



Dynamics of Forensic Accounting Academic Programme: Evidence from the Universities in Nigeria

Damilola Gabriel Fagboro¹

Department of Accounting, Faculty of Management Sciences, University of Lagos, Lagos Nigeria
E-mail: damilolafagboro@gmail.com; Tel: +2348038211452

&

Solabomi Omobola Ajibolade

Department of Accounting, Faculty of Management Sciences, University of Lagos, Lagos Nigeria
E-mail: soajibolade@yahoo.com; Tel: +2348033085782

Abstract

This paper examines the dynamics of integrating forensic accounting into the academic programmes of the universities in Nigeria. The research is a survey, using both primary and secondary data. Forensic accounting professionals in both academic and practice in Nigeria are used as respondents for the study. Both descriptive and inferential statistics are adopted to analyse the data obtained. The outcome of the study reveals that no university in Nigeria offers forensic accounting as a full-fledged degree programme. Forensic accounting academic programme offers vast opportunities. There are observed obstacles inhibiting incorporation of the emerging career into academic programmes of the universities in Nigeria; notably, dearth of qualified academics to teach the courses; low facility level; and bureaucratic bottlenecks. In the context of ignoble position of Nigeria on the Corruption Perceptions Index of the Transparency International, the study concludes that universities should be proactive to societal needs and problems. The study recommends that universities in Nigeria should surmount all barriers to incorporate forensic accounting into their academic programmes. Intending universities should seek the inputs of relevant professional bodies and practitioners when designing the programme, as this will foster employment prospects of the forensic accounting graduates. As this thriving area of knowledge evolves, relevant authorities in Nigeria should ensure that the forensic accounting academic programme is laid on a credible foundation emphasizing scientific investigative methods, expert witnessing techniques and problem-solving skills.

Keywords: forensic accounting, academic programme, universities, qualified academics

1. Introduction

The National Universities Commission's (NUC) Benchmarks for Minimum Academic Standards (BMAS) (2007) for the universities in Nigeria, incidence of corporate financial scandals and resultant audit failures, have raised concerns on how the universities in Nigeria are preparing accounting students to tackle these challenges (Okaro & Okafor, 2013; Sorunke, 2016). Oyewo, Faboyede and Egbide (2014) posit that it is typical of universities to regularly overhaul the curriculum of accounting degree programmes, both at the undergraduate and postgraduate levels of study. The authors conclude that for accounting as a discipline to maintain relevance, it has to keep evolving with the changing environment. Romanus and Arowoshegbe (2014) review and identify the factors that have hindered the development of accounting education in Nigeria. The authors report that professional accountancy service has not been adequately secured for economic developmental needs of the Country. Romanus and Arowoshegbe, therefore, conclude that in Nigeria, the professional accounting training programmes and research are neither effectively linked to these needs, nor do they portray future requirements of the accounting stakeholders (that is, accounting professional bodies and regulators, investors, captains of industry, employers of labour, academics). Previous studies have challenged the conventional accounting profession for providing a narrow image of the interaction between the profession and society; thereby artificially constraining the subject matter of the profession (Albrecht & Sack, 2000; Fouché, 2013; Fagboro, 2015; The Association of Certified Fraud Examiners (ACFE), 2016). Against this background, the International Academy of Forensics (IAF) (2017) argues that in a situation where the need of the society is not met, there is need to open up a new area of research within the existing principles and practice of the affected profession. IAF, therefore,

¹ Corresponding author.

Email: damilolafagboro@gmail.com

Tel: +2348038211452

concludes that forensic accounting profession emerged as a response to economic and financial crimes, and audit expectation gap to tackle the menace. According to the International Institute of Certified Forensic Investigation Professionals (IICFIP) (2017), to effectively combat economic and financial crimes and related vices, the starting point is incorporating forensic accounting into the academic programmes of tertiary institutions.

The Forensic Careers (2014) submits that academic programme is a dynamic endeavour that must be continuously examined, critiqued, and discussed. Hence, given the gravity of economic and financial crime cases in Nigeria; university authorities in the Country have been called upon to incorporate forensic accounting into their academic programmes (Johnson-Rokosu, 2016; Sorunke, 2016). Extant studies (Boys, 2008; Ramadhan, 2015; Lee, Cefaratti and Rose-Green, 2015; Herbert, Onyilo, Ene and Tsegba, 2017; Peterson-Kramer, Seda, and Bobashev, 2018) have provided evidence that as the demand grows for forensic accounting professional services, some universities in the advanced nations are responding by implementing forensic accounting academic programmes. DiGabriele (2008) concludes that adding a forensic accounting course to the accounting curriculum can greatly benefit the three major stakeholders in accounting education: academic institutions, students, and employers of accounting graduates. Dreyer (2014) finds that, in the United States of America (USA), forensic accounting is ranked as one of the most rewarding professions. Despite the shared benefits of forensic accounting services; it appears studies on the aspect of the profession's full-fledged academic degree programme in Nigeria are in rarity. Instead, most studies on forensic accounting in the Country focus attention on incorporating forensic accounting as a unit course within the existing conventional accounting academic programme (Efiong, 2012; Okaro & Okafor, 2013; Johnson-Rokosu, 2016; Sorunke, 2016). Hence, the current study intends to contribute to knowledge by conducting an investigation of the dynamics of forensic accounting degree programme, with the universities in Nigeria in focus. Consequently, in an attempt to achieve this aim, the study evaluates the obstacles to dynamics, and benefits of integrating forensic accounting into the academic programmes of the universities in Nigeria. It is expected that the outcome of this study will be part of the academic response to address the incidence of economic and financial crimes, and related offences, which have assumed a dangerous dimension in Nigeria in recent time (The Transparency International, 1996 - 2017).

The rest of the paper is organised into Four Sections as follows: Section two covers theoretical framework and literature review aspect of the study. Section three centers on: research design, population, and sample selection; procedure for data collection, and survey instrument for the study. Section Four relates to data presentation, analysis and discussion of findings. Section Five, being the concluding part of the paper, entails summary, conclusions and recommendations.

2. Literature Review

2.1 Concept of Forensic Accounting

Forensics (*used with a singular verb*), at its most basic level, is best explained as "*science in service to the courts*" (The Centre for Forensic Science and Medicine, 2013, p. 1). International Academy of Forensics (IAF) (2017:1) defines forensics as "*the application of scientific and technological knowledge and methods to criminal investigations and related legal problems*". Forensics is the practical application of scientific method to problems in the law, thereby assisting the legal system to acknowledge the truth. The practice deals with the study of physical evidence in a modern legal context. The Forensic Careers (2014) opines that forensics investigates both civil and criminal matters; the intent is to establish incontrovertible facts at trials. By extension, 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*" (International Institute of Certified Forensic Investigation Professionals (IICFIP), 2017, p. 2). 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. 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 (The American National Academy of Sciences, 2009). However, in every forensic specialisation, adherence to the basic scientific principles and global best practices is not an option, but a prevailing requirement (IAF, 2017).

2.2 Theoretical Framework of the Study

From the positivistic background, two theoretical perspectives, (Public Interest Theory and Programme Theory), inform the philosophy of this study. Both theories are preferred to others because they meet the four scientific and statistical generally accepted criteria (Watts & Zimmerman, 1986; Corradetti, 2011; Vogel, 2012). In essence, the two 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 (Clarke, Dean, & Oliver, 2013; Machan, 2015).

On the strength of the criteria fulfillment, testing the two theories will no longer require further measurement development and sampling decisions in this study.

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. In essence, public interest theory supports the regulation of forensic accounting academic programme in Nigeria, meeting the society expectations.

Programme Theory

Programme theory is a set of assumptions underlying a programme that explains why the planned activities should lead to the predefined goals and objectives. The programme theory includes activities directly implemented by the programme as well as the activities that are generated as a response to the programme by the context in which it takes place. In effect, programme theory is a set of assumptions underlying a programme that explains why the planned activities should lead to the predefined goals and objectives. The programme theory includes activities directly implemented by the programme, as well as the activities that are generated as a response to the programme by the context in which it takes place. Impliedly, both the public interest and programme theories represent the underlying assumptions and expectations for how forensic accounting academic degree programme could be integrated into the universities in Nigeria. That is, both theories capture what the academic programme's results and impact will be on the incidence of economic and financial crimes in the Country.

2.3 Review of Literature on Forensic Accounting Academic Programme

Ramadhan (2015) conducts a study on the perceptions of certified accountants regarding the awareness, demand, benefits, relevance and contents of forensic accounting education in a developing country of Bahrain. The results show that all respondents are familiar with forensic accounting and they expect demand for forensic accounting services to increase in the future. The author identifies the most important benefits of forensic accounting as: strengthen the credibility of financial reporting, promote responsible corporate governance, and prepare students to engage in fraud examination. Ramadhan proposes twenty six (26) topics derived from relevant literature, to be included in a forensic accounting course. The author reports that the respondents perceive all topics as important and the topics that receive the highest rating are bribery and corruption investigation, corporate governance and analytical review procedures. The study recommends that colleges and universities in Bahrain should incorporate forensic accounting in their accounting programmes. Ramadhan further suggest that the preparers of accounting programmes should recognise the value of practitioners' inputs when developing the contents of forensic accounting because their views can improve the relevance of programmes and foster graduates' marketability. However, the study suffers from its non-considering the barriers to the implementation of forensic accounting academic programme.

Sorunke (2016) investigates the challenges inhibiting Nigerian universities from integrating forensic accounting course into the accounting curriculum. Results of findings indicate that the demand and interest in forensic accounting in Nigeria is expected to increase. The study further revealed that the challenges of integrating forensic accounting into accounting curriculum in Nigeria are more of academic and administrative bottleneck. The author recommends some remedies to overcome these challenges. However, Sorunke's study is premised on the postulation that "despite the increase in demand for forensic accountants, studies show that no Nigerian university is offering forensic accounting course". Conversely, the current study submits that the University of Lagos, Nigeria commenced professional career development training in forensic accounting in the year 2014; while Niger Delta University (NDU), Wilberforce Island, Bayelsa State started similar training in 2015; pioneering the programme in the Country.

Johnson-Rokosu (2016) conducts a survey of the prospects and challenges of fraud and forensic accounting integration into curriculum in the Nigerian tertiary institutions. The study reveals that most respondents prefer fraud and forensic accounting to be integrated into the existing accounting curriculum by offering a separate fraud and forensic accounting course. The study affirms that inclusion of forensic accounting as a course would increase students' expertise, skepticism and fraud judgment. It could be inferred that Johnson-Rokosu regards 'fraud and forensic accounting' as two separate courses, whereas it has been documented in the previous studies that fraud is a sub-sect of forensic accounting (IAF, 2017; IICFIP, 2017). This position is evident from the definition of forensic accounting, provided earlier.

Bhavani and Mehta (2017) present the current scenario of offerings and availability of forensic accounting education in universities in the United Arab Emirates (UAE). According to the authors, the study is carried out to gain a complete understanding of available courses on forensic accounting at the graduate and postgraduate level, especially in accounting specialisation. Bhavani and Mehta maintain that the results of the study will help provide an insight into the direction of

forensic accounting education in the UAE; where, according to the authors, developing and improving forensic accounting education offerings has created serious thrill. Bhavani and Mehta argue further, that because of the increasing number of various corporate scandals all over the world, forensic accounting education has become the order of the day. To the authors, every accounting student needs to be trained in the emerging field; and every university has to offer it as part of the curriculum. The results of the study, however, show that very few universities in the UAE offer and focus on the emerging specialisation as part of their curriculum in graduate and postgraduate levels.

Herbert, Onyilo, Ene and Tsegba (2017) investigate the availability of fraud and forensic accounting education in Nigeria. The paper analyses the perceptions of academics and practitioners on the demand for, relevance and integration of, fraud and forensic accounting in Nigeria. The results indicate an increasing market demand for fraud examiners and forensic accountants; and suggest that fraud and forensic accounting be given adequate coverage in the accounting curriculum in response to market demand. Further, the authors; on the benefits of fraud and forensic accounting education and training; report that there is virtual unanimity that it will: i) widen the employment horizon and opportunities for graduates; ii) help to combat fraud, corruption and financial crimes; iii) strengthen the credibility of financial reporting; and iv) help rebuild investors' confidence and trust in financial reports. Herbert et al. findings support integration of fraud and forensic accounting at both the undergraduate and postgraduate levels. The study draws attention to regulatory importance and expediency of integrating fraud and forensic accounting into the accounting curriculum. In conclusion, the authors call for regulatory initiative in developing the Benchmark Minimum Academic Standards (BMAS) for forensic accounting programme at both the undergraduate and postgraduate levels. However, Herbert et al.'s study suffers the same faith with Johnson-Rokosu's (2016) view. The two works view financial fraud as a standalone course distinctively different from forensic accounting; whereas, as mentioned earlier, financial fraud is a subset of forensic accounting (IAF, 2017; IICFIP, 2017).

Bhasin (2017) conducted study on how to integrate the expertise of the forensic accounting to improve the overall corporate governance scenario prevalent in India. The author posits that the study is a preliminary investigation of the necessary skills, and educational and training requirements for forensic accountants to improve corporate governance system. Bhasin surveys academics, practicing fraud and forensic professionals in order to determine the perceptions of the professional community. Similar to Rezaee, Crumbely and Elmore (2006), the study investigates if there are differences in the views of the relevant skills of forensic accountants among accounting practitioners, academics, and users of forensic accounting services. The findings show that potential practitioners and academic agree that critical thinking, unstructured problem-solving, investigative flexibility, analytical proficiency, and legal knowledge are more important skills of forensic accountants. The author reports that potential practitioners of forensic accounting services rated analysis the more important than did academic staff. Both groups agreed with prospective users, who viewed deductive analysis as very important. The report also reveals that both groups did not differ on oral communication, written communication, or composure rankings. Bhasin submits that some skills are relevant and important to the outcome of forensic accounting education. The author concludes that recent accounting scandals have induced a crisis of confidence in financial reporting practice, and effectiveness of the corporate governance mechanisms. The author concludes that a qualified, trained and mature forensic accounting professional can prove to be a valuable asset to the corporate-sector, and gradually help to improve their corporate governance system.

Rezaee and Wang (2018) examine the relevance of big data (*data analytics*) to forensic accounting practice and education by gathering opinions from a sample of academics and practitioners in China. The study is a survey of academics and practitioners regarding the desired demand, importance and content of big data educational skills and topics for forensic accounting education to effectively respond to challenges and opportunities in the age of big data. Results indicate that: i) the demand for and interest in big data and forensic accounting will continue to increase; ii) big data and forensic accounting should be integrated into the business curriculum; iii) many of the suggested big data topics should be integrated into forensic accounting education; and iv) some attributes and techniques of big data are important in improving forensic accounting education and practice. The authors advise readers to interpret the study's results with caution because of the sample size (95 academics and 103 practitioners); and responses obtained from academics and practitioners in one country (China) that may not be representative of the global population. Notwithstanding, Rezaee and Wang maintain that the results of the study are useful in integrating big data topics into the forensic accounting curriculum and in redesigning the forensic accounting courses/programmes. As Ramaswamy (2007) previously reported, the results of Rezaee and Wang study have implications for forensic accountants in effectively fulfilling their responsibilities to their profession and society by combating fraud. The authors affirm that the study provides educational, research and practical implications as big data and forensic accounting are progressing.

Peterson-Kramer, Seda, and Bobashev (2018) carry out a study to determine the current views of educators and practitioners regarding forensic accounting education; given the recent dramatic growth in the number of colleges and universities offering such education in the advanced nations. The focus of the study is on forensic accounting education, for

both degree programme and non-degree programme (minors or concentrations). In addition, the paper examines the in-depth knowledge necessary for prospective students to prepare for entry-level forensic accounting positions. The authors review the websites of United States of America (USA) colleges and universities to ascertain the degree to which a Government funded model curriculum has been applied by those institutions that offer forensic accounting academic programme. The study population consists of all 900 USA accounting programmes listed in the Hasselback accounting directory. To check the comprehensiveness of their data; the authors also reviewed the Association of Certified Fraud Examiners' (ACFE) website for all USA schools participating in its Anti-fraud education partnership programme. Peterson-Kramer et al. find that while both groups (educators and practitioners) agree that the demand for forensic accounting services will increase in the near future and that they prefer a separate course or degree be offered at the graduate and undergraduate levels. The authors also find that there are several significant differences between the educators and practitioners' opinions on forensic accounting content and preferred teaching techniques. According to the authors, practitioners consider topics outside traditional accounting as more important to include in forensic accounting education, and more highly value teaching techniques that add an experiential learning component. From Peterson-Kramer's et al. study, it could be inferred that practitioners value some nontraditional accounting skills, such as in forensic technology and interviewing, more highly than academics. In essence, accounting educators may need to develop interdisciplinary approaches to forensic accounting education.

As the Forensic Careers (2014), IAF (2017) and IICFIP (2017) documented, and in view of the observed gap in the literature under review; the current study proposes four inter-lurking elements of dynamics of forensic accounting academic programme. These elements are: i) qualified academics to teach the courses; ii) quality of facilities to deliver the programme; iii) institutional support to strengthen the programme; iv) employment prospects of the programme's graduates. This study theorises that the combined interaction of the elements of dynamics is a requirement for the effective implementation of a robust forensic accounting academic programme in any given tertiary institution. However, it appears that these dynamics are not properly captured in the studies under review. Thus, it could be argued that most of the reviewed studies did not empirically properly identify the determinants of integrating forensic accounting, as a full-fledged academic degree programme, with specific reference to the developing economies like Nigeria.

On the strength of this reason, the current study postulates two hypotheses:

- i. *There is no significant difference between qualified academics and forensic accounting academic programme in the universities in Nigeria.*
- ii. *There is no significant difference between facilities and forensic accounting academic programme in the universities in Nigeria.*

3. Research Methods

3.1 Research Design

The research design for this study is a survey. In recent time, survey method has been used to carry out studies in the field of forensics (The Forensic Careers, 2014; The Innocence Project, 2014; International Academy of Forensics, 2017). The Institute for Digital Research and Education (2013) upholds that survey research offers high representativeness, good statistical significance, convenient data gathering, little or no observer subjectivity, and dependable results. Conversely, Hesse-Biber (2010) opines that surveys with closed-ended questions may have a lower validity rate than other question types. Notwithstanding, The Forensic Careers (2014) argues that survey supports gathering of objective and verifiable data that quantify the current situation of an activity. Thus, survey study is considered the most suitable method for the current study; with a view to empirically investigating the dynamics of forensic accounting academic programme in the universities in Nigeria.

3.2 Research Population

The research population for this study is the forensic accounting professionals (in both academic and practice) in Nigeria. The professionals are trained and certificated by either the International Institute of Certified Forensic Investigation Professionals (IICFIP) or the Institute of Chartered Accountants of Nigeria (ICAN) or both bodies. The total population is four-hundred and three (403) as at 31st of December 2018 (IICFIP, 2018; ICAN, 2018). However, the target population consists of professionals with a minimum of five years' post-qualification experience as at 31st of December 2018. As at that date, the number of the forensic accounting professionals that meet the criteria is two hundred and thirty eight (238) (IICFIP, 2018; ICAN, 2018). The population cuts across both private and public sectors of the Nigerian economy. According to the Forensic Careers (2014), 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. Creswell (2012) posits 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 tests the two hypotheses. Besides, the study also evaluates the number of universities in Nigeria that are offering full-fledged degree programme

in forensic accounting. As at 31st of December 2018, there are 165 accredited universities in Nigeria (National Universities Commission (NUC), 2018; Joint Admissions and Matriculation Board (JAMB), 2018).

3.3 Research Sample

Due to the relatively small size of the target population, the study adopts the entire population as its research sample. Further, the study also adopts the whole of 165 accredited universities in Nigeria. Lucas (2014, p. 107) submits that "The only time a researcher relies on sampling techniques is when testing all the individuals in the population is impossible". Creswell (2012) argues that "the ideal scenario is to test all the individuals to obtain reliable, valid and accurate results". According to Lucas (2014), population could be wholly adopted as a sample size if such population is relatively small.

3.4 Procedure for Data Collection

A combination of both primary and secondary methods of data gathering is adopted in this study. The primary data source consists of a set of questionnaire administered to two hundred and eight (208) main target respondents. Besides, thirty (30) copies of the questionnaire are used for pilot study; representing about thirteen percent (13%) of the study target population / sample size. The pilot study is undertaken to identify any potential challenges the respondents might encounter in completing the questionnaire items. No problems are identified in this regard. The domain of validity (also called intrinsic validity) is further used for the validity estimate. The domain of validity is obtained by calculating the square root of reliability (Rozakis, 2004; Hesse-Biber, 2010). Out of the 208 copies administered, one hundred and sixty-one (161) copies were filled and returned, representing seventy eight percent (78%) of the total number administered. As at 31st of December, 2018 the secondary data are obtained from the official websites and records of the NUC, JAMB, and individual universities in Nigeria to ascertain the number of universities offering specialized degree programme in the forensic accounting.

3.5 Research Instrument

A set of questionnaire is developed for the study. The questionnaire consists of seven sections with alphabetical numbering (Sections) A to G. Except for Section A (Demographic Data), all items use five point Likert scale; and items measuring various variables are interspersed (Ignou, 2012). Following the guidelines provided in Dutta (2013), the survey instrument is designed using opinion, factual items or categorical questions as well as open-ended items. The Likert five-point scale is adopted for opinion items. The instrument undergoes both validity and reliability tests.

3.6 Methods of Data Analysis

This study adopts both descriptive and inferential statistics to analyse the data. Two hypotheses are designed to achieve the objectives of the study. Descriptive statistical tools are used to analyse biographic data and rank some questionnaire items. T tests are used to test the two hypotheses postulated (at $\alpha = 0.05$). The study use the T Test (Student's T Test) to compare two averages (means) and decides if they are different from each other. The study aims at establishing how significant the differences between the variables are. The adoption of T Test statistics is premised on the following: That this study's:

- i. samples are randomly drawn from its respective target population;
- ii. scores in the population are normally distributed; and
- iii. scores in the population have the same variance ($s_1 = s_2$) (Dutta, 2013; Lucas, 2014).

4. Results

4.1 Job Category of the Respondents

Table I presents a report on the job category of the respondents used for the study.

Table 1: Job Category of the Respondents

Professional Forensic Accountants	Frequency	Percentage (%)	Cumulative %
Academic	09	5.6	5.6
Practitioner	152	94.4	100
Total	161	100	

Table 1 shows that the number of the respondents in academic is significantly low (5.6%). In contrast, the respondents in practice are significantly high (94.4%). The result validated Fagboro's (2015) findings that forensic accountants prefer to engage in professional practice, as it offers more financial rewards than being in academic. This may perhaps account for paucity of empirical papers in the forensic accounting discipline. IICFIP (2017) finds that professional forensic accountants in practice hardly engage in carrying out empirical studies and publications.

4.2 Forensic Accounting Academic Programme in the Universities in Nigeria

Table 2 reports on assessment of the contribution of the universities in Nigeria to the advancement of forensic accounting profession in the Country.

Table 2: Forensic Accounting Academic Programme in the Universities in Nigeria

Ownership Structure	No. of Accredited Universities	%	Universities in Nigeria Offering Specialised Academic Programme in	
			Conventional Accounting	Forensic Accounting
Federal	43	26.06	16	0 out of the 43 Federal Universities
State	47	28.49	14	0 out of the 47 State Universities
Private	75	45.45	51	0 out of the 75 Private Universities
Total	165	100	81	0 (00.00%) out of the 165 Nigerian Universities

Source: Compiled from the Statistics of NUC, JAMB, and individual Universities in Nigeria (December 2018)

From Table 2, as at 31 December 2018, there are 165 accredited universities in Nigeria; out of which 81 (49.1%) offer academic programme in the conventional accounting. The results further show that no university in Nigeria offers specialised degree programme in forensic accounting. However, further enquiries from individual universities academic profiles reveal that both the University of Lagos and Niger Delta University offer non-matriculated professional career development programme in forensic accounting. The training programme of each of the two universities is in collaboration with the International Academy of Forensics (IAF), and International Institute of Certified Forensic Investigation Professionals (IICFIP) respectively. Notwithstanding, the contribution of the universities in Nigeria to the advancement of forensic accounting profession in the Country is deemed extremely low.

4.3 Obstacles to Integrating Forensic Accounting Academic Programme in Nigeria

Table 3 reports on the outcome of the investigation conducted on the obstacles to integrating forensic accounting into the academic programmes of the universities in Nigeria. The respondents are required to rank the severity of each obstacle on a scale of five (5) points, ranging from 1 (not severe) to 5 (extremely severe). Seven (7) perceived obstacles are listed for this purpose.

Table 3: Obstacles to Integrating Forensic Accounting Academic Programme into the Universities in Nigeria

Perceived Obstacles to Integrating Forensic Accounting	MIS	MIS %	Ranking	Remark
Shortage of qualified academics to teach the courses.	4.74	95%	1 st	Very Severe
Inadequate facilities.	4.23	85%	2 nd	Very Severe
Administrative bottleneck bureaucracy.	3.92	79%	3 rd	Severe
Ideological attitude to change.	3.87	77%	4 th	Severe
Cultural attitude to change.	2.51	50%	5 th	Fairly Severe
Insufficient leadership support.	2.27	46%	6 th	Fairly Severe
Lack of faculty members' interest due to excessive workload.	1.67	34%	7 th	Hardly Severe

Key: MIS = Mean Item Score.

From Table 3, it could be deduced that all the obstacles in integrating forensic accounting academic programme in Nigeria, but one, are deemed severe. Shortage of qualified academics to teach the forensic accounting courses, and poor facility level for the programme are the most critical obstacles. The least severe obstacles the low faculty members' interest due to excessive workload. The issue of 'dearth of qualified academics to teach the forensic accounting courses' confirms the findings of the IICFIP (2017); that many developing nations face the challenge of paucity of qualified academics to teach forensic accounting courses.

4.4 Dynamics of Forensic Accounting Academic Programme

Table 4 reveals the result of rating the determinants of forensic accounting academic programme, with particular reference to the universities in Nigeria. The respondents are required to independently rate the significance of each of the four elements, on a scale of five (5) points, ranging from 1 (not significant) to 5 (highly significant).

Table 4: Dynamics of Forensic Accounting Academic Programme

Determinants of Forensic Accounting Academic Programme	SS	MIS	MIS %	Ranking	Interpretation
Qualified Academics to Teach the Courses.	161	4.97	99%	1 st	Highly Significant
Quality of Facilities to deliver the Programme.	161	4.91	98%	2 nd	Highly Significant
Institutional Support to strengthen the Programme.	161	4.85	97%	3 rd	Highly Significant
Employment Prospects of the Programme Graduates.	161	4.76	95%	4 th	Highly Significant

Keys: SS = Statistical Sample; MIS = Mean Item Score.

From Table 4, it could be inferred that all the four determinants of forensic accounting academic programme are highly significant. The result supports the postulations of the study that the four inter-locking elements are a requirement to establish forensic accounting academic programme.

4.5 Benefits of Forensic Accounting Academic Programme

Table 5 shows the ranking of the respondents' view based on the perceived benefits of forensic accounting academic programme in the universities in Nigeria. In order of least important to most important, the respondents generally agree there are three common benefits (drivers) that top the ranking. These are economic realities, professional requirements, and existence of expectation gap. The least obstacles are institutional dissatisfaction with the status quo, government regulations, and parental viewpoint.

Table 5: Mean Ranking of the Benefits of Forensic Accounting Academic Programme

Item	SS	Mean Score	Ranking
Curbs the incidence of economic and financial crimes.	161	4.9275	1 st
Promotes responsible corporate governance	161	4.9130	2 nd
Prepares students to engage in economic and financial crime investigations	161	4.9130	3 rd
Strengthens the credibility of financial reporting.	161	4.9058	4 th
Makes academic programme proactive to meet societal needs	161	4.8986	5 th
Bridges the audit expectation gap.	161	4.8913	6 th
Rebuilds the investor confidence in management representations.	161	4.8841	7 th
Rebuilds the investor confidence in the stock market	161	4.8841	8 th
Satisfies society's demand for forensic accounting academic programme	161	4.8768	9 th
Meets the demand for individuals with forensic accounting requisite skills	161	4.8768	10 th
Makes forensic accounting graduates more desirable in the marketplace	161	4.8696	11 th
Valid N (list-wise)	161		

Keys: SS = Statistical Sample; MIS = Mean Item Score.

The respondents' views are ranked based on the perceived benefits of the forensic accounting academic programme as represented in Table 5. There are three most important benefits of the programme that make the profession important to the society. These benefits are; it curbs the incidence of economic and financial crimes; promotes responsible corporate governance; and prepares students to engage in economic and financial crime investigations. Conversely, the least among the benefits are: the labour market's desirability for forensic accounting graduates, individual demand for forensic accounting requisite skills, and satisfaction of society's demand for forensic accounting academic programme.

4.6 Test of Hypotheses

The two hypotheses postulated for this study are tested as follows:

Test of Hypotheses One:

There is no significant difference between qualified academics and forensic accounting academic programme in the universities in Nigeria. Identification of Variables: $Y = f(X)$:

- i. Independent Variable: extent of qualified academics.
- ii. Dependent Variable: forensic accounting academic programme

Table 6: 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
Qualified academics to teach forensic accounting courses in the universities in Nigeria	-37.992	160	.000	-1.702	-1.79	-1.61

Table 6 shows that a statistically significant low mean difference exists between qualified academics and forensic accounting courses. This implies that there is severe shortage of qualified academics to teach forensic accounting courses in the universities in Nigeria. Thus, this study could not retain hypothesis one as stated.

4.6.2 Test of Hypothesis Two

There is no significant difference between facilities and forensic accounting academic programme in the universities in Nigeria.

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

- i. Independent Variable: facilities level
- ii. Dependent Variable: forensic accounting academic programme

Table 7: 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
Facilities for forensic accounting academic programme in the universities in Nigeria.	-28.329	160	.015	-1.037	-1.09	-.701

Table 7 reports that a statistically significant low mean difference exists between facilities and forensic accounting academic programmes. This implies that the universities in Nigeria have inadequate facilities establish the forensic accounting academic programme. This study, therefore, could not retain hypothesis two as stated.

5. Discussion, Conclusion And Recommendations

5.1 Discussion of Findings

The overall outcome of the study reveals as follows:

The number of the professional forensic accountants in academic in the universities in Nigeria is critically low, as against their counterparts in practice. This perhaps accounted for low level of empirical research publications in the field of specialisation. This result confirms the findings of Efiog (2012).Fagboro (2015) that majority of the forensic accounting practitioners in Nigeria lacks the requisite educational background and skills to conduct quality research. In the context of ignoble position of Nigeria on the Corruption Perceptions Index of Transparency International (1996 - 2017), no university in Nigeria offers forensic accounting as a full-fledged degree programme. In agreement with Sorunke (2016), the contribution of the universities in Nigeria to the advancement of the forensic accounting profession is significantly low. However, as at December 2018, only 2 out of 165(representing 01.21%) NUC accredited universities in Nigeria offer a specialized training programme in forensic accounting. They are University of Lagos and Niger Delta University, in collaboration with IAF and IICFIP respectively. All the four elements of the dynamics of forensic accounting academic programme are deemed highly significant to effect the programme. These elements are identified as: i} qualified academics to teach the courses; ii} quality of facilities to deliver the programme; ii} institutional support to strengthen the programme; and iv} employment prospects of the programme graduates. As a minimum requirement, the four conditions must be fulfilled to establish a degree awarding forensic accounting academic programme in any of the universities in Nigeria.

This study identifies some obstacles to the integration of forensic accounting into the academic programmes of the universities in Nigeria. Chiefly among these obstacles are dearth of qualified academics to teach forensic accounting courses, very low resources level, and administrative bottlenecks (weak institutional support). However, this outcome is at variance with the findings of Rezaee, Crumbely & Elmore (2006) which conclude that a good number of the universities in United States of America (USA) have capacity to incorporate forensic accounting into their academic programmes. IAF (2017) has reported that, in terms of forensic accounting academic programme development, the challenges of the developing economies are variously different from that of the advanced nations. The current study also discovers some benefits that forensic accounting academic programme implementation could offer. In the particular order of their importance, the academic programme could be are sponse from the universities in Nigeria to curb incidence of economic, and financial crimes. Promote responsible corporate governance. Enhance career prospects for students. Strengthen credibility of financial reporting. Be proactive to the societal needs and problems.

5.2 Summary and Conclusion

Tertiary institutions have important roles to play in the development of every society. To this end, university academic programmes are expected to be proactive to the society needs and problems. Hence, the dynamic nature of the society becomes part of the driving forces which make academic programme review to become inevitable. The review process ensures the eventual curriculum is not out of tune with the currency. In this regard, tertiary academic programme becomes a powerful engine for building a better society, for productivity and growth. A robust university academic programme contributes to nation's building through the production of advanced knowledge, skills and competences. The contribution is not only through basic and applied research, but also through its wider services to the society. In effect, sound academic programme remains a



major component in the development of human resources, improvements in quality of life, and sustainable development in every given economy. The outcome of this study reveals that in spite of the collective benefits of forensic accounting services to the society, there is no university in Nigeria offering the discipline as a full-fledged degree programme. That is, in Nigeria a wide a gap exists between the demand for and supply of properly trained forensic accountants. The perceived obstacles in integrating forensic accounting into academic curriculum of the universities in Nigeria include: dearth of qualified academics to teach the courses, poor level of training facilities and bureaucratic bottlenecks.

5.3 Recommendations

From the outcome of the study that; in the reality of global growing importance of forensic accounting as a distinctive field of specialisation and Nigeria's ignoble position on the global corruption index; the study recommends that: Academic intellectual engagements should be proactive to the societal needs and problems. Universities in Nigeria should surmount all barriers to the incorporation of forensic accounting into their academic programmes. Further, any university in Nigeria intending to integrate forensic accounting as a full-fledged degree programme should consider the following measures:

Recruitment and Training: Nigerian government and university authorities should embark on academic staff recruitment drive from the ranks of forensic accounting professionals in practice. The newly recruited professionals should be given every necessary encouragement to enroll for higher degree studies in the chosen career. This will serve as an immediate measure to address the challenge of dearth of qualified academics to teach forensic accounting courses. Further, Nigerian Government and private sector players should properly fund academic research efforts and implement the outcomes for the benefit of the society.

Facility Development: Relevant authorities in the universities in Nigeria should constitute a committee to investigate and determine the facility requirements for the forensic accounting academic programme. Based on the needs assessment, government should engage the private sector to actively participate in the funding of the needed facilities.

Curriculum Development: Intending universities should seek the inputs of relevant professional bodies and practitioners when designing the curriculum content, as this would strengthen forensic accounting graduates' employment marketability. As this thriving area of accounting continues to evolve, it is incumbent on the relevant authorities to deliver a strong and credible foundation that emphasises the scientific investigative method, and economic and financial crime problem-solving skills.

Programme Accreditation and Standards: The expectations of the society on forensic accounting profession are very high. For this reason, the Nigerian academic regulatory authorities should ensure that uniform and uncompromising standards to excel in this emerging field are set forth. In addition, relevant forensics bodies should work with appropriate organisations and educational institutions to improve and develop the required academic programmes. Forensic accounting is a highly specialised profession; therefore, student internship should be part of the requirements for the award of first degree in the discipline. By implication, forensic accounting academic programme should be made a five year programme, one academic session internship inclusive.

Accreditation Standards: Relevant regulatory authorities should ensure all the four interlocking determinants of forensic accounting academic programme; (qualified academics to teach the courses; quality of facilities to deliver the programme; institutional support to strengthen the programme; and employment prospects of the programme graduates) are well in place, before the programme could be accredited in any universities in Nigeria. This will fulfill the doctrine of quality assurance in the programme, meeting the required global standards. It is expected that the application of these recommendations would go a long way in ensuring a credible forensic accounting academic programme in the universities in Nigeria.

References:

- Albrecht, W. S., & Sack, R. J. (2000). Accounting education: Charting the course through a perilous future, Sarasota, FL: *American Accounting Association*, 5(8), 37-62.
- Bhasin, M. L. (2017). Communion of corporate governance and forensic accounting: A study of an Asian country, *British Journal of Research*. Retrieved from <http://www.amedpub.com>
- Bhavani, M. G. & Mehta, A. (2017). Forensic accounting education in the UAE. *Accounting and Finance Research*, 7(1). Retrieved from <https://doi.org/10.5430>
- Boys, J. (2008). *Forensic accounting in New Zealand: Exploring the gap between education and practice*, Accounting & Finance Association of Australia and New Zealand.
- Corradetti, C. (2011). The Frankfurt school and critical theory. Retrieved from <http://www.iep.utm.edu>.
- Clarke, F., Dean, G., & Oliver, K. (2013). *Corporate collapse, accounting, regulatory and ethical failure*, 2nd, Cambridge: CUP.

- Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches*. New York: Thousand Oaks/Sage.
- DiGabriele, J. A. (2008). An empirical investigation of the relevant skills of forensic accountants, *Journal of Education for Business*, 83, 331-338.
- Dreyer, K. (2014). *A History of Forensic Accounting. Honors Projects*. Paper 296, Grand Valley: Grand Valley State University.
- Dutta, S. K. (2013). *Statistical techniques for forensic accounting understanding the theory and application of data analysis*, New Jersey: Pearson Education.
- Efiong, E. J. (2012). Forensic accounting education: An exploration of level of awareness in developing economies-Nigeria as a case study, *International Journal of Business and Management*, 7(4), 264 -276.
- Fagboro, G. D. (2015). *Quality standards enforcement mechanisms and the forensic accounting profession in Nigeria*, Doctor of Philosophy (Ph.D) in Accounting Thesis Submitted to the School of Postgraduate Studies, Lagos: University of Lagos.
- Hesse-Biber, S. N. (2010). *Mixed methods research: Merging Theory with Practice*, New York: The Guilford.
- Fouché, J. P. (2013). A renewed call for change in accounting education practices, *Kamla-Raj, Int J EduSci*, 5(2), 137-150.
- Herbert, W. H., Onyilo, F., Ene, E. E. & Tsegba, I. N. (2017). Fraud and forensic accounting education: Prospects and challenges in Nigeria. *International Journal of Business and Management*, 12(7).
- Ignou, N. K. D. (2012). Selection of the research paradigm and methodology, *Online Research Methods Resource for Teachers and Trainers*, 2(1).
- Johnson-Rokosu, S. F. (2016). An empirical evaluation of forensic accounting education in Nigeria tertiary institutions. Retrieved from <https://ssrn.com>
- Lee, C. C., Cefaratti, M. & Rose-Green, E. (2015). The Incremental Benefit of a Forensic Accounting Course to Creativity. *Journal of Forensic & Investigative Accounting*, 8(1), 157-169.
- Lucas, S. R. (2014). An inconvenient dataset: Bias and inappropriate inference in the multilevel model, *Quality & Quantity*, 48, 1619-1649.
- Machan. T. R. (2015). Government regulation of business: The moral arguments, *Foundation for Economic Education*, 23(4), 561-582.
- Okaro, S. C., & Okafor, G. O. (2013). Drivers of audit failure in Nigeria: Evidence from Cadbury (Nigeria) PLC. *Research Journal of Finance and Accounting*, 4(6), 1686-1697.
- Okoye, E. I., & Akenbor, C. O. (2009). Forensic accounting in developing economies: Problem and prospects. *The University Advanced Research Journal*, 1, 1-13.
- Oyewo, B., Faboyede, S., Egbide B.C. (2014). Curriculum design for accounting education in Nigeria. *British Journal of Education, Society & Behavioural Science*. Retrieved from <https://www.researchgate.net/publication>
- Peterson-Kramer, B., Seda, M. & Bobashev, G. (2018). Current opinions on forensic accounting education, *Accounting Research Journal*, 30(3), 249-264
- Ramadhan, S. (2015). Certified accountants' perceptions of forensic accounting education: The case of Bahrain. *International Journal of Finance and Accounting*, 4(2), 109-118.
- Ramaswamy, V. (2007). New frontiers: training forensic accountants within the accounting program. *Journal of College Teaching & Learning*, 4(9) 62-76.
- Rezaee, Z., Crumbly, L. D., & Elmore, R. C. (2006). Forensic accounting education: A survey of academicians and practitioners. *Advances in Accounting Education*, 13(5), 32 - 54.
- Rezaee, Z. & Wang, J. (2018). Relevance of big data to forensic accounting practice and education", *Managerial Auditing Journal*. Retrieved from <http://www.https://doi.org>
- Romanus, O. O. and Arowoshegbe, A. (2014). The challenges of accounting education: The Nigerian experience. *Accounting and Finance Research*. 3(2). 129-137
- Rozakis, L. E. (2004). *Research methods*, New York: Marie Butler-Knight.
- Sorunke, O. A. (2016). Integrating forensic accounting into the accounting curriculum in Nigerian universities: Challenges and remedies; *International Journal of Academic Research in Progressive Education and Development*, 5(1). Retrieved from <https://www.hrmar.com/journals>
- Smith, G. S., & Crumbly, D. L. (2009). How divergent are pedagogical views toward the fraud/forensic accounting curriculum? *Global Perspectives on Accounting Education*, 2(6), 1-24.
- The American Accounting Association's (AAA) Futures Committee Report (1986). Committee on the future structure, content, and scope of accounting education issues in accounting education (Spring), 1-45, AAA.
- The American National Academy of Sciences (2009). *Strengthening forensic science in the United States: A path forward, committee on identifying the needs of the forensic sciences community*, National Research Council.
- The Association of Certified Fraud Examiners (ACFE) (2016). *Fraud examiners manual*, (International Ed.), Austin, ACFE.
- The Centre for Forensic Science and Medicine (2013). *The nature of forensics*, Toronto: University of Toronto.
- The Forensic Careers (2014). *What can you do with a degree in forensic science?* Kent: University of Kent.
- The Joint Admissions & Matriculation Board (JAMB) (2018). Unified tertiary matriculation examination, Abuja: JAMB.



- The Innocence Project (2014). Wrongful convictions involving invalidated or improper forensic science that were later overturned through DNA testing. Retrieved from <http://prezi.com>.
- The Institute of Chartered Accountants of Nigeria (2018). *Forensic accounting certification programme*, Lagos: ICAN.
- The Institute for Digital Research and Education (2013). Future structure, content, and scope of accounting education issues in accounting education (Spring), 169–195. Retrieved from <http://www.idre-edu.org>.
- The International Academy of Forensics (IAF), (2017). *The structure of forensics*, Lagos, IAF.
- The International Institute of Certified Forensic Investigation Professionals (IICFIP) (2017; 2018). Impact of forensic investigation professionals in curbing the menace, *Forensic Investigation Journal*, 1(1), 1-9.
- The National Universities Commission (NUC) (2007). *Benchmarks minimum academic standards of programmes in Nigerian universities*, Abuja: NUC.
- The Transparency International (TI) (1996 - 2017). *Annual global corruption barometer (AGCB), and corruption perceptions index (ACPI)*, Berlin: TI.
- Vogel, I., (2012). *Review of the use of 'theory of change' in international development, Review Report*, London: Department of International Development.
- Watts, R. L., & Zimmerman, J. L. (1986). *Positive accounting theory*, New Jersey: Prentice Hall.
- West Virginia University (2007). *Education and training in fraud and forensic accounting: A guide for educational institutions, stakeholder organisations, faculty, and students*. Washington: National Institute of Justice Special Report, Department of Justice.