAS. In view of the above, an analysis of the current situation of the forensic accounting profession; the

professional capabilities and competence of the practitioners; and the challenges facing the profession are desirable in Nigeria at the present time.

1.3 Aim and Objectives of the Study The aim of this study is to strengthen the emerging forensic accounting profession in Nigeria for effective service delivery and credibility. In the pursuit of this aim, the specific objectives of the study are to:

- i. Examine the perceptions of the forensic accounting professionals in Nigeria on the current state of the profession.
- ii. Evaluate the contribution of the Nigerian universities to the advancement of the forensic accounting profession.
- iii. Evaluate the contribution of the Nigerian professional accounting bodies to the advancement of the forensic accounting profession.
- iv. Establish the level of compliance of the forensic accounting professional training and certification processes in Nigeria with the IQAAS.
- v. Investigate the level of compliance of the forensic accounting professional practice and engagement processes in Nigeria with the IQAAS.
- vi. Determine the effect of QSEM components on level of compliance of the forensic accounting profession in Nigeria with the IQAAS.

1.4 Research Questions

In an attempt to adequately address the problems identified in this study, the following six research questions are in focus:

- i. What are the perceptions of the forensic accounting professionals in Nigeria on the current state of the profession?
- ii. What is the level of the Nigerian universities' contribution to the advancement of

- the forensic accounting profession?
- iii. How significant is the contribution of the Nigerian professional accounting bodies to the advancement of the forensic accounting profession?
 - iv. To what extent do the forensic accounting professional training and certification processes in Nigeria comply with the IQAAS?
 - v. To what extent do the forensic accounting professional practice and engagement processes in Nigeria comply with the IQAAS?
 - vi. To what extent do QSEM components affect compliance of the forensic accounting profession in Nigeria with the IQAAS?

1.5 Hypotheses This study attempts to obtain empirical data that quantify the current state of the forensic accounting profession in Nigeria. The research questions i to iii are, therefore, subjected to descriptive statistical analysis. Consequently, three hypotheses are formulated specific to research questions iv to vi:

- i. Forensic accounting professional training and certification processes in Nigeria do not significantly comply with the IQAAS.
- ii. Forensic accounting professional practice and engagement processes in Nigeria do not significantly comply with the IQAAS.
- iii. Quality standards enforcement mechanisms (QSEM) do not have any significant effect on the compliance of the forensic accounting profession in Nigeria with the IQAAS.

1.6 Significance of the Study Since forensic accounting profession is undergoing a developmental process worldwide; developing and applying Quality Standards Compliance Index (QSCI) for the profession in Nigeria is a significant contribution in the history of the field of specialisation in the Country. In addition, empirical studies on the application of quality standards enforcement mechanisms (QSEM) to the forensic accounting profession are extremely rare. Consequently, this research effort should provide a significant contribution to the advancement of knowledge in this regard.

This study resulted in the creation and application of a standardised index for measuring quality standards compliance in the forensic accounting academic programme and practice. Using a standardised index will provide potential benefits for the regulators and other stakeholders in Nigeria. The primary benefit of using a compliance index instead of a compliance rate is that an index allows regulators to capture a greater degree of subtlety in their compliance measurement efforts. Compliance indexes can measure compliance on a scale, not just as a binary measure. Another benefit of using an index approach is that it allows regulators to compile certain indicators to compare performance across time or across components. With creating a 'standardised' index, comprising common measures of compliance, regulators can remove the inconsistencies that may be measured in different years or across different building blocks. Similarly, if the profession has made changes to move towards compliance with certain standards, but has still not reached full compliance, a compliance rate would not capture that progress. Using an index approach will give regulators a way to track progress of each of the forensic accounting building blocks on a shorter time frame because it measures the extent of compliance in a more incremental way (The Compliance Indexing Project, 2014).

The outcome of the study will also benefit the Nigerian universities and other institutions of learning intending to integrate forensic accounting into their academic programmes. Studies have shown that the current accounting academic programme has not really kept pace with the dynamic, complex and expanding profession for which students are being trained (Fagboro et al, 2011; Efiog, 2012; Dutta, 2013). The Futures Committee Report (1986) of the American Accounting Association (AAA), and West Virginia University (2007) raised concerns about the standard of the accounting academic programme. The authors concluded that without significant changes to the accounting academic programme, future accountants would not receive the preparation they needed to meet the emerging needs of the society.

The result of this study will have public interest implications on the grounds that the government, anti-economic and financial crime agencies, legal and para-legal officers, business community and captains of industry, non-governmental organisations and the accounting profession are all concerned with business frauds, accounting scandals, corporate failures, and related workplace abuses. The outcome of the study will provide guidelines on policy initiatives that should be adopted in any plan to improve the forensic discipline, and allow the forensic community serves society more effectively. Quality standards in forensic accounting activities will help rebuild eroded investor confidence in management representation and corporate investment. Attracting investment requires protecting investors. Quality standards will also strengthen the ability of the accounting profession to serve its purpose in the society.

1.7 The Scope and Limitations of the Study

The focus of this study is to provide empirical evidence that will help ensure that the emerging forensic accounting profession in Nigeria is subject to an appropriate regime of high quality standards, to effectively deliver its services to the society. The study cover the activities of the

forensic accounting profession registered with the IICFIP or/and ICAN in Nigeria. It also focused on the accounting educational and training programmes of the NUC accredited universities in Nigeria as at 31st of December, 2014. However, the study did not by any means conduct an evaluation of the activities of the anti-economic and financial crime agencies in the Country. This study also did not include a survey assessment of the quality of research outputs in the forensic accounting profession in Nigeria.

Although the study attempted to encompass quality improvement in forensic accounting profession; it however, experienced a relative dearth of local prior research studies on the subject area. This research effort experienced a relative dearth of local theoretical and empirical works in the area of study. This is perhaps not unconnected with the fact that the field of specialisation is still in its infancy in Nigeria.

- i. As the data used for this study were partly obtained from a primary source, specifically the use of a set of questionnaire; they may therefore contain some potential sources of bias, including those listed below, which may impact on the outcome of the study.
- ii. Selective memory: Remembering or not remembering experiences or events that occurred at some point in the past. Telescoping: Recalling events that occurred at one time as if they occurred at another time.
- iii. Attribution: The act of attributing positive events and outcomes to one's own agency, but attributing negative events and outcomes to external forces.
- iv. Exaggeration: The act of representing outcomes or embellishing events as more significant than is actually suggested from other data.

Furthermore, preset answers might not necessarily reflect how the respondents really feel about a subject; and in some cases, it might just be the closest match to a preconceived hypothesis. However, it is noted that this study witnessed a relatively fair support, patronage and enthusiasm among the respondents. It received the respondents' co-operation in terms of provision of data, opinions, and in timely completion of the research instrument, which assisted in the achievement of set objectives.

1.8 The Operational Definition of Terms

The following terms are operationally defined according to their specific usages in this study:

- i. **Forensic Accounting Professional:** A forensic accounting professional in Nigeria, trained and certificated by the International Institute of Certified Forensic Investigation Professionals (IICFIP) or/and the Institute of Chartered Accountants of Nigeria (ICAN).
- ii. **Quality Standards Enforcement Mechanisms (QSEM):**The three determinants (level of institutional regulation, extent of enabling legal framework, and degree of judicial acceptance) of the extent of compliance of the forensics profession in Nigeria with the requirements of the International Quality Assurance Accreditation Standards (IQAAS).
- iii. **Level of Institutional Regulation:** The existence of relevant forensic regulatory authorities in Nigeria, and the extent at which the authorities ensure quality improvement in the forensic accounting profession in the Country.
- iv. **Extent of Legal Framework:** The existence of the acts of parliament that establish the forensic profession in Nigeria, and the extent at which the enabling acts ensure quality standards in the forensic accounting profession in the Country.

- v. **Degree of Judicial Acceptance:** The judicial admissibility criteria and standards for the forensic profession in Nigeria, which the forensic accounting profession must comply with to determine its extent of acceptance by the court of law.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction This Chapter focuses on both the conceptual and theoretical frameworks of the study. It presents the historical background of forensic accounting and a review of the theories, and clarifies concepts relating to the area of study. It also presents evidence in prior studies of forensic accounting.

2.2 Evolution of the Forensic Accounting Profession The word ‘forensics’ is a derivative of the Latin word ‘forensis’, meaning belonging to the forum, which was the ancient Rome’s site for public debate (Walls, 1974; DeForest, Gaennslen & Lee, 1983). Forensics means relating to the use of science and technology in the investigation and establishment of facts or evidence in a court of law (Myren & Henderson, 1988; Neufeld & Garrett, 2009). In this regard, the profession, ‘forensic accounting’ is not as new as many people think, though it has grown in popularity in recent years (Dreyer,2014). Accountants have been using their investigative skills almost since the dawn of time. Some of the earliest accounting records date back over 7,000 years to ancient Babylon, Assyria and Sumeria, where accounting was used to track agriculture (Kenneth, 2010). Back then, people were concerned about not getting short-changed in their business and financial lives (The American National Association of Forensic Accountants (NAFA), 2013). Archaeological findings, dating between 3300 and 3500 BC, revealed the habits of the world’s first accountants or scribes in Mesopotamia and Egypt; who recorded commercial transactions onto damp clay tablets or papyrus. The ancient Egyptian scribes accounted for all of the Pharaoh's assets; they were known as the *"eyes and ears of the Pharaoh"* (Oberholzer, 2002, p.3). A scribe would then enfold the original document in a thin clay envelope. If the outer tablet was tampered with later, it was cause for an investigation. Egyptians bookkeepers were careful to

prepare meticulous records since any irregularities found by royal auditors were punishable by fine, mutilation or even death (Peloubet, 1946).

Similarly, during India's Maurya period (321-184 BC), records indicate the inclination to go beyond accuracy and accountability; addressing issues of criminality. Kautilya's Arthashastra, the earliest known treatise on accounting concepts, lists at least forty different types of embezzlement (Peloubet, 1946). Kautilya also considered the punishment for accountants failing in their duties, be it a deliberate fraud, incompetence or negligence (Oberholzer, 2002).

According to Kenneth (2010), the 'chartered accounting profession' was first established in nineteenth century in Scotland. At that time in history, a close relationship existed between lawyers and accountants. The two professions frequently belonged to the same associations and most lawyers offered clients accounting services. Accountants in turn, incorporated the duties of experts witnesses into their general services rendered. The year 1824 circular, announcing the accounting practice of one James McClennard of Glasgow, states that he will make "*statements for laying before arbiters, courts or council*" (Kenneth, 2010, p.2). During these early years, legal work comprised a substantial portion of the accountant's services. For instance, when in the year 1854 the Edinburgh Society of Accountants petitioned Queen Victoria for a Royal Charter; it took pains to draw the attention to the relationship between accounting and law. It stated that "*the business of the Accountants is inclined to the Department of Actuary; it also ranges over a much wider field in which considerable acquaintance with the general principles of law is quite indispensable*" (Meier, Kamath & He, 2010, p.26). By the early twentieth century, chartered accountants had increased their accounting services, and court appearances reduced to a fraction of their overall business. It could therefore be argued that rather than a new specialty within

accounting, modern-day forensic accounting represents a return to accounting roots (Meier et al, 2010; Dreyer,2014).

The discipline of forensic accounting gained prominence during the trial of a notorious American gangster, Alphonse Gabriel ‘Al’ Capone (January 17, 1899 – January 25, 1947). Eliot Ness, an agent with the Prohibition Bureau during the 1930’s, has earned a place in the annals of American crime fighting for his effort to terminate Al Capone’s criminal career (Meier et al, 2010). It was an accountant with the Internal Revenue Service (IRC), Elmer Irey, who played a key role in pursuing Capone for tax evasion. Elmer Irey was, in effect, America’s first high profile forensic accountants. The team of investigators, dubbed “*the silent investigators*”, used their superior investigative and analytical skills to piece together an irrefutable chronicle of Capone’s financial malfeasance (Crumbly, 2001, pp.1-2).

In Dreyer’s (2014) account, the first person to coin the phrase “forensic accounting” in print was probably Maurice E. Peloubet in 1946. At that time Peloubet was a partner in the public accounting firm of Pogson, Peloubet & Co in New York. Peloubet stated that “during the war both the public accountant and industrial accountant have been and are now engaged in the practice of forensic accounting” (Dreyer, 2014, P.3).

In the earliest time, statutory auditors took responsibility for detection of fraud, and investigative accounting techniques were used in their audit activities. However, beginning from early 1940s, auditors and the accounting profession began to redefine the duties of an audit (Rezaee, Lander & Reinsten, 1992). Since then, the auditors are primarily known for expressing their opinion as to whether the financial statements of an organisation showed a true and fair view of the entity’s transaction (Kenneth, 2010). The strident calls and pressures on modern audit to once again

assume responsibility for fraud, has given birth to forensic accounting. Stakeholders are of the view that audit and forensic accounting will reunite again (Coenon, 2005). Forensic accounting techniques are believed to detect and prevent fraud which will help in bridging the audit gap as it relates to inability of an audit to detect fraud (Crumbly, 2001; Crumbley & Apostolou, 2002).

Peloubet, in his 1946 essay titled: '*Forensic accounting: Its place in today's economy*'; argued that by 1940s, forensic accounting had proven its worth during World War II; However, formalised procedures were not in place until the 1980s when major academic studies in the field were published (Rasey, 2009). As a profession, forensic accounting continued to grow during the latter half of the 20th century, until today, when almost no successful business litigation claims is made without the assistance of a forensic accountant.

The word forensic means 'suitable for use in a court of law' (Walls, 1974). This is the high standard that forensic accountants are held to. By extension, forensic accounting provides an accounting analysis that is suitable to a court of law and is used to help resolve both civil and criminal cases (Kenneth, 2010). Forensic accounting involves looking beyond the numbers and grasping the substance of situations (DiGabriele, 2011). The practice is more than simple accounting, and more than basic detective work. Due to its unique elements, it is a combination that will be in demand for as long as human nature exists (Rezaee, Lander, & Reinsten, 1992; DiGabriele, 2011). Modern forensic accounting focuses on three main areas: investigation, litigation support, and dispute resolution (Dreyer, 2014).

- i. **Investigation:** Investigation is the act of determining whether criminal matters such: as employee theft, securities fraud (including falsification of financial statements), identity theft, and insurance fraud have occurred. As part of the forensic accountant's

- work, he or she may recommend actions that can be taken to minimise future risk of loss. Investigation may also occur in civil matters.
- ii. **Litigation Support:** Litigation support represents the factual presentation of economic issues related to existing or pending litigation. In this capacity, the forensic accounting professional quantifies damages sustained by parties involved in legal disputes and can assist in resolving disputes, even before they reach the courtroom. If a dispute reaches the courtroom, the forensic accountant may testify as an expert witness.
 - iii. **Dispute Resolution:** In dispute resolution, forensic accountants often have to give expert evidence at trial. Forensic accountants investigate everything from tax fraud to copyright infringement, to fact checking for divorce cases. Forensic accountants are crucial to many legal issues facing both public and private organisations today (Kenneth, 2010; DiGabriele, 2011; Dreyer,2014).

2.2.1 Historical Development of the Forensic Accounting Profession in Nigeria The history of forensic accounting profession in Nigeria is a very recent one (Fagboro, Ajibolade & Akerele, 2014). Although not a statutory specialised forensic accounting institute the Institute of Chartered Accountants of Nigeria (ICAN) is the only Nigerian professional accounting body that offers a specialised training and certification programme in forensic accounting in Nigeria till date (Keshi, 2014). ICAN founded the Audit, Investigations and Forensic Accounting Faculty in the year 2009. The faculty started its certification programme in forensic accounting in 2011. The ICAN Forensic Certification Training Programme is restricted only to its professional members; that is, qualified chartered accountants who are either associates (ACAs) or fellows (FCAs) of the Institute. According to the ICAN (2014), those who have passed the qualifying

examinations but are yet to be inducted as associate members, are not eligible to enroll for the forensic programme until they are formally admitted into membership of the Institute.

As at December 2014, ICAN has trained and inducted three hundred and eighty-two (382) of its members as Certified Forensic Accountant of Nigeria (CFAN) (ICAN, 2014). These are those who have passed the examination on the six (6) training modules. The course contents of the ICAN forensic certification training programme are detailed in Appendix II. The programme is categorised into six modules taken in three segments, consisting of coursework and moot court session: Module 1; Modules 2-4; and Modules 5-6 (ICAN, 2014).

Moot/Mock Court Session: At the end of the course work, there is a Moot Court Session which is the simulation of real court scenario to prepare participants for what they are expected to face in practice.

Thus, from being an emerging practice, forensic accounting has long been part of the accounting profession (Keshi, 2014). The profession took a back seat in the early 20th century with the traditional accounting taking a greater role; forensic accounting is now merely returning to its traditions. The present day forensic accountants are involved in a wide variety of cases, from the more mundane family law and commercial matters through to a range of criminal investigations, which include white-collar crimes such as business and insurance fraud through to organised economic and financial crime, murder and even terrorism where forensic accountants are used to trace the money trail and uncover just who is financing the terrorist groups (IICFIP, 2014).

2.3 Nature of a Profession Talcott Parsons (13 December, 1902 – 8 May, 1979) is regarded as the 'father' of studies of profession' (Koumenta & Humphris, 2011). However, 'profession' had been explored before Parsons. For instance, classical theorists' research works

are sometimes regarded as the first systematic study in the field of profession (Flexner, 1915). These classical theorists include: Auguste Comte (19 January, 1798 – 5 September, 1857); Herbert Spencer (27 April, 1820 – 8 December, 1903); David Émile Durkheim (15 April, 1858 – 15 November, 1917); Max Weber (21 April, 1864 – 14 June, 1920). Nevertheless, it is Parsons and his followers that, in the language of American functionalism, initiated the paradigm and tradition of the object of research, partly by emphasising the importance of the professions in industrial society, and partly by formulating the conceptual framework within which the professions are analysed, theoretically and empirically (Koumenta & Humphris, 2011). In Parson's well-known evolutionistic theory of history, societies progress from simpler to more complex forms (Ignou, 2012). Complexity evolves from 'structural differentiation', that is, increased specialisation and division of labour. Social evolution is tantamount to 'adaptive upgrading' of the social system to its environment (Humphris, Kleiner & Koumenta, 2011).

Thus, beginning in the 1920s, as the new field of sociology began to study societies, disciplines, and organisations, the characteristics of, and criteria for establishing 'what a profession is' were explored (Tracey, 2013). The heyday of scholarly discourse on identifying the criteria for a 'profession' occurred between the 1950s and 1980s (Keeler, 1984). Robert King Merton (July 4, 1910 – February 23, 2003), a professor of Sociology at Columbia University, was engaged as a consultant to the American Sociological Association (ASA) to assist the organisation to better understand the requirements of a profession (Tracey, 2013). At the end of the engagement, Merton (1959) came up with a definition of professional association as:

"an organisation of practitioners who judge one another as professionally competent and who have banded together to perform social functions which they cannot perform in their separate capacity as individuals" (p. 50).

Other studies, including Bucher, & Strauss, (1961); Kay & Vickers (1990); Abbott, (1988), have suggested the following characteristics associated with a profession:

- i. A basis in systematic theory: A distinct way of viewing phenomena surrounding the knowledge base of the profession.
- ii. Specialised competencies and practitioners who are effective in practicing the professional role.
- iii. Dedication to raise the standards of the profession's education and practice.
- iv. Availability of professional education as a life-long process and mechanisms to advance the education of professionals established by the profession.
- v. The presence within the profession of individuals with varied identities and values forming groupings and coalitions that coalesce into unified segments; known as specialties with specific missions.
- vi. Authority recognised by society and the clientele of the profession.
- vii. Approval of the authority sanctioned by a broader community or society.
- viii. A code of ethics to regulate the relationships between professionals and clients.
- ix. Self-regulation that protects practitioners and supports disciplinary criteria and actions to censure, suspend, or remove code violators.
- x. A professional culture sustained by formal professional associations, such that the membership may develop a biased perspective through their profession's lenses.

The Australian Council of Professions (2014, p.2) defined a profession as a

‘disciplined group of individuals who adhere to ethical standards and uphold themselves to, and are accepted by, the public as possessing special knowledge and skills in a widely recognised body of learning derived from research, education and training at a high level, and who are prepared to exercise this knowledge and these skills in the interest of others’.

The UK Inter-professional Group (UKIPG) (2013, p.1) defined a profession as

“an occupation in which an individual uses an intellectual skill based on an established body of knowledge and practice to provide a specialised service in a defined area, exercising independent judgement in accordance with a code of ethics and in the public interest”.

Tracey (2013) noted that professions were based on scientific and philosophical facts acquired through scholarly endeavour. Individuals who enter a profession do so for reasons that distinguish them from other work or vocations (Koumenta & Humphris, 2011). Professionals understand that their work renders a unique public service with a scientific or philosophical basis and/or body of knowledge that requires an extended period of academic and hands-on preparation. Professions are also based on specialised skills necessary for the professional to perform the public service (Humphris *et al.*, 2011).

Southern Illinois University (2011) proposed that professions have the following common characteristics / attributes:

- i. A systematic body of knowledge.
- ii. Professional authority and credibility.
- iii. Regulation and control of members.
- iv. A professional code of ethics.
- v. A culture of values, norms, and symbols.

Associated with a profession is a great body of special knowledge. Preparation for a profession includes training in applying that knowledge (Akkeren & Tarr, 2014). The standards of a profession are maintained at a high level through the force of organisation or concerted opinion.

Each member of a profession recognises his or her responsibilities to the public over and above responsibilities to clients or to other members of the profession. This matches the earlier views of Bucher & Strauss (1961), who identified the characteristics of a profession as: Professional autonomy; a clearly defined, highly developed, specialised, and theoretical knowledge base; control of training, certification, and licensing of new entrants; self-governing and self-policing authority, especially with regard to professional ethics; and a commitment to public service (Brien, 1998). Casey & Magenau (2002) focused more on status and remuneration in his list of the characteristics of a profession: remuneration, social status, autonomous or authoritative power, and service.

In essence, a profession is an occupation that requires specialised knowledge and intensive academic preparations to which entry is regulated by a representative body (Vambe, 2013). Professions are occupationally related social institutions established and maintained as a means of providing essential services to the individual and the society (Akkeren & Tarr, 2014). The essentials of a profession are:

- i. **Specialised Knowledge:** A profession must have a systematic body of knowledge that can be used for development of professionals. Every professional must make deliberate efforts to acquire expertise in the principles and techniques.
- ii. **Formal Education and Training:** There are number of institutes and universities to impart education and training for a profession. No one can practice a profession without going through a prescribed course.
- iii. **Social Obligations:** Profession is a source of livelihood but professionals are primarily motivated by the desire to serve the society. Their actions are influenced by social norms and values.

- iv. **Code of Conduct:** Members of a profession have to abide by a code of conduct which contains certain rules and regulations, norms of honesty, integrity and special ethics. A code of conduct is enforced by a representative association to ensure self discipline among its members. Any member violating the code of conduct can be punished and his membership can be withdrawn.
- v. **Representative Association:** For the regulation of profession, existence of a representative body is a must (Southern Illinois University, 2011; The Australian Council of Professions, 2014).

Hence, the term 'profession' stands for an occupation which requires some specialised study and training, and the purpose of which is generally to provide skilled services and guidance in place of a definite fee or remuneration ([Machan](#), 2015). A profession as a calling implies acquisition of a form of specialised knowledge, range skills and their application in service of humanity (The United Kingdom (UK) Inter-professional Group (UKIPG), 2015). The doctrine of profession gives rise to professionalism (Brien, 1998; Freidson, 2001; Charles, 2012; Vambe, 2013)

However, professionalism is not a straight forward concept to define ([Machan](#), 2015). In tackling the problem of definition, this study considered what existing professions do, and has thus identified six characteristics of professionals namely:

- i. The professional has skills or expertise proceeding from a broad knowledge base.
- ii. The professional provides a service based on a special relationship with those whom he or she serves. This relationship involves a special attitude of beneficence tempered with integrity. This includes fairness, honesty and a bond based on legal and ethical

- rights and duties authorized by the professional institution and legalised by public esteem.
- iii. To the extent that the public recognises the authority of the professional, he or she has the social function of speaking out on broad matters of public policy and justice, going beyond duties to specific clients.
 - iv. In order to discharge these functions, professionals must be independent of the influence of the state or commerce.
 - v. The professional should be educated rather than trained. This means having a wide cognitive perspective, seeing the place of his or her skills within that perspective and continuing to develop this knowledge and skill within a framework of values.
 - vi. A professional should have legitimised authority. If a profession is to have credibility in the eyes of the good public, it must be orderly recognised as independent, disciplined by its professional association, actively expanding its knowledge base and concerned with the education of its members. If it is widely recognised as satisfying these conditions, then it will possess moral as well as legal legitimacy, and its pronouncements will be listened to with respect (Charles, 2012; Vambe, 2013; [Machan](#), 2015).

It is inherent in the definition of a profession that a code of ethics governs the activities of each profession or professional (Charles, 2012). Such codes require behaviour and practice beyond the personal moral obligations of an individual (MacDonald, 1995). Professional codes of practice defined and demand high standards of behaviour in respect to the services provided to the public and in dealing with professional colleagues. These codes are enforced by the profession and are acknowledged and accepted by the community (The Australian Council of Professions,

2014).Forensic accounting as it is now practiced is associated with the aforementioned characteristics and criteria for defining a profession.

2.4 Forensics in Theoretical Context

Forensics has been defined as the application of science to law (Kendall, 2013). In other words, forensics means suitable for use in the court of law (Bohan, 2010). Pardo (2010:1) defined forensics as “the application of scientific methods to examine the evidences gathered in order to solve queries, thereby helping the legal system to acknowledge the truth”. According to Lyman (2008), forensics is the application of a broad spectrum of sciences to answer questions of interest to a legal system. Thus, the emphasis of forensic investigations is on seeking, extracting and establishing the truth (Walls, 1974; Kassina, Drorb & Kukuckaa, 2013). Truth is sought for its own sake; and those who are engaged upon the quest for anything for its own sake are not interested in other things (Hall, 1968; Pardo, 2010).

Two central questions about forensics, as stated in Kendall (2013), are:

- i. What is the aim of forensics?
- ii. How ought one to interpret the result of forensics?

To these, the forensic realists claimed that forensics aimed at truth and that one ought to regard forensic theories as true, approximately true, or likely true (Walls, 1974; Pardo, 2010; Kassina, Drorb & Kukuckaa, 2013; Kendall, 2013). Conversely, forensic anti-realists or instrumentalists argued that forensics did not aim (or at least did not succeed) at truth and that forensic theories should not be regarded as true (Neufeld & Garrett, 2009; Ngex, 2010; Edwards, 2011). Some anti-realists claimed that forensic theories aimed at being instrumentally useful and should only be regarded as useful, but not true, descriptions of the world (Neufeld & Garrett, 2009; Strutin, 2009). More radical anti-realists (Misinger & Sacks, 2006, p.5) had argued that forensic theories

did not even succeed at this goal, and that later, more accurate forensic theories are not '*typically approximately true*' as contended.

Realists often pointed to the success of recent forensic theories as evidence for the truth (or near truth) of the current theories (Pardo, 2010; Kassina et al., 2013; Kendall, 2013). Antirealists pointed to either the history of forensics, epistemic morals, the success of false modeling assumptions, or widely termed postmodern criticisms of objectivity as evidence against forensic realisms (Neufeld & Garrett, 2009; Ngex, 2010; Edwards, 2011). Some antirealists attempted to explain the success of the theories without reference to truth while others denied that the current forensic theories were successful at all (Polick, 2008).

In this regard, Kendall (2013, p.17) reported that "the traditional role of forensics is to provide indisputable evidence at trials, thereby assisting the court to establish the truth". The practice deals with the study of physical evidence in a modern legal context (Kassina et al., 2013). Thus, such evidence is expected to be empirical and properly documented in accordance with the International Quality Assurance Accreditation Standards (IQAAS); such as is applicable to the particular field of the forensic inquiry (Gauch & Blind, 2014). The function of forensics is primarily the use of procedures and methods of basic scientific techniques for various analysis of evidence associated with crimes (Zysman, 2009). On this strength, Kendall (2013, p.21) noted that "the concept of forensics is related to the notion of authentication". That is, to determine whether an evidence is what it purports to be, or is alleged to (Polick, 2008). To this end, Hall (2013:8) concluded that "poor quality activities at any stage of the process will lead to the destruction, contamination or failure to recover or reliably analyse traces of valuable evidence". This in turn will lead to failed investigations, prosecutions and even miscarriages of justice (Ribadu, 2006; Akpan, 2010).

Krige & Dominique (2003) found that the way in which forensics was conducted was distinct from, and complementary to, other modes by which humans investigated and created. The authors positioned that the methods of forensics have a long history of successfully building useful and trustworthy knowledge and filling gaps while also correcting past errors. Krige & Dominique (2003), therefore, concluded that “the premium that forensics places on precision, objectivity, critical thinking, careful observation and practice, repeatability, uncertainty management, and peer review enables the reliable collection, measurement, and interpretation of clues in order to produce knowledge” (p. 46).

Misinger & Sacks (2006) argued that “the proper function of forensic science is to extract the truth” (p.16). According to Saks et al. (2001), as it is practiced today, forensics does not extract the truth reliably. Forensics expert evidence that is erroneous (honest mistakes) and fraudulent (deliberate misrepresentation) has been found to be one of the major causes, and perhaps the leading cause, of erroneous convictions of innocent persons (Saks & Koehler, 2008). In the wake of DNA exonerations, an extensive literature has developed on the limited reliability of forensic testimony in the courts (Zysman, 2009). Previous studies in this literature have recommended salutary reforms such as independence of forensics practices from law-enforcement agencies (Kendall, 2013); improved documentation of forensic work (Pardo, 2010); double-blind proficiency tests (Kassina, Drorb & Kukuckaa, 2013); and the use of evidence line-ups (Neufeld & Garrett, 2009). These reforms, however, will have limited effect without further reform in the institutional structure of forensic work (Chatman, 2009; Chakravarty, 2010).

The institutional structure of forensic work is an important source of forensic error, insufficiency and, sometimes, malfeasance (Edwards, 2011). The forensic worker has an effective monopoly on the analysis of the evidence presented to him, and is therefore in a

position to infer from the evidence what he pleases (Ngex, 2010). Past calls for reform seem to have neglected both the role of industrial organisation in discouraging high-quality forensics and the importance of competition in the supply of forensic services (Neufeld & Garrett, 2009; Bohan, 2010). The studies proposed breaking up the forensic worker's monopoly by instituting 'competitive self-regulation'. Competitive self-regulation would put forensics into a competition similar to the competition characterising pure science. Each forensic discipline becomes a check on every other forensics (Bohan, 2010). In Edwards' (2011) view, this system of checks and balances would reduce the errors committed by forensic scientists. It would even work to reduce the conscious and unconscious abuses committed by some forensic workers.

Forensics is a social process in which the truth emerges from a rule-governed competitive process (Koppl & Butos, 2003). It is a competitive process in which knowledge is public, the idiosyncrasies of individual researchers are checked by the results of other workers, and results are subject to criticism, review, and reproduction (Neufeld & Garrett, 2009). As it is practiced today, forensics needlessly departs from this model (Pardo, 2010). Forensic analysis often depends very much on the personal qualities of each individual forensic practitioner. Idiosyncrasies of individual forensic expert may determine the final result, and there is limited criticism, review, and reproduction (Bohan, 2010). A competitive process of self-regulation is constantly at work eliminating errors in pure science. No such process is at work in forensic science. Pure science is self-regulating, forensic science is not (Saks, & Koehler, 2008).

The differences between pure science and forensics concern institutional structure (Ngex, 2010). Forensics is sometimes unreliable because the larger environment of knowledge seeking is not appropriately structured (DeForest, Gaennslen & Lee, 1983; Gospel & Lewis,

2011). Most forensic practitioners are skillful and diligent practitioners of their trade (Hart, 2004; Gospel & Lewis, 2011). They find themselves in an environment, however, that does not encourage the sort of institutional self-criticism characterising scientific applications (Cooley & Oberfield, 2007). They are in an environment that can induce unconscious bias and even give the unscrupulous an incentive to lie. If competitive self-regulation has value, it is because it provides a better institutional structure for truth seeking and knowledge production (Chisum & Turvey, 2006).

However, Cooley & Oberfield (2007, p.6) reasoned that “in forensics, the production and presentation of evidence should depend first on establishing on whom the [burden of proof](#) lays”. Earlier, Akpan (2010) had found that “there are two primary burden-of-proof considerations in law”. The first is on whom the burden rests. In many courts, especially in the Nigerian adversarial legal system, the burden of proof is placed on the investigator/prosecutor (Ekundayo, 1993; Ngex, 2010). The second consideration is the degree of certitude the proof must reach, depending on both the standard and quality of the evidence (Oke, 1994; Osipitan, 2009). These degrees are different for criminal and civil cases. The former requiring evidence beyond a [reasonable doubt](#), while the later considers only what most likely happened (Akindede, 2009). The decision maker, often a court judge, decides whether the burden of proof has been fulfilled (Stephen, 2008; Osipitan, 2009).

Kate (2000) positioned that presenting evidence before the court differs from the gathering of evidence in important ways. Gathering evidence may take many forms; presenting evidence that tend to prove or disprove the point at issue is strictly governed by rules (Walls, 1974; Hart, 2004; Ellen, 2005). Failure to follow these rules leads to a number of consequences (Cooley & Oberfield, 2007). In Nigeria, for instance, in the economic and financial crime cases, certain

policies allow (or require) evidence to be excluded from consideration based either on [indicia](#) relating to reliability, or broader social concerns (Akpan, 2010). Testimony (which tells) and exhibits (which show) are the two main categories of evidence presented at a trial or hearing (Krige & Dominique, 2003; Handdad, 2007).

2.5 Selection of Theories for the Study

Reasoning from the positivistic perspectives, a good theory must have a central concept that can encompass the universe to be explained, connecting all its elements (Watts & Zimmerman, 1986; Vogel, 2012). On this basis, three theoretical perspectives, (Public Interest Theory, Theory of Profession, and Theory of Professional Regulation), informed this study. The theories belong to the family of Theories of Economic Regulation (Majone, 1996; Ignou, 2012; [Machan](#), 2015). This is so, because the three theoretical perspectives provide a set of factors affecting the initiation, enforcement, and implementation of quality standards in the organisational / professional settings (Clarke, Dean & Oliver, 2013). Besides, the theories are preferred to others because they all meet the four scientific and statistical generally accepted criteria as specified by Scott (1995), Scott (2004), Bohman (2005), and Corradetti (2011).

In essence, the three theories:

- i. make predictions rather than rely entirely on after-the-fact explanations;
- ii. predict one outcome rather than several contradictory outcomes;
- iii. make a specific prediction, rather than an extremely vague one; and
- iv. make a prediction that can be verified through objective observation (Corradetti, 2011; Clarke, & Oliver, 2013; [Machan](#), 2015).

On the strength of the above explanation, testing the three theories will no longer require further measurement development and sampling decisions in this study.

2.5.1 Public Interest Theory

Public interest theory is part of economic regulation theory first developed by Arthur Cecil Pigou (1877 – 1959) in the year 1932. The theory holds that regulation is supplied in response to the demand of the public for the correction of inefficient or inequitable market practices. The public interest theory assumes that the economic markets are very fragile and they have a tendency to operate inefficiently and in favour of individual's concern, while ignoring the importance of the society as a whole. To direct and monitor the economic markets, therefore, intervention of government is required (Baldwin & Cave, 1999). Pigou (1932, p.17) argued that "regulations are prepared in the public interest when they are demanded by the public for correcting inefficient practices". Regulations are understood to do good to the whole society rather than any individual's interest. The regulatory body is to serve the interest of the society as a whole rather than making laws in favour of the regulators.

The subject of regulation is wide ranging and is important (Misham, 1969). There are many viewpoints as to the purpose, the need for and the operation of regulation. Not only can regulation be viewed as market failure, it can also be seen as 'theory failure' (Clarke & Oliver, 2013). In accounting, the profession strenuously pursued a search for an underlying theoretical structure through generally accepted accounting principles (GAAP), standards and a conceptual framework (Pitt, 2012). Had the profession been successful there would have been less need for the intervention of the government in regulating the discipline. So, in this sense, it is the failure of those in the discipline of accounting to provide a theory that has necessitated the intervention;

or at least to the extent that there has been. Economic purists argue that there should be no need for regulation as the market can operate to ensure the fair distribution of resources (Peltzman, 2011). However, there is a paradox in the free market argument as history has shown that considerable regulation has been necessary to ensure that the market can operate reasonably efficiently (Clarke & Oliver, 2013).

In legal and economic literature, there is no fixed definition of the term 'regulation' (Peltzman, 2011). Some researchers devote considerable attention to the various definitions of regulation, and attempt through systematisation to make the term amenable to further analysis (Abbott, 1988; Baker, 2005). Other researchers, however, entirely abstain from a further definition of regulation (Joskow & Noll, 1981; Baldwin & Cave, 1999). In order to delineate the subject, a further definition of regulation is nevertheless necessary. This study adopts the definition of regulation as offered by (Hertog, 1999, p.1), '..... the employment of legal instruments for the implementation of social-economic policy objectives'. A characteristic of legal instruments is that individuals or organisations can be compelled by government to comply with prescribed behaviour under penalty of sanctions (Baldwin & Cave, 1999). Corporations can be forced, for example, to observe certain prices, to supply certain goods, to stay out of certain markets, to apply particular techniques in the production or service process or to pay the legal minimum wage (Baker, 2005). Sanctions can include fines, the publicising of violations, imprisonment, an order to make specific arrangements, an injunction against withholding certain actions, or closing down the business (Clarke & Oliver, 2013).

A distinction is often made between economic and social regulation (Peltzman, 2011). Economic regulation consists of two types of regulations: structural regulation and conduct regulation (Kay & Vickers, 1990). 'Structural regulation' is used for regulating market structure ([Machan, 2015](#)).

Examples are restrictions on entry and exit and rules against individuals supplying professional services in the absence of recognised qualifications. ‘Conduct regulation’ is used for regulating behaviour in the market (Tracey, 2013). Examples are price control, rules against advertising and minimum quality standards. Economic regulation is mainly exercised on natural monopolies and market structures with limited or excessive competition ([Machan. 2015](#)).

Social regulation comprises regulation in the area of the environment, labour conditions (occupational health and safety), consumer protection and labour (equal opportunities and so on) (Peltzman, 2011). Instruments applied include regulation dealing with the discharge of environmentally harmful substances, safety regulations in factories and workplaces, the obligation to include information on the packaging of goods or on labels, the prohibition of the supply of certain goods or services unless in the possession of a permit and banning discrimination on race, skin color, religion, sex, or nationality in the recruitment of personnel (Peltzman, 2011; Tracey, 2013; [Machan. 2015](#)).

In the theories of economic regulation, a distinction can be made between positive and normative theories. The positive variant is directed to the economic explanation of regulation and deriving the consequences of regulation (Clarke & Oliver, 2013). The normative variant investigates which type of regulation is the most efficient. The latter variant is called normative because there is usually an implicit assumption that efficient regulation would also be desirable; for the distinction between positive and normative theories (Pigou, 1932; Clarke & Oliver, 2013). The focus of this study is to discuss the positive theories directed to the economic and professional explanation of regulation. The normative theory is not discussed further in this study

Views on Regulation

While many would see regulation as concerning “sustained and focused control exercised by a public agency over activities valued by a community” (Allen & van der Velden, 2007, p.3); there are other viewpoints which suggest that: Regulation can be seen as a specific set of commands such as those contained in the Company and Allied Matters Act (CAMA) 1990 (as amended) as to the appointment of directors of a company. It may be seen as deliberate state influence which would encompass the first viewpoint and extend well beyond it. For example, the whole body of corporations law which directs the establishment, management and winding up of companies. Or it may be viewed in even broader terms to include all forms of social control and influence. This would include not only the corporations legislative requirements but other rules and directions, such as professional accounting standards and stock exchange requirements (Oberholzer, 2002; Kleiner, 2013). Regulation should not be perceived purely in “negative” terms because it also facilitates and enables activities (Kleiner & Krueger, 2010).

Reasons for Regulation

Regulation is a form of government intervention designed to influence or shape the behaviour of organisations and individuals in the private sector (Akkeren & Tarr, 2014). Gaffikin (2005) argued that there were a number of reasons for regulation. A regulation may be used to prescribe or proscribe conduct (‘command-and-control’ regulation), to calibrate incentives (‘incentive’ regulation), or to change preferences (‘preferences shaping’ regulation) (Akkeren & Tarr, 2014; Kleiner & Krueger, 2010). In professional organisations it can also be extended to monitoring and enforcement of rules as established by primary and/or delegated legislation. In this form, it is generally a written instrument containing rules having the force of legislative law (as opposed to

natural law) (Ezzamel, Xiao, & Pan, 2007). Other forms of regulation are self-regulation (Gospel & Lewis, 2011). In general, regulations are written by executive agencies as a way to enforce laws passed by the legislature. Owing to the actual or potential interference in choices, the idea of 'regulation' and most issues related to it tend to be in controversy (Koumenta et al., 2014).

Regulation creates, limits, constrains a right, creates or limits a duty, or allocates a responsibility (Kleiner, 2013). Regulation can take many forms: legal restrictions promulgated by a government authority; contractual obligations that bind many parties; self-regulation by an industry such as through a trade association; social regulation (norms); co-regulation; third-party regulation; certification; accreditation or market regulation (Tenn, 2001; Oberholzer, 2002). In its legal sense regulation can and should be distinguished from primary legislation (by parliament of elected legislative body) on the one hand and judge-made law on the other (Stigler, 1971; Kleiner, 2013).

Regulation mandated by a government attempts to produce outcomes which might not otherwise occur, produce or prevent outcomes in different places to what might otherwise occur, or produce or prevent outcomes in different timescales than would otherwise occur (Oberholzer, 2002; Kleiner, 2006). In this way, regulations can be seen as implementation artifacts of policy statements (Tracey, 2013). Common examples of regulation include controls on market entries, prices, wages, development approvals, pollution effects, employment for certain people in certain industries, standards of production for certain goods, the military forces and services. The economics of imposing or removing regulations relating to markets is analysed in regulatory economics (Forth, Bryson, Humphris, Kleiner, & Koumenta, 2012).

Regulations may create costs as well as benefits and may produce unintended reactivity effects, such as defensive practice. Efficient regulations can be defined as those where total benefits exceed total costs (Kleiner, & Kudrle, 2000; Kleiner, 2013). Public interest theory suggests that government is a response to public demands for government to rectify situations of market failure through imperfect competition, market disequilibria, missing markets (caused by hidden or asymmetric information, high transaction costs, externalities, public goods) or market outcomes that are undesirable for social (Akkeren & Tarr, 2014; [Machan](#), 2015).

According to Koumenta et al. (2014) and ([Machan](#), 2015), this view assumes that:

- i. the market outcome represents a ‘failure’ of some sort, and the market is not capable of fixing the problem itself;
- ii. that the government is capable of fixing that failure so that the optimal efficient outcome will be achieved (given constraints from institutions, technology and information); and
- iii. that the benefits of doing so will outweigh the additional costs created by the intervention (after taking into account administrative costs and any new allocative inefficiencies).

Thus, public interest theory can be said to assume that the regulatory regime will both aim for and achieve economic efficiency. Regulation consists of requirements the government imposes on private organisations and individuals to achieve specific purposes. In professional organisations, these purposes include to ensure:

- i. Quality of service;
- ii. Standards of qualification & practice;
- iii. Register of qualified persons and award of titles; and

- iv. Overseeing conduct, investigating complaints, sanctions (Oberholzer, 2002; Gospel & Lewis, 2011; Akkeren & Tarr, 2014).

Failure to meet regulations can result in fines, orders to cease doing certain things, or, in some cases, even criminal penalties. To this end, economists distinguish between two types of regulation: economic and social.

- i. Economic regulation refers to rules that limit who can enter a business (entry controls) and what prices they may charge. For example, many professionals (lawyers, accountants, beauticians, financial advisers) must have licenses in order to do business; these are examples of entry controls.
- ii. Social regulation refers to the broad category of rules governing how any business or individual carries out its activities, with a view to correcting one or more 'market failures'. A classic way in which the market fails is when firms (or individuals) do not take account of the costs their activities may impose on third parties. Anytime this happens, the activities will be pursued too intensely or in ways that fail to stem harm to third parties. For example, left to its own devices, a manufacturing plant may spew harmful chemicals into the air and water, causing harm to its neighbors. Governments respond to this problem by setting standards for emissions or even by requiring that firms use specific technologies (such as 'scrubbers' for utilities that capture noxious chemicals before steam is released into the air) (Ezzamel et al., 2007; Akkeren & Tarr, 2014).

Economic regulation, in particular, has come into focus during the past decade, mainly because such regulation has been associated with falling quality standards in many industrialised

countries (Kleiner & Kudrle, 2000; Tenn, 2001; Akkeren & Tarr, 2014). On the other hand, social regulation by government also is being discussed when drug abuse legislation, censorship of pornography, and similar matters are considered. Most types of government regulation involve the setting up and enforcement of standards for conducting legitimate activities.

During the past few years, the case for such regulation has been spelled out in fairly clear and general terms (Koumenta, 2011; Kleiner, 2013; Tracey, 2013; Koumenta et al., 2014):

- i. Creature of the Government:** This argument for government regulation of organisations, made prominent by Ralph Nader and others, holds that because corporations are chartered by government, they should, therefore, be regulated. In this view, the government charter actually ‘creates’ the corporation, and government should regulate the behaviour of its ‘dependent’, the corporation.
- ii. Market Failure:** The second moral argument for government regulation of private entities recognises that a free market usually enables people do the best that can be done. On the one hand, free markets encourage maximum efficiency. On the other hand, free markets foster responsible conduct, and encourage the production of goods and services which are of value to members of the community.

Advocates of the ‘market failure’ approach contend that there are some serious exceptions (Tenn, 2001; [Machan](#), 2015). They assert, following John Stuart Mill, that the free market often fails to achieve maximum efficiency; that it sometimes wastes resources. They often cite the example of utility services. If there were free competition among utilities, ‘market failure’ advocates hold, there would be much duplication, different companies putting up

telephone and electric poles, waterlines, side by side, which would be a waste. So it is argued that it is important for government to restrict competition and thus correct market failures.

The second type of market failure, as Kleiner (2013) identified is that markets misjudge what is important. To wit, markets often do not respond to real needs, for medical care, libraries, safety measures at work, health provisions, fairness in employment and commerce, and so on. Governments should, therefore, remedy market failures with regulatory measures. Such measures include laws, quality standards, safety standards, health codes, which have as their expressed aim the improvement of society (Oberholzer, 2002; Gospel & Lewis, 2011).

- iii. **Rights Protection:** Another 'justification' for government regulation of business is the belief that government is established to protect citizens' rights, and that there are many rights which go unprotected in a free market.
- iv. **Judicial Inefficiency:** This argument for regulation rests on a belief in the considerable power of the free market to remedy mistakes in most circumstances. However, advocates of regulation point to one area where this power seems to be ineffective, poor quality service delivery.

The study of formal (legal and/or official) and informal (extra-legal and/or unofficial) regulation constitutes one of the central concerns of the sociology of law (Kleiner, 2013).

2.5.2 Theory of Profession

Throughout the 20th Century, a tradition of theory of professions has been developed and used within the social sciences, primarily in sociology, but also in management sciences and forensics (Allen & van der Velden, 2007). This development is understood in the context of the increasing

specialisation in working life combined with the acceleration of institutionalised expertise in society. The Theory of profession focuses on the relations between occupational groups, theoretical knowledge and the possibilities for practitioners to exclusively apply such knowledge within their occupational practice (Ayres & Braithwaite, 1992). Applying such a perspective to the field of forensic accounting, demonstrates that the traditional focus at the two levels of individual and workplace is not always sufficient for a study of occupational practices. Instead, workplaces and their concomitant occupational groups should also be related at a societal level. The workplace is power relations, and occupational identities.

Until the 1970's theorists of professions held often a strong interest in comparing the traits of occupational groups in order to distinguish professions from other occupational groups (MacDonald, 1995). This direction has been characterised as *essentialistic* as it presupposes a certain essence within these professions (Adams, 2010). Some of the distinguishing traits are that professional practice should be conducted with a starting-point in systematic theory, that the intended occupational group is recognised as an authority within its domain, that society sanctions the enterprise in question, that the practitioners work in accordance with ethical codes and that the professional body controls its own training program (Gospel & Lewis, 2011). The essentialistic approach has been criticised, among other things, for its view of society as rationalistic and free from conflict, where professionals work altruistically without group interests, solely for the benefit of their clients and thereby for the best interest of society (MacDonald, 1995).

Since the 1970's, research on professions has taken a new focus, namely to study the professional aspirations among occupational groups, or in other words, their *professional project*

(Larson, 1977). Defining professions in order to distinguish them from other occupational groups thereby becomes less significant. Instead, interest has been directed towards studying the strategies used by different groups to achieve a certain social status as a “profession”. The essentialistic traits have come to be regarded as ambitions held by less established professions, such as nurses, social workers and librarians, rather than manifestations of a professional core. Within such projects, considerable symbolic significance is attributed to the theoretical knowledge of the occupational groups in question (Collins, 1979; Ayres & Braithwaite, 1992).

Acknowledged as a leading researcher on the theory of profession, Abbott (1988) suggested three potential rights for a profession to claim jurisdiction: within the legal framework, through public opinion, and in the workplace. He defined a profession’s social structure as including groups, controls, and worksites that work cohesively to create an improved professional model. This structure influences professions in the following ways:

- i. The more organised a profession, the more effective the claim of jurisdiction.
- ii. Organisation into a single, identifiable association is a pre-requisite to any public/legal claim of jurisdiction.
- iii. Level of formality of organisational structure may provide advantage/flexibility in workplace competition.
- iv. Highly organised, resilient internal structures (Gaffikin, 2009).

Fournier (1999), in describing the profession of accounting, presents a model of professionalism as a disciplinary logic that includes criteria of legitimacy, public good, social welfare, as well as professional competence based on knowledge, conduct and control. The author added that “to be a professional requires appropriate conduct as well as the ability to gain and retain a body of knowledge on a subject” (p.13). The theory of profession provides an analytical lens with which

to understand the characteristics, attributes and structure of the forensic accounting profession in Nigeria. The framework includes characteristics that previous research has identified explains how membership to a profession is achieved by stakeholders.

In the forensic accounting context, the theory of profession is described as the power and reputation granted by society to the profession in terms of protecting public interest where professionals acquire a body of knowledge, which is connected to the major needs and values of the social and forensic accounting system (Pollock & Amernic, 1981). Professions are expected to commit their services to the interest of the public rather than the interests of their clients or self-interest (Pollock & Amernic, 1981). Therefore, forensic accounting professionals are regarded as a mechanism to protect public interest as they are required to act above and beyond material incentives (Larson, 1977). In the context of this study, the theory of profession provides a useful framework for identifying the functions and attributes of the profession (Canning & O'Dwyer, 2001), which is consistent with the necessary requirements and qualifications to work in the field of forensic accounting.

Canning & Dwyer (2001) presented the theory of profession framework with five attributes that contributed to accounting 'professionalism', and ultimately, the protection of public interest.

These attributes are:

- i. test of competence,
- ii. further study and relevant training,
- iii. a register of qualified members,
- iv. enforcement of a high standard of professional conduct, and
- v. organisation within a specific occupation.

Testing the competence of members is a basic element of the theory, as it requires members of the profession to have a basic educational background, and also high-level technical skills (Gaffikin, 2009). Ongoing development, including study and further training, is also suggested as very important for a professionals' career development as this may help to enhance a forensic accountants' ability to perform various services (Modugu & Anyaduba, 2013). To achieve this goal, DiGabriele (2009, p.23) posited that "members should form an organisation that controls entry into the profession with members determining the specialised knowledge that is necessary". In agreement, Canning & O'Dwyer (2001) suggested that registering qualified members would be a useful way to control entry into the profession to ensure that members meet the various standards required.

Protecting public interest is also an important aspect of the theory. For example, Maurice (1996:9) argued that "it is essential for the accounting profession to establish ethical codes along with a strict, accountable and transparent disciplinary process to implement them if the accounting profession intends to achieve public recognition and trust". To some extent, therefore, the integrity of the profession relies on the effectiveness of implementing these codes (Majone, 1996). To protect public interest, accountability and transparency were two crucial indicators, as the general public could assess whether the professions acted in the public interest through these two indicators (Gray et al., 1997; Canning & O'Dwyer 2001). Adding to the complexity of identifying what professionalising forensic accounting should include, by suggesting that in addition to formal qualifications and training programmes, moral and ethical values should also be a requirement (Canning & O'Dwyer, 2001; Candilis, 2009). Candilis (2009) maintained that honesty and integrity needed to be part of the broader definition of a

forensic accounting professional, emphasising the importance of forensic accountants having these attributes.

The theory of profession noted three attributes of a profession: body of knowledge, control of entry, and code of ethics will be used as the benchmarks to assess the forensic accounting profession in Nigeria (Palmer, 1977; Pagliero, 2011; Peltzman, 2011). Each of these characteristics and their attributes is explained below.

i. Body of Knowledge: A body of knowledge includes formal higher institution qualifications, skills, training and experience. It is argued that it is necessary for a professional to acquire the knowledge base for serving public interests. However, Pagliero (2011) suggested that “the capability of fulfilling professionals’ responsibilities to the public does not merely depend on the level of knowledge they obtained, but also on the standard of education they acquired”. He added that the development of the accounting profession to date has resulted from the interaction between higher institutions and relevant professional institutes, as university education was considered a high-level education (Peltzman, 2011). Skills, training and experience are also expected to be acquired by professional forensic accountants for current and future practice (Gaffikin, 2009). Relevant experience accumulated, meaningful skills achieved and ongoing training received could help strengthen the profession as forensic accountants would be required to update their expertise, much like the continuing medical education (CME) points systems used in the medical industry (Devonport, 2009).

ii. Control of Entry: Professions are distinguished from trade unions because they use organisations to take control over entry (Devonport, 2009). Normally, a robust qualifying examination system will be used to test the competence of persons who wish to enter into a profession (Devonport, 2009). In addition, it is argued that a register of qualified members

should be required by the profession (Canning & O'Dwyer, 2001). If a forensic accountant passes a qualifying examination, he/she can then register his/her qualification with the profession, and, in doing so, the professional organisation will know the details and number of members and provide relevant ongoing training for their members (Devonport, 2009).

iii. Code of Ethics: A profession must have strong instructions for its members to follow, as this can help to ensure that members can fulfil the expectations from society (Cohen & Pant, 1991). It is posited that it is necessary to design a separate ethical course for forensic accounting academic programme to enhance ethical education by delivering appropriate ethical values to potential members of the profession (Cohen & Pant, 1991). Gaffikin (2009) adds that each member of the profession should adhere to a code of conduct as the ethical codes will properly reflect the activities of members in respect to the expectations of the public. Ethical codes can also help to balance the interest between clients, forensic accountants and the entire community (Gaffikin, 2009). Therefore, ethical code of conduct is recognised as the third characteristic for forensic accountants to be recognised as professionals as the code will guide the behaviour of members to deliver professional services in an appropriate manner and, as Fournier (1999) suggests, help to build the subjectivity of the professional practitioner. The theory of profession, therefore, serves as a background discussion to the compliance theory.

2.5.3 Theory of Professional Regulation

Over the years there have been many arguments and debates over the necessity for professional regulation (Abbott, 1988). Those who believe in the efficacy of markets argue that regulation is not necessary as market forces will operate to best serve society and optimise the allocation of resources. However, there are many who point out that markets do not always operate in the best

interests of societies so some form of intervention in the form of regulation is necessary (Tracey, 2013).

In Gaffikin's (2005) account, the regulation of accounting profession became an issue, especially after the economic crash of the 1920-30s which, amongst other things, led to the search for accounting principles and theory described. A major objective of accounting is to provide information to interested parties who may not have access to complete (or the necessary) information to make economic decisions. This category of information users are at an information disadvantage. so there is information asymmetry. This information asymmetry is often used to justify the need for accounting regulation. However, the regulation extends well beyond the information to the preparers of information. That is, the professional competence of the accountants or auditors, and generally believed to be the most able to provide and/or supervise the provision of financial information.

Accounting and accountants are now subject to wide range of forms of regulation (Grippio & Ibex, 2003). There are laws governing the operation of corporations many of which involve the disclosure of financial information. In addition, there are laws affecting the creation and operation of professional associations, which, in turn impose regulations on their members (Boone, 2012). Regulations, therefore, are very much part of modern everyday life. However, there is disagreement on the extent to which regulation should intervene in the 'free' exchange of goods and ideas (Ernest, 1957). For example, a believer in a strong form of market efficiency would contend that regulation of securities markets is unnecessary as the market is always instantly informed of all relevant information. However, most people would agree that there are few, if any, instances of strongly efficient markets so some level of regulation of the flow of

information concerning the operations of securities (and other) markets is necessary (Grippio & Ibex, 2003).

The above discussion of regulation is, however, simplified as any debate on the extent to which government should be involved in the day to day operation of society is extremely complex and has been the subject of debate by many scholars (and others) for most of our history. Underlying regulation are theories of the state, politics and ideology.

Theorising Professional Regulation

Throughout history, there have been two main approaches to professional regulation; the European, and that of the United States of America (USA) (Abbott, 1988; Koumenta et al., 2014). Each of the two main approaches is based on a different philosophy (perhaps more accurately different ideologies) of the need for regulation. In the USA, at least since 1887, regulation has been achieved through independent boards and/or commissions charged to monitor and enforce regulation. There is an implicit belief in the functioning of the market. Consequently, ownership is left in private hands and “is interfered with only in specific cases of market failure” (Ezzamel et al., 2007, p.7).

On the other hand, in Europe up until the Second World War there was a suspicion and even hostility to the idea of the market solving all problems (Abbott, 1988; Tracey, 2013). Consequently, public ownership was the main mode of economic regulation, industries were nationalised. The resultant public ownership of industries “was supposed to give the state the power to impose a planned structure on the economy and to protect the public interest against powerful private interests” (Majone, 1996. P.11). However, the nationalisation of industries was designed not only to eliminate political power and the economic inefficiency of private

monopolies but also to stimulate economic development. However, in the last fifty years, for a variety of reasons, attitudes in Europe have shifted more to the US approach, public ownership as a mode of regulation was seen to have failed (Akkeren & Tarr, 2014).

Initially the main advantage claimed for regulation was the protection of the public interest (Abbott, 1988). This applied in both modes of regulation, statutory regulation or public ownership. Regulation was believed to protect against market failure (Akkeren & Tarr, 2014). Markets 'failed' when they were not economically efficient. The notion of efficiency was formalised by an Italian economist and sociologist, Vilfredo Federico Damaso Pareto (15 July, 1848 – 19 August, 1923), after which the concept is named. Pareto efficiency (sometime wrongly referred to as Pareto optimality) is used by economists to define the efficient organisation of the economy. Pareto efficiency refers to the allocation of resources such that someone can be made better off while no one else is made worse off (Baker, 2005). Hence there has been an efficient means of production and distribution of resources. Anytime this does not happen, there has been market failure (Akkeren & Tarr, 2014). This notion underlies neo-classical economics and is an important consideration in understanding the notion of economic regulation which is the topic of consideration here (Koumenta et al., 2014).

Accounting Profession and Regulation

For most of the twentieth century, the accounting profession sought to maintain a regime of self-regulation (Harris, 2012). Accounting professional bodies worked hard to avoid the imposition of regulation on the discipline. For this reason the professional bodies have attempted to develop, first GAAP; and then a conceptual framework that would serve as the basis of an accounting theory. Most of the developments took place in the United States of America (USA) and United

Kingdom (UK). That is, confidence was maintained in the operation of the market with regulation seen as necessary to provide rules to correct the slight imperfections in the workings of the market (Heitger & Heitger, 2008).

There is a paradox in that the principles, standards and other associated factors were viewed by many as necessary for the development of an accounting theory yet accounting practice was seen as only needing 'minor corrections' to be able to work efficiently (in the market) (Hopwood, Leiner & Young, 2008). The search for GAAP and a theoretical framework has been a struggle for the discipline and its members. Widely differing viewpoints on the necessity and form of regulation have resulted in considerable tensions. The involvement of accounting and accountants in spectacular corporate collapses and major case of business fraud has ensured the need for accounting regulation (Italia, 2012). Thus, there has been a public interest concern that has created the regulation. That is, pressure from various sections of society has demanded regulation.

This was similar to what happened in Nigeria, when the Government (regulation) created the Securities and Exchange Commission (SEC). The background to this was the economic depression and more particularly the stock market crash which hurt many people (Uche, 2007; Uche, 2010). A first reaction would be to suggest that the regulation was a result of "public pressure" and hence it was a result of the public interest. However, as Tinker (1994) has shown there are diametrically opposite interpretations of this event. Benston (1989) adopts a free market, economic approach and argues that the legislation damaged capitalism (investment) and should be repealed (to permit the free operation of the market). His argument adopts a group interest interpretation as he attributes the "responsibility for the continuance of securities legislation to self-serving journalists, academics, lobbyists, and government officials" (Benston,

1989, p. 67). He believes the legislation should have been repealed in the (private) interests of capitalism. On the other hand Tenn (2001) argued that the legislation served to “protect” capitalism. They employ a public interest perspective. They argued that there was considerable public pressure for the legislation which was “essential to the preservation and reproduction of capitalist social relations” (Tenn, 2001, p.66), that is, the growth in public investing in corporations.

The heated debate between the SEC and the accounting professional bodies continued throughout the rest of the twentieth century and it raises questions about the appropriateness of self-regulation (Peltzman, 2011). There are specific problems in the discipline of accounting and they concern the issue of independence. There are many interrelated concerns in respect of independence. Initially accounting firms earned most of their income from fees for auditing. The first concern is that the accounting firm is investigating its employer so there is an initial conflict of interests. The accounting professional bodies through their agencies are supposed to ensure that the possible conflict of interests between auditor and client does not arise; that the highest standards of professionalism are maintained. The professional body comprises members of the accounting firms whose work is being monitored and regulated by the professional bodies. Another potential conflict of interests which is made acute if the accounting firm has any power over the professional body. This has clearly been shown to be the case in many instances; the big accounting firms influenced the professional (private) regulators (Pitt, 2012). Many of the problems associated with the conflicts of interest have come to light with some of the corporate failures early this century (Peltzman, 2011).

In view of the above analogy, to serve the public interest, the International Federation of Accountants’ (IFAC) vision is to continue to strengthen the worldwide accountancy profession

and contribute to the development of strong international economies by establishing and promoting adherence to high-quality professional standards, furthering the international convergence of such standards and speaking out on public interest issues where the profession's expertise is most relevant. High quality performance by professional accountants benefits the economy and society by contributing to the efficient allocation and management of resources in both the private and public sectors, and to the operation of financial and capital markets, and through these to the production of goods and services. In doing this accountants help to improve standards of living and overall wealth (IFAC, 2007).

In recent years, how the accounting profession should be regulated has been the subject of much debate, and there has been much consequential change, as professional accountants, their clients, professional accounting bodies and governments seek to ensure that the profession continues to deliver high quality services and contributes to economic growth and development (Dreyer,2014). Recognising the importance of this issue, the IFAC (2007) has formalised in this document its view that professional accounting bodies, acting in the public interest, must play an active role in the regulation of the profession and that professional accounting bodies and governments need to work together to ensure that regulation is effective and efficient.

On the basis of the above discuss, the three theories (Public Interest Theory, Theory of Profession, and Theory of Professional Regulation) have given credence to the emergence of forensic accounting profession as distinctive field of specialisation in both academic and practice. The theories are, therefore, assimilated into the quality standards enforcement mechanisms (QSEM) components (level of institutional regulation, extent of legal framework, and degree of judicial acceptance.). This is informed, because the three theories suggest potential means for the forensic accounting profession to achieve high quality standards in service

delivery. Following the relationship among the three theories, therefore, the current study conceptualised the effects of each of the quality standards enforcement mechanisms (QSEM) components; and the combined (synergy) effect of QSEM components, on the compliance of forensic accounting profession in Nigeria with the requirements of the IQAAS; thereby achieving high quality standards in the profession's service delivery, as depicted in Figure 2.1.

2.6 The Conceptual Model of the Study

Quality standards enforcement mechanisms (QSEM) are a set of interacting variables that ensure the forensic profession complies with the specifications of the IQAAS (IICFIP, 2014; Pratt, 2014). The IQAAS are global best practices designed for the forensic profession to attain global best practices, credibility and acceptance (The American Academy of Forensic Sciences, 2013; The International Standards Organisation (ISO), 2015). Thus, Figure 2.1 presents a framework for analysing both the individual and combined (synergy) effects of the QSEM on the compliance of forensic accounting profession in Nigeria with the IQAAS.

The variables are in two categories: i. The QSEM consist of: Level of institutional regulation; Extent of legal framework; and Degree of judicial acceptance).

ii. Extent compliance of the forensic accounting profession in Nigeria with the IQAAS.

QSEM Components

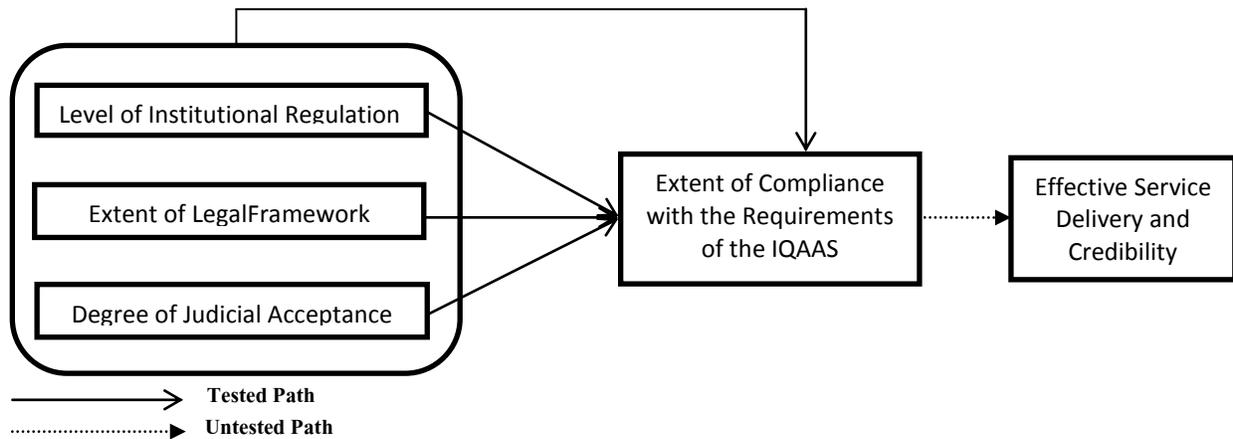


Figure 2.1: The Conceptual Framework of the Effects of the QSEM on Compliance
Source: The Author (2014). Designed for the Current Study

2.6.1 The Proposed Relationships among the Variables in the Conceptual Model

The study proposes and tests a model for ensuring the implementation of quality standards in the forensic accounting profession in Nigeria taking the effects of the influencing factors into account. The influencing factors proposing here are: **Level of Institutional Regulation**; **Extent of Legal Framework**; and **Degree of Judicial Acceptance**; which are the components of QSEM. The hypothesised relationships among the factors influencing quality standards compliance in the forensic accounting are represented in the Figure 2.1. The study's independent variables are therefore QSEM components namely: (i) **Level of Institutional Regulation**; (ii) **Extent of Legal Framework**; and (iii) **Degree of Judicial Acceptance**. Since studies (Oberholzer, 2002; Fouché, 2013; Etienne, 2014) have shown that there is a limit to the level of the effect of each individual component of enforcement mechanisms on quality standards, a combination of the three components is proposed to exert significant influence on quality standards in forensics. Each of the variables is explained as follow:

QSEM Components

A combination of the QSEM components (institutional regulation; statutory legal framework; and judicial acceptance), is referred to as enforcement mechanisms, capable of guaranteeing effective service delivery and credibility in the forensic accounting profession, and judicial admissibility of the profession's work products (Etienne, 2014). Only rarely have compliance theorists proposed conceptualisations for the interactions of these QSEM components. Many frameworks do not even acknowledge that such interactions exist. Others account for the combined influence of different motives merely in a cumulative way (Fouché, 2013; Handdad, 2007). Thus, further to the proposed relationships among the variables in the conceptual model, a discussion of each of the QSEM follows:

i. Level of Institutional Regulation

Regulation refers to a set of authoritative rules accompanied by a mechanism, usually administered by a public agency, for monitoring and promoting compliance with those rules (Etienne, 2014). A broader view of regulation sees government strategies going beyond the creation and enforcement of rules, and includes disclosure requirements. This broader view of regulation recognises that non-government actors/agencies, including corporations, professional organisations, international stakeholders, other community groups and private citizens can be involved in regulation (Powell, 1991). Professional regulation involves the enactment of legal barriers to entry in occupations most commonly in relation to the attainment of some minimum qualification standards. It refers to legally defined requirements or rules that govern entry into occupations and subsequent conduct within them (Kassina, Drorb & Kukuckaa, 2013).

In Nigeria, entry is commonly determined by the attainment of certain minimum qualifications, but can also include satisfying certain work experience and continuous professional education

and development (CPED) requirements, as well as passing competence tests. Based on these characteristics, Forth, Bryson, Humphris, Kleiner & Koumenta (2012) develop two criteria for designing regulation: (i) Whether the government (directly or through an appointed agency) sets legal barriers to entry making it unlawful to practice otherwise. (ii) Whether the attainment of minimum skills standards (whether mandatory or voluntary) is present within the occupational group in question. The resulting typology consists of three forms of legal regulation (licensing, certification and registration) and one form of regulation that has no legal backing or state involvement (accreditation). The remaining occupations are classified as unregulated (Kassina et al, 2013). Based on the degree of restrictiveness to entry, occupational regulation can be depicted as a continuum ranging from unregulated to licensing

Generally, in Nigeria, four types of regulation can be distinguished: licensing, registration, certification, and accreditation. The remaining occupations are classified as unregulated. Forth, Bryson, Humphris, Kleiner & Koumenta, 2012; Koumenta et al, 2014) provide a description of each type of regulation:

- i. Licensing refers to situations where it is unlawful to practice an occupation or carry-out a specified range of activities without meeting certain criteria usually but not exclusively relating to educational attainment.
- ii. Registration applies when individuals have a legal requirement to register their names and address with a relevant regulatory body in order to be allowed to practice the occupation, but does not include stipulations in relation to skill levels or educational requirements.
- iii. Certification allows practitioners to apply to be certified as competent by a relevant regulatory body after certain skills requirements have been met, but it is voluntary in

nature. In some cases, certification provides the practitioner with a legal protection of title, for example Chartered Accountant.

- iv. Accreditation involves practitioners applying for recognition of their competence by a professional body or industry association and it can confer protection of title (for instance, Certified Forensic Accountants).

The above typology of regulation in the Nigeria is also broadly applicable across the world, although one might expect to find variations in terminology and entry requirements to the profession (Tracey, 2013; Leyira & Tony-Obiosulesi, 2014; The Institute of Chartered Accountants of Nigeria, 2014). However, the focus of this discussion is on licensing, the most restrictive form of regulation, as it is this form that has the potential to create the biggest distortions in the operation of the professional engagements.

The key public policy justification for occupational regulation in general, and licensing in particular is its ability to protect consumers and the wider public from incompetent and unscrupulous practitioners (Forth et al., 2012). Through setting minimum skills standards for entry to occupations, occupational licensing is expected to raise average skills levels in the occupation, and as a result consumers are likely to receive a more homogeneous and high quality service while the resulting higher investments in training have the potential to enhance the skills base in the economy (Kuhlmann et al. 2009; Leyira & Tony-Obiosulesi, 2014).

However, professional licensing can create distortions in the operation of the labour and product markets such as higher incomes for practitioners and higher prices for consumer, while lower income consumers may be priced out of the service or opting for even lower quality services (Forth et al., 2012; Kassina et al., 2013). Perhaps, the most under-developed theme in relation to

professional regulation is its impact on geographical mobility (Peltzman, 2011). In theory, professional licensing is likely to act as a deterrent to geographical movements. This is first because under licensing arrangements investments entry to an occupation is more intense (especially in the absence of any harmonisation, commonly referred to as ‘reciprocity’) commonly involving qualification requirements, passing examinations, and in many cases the engagement in continuing professional development activities (an investment that continues throughout ones career) (Stigler, 1971; Hertog, 1999; Peltzman, 2011).

Secondly, in many professional labour markets, practicing the occupation also involves location specific investments such as investments in local reputation, an additional cost that the practitioner has to bear if he or she decides to migrate (Koumenta & Humphris, 2011). Finally, if a worker moves from a highly regulated labour market, and in particular a licensed occupation, to a less regulated one, then there is a possibility that of wage penalty if the wage premium associated with licensing is higher in the home country compared to that in the destination

ii. Extent of Legal Framework Legal framework is system of regulations and the means to enforce them, usually established by a government to regulate a specific activity (Akkeren & Tarr, 2014). It is a system of rules, laws, or agreements that establish the way that an entity operates in society (Kleiner, 2013). Legal framework provides guidance on the background statutes, regulations and policies that support the professional organisations operations (Kassina et al., 2013). The government regulation of professional work by state authorities is typically justified as being in the public interest (Kleiner, 2013). For some, professions serve a higher social purpose by providing services to the community and the public; regulatory legislation establishes a contract between professionals and the state to regulate a field of activity and a

group of practitioners for the benefit of society more generally (Leyira & Tony-Obiosulesi, 2014).

Contrary argument advanced by many others highlighted professionals' pursuit of social closure in order to monopolise rewards and status for practitioners (Ezzamel et al., 2007). While professionals might claim a concern for the public interest, they are really concerned with their own gain (Tracey, 2013). Enabling legal framework or regulatory legislation, granting professionals a privileged place in the market is a prize awarded to organised professional groups with connections and status, who have managed to convince legislators that they are deserving of market privileges (Garrett & Neufeld, 2009). Through legislation, professionals cut off access to professional practice and the rewards that accompany it. Some researchers have occupied a middle ground, arguing that while professions seek power from the state, and aim to use that power for their own ends, they also endeavour to meet higher societal goals, and ultimately serve the public interest (Akkeren & Tarr, 2014).

Underpinning such debates is a broader theoretical question: Why do state actors regulate professions? Sociologists, such as Koumenta, & Humphris (2011), Kleiner (2013), and Tracey (2013), have argued that regulated professions are part of the state system and societal governance structures broadly defined. State actors may regulate professions for a variety reasons; for instance, because they see some gain for themselves and their political agendas (Abbott, 2005), or to enhance social governance and legitimate state functioning (Kleiner, 2013), or to benefit the public and society more generally (Akkeren, & Tarr, 2014). This study explores this latter dimension: do state actors claim to regulate professions; and specifically to establish self-regulating professions; to protect the public interest? If they do, what exactly do they mean by "public interest"? Research on professions and the public interest has revealed considerable

ambiguity surrounding the concept: it has rarely been clearly defined and operationalised in sociological research (Koumenta, & Humphris, 2011), and it has been variably used by professional groups (Baker 2005). Furthermore, conceptualisations of the public interest appear to vary across time and place (Kuhlmann et al. 2009). Although studies have explored definitions of the public interest on theoretical and empirical level (Kleiner, 2013), or as used by professions themselves (Kassina et al., 2013), there is a dearth of research exploring meanings attached to the concept as used by legislators, state actors, and policy advisors.

This section explores the meanings attached to professional regulation and the public interest, primarily from the point of view of state actors and policy advisors (Abbott, 2005). Through a historical look at legislation regulating professions, and debates and discussions around the purpose of that legislation, the justifications for professional self-regulation have long been based on public protection and the public interest (Baker, 2005). Nevertheless, what exactly is in the public's interest; and who is in the best position to determine what is best for the public, has been controversial and has varied over time. Frequently, prior to the 1960s, professional groups' interests and the public interest were seen to coincide, or at least overlap (Akkeren, & Tarr, 2014). Legislation was justified as serving the interests of both the public and professionals. By the late 1960s, however, this had changed, and professional interests were seen as markedly different, even oppositional, to the public interest. Since this time, professional groups' ability to shape legislation, and convince legislators that they know what is best for the public has declined

Legislators appear to be influenced by consumers and business interests, and definitions of what is in the public's best interest increasingly reflect what is best for business (Kleiner, 2013). Early professional legislation established criteria (education and examinations) for entry to practice professions (Adams 2010). Legislators (and professionals seeking regulation) asserted that it

was in the public interest for these service providers to be more knowledgeable and therefore competent (Casey & Magenau, 2002).

Terms such as the 'public interest' are elastic enough that various social actors can use them to justify their actions and rationalise their requests (Gosselin, 2014). Historically, professionals were influential, and were generally successful in advancing claims that they knew what was best for the public, and their regulation benefitted society generally (Leyira & Tony-Obiosulesi, 2014). Professionals were still influential in the 1960s when their rights to self-regulation were curtailed. Although theirs were not the only voices determining what was in the 'public interest,' their voices were heard. Today, their influence is on the decline. Professionals appear to be less influential in defining what is best for the public (Baldwin & Cave, 1999). State actors are listening to business leaders, economists and consumer pressure groups, and are less open to the claims of professional groups (Kassina et al., 2013). Today self-regulating professionals may claim that self-regulation advances the public interest, but it is not clear that anyone is listening.

The legal rules and enforcement vary systematically by legal origins: English (common law), French, German, or Scandinavian (all are code laws) (Card & James, 1990). The common law tradition tends to protect investors more than code law (Baker, 2005). Recent empirical studies in accounting have employed La Porta's legal framework to examine the impact of the legal environment on the properties and quality of financial reporting (Jaggi & Low, 2000; Hung, 2001; Hope, 2003). Some of them, particularly, employ legal system dichotomy, code law versus common law, to examine the association of legal systems with financial disclosure, return-earnings relations, and economic activities (Jaggi and Low, 2000; Guenther and Young, 2000). Most of them confirm the usefulness of such legal frameworks in explaining the phenomena they

examined. However, Ball et al. (2000b) found irregularities with respect to four Asian common law countries. Accounting in these countries, they found, resembled code law countries.

More recent papers focus on the enforcement aspect of the rules (Klapper & Love, 2002; Hope, 2003; Leuz et al., 2003). These studies employ La Porta's broad measures of legal enforcement, such as efficiency of the judicial system, rule of law, corruption, risk of expropriation, likelihood of contract repudiation by the government and index of accounting disclosure. They provide evidence regarding the important role of legal enforcement on forecast accuracy and earnings management (Hope, 2003; Leuz et al., 2003).

In comparison to the legal environment, the accounting regulatory environment directly deals with the quality of financial accounting information. Accounting regulatory environment consist of quality, acceptability, and enforceability of accounting standards. Quality of accounting standards mirrors the quality of published information. Openness of standard setting process and involvement of stakeholders in the process leads to the wide acceptance of the standards. Enforceability of standards ensures proper implementation of the standards. Thus, high quality generally accepted accounting standards that are properly implemented will results in high quality accounting information. That is, a combination of accounting regulatory infrastructure and legal enforcement environment would have more direct influence on the quality of service delivery in the profession.

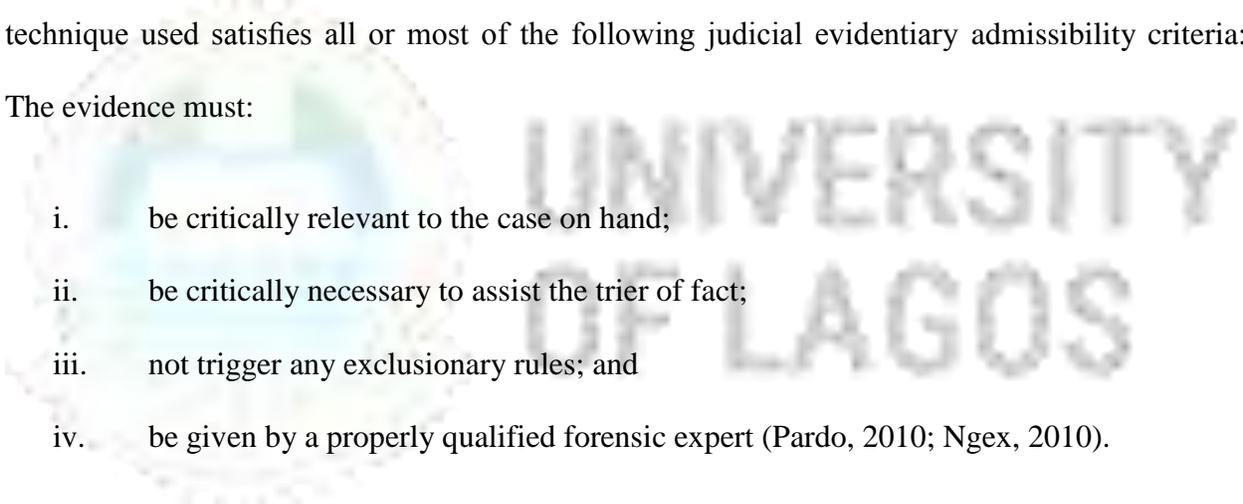
iii. Degree of Judicial Acceptance

Certainty and truth are, by definition, objectives of forensics (Gosselin, 2014). Thus, Salas&Gomez (2010) posited that the tendency among people is to believe that anything produced by a forensic expert was science and therefore certain. The authors, however, argued

that forensic findings were not free of error. They pointed out that forensic evolved, among other things, by questioning and verifying the ideas and theories that were held to be scientifically valid and by continuously searching for new knowledge. Salas & Gomez found that as judicial systems in several countries had evolved over time, they had established minimum criteria for the admissibility of forensic evidence in order to ensure accuracy as far as possible. They concluded that forensics in countries with such requirements had established quality systems as a tool for verifying the standards of the scientific information they provided to courts as evidence.

In order to be admitted in court, the judge as a gatekeeper, must decide whether the forensic technique used satisfies all or most of the following judicial evidentiary admissibility criteria:

The evidence must:

- 
- i. be critically relevant to the case on hand;
 - ii. be critically necessary to assist the trier of fact;
 - iii. not trigger any exclusionary rules; and
 - iv. be given by a properly qualified forensic expert (Pardo, 2010; Ngex, 2010).

However, in assessing the reliability of an expert's testimony, the court will establish whether:

- i. It needs the assistance of the expert;
- ii. the testimony is sufficiently based upon reliable data and facts;
- iii. the testimony is the product of reliable methods;
- iv. the expert witness has applied the principles and methods reliably to the facts of the case (Oke, 1994; Handdad, 2007; Akpan, 2010; Obuah, 2010).

As identified by Oke (1994) Osipitan (2009), Akpan (2010) and Edwards (2011), three criteria are generally used to determine admissibility of forensic evidence. These are whether the:

- i. Court needs the assistance of an expert: expert evidence must deal with something where, without instruction or advice from an expert, the court would be unable to reach a sound conclusion as to the subject matter.
- ii. Expert is competent: the expert witness must have sufficient understanding of the theory and practice of the subject in question.
- iii. Substance of the proposed expert evidence is reliable: "the subject-matter in question must be part of a recognised body of science or experience which is suitably acknowledged as being useful and reliable, and properly capable of reaching and justifying the opinions offered.

According to these rules, scientifically sound techniques with standard procedures demonstrating their testability, accuracy and acceptance in the forensic community are likely to be admitted in the courts of law (Strutin, 2009; Ngex, 2010; Pardo, 2010). On the other hand, non-scientific statements, such as expert testimony lacking scientific foundation, are likely to be rejected.

Leo & Gould (2010), therefore, advised on more transparent procedures and a scientific framework for the logical and testable interpretation of forensic evidence. How the judges assess these criteria is however a bit of a mystery (Handdad, 2007; Kassina, Drorb & Kukuckaa, 2013). The problem is that, in court, forensic facts are disputed by lawyers, not forensic experts. It is however argued that lawyers have insufficient understanding of the basic forensic principles behind the evidence, to adequately test the claims of an expert and make suitable objections (Gaffikin, 2005; Chatman, 2009). Hence, the onus falls on the forensic practitioners to ensure

that their findings have been subjected to the appropriate level of scrutiny before reporting them (Ekundayo, 1993; Oke, 1994; Fagboro & Olofinshola, 2007).

The evaluation of expert evidence can be a bit hit and miss with little obvious identifiable consistency (Gosselin, 2014). Revelations about erroneous expert evidence have helped fuel a renewed interest in the reliability of forensic evidence, and the experts who present it; even previously gold standard ‘sciences’ are being challenged across the world (Misinger & Sacks, 2006; Handdad, 2007; Edwards, 2011).

In the 1993 case of *Daubert v. Merrell Dow Pharmaceutical Inc.*, the US Supreme Court gave a landmark ruling that returned responsibility to judges to determine the admissibility and reliability of the forensic evidence presented in their courts (Strutin, 2009). This new “Daubert standard” suggests the following areas of inquiry:

- i. whether the scientific technique or theory can be (and has been) tested;
- ii. whether the technique or theory has been subject to peer review and publication;
- iii. the technique’s potential rate of error;
- iv. existence and maintenance of standards controlling the technique’s operation; and
- v. whether the scientific theory or method has attracted widespread acceptance within a relevant scientific community (Gaffikin, 2005; Chatman, 2009; Zysman, 2009).

Akpan (2010) reported that Nigerian courts considered these US rulings when determining the admissibility of expert evidence. In general, the forensic experts are now required to *demonstrate* that their evidence can be relied upon, rather than the court accepting the word of the forensic expert in faith. Forensic practitioners are obligated to explain their findings in a manner that a

layperson can comprehend, meaning that exemplary communication skills are a necessity (Ekundayo, 1993).

iv. Regulation Enforcement

A criticism often leveled at self-regulation concerns enforcement. Professional accounting bodies have disciplinary committees designed to enforce the relevant regulations. However, how effective is this process? There are issues of politics and power (Otusanya & Lauwo, 2010). For example, would the accounting bodies have taken action against a major accounting firm if there was evidence of some of its member acting inappropriately? Some suggest had they done so there may have been fewer corporate scandals. A case in point is Akintola William saga in the Cadbury Nigeria Plc, between the years 2002-2005 (Otusanya & Lauwo, 2010).

There are various approaches that have been used to ensure enforcement of regulations. These vary from compliance approaches to deterrence approaches. With the former the aim is to encourage conformity with the regulation; with the latter, prosecutions are used to deter future infractions. The Nigerian approach to accounting standards is said to be rules based so its emphasis is on deterrence (Owolabi, 2012). In other countries such as USA, Australia, and the position adopted by the International Accounting Standards Board, the approach is said to be principles based so the emphasis is to ensure users can theoretically justify use of an accounting technique; does it comply with the intention behind the regulation? However, the issue is not that simple because if a system is rules-based, then it is important to have rules that are sufficiently precise, extensive and understandable (Adeyemi & Fagboro, 2013).

Deterrence approaches are said to be more direct and definite and more effective in eliminating errant conduct. They are “tougher” than compliance approaches and it is therefore more rational

to comply. Compliance approaches are, it is argued more susceptible to capture and a lack of sufficient enforcement resources. On the other hand, compliance proponents argue it is more efficient and less costly because the process of prosecution is costly. It is also more flexible and less confrontational which in turn encourages compliance. Ayres & Braithwaite (2013) have suggested that. The trick of successful regulation is to establish a synergy among the enforcement mechanisms (Kenneth, 2010; Kendall, 2013; Leyira & Tony-Obiosulesi, 2014). .

v. Sources of Standards: Sequel to the above analogy the following are some of the main sources of standards in forensic disciplines (Brien, 1998; Blind, 2002).

Courts: Court rulings can affect existing standards in a couple of different ways. Rulings can cause new standards to develop, alter existing standards, or do away with standards all together. Court rulings can also change how the entire discipline functions (Uche, 2007; Tracey, 2013). This was the case in the court rulings in *Daubert v. United States* (1939) which established that experts are required to testify on any presented evidence in a grand judicial trial. Prior to this case, the *Frye* case had established a 'general acceptance' ruling simply requiring the methods of analysis to have general acceptance within the forensic/scientific community (McDorman, 2010). The *Daubert* case has drastically changed the training required of experts in the field, as testifying prior to this case was a rarity, though it did not change the rule for qualifying a witness to testify as an expert. These qualifications were established in the cases of *Miller v. Brass Rail Tavern, Inc.* and *McMahon v. Young*. The cases stated that the test to be applied when qualifying an expert witness to testify is whether the witness has any reasonable pretension to specialised knowledge on the subject under investigation and whether the opinions he/she will be expressing can be stated with reasonable certainty (Oke, 1994; Omoniyi, 2004; Ngex, 2010; Modugu & Anyaduba, 2013).

Other court rulings affect standards through the formation of crimes and penal codes within the states. These crimes codes cover topics such as the definition of relevant and admissible evidence and what would exclude evidence from court and the frequency with which audits must be conducted. Additionally, government Acts can affect the standards which develop.

Professional Organisations: Forensic practitioners join professional organisation early on in their careers as membership provides guidance in terms of education, training, and experience required to perform the tasks of the field. Every professional organisation is likely to have its own code of ethics which is typically embedded in the association's bylaws (Pagliero, 2011). These standards are therefore incorporated into an agency's Level One Quality Assurance Documentation (QAD). Any viable code of ethics describes which behaviours are considered ethical and which are not as well as a mechanism for the enforcement of these codes. The enforcement mechanism of the codes of ethics forms Level Two Documentation. This mechanism describes procedures for filing complaints, investigating issues, and coming to a resolution (Okoye & Akamobi 2009; Okoye & Akenbor, 2009; Okoye & Jugu, 2010).

Accreditation and Certification Bodies: Expert forensic organisations look to certification and accreditation bodies for guidance on professionalism and objective standards that help judge the quality of forensic practitioners. Furthermore, certification demonstrates a forensic entity's concern for commitment to quality. Certification bodies will specify a minimum level of knowledge, training, and experience required to become certified. These standards are stated in the application process as is a mechanism for the withdrawal of certification from individuals who do not maintain consistent knowledge or engage in unethical conduct. As a result of the ability to withdraw certification based on conduct, a certifying body typically has its own code of ethics. Level One and Level Two documents are, therefore, inherent in a certifying body's

structure often as bylaws and policies. Level Three documents are also present as procedure manuals as it is required that candidates be knowledgeable with the generally accepted analytical and operational standards of a discipline (Akkeren & Tarr, 2014; Allen & van der Velden, 2007).

General Requirements for the Competence of Testing and Calibration Laboratories (ISO Guide 17025-2005), is an international programme on which many accreditation and certification standards are based. Accreditation bodies are, therefore, the ultimate source of Levels One and Two standards for forensic laboratories, off of which forensic bodies base their individual codes and policies. Widely known and respected certification bodies in the forensics field include the Forensic Specialties Accreditation Board (FSAB); the American Society of Crime Laboratory Directors (ASCLD); and the newly formed International Institute of Certified Forensic Investigation Professionals (IICFIP).

Forensic Working Groups: The goal of forensic working groups is to improve discipline practices and to build consensus on varying matters within the community. Specifically these groups issue Level Two quality assurance practices and Level Three analytical and procedural documents. Many working groups have subcommittees dealing with terminology, quality, ethics, and education/training (Hung, 2001; Italia, 2012; Joseph, 2012; Ibijola, 2014).

Compliance Inspections: Compliance inspections play a large role in encouraging the development of standards as well as affecting those standards already developed (The Compliance Indexing Project (2014). Compliance inspections both internal and external ensure that standards and methods developed in the quality assurance manual are actually being carried out in the manner depicted. Internal audits serve as a kind of check-up on employee and system performance and often effect what certifications will be required of employees in the following

year (Duska & Duska, 2006; Etienne, 2014). External audits ensure that the operations of forensic organisation can be understood by a larger audience and evaluate the efficiency of the organization (The Compliance Indexing Project (2014). However, because of the sensitive and technical nature of forensic, external audits can only be carried out by a select few forensic institutes (Mnookin, 2009; Peltzman, 2011; Oyebola, 2012; Etienne, 2014).

Importance of Standards: Forensics resisted the idea of standardisation of methods and practices for many reasons early in the history of the discipline. Arguments ranged from ‘every case is different’ to ‘samples are too small and not homogenous’. While these statements are true, underlying principles of examination can apply to any case. Standards ensure that the profession is following a standard methodology and therefore produce a way of judging whether forensic results are meaningful, accurate and reliable in the context of the case. Modern stakeholders have demanded that evidence analysis be conducted in accredited laboratories by certified criminalists. Moreover, expert witness testimony would mean little without these standards. Standard procedures allow an experts work to be evaluated by other forensic experts familiar with the procedure and, therefore, allow the court to be convinced that the testing done was adequate to prove whatever statement of fact (Agbebiyi, 2002; Ahadiat; 2010; Abubakar, 2015).

Standard practices, specifications, methodologies, and protocols allow the end users of forensic work-products to have confidence in the validity, reliability, and meaning of the evidence involved. Forensics communities have begun to accept that standardisation is beneficial to the discipline. Standards will only branch out and evolve as time goes by (Baldwin & Cave, 1999; Chatman, 2009; Chakravarty, 2010; Boone, 2012).

2.7 Ethical Issues in Forensics Ethics can be said to entail principles or standards of human conduct, sometimes referred to as morals (Vambe, 2013). Walkings (1956, p.3) defined ethics as '*a system of moral principles*'. To Moti (2006, p.1), '*ethics is a system of moral principles that govern or influence a person's behaviour*'. Vambe (2013) conceived ethics as the written code of relational norms and guides which described the range of appropriate behaviour in interpersonal settings. The codes prescribe the proper ways of relating to clients, the public, peers, superiors or subordinates (Ugwu, 2010). Ethic is means of achieving orderly and courteous conduct of a profession (Tsebe, 2011). This could encompass both the smoothing of intra-professional contention, and of the individual professional relations with the collective profession. The recognition awarded by the general public requires in return, some protection of public or client interests. Bayles (1988) posited that the code of conduct may define the relationship between a profession or/and professional and the external environment in many ways. It may serve to distinguish professional service from other services in the society, and may be used to support argument for public accountability (Tsebe, 2011). Codes describe the rules intend to guide present and future action. The function of codes is to influence the decision that an organisation or individuals make so that the resulting behaviour is acceptable (Moti, 2006)

From ethical viewpoint, the field of forensics is relied on by the criminal justice system (Hopwood, Leiner & Young, 2008; Edwards, 2011). Forensic practitioners are responsible for the investigation and collection, preservation, analysis, and interpretation of physical evidence (Saferstein, 2011). The evidence, which forensic practitioners are responsible for have a lot of weight in a wide variety of cases, but have a special importance when the evidence is being used in criminal cases (Krige & Dominique, 2003; Saks & Koehler, 2008). All forensic practitioners must be knowledgeable and skilled in their chosen area of study in order to do their job to the

best of their ability and provide adequate forensic service (Chisum & Turvey, 2006). Forensic practitioners must also be of good ethical and moral character (Handdad, 2007). However, even the best people encounter situations where their moral and ethical standards are tested (Ellen, 2005; Cooley & Oberfield, 2007).

Forensics is able to reveal information such as who committed a crime, whether or not a crime was actually committed, and what exactly took place during the crime (Gosselin, 2014). If one piece of evidence is mishandled, manipulated, or misinterpreted a person's life could be destroyed or justice can go unserved (Hart, 2004). It is important that forensic practitioners allow the evidence to speak for itself without any manipulation or errors (Ayres, 1994). Most people believe that scientific analysis provide trust worthy proof in regards to the interpretation of the evidence, but what they fail to take into account is that the evidence is being handled by humans, which are capable of interpreting the evidence to best suit them (Sadowski & Thomas, 2012). From the crime scene to the laboratory and in the courtroom, it is important that forensic practitioners always display good moral and ethical character, while providing trust worthy, high class forensic service (Saferstein, 2011).

The first place forensic practitioners come into contact with physical evidence is at the crime scene (Bohan, 2010). There are policies and procedures that must be abided by in order to properly document and collect evidence (Ngex, 2010). If a crime scene investigator fails to abide by the set policies and procedures they are not only acting unethically, but they are also putting the case at risk (Bohan, 2010). In order to lessen the chances of evidence being mishandled, there is a chain of custody that must be established from the beginning to the end of the investigation (Saks & Koehler, 2008). The possibility of evidence manipulation begins at the crime scene; here

evidence can be purposefully or accidentally overlooked, planted, or mishandled (The Innocence Project, 2014). One reason why ethics is so important in the field of forensics is because the results yielded by physical evidence discovered at a crime scene have a great impact on the lives of others (Crumbley & Apostolou, 2002).

After collecting evidence from the crime scene, the evidence must be analysed. The analysis of physical evidence is one of the most important steps in the investigation (Hopwood, 2006). The proper analysis of physical evidence can change the outcome of an investigation (Hopwood, 2006). This is one of the times where the work of forensic practitioners is capable for misuse by those who either do not possess the proper knowledge and skills required to perform their duties or by someone who is willing to manipulate evidence for their own reasons (Gosselin, 2014). Evidence can be contaminated, poorly tested, carelessly discarded, mislabeled or the results can be misrepresented by the technician (The Innocence Project, 2014). In order to avoid the possibility of evidence becoming tainted due to one not possessing the proper knowledge and skills required, forensic practitioners require to attend periodical training and maintain current certification (Hart, 2004).

Even though efforts are made to reduce the possibility of evidence becoming compromised, too often evidence is mishandled, manipulated, or misinterpreted (Barnett, 2001). Sometimes the evidence is compromised accidentally, but other times, forensic analyst purposefully manipulate evidence for various reasons (Sadowski & Thomas, 2012). In 2008, it was determined that Steven Stokes, who worked for the Tucson Police Department's crime laboratory as a latent print examiner for 20 years had mishandled evidence in six criminal cases between December 2004 and January 2006 (Phoenix Breaking News, 2008). It has not been determined if he mishandled

the evidence purposefully or not, but as a result of his actions Stevens decided to resign (Gosselin, 2014). In 2010, it was determined that eight crime laboratory analysts at the North Carolina State Bureau of Investigation manipulated blood evidence or withheld important information from defense attorneys in 230 cases (San Francisco Examiner, 2010). The analysts manipulated evidence in order to help the prosecution. Of the 230 cases, 190 of the convictions were unjust. Because of the tainted evidence three possibly innocent people were executed, four are on death row and two others are serving life sentences (Sadowski & Thomas, 2012).

Since the work forensic practitioners do at the crime scene and in the laboratory are often used in court, it is vital that the skills and knowledge of forensic experts demonstrate a strong scientific background and a unquestionable understanding criminalistics (Hart, 2004). In the courtroom forensic personnel are called upon to provide expert witness testimony in regards to their specialty (Strutin, 2009). In some cases the expert testimony given by forensic personnel have a lot of weight in regards to the outcome of the case (Kassina, Drorb & Kukuckaa, 2013). For that reason it is vital that the expert witness (forensic practitioners) be 100% qualified and be of good ethical and moral character (Hart, 2004). One case of false expert testimony involved former director of the West Virginia state crime laboratory, Fred Zain (The Innocence Project, 2014). Zain testified falsely in favour of the prosecution and manipulated multiple cases in West Virginia and Texas (The Innocence Project, 2014). Later DNA evidence and new evidence revealed that Zain manipulated evidence results and provided a false expert testimony in multiple cases. Another case involved Pamela Fish, a Chicago lab technician. Fish testified falsely in favor of the prosecution about evidence she had analyzed in eight separate cases. The defendants were later proven innocent due to DNA testing (Chakravarty, 2010). The Innocence Project

(2014, p.11) suggested that “this type of unethical behavior is unacceptable, and a greater effort must be made in order to ensure this type of behavior does not take place”.

Thus, any individual wishing to practice as a forensic accountant is expected to be guided by the following professional etiquettes, as provided by the Canadian Institute of Chartered Accountants’(CICA)the Alliance for Excellence in Investigative and Forensic Accounting (IFA Alliance) (2006); Sadowski, & Thomas, (2012); ICAN (2014); IQAAS (2014); and IICFIP (2014): A forensic accountant should, at all times

- i. demonstrate a commitment of professionalism and diligence in the performance of his or her duties.
- ii. not engage in any illegal or unethical conduct, or any activity, which would constitute a conflict of interest.
- iii. exhibit the highest level of integrity in the performance of all professional assignments, and will accept only assignments for which there is reasonable expectation that assignment will be completed with professional competence.
- iv. comply with the lawful orders of the courts, and will testify to matters truthfully and without bias or prejudice.
- v. in conducting investigations; obtain evidence or other documentation to establish a reasonable basis for any opinion rendered. No opinion shall be expressed regarding the guilt or innocence of any person or party.
- vi. not reveal any confidential information obtained during a professional engagement without proper authorisation.

- vii. reveal all material matters discovered during the course of an investigation, which, if omitted, could cause a distortion of the facts.
- viii. continually strive to increase the competence and effectiveness of professional services performed under his or her direction.

The above code of conducts can be stated thus, as specifies by The International Standards Organisation (ISO) (2015), and The Association of Certified Fraud Examiners (ACFE) (2014):

- i. **Integrity:** A forensic accountant should behave with integrity in all professional, dealings and financial relationships. Integrity implies not merely honesty, but fair dealing and truthfulness in all business engagements and judgments.
- ii. **Objectivity:** A forensic accountant's objectivity must be beyond question. This is essential for any professional person exercising professional judgment. Objectivity is the state of mind, which has regard for all considerations relevant to the task in hand but no other. It is sometimes described as independence of mind.
- iii. **Independence:** A forensic accountant must be in a position to give an honest and unbiased report/evidence when required to provide information about a client by a competent court of law.
- iv. **Confidentiality:** Information confidential to a client or employer acquired in the course of professional engagement should not be disclosed except where consent has been obtained from client/employer or other appropriate source, or where there is a legal right or duty to disclose such. A forensic accountant should not accept or continue an engagement in which there is or is likely to be a significant conflict of interest between him and the client/employer. Furthermore, a forensic accountant should not voluntarily appear in court as

an expert witness against a client or former client/employer, unless served with a subpoena or any other form of witness summons. He could refuse particular questions, which he/she is not obligated to answer. However, he/she must produce any documents in his ownership or possession if the court of law so directs. A forensic accountant should not make improper use of any knowledge he may gain in the course of his investigative assignment. He should ensure that the staff under his control also observes this requirement.

- v. **Maintenance of Accepted Ethical Conduct.** Forensic accountants are renowned for their honesty, discretion and tact. In essence, he must be open to consider all alternatives, scrutinize the full details and at the same time see the big picture of the issue at stake. In this regard, he must be able to listen effectively and communicate clearly and concisely.

2.8 Professional Competencies in the Forensic Accounting Profession Economic and financial crimes have become as complex as human nature (Ribadu, 2006). Thus, in this section, related literature on the subject matter, forensic accounting, is reviewed with a view to vividly demonstrate the gap in knowledge. Forensic accounting encompasses investigation, litigation support, and dispute resolution and, therefore, is the intersection between accounting, investigation and the law (The Canadian Institute of Chartered Accountants (CICA) (2006); Pagliero, 2011; IICFIP, 2014).

To this end, two types of literature motivated this study:

- i. The academic stream, which ranges from forensic accounting course coverage to course identification and recommendation.
- ii. The practitioner stream, which suggests the skills that forensic accountants use in practice.

DiGabriele (2008) extended these studies by surveying accounting academics, forensic accounting practitioners and users of forensic accounting services to further define the relevant skills of forensic accountants. The author identified nine competencies from the three major stakeholder groups and had the participants rate their agreement/disagreement with the importance of those competencies. DiGabriele was able to group the competencies into those related to knowledge and ability and those related to performance. His results suggested that the three major stakeholder groups differ on all of the knowledge and ability items but agree on all of the performance items. His results also suggest that academics and practitioners have more agreement over the importance of the forensic accountant's skills than the users of forensic accounting services (DiGabriele, 2010).

Researchers such as Rezaee, Lander & Reinsten (1992) and Okoye & Gbegi (2013) suggested that: Accounting graduates need to possess a combination of cognitive skills (technical knowledge, expertise and abilities) and personal or behavioural characteristics (principles, attitudes, values and motives) which are a function of individual personality. In recent years, some academics have been suggesting that a skill such as emotional intelligence (the ability to recognize, use and manage emotions) is critical for engaging with the world and that emotions are central in all rational decision making processes (Modugu & Anyaduba, 2013). Others have suggested that emotional intelligence has become a skill that may allow Accountants to perform better in a variety of areas such as leadership, client relations, and even decision making (Efiong, 2012). Furthermore, Boys (2008:65) advocate that: The AICPA and the Institute of Management Accountants recognise emotional intelligence skills as critical for the success of the accounting profession.

There have been several studies undertaken across industries that reflect the views of employers. Modugu & Anyaduba (2013) suggest that the UK current skills policy should centre on the need to drive up qualification obtained and make the system more employer-led. Modugu & Anyaduba's study also discovered that social skills are generally found to be vital and are often claimed to be lacking in the labour market. However, social skills are very difficult to define, and if these are the skills that employers want, it will be very difficult to meet these through qualifications (Modugu & Anyaduba, 2013). Several studies have involved employers in an attempt to identify stakeholder expectations of university graduates.

Bolgna & Linqvist (1995) in a project for the UK Economic and Social Research Council explored employers' perspectives on the role of generic skills in the workplace and the different uses, purposes and contexts for their development in the first few years of graduate employment. They found that employers and employees alike had varying understandings of the importance of generic skills in the workplace. Other findings by Crumbley & Apostolou (2002) and Chukwunedu & Okoye (2011) emphasise employers' stated needs for graduates to be able to function in the workplace, that employers expect accounting graduates to be confident communicators, good team players, critical thinkers, problem solvers and, in addition, to be adaptive, adaptable and transformative people capable of initiating and responding to change (Harris. 2012). Even though the desirable graduate attributes in these lists are similar to those of 20 years ago (Crumbley & Apostolou, 2002), the lists are getting longer and more complex.

Some researchers have indicated that technical skills are regarded as implicit in the skills base of a person entering an accounting career, but that it is a range of broader 'personal characteristics' that facilitate career success and make accounting graduates more valuable to employers.

Ahadiat (2010) conducted a study of which he asked respondents to rate the following skills expected of an accountant and auditor: ability to synthesize, accounting technical skills, analytical skills, computer competency, creative ability, critical thinking, ethical behavior, general business skills, initiative, leadership skills, people skills, presentation skills, sales skills, team orientation, verbal communication, written communication, and personal demeanor. The results from the study shows that accounting curricula across the United States were revised to include instructions aimed at improving students' knowledge, skills, and abilities which would go beyond their technical knowledge. These skills included, communication skills, analytical skills, presentation skills, team orientation, critical thinking, among others.

Furthermore, Okoye & Jugu (2010) suggested that employers expected accounting students to learn a multitude of skills, not simply how to generate and use accounting information. These skills include being able to communicate, work in a group environment, solve real world problems, and use computer and Internet tools. The challenge of delivering graduates with a more extensive and special skill sets is highlighted in a recent European study (Okoye & Jugu, 2010; Shanikat & Khan, 2013). Their research points to similar employer demands for non-technical skills (beyond the necessary technical accounting skills), but reported at the same time that employers were unsympathetic with claims from universities that they had limited capacity to deliver on these greater demands. Consequently, a special training process can be fashioned out to give interested accounting graduates an opportunity to acquire these special skills that will make them specialists.

In searching for the skills area of forensic accounting, DiGabriele (2007 & 2008) in a US study found that both academics and practitioners agreed that critical thinking, unstructured problem

solving, investigative flexibility, analytical proficiency, and legal knowledge are important and basic skills for forensic accountants.

Harris & Brown (2000) have identified specialised skills and technical abilities of forensic accountants. Forensic accountants are usually familiar with criminal and civil law and understand courtroom procedures and expectations. These researchers also stressed investigative skills, including theories, methods, and patterns of fraud abuse. Forensic Accountants think creatively to consider and understand the tactics that a fraud perpetrator may use to commit and conceal fraudulent acts (Harris. 2012). Additionally, they need to clearly and concisely communicate findings to various parties, including those with less knowledge of accounting and auditing. Grippo & Ibex (2003) illustrated that the most important skills of Forensic Accountants come from experience in accounting and auditing, taxation, business operations, management, internal controls, interpersonal relationships, and communication.

Messmer (2004) stated that successful forensic accountants must have analytical abilities, strong written and verbal communication skills, a creative mindset, and business acumen. They must be able to interview and elicit information from potentially uncooperative people and possess a strong amount of skepticism. Ramaswamy (2005) believed that forensic accountants are distinctively positioned to be able to uncover financial deceptions, their prominent skills being an in-depth knowledge of financial statements, the ability to critically analyse them, and a thorough understanding of fraud schemes. Ramaswamy also believed that forensic accountants should have the ability to comprehend the internal control systems of corporations and be able to assess their risks. The knowledge of psychology helps forensic accountants to understand the impulses behind criminal behavior that motivate and encourage financial deception. Also, (a) interpersonal and communication skills that aid in disseminating information about the company's ethics and

(b) an understanding of criminal and civil law and of the legal system and court procedures are skills that aid forensic accountants.

Aderibigbe (2000) suggested that a forensic accountant requires high level of competence, integrity and honesty to perform his job. He is of the opinion that a forensic accountant must be thoroughly trained and must prove his competence by passing all relevant examinations to become a member of a recognized accountancy body. He maintained that a forensic accountant should always be outstanding in terms of integrity, honesty and probity and must maintain a professional attitude in the performance of his responsibilities.

Studies by scholars such as Davis, Farrell & Ogilby (2014) and Dreyer(2014) highlighted that analytical skill remained the foremost trait that forensic accountants were expected to possess. Their results also revealed that the skill sets of a forensic accountant are eclectic; these include general civilisation, communication, accounting, business, auditing, technology, psychology, criminology, courtroom behavior, and meta-thinking skills which are all critical to the effectiveness of forensic accountants. Rezaee (2002) examined a sample of undergraduate and postgraduate accounting students, and the results indicated that the students believed that forensic accounting is a viable career option but is not getting the proper attention in colleges and universities.

The West Virginia University (2007) prepared a model curriculum guide for education and training in fraud and forensic accounting to aid academic institutions, public and private organizations, practitioners, faculty, and prospective students. Rezaee, Crumbley & Elmore (2006) surveyed opinions of practitioners and academics regarding the importance, relevance, and delivery of forensic accounting education. Their results indicated that the demand for and the

interest in forensic accounting will continue to increase. Their study further shows that both practitioners and academics viewed accounting education as relevant and beneficial to accounting students.

Efiong (2012) recommended that special training process could be fashioned out to give interested accounting graduates an opportunity to acquire these special skills that would make them specialists. Ramaswamy (2005) believed that: Forensic accountants are distinctively positioned to be able to uncover financial deceptions; his prominent skills being an in-depth knowledge of financial statements, the ability to critically analyse them, and a thorough understanding of fraud schemes. He also believed that forensic accountants should have the ability to comprehend the internal-control systems of corporations and be able to assess their risks. The knowledge of psychology helps forensic accountants to understand the impulses behind criminal behavior that motivate and encourage financial deception. Also, interpersonal and communication skills that aid in disseminating information about the company's ethics and an understanding of criminal and civil law and of the legal system and court procedures are skills that aid forensic accountants (Harris. 2012).

Similarly, a study conducted by Chukwunedu & Okoye (2011) revealed that “forensic accounting techniques injected in an audit and given cost/benefit considerations is capable of increasing the ability of the auditor to detect fraud and thus help bridge the audit expectation gap. This finding has implications for both accounting education and accounting practice.

The academic literature has identified some of the forensic accounting courses and course contents, whereas the practitioner literature suggests core skills necessary in practice. However, the literature has not yet empirically investigated the perceptions of major stakeholders:

accounting academics, forensic accounting practitioners, and users of forensic accounting services, regarding which skills are important for forensic accountants. The views of these three stakeholders will be significant in shaping the future of forensic accounting. An attempt is made in this study to investigate the basic skills needed for effective forensic accounting profession. The background provided above will lead to a discussion on audit failure and expectation gap, relative to the emergence of forensic accounting as a specialised field of study.

2.8.1 Audit Failure and Expectation Gap

The issue of failure of audit to uncover, investigate and prevent economic and financial crimes has raised questions about the independent auditors' skills, knowledge acquisition, experience, competence and effectiveness (The Nigerian Securities and Exchange Commission (SEC), 2006; Otusanya & Lauwo, 2010; Owolabi, 2012; Tambuwa, 2013; Okojo-Iweala, 2014).

Appendix III presents cases of economic and financial crimes which have resulted in failures of corporate giants, demise of hitherto major auditing firm and loss of confidence in audit function (Ajibolade, 2008; Richter, 2010; The Accounting Degree, 2010; Yuhao, 2010; Balkhi, 2013; Said, 2013).

The Statement on Auditing Standards (SAS 99) (2002), *Consideration of Fraud in a Financial Statement Audit*, was issued as part of the accounting profession's response to the corporate scandals including the Enron, Tyco, Global Crossing, WorldCom cases; that cost investors billions of American Dollars, and which also brought down a major auditing firm, Arthur Andersen. The SAS 99 requires auditors to exercise professional skepticism when considering the risk that a fraudulent material misstatement might exist. Professional skepticism as defined in the Standard, is 'an attitude that includes a questioning mind and a critical assessment of audit

evidence (p.3). However, Tanko (2013: p.25) argued that “neither does the SAS provide specific guidance on what ‘*exercising professional skepticism*’ means nor does it explain how auditors can exercise professional skepticism when conducting fraud investigations”. On this basis, Okaro & Okafor (2013); Fagboro & Adeyemi (2011); Richter (2010) argued that the SAS 99 could not close the audit expectation gap.

The International Organisation for Standardisation (ISO) on Auditing Practices (2004), defined an external auditor as “an audit professional who performs an audit on the financial statements of a company, government, individual, or any other legal entity or organisation, and who is independent of the entity being audited” (p.1). Part A (XI), Chapter 2 of the Companies and Allied Matters Act (CAMA) 1990 (as amended) Laws of the Federation of Nigeria (LFN), stipulates that the main objective of an audit is to enable the auditors report, whether in their opinion, the balance sheet and profit and loss accounts present a true and fair view. In *Re Kingston Cotton Mills (No 2)* (1896), Lord Justice Lopes of the United Kingdom’s Appeal Court stated that the auditor was a watchdog but not a bloodhound (Ngex, 2010). Wells (2014) held that “..... the primary and statutory roles of auditors are not the detection of fraud; instead an expression of opinion on the fairness or otherwise of management representations” (p.2). Hence, ACFE (2014) concluded that “..... statutory auditors are not fraud hunters” (p.16).

On the basis of the above, Tanko (2013) argued that most users of audited financial information did not seem to accept this legally defined status. The author observed that the users would wish to see an auditor’s certificate as an assurance that all that needed to be known about the financial transactions of an entity had been disclosed to the auditors and the auditor’s signature should be taken to mean that all was well with the entity, and there had been no fraud. Earlier, Pitt, (2012) had reported that the probable lack of clarity among users of financial statements, the general

public and auditors as relating to the proper definition of the role and definition of an audit was what contributed to the *'expectations gap'*.

Richter (2010, p.13) also concluded that: "In the midst of all these accounting anomalies, the accounting profession and the role it played came into focus. Auditors helped in misleading the public by certifying that the financial reports of fraudulent entities were true and correct". Reasoning along the same line of thought, Tambuwal (2013) observed that the various anti-corruption agencies in Nigeria were helpless in the fight against corruption. He argued that both the EFCC, and the Independent Corrupt Practices and other Related Offences Commission (ICPC) have not been able to curb the rising cases of official corruption and embezzlement of public funds. Tambuwal opined:

"Despite the existence of the EFCC and the ICPC, cases of official corruption are on the increase every day; if our audit system is efficient and effective, agencies like the EFCC and ICPC would really have less work to do" (p.2).

The American Diploma Project Network (2011) defined audit expectation gap as the difference between what the public expects from the auditor and what the auditor actually statutorily provides. On this note, Kamau (2012) found that: "the public is ignorant of the duties of the auditor and this lack of knowledge is responsible for unreasonable expectations of the public from auditors" (p.11). Kamau, therefore, recommended that the public needed more education on the duties and responsibilities of the auditor; and that the standard auditor's report should be expanded to include disclaimer clauses clearly showing that it was not a certificate or guarantee of the financial soundness of the auditee. He, therefore, suggested that it should be clearly stated in the audit report that the auditor was not the compliance officer of the audited entity, and that the auditors' report should add that the opinion expressed by the auditor should not be construed to mean a guarantee of accuracy of the financial statements.

2.9 Economic and Financial Crimes in Nigeria

Deregulation, liberalisation, reformation, and globalisation had over time redefined the economic landscape in Nigeria. On the other hand, the process has provided opportunities for criminal activities. Economic and Financial crimes are one of the negative or dark sides of these developments which auditors have not been able to conquer (Okoye & Jugu, 2008). The Economic and Financial Crimes Commission Act (EFCC, 2004) of Nigeria defined economic "non-violent criminal and illicit activity committed with the objective of earning wealth illegally either individually or in a group or in an organised manner, these include any form of fraud, narcotic drug trafficking, money laundering, embezzlement, bribery, looting and any form of corrupt practices, illegal arms deal, smuggling, human trafficking and child labour, oil bunkering and illegal mining, tax evasion, foreign exchange malpractice, including counterfeiting of currency, theft of intellectual property and piracy, open market abuse, dumping of toxic wastes, and prohibited goods".

Economic and financial crimes encompass almost all forms of organised transnational crime. It refers to the offer or acceptance of any benefits to do or not to do certain things or carry out any act that is prohibited by law or 'morality'. For clarity purposes, the words 'economic crime' and 'financial crime' are contrasted as follows:

Economic Crimes: These have damaging effects on the economic and political system of a country as manifested in crimes such as; corruption, embezzlement of public funds, currency counterfeiting, smuggling, drug and human trafficking. The damage this type of crime wrecked to the image of Nigeria overshadows the direct financial loss (Okonjo-Iweala, 2015).

Financial Crimes: These are crimes which in addition to getting financial benefits are targeted directly on funds and financial instruments. Financial crimes are crimes against property,

involving the unlawful conversion of the ownership of property (belonging to one person) to one's own personal use and benefit. Financial crimes may involve fraud (cheque fraud, credit card fraud, mortgage fraud, medical fraud, corporate fraud, securities fraud (including insider trading), bank fraud, payment (point of sale) fraud, health care fraud); theft; scams or confidence tricks; tax evasion; bribery; embezzlement; identity theft; money laundering; and forgery and counterfeiting, including the production of Counterfeit money and consumer goods (International Compliance Association, 2015).

Financial crimes may involve additional criminal acts, such as computer crime, elder abuse, burglary, armed robbery, and even violent crime such as robbery or murder. Financial crimes may be carried out by individuals, corporations, or by organised crime groups. Victims may include individuals, corporations, governments, and entire economies. These include among others; advance fee fraud (popularly known as 419 in Nigeria), currency trafficking and counterfeiting (Mustapha, 2011). Following this line of reasoning, therefore, while all financial crimes are economic crimes, not all economic crimes are financial crimes. In other words, financial crime is a subset of economic crime.

The main types of Financial Crime: According to the American Association of Certified Fraud Examiners (ACFE) (2014), financial crime is commonly considered as covering the following offences:

- i. Fraud
- ii. Electronic crime
- iii. Money laundering
- iv. Terrorist financing and racketeering

- v. Bribery and corruption
- vi. Market abuse and insider dealing
- vii. Information security

The link between financial crime and terrorist financing: IICFIP (2015) reported that terrorist organisations require financial support in order to achieve their aims and a successful terrorist group, like any criminal organisation, is therefore one that is able to build and maintain an effective financial infrastructure. It is generally believed that terrorist organisation raise funds by the following means:

- i. Legitimate sources, such as the abuse of charities or legitimate businesses self-financing (that is. through their members or sympathisers)
- ii. Criminal activity
- iii. State sponsors
- iv. Activities in failed states and other safe havens

Terrorists often control funds from a variety of sources around the world and employ increasingly sophisticated techniques to move these funds between jurisdictions. To manage their finances, they draw on the services of professionals, such as bankers, accountants and lawyers, and take advantage of a range of financial services products (IICFIP, 2015; International Compliance Association, 2015).

Money Laundering: Money laundering is an aspect of financial crime. For most countries, money laundering and terrorist financing raise significant issues with regard to prevention, detection and prosecution. Sophisticated techniques used to launder money and finance terrorism

add to the complexity of these issues. Such sophisticated techniques may involve different types of financial institutions; multiple financial transactions; the use of intermediaries, such as financial advisers, accountants, shell corporations and other service providers; transfers to, through, and from different countries; and the use of different financial instruments and other kinds of value-storing assets. Money laundering is, however, a fundamentally simple concept. It is the process by which proceeds from a criminal activity are disguised to conceal their true origin. Basically, money laundering involves the proceeds of criminally derived property rather than the property itself. Money laundering can be defined in a number of ways, most countries subscribe to the definition adopted by the United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988) (Vienna Convention) and the United Nations Convention Against Transnational Organised Crime (2000) (Palermo Convention):

- i. The conversion or transfer of property, knowing that such property is derived from any (drug trafficking) offense or offenses or from an act of participation in such offense or offenses, for the purpose of concealing or disguising the illicit origin of the property or of assisting any person who is involved in the commission of such an offense or offenses to evade the legal consequences of his actions;
- ii. The concealment or disguise of the true nature, source, location, disposition, movement, rights with respect to, or ownership of property, knowing that such property is derived from an offense or offenses or from an act of participation in such an offense or offenses, and;
- iii. The acquisition, possession or use of property, knowing at the time of receipt that such property was derived from an offense or offenses or from an act of Participation in such offense or offenses.

The Financial Action Task Force on Money Laundering (FATF), which is recognised as the international standard setter for Anti-money Laundering (AML) efforts, defines the term “money laundering” briefly as “the processing of criminal proceeds to disguise their illegal origin” in order to “legitimise” the ill-gotten gains of crime (p.17). FATF (2013) identified essentially seven groups of people who commit the various types of economic and financial crimes:

- i. Organised criminals, including terrorist groups, are increasingly perpetrating large-scale frauds to fund their operations.
- ii. Corrupt heads of state may use their position and powers to loot the coffers of their (often impoverished) countries.
- iii. Business leaders or senior executives manipulate or misreport financial data in order to misrepresent a company’s true financial position.
- iv. Employees from the most senior to the most junior steal company funds and other assets.
- v. From outside the company, fraud can be perpetrated by a customer, supplier, contractor or by a person with no connection to the organisation.
- vi. Increasingly, the external fraudster is colluding with an employee to achieve bigger and better results more easily.
- vii. Finally, the successful individual criminal, serial or opportunist fraudsters in possession of their proceeds are a further group of people who have committed financial crime

2.9.1 Business Fraud Risks

Low-level financial crimes are a fact of life in the modern workplace (Wells, 2012). Individually, these crimes are rarely significant enough to warrant the hiring of professional investigators, but if left unchecked, small crimes add up to big losses (The American Association of Certified

Fraud Examiners (ACFE), 2014) . In companies without resident fraud investigators, detecting and solving low-level crimes generally fall to managers and internal auditors (Adeyemi & Fagboro, 2013). Choo & Tan (2007) observed that the cost of fraud to businesses was difficult to estimate because not all fraud and abuse were discovered; not all uncovered fraud was reported; and civil or criminal action was not always pursued. Allan & Constable (2006) submitted that fraud was an undesirable constraint on growth and development of companies and nations.

Fima (2008) concluded that most modern day business organisations are subject to fraud risks. In support of this conclusion, Wells (2012, p.1) posited that “very few people begin their careers with the goal of becoming liars, cheats, and thieves. Yet that turns out to be the destiny of all too many”. Polick (2010, p.1) defined workplace surveillance as “..... management activities aimed at identifying and developing actions for a business to reduce risks arising from the actual and potential cases of business fraud”. Management workplace surveillance involves prevention, detection and response to fraud risks; and making financial crime and occupational abuse more difficult and risky to commit (Akinyomi, 2010). Klynveld Peat Marwick Goerdeler (KPMG) (2007:1) defined fraud as “a broad legal concept that generally refers to an intentional act committed to secure an unfair or unlawful gain”. Deloitte Forensic Center (2007: 3) noted that “fraud always involves one or more persons who, with intent, act secretly to deprive another of something of value, for their own enrichment”.

The ACFE (2014, p. 1) viewed occupational fraud and abuse as: "the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organisation's resources or assets". Impliedly, ACFE's definition encompasses a wide variety of conduct by executives, employees, managers, and principals of organisations. Wells (2012, p. 1)

stressed that “whatever industry fraud is situated in or whatever kind of fraud is visualised, deception is always the core of fraud”.

Fima (2008) classified business frauds into two broad categories: i. Fraud directed against the company; and ii. Frauds that benefit the company. In the former, the business is the victim, and in the latter the business, through the fraudulent actions of its officers, is the intended beneficiary. ACFE (2010) argued that in frauds for organisation management was often involved in a conspiracy to deceive. Frauds for the company are usually intended by top managers to deceive shareholders, investors, creditors, and regulatory authorities. Similar frauds by lower-level managers may be intended to deceive their superiors in the firm. It may be to make the superior believe that the unit is more profitable or productive than it is; and thereby perhaps to earn a higher bonus award or a promotion for the subordinate manager (Silverstone & Sheetz, 2004). In the latter event, despite the fact the subordinate’s overstatement of income, sales, or productivity ostensibly helps the company (to look better), it is really a fraud against the company. Further, fraud against the company can be internal or external, or a combination of both (Pickett & Pickett, 2002).

There are many reasons employees commit fraud. Cohen & Pant (2007) stated that greed, gambling, financial strain either personal or business, feasibility of business as well as influence of others were the major determinants of fraud. This position was supported by Maxima Group (2012), in which they found corporate crime was closely related to gambling activity. On the other hand, KPMG (2007) discovered poor management or internal controls, conspiracy between employee and third party, and type of business operation, were the main causes for fraud to happen. ACFE (2014) and Ernst & Young (2006) reported that the perpetrator’s need to maintain an expensive lifestyle, lack of internal controls in the company, the perpetrator’s low temptation

threshold and lack of awareness that what he or she was doing was wrong were the major reasons leading to corporate crime.

Previous research (Cressey, 1953, Coenen, 2007) on fraud risk explained fraud as the interaction of three causal influences (fraud risk factors) affecting a potential perpetrator: i. Incentive, ii. Opportunity, and iii. Attitude. Incentive or motivation results from a perceived pressure on a person to commit fraud. An employee may have significant financial obligations that exceed his/her earnings power. Opportunity' results from conditions or situations that would allow a person to commit fraud. Attitude or character is what allows a person to rationalise the act of fraud. In sum, Coenen (2007, p.13) submitted that "a person who was able to rationalise selfish gain at the expense of others would commit fraud when incentive and opportunity exist".

In support of these arguments, other researches in business fraud (Cressey, 1953; Polick, 2010; Bailey, 2012) have concluded that attitude, opportunity, and incentive must all be present for fraud to exist. However, research in social psychology (Wilks & Zimbelman, 2004; Friedrichs, 2007) suggested that people would rely more on attitude cues when explaining or predicting a negative behaviour. The social psychology study categorised explanations or causes for a person's behaviour as either 'dispositional' or 'situational' (Coenen, 2007). Hence, causes that are attributable to a person's internal attitude (like character) are classified as dispositional; while those that are part of the person's external environment (for example, opportunity and incentive) are considered situational (Ajzen, 2006).

Decades of research by (Fishbein & Ajzen, 1975; Ajzen, 2001; Ajzen, 2006) showed that people had a strong tendency to attribute another person's behaviour to dispositional tendencies, while attributing their own behaviour to situational circumstances. The explanation for this 'attribution

effect' is that people view the structure of their social environments as providing enforcing mechanisms that encourage positive behaviour. Lee, Cerreto & Lee (2010) pointed out that "negative behaviour, which reflects a break with social conventions, provides a view of the underlying disposition of the person behaving negatively".

In Nigerian, despite significant advances in fraud detection techniques, it appears fraud losses continue to pose a significant problem to the survival of many organisations. The adverse impact of business fraud is not only to firms but even on national economic systems. Business fraud could lead to financial ruin of people and community, enterprises as well as seriously damage the Nation's economic systems (Adeyemi & Fagboro, 2013).

According to Omoniyi (2004, p.43), the dramatic increase in economic and financial crimes in Nigeria can be ascribed to the following factors: economic pressures; the weakening of moral values; the increased sophistication of criminals; inadequate training of authorities in fraud prevention and detection; government corruption; and uncertainty and fears about the future. The globalisation of economic and information technology, such as electronic money transfers, have also eased the path of the fraudsters and complicated the task of the investigators. The net effect of this is that, the dramatic increase in the incidence of financial crime has reduced to a near zero the level of business confidence the international community has in investing in the nation's economy.

There appears to be little doubt about the fact that the problems posed by financial crimes and related economic malpractices should be a matter of great concern to every researcher, regulated and operators of the economy. Asein (2002, p.28) stated that "accounting profession is again facing the most critical challenge" in the history of its existence. A study on improving the

quality and usage of forensic accounting services is, therefore, imperative. With this in mind, this study, therefore, seeks to research into how forensic accounting could be developed and nurtured in Nigeria. That is, as an antidote to the economic and financial crimes and occupational abuses ravaging the society.

2.9.2 Celebrated Cases of Economic and Financial Crimes in Nigeria

The International Institute of Certified Forensic Investigation Professionals (IICFIP), United States of America (USA) (2014) reported that “the magnitude of financial crime cases is significant in Nigeria, as the criminals are becoming more creative by the day” (p.17). The Transparency International (2014) described the economic and financial crimes as a growth industry in Nigeria. In Nigeria, not all fraud cases are discovered and that not all discovered frauds are reported. In effect, economic and financial crime statistics are just an estimate in the country.

The following constitute comments on celebrated examples of such cases:

The former chairman of EFCC, Nuhu Ribadu, when testifying at the Southwark Crown Court, London, in the former Delta State Governor, Chief James Onanefe Ibori’s \$255 million corruption case, had this to say:

“James Ibori was never Nigeria’s worst plunderer of state wealth, “but he may only have been less smart, far worse official thieves are walking free today, and are celebrated as heroes” (Anyagafu & Sam-Duru, 2014, p.7).

The USA Federal Bureau of Investigation (FBI), the Department of Justice (DOJ), on Wednesday, 6th of March, 2014, impounded \$458 million in corruption proceeds the former

Nigerian Head of State, late General Sani Abacha hid in bank accounts around the world. The Acting Assistant Attorney General, Mythili Raman, of the DOJ's Criminal Division stated that:

"General Abacha was one of the most notorious kleptocrats in memory, who embezzled billions from the people of Nigeria while millions lived in poverty," (Anyagafu & Sam-Duru, 2014, p.7).

The former Chief Justice of Nigeria, Aloma Mukhtar, captured the anti-economic and financial crime war in Nigeria thus:

".....it is a gun-war being fought with bows and arrows with high level of manipulations that turn its fighters into victims and those being fought into heroes" (p.1) (Anyagafu & Sam-Duru, 2014, p.7).

The United States of America Deputy Assistant Secretary, Bureau of African Affairs, opined as follows:

"I would say that corruption is extremely high in this country; there is no other polite way to say this. It is extremely unfortunate; the fact that there is corruption in Nigeria is disheartening" (Anyagafu & Sam-Duru, 2014, p.7)

Umar (2013) argued that if corruption could be tackled, ninety five percent of Nigeria's problems would be solved. He further noted that:

"No country can survive with the prevailing rot in Nigeria. It is a major cause for concern. Unfortunately, all our efforts at confronting the corruption challenges are breeding more corruption". (p.16).

The Nigerian incumbent President Muhammadu Buhari (2015) stated that, '*Corruption in Nigeria has virtually developed into a culture where honest people are abused*' (Abubakar, p.2).

The Transparency International also persistently ranked Nigeria among the most corrupt nations in the world, since 1995. Evidentially, listed in Appendix III are selected ten cases of economic

and financial crime cases, accounting scandals and audit failures both in Nigeria and around the world, as documented by the Economic and Financial Crimes Commission (EFCC) (2014); The Central Bank of Nigeria (CBN) (2010).

Alluding to the existence of audit failures and establishing a case for forensic accounting services in Nigeria; Okonjo-Iweala (2014) called for independent forensic investigations to resolve the puzzle over an alleged shortfall of \$20bn in the Nigerian National Petroleum Corporation (NNPC) remittances to the Federation Account. Stated as follows:

“Our judgment is that a proper examination of these documents requires technical expertise beyond the capacity of the reconciliation team. Therefore, we believe we should have an independent forensic audit to manage these submissions,” (p.7).

At the opening ceremony of the 20th Nigerian Economic Summit, organised by the Nigerian Economic Summit Group (NEGS), with the theme, *‘Transforming Education through Partnership for Global Competitiveness’*; the former Nigerian President Goodluck Jonathan (2014, p.13) stated that “the foundation which formed the bedrock of the Nation’s education policy had become obsolete”. The President, therefore, challenged the NESG, to review the Nigerian educational policy foundation, which was developed about 45 years ago (in the year 1969) to meet the current realities. According to the former President, “..... more than forty years after, this policy foundation is ripe for review, to determine its relevance and fine-tune its adaptability to national objectives, in this 21st century” (p.3).

2.9.3 An Overview of the Transparency International (TI) Annual Corruption Perceptions Index (ACPI) and Nigeria Ranking

The TI ranking of countries is according to the extent to which corruption is perceived to exist. The organisation draws on data sources from different institutions, which purport to measure perceptions of corruption in the public sector. The TI created the ACPI in the year 1995; with

which it ranks countries on a scale of zero to 10; with zero indicating high levels of corruption and 10 indicating low levels. The ACPI is measured with a different methodology year to year, which according to critics, makes yearly comparisons difficult (Cobham, 2013). Hence, critics pointed-out that the ACPI, as its title openly acknowledges, is only an index of “perceptions” based on survey data rather than a measure of actual corrupt activity.

The critics maintained that ACPI could not be used as a tool for measuring the implications of new policies (Obuah, 2010); Shanikat & Khan, 2013). However, TI (2014) defended the perceptions-based methodology as a “reliable estimate of corruption,” noting that “corruption, whether frequency or amount, is to a great extent a hidden activity that is difficult to measure” (p.14). Furthermore, criticism of the ACPI centered on potential divergences in how a country was scored in the sets of data relied on to construct the Index, and how TI resolved the divergences. TI responded that the ACPI reflected “the beauty of aggregating the surveys,” because it looked at “corruption perceptions across the spectrum” (p.15). Regardless of the criticisms that may be leveled against it, this study argues that the CPI remains a critical and trusted benchmark used to allocate scarce compliance, prosecutorial and regulatory resources.

Shanikat & Khan (2013) argued that: ‘.....because corruption is willfully hidden, it is impossible to measure directly; instead, [proxies](#) for corruption are used’ (p.2). Media outlets frequently use the raw numbers as a yardstick for government performance, without clarifying what the numbers mean. The local Transparency International chapter in [Bangladesh](#) disowned the index results after a change in methodology caused the country's scores to increase; media reported it as an ‘improvement’. Shanikat & Khan (2013) suggested that CPI should be dropped for the good of Transparency International. It argues that the CPI embeds a powerful and misleading

elite bias in popular perceptions of corruption, potentially contributing to a vicious cycle and at the same time incentivising inappropriate policy responses. Pickett & Pickett (2011, P.9) maintained that "the index corrupts perceptions to the extent that it's hard to see a justification for its continuing publication."

In the United States, many lawyers advise international businesses to consult the CPI when attempting to measure the risk of [Foreign Corrupt Practices Act](#) violations in different nations. This practice has been criticized by Pickett & Pickett (2011), who wrote that since the CPI may be subject to perceptual biases it therefore should not be considered by lawyers to be a measure of actual national corruption risk.

Transparency International also publishes the [Global Corruption Barometer](#), which ranks countries by corruption levels using direct surveys instead of perceived expert opinions, which has been under criticism for substantial bias from the powerful elite. Table 2.1 depicts the Transparency International (TI) Annual Corruption Perceptions Index's (ACPI) Ranking of Nigeria among the nations of the world.

Table 2.1: The TI ACPI (Years 1996 – 2014) on Nigeria

YEAR	NO. OF COUNTRIES INCLUDED IN THE ACPI	NIGERIA RANK ON THE ACPI	NIGERIA POSITION ON THE ACPI	NIGERIA SCORE ON A SCALE OF TEN POINTS
1996	54	54	1 st out of 54 Countries	0.69
1997	52	52	1 st out of 52 Countries	1.79
1998	85	81	5 th out of 85 Countries	1.9
1999	99	98	2 nd out of 99 Countries	1.6
2000	90	90	1 st out of 90 Countries	1.2
2001	91	90	2 nd out of 91 Countries	1.0
2002	102	101	2 nd out of 102 Countries	1.6
2003	133	132	2 nd out of 133 Countries	1.4
2004	146	144	3 rd out of 146 Countries	1.6
2005	159	152	8 th out of 159 Countries	1.9
2006	163	142	22 nd out of 163 Countries	2.2
2007	180	147	34 th out of 180 Countries	2.2
2008	180	121	60 th out of 180 Countries	2.7
2009	180	130	51 st out of 180 Countries	2.5
2010	178	134	45 th out of 178 Countries	2.4
2011	183	143	41 st out of 183 Countries	2.4
2012	176	139	38 th out of 176 Countries	2.7
2013	177	144	34 th out of 177 Countries	2.5
2014	175	136	27 th out of 175 Countries	2.8

Source: Compiled from the TI ACPI (1996 - 2014)

Towing the same line of reasoning, Dutta (2013) reported that “the accounting profession is presently being pulled and sharpened by contending forces; the profession is faced not only with the need to increase the knowledge requirement of its members, but also a progressive increase in public expectation about the scope, relevance and quality of its work” (p. 12). Hall (2011) submitted that: “many an accountant has a highly focused education resulting in a ‘pinched outlook’ which often ‘handicaps’ his performance. It restricts his vision, it hampers his reasoning.” (p. 16). Langenderfer (1974) concluded that: “in a situation where the growing needs of the society are not met, there is need to open up new areas of research within the existing principles and practices of the affected profession” (p.54).

In response, previous studies (Crumbley & Apostolu, 2002; Albrecht & Albrecht, 2006; Smith & Crumbley, 2009; The Forensic Careers, 2012; IICFIP, 2014) had provided evidence indicating

that forensic accounting is an emerging potent specifically designed to tackle menace of economic and financial crimes and related offences. In the year 2012, forensic accounting was ranked the number one most secured career track (Fouché, 2013); and according to (IICFIP, 2013), the “demand for forensic accountants is expected to outmatched the supply” (p.17). Rezaee, Crumbley & Elmore(2004) conducted a survey in the USA, and found that more than 93% of academics and 88% of practitioners expected the demand for forensic accounting services to continue to rise in the future. However, studies (Omoniyi, 2004; Fagboro et al., 2014; Keshi, 2014) have provided evidence that most of forensic accounting practitioners in Nigeria are not well grounded in both the theoretical and technical knowledge required to effectively function in the emerging field of practice.

2.10 Academic Research and Practice in the Accounting Profession

Accounting research is often conceived as applied research in that the focus of study is made up of technologies and technical practices used by accounting practitioners in social and organisational settings (Watts, (1974; Uche, 2010). This stands in marked contrast to the physical sciences where the focus of study is mainly physical matter (Hancock, Howieson, Kavanagh, Kent, Tempone, & Seagal, 2010). At the international level, research is generally a requirement for accounting academic career progression, and an important contributor to the development of knowledge and scholarship (Evans, 2010; Evans et al., 2010). The impact of research in some disciplines is easy for the lay person to comprehend, such as in medicine, where advances in medical procedures and development of new drugs result in benefits to society (Webber, 2005; West Virginia University, 2007). For accounting, this impact is not so easy to discern (Albrecht & Sack, 2000; Boys, 2008). For instance, in the field of accounting there have been claims that research has become too far removed from the interests of the

profession and practitioners. Researchers in turn point to the shortcomings of current professional practices (Albrecht & Sack, 2000; Hancock et al., 2010). Some in the accounting research community go so far as to consider that many practical issues of concern to professional accountants do not warrant the attention of researchers (Hopwood, 2007). In view of the above analogy, a presentation on research detachment between the academic and practice in accounting profession follows.

Research Detachment

In recent times a number of commentators have indicated that accounting research has become insufficiently innovative and increasingly detached from practice and society (Hopwood, 2007; Hopwood, Leiner & Young, 2008; Hopwood, 2009). Associated with such concerns has been a flurry of recent special journal issues, editors' forums and papers on the apparent research/practice gap in accounting. Some commentators argue that the ultimate purpose of accounting research should be to improve accounting practice, rather than simply to describe or understand or critique it. Hence a gap appears to have emerged between the concerns of policy makers, practitioners and academics as to the need to identify the impact of accounting research and to establish links between research output, practice and social impact (Gall, Borg & Gall; 1996; Wintoki, 1997; Hall, 2013; Gosselin, 2014).

Gosselin (2014) reflected on the business school in the age of globalisation. Recent developments in Australia would indicate their analysis was correct (Cappelleto, 2010). For instance, in 2010 many universities have over-enrolled students, some by as much as 20%, and of course the area for over-enrollment is the business school (The American Accounting Association' (AAA) Futures Committee Report (1986). Accounting schools are seen as 'cash cows' for the rest of university activities (Ajayi & Akindutire, 2007). This over-enrolment has led to staff shortages, large classes, very high student/staff ratios and issues associated with poor

teaching quality (Hopwood, 2009). Another important feature of these conditions is the impact on accounting academics' ability to undertake accounting research (Hall, 2013). In the international arena several commentators have indicated that business and accounting research have become inefficient, pedestrian and increasingly detached from practice (Grippio & Ibex, 2003). For example, in the United States, the American Accounting Association (AAA) research impact task force reported that research did have an influence on practice. However, they concluded that academia is recognised more for its role as a provider of education and less recognised for professional or practice impacts (Hall, 2013).

The Association to Advance Collegiate Schools of Business (AACSB) (2008) task force on research stated that scholarly inquiry is an essential process that places business schools in a unique and important position at the intersection of management theory, education and practice. It differentiates institutions of higher education from providers of training and from other organisations providing management education while relying on scholarship generated by others for its educational content (Grippio & Ibex, 2003; [Baine](#), 2014). It also made several strong recommendations around the issue of the lack of impact of scholarship on the intended audiences. A recent article in the *Financial Times* in the United Kingdom (UK) reported that the AACSB is developing measures of academic impact on business in areas such as executive education and the work of research centres (Schiller, 2011, p. 13).

In the UK and Australia there is considerable focus on the issue of impact of publications and research. This is seen in the *Australian Accounting Review* (2010) special forum analysing how research assessment exercises like the Excellence for Research in Australia (ERA) (Cappelletto, 2010) and the Research Assessment Exercise (RAE) in the UK (Hancock et al., 2010) affect academics, journals and universities (Seda & Kramer, 2008). In 2010, the new UK coalition

government was still pondering how to take forward the previous government's plans to award funding to higher education by assessing the overall quality of research, with around 20% of the amount accounted for by the 'impact' of research undertaken by an institution. English et al (2010, p.4) reports that the UK Universities Minister criticised business schools 'for focusing on peer-reviewed research at the expense of applied studies'.

The Divide between the Academia and Professional Practice Historically, there have been a number of publications suggesting a divide between the academic community and the professional community (Hancock et al., 2010). Early on the divide was about how to educate accountants and the case for the introduction of accounting degrees (The American Diploma Project Network (ADPN), 2011). This was mainly centered on the concept that accounting was about accounting principles or a broader education than just technical training (ADPN, 2011). As business schools grew in such countries as the UK and Australia in the 1950s, accounting degrees became popular and a broader education began to be offered. From this time a further change could be observed in the establishment of an academia with its requirements adopted from the social science model (doctorate qualifications, a record of publications, concentration on employment of acceptable methodologies and theory as a foundation for research work). These requirements were different from those valued by the practising accountant, who maintained an emphasis on professional qualifications and technical skills.

ADPN (2011) captures the 'schism' between the interests of academics and the interests of practitioners in the following comments:

- i. Academics are considered elitists as they speak with their own jargon; they use complex mathematical formula; they shut out potential practitioner readers by doing this; the aim of the game is to publish at all costs, not to disseminate knowledge or

improve practice.

- ii. Practitioners are seen as not being interested in any challenge or debate or threat to the status quo; they are reluctant to disclose their data, so they want us to help them but they would not let us into their firms.
- iii. Practitioners often regard jargon as pretentious whereas academics suggest that when you have new ideas, new terminology appears; mathematical formulae are really useful because they are a form of shorthand and help clarity of thought.

Any discussion about the impact of research on professional practice must include education in the equation. A research/practice/teaching triangle has induced a range of research around these connections. The focus of such studies has been largely internal, namely on whether research impacts practice through accounting education, on courses and through students who become graduates and professional practitioners (Bricker & Previts, 1990; Cappelletto, 2010). Hancock et al. (2010) consider the changing skills required by accounting graduates to be able to account for the future. Whatever is possible in terms of the direct impact accounting research has on practice, the profession and society is clearly a contested ideal (Hopwood, 2007; Adams, 2010).

So, has anything changed in narrowing the gap between academia and practice? After more than fifty years of producing university accounting graduates, we are still being told that universities produce narrowly educated and focused graduates who can produce bank reconciliations, but cannot think critically (Albrecht, & Sack, 2000; Chen, Hu, Lin, & Xiao, 2015).

Efforts to Bridge the Gap

Arguably there are signs that times are changing. At the international level there are sporadic signs of improving interactions between accounting practitioners, higher education providers and academics (Australian Financial Review (AFR), 2010). This is witnessed by the inclusion of academic work in professional publications; research funding provided by the accounting profession; and the commissioning and publishing of research on contemporary issues facing accounting academics by the practitioners (Cappelletto, 2010). For instance, the professional bodies have funded academic research in areas such as accounting for the environment, water accounting, emissions trading scheme, intellectual capital, public private partnerships, and carbon credits and assurance. Academics and practitioners are working together to create new academic discourses and practice in these emerging accountings (Cappelletto, 2010; English et al., 2010).

The Researcher Role: In summary, the role of the accounting academic remains as one of critiquing, challenging, and engaging in debate (Albrecht & Sack, 2000). This role is as important as producing practically useful research. As Chen et al. (2015) argues, what counts as knowledge will remain as contested and needs to be debated and negotiated between the profession, policy makers, practitioners and accounting academics, while preserving the researcher's role and right of independence and critical thought. This is occasionally evident, for example, through collaboration between professional accounting bodies and academics to produce sponsored research, sponsored specialised conferences and public policy contributions (Adams, 2010).

There is, in some quarters, an emerging recognition that collaboration between academic research and practice is an important, but not sole determinant for research (Chen et al., 2015).

As argued earlier, a crucial key role of academics remains: namely to critique, debate and challenge the status quo. This is an essential path to improving the lot of stakeholders, be they investors, minority groups, employees, communities, accounting practitioners, government policy or societal conditions (Seda& Kramer, 2008). This study contends that accounting research needs to be socially, politically and institutionally contextualised, theoretically informed, embracing of interdisciplinarity, and representative of long-term thinking. Without a persistent focus on social, political and organisational settings, academic accounting research will become lost in a myopic obsession with accounting technologies and practices so that the potentially wider societal contribution will fail to emerge.

The Practitioner Role: The role of the practitioner is to seek out academic research results that add value to the businesses of clients or to the practice itself and its business performance, or to the enhanced credibility and longevity of the profession of which the practitioner is a part (Diamond, 2005; Seda& Kramer, 2008). According to Chen et al., (2015), practitioners can provide the demand for, and encourage relevancy in, academic research outputs. In addition, the interface between practitioner and academic is moderated through the practitioner's need for high quality student graduates. The students leave university with competencies, skills and worldliness and move into the practising part of the profession equipped to conduct daily operations for financial gain, yet able to think creatively about the future of the profession and to value the services offered by accountants to society (Bricker et al., 1990; English et al., 2010). The provision of resources, monetary and in kind, provides a third avenue of discourse between practitioners and academics, in which practice-based theoretical developments are studied and a pragmatism that is not always evident in academic research output can be encouraged (West Virginia University (2007).

2.11 Quality Assurance in the Academic Programme of Tertiary Institutions More

than a century ago, Emile Durkheim (1897-1951) rejected the idea that education could be the force to transform society and resolve social ills. Instead, Durkheim concluded that education “can be reformed only if society itself is reformed” (Durkheim, 1946, p.372). He argued that education “is only the image and reflection of society. It imitates and reproduces the latter...it does not create it” (1946, p.372). On this note, Chen et al., (2015) opines the process of educational change is a dynamic one involving interacting factors over time. That is, when more factors work against implementation, the process will be less effective. Consequently, when more factors support implementation, more change in practice will be accomplished. The results from a large number of studies on educational change make clear that influencing factors often have a different impact in different settings of educational change (Fullan, 1991; Efiong, 2012; Fouché, 2013). Besides, the impact is often related to different stages of the innovation process.

Thus, quality assurance (QA) has been an issue at the forefront of educational system concerns for the past decade (Fouché, 2013). It is the set of planned and systematic actions necessary to provide appropriate confidence that a product or service will satisfy the requirements for quality (Okebukola, 2010). Furthermore, an important part of defining the end-product of any educational system is the specification of its quality related features, which the system must then aim to deliver. Quality assurance is a global term used to incorporate the quality policy, quality management and quality control functions, which combine to assure the client that the product / service will be consistently manufactured / delivered to the required condition. Its aim is to achieve and assure quality through the adoption of a cost effective quality control system and through external inspections and audits (Okebukola, 2010). Quality assurance is a way of measuring, improving, and maintaining the quality of any human activity that has a value. It may

be academic, sports performance, business, or economy. Quality assurance is a means of ensuring that the best practices are encouraged in a social system.

Quality, as a concept, has been defined differently by different stakeholders (Meier, Kamath & He, 2010). This is because it is multidimensional and mean different thing to different stakeholders. Quality can be defined as “fitness for purpose”. It encapsulates the concept of meeting commonly agreed precepts or standards. Such standards may be defined by law, an institution, a coordinating body or a professional society. In the diverse arena of higher education, fitness for purpose varies tremendously by field and programme (Meier et al., 2010). Quality refers to the standard of a phenomenon when it is compared to other things like it: how good or bad something is, that is, to be of good/poor/top quality or of a high standard. In this context, it is associated with the ‘monitoring and evaluation component of education’ to see whether the outcome is good and of the intended standard (McCarthy, 1996; Maduewesi, 2005). Quality is the ability or degree with which a product, service, or phenomenon conforms, to an established standard, and which makes it to be relatively superior to others. With respect to education, this implies the ability or degree with which an educational system conforms to the established standard and appropriateness, of the inputs available for the delivery of the system (Fadipe, 1999). Quality in education therefore means the relevance and appropriateness of the education programme to the needs of the community for which it is provided (Maduewesi, 2005).

Quality assurance on the other hand, is about consistently meeting product specification or getting things right the first time, and every time. Quality assurance in the university system implies the ability of the institutions to meet the expectations of the users of manpower in relation to the quality of skills acquired by their outputs (Ajayi & Akindutire, 2007). Equally, it

can be said to be the ability of the universities to meet certain criteria relating to academic matters, staff-student ratios, staff mix by rank, staff development, physical facilities, funding, and adequate library facilities. Adequacy of various inputs in the university system, in terms of quality and quantity, exercises tremendous influence on quality assurance in the university system (Adamu, 1994; Kisilowska, 2002; Kisuniene, 2004).

Quality assurance is a key component of successful internationalisation; a mechanism for building institutional reputation in the competitive local and global arena and a necessary foundation for consumer protection (The National Universities Commission (NUC), 2013; Jonathan, 2014). Quality assurance for this study is defined conventionally as fitness for purpose in the university academic programme as meeting or conforming with generally accepted standards as defined by quality assurance bodies and appropriate academic and professional communities (The International Standards Organisation (ISO), 2015). It is also viewed as a planned and systematic review processes carried out by organisation, institution, or programme, to determine if acceptable standards are being met, maintained and enhanced. It guarantees confidence in a programme of study given by an institution that standards and quality are being maintained and enhanced (UNESCO, 2006).

Kisilowska (2002) noted that quality assurance principles are a certain form of naming and ordering the actions that are necessary for assuring the quality, for instance of teaching, it is internally measured and evaluated at a given university, and also externally, during an accreditation process. As a result of this, quality assurance principles are to be used as indicators to ensure compliance. It is noteworthy that quality assurance principles regulate both the external and internal activities of an educational institution. Assuring quality means (Ijeoma & Osagie, 2005; Adamu, 2011; Obadara & Alaka, 2013; Ibijola, 2014):

- i. pointing to and naming the elements that are decisive to the evaluation of an educational process or other assessable elements;
- ii. defining the procedures for acting, appointing person and working out the documents necessary for the correct execution of tasks relating to a given entity;
- iii. setting quality indicators; and
- iv. analysing quality on a regular basis with the use of appropriate tools.

A tertiary institution is only as good as the quality of its teaching staff -they are the heart of the institution that produces its graduates, its research products, and its service to the institution, community, and nation (NUC, 2013). Every nation and its university graduates are competing in an environment shaped by its own local and national needs, as well as international expectations and standards. The impact of the latter is increasing. As a result, the success and competitiveness of graduates in tertiary institutions will be affected by those standards and expectations. There is no doubt that the quality of higher education determines the quality of human resources of a country. One of the major objectives of the universities is to produce a qualified, skilled and globally competent workforce for the labour market of business and industry, which is a critical factor to national growth and development. Since no nation can develop beyond the quality of its higher education (Adams, 2010).

Recent developments such as increasing student enrolments; reduced state funding for public higher education; increasing number of private providers; cross border education have also influenced the purpose and functions of higher education (Harvey, Mason & Ward, 1995; Harvey, 2004). The need for global competitiveness is another recent development that has impacted higher education (ISO, 2015). In Nigeria, some of these recent developments are reflected in mission statement of NUC, which is the regulatory body established to oversee the

administration and delivery of higher education in Nigeria: ‘to ensure the orderly development of a well coordinated and productive university system that will guarantee quality and relevant education for national development and global competitiveness (NUC, 2013).

Accreditation is a process of self-study and external quality review used in higher education to scrutinise an institution and/or its programmes for quality standards and need for quality improvement (ISO, 2015). The process is designed to determine whether or not an institution has met or exceeded the published standards (set by an external body such as a government, national quality assurance agency, or a professional association) for accreditation, and whether it is achieving its mission and stated purpose (Mishra, 2006). The process usually includes a self-evaluation, peer review and a site visit. Accreditation is the establishment or of the status, legitimacy or appropriateness of an institution, programme or module of study. Accreditation standards and guidelines in Nigeria educational system is aimed at strengthening programme for quality assurance and quality improvement (Ibijola, 2014). It is a process that aids institutions in developing and sustaining effective educational programmes and assures the educational community, the general public, and other organisations that the accredited institution has met high standards of quality and effectiveness (NUC, 2013).

The Council for Higher Education Accreditation (CHEA) of the United States of America (USA) defined accreditation as “a process of external review used by higher education to scrutinise colleges, universities and educational programmes for quality assurance and quality improvement” (2010, p.1). The goal of accreditation is to ensure that education provided by institutions of higher education meets acceptable levels of quality. Accrediting agencies develop evaluation criteria and conduct peer evaluations to assess whether or not those criteria are met. Institutions and/or programmes that request an agency's evaluation and that meet an

agency's criteria are then "accredited" by that agency (Ibijola, 2014). However, the extent to which each tertiary institution accepts and fulfils the responsibilities inherent in this process is a measure of its concern for freedom and quality in higher education and of its commitment to strive for and achieve excellence in its endeavours (Mishra, 2006).

According to the U.S. Department of Education (USDE) (2014, p.9), there are two basic types of educational accreditation, one identified as "institutional" and one referred to as "specialised" or "programmatic" Institutional accreditation normally applies to an entire institution, indicating that each of an institution's parts is contributing to the achievement of the institution's objectives, although not necessarily all at the same level of quality. The accrediting Commission (NUC), for example, performs institutional accreditation, as other national accrediting agencies do, such as the Board (NBTE). In Nigeria, specialised accreditation is a voluntary process and institutions choose to apply for accredited status. If accredited, such an institution agrees to abide by the standards of their accrediting agency and to regulate itself by taking responsibility for its own improvement. Accordingly, the Institute of Chartered Accountants of Nigeria (ICAN) grants exemption to graduates of accredited institutions from its professional examinations. Specialized or programmatic accreditation normally applies to programmes, departments, or schools that are parts of an institution. The accredited unit may be as large as a college or school within a university or as small as a curriculum within a discipline. Most of the specialised or programme accrediting agencies review units within an institution of higher education (Ijeoma & Osagie, 2005; Adamu, 2011; Ibijola, 2014).

As stated above, the concept of quality assurance is the ability of education institutions to meet the need of the user of manpower in relation to the quality of skills acquired by their products, that is, students (Atoyebi&Oyeleke,2013). The quality of an academic programme becomes a

universal concern because the product of one university invariably becomes an employee in another university or other cultures' industrial setting. Also, degree obtained at the end of training in a university is intended to ascertain the level of competency (Ijeoma & Osagie, 2005).

2.11.1 Quality Assurance in the Nigerian Universities

The period 2nd – 7th of August, 2004 marked was landmark in the history of the Nigerian university system, as the National Universities Commission (NUC) held a workshop that led to the merger of a set of benchmarks and the existing minimum academic standards of programmes taught in the Nigerian universities. Prior to this workshop which had as its theme, “*Towards the Production of Better Skilled and Entrepreneurial Graduates*”, there had been a growing concern by the Nigerian public about the relevance of the curriculum of Nigerian universities to the national development. Similarly, at that time, the minimum academic standards had existed for fifteen (15) years having been developed in 1989; and was thus long overdue for review. In 2001, a set of Benchmarks had been developed with the intension of providing the framework for curriculum revision (NUC, 2007).

In order to have an all inclusive review process, the NUC conducted a national needs assessment survey to find out those aspects of the curriculum of the Nigerian universities that needed to be adjusted for relevance. The Commission also developed entrepreneurial studies curriculum for all undergraduates in the Nigerian university system irrespective of their course of study. Consequently, the workshop served the purpose of reviewing the minimum academic standards and merging the benchmarks and the revised minimum academic standard documents. The results of the Survey of Needs Assessment of Nigerian Graduates and the developed Entrepreneurial Studies Curriculum were also incorporated into the document during the workshop (NUC, 2007). In all, there were about 300 senior academics (mainly Professors) from

all disciplines who participated in the exercise. All the Vice-Chancellors from the Nigerian universities also participated in the review exercise.

The workshop culminated in the production of the Benchmarks Minimum Academic Standards (BMAS) Documents which were circulated to the Nigerian universities for their comments. The comments from the universities were also incorporated in the document in another workshop involving seasoned Nigerian academics. Afterwards, it passed through the scrutiny and subsequent approval of the Quality Assurance Committee of the NUC Board and the Board itself. Preparatory to presenting the documents to the Federal Executive Council for its approval through the Federal Ministry of Education, the NUC, again put together panels of distinguished professors for a final editing of the documents especially since some other BMAS have been developed since the 2004 workshop. The recent additions were for programmes which previously had none. About thirty five (35) Professors across Nigerian Universities worked for two days at the NUC Secretariat from the 26th and 27th March, 2007 on the final editing of the BMAS.

The National Universities Commission (NUC) (2013) defined quality assurance as the systematic review of educational programmes to ensure that acceptable standards of, education, scholarship and infrastructure are being maintained. As part of the efforts to ensure qualitative university education in Nigeria, the NUC was particular about ensuring accreditation of academic programmes in Nigerian universities in order to produce graduates who are relevant to the Nigerian economy (Ibijola, 2014). Emphasis is laid on the quality of academic staff and students to be admitted and employed respectively. The Commission is committed to improving the quality of university programmes through injection of requisite inputs as well as assuring

quality process and outputs based on the decree 49 of 1988 that widen its scope. The NUC is charged to embark on accreditation of quality assurance in Nigerian universities (Aboderin, 2012).

Quality assurance can be either an external or internal process. External quality assurance refers to the review by an external agency (that is, a national quality assurance agency) or body (that is, a professional body), which evaluates the operations of a university (institutional) or of its programmes to ascertain the level of compliance with set minimum standards. External quality assurance is mainly carried out through the instrumentality of accreditation and involves, as indicated earlier, a self-study, peer review and a reporting system. Internal quality assurance, on the other hand, refers to the internal policies and mechanisms of a university or programme for ensuring that it is fulfilling its purposes as well as the standards that apply to higher education in general or to the profession or discipline, in particular (IIEP, 2006). Indeed, most universities from inception design and implement various internal activities to ensure that certain agreed standards of performance are being met. Examples of such are the external examination system, self-assessment system, student-lecturer assessment.

Quality assurance is a set of activities or procedures that an organisation undertakes to ensure that standards are specified and reached consistently for a product or service (The PunchEditorialComment,2013). Its goal is to create reliable systems by anticipating problems and designing procedures to avoid as many errors and faults as possible (Kisuniene, 2004). It is a systematic management and assessment procedure adopted by higher education institutions and system in order to monitor performance against objectives and to ensure achievement of quality outputs and quality improvements. Green (1994) observed that an aggregate of actions and measures taken regularly to assure the quality of higher education products, services, or

processes, with an emphasis on assuring that a prescribed threshold of quality is met will go a long way in revitalising nation's university system.

On the quality of input into Nigerian universities, it is often said that no education can rise above the quality of its teachers (Aboderin, 2012). The teacher is the most important of all the inputs that go into educational provision. This is because education of the highest quality requires teachers of the highest quality. Currently, there is student population explosion in Federal and State Universities due to over enrolment without expansion of facilities (Ibijola, 2014). To ameliorate the situation, 6 new federal universities were established, one in each geo-political zones of the country. More private universities have also been granted license to operate. Classrooms are overcrowded while laboratories and other learning materials are grossly inadequate because of insufficient funding which is the cry of all the universities. The UNESCO had recommended a standard budget allocation to educational sector to stand as 26% but there is never a year in the history of this country that 26% of a national budget is allocated to education (Ibijola, 2014).

Quantity and quality of academic staff is another element of major concern. The teacher/student ratio is always nothing to talk of; even the ratios by discipline are far from encouraging especially in the humanities and some science-based disciplines (Okebukola, 2010). The most unfortunate about the academic staff is that their population is heavy at the bottom. Senior lecturers and above are few while lecturer 1 and below are more. Many are no longer interested in Ph.D and now that private universities have increased, the situation is going to be worse. All these are the focus of accreditation exercise (Awe,2009; Amaka, 2012).

The quality of education does not depend only on resource inputs, but also on the output, which

includes academic achievement on tests, scores and progression and pass rates; in other words, the internal and external efficiency. The dimensions for quality in the output are measures of achievement, attainment and standards (Maduewesi, 2005). Achievement refers to what students really learnt in terms of the knowledge, skills and attitudes acquired. Attainment refers to the number of students who complete the prescribed academic programmes and obtain the qualifications. Standards are the official learning objectives, that is what society expects of products of a given school system. Out of the three, a measure of achievement which is most relevant to this research also offers the most promising source of policy-relevant information. From the national survey jointly carried out by NUC and Education Trust Fund, there were series of comments made on the account of complaints of the deteriorating standards of graduates from Nigerian universities in various fields of knowledge in the survey. The disciplines included administration, agriculture, arts, education, engineering, social sciences, veterinary medicine and medical sciences, (NUC, 2013). The outputs were found to be deficient both in communication skill and professionalism (Amaka, 2012).

The quality of process implies student/teacher interaction, level of learner participation and engagement in learning (Awe,2009). Repetition and drop-out rates are indicators of inefficiency in an education system. Carry-over syndrome is taken to be normal by Nigerian university students. Other indicators that show it is not well with the process of Nigerian university education are issues of examination malpractice, sexual harassment, sorting, sale of handouts, cultist (Obadara &Alaka, 2013). There is also delay of release of results in some universities. Outputs of educational research are nothing to boast about in today's Nigerian universities as teachers bemoan dearth of research grants. Community service which is another indicator of efficiency is at very low ebb. Not much is heard of in this area (Omoregie, 2005).

The curriculum content of the Nigerian educational system has been criticised as being overloaded, and does not sufficiently attend to the needs of the Nigerian learner (Awe,2009; Amaka, 2012; The PunchEditorialComment,2013; Ibijola, 2014). The data from the Monitoring of Learning Achievement (MLA) project, a nationwide study conducted between 1994 and1996 and the report published in 1997 by the Federal Ministry of Education, with the support of UNICEF and UNESCO has also shown that there is a wide gap between the intended curriculum and the achieved curriculum (Ibijola, 2014). However, this criticism has been challenged because the curriculum content of our institutions compares favourably with those in other countries. Obadara &Alaka (2013, p.3) maintained that “What is needed in our system is a re-ordering of the curriculum content, and enrichment of the achieved curriculum and for the implemented curriculum to focus on relevance and functionality”. The achieved curriculum is the knowledge, skills and attitudes that are achieved or learned while the implemented curriculum is the translation of curricula intentions into reality in classrooms, laboratories, workshops, playgrounds and other settings for learning, while not losing sight of the language provisions in the National Policy on Education (FGN, 2004). Following this, there should be a flexible curriculum. Curriculum rigidity must give way to ‘curriculum liberality’. Such curriculum must be relevant to both individual learner’s needs and societal needs at large.

Another cause of anxiety about Nigerian University education is the instability in the system characterised by the truncation of academic sessions and the epileptic closure and reopening of universities; occasioned by recurring and sometimes protracted strike actions by staff (academic and non-academic) and students (Ibijola, 2014). For instance, in the year 2007, the Nigerian Academic Staff Union of Universities (ASUU) went on strike for three months. In May 2008, it held two one-week "warning strikes" to press a range of demands, including an improved salary

scheme and reinstatement of 49 lecturers who were dismissed many years earlier. In June 2009, ASUU ordered its members in federal and state universities nationwide to proceed on an indefinite strike over disagreements with the Federal Government on an agreement it reached with the union about two and a half years earlier. After three months of strikes, in October 2009, the union and other staff unions signed a memorandum of understanding with the government and called off the industrial action. On 1 July 2013, ASUU embarked on another strike which lasted 5 months and 15 days was called off on 16 December 2013. Claims made by ASUU in regards to the strike are centered largely on funding and revitalisation of Nigerian public universities as well as a certain earned allowance which it claims to be in arrears of ₦92 billion. Some Nigerian students said that the strike was a curse to them while others said it was a blessing before the ASUU strike was called-off (Atoyebi,&Oyeleke,2013; The PunchEditorialComment,2013).

Generally, accreditation of institutions and programmes takes place periodically for improvement and quality assurance in the Nigerian universities, therefore it:

- i. verifies that an institution or programme meets established standards;
- ii. assists prospective students in identifying acceptable institutions;
- iii. assists institutions in determining the acceptability of transfer credits;
- iv. helps to identify institutions and programmes for the investment of public and private funds;
- v. protects an institution against harmful internal and external pressure;
- vi. creates goals for self-improvement of weaker programmes and stimulating a general raising of standards among educational institutions;

- vii. involves the faculty and staff comprehensively in institutional evaluation and planning;
- viii. establishes criteria for professional certification and licensure and for upgrading courses offering such preparation; and
- ix. provides one of several considerations used as a basis for determining eligibility for federal assistance (Okojie, 2008; Obadara & Alaka, 2013; NUC, 2013; Ibijola, 2014).

Accreditation exercises have been carried out in Nigeria after the Federal government has approved the minimum academic standard. The first exercise was conducted in 1990 and 1991 and this involved 837 academic programmes across Nigeria University. A second comprehensive exercise was inducted between January and March accreditation in 2000 in both exercises, and according to Okebukola (2002), more than one thousand academic programmes were accredited in all Nigerian universities. The Universities Commission also accredited 1,343 programmes in 2005 in 48 Universities and five Colleges (NUC, 2005). No doubt that accreditation exercise in Nigerian universities has helped to improve the facilities and the quality assurance report which stressed the situation analysis of the universities has also helped universities authorities to work on areas where there are challenges.

In Nigeria, the Federal Government, through the Ministry of Education and accrediting agencies (NUC and NBTE), sustains a cooperative relationship whereby government relies on them to confirm the quality of institutions and programmes in which students enroll using federal student aid funds (Okojie, 2008). The Federal and State government fund their respective institutions while privately owned tertiary institutions are funded by the promoters (Atoyebi, & Oyeleke, 2013). Accreditation is important to students for a smooth transfer of courses and programmes among universities; which is considered an important indicator of quality.

Accreditation status of an institution or programme is important to employers when evaluating credentials of job applicants and when deciding whether to provide tuition support for current employees seeking additional education (Obadara & Alaka, 2013; The Punch Editorial Comment, 2013).

2.11.2 Perspectives on the Accounting Academic Programme and Practice in Nigeria

Accounting is often referred to as one of the oldest professions in the world. Equally often it is referred to as one of the newest and most rapidly growing professions. This difference stems largely from the fact that there are broad and narrow explanations and concepts of accounting. That is, when accounting is considered in broad general terms as the collecting, summarising, analysing, recording and communication of financial or economic data, it is indeed as old as civilization. However, when accounting is considered in a truly professional sense, as a highly developed and systematised method of collecting, recording, interpreting, and controlling economic data by members of a recognised profession, then it is very new.

In her work titled: *'The Development of Accounting Profession in Nigeria'*; Ajayi (1997, p.3) posited that "a discussion of the development of accounting profession in Nigeria cannot be undertaken without making reference to the development of Nigeria as a nation". Ikime (1987, p. 35) remarked that "the advent of Christianity to what later became known as Southern Nigeria brought with it elements of western education". Admittedly, the original aim of the missionaries was to produce low-grade teachers, clerks, some catechists, and ultimately pastors, not to produce high-level manpower that would eventually lead the struggle for independence (Ajayi, 1997).

However, once education began to be provided, it developed a certain momentum of its own. Expectedly, the colonial authorities at long last made some contribution; though low-keyed to the Christian mission's education effort. The rationale behind this gesture was evident: the mission's effort produced the Nigeria junior civil servants that the colonial state needed. This is the genesis of how western education took root in Nigeria. This historical position is buttressed by Wintoki (1997, p.50) when he argued that "it is an acknowledged fact that accounting profession in Nigeria developed along the British pattern". It is therefore quite natural to expect the profession in Nigeria to inherit the virtues and weaknesses of its foster mother, Britain. Consequently, until lately the accounting profession in the United Kingdom was lagging behind in conducting research in accounting in comparison to United States America. By implication, until recently, accounting research in Nigeria, like the United Kingdom, was always considered from the perspective of practice.

The position of Wintoki can be traced to the time when the Companies Ordinance of 1922 was enacted. In effect, the development of accounting education and training in Nigeria can be said to start in the early Nigerian Colleges of Arts, Science and Technology, which were established in Ibadan, Enugu and Zaria (Ikime, 1987). However, Ajayi (1997, p.7) maintained that "accounting did not start as a university course until 1960 when the University of Nigeria, Nsukka, was established. Following this were the University of Lagos and Ahmadu Bello University, both established in 1962, where accounting degree courses were included in their curriculum since inception".

Historically, the development of accounting profession in Nigeria also has its origin from the assistance given by some big international firms of accountants in helping the Federal Government in training accounting personnel needed for the economic development of the

country (Ikime, 1987). The development of the profession was later given a fillip by the establishment of tertiary institutions and the award of scholarship to students to study for accounting qualification in the United Kingdom (UK), and lately the United State of America. Subsequently, accounting development in Nigeria was strongly influenced by those who qualified as accountants in those two countries; who understandably contributed to its development by importing into the country the knowledge and skills they had acquired (Ikime, 1987; Ajayi, 1997; Wintoki, 1997).

In Durukwuaku's (1997:108) account, the history of accounting education in Nigeria is not complete if one fails to incorporate the work of Sir Eric Ashby, who headed the Commission on Post-Secondary School and Higher Education in Nigeria in the year 1960. It is on record that it was this commission that recommended that commercial programmes should be offered in the Nigerian higher schools and universities. However, relative to professionalising accounting in Nigeria, Ajayi (1997, p.4) asserted that "immediately after the country's independence, the idea of establishing a professional body of accountants in the country became a burning issue in the minds of a few accountants". These accountants coordinated their efforts together and on December 29, 1960 the inaugural meeting of "the Association of Accountants in Nigeria" incorporated under the Companies Act (1958), was held in Lagos. The main objects of the Association were to provide a central organisation for the accountants in the country, to maintain a strict standard of professional ethics, and to provide for the training, examination and legal qualifications of students in accounting.

Towing this line of history, Binitie (2000) reported that in 1965 the Association of Accountants in Nigeria evolved into an institute responsible for regulating the accounting profession. Consequent upon this, accounting profession in Nigeria was given official recognition by the

Federal Parliament Act Number 15 of 1965 for the establishment of the Institute of Chartered Accountants of Nigeria (ICAN). The Act came into effect on September 1, 1965.



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CHAPTER THREE

METHODOLOGY

3.1 Introduction The previous Chapter (Two) reviewed literature on both the conceptual and theoretical frameworks related to this study. Consequently, the current Chapter (Three) discusses the statistical methods and procedures adopted in carrying out the study. The Chapter highlights the research setting and design, both the population and the sample of the study. In addition, the Chapter includes sample frame and sampling techniques, research instrument/measurement of variables, validation and administration of the research instrument, and the statistical techniques for the test of hypotheses.

3.2 Research Design A baseline survey is adopted for this study. In recent time, a baseline research design method had been used in carrying out studies in the field of forensics (The Forensic Careers, 2014; The Innocence Project, 2014; The American Academy of Forensic Sciences, 2013; The Institute for Digital Research and Education, 2013; Creswell, 2012; Rahni, 2011). The Forensic Careers (2014, p.16) argued that “baseline survey permits an empirical [analysis](#) of the [current](#) situation of the forensic profession, and gathering of key data early for later informed judgments about the quality standards improvements, and development results the profession achieved”. Creswell (2012, p.3) opined that “baseline survey supports gathering of objective and verifiable data that quantifies the current situation of an activity”. Thus, baseline study is considered the most suitable method for the current study, with a view to developing quality standards compliance index for the forensic accounting profession in Nigeria.

3.3 Research Population and Sample

This sub-section discusses both research population and sample for the study.

3.3.1 Research Population

The research population for this study is the forensic accounting professionals (in both academic and practice) in Nigeria, trained and certificated by the International Institute of Certified Forensic Investigation Professionals (IICFIP) or/and the Institute of Chartered Accountants of Nigeria (ICAN) only, which totaled four-hundred and three (403) as at 31st of December, 2014 (IICFIP, 2014; ICAN, 2014). The target population consists of this category of professionals with a minimum of two years post-qualification experience as at 31st of December, 2014. As at that date, the number of the forensic accounting professionals that meet the criteria was two hundred and thirty eight (238) (IICFIP, 2014; ICAN, 2014). The population cuts across both private and public sectors of the Nigerian economy.

According to Ho (2006), this method of research population selection is adopted in cases where the specialty of the respondents will bring more accurate, reliable and valid results than by using the whole target population. Rahni (2011, p.9) noted that this “method of population selection is considered a viable option in obtaining data from a very specific group of people, when a limited number of individuals possess the trait of interest”. Thus, the method best enabled the current study answers the research questions and the tests the hypotheses. Additionally, the research population selection was also based on both the advice of the supervisors and other experts in the field of study, given the quality of expertise and experience required from the respondents.

However, it has been stressed that such population (or sample) selection could be prone to researcher bias (Hesse-Biber, 2010). On the contrary, Lucas (2014, p.41) argued that: “the method is only a disadvantage when it is ill-conceived or poorly considered”. Lucas maintained further that “such a technique could only be prone to researcher bias where it is not based on clear criteria; whether a theoretical framework, expert elicitation, or some other accepted criteria” (p.106). On this note, Lucas recommended that ‘Such population frame is more suitable for an in-depth research in which the focus is to understand complex and sensitive social phenomena’ (p.106).

3.3.2 Research Sample

However, due to the relatively small size of the target population, the study adopts the entire research population as its research sample. Lucas (2014, p.107) positioned that “The only time a researcher relies on sampling techniques is when testing all the individuals in the population is impossible”. Adèr, Mellenbergh & Hand (2008, p.171) maintained that “the ideal scenario is to test all the individuals to obtain reliable, valid and accurate results”. According to Miller, Strang, & Miller (2010) population could be wholly adopted as a sample size if such population is relatively small. The authors reasoned that such a sample size would make findings more valid and reliable. The respondents for the current study were considered as possessing the required characteristics, knowledge, expertise and experience.

3.4 Procedure for Data Collection

A combination of both primary and secondary methods of data gathering was adopted in this study. The primary data source consisted of a set of questionnaire administered to two hundred and eight(208) numbers of respondents; besides the thirty (30) copies used for pilot study as indicated in Section 3.6.1. Out of the copies administered, one hundred and sixty-one (161) copies were filled and returned, representing seventy eight percent (78%) of the total number administered.

The secondary data were obtained from the official websites and records (as at 31st of December, 2014) of the National Universities Commission (NUC); and Joint Admissions & Matriculation Board (JAMB) to ascertain the number of the Nigerian universities offering various specialised academic programmes in the forensic accounting. Additionally, visits were made to the IICFIP Secretariat in Ikeja, Lagos State, Nigeria; and ICAN's Audit, Investigations and Forensic Accounting Faculty at Oyingbo, Lagos. The visits were made to obtain data on the membership spread, methods of training and certification process, and mandatory continuing professional education and development (MCPED) programmes. Both Institutes' modules were also scrutinised to evaluate their level of compliance with the International Quality Assurance Accreditation Standards (IQAAS) benchmarks.

The study also adopted critical incident technique (CIT) to objectively investigate the extent to which the forensic accounting profession in Nigeria conformed to the International Quality Assurance Accreditation Standards (IQAAS). The forensic accounting building-blocks were used as the performance measures: i). Academic programme. ii). Professional training and certification process. iii). Professional practice and engagement. iv). Mandatory continuing professional education and development (MCPED). v). Professional institute and statutory regulatory authority. The CIT was adopted as a set of [procedures](#) to collect direct observations of the building-blocks that have critical significance and meet methodically defined criteria. These observations were then kept track of as incidents, which were used to make recommendations as suggested by Kirby (2013). The CIT was designed to capture the participants' experience, rather than in categories predetermined (Serenko, 2006). The method involved research questions on the current situation of the forensic accounting profession in Nigeria.

3.5 Measurement of Variables There were four (4) variables used for this study:

- i. Level of institutional regulation;
- ii. Extent of legal framework;
- iii. Degree of judicial acceptance; and
- iv. Extent of compliance with the IQAAS (as related to the forensic accounting profession).

Consequently, a multiple regression model was defined for the study. The independent variables and the dependent variable are identified as follows:

- i. **Independent Variables (IVs) (x):** Quality standards enforcement mechanisms (QSEM) namely: Level of institutional regulation; Extent of legal framework; and Degree of judicial acceptance.
- ii. **Dependent Variable (DV) (y):** Extent of compliance of the forensic accounting profession in Nigeria with the IQAAS).

The relationship between the IVs and DV is mathematically expressed as: $y = (f)x$ (that is, the IV predicts the DV). Consequently, a Multiple Regression Model was defined for the study, involving the dependent variable and the three independent variables. The dependent variable is examined to see whether, and by how much it varies as the independent variables vary.

The model is presented in a simple [stochastic linear form](#):

$$y_i = a_0 + b_1x_1 + b_2x_2 + b_3x_3 + e_i \dots\dots\dots (1)$$

- i. The term y_i is the i^{th} value of the dependent variable;
- ii. a_0 is the linear regression constant or intercept;
- iii. $x_1, x_2, \text{ \& } x_3$ are the independent variables; and
- iv. $b_1, b_2, \text{ \& } b_3$ are the gradients or slopes of the multiple regression model (that is, coefficients of the variables).

- v. The term ϵ_i is known as the "error/residuals/uncertainties" and contains the variability of the dependent variable not explained by the independent variable.

Where:

y_i =Extent of compliance of the forensic accounting profession in Nigeria with the IQAAS.

x_1 =Level of Institutional Regulation. x_2 = Extent of Legal Framework. x_3 =Degree of Judicial Acceptance.

Based on the multiple regression model, aggregately four variables are considered for analysis, out of which three are independent variables and one is dependent.

Each of the four variables is explained as follow:

3.5.1 Level of Institutional Regulation Section G of the survey instrument used for this study related to the first three variables (level of institutional regulation, extent of legal framework, and degree of judicial acceptance). The Section dealt with measurement of the effectiveness of quality standards enforcement mechanisms (QSEM) in the forensic accounting profession. The variable (level of institutional regulation) reflected in the item number 14(i) of the Section G. Previous studies **have identified** level of institutional regulation **as one of the three components of QSEM** (The Innocence Project, 2014; IICFIP, 2014; The Centre for Forensic Science and Medicine. 2013; Kendall, 2013; The American National Academy of Sciences, 2009). As a result, this study adapted and measured the potency of the variable along with the other two, in-terms of enforcement of quality standards in the forensic accounting profession in Nigeria. The measurement was on a scale of five (5) points, ranging from 1 = least effective to 5 = most effective enforcement mechanism. The IQAAS noted level of institutional regulation as one of the governance structures, and conditions for accreditation of the forensic profession in every country.

3.5.2 Extent of Legal Framework

As mentioned in Section 3.5.1, Section G of the questionnaire dealt with measurement of the effectiveness of quality standards enforcement mechanisms (QSEM) in the forensic profession. The variable (extent of legal framework) reflected in item number 14(ii) of the Section G. Previous studies **have identified the variable as one of the three components of QSEM** (The Innocence Project, 2014; IICFIP, 2014; The Centre for Forensic Science and Medicine. 2013; Kendall, 2013; The American National Academy of Sciences, 2009). As a result, this study adapted and measured the effectiveness of the variable along with the other two, relative to enforcement of quality standards in the forensic accounting profession in Nigeria. The measurement was on a scale of five (5) points, ranging from 1 = least effective to 5 = most effective enforcement mechanism. The IQAAS take extent of legal framework as one of the governance structures, and conditions for accreditation of the forensic profession in every country.

3.5.3 Degree of Judicial Acceptance

Degree of judicial authority is one of the three variables in Section G item number 14(iii) of a set of questionnaire used for this study. The Section G dealt with measurement of the effectiveness of quality standards enforcement mechanisms (QSEM) in the forensic profession. Previous studies **have identified the variable as one of the three components of QSEM** (The Innocence Project, 2014; IICFIP, 2014; The Centre for Forensic Science and Medicine. 2013; Kendall, 2013; The American National Academy of Sciences, 2009). As a result, this study adapted and measured the effectiveness of degree of judicial acceptance with the other two, specific to enforcement of quality standards in the forensic accounting profession in Nigeria. The measurement was on a scale of five (5) points, ranging from 1 = least effective to 5 = most effective enforcement mechanism. The IQAAS consider degree of judicial authority as one of

the governance structures, and conditions for accreditation of the forensic profession in every country.

3.5.4 Extent of Compliance with the IQAAS

The extent of compliance was measured using a compliance index. A compliance index is a scoring system representing the extent to which organisations / programmes / facilities are complying with the identified relevant regulatory requirements or standards (The Compliance Indexing Project, 2014). The Quality Standards Compliance Index (QSCI) is designed to measure the level of compliance of the forensic accounting profession in Nigeria using the IQAAS scorecard. This study designed the following interpretations (Table 3.1) on a scale of five points, for the QSCI:

Table 3.1: Interpretation of the QSCI for the Forensic Accounting Profession

S/N	Index	Percent	Compliance Indicator	
			Level	Remark
i	3.0– 5.0	60 – 100%	Moderate- Very High	Good - Excellent
ii	2.50 – 2.99	50 –59%	Average	Fairly Good
iii	0.00 – 2.49	40 – 49%	Non-compliance - Low	Poor

Source: Author (2015).Designed for theStudy **Key:** A minimum score is zero (0%), indicating that the entity/facility is out of compliance with all relevant requirements. The maximum scale is 5 (100%), meaning that the entity/facility is in compliance with all relevant requirements (very high level). The average compliance index = 2.5 (50%) points.

The compliance measurement covers the four structures of the forensic profession:

- i. Academic programme;
- ii. Professional training and certification process;
- iii. Professional practice and engagement; and
- iv. Mandatory continuing professional education and development (MCPED).

One of the issues with calculating this index is the distinction between a non-disclosure that is a result of non-compliance, versus one that is a result of non-applicability. The current study resolved this issue by making the score relative only to the IQAAS requirements for which the forensic

accounting profession is responsible. Had it been that the current study did not apply this approach, many scores would have been artificially low, as non-applicable items would have been treated as instances of non-compliance.

Consequently, Section E (No. 12) of the research instrument was on the extent of compliance of the forensic accounting profession in Nigeria with the IQAAS. The Section measured thirteen (13) items. Over the years, studies on quality standards compliance in forensics have used these items, either in part or in whole (Dutta, 2013; Kendall, 2013; The Canadian Institute of Chartered Accountants (CICA), 2006; Oberholzer, 2002; Walls, 1974) to measure quality standards in forensics. Consequently, the current study adapted the items as drivers of, and conditions for quality standards in the forensic accounting profession in Nigeria.

3.6 Research Instrument

A set of questionnaire was developed for the study (a copy is attached as Appendix I). The questionnaire consisted of seven sections with alphabetical numbering (Sections) A to G. Except for Section A (Demographic Data), all items used five point Likert scale; and items measuring various variables were interspersed (Ho, 2006; Kothari, 2004). Following the guidelines provided in The Institute for Digital Research and Education (2013) and Dutta (2013), the survey instrument was designed using opinion, factual items or categorical questions as well as open-ended items. The Likert five-point scale was adopted for opinion items. The instrument underwent both validity and reliability tests, detailed as follows:

3.6.1 Validity Test

The research instrument was subjected to content and construct validity testing:

i. Expert Test: The questionnaire was handed to two experienced forensic accounting

professionals (a senior academic and a practitioner in the management cadre). After necessary suggestions were effected, the questionnaire was further handed to two statisticians (both senior academics); who checked through the items to assess their suitability for measuring the desired variables of the study. Corrections were made following their suggestions and advice.

ii. Content Test: This test was performed to determine the level of clarity and appropriateness of the instructions in the questionnaire, based on the assessors' interpretation of the measures. The content test was carried out for a re-assessment that the measurement tools were capable of measuring what they were intended to measure. The validation was done with the assistance of a professor of content analysis, a behavioural psychologist and the supervisors. Advice was given on which items were to be retained, reframed or expunged, and final corrections were effected as appropriate.

iii. Pilot Test: At this stage of the validity tests, the questionnaire items were subjected to series of test in a formal manner. A pilot study was carried out. Thirty (30) copies of the questionnaire were used for this purpose, representing about thirteen percent (13%) of the study target population / sample size. The pilot study was undertaken to identify any potential challenges the respondents might encounter in completing the questionnaire items. No problems were identified. Besides, the domain of validity (also called intrinsic validity) was further used for the validity estimate. The domain of validity was obtained by calculating the square root of reliability, as reported in Table 3.1 (Cox, 2006; Quinton & Smallbone, 2006; Hesse-Biber, 2010).

3.6.2 Reliability Test

The reliability test was carried out with the aid of Statistical Package for Social Scientists (SPSS) version 21 (August 2013 edition). Thus, in relation to the reliability of the instrument used for the study; reliability coefficient for each of the four variables (Level of institutional regulation; Extent

of legal framework; Degree of judicial acceptance; and Extent of compliance with the IQAAS) were calculated using Cronbach Alpha test. The Cronbach's Alpha test associated each measurement item with every other measurement items to obtain the average inter-correlation for all the paired associations (Cox, 2005; Cronbach, 1951). A comparison of the means of the variables found no significant differences between the responses from the pilot and the main study. However, responses from the pilot survey were not included in the analysis of final sample (Duttan, 2013; van-Teijlingen & Hundley, 2012). Responses from the main study were tested for late response bias but none was found. Similarly, no systematic non-response bias was found.

The measurement indicators were evaluated by confirmatory factor analysis. The indicators assessed whether all items in a given scale represented the same latent factor. Composite reliability measured the internal consistency of the variables' indicators, similar to Cronbach Alpha Coefficient. The result of the composite reliability measures is reported in Table 3.2. All scales were found to have acceptable internal consistency ($\alpha > 0.8$) in line with the guidelines provided by the Institute for Digital Research and Education (2013). In effect, all measures demonstrated acceptable reliabilities, with coefficients (α) > 0.8 . The Institute for Digital Research and Education (2013, p.61) noted "that $\alpha > 0.7$ is an acceptable standard for reliability and consistency of the instruments used to measure the variables". The variances extracted from the data analysed tallied with the validity coefficients (as reported in Table 3.2).

Table 3.2: Validity and Reliability Coefficients of Research Variables

Research Variables	Validity Coefficients	Composite Reliability Coefficients
Level of Institutional Regulation	0.913	0.834
Extent of Legal Framework	0.904	0.817
Degree of Judicial Acceptance	0.911	0.829
<i>Compliance with the IQAAS</i>	<i>0.924</i>	<i>0.853</i>
Overall/Full Scale Variables	0.97	0.94

Source: Research Survey (2015)

3.7 Methods of Data Analysis This study adopted descriptive, inferential statistics, and compliance index to analyse the data. Six research questions and three hypotheses were designed to achieve the objectives of the current study. Descriptive statistical tools were used to analyse biographic data. Hypotheses one and two were tested with t-test, while hypothesis three was tested using regression model (backward elimination) (at $\alpha = 0.05$). Being a baseline study, mean score test and compliance index were used to measure the extent of compliance of the forensic accounting profession in Nigeria with the IQAAS. After item analysis had been performed, in order to establish internal consistency, the study also performed diagnostics for linearity and normality.

The descriptive statistics were used to prepare, tabulate, and summarise the data as well as computation of the summary measures such as the mean and standard deviation. Frequency distribution showing absolute and relative frequencies and percentages was adopted as well as pictorial representation or visual displays of data such as pie and bar charts. Frequency counts and percentages were used to present demographic profile of the respondents as well as their individual responses.

Table 3.2 reported the convergent validity of the indicators. Taken together, the convergent validity supported the use of the full compliance index on a scale of five (5) points; and its indicator variables for testing this study's hypotheses. The variables used to test the hypotheses were the four variables indicated earlier. The measurement of the variables was obtained from the questionnaire results. By implication, all the measures in the study exceeded the minimum threshold of $\alpha = 0.7$. These results indicated that there was strong internal consistency among the items that made up the research instrument.

3.8 Limitations of the Research Method Adopted in this Study

Qualitative researchers have been criticised for overusing interviews and focus groups at the expense of other methods such as ethnography, observation, documentary analysis, case studies, and conversational analysis. Thus, the reliability of survey data may depend on the following factors (Willis, 2007; Adèr, Mellenbergh & Hand, 2008; Corder & Foreman, 2009):

- i. Research quality is heavily dependent on the individual skills of the researcher and more easily influenced by the researcher's personal biases and idiosyncrasies.
- ii. It is sometimes not as well understood and accepted as quantitative research within the scientific community.
- iii. The researcher's presence during data gathering, which is often unavoidable in qualitative research, can affect the subjects' responses.
- iv. Issues of anonymity and confidentiality can present problems when presenting findings.
- v. Respondents may not feel comfortable providing answers that present themselves in a unfavorable manner.
- vi. Data errors due to question non-responses may exist. The number of respondents who choose to respond to a survey question may be different from those who chose not to respond, thus creating bias.

However, a standardised baseline survey (as adopted for this study) is mostly free from these limitations. In effect, qualitative research has numerous strengths when properly conducted. For instance, data based on human experience are powerful and sometimes more compelling than quantitative data (Smith, 2003; Quinton & Smallbone, 2006; Hesse-Biber, 2010; Miller, Strang & Miller, 2010).

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The data presented in this Chapter were obtained from:

- i. Opinions of the respondents, through administration of a set of questionnaire (the primary source); and
- ii. Statistics from the International Institute Certified Forensic Investigation Professionals (IICFIP); Institute of Chartered Accountants of Nigeria (ICAN); National Universities Commission (UNC); and Joint Admissions and Matriculation Board (JAMB) (the secondary source).

There were six objectives, six research questions, and three hypotheses that guided this study. The data were subjected to both descriptive and inferential statistical analyses. The descriptive statistics provided simple summaries about the sample and observations that were made. Both hypotheses one and two were tested using one sample t-test, while hypothesis three was tested with the aid of multiple regression analysis.

4.2 Demographic Data of the Respondents

Tables 4.1 to 4.8 report the analysis of demographic data of the respondents. The respondents used for this study were the forensic accounting professionals in Nigeria, with a minimum of two year post qualification experience, trained and certificated by IICFIP or/and ICAN.

4.2.1 Gender Distribution of the Respondents

Table 4.1: Gender Distribution of the Respondents

Gender	Frequency	Percentage (%)	Cum. Percentage (%)
Male	133	82.6	82.6
Female	28	17.4	100
Total	161	100	

Source: The Research Survey (2015)

From Table 4.1, the result reveals that the respondents are predominantly male (82.6%) male. The outcome supports DiGabriele (2008) finding that at undergraduate level the enrolment of both male and female students were almost at par; but female enrolments dwindled at both postgraduate and professional levels.

4.2.2 Age Distribution of the Respondents

Table 4.2: Age Distribution of the Respondents

Age	Frequency	Percentage (%)	Cumulative %
21 – 30 years	0	0.0	0
31 – 40 years	20	12.4	12.4
41 – 50 years	73	45.3	57.7
51 – 60 years	47	29.2	86.9
Above 60 years	21	13.0	100
Total	161	100	

Source: The Research Survey (2015)

From Table 4.2, a good number of the respondents (87.5%) are above forty (40) years of age; an indication that the respondents are matured in terms of age. The result also reveals that none of the respondents is below thirty years of age. Furthermore, 42.2% of the respondents are above 50 years of age. Dutta (2013) had argued that older forensic practitioners approached professional engagements with more caution than the younger ones; and their opinions carried more weight in the court trials. In effect, the opinions the respondents provided in this study could be adjudged valid, reliable and credible.

4.2.3 Job Category of the Respondents

Table 4.3: Job Category of the Respondents

Profession (Forensic Accounting)	Frequency	Percentage (%)	Cumulative %
Academic	9	5.6	5.6
Practitioner	152	94.4	100
Total	161	100	

Source: The Research Survey (2015)

Table 4.3 shows that the number of the academic respondents (5.6%) is significantly low compared to the practitioners. The result validated Fagboro's (2005) findings that less attention

is focused on professional qualifications in the Nigerian tertiary institutions. In contrast, both educational and professional qualifications are given almost the same weight in terms of conditions for both employment and promotion in the private sector. This may account for paucity of empirical papers in the forensic accounting discipline (Gutta, 2013). Fagboro et al. (2014) found that the overwhelming majority of the forensic accounting practitioners in Nigeria lacked the requisite educational background technical and research skills to conduct quality research.

4.2.4 Present Employment of the Respondents

Table 4.4: Present Employment of the Respondents

Present Employment	Frequency	Percentage (%)	Cumulative %
Public Sector	27	16.8	16.8
Private Sector	134	83.2	100
Total	161	100	

Source: The Research Survey (2015)

From Table 4.4, it is observed that the number (16.8%) of the respondents (forensic accounting professionals) in the public sector is significantly low compared to their counterparts in the private sector. Vambe (2013) found that in the Nigerian public sector, educational qualifications are given priority over professional qualifications, relative to conditions for employment and promotion; while in the private sector, both educational and professional qualifications are given almost equal considerations. Omolehinwa (2012) had also observed that one of the problems in the Nigerian Government was slow response to changing circumstances, which demanded efficiency and professionalism for survival. However, in the Nigerian public service, mostly in the parastatals, emphasis has now been placed on professional qualifications in terms of conditions for employment and promotion.

4.2.5 Job Status of the Respondents

Table 4.5: Job Status of the Respondents

Present Position on the Job	Frequency	Percentage (%)	Cumulative %
Management Cadre	94	58.4	58.4
Senior Cadre	67	41.6	100
Others	0	0.0	100
Total	161	100	

Source: The Research Survey (2015)

The outcome from Table 4.5 depicts that more than half (58.4%) of the respondents are in the management cadre. In effect, the outcome of this study could be relied upon given the caliber and status of the respondents, in terms of experience on the job. The American Association of Certified Fraud Examiners (ACFE) (2014) found that a positive relationship existed between career attainment and level of integrity displayed on the job. The result from Table 4.5 confirms why a good number (43.2%) of the respondents are over fifty (50) years of age. In Nigeria, it takes a while to reach the top of career ladder. Ho (2006) also reported that there was a positive correlation between the work experience of respondents and credibility of the opinions they provided.

4.2.6 Highest Academic Qualification of the Respondents

Table 4.6: Highest Academic Qualification of the Respondents

Highest Academic Qualification	Frequency	Percentage (%)	Cum. %	Ranking
O' Level	4	2.5	2.5	7 th
A' Level	0	0.0	2.5	11 th
OND	6	3.7	6.2	6 th
NCE	2	1.2	7.4	9 th
HND	41	25.5	32.9	2 nd
B.Sc.	39	24.2	57.1	3 rd
PGD	7	4.3	61.4	5 th
MBA	46	28.6	90.0	1 st
M.Sc.	12	7.5	97.5	4 th
M.Phil.	1	0.6	98.1	10 th
Ph.D.	3	1.9	100	8 th
Others	0	0.0	100	11 th
Total	161	100		

Source: The Research Survey (2015)

The figures from Table 4.6 reveal that holders of either Master of Philosophy (M.Phil.) or Doctor of Philosophy (Ph.D) are four (4) in number, representing 2.5% of the total respondents. This appears to corroborate the National Universities Commission's (NUC) (2013) observation that the number of Ph.D holders in Accounting was significantly low. Additionally, Master of Business Administration (MBA) degree holders are the largest (28.6%) class of respondents, in terms of the highest academic qualification of respondents. It is also observed that some of the respondents did not have solid educational background.

4.2.7 Professional Qualifications of the Respondents

Table 4.7: Respondents Professional Qualifications

Professional Title	Yes		No	
	Frequency	Percentage (%)	Frequency	Percentage (%)
FCFIP/CFIP	65	40.4	96	59.6
CFAN	134	83.2	27	16.8
CFE	41	25.5	120	74.5
FCA/ACA	134	83.2	27	16.8
FCCA/ACCA	14	8.7	147	91.3
CPA	5	3.1	156	96.9
FCTI/ACTI	84	52.2	77	47.8
FCMA/ACMA	14	8.7	147	91.3
CAN	18	11.2	143	88.8
Others	0	0	161	100
Average	51*	31.6	110*	68.4

Source: The Research Survey (2015) **Total number of respondents = 161*

The respondents in this study are the forensic accounting professionals in Nigeria, certificated by IICFIP or/and ICAN, with a minimum of two year post qualification experience. Thus, from Table 4.7 the respondents are either Fellow Certified Forensic Investigation professional (FCFIP)/ Certified Forensic Investigation professional (CFIP) of the International Institute of Certified Forensic Investigation Professionals (IICFIP), United States of America; or Certified Forensic Accountants of Nigeria (CFANs) of the Institute of Chartered Accountants of Nigeria (ICAN) Forensic Certification Training Programme; a combination of both FCFIP/CFIP and

CFAN. Following the ICAN's forensic certification rule, ACA/FCA is a condition precedent for CFAN.

For the forensic accounting professional training programme, ICAN only trains its existing professional members (that is, holders of FCAs/ACAs) as Certified Forensic Accountants of Nigeria (CFAN). Consequently, from Table 4.7 the number of CFANs (134) tallies with the number of ACAs/FCAs. Furthermore, some ICAN members as well as non-members have looked towards the IICFIP for certification. The total number of FCFIPs/CFIPs (surveyed alone) = 65. Thus, CFANs (143) plus FCFIPs/CFIPs (65) = 208; whereas the total number of the respondents is 161. In effect, there are (208 - 161) 47 respondents that are certified as FCFIP/CFIP and CFAN. Unlike ICAN that limits its forensic accounting training to only its existing professional members, IICFIP is an umbrella body for all forensic disciplines. The IICFIP's conditions for membership are less restricted and more embracing than that of ICAN.

4.2.8 Respondents Post Qualification Work Experience

Table 4.8: Respondents Post Qualification Work Experience

Post-Forensic Accounting Qualification Work Experience	Frequency	Percentage (%)	Cum. Percentage (%)
2 – 4 years	161	100	100
5 – 7 years	0	0	
8 – 10 years	0	0	
Above 10 years	0	0	
Total	161	100	

Source: The Research Survey (2015)

The result from Table 4.8 confirms that none of the respondents has less than two years post forensic accounting professional qualification work experience. This alludes to the fact that the respondents have requisite experience on the job, which impacts on the reliability of the opinions they provided in this study. Table 4.8 also reports that none of the respondents has more than four years post forensic accounting professional qualification work experience. The result

provides an evidence that the forensic accounting profession is still in its infancy in Nigeria, as it is in the most part of the world (Efiong, 2012; ICAN, 2014; IICFIP, 2014; and The Forensic Careers, 2014).

4.3 Current State of Forensic Accounting Profession in Nigeria (*Research Question One*)

Table 4.9: The Current State of the Forensic Accounting Profession in Nigeria

Governance Structures of Forensic Accounting Profession	CMIS	Compliance Rate (%)	Compliance Indicator	
			Availability	Remark
Institutional Regulation	0	0.00	Presently Not Available	Non-compliance
Legal Framework	0	0.00	Presently Not Available	Non-compliance
Judicial Acceptability	5	100	Available in Nigeria	Very High Compliance
Overall Compliance	0.33	33%		Very Low

Source: The Research Survey (2015)

CMIS = Compliance Mean Item Score

In terms of availability of the forensic accounting governance structures in Nigeria, Table 4.9 reports on the current state of the profession benchmarking with the existing requirements of the IQAAS. The scoring scale ranges between five points for availability; and zero for non-availability of each of the three IQAAS recognised governance structures (institutional regulation, enabling legal framework, and judicial authority) for the forensic accounting profession.

From Table 4.9, out of the three components of QSEM, only one (Judicial Authority) is in existence in Nigeria. That is, the forensic accounting profession in Nigeria lacks both the Institutional Regulation and Enabling Legal Framework. It can thus be concluded that the profession in Nigeria is lacking in terms of a strong governance structures to coordinate activities and enforce standards. The result confirms Okonjo-Iweala's (2015) position that corruption persists in Nigeria because the Country lacks the institutions, systems and processes to prevent it.

The judicial authority over the forensic profession in Nigeria was noted in the case of Akolade Arowolo who was sentenced to death on the 21st of February, 2014, having found him guilty of

murdering his banker's wife. The death sentence was handed down mainly based on the forensic evidence provided by Professor John Obafunwa, a forensic pathologist and Chief Medical Examiner at the Lagos State University Teaching Hospital. The trial Judge, Justice Lateefa Okunnu of a Lagos High Court sitting in Ikeja, described Obafunwa's evidence as 'completely professional,' noting that the forensic expert evidence was 'objective, formal, and impassioned.'

4.4 Problems that led to the Emergence of the Forensic Accounting in Nigeria

Table 4.10: Problems that led to the Emergence of the Forensic Accounting Profession in Nigeria

The Problem	MIS	Remark	% Value	Ranking
Cases of economic and financial crimes.	5	Highly Severe	91	1 st
Racketeering financing.	4	Very Severe	86	4 th
Terrorism financing	4	Very Severe	85	5 th
Increase in the crime due to technological advancement.	4	Very Severe	72	7 th
Ingenuity of the fraudsters	4	Very Severe	67	8 th
Increase in corporate failures.	3	Severe	64	10 th
Audit investigation tools are no longer sufficient to unravel the crimes.	4	Very Severe	81	6 th
Increase in the demand for qualified forensic accounting professionals.	4	Very Severe	88	3 rd
Shortage of qualified forensic accounting professionals.	4	Very Severe	89	2 nd
The dynamics of the business environment.	3	Severe	66	9 th

Source: The Research Survey (2015)

Table 4.10 presents a summary of the outcome of the problems that led to the emergence of the forensic accounting profession in Nigeria. The report reveals that all the problems that led to the emergence of the profession in Nigeria are, at least, deemed severe. The result of the absolute percentile values reveal that: both racketeering financing (86%); and terrorism financing (85%) achieve close rating. Similarly, both the demand for qualified forensic accounting professionals (88%); and the shortage of qualified forensic accounting professionals (89%) achieve close ratings. The rating of the "basic traditional audit investigation tools are no longer sufficient to unravel the crimes" as 81%; suggests that statutory auditors are lacking in the requisite skills to investigate the economic and financial crimes.

4.5 Determinants of Success of the Economic and Financial Crime Prosecutions

Table 4.11: Determinants of Success of the Economic and Financial Crime Prosecutions

Determinants of Success	Mean Item Score	Remark
Co-operation from parties who should furnish relevant information.	4	Agree
Quality of evidence gathered at the investigation stage.	4	Agree
Transparency of investigation of the case itself.	4	Agree
Professional competences of the prosecuting counsel.	4	Agree
Fairness of the presiding judge in the trial.	5	Strongly Agree
Gaps in the law guiding the prosecution.	4	Agree

Source: The Research Survey (2015)

Table 4.11 reveals that the respondents agree that all the listed determinants play critical roles in the success or otherwise of the prosecution of the economic and financial crimes in Nigeria. This result supported the position of other scholars in the field of criminal intelligence and investigations (Ribadu, 2006; Ngex, 2010; Keshi, 2014). However, the fairness of the presiding judge in the trial is reported as the most potent determinant. In recent time, Nigerians have witnessed occasions where presiding judges compromise the integrity of the legal profession. Some of the judges so indicted have been officially sanctioned as appropriate. A case in point was on the 25th of April, 2013, in Abuja, the National Judicial Council (NJC) suspended Justice Abubakar Talba of the High Court, Federal Capital Territory (FCT) Abuja, from office for a period of one year without pay over the judgment he delivered in the case of the police pension fund culprit, John Yakubu Yusuf (Eme, Uche & Uche, 2014).

However, the quality of evidence gathered at the investigation stage is reported as second rated determinant; which supported the previous findings (The Innocence Project, 2014; The American Academy of Forensic Sciences, 2013; Edwards, 2009). This shows that quality of forensic evidence has a crucial role to play in the administration of criminal justice in Nigeria (Neufeld & Garrett, 2009; Fagboro & Olofinsola, 2007).

4.6 Contribution of the Nigerian Universities to the Advancement of the Forensic Accounting Profession (*Research Question Two*)

This Section centers on the assessment of the contribution of the Nigerian universities to the advancement of forensic accounting profession in the Country. Table 4.12 reports on the findings.

Table 4.12: Specialised Forensic Accounting Academic Programme in the Nigerian Universities

Ownership Structure	No. of Universities	%	Universities Offering Specialised Programmes in		
			Conventional Accounting	Forensic Accounting	Forensic Accounting (%)
Federal	40	1.25	22	2	05%
State	38	9.69	23	0	00%
Private	50	9.06	41	1	02%
Total	128	00%	86	3	2.34%

Source: Compiled from the NUC & JAMB Statistics (December 2015)

From Table 4.12, as at December 2014, only three Nigerian universities out of 128, offer specialised forensic accounting academic programmes; whereas the proportion of the Nigerian universities offering academic programmes in the conventional accounting is 86, representing 67% of the total number of the Nigerian Universities as that date. Thus, the contribution of the Nigerian universities to the advancement of the forensic accounting profession is deemed significantly low (2.34%). However, a few number of the Nigerian universities offering programmes in the conventional accounting do offer fraud examination (a sub-set of forensic accounting) as a unit course. The fraud examination is mostly offered at final year level, being a specialised course. In addition, some aspects of fraud examination are covered in the audit and investigation syllabus the universities offered. In a related manner, Table 4.13 reports on the outcome of the investigation conducted on the obstacles in integrating forensic accounting academic programme in Nigeria.

4.7 Obstacles in Integrating Forensic Accounting Academic Programme in Nigeria

Table 4.13: Obstacles in Integrating Forensic Accounting Academic Programme into the Nigerian Universities

Obstacles in Integrating Forensic Accounting Academic Programme	MIS	Ranking	Remark
Lack of capacity for additional academic programme in the university.	4.23	2 nd	Very Severe
Administrative bottleneck bureaucracy.	3.92	3 rd	Severe
Lack of sufficient leadership support.	3.87	4 th	Severe
Lack of sufficient qualified academics to teach forensic accounting courses	4.74	1 st	Very Severe
Lack of faculty members' interest due to excessive workload.	1.67	7 th	Hardly Severe
Ideological attitude to change.	2.51	5 th	Severe
Cultural attitude to change.	2.27	6 th	Severe

Source: The Research Survey (2015)

Key: MIS = Mean Item Score.

From Table 4.13, it can be deduced that all the obstacles in integrating forensic accounting academic programme in Nigeria, but one, are at least deemed severe. Both lack of sufficient qualified academics to teach the forensic accounting courses; and lack of capacity for additional academic programmes are the most severe obstacles to integrating the specialty into the Nigerian universities' academic programmes. The least severe among these obstacles which also is the only obstacle that is hardly severe is the lack of faculty members' interest due to excessive workload. The issue of 'lack of sufficient qualified academics to teach the forensic accounting courses' is a critical one. It confirms the findings of the Forensic Accounting Degree Directory (2014) that globally there paucity of qualified academics to teach forensic accounting courses.

4.8 Contribution of the Nigerian Professional Accounting Bodies to the Advancement of the Forensic Accounting Profession in the Country ((*Research Question Three*))

In Nigeria, as at present time, there are two statutorily recognised national accounting bodies:

- i. The Institute of Chartered Accountants of Nigeria (ICAN) created by an Act of Parliament No. 15 of 1st of September 1965; and
- ii. Association of National Accountants of Nigeria (ANAN) founded in the year 1979, and Chartered by Act (Decree) No. 76 of 1993 (Now Cap A26 LFN. 2004). As at

31st of December, 2014, both ICAN and ANAN have trained 53,527 professional accountants. Although not a statutory specialised forensic (accounting) institute, ICAN is the only Nigerian professional accounting body that presently offers a specialised training and certification programme in the forensic accounting. ICAN founded the Audit, Investigations and Forensic Accounting Faculty in the year 2009. The Faculty started its certification programme in 2011. The ICAN Forensic Certification Training Programme is restricted only to its existing professional members. That is, qualified chartered accountants who are either associates members (ACAs) or fellows (FCAs). As at December 2014, ICAN has trained and inducted three hundred and eighty-two (382) of its members as Certified Forensic Accountant of Nigeria (CFAN) (ICAN, 2014). The category represents those who have passed the examination on the six (6) modules. Given the prevalent level of corruption in Nigeria, this contribution of only one of the major Nigerian professional accounting bodies to the advancement of the forensic accounting profession in the Country is considered low.

4.9 Compliance of the Forensic Accounting Professional Training and Certification Process in Nigeria with the IQAAS (*Research Question Four*)

4.9.1 Skill Requirements in the Professional Training and Certification Process

Table 4.14: Skill Requirements in the Professional Training and Certification Process

Basic Skill Requirements	MI S	Ranking	Compliance Indicator	Remark
Theoretical investigative skills.	2.83	4 th	Low	Scarcely covered
Technical investigative skills.	3.71	2 nd	Moderate	Covered
Multitasking skills.	2.59	5 th	Low	Scarcely covered
Critical thinking skills.	0.00	9 th	Non-compliance	Not covered
Problem-solving skills.	3.92	1 st	Moderate	Covered
Effective communication skills.	1.00	8 th	Significantly Low	Scarcely covered
Expert witness skills	3.44	3 rd	Moderate	Covered
Strategic skills	1.91.	6 th	Low	Scarcely covered
Negotiation skills	1.83	7 th	Significantly Low	Scarcely covered
Logic	0.00	9 th	Non-compliance	Not covered
Overall Mean Item Score (OMIS)	2.23		Very Low Compliance	

Source: The Research Survey (2015)

The International Quality Assurance Accreditation Standards (IQAAS) stipulate that ten (10) basic skills should be covered, as a minimum, in the forensic accounting professional training

and certification process. However, the responses of the respondents, as summarised in Table 4.11, show that: theoretical investigative skills; multitasking skills; effective communication skills; strategic skills; and negotiation skills, are not covered up to the minimum required compliance index of 2.5 points in the forensic accounting professional training and certification process in Nigeria. On the other hand, technical investigative skills; problem-solving skills; and expert witness skills are all covered above the minimum compliance index. Both critical thinking skills and logic are not by any means covered. The result shows that the compliance index of the basic skill requirements in the forensic professional training and certification process in Nigeria is very low (1.70) on a scale of five points, (that is, 34%). This implies that the specialised forensic accounting professional training and certification process in Nigeria do not significantly conform to the IQAAS. Omoniyi (2004); Fagboro et al. (2011); Fagboro at al. (2014); Keshi (2014) had found that many of the existing forensic accounting practitioners in Nigeria lacked the requisite skills to effectively function in the field of specialisation.

4.9.2 Test of Hypothesis One

Forensic accounting professional training and certification processes in Nigeria do not significantly comply with the IQAAS.

Identification of Variables: $Y = f(X)$:

- i. Independent Variable: IQAAS.
- ii. Dependent Variable: professional training and certification processes.

Table 4.15: One-Sample T-Test for Hypothesis One

	Test Value = 4					
	T	Df.	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Basic skill requirements in forensic accounting professional training and certification process.	-37.992	160	.000	-1.702	-1.79	-1.61

Table 4.15 shows a low significant difference between the basic skills offered in the forensic accounting professional training and certification process and the IQAAS requirements. This implies that the ICAN Forensic Certification Training Programme does not significantly comply with the IQAAS. Thus, this study accepts hypothesis one as stated.

4.10 Compliance of the Forensic Accounting Professional Practice and Engagement in Nigeria with the IQAAS (*Research Question Five*)

Table 4.16: Forensic Accounting Profession in Nigeria Compliance with the IQAAS

Determinants (IQAAS Requirements)	Mean Item Score	Remark
National Institute of Forensics.	0.0	Non-compliance.
National Academy of Forensics.	0.0	Non-compliance.
Statutory Institute of Forensic Accounting.	0.0	Non-compliance.
Training and Certification Process	5.0	Very High Compliance.
Mandatory continuing professional education and development.	0.0	Non-compliance.
Statutory Professional Standards and Code of Conducts	0.0	Non-compliance.
Overall Mean Item Score of the Compliance Index	1.70	Very Low Compliance

Source: The Research Survey (2015)

From Table 4.16, the overall Mean Item Score of the compliance index reported (1.70) is deemed very low, compared to the IQAAS minimum acceptable standard of 2.5 points (IQAAS, 2014). This implies that the forensic accounting profession in Nigeria does not significantly conform to the IQAAS; most of the required governance structures (statutory forensic accounting institute, association of forensic practitioners, academy of forensics, and enabling legal framework) to enforce quality standards are not in place in Nigeria.

4.11 Quality Standards in the Forensic Accounting Practice and Engagement

Table 4.17: Perception of the Professionals on the Quality Standards in the Forensic Accounting Practice and Engagement

Quality Standards	MIS	Remark	%	Effect
The hallmark of forensics is the delivery of high quality services.	4	Agree	89	Positive
<i>Determinants of credibility of the forensic investigation include:</i>				
i. Educational qualification of the forensic accountant.	4	Agree	73	Positive
ii. Professional qualification of the forensic accountant.	4	Agree	95	Positive
iii. Quality of the research publications of the forensic accountant.	4	Agree	72	Positive
iv. Quality of training of the forensic accountant.	4	Agree	71	Positive
v. Skills of the forensic accountant.	4	Agree	74	Positive
vii. Experience of the forensic accountant.	4	Agree	73	Positive
viii. Competence of the forensic accountant.	4	Agree	72	Positive
Quality standards enforcement strengthens credibility of forensics.	4	Agree	83	Positive
Quality standards are enforceable in the forensic profession.	4	Agree	79	Positive
Quality standards are enforced in the forensic accounting in Nigeria.	3	Undecided	49	Neutral
Forensic accounting in Nigeria lacks the necessary governance structures.	4	Agree	73	Negative
Forensic accounting in Nigeria rests on weak methodological foundation.	4	Agree	74	Negative

Source: The Research Survey (2015)

MIS: Mean Item Score

From the figures in Table 4.17, the respondents agree that: The hallmark of forensics is the delivery of high quality services (89%); Quality standards enforcement strengthens credibility of forensic work products (83%). Quality standards are enforceable in the forensic profession (79%). Conversely, however, the respondents also deem to agree that: Quality standards enforcement in the forensic accounting profession in Nigeria is low (49%). Forensic accounting profession in Nigeria lacks the necessary governance structures (73%); as result, the profession rests on a weak methodological foundation (74%). The current results validate previous findings (Fagboro et al., 2011; Fagboro at al., 2014; Kesh, 2014). In-terms of determinants of the quality of the result of a forensic investigation; the respondents rate professional qualification (95%) over both educational qualification (73%), and quality of the research publications (72%) of the forensic accountant. That is, professional attainment positively impacts on the quality standards in the forensic discipline.

4.11.1 Test of Hypothesis Two Forensic accounting professional practice and engagement processes in Nigeria do not significantly comply with the IQAAS.

Identification of Variables: $Y = f(X)$:

- i. Independent Variable: IQAAS.
- ii. Dependent Variable: professional practice and engagement.

Table 4.18: One-Sample T-Test for Hypothesis Two

	Test Value = 4					
	T	Df.	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Quality standards in the forensic accounting practice and engagement.	-28.329	160	.015	-1.037	-1.09	-.701

Source: The Research Survey (2015)

Table 4.18 reports that there is a significant difference between the compliance level of the variable and forensic accounting practice and engagement in Nigeria. This implies that the variable quality standards compliance in the forensic accounting practice and engagement does not conform to the IQAAS. This study, therefore, retains hypothesis two as stated. This position confirms the results of Table 4.13; and the findings of Omoniyi (2004) and Fagboro & Olofinsola (2007).

4.12 Effect of QSEM on the Compliance of the Forensic Profession with the IQAAS (Research Question Six)

Table 4.19: Effect of Individual Component of the QSEM on the Compliance of the Forensic Profession with the IQAAS

QSEM Components	Mean Item Score	Effect of Each QSEM Component	Indicator
Institutional Regulatory	2	46%	Less Effective
Legal Framework	2	45%	Less Effective
Judicial Acceptance	3	52%	Averagely Effective

Source: The Research Survey (2015)

4.12.1 Test of Hypothesis Three

Quality standards enforcement mechanisms (QSEM) do not have any significant effect on the compliance of the forensic accounting profession in Nigeria with the IQAAS.

Identification of Variables: $Y = f(X)$:

- i. Independent Variable: QSEM (Institutional Regulation; Legal Framework; and Judicial Acceptance).
- ii. Dependent Variable: Compliance of the forensic accounting profession in Nigeria with the IQAAS.

Table 4.20: Coefficients of QSEM Components for Hypothesis Three

Model	Unstandardised Coefficients		Standardised Coefficients	T	Sig.	
	B	Std. Error	Beta (β)			
1	(Constant)	3.657	.183		19.953	.000
	Institutional Regulation	-.029	.037	-.076	-.762	.447
	Legal Framework	.016	.038	.042	.419	.676
	Judicial Acceptance	.080	.038	.169	2.113	.036
2	(Constant)	3.669	.181		20.318	.000
	Institutional Regulation	-.019	.030	-.051	-.641	.523
	Judicial Acceptance	.081	.037	.172	2.181	.031
3	(Constant)	3.620	.164		22.123	.000
	Judicial Acceptance	.078	.037	.166	2.119	.036

a. Dependent Variable: Compliance of the forensic accounting profession in Nigeria with the IQAAS.

The results from Table 4.20 indicate that out of the three components of the quality standards enforcement mechanisms (QSEM),judicial acceptance has the most significant effect (.036); while on the other hand legal framework has the least significant effect (.676), on the compliance of the forensic accounting profession in Nigeria with the IQAAS. These results are consistent with the figures in Table 4.19.

Table 4.20 also depicts that the synergy effect of all the independent variables (combined QSEM components) on the dependent variable is statistically significant. Consequently, the study could not accept hypothesis three, as there is sufficient statistical evidence to conclude that the combination of all QSEM components will positively impact on the compliance of the forensic accounting profession in Nigeria with the IQAAS. However, independently, individual variable impacted on the dependent variable to varying extent. The judicial acceptance is the most effective independent variable in terms of compliance of the profession with the IQAAS. These results appear to corroborate the results as shown in Table 4.16 results.

4.12.2 Other Determinants of the Quality Improvement in the Forensic Accounting

Table 4.21: Other Determinants of the Quality Improvement in the Forensic Accounting

Other Determinants	Frequency	Percentage (%)	Ranking
Government Policy	38	38.77%	1 st
Public Image	27	27.55%	2 th
Contractual Obligation	24	24.50%	3 th
Socio-Cultural Factors	09	09.18%	4 th
Total	98*	100%	

Source: The Research Survey (2015)

*Total number of respondents = 161

Based on the opinions of the respondents, Table 4.21 reports on the strength of other factors that could contribute to the quality standards in the service delivery of the profession relative to the Nigerian environmental peculiarities. Thus, in addition to the results revealed in Tables 4.19 & 4.20, Table 4.21 shows that government policy, public image, contractual obligation, and socio-cultural factors play varying roles in ensuring quality standards and credibility in professional services in Nigeria. This finding supports the linear model postulation, that there might be other variables (uncertainties), besides the three main independent variables that could impact on quality improvement in the forensic accounting profession in Nigeria.

4.13 Validation of the Findings The findings of this study support the three theories (Public Interest Theory, Theory of Profession, and Theory of Professional Regulation) adopted for the research work. The three theories belong to the family of Theories of Economic Regulation (Abbott, 1988; MacDonald, 1995; Clarke, & Oliver, 2013). The three theoretical perspectives provide a set of factors affecting the initiation, enforcement, and implementation of quality standards in the organisational / professional settings (Clarke, Dean & Oliver, 2013). In essence, the three theories:

- i. make predictions rather than rely entirely on after-the-fact explanations;
- iii. predict one outcome rather than several contradictory outcomes;
- i. make a specific prediction, rather than an extremely vague one; and
- ii. iv. make a prediction that can be verified through objective observation (Baldwin & Cave, 1999; Corradetti, 2011; [Machan](#), 2015).

CHAPTER FIVE

SUMMARY AND DISCUSSION OF FINDINGS

5.1 Introduction Further to the outcome of the analysis of data presented in Chapter Four, this Chapter presents both the discussion and summary of findings of this study. The discussion of findings is majorly based on two sources:

- i. the results obtained from the data presentation and analysis; and
- ii. a review of empirical research studies regarding quality standards in forensics.

The discussion is broken down into six sub-sections specific to the six research questions for which answers were sought in this study.

5.2 Summary of Findings In a summary, this study empirically demonstrated that:

- i. Forensic accounting profession is still in its infancy in Nigeria. The profession presently lacks: statutory regulatory institution, enabling legal framework; and uniform coordination, training, certification and accreditation standards in Nigeria. The lack of these governance structures negatively impacts on the quality of service delivery and credibility of the profession.
- ii. Regulation of the profession can take the form of government or government agency regulation, self- regulation by the profession itself, and judiciary or a combination.
- iii. There is a significant difference between the current state of the forensic accounting profession in Nigeria and the requirements of the International Quality Assurance Accreditation Standards (IQAAS).
- iv. Quality standards enforcement mechanisms (QSEM) are very weak to ensure compliance with the IQAAS.
- v. The study also found an acute shortage of qualified professionals in the practice;

many of the existing practitioners do not possess the level of skills required to effectively function in the field of specialisation.

- vi. The result further showed that the contribution of the Nigerian universities to the development of the discipline is not significant, mainly owing to insufficient qualified academics and facilities.

5.3 Discussion of Findings

The perceptions of the forensic accounting professionals on the current state of the profession in Nigeria (Research Question One)

The result showed that the professionals perceive the forensic accounting profession in Nigeria as lacking in necessary governance structures. The profession does not meet the IQAAS requirements in: Enabling legal framework; statutory regulatory authority; and specialised professional institutes or associations. There was an observed significant difference between the current state of the forensic accounting profession in Nigeria and the requirements of the IQAAS. These results validate the findings in Omoniyi (2004); Fagboro et al. (2011); Efiog (2012); Fagboro et al. (2014) and Keshi (2014); which indicated that the forensic accounting profession in Nigeria lacks necessary governance structures to ensure quality improvement and professionalism.

As at the present time, the forensic accounting profession in Nigeria lacks uniform ethical standards and professional rules. It could be argued that the profession rests on a weak foundation. The outcome of the opinion survey further showed that majority of the practitioners lack the educational background and requisite skills in forensic accounting. These shortcomings might account for why the validity, reliability, credibility and admissibility of the forensic

accounting evidence have been subjected to increased scrutiny by lawyers and judges in the Nigerian courts (Ribadu, 2006; Fagboro & Olofinsola, 2007; Akindede, 2009).

The extent of contribution of the Nigerian universities to the advancement of the forensic accounting profession in the Country (Research Question Two)

The study finds that the contribution of the Nigerian universities to the advancement of the forensic accounting profession is significantly low (2.34%). As at 31st of December 2014, there were 128 existing universities in Nigeria (NUC, 2014). Out of this number, only three (3) universities offered academic programmes in the forensic accounting, with one private university offering the forensic accounting academic programme at undergraduate level and two Federal Government universities offering the programme at the Master and Diploma levels. All the three programmes are noted to be at their infancy. Both the undergraduate and postgraduate programmes may enjoy the NUC approval, but they are yet to be accredited by any known forensic regulatory institute. The Diploma programme in one of the universities is, however, run in partnership with the IICFIP.

Furthermore, the results of this study revealed that the major impediments to the development of the forensic accounting academic programmes in the Nigerian universities were in the following order of their perceived importance (on a Likert scale of 5 points): Lack of sufficient qualified academics to teach the core forensic accounting courses (4.74). Lack of capacity for an additional academic programme in the university (4.23). Administrative bottleneck/bureaucracy (3.92). Lack of sufficient leadership support (3.87). Ideological attitude to change (2.51). Cultural attitude to change (2.27). Lack of faculty members' interest due to excessive workload (1.69). In agreement with previous studies (DiGabriele, 2008; Fouché, 2013; Rahni, 2014), lack of sufficient qualified academics to teach the core forensic accounting courses was perceived to be the most critical factor (Efiong, 2012; The Forensic Careers, 2014). However, this outcome

contrasts the evidence provided by the studies carried out in the developed economies. In such studies, lack of capacity for an additional academic programme in the university; administrative bottleneck/bureaucracy; and lack of sufficient leadership support, played less significant roles.

The extent of contribution of the Nigerian professional accounting bodies to the advancement of the forensic accounting profession in the Country (Research Question Three)

This study found that the level of contribution of the Nigerian professional accounting bodies to the advancement of the forensic accounting profession in the Country is low. The Institute of Chartered Accountants of Nigeria (ICAN) is presently the only Nigerian professional accounting body offering specialised training and certification programme in forensic accounting. The programme is however restricted only to the professional members of ICAN. This policy tallies with the position of some accounting bodies in the United Kingdom (UK), Canada, Australia, South African, and United States of America (USA). The idea is seen only as a starting point to raise forensic accounting professionals, in attempt to narrow the gap between the demand and supply of the professionals (Fagboro, Gordon & Ehie, 2011; Fouché, 2013; Rahni, 2014). An international body, IICFIP, also offers certification in forensic disciplines to Nigerians. As at 31st of December 2014, the IICFIP membership strength in Nigeria was one hundred and forty-three (143); out which ninety-seven (97) were ICAN members (IICFP, 2014). The IICFIP manual reveals that the Institutes involves in accreditation of forensic academic programmes in tertiary institutions. This study found variability across forensic accounting activities in Nigeria, in terms of training and certification processes. These findings suggest that, the forensic accounting practice in Nigeria lacks uniform coordination, training, certification and accreditation standards.

The extent to which the forensic accounting professional training and certification processes in Nigeria conform to the IQAAS (Research Question Four)

Hypothesis One: Forensic accounting professional training and certification processes in Nigeria do not significantly comply with the IQAAS.

The study reported on the extent to which the ICAN Forensic Certification Training Programme complied with the IQAAS basic skills requirements. ICAN categorises its Forensic Certification Training Programme into: Module 1; Modules 2-4; and Modules 5-6. The Six-Module Course Contents are outlined thus: Module 1: Introduction to forensic accounting; Module 2: Economic and financial crimes; Module 3: Fraud Risk Management; Module 4: Evidence; Module 5: Introduction to forensic examination; Module 6: Report writing and court testimony.

The compliance index this study used to measure the certification programme's extent of compliance with the IQAAS was on a scale of 5 points; while 2.5 points and above was adjudged a high index at varying degrees, converse if opposite is true. The result revealed: Theoretical investigative skills=2.83. Technical investigative skills=3.71. Multitasking skills=2.59. Critical thinking skills=0.00. Problem-solving skills=3.92. Effective communication skills=0.00. Expert witness skills=3.44. Strategic skills=1.91. Negotiation skills=1.83. On the average, the total compliance index was 2.23 points, suggesting that the compliance level of the ICAN Forensic Certification Training Programme with the IQAAS was low. The outcome of the study confirms the findings of Fagboro et al. (2014) and Keshi (2014)) that a good number of the qualified forensic accounting professionals in Nigeria do not possess the requisite skills required to function effectively in the field of practice. Hypothesis one also supports these results. The results also corroborate with the result of the t-test which shows a statistically significant difference between the forensic accounting professional training and certification process in Nigeria and the IQAAS.

The extent to which the forensic accounting professional practice and engagement processes in Nigeria conform to the IQAAS (Research Question Five)

Test of Hypothesis Two: Forensic accounting professional practice and engagement processes in Nigeria do not significantly comply with the IQAAS.

The level of compliance of the forensic accounting professional practice and engagement in Nigeria with the IQAAS is 0.39, on a scale of 5.0 points. For instance, the IQAAS stipulate that every forensic professional institute must conduct mandatory continuing professional education and development (MCPED) for its members, at least once in two years. ICAN started its forensic accounting certification programme in the year 2011, till date the Institute is yet to conduct MCPED for its members. To the contrary, this study provides evidence that the law of admission of and reliance on forensic evidence in criminal trials depends critically on three factors: The extent to which the

- i. forensic discipline complies with the IQAAS.
- ii. forensic discipline is founded on a reliable scientific methodology, leading to accurate analyses of evidence, and proper reports of findings.
- iii. practitioners in the forensic discipline that rely on human interpretation, adopt procedures and performance standards that guard against bias and error.

Additionally, the result indicated that: Quality standards enforcement mechanisms strengthen credibility of forensic work products. The IQAAS and IICFIP recognise the three independent components of the quality standards enforcement mechanisms in the forensic profession. These mechanisms are: (i) Institutional Regulation, (ii) Legal Framework, and (iii) Degree of judicial admissibility criteria and standards for the forensic profession. However, the forensic accounting profession in Nigeria presently lacks statutory regulatory authority, and enabling legal

framework. Hence, the judiciary is the only existing organ that can legally and effectively enforce quality standards in the forensic accounting profession in Nigeria.

This study also found that in order to be admitted in court, the judge as a gatekeeper, must decide whether the forensic technique used satisfies all or most of the following judicial evidentiary admissibility criteria: The evidence must:

- i. be critically relevant to the case on hand;
- ii. be critically necessary to assist the trier of fact;
- iii. be not trigger any exclusionary rules and be given by a properly qualified forensic expert.

However, in assessing the reliability of an expert's testimony, the court will establish whether:

- i. It needs the assistance of the expert;
- ii. the testimony is sufficiently based upon reliable data and facts;
- iii. the testimony is the product of reliable methods;
- iv. the expert witness has applied the principles and methods reliably to the facts of the case.

According to these rules, this study reported that scientifically sound techniques with standard procedures demonstrating their testability, accuracy and acceptance in the forensic community are likely to be admitted in the Nigerian Court of Law. On the other hand, nonscientific statements, such as expert testimony lacking scientific foundation, are likely to be rejected. The implications of these rules are in accordance with the opinions of the respondents used in this study; who advised on more transparent procedures and a scientific framework for the logical and testable interpretation of evidence.

The outcome confirms the submissions of Fagboro et al. (2014) and Keshi (2014) and that the profession in Nigeria rests on a weak methodological foundation. Forensic accounting activities (academic programme and research; professional training and certification procedures; Professional practice and engagement; and mandatory continuing professional education and development (MCPED) in Nigeria presently lack strong ties to IQAAS. Based on the above results, this study sustained hypothesis two as stated.

The effect of QSEM components on compliance of the forensic accounting profession in Nigeria with the IQAAS. (Research Question Six)

Hypothesis Three: Quality standards enforcement mechanisms (QSEM) do not have any significant effect on the compliance of the forensic accounting profession in Nigeria with the IQAAS.

The result of hypothesis three indicated that combined QSEM components have significant effect on compliance of the forensic accounting profession in Nigeria with the IQAAS. On the other hand, the effect of individual QSEM component on compliance of the profession in Nigeria with the IQAAS is less significant. That is, the synergy effect of QSEM components has sufficient capacity to enforce high quality standards in the profession, as against individual components. The result also supports previous position that among the three components, the judicial acceptance exerts the greatest influence on the quality of forensic profession work products and services (Misinger & Sacks, 2006; Fagboro & Olofinola, 2007; Leo & Gould, 2010).

In Section 3.7.1, the study presented an equation for multiple regression model involving one dependent variable, and three independent variables, in simple stochastic linear form: $y_i =$

$$a_0 + b_1x_1 + b_2x_2 + b_3x_3 + e_i \dots\dots\dots (1)$$

The dependent variable was studied to see whether, and by how much, it would vary as the

independent variables vary. The analysis of the regression model revealed that besides the independent variables; the study found four (4) uncertainties that could positively impact on the quality improvement in the forensic accounting profession in Nigeria. The uncertainties are:

Government policy;

i. Public image;

ii. Contractual obligation; and

iii. Socio-cultural factors. The uncertainties are the variability of the dependent variable not explained by the independent variables; which confirms the validity and reliability of the model.



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CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction This Chapter is the concluding part of the study. It therefore presents the conclusions, recommendations, contributions to knowledge, limitations, and suggestion for further study.

6.2 Conclusions

Professions change over time. They adapt to changes in cultural attitudes, shifting economic conditions, scientific discoveries, technological innovations, and to a host of other developments that mark the evolution of societies. Professions adapt to transformations in the human values and needs which give rise to them. Against this background, the focus of this research study is to ensure that the provision of the emerging forensic accounting services in Nigeria is subject to an appropriate regime of high quality standards. In the process, the study found deficiencies in the forensic accounting profession in the Country, and calls for reforms and new research in the field of specialisation. In Nigeria, rigorous and uniform mandatory training and certification programme for forensic accounting profession are currently lacking; as are strong standards and protocols for analysing and reporting on evidence. However, that does not mean everything about the profession in Nigeria is not reliable, but concerted efforts are required to clear up the lingering uncertainties.

The hallmark of a profession is the delivery of high quality standards. Thus, questions about quality standards in professional services, public interest protection and how professionals are regulated are now commonplace. This study considers that a profession must have a governing body which set standards of academic programme, training and certification as conditions of

entry, and achievement of professional status; and which sets ethical standards and professional rules which are to be observed by its members. These rules are designed for the benefit of the public, and professionals in breach of such rules are subjected to disciplinary action; which may ultimately result in the loss of professional status. The continuing existence of such professional bodies is an important public protection and such bodies must improve the protection of the public through greater statutory powers, more stakeholder-focused codes of practice, and through revalidation processes. Those holding such qualifications and practising as professionals are expected to act with integrity, skill, independence and knowledge in a defined area of expertise.

Economic and financial crimes have become as complex as human nature. The requirements of the investigations have also diversified. The solution lies in adopting of effective scientific crime investigating methods besides taking preventive measures. Hence, continuous search for excellence and quality is crucial to yield better products, superior services, and a successful profession. This is so, because globally the legal system is placing increasing reliance on science-based evidence, and with this goes the responsibility of the forensic regulatory authorities to ensure that the evidence is reliable and meets the highest global standards. There must be continued commitment to quality improvement and stability in the forensic accounting profession in Nigeria, through the application of principles of global best practices.

Forensics is a profession without geographical boundary; therefore, the need for the profession in Nigeria to meet internationally accepted professional standards is no longer an option. Forensics plays a pivotal role in the criminal justice system, providing crucial evidence about the economic and financial crime evidence to the trial of fact. Quality of the forensic accounting evidence and its analysis must, therefore, be beyond reproach if public and stakeholder confidence is to be retained. Hence, in view of the above analogy, the current study concludes thus:

Challenges Facing the Forensic Disciplines: For decades, the forensic disciplines have produced valuable evidence that has contributed to the successful prosecution and conviction of criminals as well as to the exoneration of innocent people. Those advances, however, also have revealed that, in some cases, substantive information and testimony based on faulty forensic analyses have contributed to wrongful convictions of innocent people. This fact has demonstrated the potential danger of giving undue weight to forensic evidence and testimony derived from imperfect testing and analysis. Moreover, imprecise or exaggerated expert testimony has sometimes contributed to the admission of erroneous or misleading evidence. Further advances in the forensic disciplines will serve four important purposes:

First, further quality improvements will assist forensic practitioners in the course of their investigations to identify perpetrators with higher reliability. Second, further improvements in forensic practices will reduce the occurrence of wrongful convictions, which reduces the risk that true offenders continue to commit crimes while innocent persons inappropriately serve time in prison. Third, any improvements in the forensic disciplines will undoubtedly enhance the Nation's ability to address the economic and financial crimes. Fourth, any improvements will enable the forensic accounting profession in Nigeria meet the world-class standards and global recognition, acceptability and credibility.

Obligations to the Court: Forensic professionals are essentially service providers; and although they may be subpoenaed by either the defence or prosecution counsel, they must consider themselves impartial to both sides. In this way, the forensic expert must consider themselves clients of the court as a whole, entrusted with presenting the truth of the matter at hand. In the course of determining how best to conform to the needs and expectations of the customer, it is necessary to analyse their primary requirements, any feedback and complaints, and their

suggestions for improvements. Ordinarily, it would be pertinent to turn to the court for guidance on the expected level of quality in forensic services. The problem with this is that the court does not have the specialised knowledge of the forensics, and thus does not necessarily know the difference between good and poor quality in the field. The court therefore places the obligation on the forensic field to determine the reliability and applicability of evidence. In general, the forensic experts are now required to demonstrate beyond any reasonable doubt that their evidence can be trusted and relied upon, rather than the court accepting the word of the experts in faith. In essence, forensic practitioners are obligated to explain their findings in a manner that a layperson can comprehend; meaning that exemplary communication skills are a necessity.

The role of the Professional Institute: Standards of professional conduct defined by the professional institute usually apply at two levels. First, entry-level standards ensure that entrants to the profession have sufficient qualifying knowledge and practical experience to be a professional. Second, a professional institute may support the career development of its members by developing levels of membership beyond the entry-level, to recognise higher levels of professional competence. The development and application of differentiated standards recognises professional growth and assists in defining a career path for members of the profession. To be effective, therefore, the standards must be applied. Each level of membership must have entry requirements that are enforced by the professional body and there should be no automatic career progression to advanced grades of membership without meeting the criteria set for membership at that level. To ensure against ‘soft’ standards, the professional regulatory body could consider quotas for higher categories of membership. That is, applying limits to the number of places awarded in the higher categories each year. There are substantial differences between professional bodies in the number of grades of membership they define and in the criteria they

set for entry to those levels.

Professional Standards Enforcement: Enforcing standards of professional conduct is a key role for a self-regulating professional institute. By developing standards of competence and conduct for their members to enter the profession and to maintain their membership, the profession has a basis for inviting members to join, benchmarks for members who want to maintain their membership, and reasons for excluding or dismissing members who are not performing at the expected standard. In this way, a self-regulating professional registration body uses standards to enhance quality.

Institutional Regulation: This study finds that the position of trust in which the public holds forensic accounting profession means that there is considerable scope for abuse of trust. As with other professions, therefore, the activities of profession should be regulated to ensure there is public confidence. Professions are regulated so that the various aspects of the public interest are kept in balance. Regulation of the forensic accounting profession (either self-regulation or external regulation, or a combination) is needed to provide the public interest with protection and assurance in situations where the issues are too complex for the public to be reasonably expected to look after their own interests. The activities of the forensic accounting profession in Nigeria typically fall into such a category.

Self-Regulation: Self-regulation only works to promote standards if the profession has mechanisms in place to ensure compliance with the standards and to apply sanctions to members who do not comply. A self-regulating profession has a social responsibility to sanction members who are incompetent and found guilty of professional misconduct. Self-regulation recognises the maturity of a profession. It honours the special skills, knowledge and experience that a

profession possesses. Self-regulation means that the government has delegated its regulatory functions to those who have the specialised knowledge necessary to do the job. The granting of self-regulation acknowledges a profession's members are capable of governing themselves.

The Power of Self-Regulation: A self-regulating organisation is the licensing body responsible for setting educational, technical and ethical standards. Generally speaking, the power of self-government has two aspects: i). the power to license; and ii). the power to discipline. The self-regulating organisation sets and maintains standards of competency and conduct. It supervises members and enforces those standards by disciplining members who fail to adhere to them. Once a person has been admitted to a profession, the self-governing body has an ongoing obligation to the public to ensure that its members remain competent. They must also continue to meet professional and ethical standards. The professional regulator's duty to protect the public interest sets it apart from other organisations, such as professional associations. In contrast, professional associations are voluntary membership-driven organisations. They are dedicated to furthering the economic, employment, professional and political interests of their members and advocating on their behalf. As a general rule, professional associations neither discipline nor license their members.

Credibility and Reliability: Credibility and reliability of forensic results are key issues in criminal investigation. It is necessary to ensure that all steps taken in the forensic process are correctly and appropriately conducted from investigation to court. Quality control and quality assurance procedures can help clarify and demonstrate that all steps in the process had been carried out by meeting an agreed 'standard', which is accepted by all stakeholders taken part in the process. Quality system contains the following components: organisation structure, job

description, standard operational, procedure, processes, procedures, resource and information that use to operate or contribute to successful quality management. Then quality system is relating to an operation following standard guidelines or many regulators of organisation resulting a quality outcome which will create satisfaction for clients. Standard establishes norm or requirements, for example technical criteria, method, processes and practices, thus providing a quality outcome and good service. Standards, therefore, are then the key to everything associated with ensuring competent performance and outcome in the forensic accounting profession.

Quality Standards: Quality standards are one of the main focuses in forensics standardisation and professionalisation. The concepts employ a 'triangle of quality'. At its base is standardisation where the standard methods and practices of the field are represented. The other two sides consist of certification and accreditation, each side being useless without the other and each relies on that basis of standardisation. Certifying bodies require a standard of knowledge from which to develop their rules and examinations. Likewise these bodies enhance standardisation by defining the requisite knowledge required for practice and therefore the training and education considered a prerequisite for certification. Likewise, accreditation is meaningless without standards provided to applicant organisations to communicate what is expected.

Quality standards include: mandatory requirements and guidance for forensic accounting services, with respect to public interest, professional independence, professional competence and due care, confidentiality, professional engagement matters, expert witness services, standards against false or misleading information and changes in opinion, quality control and professional fees.

The Growing Focus on Tertiary Academic Programme: All curricula require periodic review and institutions must have a standard mechanism for identifying the curriculum requirements based on national needs and international trends. This is so, because possession of relevant knowledge, creation of new knowledge, and the capacity for its application has become the determinants in the strength of a nation. Education is the process of transforming the raw human resources to the expected quality and standard, to live and contribute effectively to the development of the society. To this end, universities have frequently been regarded as key institutions in processes of social change and development. The most explicit role they have been allocated is the production of highly skilled labour and research output to meet observed economic needs.

6.3 Recommendations Forensic accounting profession has emerged as a valuable tool in the fight against economic and financial crimes. This study recognises advances made in the forensic accounting discipline globally, leading to a greater use of forensic evidence in the court of law. However, the future of the profession lies in active participation in continuous quality improvement strategies, and support for research and development initiatives. Every change has a price tag. On this strength, the following recommendations are proposed:

Professional Organisations and the Public Interest: Professionals and professional bodies have an important responsibility to the community in which they operate, to the public interest, not just to their current clients or employers or to themselves. This is one of the characteristics of a profession. While individual members of a profession have an obligation to serve the public interest, professional organisations have a more specific responsibility and role in this regard. One of the fundamental objectives of forensic accounting profession should, therefore, be to provide assurance on the quality of services provided by its members. To achieve this, the

profession must be dedicated to upholding and promoting high quality professional practices, including through regulation of their members. In this way, it will contribute to the public interest, which is an essential characteristic of professional organisations. The forensic accounting profession in Nigeria needs to regulate the activities and conduct of its members to ensure that its responsibility to the community is fulfilled; even if there is significant external regulation of the profession by a government agency.

The Need for Regulation: Regulation should protect the public from being misled, or from suffering from abuse of power through knowledge or monopoly. Every profession is defined by the knowledge, skills, attitude and ethics of those in the profession. Regulation of a profession is a specific response to the need for certain standards to be met by the members of that profession. The need for and nature of such regulation is dependent on the specific profession and the market conditions in which it operates. Like other professions, the sustainability, credibility, and acceptability of the forensic accounting profession depends upon the quality of the services provided by its members and on the profession's capacity to respond effectively and efficiently to the demands of the economy and society. Regulation seeks to ensure the right quality and, where appropriate, consistency in the quality of forensic services. It is therefore recommended that the forensic accounting profession in Nigeria should be regulated to ensure appropriate quality is provided in service delivery. These include enforcement of ethical rules and technical standards, and the need to represent non-contracting users of forensic accounting services, such as investors and creditors.

The market for professional forensic accounting services has the potential to be inefficient; thus regulation should be used to mitigate the potential impact of this inefficiency on the economy and society. In designing regulation for the forensic accounting profession in Nigeria, care needs

to be taken that the nature and characteristics of the potential issues for the operation of the profession are well understood; otherwise, the regulation may not achieve its purpose. Regulation seeks to ensure that forensic accounting services are of the right quality. Similarly, regulations affecting the profession, like most other regulations, need to be of the right quality. To meet the public interest, the regulation must be proportionate, transparent, non-discriminatory, targeted, implemented consistently and fairly, and subject to regular review. In addition, effective regulation must not be anti-competitive. The benefits of regulation to the economy and society should outweigh the costs of that regulation and this is more likely if regulation meets these criteria.

Establishment of Forensic Regulatory Bodies to Strengthen Quality Standards: The study reports that forensic accounting profession in Nigeria has problems that should be addressed by overhauling the current structure. It is therefore recommended that, the Nigerian Federal Government, through the enabling Acts of Parliament, should establish regulatory bodies such as: National Institute of Forensics (NIF); Nigerian Academy of Forensics (NAF); and Nigerian Institute of Professional Forensic Accountants (NIPFA). The organs must have autonomous power to:

- i. Pursue a strong research agenda to confirm the evidentiary reliability of methodologies used in the forensic practices in Nigeria.
- ii. Set standards for the validity and reliability of extant forensic techniques, and establish standards for their use in the courts of law.
- iii. Create a system to enforce standards, push for improvements and secure the integrity of the final forensic products meeting the international quality assurance accreditation standards (IQAAS).

However, this study recommends that the proposed governing body (National Institute of Forensics (NIF)) should not be established within an existing Federal Government Institute. This is, because evidence abounds that some of the existing Federal entities are too wedded to politics, to offer effective quality standards maintenance.

Accreditation and Certification Standards: To ensure accuracy of forensic analysis, forensic accounting professionals should be certified within the forensics discipline, before being able to practice or testify. Moreover, a national code of ethics and professional standards for all forensic disciplines should be established and enforced through the certification process. This would bring an end to forensic accounting expert witnesses offering unfounded, exaggerated, and erroneous (or intentionally false) evidence to courts. The statutory standards would ensure objectivity, reliability, and efficiency of forensic testing and analysis. Objectivity consists of neutrality and autonomy. Neutrality means that the investigator's own preferences will not influence the results of his/her work. Autonomy means that the preferences of outside agencies will not have such an influence. Objectivity and excellence in service delivery are goals that the forensic accounting profession must attain.

Research Validation: There should be a promotion of more and better research to validate the basic premises and techniques by addressing issues of the accuracy, reliability, and validity in the forensic accounting practices. Promoting more research encourages collaboration among various units, will help develop tools for advancing measurement, validation, reliability, information sharing, and proficiency. Generally speaking, creating standardised operating procedures reduces potential bias and other sources of human error in forensic practices.

Forensic Accounting and Criminal Intelligence Academic Programmes: The dynamic nature of society is part of the driving forces which makes curriculum review to become inevitable. The review process ensures that the eventual curriculum is not out of tune with the currency. However, this study found that only three universities in Nigeria (as at 31st of December, 2014) offered a specialised academic programme in forensic accounting. In the context of global growing importance of forensic accounting as a field of specialisation, and Nigeria's ignoble position on the global corruption index; the study recommends that academic intellectual engagements should be proactive to societal problems and needs. Governments and private sector players should properly fund academic research efforts and implement the outcomes for the benefit of the society. The Nigerian universities should surmount all barriers to the incorporation of forensic accounting into their academic programmes.

Course developers should also recognise the value of relevant professional bodies and practitioners' inputs when designing the curriculum content; as this would foster forensic accounting graduates' employment marketability. There are conceptual differences between fraud examination and forensic accounting. Hence, individual universities have to determine whether they should base their programme on a fraud model, or a more wide-ranging forensics model, or a combination of the two approaches. As this thriving area of accounting continues to evolve, it is incumbent on the relevant academics to deliver a strong and credible foundation that emphasises the scientific investigative method, and economic and financial crime problem-solving skills.

Besides, NUC should ensure that uniform and uncompromising standards for quality management to excel in this emerging field are set forth. The NUC should encourage the establishment of undergraduate and postgraduate forensic accounting and criminal intelligence

academic programmes. In addition, the proposed National Institute of Forensics (NIF) should work with appropriate organisations and educational institutions to improve and develop the required academic programmes. While the practical experience and learning acquired during an internship is critical, training should move beyond apprentice-like transmittal of practices to education based on scientifically valid principles. To make these programmes appealing to potential students, attractive scholarships and fellowships should be offered. Further, forensic accountants would be better trained in scientific methodology.

Any Nigerian university intending to offer forensic accounting as a full-fledge specialised academic programme can offer the discipline in any or all of the following areas:

- i. Certificate Course/Training programme (maximum of three months certificate course).
- ii. Diploma programme (six months / two semesters, as pioneered by the University of Lagos in collaboration with the International Institute of Certified Forensic Investigation Professionals (IICFIP), Incorporated United States of America).
- iii. Bachelor of Science (B.Sc.) degree awarding programme (five sessions, one session internship inclusive).
- iv. Postgraduate Diploma (PGD) programme.
- v. Professional Master degree awarding programme.
- vi. Master of Science (M.Sc.) degree awarding programme.
- vii. Doctor of Philosophy (Ph.D.) degree awarding programme.

It is suggested that the intending university should collaborate with a recognised professional institute. The institute will provide the technical training support aspect and accreditation of the programme, which will enhance the employability of the products.

Educational and Training Needs: Educational and training for the forensic professionals, as in other professions, is an ongoing need. Training of novices, and providing continuing education and development for seasoned professionals are essential to ensure that the profession delivers the best possible service to the criminal justice system and other users. The training needs of the forensic community are immense. The major impact of training is on the professional level. Forensic accountants must stay up-to-date as new technology, equipment, methods, and techniques are developed. The fact remains that training programmes exist in a variety of forms. However, there is a need to broaden the scope and build on existing resources of the professionals. Forensic professionals need to take advantage of the advancement in information technology, and the ability to use it to exchange information and deliver training. Training is essential but can be costly. The forensic community needs to be aggressive and creative in obtaining funding for training programmes to ensure the professionals keep abreast of the ever-changing trends and discoveries in the forensic field.

The educational and training needs of the forensics community in Nigeria are urgent; therefore, the Nigerian Government should establish with the proposed NIF:

- i. National Standards for Education and Training in Forensics,
- ii. An independent, community-wide, consensus-building, standard-setting body such as a the Technical Working Group for Education in Forensics, and,
- iii. An accreditation system for forensic academic programmes.

Standard Terminology: Wide variability is found across forensic disciplines not only with regard to techniques and methodologies, but also with regard to reliability, error rates, reporting, research foundations, general acceptability, and published material. Generally speaking, there is a need in the forensic accounting to raise the standards for reporting and testifying about the results of investigations. For example, many terms are used by forensic examiners in reports and in court testimony to describe findings, conclusions, and the degrees of association between evidentiary material and particular people or objects. Such terms include but are not limited to “*match,*” “*consistent with,*” “*identical,*” “*similar in all respects tested,*” and “*cannot be excluded as the source of*”. The use of such terms may have a profound effect on how the trier of fact in a criminal or civil matter perceives and evaluates evidence. Yet the forensic disciplines in Nigeria have not reached agreement or consensus on the precise meaning of any of these. To this end, standard terminology should be used in reporting on and testifying about the results of forensic accounting investigations so that the judiciary may better understand the scientific evidence offered. Not only should the field of practice have standardised reporting vocabulary and scales, but reports generated should be complete and thorough.

Judicial Gate-Keeping: The Nigerian courtrooms should not be laboratories to test the reliability of forensic methods. The judiciary should not assume the reliability of certain forensic accounting methodologies before these techniques are properly studied and accurately verified by scientific research. The manipulation, mishandling, and misinterpretation of forensic evidence can have damaging effects on criminal cases and the lives of others. It is important to ensure that forensic practitioners are competent in regards to the duties and responsibilities of their chosen area of forensic expertise. Too often forensic evidence has been mishandled, manipulated, and misinterpreted, which has caused destruction to many criminal cases and the lives of many

innocent individuals. Only those who are properly trained, educated, and are of good moral and ethical character should be entrusted to handle forensic evidence. The physical evidence in criminal cases has a lot of weight in court. The court is heavily influenced by the results of the forensic evidence and in some cases the testimony of expert witnesses. It is for that reason unethical behaviour in the field of forensic accounting should not be tolerated. The evidence should be allowed to accurately speak for itself free of error and/or manipulation.

Ethical Issues in Forensics: Forensics, as the application of science to civil and criminal law, is a field that is grounded in applied ethics. The identification, collection, and preservation of any piece of forensic evidence will ultimately involve numerous individuals. At any step within the process, evidence can be deliberately or accidentally mishandled. This risk begins at the scene of the crime, where there is the possibility of evidence planting, destruction, or mishandling. After the scene has been processed, evidence is then sent to a forensic laboratory for analysis. Here, it can be subject to contamination through poor testing methods, excess consumption, mislabeling, and even loss or destruction. After the analysis has been performed, those analysing the evidence must then report on their findings.

Forensic personnel must be accurate and honest when reporting their examination results. There have been instances uncovered where individuals trusted with such reporting have misrepresented their findings, and have even been involved in drylabbing, which is the reporting of results based on forensic analysis, when no test or analysis was ever performed. These errors, omissions, or completely fraudulent testimonies or reports are of special concern due to the fact that forensic evidence that is testified to or reported on by “experts” is routinely given more weight and consideration by judges. As a result, false testimony, inflated statistics, and

laboratory fraud have led to wrongful conviction in some countries, due in part to court's trust in the system, but with forensic fraud being the impetus.

Implementation Process: The paths to implementing of the above recommendations will include legislative, executive, academic, and agency routes, or a combination thereof. It is expected, therefore, that the recommendations will go a long way toward improving the quality standards and scientific underpinnings of forensic accounting profession in Nigeria. To ensure that the recommendations become reality, appropriate funding would be essential.

6.4 Contributions to Knowledge

This research study contributes to the advancement of knowledge in the following respects:

- i. The study resulted in the development of a Quality Standards Compliance Index (QSCI) for the forensic accounting profession in Nigeria. In terms of excellence in the delivery of high quality standards in the forensic accounting profession, the Compliance Index will help: monitor and analyse compliance with the regulatory requirements; review effectiveness of specific building blocks; report to external audiences; assess and adapt indicators; find anomalies such as low compliance levels on relatively achievable requirements; search for correlations among different types of compliance violations; and measure progress and identify persistent problems.
- ii. The study fills a gap in the forensic accounting literature on quality standards enforcement mechanisms (QSEM) by developing, testing and fitting a predictive model for enforcement of high quality standards and excellence in service delivery in the profession. Contrary to previous studies that considered bi-variate relationship

- between the compliance of forensic accounting profession with the IQAAS and each QSEM components.
- iii. The research is a pioneer study on the role of quality standards enforcement in ensuring quality improvement and effective service delivery in the profession.
 - iv. The study identified and statistically demonstrated the major impediments to the development of forensic accounting academic programmes in Nigeria. The study also proffered some solutions to these problems.
 - v. The study also identified and statistically demonstrated the main predictors of the success or failures of the prosecutions of the economic and financial crime cases in Nigeria.

6.5 Limitations Notwithstanding the contributions of this research study, the fact remains that all studies have limitations, and the current study is not an exception. The limitations experienced in this study include the following:

Limitation Imposed by Sample Size: As reported earlier, a good number of the forensic accounting professionals in Nigeria do not possess the requisite education, skills, competence and experience required to effectively function in the field of specialisation. In order to ensure that the opinions provided are valid and reliable, the respondents used for this study were the forensic accounting professionals with minimum of two years work experience. This decision impacted on the study sample size. The official total number of the forensic accounting professionals in Nigeria, (trained by either IICFIP or/and ICAN), at the time of sample selection (December 2014) was four hundred and three (403), as against the two hundred and thirty eight (238) used (IICFIP, 2014; ICAN, 2014).

Limitation Imposed by Availability of Relevant Data: As discussed earlier, forensic accounting profession in Nigeria is still in its infancy. As a result, relatively, there were not enough data on the profession to warrant more statistical hypotheses tests. For instance, as regard academic programme, only three (3) out of one hundred and twenty eight (128) universities in Nigeria (as at the time of this survey) has programmes in the forensic accounting. Furthermore, ICAN is yet to organise mandatory continuing professional education and development (MCPED) for its forensic professional members since inception, to permit compliance measurement with IQAAS. Regardless, this study was able to conduct a critical analysis of the current state of the forensic accounting profession in Nigeria, within the limits of the available data.

Limitation Imposed by Scope of the Study: The primary focus of this study is to ensure that the foundation of the forensic accounting profession in Nigeria is built on the internationally recognised high quality standards. In effect, the objectives of study did not include the following areas of potential research:

- i. A survey analysis of the perceptions of other forensic accounting stakeholders on the field of study in Nigeria.
- ii. A survey of the contribution of other Nigerian tertiary institutions, like polytechnic and colleges of education. Regardless of these limitations, the objectives of the study were fully achieved.

6.6 Suggestion for Further Study

Research limitations usually serve as a reason for the need for further research. Hence, on the basis of the limitations identified in this study, future studies in the same field of research interest may consider the following:

Enlarge Sample Size: Statistical tests normally require a large sample size, because it is more representative of the population, limiting the influence of outliers or extreme observations. A sufficiently large sample size is also necessary to produce results among variables that are significantly different. On this note, it is suggested that future study in this direction should increase the sample size.

Data Availability: As time goes on, a good number of the Nigerian universities will integrate forensic accounting into their academic programmes. This will translate to availability of more data to permit measuring the level of compliance with the IQAAS. In addition, future study should not be confined to the Nigerian universities; the scope should be widened to accommodate other tertiary institutions and research institutes in the Country.

Widen the Scope: Forensic accounting is still in its developmental stage in Nigeria. Hence, future research engagement in the field of study should consider investigating the:

- i. Performance of the anti-economic and financial crime agencies in Nigeria.
- ii. Perceptions of other forensic accounting stakeholders about the field of study in Nigeria.
- iii. Contribution of other Nigerian tertiary institutions, like polytechnic and colleges of education.

- iv. Do a comparative analysis, and investigate the determinants of the difference between the low-corrupt and the high-corrupt countries of the world.

However, the objectives of the current study did not cover any of the areas recommended for future research.



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Appendix I

FORENSIC ACCOUNTING PROFESSION QUESTIONNAIRE

Introduction:

This survey instrument is specifically designed for the forensic accounting professionals in both academic and practice in Nigeria. The study is on quality standards in the forensic accounting profession in the Country. In this regard, your candid opinions through the completion of this questionnaire are considered helpful. You are assured that the opinions you provide will be treated in strict confidence. This is why you are not required to indicate your name.

Section A: Demographic Data

Kindly respond to the items below as appropriate:

1. Gender: Male Female
2. Age Brackets: 21- 30 years 31 - 40 years 41 – 50 years 51- 60 years Above 60 years
3. Profession (Forensic Accounting): Academic Practitioner
4. Present employment: Public Sector Private Sector
5. Present position on the job: Management Cadre Senior Cadre Others
- 6.Highest academic qualification: O’ Level A’Level OND NCE HND B.Sc. PGD MBA M.Sc. M.Phil. Ph.D.
- Others (kindly indicate)
7. Professional qualification(s): FCFIP/CFIP CFAN CFE FCA/ACA FCCA/ACCA CPA FCTI/ACTI FCMA/ACMA CNA
- Others (kindly indicate)
- 8.Post-forensic accounting professional qualification work experience: 2 – 4 yrs 5 – 7 yrs 8 - 10 yrs Above 10 years

Section B: Drivers of the Emergence of the Specialised Forensic Accounting Profession in Nigeria

9. Please, rate the importance of the following perceived drivers of the emergence of forensic accounting profession in Nigeria, by ticking [√] the appropriate number (where 1=least important, and 5=most important):

S/N	Item	1	2	3	4	5
i	Cases of economic and financial crimes.					
ii	Racketeering financing.					
	Terrorism financing.					
iii	Economic and financial crimes due to technological advancement.					
iv	Ingenuity of the fraudsters.					
v	Increase in corporate failures.					
vi	Basic traditional audit investigation tools are no longer sufficient to unravel the crimes.					
vii	Demand for qualified forensic accounting professionals.					
viii	Shortage of qualified forensic accounting professionals.					
ix	Dynamics of the business environment.					

Other driver(s) (please, specify)(1 2 3 4 5)

Section C: Determinants of Success of Prosecution of the Economic and Financial Crimes

10. Please, indicate the extent to which you agree or disagree with the following statements, by ticking [√] the appropriate column:

Key: Strongly Agree (SA) Agree (A) Undecided (UN) Disagree (D) Strongly Disagree (SD)

S/N	Item	SA	A	UN	D	SD
i	Co-operation from parties who should furnish relevant information.					
ii	Quality of evidence gathered at the investigation stage.					
iii	Transparency of investigation of the case itself.					
iv	Professional competences of the prosecuting counsel.					
v	Fairness of the presiding judge in the trial.					
vi	Gaps in the law guiding the prosecution.					

Other determinant(s) (please, specify)

Section D: Basic Skill Requirements in the Forensic Professional Training and Certification Process

11. Please, rate the extent to which the specialised forensic accounting professional training and certification process cover the acquisition of the following skill requirements, by ticking [√] the appropriate number (where 1= not covered, and 5 = well covered):

S/N	Item	1	2	3	4	5
i	Theoretical investigative skills.					
ii	Technical investigative skills.					
iii	Multitasking skills,					
iv	Critical thinking skills					
v	Problem-solving skills.					
vi	Effective communication skills.					
vii	Expert witness skills.					
viii	Strategic skills.					
ix	Negotiation skills					

Other skill(s) (please, specify) (1 2 3 4 5)

Section E: Quality Standards in the Forensic Accounting Practice and Engagement

12. Please, indicate the extent to which you agree or disagree with the following statements, by ticking [√] the appropriate column:

Key: Strongly Agree (SA) Agree(A) Undecided (UN) Disagree (D) Strongly Disagree (SD)

S/N	Item	SA	A	UD	D	SD
i	Hallmark of forensics is the delivery of high quality services.					
ii	Determinants of credibility of the result of a forensic investigation include:					
	a. Educational qualification of the forensic accountant.					
	b. Professional qualification of the forensic accountant.					
	c. Quality of the research publications of the forensic accountant.					
	d. Quality of the training of the forensic accountant.					
	e. Skills of the forensic accountant.					
	f. Experience of the forensic accountant.					
iii	Quality standards enforcement strengthens credibility of forensic work products.					
iv	Quality standards are enforceable in the forensic profession.					

S/N	Item	SA	A	UD	D	SD
v	Quality standards are enforced in the forensic accounting profession in Nigeria.					
vi	Forensic accounting profession in Nigeria lacks the necessary governance structures.					
vii	Forensic accounting profession in Nigeria rests on a weak methodological foundation.					

Section F: Obstacles in Integrating the Specialised Forensic Accounting Academic Programme into the Nigerian Universities

13. Please, rate the severity of the following obstacles in integrating the specialised forensic accounting academic programme into the Nigerian universities, by ticking [√] the appropriate number (where 1 = not severe; 5 = very severe):

S/N	Item	1	2	3	4	5
i	Lack of capacity for additional academic programme in the university.					
ii	Administrative bottleneck bureaucracy.					
iii	Lack of sufficient leadership support.					
iv	Lack of sufficient qualified academics to teach forensic accounting courses.					
v	Lack of faculty members' interest due to excessive workload.					
vi	Ideological attitude to change.					
vii	Cultural attitude to change.					

Other obstacle(s) (please, specify) 1 2 3 4 5)

Section G: Effectiveness of the Quality Standards Enforcement Mechanisms in the Forensic Profession

14. Please, rate the effectiveness of each of the following quality standards enforcement mechanisms in the forensic profession, by ticking [√] the appropriate number (where 1 = least effective and 5 = most effective):

S/N	Item	1	2	3	4	5
i	Regulatory authority for the forensic accounting profession.					
ii	Legal framework for the forensic accounting profession.					
iii	Judicial acceptance of the forensic accounting profession.					

Kindly specify other factors that could ensure quality standards in the forensic accounting

profession in Nigeria:

.....

Most grateful for your co-operation and assistance in filling this questionnaire, Sir/Madam.

Module 1: Introduction to Forensic Accounting

- i. Meaning of “forensic”
- ii. Auditing, investigations and forensic accounting – similarities and differences
- iii. Types of engagements requiring forensic accounting
- iv. Evolution of forensic accounting
- v. Skill sets for forensic accountant
- vi. Ethical conduct for forensic accountant
- vii. ICAN forensic accounting certification programme

Module 2: Economic and Financial Crimes

- i. Criminology -Theories of crime
- ii. Meaning of economic and financial crimes
- iii. Types of economic and financial crimes
- iv. Why people engage in economic and financial crimes
- v. Impact of economic and financial crimes (on individual, organization, nation)
- vi. Introduction to fraud
 - a. Definition of fraud
 - b. Legal elements of fraud
 - c. Types of fraud schemes
- vii. Financial Statement Analysis: Discovering errors, Fraud and irregularities in books, Records and computer data
 - a. Financial statements fraud
 - b. Asset misappropriation: Cash theft, payroll fraud, inventory
 - c. Bribery and corruption,
 - d. Intellectual property theft,
 - e. Computer fraud, internet fraud,
 - f. Employee fraud
 - g. Professional fraud
 - h. Public sector fraud,
 - i. Consumer fraud
 - j. Health care
 - k. Fraud in insurance sector
 - l. Securities fraud
 - m. Fraud in financial institutions: embezzlement schemes, loan fraud, cheque, credit card and ATM fraud, letter of credit, money transfer schemes

Detection and Prevention Mechanisms Fraud Triangle (why people commit fraud)

- i. Profile of a fraudster
- ii. Red flags of fraud

- iii. Introduction to money laundering
- iv. Definition of money laundering
- v. History of money laundering
- vi. International efforts against money laundering
- vii. Stages of money laundering
- viii. Distinction between money laundering and terrorist financing
- ix. Money laundering typologies
- x. Overview of Nigeria's anti-money laundering compliance requirements
- xi. Overview of effective anti-money laundering compliance programme
- xii. Overview of penalties for money laundering offences
- xiii. Impact of money laundering (on individual, organisation and nation)

Module 3: Fraud Risk Management

- i. Meaning of fraud risk management
- ii. Elements of effective Fraud Risk Management
 - a. Prevention
 - b. Detection
 - c. Response
- iii. Fraud Risk Management initiatives
- iv. Prevention
 - a. Fraud risk assessment
 - b. Fraud awareness and prevention training
 - c. Code of ethics
 - d. Fraud prevention plan
 - e. Background screening
 - f. Whistleblower facilities
- v. Detection
 - a. Surprise audits
 - b. Whistleblower facilities
 - c. Data analysis
 - d. Independent assurance
 - e. Detective controls
- vi. Response
 - a. Fraud response plan
 - b. Independent investigations
 - c. Communication protocols
 - d. Securing evidence
 - e. Fraud trend analysis
 - f. Post fraud control review

Module 4: Evidence

- i. Meaning and nature of evidence
- ii. Sources of Nigerian law of evidence
- iii. Types of evidence
- iv. Rules of evidence
- v. Fundamental rights related to criminal trials
- vi. Facts in issue
- vii. Relevance and admissibility
- viii. Evidence of character
- ix. Evidence of similar facts
- x. Facts of which proof is not required
- xi. Official and privileged communications
- xii. Presumptions
- xiii. Means of proof
- xiv. Burden/ standard of proof
- xv. Competence and compellability of witnesses
- xvi. Illegally obtained evidence

Module 5: Introduction to Forensic Examination

- i. Legal and other considerations in forensic examination
- ii. Tools required to manage forensic examination (mandate, planning, working notes, investigation diary, reporting, case management)
- iii. Evidence gathering and preservation
 - a. Sources of information
 - b. Surveillance and covert examination
 - c. Document analysis: chain of custody, obtaining documentary evidence, third-party documents
 - d. Accessing information on-line
 - e. Search and seizure procedures
- iv. Consultation, Interviewing and Interrogation
- v. Data analysis and reporting tools
- vi. Introduction to computer forensic and tools

Module 6: Report Writing and Court Testimony

- i. Types and structure of forensic report
- ii. Tips for writing forensic report
 - a. Common reporting mistakes
 - b. Accuracy of reports
 - c. Organisation of information
 - d. Visual aids
 - e. Clarity and grammar

- iii. Introduction to the legal system
- iv. Overview of the criminal justice system
- v. Overview of the civil justice system
- vi. Overview of court procedures
- vii. Expert witness testimony (including the various areas where the services of a forensic accountant may be required by court)
- viii. Tips for convincing the court
- ix. Techniques used by lawyers in cross-examination
- x. Tips for surviving cross-examination

The programme is categorised into six modules taken in three segments, consisting of coursework and moot court session: Module 1; Modules 2-4; and Modules 5-6.



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Appendix III

Sampled Cases of Economic and Financial Crimes Cases around the World As at 31st of December, 2014

1. Waste Management Company (1998):

- i. Company: Houston-based public traded waste management company.
- ii. What happened: Reported \$1.7 billion in fake earnings.
- iii. Main players: Founder/Chief Executive Officer (CEO)/Chairman Dean L. Buntrock and other top executives; Arthur Andersen (company auditors)
- iv. How they did it: The company allegedly falsely increased the depreciation time length for their property, plant and equipment on the balance sheets.
- v. How they got caught: A new CEO and management team went through the books.
- vi. Penalties: Settled a shareholder class-action suit for \$457 million. SEC fined Arthur Andersen \$7 million.

2. Enron Energy and Service Corporation (2001):

- i. Company: Houston-based commodities, energy and service corporation
- ii. What happened: Shareholders lost \$74 billion, thousands of employees and investors lost their retirement accounts, and many employees lost their jobs.
- iii. Main players: CEO Jeff Skilling and former CEO Ken Lay.
- iv. How they did it: Kept huge debts off balance sheets.
- v. How they got caught: Turned in by internal whistleblower Sherron Watkins; high stock prices fueled external suspicions.
- vi. Penalties: Lay died before serving time; Skilling got 24 years in prison. The company filed for bankruptcy. Arthur Andersen was found guilty of fudging Enron's accounts.

3. WorldCom Telecommunications Company (2002):

- i. Company: Telecommunications Company; now MCI, Inc.
- ii. What happened: Inflated assets by as much as \$11 billion, leading to 30,000 lost jobs and \$180 billion in losses for investors.
- iii. Main player: CEO Bernie Ebbers
- iv. How he did it: Underreported line costs by capitalising rather than expensing and inflated revenues with fake accounting entries.
- v. How he got caught: WorldCom's internal auditing department uncovered \$3.8 billion of fraud.
- vi. Penalties: CFO was fired, controller resigned, and the company filed for bankruptcy. Ebbers sentenced to 25 years for fraud, conspiracy and filing false documents with regulators.

4. Freddie Mac (2003):

- i. Company: Federally backed mortgage-financing giant.
- ii. What happened: \$5 billion in earnings were misstated.
- iii. Main players: President David Glenn, Chairman/CEO Leland Brendsel, ex-CFO Vaughn Clarke, former senior VPs Robert Dean and Nazir Dossani.
- iv. How they did it: Intentionally misstated and understated earnings on the books.
- v. How they got caught: An SEC investigation.
- vi. Penalties: \$125 million in fines and the firing of Glenn, Clarke and Brendsel.

5. Cadbury Nigeria PLC (2006):

- i. Company: Cadbury Nigeria PLC.
- ii. What happened: Consistently overstated its earnings for four years to the tune ₦13.255 billion; during which time Akintola Williams Deloitte (AWD) had been the companies' statutory auditor for forty years.

- iii. Main players: The company's board of directors, audit committee, head of internal audit, external auditor, and registrars.
- iv. How they did it: The company's board used stock buy backs, cost deferrals, trade loading and false suppliers' stock certificates to manipulate its financial reports.
- v. How they got caught: The new finance director seconded from the parent company (Cadbury Schweppes International, United Kingdom) to Cadbury Nigeria blew the alarm.
- vi. Penalties: Cadbury Nigeria paid a fine of ₦7.8 million. The principal officers were banned /suspended from operating in the Nigerian capital market, being employed in the financial services sector and holding directorship positions in any public company in Nigeria. AWD was ordered to pay a fine of ₦20 million; and strongly reprimanded and warned to desist from engaging in acts that may affect the investing public's confidence in the capital market. Union Registrars Limited was ordered to pay a penalty of ₦7.2 million.

6. Lehman Brothers Scandal (2008):

- i. Company: Global Financial Services Firm.
- ii. What happened: Hid over \$50 billion in loans disguised as sales.
- iii. Main players: Lehman executives and the company's auditors, Ernst & Young.
- iv. How they did it: Allegedly sold toxic assets to Cayman Island banks with the plan that they would be bought back eventually. Created the impression Lehman had \$50 billion more cash and \$50 billion less in toxic assets than it really did.
- v. How they got caught: Went bankrupt.
- vi. Penalties: Forced into the largest bankruptcy in U.S. history. SEC didn't prosecute due to lack of evidence.

7. Bernie Madoff Scandal (2008):

- i. Company: Bernard L. Madoff Investment Securities LLC was a Wall Street investment firm founded by Madoff.
- ii. What happened: Tricked investors out of \$64.8 billion through the largest Ponzi scheme in history.
- iii. Main players: Bernie Madoff, his accountant, David Friehling, and Frank DiPascalli.
- iv. How they did it: Investors were paid returns out of their own money or that of other investors rather than from profits.
- v. How they got caught: Madoff told his sons about his scheme and they reported him to the SEC. He was arrested the next day.
- vi. Penalties: 150 years in prison for Madoff plus \$170 billion restitution.

8. Mrs. Cecilia Ibru(former Managing Director (MD) of Oceanic Bank Plc) (2010):

- i. The Company: Oceanic Bank Nigeria PLC.
- ii. What happened: Mrs. Cecilia Ibru was arraigned by the Economic and Financial Crimes Commission (EFCC) in August 2009 on the allegation that she was involved in a multi-billion Naira banking scandal after her bank was found to have low cash reserves.
- iii. Main player: Mrs. Cecilia Ibru as the then MD of Oceanic Bank Plc.
- iv. How she did it: Mrs. Ibru was allegedly using cronies as fronts to launder investors' and depositors' funds to her personal purse.
- v. How he got caught: The CBN and the Nigeria Deposit Insurance Corporation (NDIC) examiners found serious infractions against her which led to her removal as the MD of the Bank by the then CBN Governor.
- vi. Penalties: A Nigerian Federal High Court sitting in Lagos, on Friday 8th, October 2010 found Mrs. Cecilia Ibru guilty and jailed her for 18 months, after she had voluntarily forfeited assets worth N191.4bn. She spent 6 months behind bars as the sentences on the 3 count charges ran concurrently.

9. Chief James Onanefe Ibori (Former Governor of Delta State): US \$266 million (2012)

- i. The Entity: Delta State.

- ii. What happened: The Nigerian Economic and Financial Crimes Commission (EFCC) and the British Police accused James Ibori of stealing \$250million during his tenure as governor of Delta State.
- iii. Main player: Chief James Onanefe Ibori and associates.
- iv. How she did it: Chief James Onanefe Ibori was allegedly using cronies as fronts to launder his state's monies.
- v. How he got caught: James Ibori admitted in a London court in February 2013 to fraud and money-laundering involving sums of approximately 50 million pounds (\$79 million). He was accused of stealing \$250 million from the public purse and funneling much of the stolen funds to banks in England to fund a lavish lifestyle.
- vi. Penalties: On the 17th of April 2012, Southwark Crown Court in London sentenced James Ibori to 13 years imprisonment. Conviction of Associates: Christine Ibie-Ibori (James Ibori's sister) and Udoamaka Oniugbo Okoronkwo (James Ibori's mistress) were each sentenced to 5 years in prison on Monday 7 June 2010, on counts of money laundering, in a verdict delivered at the Southwark Crown Court, London.the UK court. The UK Court also jailed Bhadrash Gohil James Ibori's former London lawyer), Daniel Benedict McCann (James Ibori's former London fiduciary agent), and Lambertus De Boer (James Ibori's former London corporate financier) for a total of 30 years.

10. Mr. John Yakubu Yusuf (Assistant Director, Nigerian Police Pension Board) (2013):

- i. The Organisation: The Nigerian Police Pension Board (PPB).
- ii. What happened: Mr. John Yakubu Yusuf defrauded PPB of N23.3bn pension fund.
- iii. Main players: Yusuf is one of the six persons standing trial in the N32.8bn Police Pension scam. The six suspects were first arraigned on 29th March 2012 on 16 criminal charges bordering on conspiracy and criminal breach of trust, before Justice Mohammed Talba of the High Court of the Federal Capital Territory, Gudu, Abuja. They were Esai Dangabar, Atiku Abubakar Kigo, Ahmed Inuwa Wada, John Yakubu Yusufu, Mrs. Veronica Ulonma Onyegbula and Sani Habila Zira. Kigo was the director of the Police Pension Office, before he was made permanent secretary.
- iv. How he did it: Yusuf colluded with five others to divert N32.8bn Police Pension fund to their personal accounts.
- v. How he got caught: The Nigerian Economic and Financial Crimes Commission (EFCC) investigated the accused persons based on series of petitions received.
- vi. Penalties: Justice Mohammed Talba of Abuja High Court, on Monday, 28 January 2013, sentenced Yusuf to two years' imprisonment with an option of N750,000 fine for the embezzlement of N23.3bn pension fund. On Monday, 28 January 2013, the EFCC rearrested John Yakubu Yusuf on charges related to false declaration of assets.