AN EVALUATION OF CONTEMPORARY ISSUES IN FORENSIC ACCOUNTING PRACTICE

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INTRODUCTION

Accounting is always referred to as a business language everywhere around the world. It is a language that is used to communicate business operations. Every individual business venture separately keeps their business records and there is the need to communicate the business activities of these business enterprises to the individuals, groups, institutions who have interest in the operations and result of the enterprise. These interest groups in the business range from Shareholders, Creditors to investors. Although Accounting is usually associated with business, trade and profession, yet, the business entity is not the only kind that makes use of accounting information. Entities such as Law Firms, individual and government use and prepare account so as to get hold of information on the financial health and performance of their entity.

It is often a cumbersome task trying to manage the assets of any business firm as there are staff, business partners and customers who nurse the idea of defrauding firms and carting away with their assets which sometimes brings about a loss to the earnings of the business and sometimes, a windup of the affected business. Hence, there is the need to not just a robust internal control system, but an accountant who can efficiently combine audit, investigation and accounting skills to prevent this menace from befalling the firm and even when fraud occurs in the business, they will be able to provide evidence in court against such a fraud perpetrator.

Our focus here will be to explain with reason, the reason underlying a particular accounting practice (Forensic Accounting). Forensic Accounting practice shall be the accounting practice we shall be focusing on. In addition, we shall also examine some



analytical models and modeling /mathematical techniques that are commonly used in Forensic Accounting as well as their related empirical applications.



FORENSIC ACCOUNTING

According to the Association of Certified Fraud Examiners (ACFE), Forensic

Accountants combine their accounting knowledge with investigative skills in various litigation support and investigative accounting settings.

Crumbley & Apostolou (2002) notes that the forensic accountant takes a much more skeptical and proactive approach to uncovering fraud, not just verifying what is in the financial statements.

Also, Gippo (2003) notes that knowing how a business operates and effective types of internal controls is a critical part of being a forensic accountant.

In addition, Conway and Rouse (2002) states that when there is alleged fraud, it is important to engage independent forensic accountants because the current auditors may encounter potential inherent conflicts.

Furthermore, Crumbley (2003) asserts that knowledge and experience in financial planning and management techniques, as well as advance computer skills, including an ability to understand and apply various information technology and accounting systems, are also key characteristics of forensic accountants.

Forensic accounting involves the combination of skills in accounting, audit, investigation, taxation, business operations and management, internal controls, interpersonal relationships, and people for legal matters-used as evidence in court of law.



Forensic Accountants apply various analytical models/mathematical techniques in the discharge/performance of their duties.



ANALYTICAL MODELS/MATHEMATICAL TECHNIQUES USED IN FORENSIC ACCOUNTING

Mantone (2013) identifies sixteen analytical models/mathematical techniques used in Accounting Research using the Forensic Accounting approach as an accounting practice for fraud detection. These analytical models/mathematical techniques are:

- Liquidity Ratios: Working Capital (current assets minus current liabilities),
 working capital index (current year working capital minus prior year working
 capital), Working capital turn over (Net sales divided by (current assets minus
 current liabilities), and the current ratio (current assets divided by current
 liabilities).
- 2. Profitability Ratio: Gross Profit Margin (sales minus cost of sales) divided by sales, Stock Sales (Ending Inventory divided by Net Sales), Return on Equity (Net income divided by (Beginning Shareholder Equity +Ending Shareholder Equity) divided by 2) or Net Income divided by Shareholder Equity.
- 3. Horizontal Analysis: Investors, Auditors, financial analysts and other interested parties use this to examine changes in the line items of the Balance Sheet and the Income Statement from year to year. This is arrived at thus: (current year amount minus prior year amount) divided by prior year amount.
- 4. Vertical Analysis: This measures the relationship that exists between one item and another in a financial statement. In terms of the income statement, its focus is on the ability of a business to earn a profit. (Bienias et al 2014).
- 5. Cash realized from operations.



- 6. Analyzing cash realized from operations to net income from operations.
- 7. The Beneish M-score Model: This model was developed by Professor Messod

 Beneish. It combines eight financial ratios to determine if a company has

 managed or manipulated its earnings. These financial ratios are:
 - 1) Day's Sales in Receivable Index (DSRI): This measures the ratio of days' sales in receivables in a year to that in the previous year. A large increase in the DSR could mean revenue inflation.
 - 2) Gross Margin Index (GMI): This measures the gross margin in a year to that in the previous year. Where the index is above 1, it indicates deterioration in gross margin.
 - 3) Asset Quality Index (AQI): This measures the ratio of assets that are non-current other than property, plant and equipment to the total assets. It is the ratio of the quality of asset in one year to the base year.
 - 4) Sales Growth Index (SGI): This measures the ratio of sales in a particular year as against the base year.
 - 5) **Depreciation Index (DEPI):** This measures the ratio of the rate of depreciation in the base year to the corresponding rate in the present year. When depreciation is greater than 1, it is an indication that assets are being depreciated at very slow rate.
 - 6) Total Accruals to Total Assets (TATA): This measures the total accruals to total asset. When accruals are high, this indicates a likelihood of earnings manipulations.



- 7) Sales, General and Administrative Expenses Index (SGAI): this measures the sales, general and administrative expenses in a year in relation to that in the base year.
- 8) Leverage Index (LVGI): This measures the ratio of the total assets in a year in relation to a base year. Where the leverage index is greater than 1, it is an indication of an increase in leverage.
- 8. Dechow-Dichev Accrual Quality: Dechow and Schrand (2004) are of the opinion that when earnings are in conformity with the acceptable accounting principles, regulators see them as being of high quality. Earnings should be free from manipulations by the Management of any enterprise but must reflect the true position of the enterprise.
 - Dechow, P.M and Dichev, I.D (2002) in their paper titled *The Quality of Accruals and Earnings: The Role of Accrual Estimation Error* concluded that accruals and earning quality are not just intentionally caused by manipulations by Management but are caused by estimation errors caused by high unpredictability of operations. Hence, the higher the unpredictability of operation, the higher the estimation errors.
- 9. Sloan's Accruals: Richard Sloan of University of Michigan in 1996 published a paper that found out that companies having negative or small accruals often outperforms (+10% annually) those with large accruals. This is referred to as the "accrual anomaly". His suggestion is that investors Centre more on earnings but not on the generation of cash.

Atlantic International University



D Muresan in her paper titled *Accrual Anomaly: A survey of the methods used to measure accruals* concluded by stating that when accruals are higher, it could be a sign that earnings could have been overestimated.

- 10. Jones Nondiscretionary Accruals.
- 11. The Piotroski F-Score Model: Joseph Piotroski is a Chicago Accounting

 Professor who developed a discrete score between 0 and 9 to imitate nine

 criteria that is used to decide the potency of the financial position of a firm. When

 one of the criteria is met, the company is given a point for it, otherwise, no point

 is awarded. Thereafter, the points gotten are added to decide the value of stock

 that is best.

The criteria are:

Profitability:

- Current year return on asset (ROA) that is positive (1 point).
- Current year operating cash flow that is positive (1 point).
- Current period higher return on assets (ROA) as compared to return on assets in the year before (1 point).
- Return on asset that is less than cash flow from operations (1 point).

Liquidity, Leverage and Source of Funds:

- When long term debt has low ratio in the current period compared to the value in the previous year (1 point).
- When current ratio this year is higher than that of the previous year (1 point).
- When there is no issuance of new shares last year (1 point).



Efficiency in Operations:

- When gross margin is higher than that of the previous year (1 point)
- When asset turnover ratio is higher compared to that of the previous year (1 point).
- 12. Lev-thiagarajan's 12 Signals: This study is associated with over increase in sales as compared to sales in the base year.
- 13. Benford's Law: This law simply stats that where there is a collection of numbers naturally occurring, the leading digit is likely small. He used the table below called the 'Benford's distribution Table' in his analysis:

	Probabilities						
Digit	1st Digit	2nd Digit	3rd Digit	4th Digit	5th Digit		
0	NA	0.11968	0.10178	0.10018	0.10002		
1	0.30103	0.11389	0.10138	0.10014	0.10001		
2	0.17609	0.10882	0.10097	0.10010	0.10001		
3	0.12494	0.10433	0.10057	0.10006	0.10001		
4	0.09691	0.10031	0.10018	0.10002	0.10000		
5	0.07918	0.09668	0.09979	0.09998	0.10000		
6	0.06695	0.09337	0.09940	0.09994	0.09999		
7	0.05799	0.09035	0.09902	0.09990	0.09999		
8	0.05115	0.08757	0.09864	0.09986	0.09999		
9	0.04576	0.08500	0.09827	0.09982	0.09998		

- 14. Z-score Analysis.
- 15. Correlation: This helps to measure the relationship that exists between cost of sales to sales in order to ensure that unusual relationship is revealed.



16. Regression Analysis: This helps to analyze if there is the existence of relationship between variables such as sales to cost of sales.



JUSTIFICATION:

The role of Forensic Accountant cannot be overemphasized in present day businesses, where business ventures/enterprises are exposed to various forms of fraud, ranging from internal 'white collar' to external frauds. Forensic Accountants are able to provide evidences of fraud of any kind that might have occurred in a business venture and ensure same is testified against in any court of law.

Despite the importance of Forensic Accounting in business enterprises, it also has its shortcomings which shall be examined in this paper.

Forensic Accounting can help in the areas of:

- 1. Fraud Prevention: Forensic accounting practice helps a business enterprise to ensure that frauds of any kind in a business enterprise are prevented using various analytical tools. It involves the continuous fraud awareness session and prevention techniques by a forensic expert. For instance, the Benford's Law can help to detect manipulation of figures.
- Solving Financial crimes: Forensic Accounting can help to solve issues relating to financial crimes and money laundering often associated with business enterprises, be it private or government.

The following are the limitations associated with the practice of Forensic Accounting:



- Time Consumption: It requires a lot of time examining accounting records for the purpose of investigation by Forensic Accountants. This can involve weeks or months depending on the magnitude of the case/fraud being investigated.
- 2) High Cost Implication: as a matter of fact, it is going to be very difficult for Forensic Accounting to be practiced in small business enterprises. This is due to the high cost of hiring one for the purpose of examining financial records where fraud has occurred. Hence, it is only affordable by big organizations (Modugu and Anyaduba, 2013).



GENERAL ANALYSIS:

In the past years, various Scholars have critically examined the role, benefits of Forensic Accounting, how best it can be integrated into the accounting curriculum and its positive impact in any business enterprise, either private or government and also, the challenges thereof.

Here, we shall be analyzing some research that have been carried out within the past five years and look at their contributions to the subject of Forensic Accounting and also contrast them.

In 2011, Dahli Gray wrote a journal on *Forensic Accounting And Auditing: Compared And Contrasted To Traditional Accounting And Auditing.* In his publication, he compared and contrasted ranging from techniques used by Forensic Accountants which include: Criminalistics, Forensic Evidence, Expert Testimony, Chain of Custody, Forensic Computer Investigation, Fraud Symptoms, Interview and Interrogation, Verbal and Non verbal Cues, Question Types, Techniques to Persuade and Signed Confession.

Moreso, Ehiohiren and Atu in 2016 carried out a study on *Forensic Accounting and Fraud Management: Evidence from Nigeria*. They try to establish: (1) the extent of influence which an effective Forensic Accounting has on fraud control and Management and (2) the significant difference that exist between the duties of the professional Accountants and that of traditional External Auditors. In their conclusion, they established that: (1) Forensic accounting can help to uncover practices that are fraudulent, identify when assets are misappropriated and reverse insider transactions



which influence significantly the detection and control of fraud and (2) significant difference exist between the duties performed by professional Forensic Accountants and those of the traditional External Auditors.

Also, Enofe et. al carried out a study in 2013 on *The Impact of Forensic Accounting on Fraud Detection*. In their study, they try to establish: (1) the way in which forensic accounting affect the detection of fraud and (2) if forensic accounting has the ability to curb fraudulent activities. Based on their findings, they concluded that forensic accounting has the ability to provide firm with the desired tools to deter fraudulent activities but cannot but is not able to curb fraudulent activities.

In addition, Amake and Ikhatua in 2016 carried out a research on *Forensic Accounting* and *Fraud Detection in Nigeria Public Sector*. They wanted to ascertain:(1) if applying Forensic Accounting in the public sector will help to detect fraud in the public sector (2.) if significant relationship exists between Forensic Accounting and litigation support service in courts in Nigeria. They concluded thus in their findings: (1) Forensic Accounting applies the combination of Accounting, Auditing and investigation skills to detect, prevent and provide evidence that are valid for the purpose of prosecution in Nigeria's court. (2) the application of Forensic Accounting can help to detect and prevent financial and economic fraud in the Nigerian Public Sector.

Furthermore, Omondi (2013) assessed *The Impact of Forensic Accounting Services on Fraud Detection and Prevention among Commercial Banks in Kenya*. He tried to ascertain: (1) if Forensic Accounting Services impact in preventing and detecting fraud in commercial banks (2) the kind of fraud that is prevalent in commercial banks in Kenya



and (3) the areas where Forensic Accounting functions can be applied in the Bank. His findings reveal that Kenyan Banks adopt the Forensic Accounting practice implying that Forensic Accounting has positive impact in preventing and detecting fraud.

Finally, Samuel F. Johnson-Rokosu in 2015 published a journal titled: *Integrating* Forensic Accounting Core Competency into the Study of Accounting. Case of Nigeria Tertiary Institutions. In his study, he tried to establish: (1) if students expertise will increase if Forensic accounting is included as a course into the Accounting and Auditing courses (2) if there are existing prospects and challenges if Fraud and Forensic Accounting is infused into the curriculum of accounting where there is or no support from administrative or faculty support and (3) a best approach of fitting in fraud and forensic accounting into the curriculum of accounting in tertiary institutions in Nigeria. In his conclusion, he established that: (1) if forensic accounting is included into the accounting and auditing curriculum, the expertise, judgement on fraud and skeptism will increase; (2) if there is lack of support from administrative and academic staff members in integrating forensic accounting into the accounting curriculum, this might adversely affect the societal needs for forensic accounting practice and (3) the best way of integrating fraud and forensic accounting into the accounting curriculum is to:(i) involving faculty into the revision of curriculum (ii) stakeholders consideration (iii) consideration of accrediting agencies and the requirements of government (iv) consideration of resources availability (v) consideration of the necessity for a change (vi) planning consideration (vii) consideration of learning goals assurance (viii) compromise consideration and (ix) understanding that change is constant.



The summary of the research above is tabulated thus:

Dahli Grey in 2011 had a focus on comparing and contrasting Forensic Accounting and Auditing with the aim of establishing the clear difference that exist between both Professions considering the techniques applied by the Forensic Accountant, one of which is the Forensic Evidence as compared to Audit.

In 2013, Forensic Accounting took a look at *The Impact of Forensic Accounting*Services on Fraud Detection and Prevention among Commercial Banks in Kenya where

Omodi established that Forensic Accounting has the ability to detect and prevent fraud in Banks noting that Forensic Accounting is practiced in Kenyan Commercial Banks.

Also, in 2013, Forensic Accounting shifted focus to critically examine if it has the ability to curb activities that are fraudulent in any firm. The joint view of Enofe, Okpako and Atube is that Forensic Accounting has the ability to provide any firm with the tools of deterring fraudulent activities but cannot in itself curb fraudulent activities.

In 2015, there was the view by Samuel F. Johnson-Rokosu in his publication titled Integrating Forensic Accounting Core Competency into the Study of Accounting. Case of Nigeria Tertiary Institutions to infuse Forensic Accounting into the accounting curriculum of institution of higher learning, the best approach in doing this and an examination of the prospects and challenges in infusing Fraud and Forensic Accounting into the accounting curriculum where there is no administrative/faculty support in higher institution of learning. He established that if forensic accounting is included into accounting and auditing curriculum, expertise and fraud judgement and skeptism will



increase. Also, societal needs for forensic accounting may be affected if there is lack of support from administrative/academic staff in implementing its integration into the accounting curriculum. Hence, faculty should be included in the revision of curriculum.

2016 became a wake up call for Forensic Accounting practice to be incorporated into the Nigerian Public Sector for the purpose of fraud detection. This was the view of Amake and Ikhatua in their publication titled *Forensic Accounting and Fraud Detection in Nigeria Public Sector*. They concluded that if Forensic Accounting practice is introduced to the public sector in Nigeria, economic and financial crimes will be detected and prevented. In the same year, Ehiohiren and Atu also contributed in their publication, *Forensic Accounting and Fraud Management: Evidence from Nigeria*, stating that Forensic Accounting can help uncover fraudulent practices and reveal when assets are misappropriated.

The table below is used to illustrate various research that have been carried out in Forensic Accounting, including the objectives, findings and focus of each research:

		YEAR OF		OBJECTIV		
S/	AUTHOR(PUBLICATI		ES OF THE		
N	S)	ON	TOPIC	STUDY	FINDINGS	FOCUS



				(1) the extent of influence which an effective Forensic Accounting	(1) Forensic accounting can help to uncover practices that are fraudulent, identify when assets are misappropria ted and reverse insider transactions which	
				has on fraud	influence significantly	
				control and Manageme	the detection and control	
				nt (2) the	of fraud and	
				significant difference	(2) significant difference	
				that exist	exist	
				between	between the	
			Forensic	the duties of the	duties performed by	
			Accounting	professiona	professional	
			and Fraud	Ì	Forensic	
			Manageme	Accountant	Accountants	
			nt: Evidence	s and that of	and those of the traditional	Fraud
	Ehiohiren		from	traditional	External	Managem
1	and Atu	2016	Nigeria	External	Auditors	ent



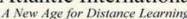
					Based on	
					their findings,	
					they	
					concluded	
				(4)	that forensic	
				(1) the way	accounting	
				in which forensic	has the ability to	
				accounting	provide firm	
				affect the	with the	
				detection of	desired tools	
				fraud (2) if	to deter	
				forensic	fraudulent	
			The Import	accounting has the	activities but cannot but is	
			The Impact of Forensic	ability to	not able to	
	Enofe,		Accounting	curb	curb	
	Okpako		on Fraud	fraudulent	fraudulent	Fraud
2	and Atube	2013	Detection	activities.	activities	Detection
					(1) Forensic	
				(4) if	Accounting	
				(1) if applying	applies the combination	
				Forensic	of	
				Accounting	Accounting,	
				in the	Auditing and	
				public	investigation	
				sector will	skills to	
				help to detect fraud	detect, prevent and	
				in the	provide	
				public	evidence that	
				sector (2.) if	are valid for	
				significant	the purpose	_
				relationship	of	Fraud
				exists between	prosecution in Nigeria's	Detection in Nigeria
				Forensic	court . (2) the	Public
			Forensic	Accounting	application of	Sector
			Accounting	and	Forensic	using
			and Fraud	litigation	Accounting	Forensic
	A 1		Detection	support	can help to	Accountin
	Amake and		in Nigeria Public	service in courts in	detect and	g Applicatio
3	Ikhatua	2016	Sector.	Nigeria	prevent financial and	Applicatio n
ა	iknatua	2010	Sector.	inigeria	ımancıaı and	n



					economic fraud in the Nigerian Public Sector.	
4	Omondi	2013	The Impact of Forensic Accounting Services on Fraud Detection and Prevention among Commercia I Banks in Kenya	(1) if Forensic Accounting Services impact in preventing and detecting fraud in commercial banks (2) the kind of fraud that is prevalent in commercial banks in Kenya (3) the areas where Forensic Accounting functions can be applied in the Bank	His findings reveal that Kenyan Banks adopt the Forensic Accounting practice implying that Forensic Accounting has positive impact in preventing and detecting fraud	Forensic Accountin g application in detecting and preventing fraud in commerci al banks in Kenya
4	Omonu	2013	Reliya	מוכ שמווג	nauu	ixeriya



				(1) if	(1) if forensic	
				students	accounting is included into	
				expertise will	the	
				increase if	accounting	
				Forensic	and auditing	
				accounting	curriculum,	
				is included	the expertise,	
				as a course into the	judgement on fraud and	
				Accounting	skeptism will	
				and	increase (2)	
				Auditing	if there is	
				courses (2)	lack of	
				if there are existing	support from administrativ	
				prospects	e and	
				and	academic	
				challenges	staff	
				if Fraud	members in	
				and Forensic	integrating forensic	
				Accounting	accounting	
				is infused	into the	
				into the	accounting	
				curriculum of	curriculum,	
				accounting	this might adversely	
				where there	affect the	
				is or no	societal	
				support	needs for	
				from administrati	forensic	
			Integrating	ve or	accounting practice (3)	
			Forensic	faculty	the best way	
			Accounting	support (3)	of integrating	
			Core	a best	fraud and	
			Competenc y into the	approach of fitting in	forensic accounting	
			Study of	fraud and	into the	Integrating
			Accounting	forensic	accounting	Forensic
	_		. Case of	accounting	curriculum is	Accountin
	Samuel F.		Nigeria	into the	to:(i)	g into
5	Johnson- Rokosu	2015	Tertiary Institutions	curriculum of	involving faculty into	accounting Curriculum
J	1700020	2013	การแนนเบกร	UI	racuity IIIto	Curriculuill





	accounting in tertiary institutions in Nigeria	the revision of curriculum (ii) stakeholders consideration (iii) consideration of accrediting agencies and the requirements of government (iv) consideration of resources availability (v) consideration of the necessity for a change (vi) planning consideration (vii) consideration of learning goals assurance (viii) compromise consideration and (ix) understandin g that change is
		constant.



DISCUSSIONS

Despite the menace caused by fraud and its impact on the productivity and profitability of business firms around the world, some higher institutions of learning in various countries around the world are yet to incorporate Forensic Accounting into their accounting curriculum while it is yet to dawn on some huge business firms, the need to employ the service of Forensic Accountants.

In Nigeria, a few higher institutions of learning have seen the need to incorporate Forensic Accounting as a course of study. For instance, the University of Lagos, Nigeria now offers a-9-months Diploma course in Forensic Accounting on weekends basis to assist professionals develop their knowledge on issues bothering on fraud, its detection and prevention

In 2003, the Federal Government of Nigeria established a commission known as the Economic and Financial Crimes Commission to help curb the issues of money laundering spreading its activity to all sectors-private and public in Nigeria. In 2007, another Institute of Forensic Accountants (IFA) was also established to help Forensic Accountants in the areas of litigation, fraud detection, crime and economic losses.

In South Africa, several higher institutions of learning such as Northwestern University and University of Pretoria offer courses on Forensic Accounting ranging from Bachelors to Doctorate to help professionals in the areas of fraud detection, crimes and other economic loss-related issues.



In the United Kingdom and the United States as well, several institutions of learning have deemed it fit to offer courses in Forensic Accounting to help prevent and detect fraud while the government of these countries have also established various institutions to help curb the menace of fraud and its impact in their economies.

The tables below critically reviews institutions-learning and otherwise put in place by various countries to help acquire the knowledge for mitigating fraud and as well institutions to help detect and prevent them.



SOME INSTITUTIONS OF LEARNING ESTABLISHED FOR THE ACQUISION OF FORENSIC ACCOUNING SKILLS IN UK, US, SOUTH AFRICA AND NIGERIA

	EUROPE						
S/N	INSTITUTION	COUNTRY OF LOCATION	COURSE TITLE	DEGREE AWARDED	DEGREE DURATION	DEGREE- AWARDING DEPARTMENT	MODE OF STUDY
1	Sheffield Hallam University	United Kingdom	Forensic Accounting	MSc	1 YEAR	DEVELOPMENT AND SOCIETY	FULL TIME
2	Sheffield Hallam University	United Kingdom	Forensic Accounting	ВА	3/4 YEARS	DEVELOPMENT AND SOCIETY	FULL TIME
3	University of South Wales	United Kingdom	Forensic Audit and Accounting	MSc	1 YEAR	SCHOOL OF LAW, ACCOUNTING AND FINANCE	FULL TIME
4	University of South Wales	United Kingdom	Forensic Accounting	ВА	3/4 YEARS	SCHOOL OF LAW, ACCOUNTING AND FINANCE	FULL TIME
5	University of Portsmouth	United Kingdom	Forensic Accounting	MSc	1 YEAR	ACCOUNTING AND FINANCIAL MANAGEMENT	FULL TIME
6	University of Portsmouth	United Kingdom	Forensic Accounting	MSc	30 MONTHS	ACCOUNTING AND FINANCIAL MANAGEMENT	DISTANCE/ONLINE
7	Northumbria University	United Kingdom	Forensic Accounting	MSc	1 YEAR	ACCOUNTING	FULL TIME
8	Keele University	United Kingdom	Accounting and Forensic Science	BSc	3 YEARS	KEELE MANAGEMENT SCHOOL	FULL TIME
9	De Montfort University	United Kingdom	Forensic Accounting	MSc	1 YEAR	BUSINESS AND LAW	FULL TIME
	NIGERIA AND SOUTH AFRICA						
1	University of Lagos	Nigeria	Forensic Accounting	Diploma	9 MONTHS		WEEKENDS
2	NorthWest University	South Africa	Forensic Accounting	Bcom	3 YEARS	SCHOOL OF ACCOUNTING SCIENCES	3 YEARS
3	NorthWest University	South Africa	Forensic Accounting	Mcom	1 /2 YEARS	SCHOOL OF ACCOUNTING SCIENCES	FULL TIME
4	NorthWest University	South Africa	Forensic Accounting	PhD	AT STUDENT'S PACE	SCHOOL OF ACCOUNTING SCIENCES	NOT STATED



	University of		Postgraduate Diploma in Investigative and Forensic			DEPARTMENT	
5	Pretoria	South Africa	Accounting	PGD	1 YEAR	OF AUDITING	ONLINE/FULL TIME
6	University of Pretoria	South Africa	Fraud Risk Management	MPHIL	2 YEARS	DEPARTMENT OF AUDITING	ONLINE/FULL TIME
	UNITED STATES AND CANADA						
1	Golden Gate University	United States	Forensic Accounting	Certificate in Forensic Accounting	9 MONTHS	Accounting	ONLINE/FULLTIME
2	Seneca College	Canada	Fraud Examination and Forensic Accounting	Ontario College Graduate Certificate	8 MONTHS	Accounting and Finance	FULLTIME
3	Florida Atlantic University	United States	Forensic Accounting	Executive Master of Accounting	2 YEARS	School of Accounting Executive Programs	ONLINE
4	Florida Atlantic University	United States	Digital Accounting Forensics and Data Analytics	Executive Master of Accounting	2 YEARS	School of Accounting Executive Programs	ON CAMPUS/ONLINE/WEB
5	Northeastern University	United States	Forensic Accounting	Graduate Certificate in Forensic Accounting	1 YEAR FULL TIME;1.5 YEARS PART TIME	College of Professional Studies	ONLINE
6	Post University	United States	Forensic Accounting	Certificate in Forensic Accounting	Not stated	The Malcolm Baldrige School of Business	CAMPUS/ONLINE
7	Southern New Hampshire University	United States	Forensic Accounting and Fraud Examination	Bs		Business	ONLINE
8	Southern New Hampshire University	United States	Forensic Accounting	MS	15 MONTHS	Business	ONLINE/CAMPUS
9	University of North Carolina at Charlotte	United States	Forensic Accounting	Forensic Accounting Certificate	1 YEAR	UNC Charlotte Continuing Education	ONLINE
10	New England College School of Graduate and Professional Studies	United States	Forensic Accounting	Masters of Science in Accounting/Forensic Accounting	1 YEAR ,8 MONTHS	School of Graduate and Professional Studies	ONLINE
11	Lasalle University	United States	Fraud and Forensic Accounting	Graduate Certificate in Forensic Accounting	Duration not stated	College of Professional Studies	ONLINE



12	West Virginia University	United States	Forensic Accounting and Fraud Examination	Graduate Certificate in Forensic Accounting and Fraud Examination	2-4 YEARS	College of Business and Economics	ONLINE/CAMPUS
13	West Virginia University	United States	Forensic Accounting and Fraud Examination	MS in Forensic and Fraud Examination	30 CREDIT HOURS	College of Business and Economics	ONLINE/CAMPUS
14	American University Washington DC	United States	Forensic Accounting	Graduate Certificate	4 YEARS	KOGOD School of Business	CAMPUS



SOME INSITUTIONS ESTABLISHED TO HELP PREVENT AND DETECT FRAUD IN UK, US AND NIGERIA

	NAME OF FORENSIC/ACCOUNTING	YEAR OF		
S/N	BODY	ESTABLISHMENT	OBJECTIVES	LOCATION
1	Economic and Financial Crimes Commission (EFCC)	The EFCC was established in 2003, partially in response to pressure from the Financial Action Task Force on Money Laundering (FATF), which named Nigeria as one of 23 countries noncooperative in the international community's efforts to fight money laundering	The law enforcement agency that investigates financial crimes such as advance fee fraud (419 fraud) and money laundering	No.5 Fomella Street, Off Adetokunbo Ademola Crescent, Wuse II, Abuja,Nigeria.Website:https://www.efccnigeria.org
2	Institute of Forensic Accountants (IFA)	This was established in 2007 under Decree No 1 of 1990 as a Professional Institution for the Provision of bonafide Qualifications for Forensic Accountants through the administration of Professional Examinations	IFA was established to provide qualified Forensic Accountants to inspire Public confidence in litigation matters relating to detection of fraud and abuse including white-collar crimes, Economic losses, etc.	7, Kachia Road, Kaduna, Nigeria. Website:
3	Association of Chartered Certified Accountants (ACCA)	It was founded in 1904	ACCA actively seeks to enhance the value of accounting in society through international	Adelphi ,London, United Kingdom. Website: www.accaglobal.com









	American Institute of Certified Public	It was founded in	standards for the profession and U.S. auditing standards for audits of private companies, non-profit organizations, federal, state and local	New York, Website:
6	Certified Public Accountants (AICPA)	It was founded in 1887	and local governments.	New York. Website: www.aicpa.org



ACUALIZATION

The various techniques and approaches of Forensic Accounting analyzed in this paper are not just limited to usage only in organizations making Annual Returns and profit-making organizations, but can also be applied to religious organizations and other not-for-profit organizations, since they also do keep accounting records and are audited like profit-oriented organizations. The essence of the record keeping and auditing in these not-for-profit organizations which also consists of religious organizations is not just limited to complying with their internal regulations and policies alone, but sometimes, to avoid misappropriations of the contribution of funds made to them in various forms such as deposits, trusts and contributions.

For a Treasurer in a church, the knowledge acquired from Forensic Accounting will help to ascertain when there is an increase in Leverage. Applying the Leverage index approach, the ratio of assets of a church within a year may be compared with that in the base year to ascertain if there is increase in the Leverage (where the Leverage Index is greater than 1) or otherwise.

It is also easy to identify where there are manipulations on the various contributions from various days' activities in the church. Here, the Benford's Law approach can help to ascertain where manipulations exists.



CONCLUSION

The impact of fraud and financial crimes on any economy is too enormous to be ignored. This menace called fraud has over the years crumbled various economies and large business firms. Financial crimes and fraud can be prevented and detected both in the private and public sectors of any economy where private organizations and government agencies employ the services of Forensic Accountants to apply their forensic skills in the review of their books to detect cases of fraud present acceptable evidences in the court of law for prosecution.

In addition, Financial and Economic crimes (fraud) are prevalent both in the private and public sectors and as such there is the need to detect and if possible, prevent these menace that have crumbled large firms and several economies. If Forensic Accounting is integrated into the curriculum of higher institutions of learning, it will help students acquire the skills they need to combat fraud and financial crimes.

Furthermore, Forensic Accounting practice can help to uncover practices that are fraudulent both in the private and public sectors including banks.

The following can help to detect and prevent the menace of fraud:

1. Government should also increase the number of crime agencies to ensure that financial crimes and fraud and also conduct monthly training for its personnel;



- Government should as a regulation insists that all business enterprises
 irrespective of their sizes, employ the services of Forensic Accountants as a way
 of preventing and detecting frauds;
- Organizations should ensure that from time to time, sensitization memos and seminars on fraud, its prevention and detections are held for their employees at least once in every month;
- 4. There is also the need to integrate Forensic Accounting into the Accounting curriculum of all accounting degree awarding institutions;
- Similar research should be carried out other countries as this research is limited to the United States, United Kingdom and Nigeria.
- Government should ensure that the fees charged by Forensic Accountants are regulated to be reasonable enough to be affordable by small firms that cannot afford their services.



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