# The Effect of Accounting Ethics on the Quality of Financial Reports of Nigeria Firms

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#### Abstract

The broad objective of this study is to investigate the effect of ethics on financial reporting quality. Primary data was used for the study. The data was sourced from questionnaires administered to respondents. The analysis of the data showed that accounting ethics had a significant relationship with financial reporting quality. The study also recommends that the employment processes of companies should be improved upon so as to ensure that men and women with high level of ethical standing would be employed. Ethics and compliance department should be put in place by firms to direct and monitor ethics implementation in their day-to-day operations. Also accountants as custodians of good financial reports should adhere to the codes of professional practice issued by the Institute of Chartered Accountants of Nigeria (ICAN) in carrying out their everyday responsibility.

Keywords: accounting ethics, financial reporting,

#### Introduction

Ethics is a term subject to numerous, sometimes conflicting, interpretations and as such ethical problems are a very relevant issue present in many aspects of real life. Ethics can be examined through several branches and under several grids of analysis, modern or classic (Filipe, Alberto, Ferreira, 2011). A distinguishing mark of the accountancy profession is its acceptance of the responsibility to act in the public interest (IFAC, 2005). Key qualities which appear in the codes of ethics of professional bodies include independence, integrity, objectivity, competence and judgement. For example, the ICAEW's introduction to its 'Guide to Professional Ethics includes a list of five fundamental principles which either expressly mentions or clearly implies all of these qualities, along with other related qualities such as honesty, fair-dealing, truthfulness, courtesy, skill and diligence (Gowthorpe, 2005). The history of the need for accountants to establish high ethical standards began with the failure of the technology bubble followed by the collapse of Enron, WorldCom and Arthur Anderson among others (Rockness & Rockness, 2010).

The resulting lack of confidence in financial information provided or prepared by accountants led Congress of the United States to enact the Sarbanes-Oxley (SOX) Act in 2002, including the creation of the Public Company Accounting Oversight Board (PCAOB), both of which advocated renewed pressure for accountants to have ethics education to improve the chances that practicing accountants make ethical decisions when confronted with difficult choices. The widespread corruption in the society and the failure of organizations in every part of the world have once more increased the need for accounting professionals to adhere strictly to the codes of professional conduct. According to Ogbonna and Appah (2011), the widespread corruption in the business environment seems to be the order of the day in all societies. Therefore, accountants as professionals responsible for the preparation of financial reports need to adhere to the codes of ethical accounting standards to produce reliable, relevant, timely, accurate, understandable and comprehensive financial reports. According to Nzotta (2008), financial reporting forms the basis for economic decision making. The various shareholders need financial reports for decision making on the investment and financial aspect of the organization. The financial reports produced by the accountant should be based on certain fundamental qualities for various users to understand the content of the report. As a result, an accountant is responsible for the consequences of his moral choices not only for his own life but also on the lives of other people. An accountant who commits fraud not only ruins his own moral being but also harms the interests of the other members of society who depend on him (Catacutan, 2006).

Alexander and Britton (2000) noted that the fundamental objective of financial reports is to communicate economic measurements of information about resources and performance of the reporting entity useful to those having reasonable rights to such information. IASB (2008) noted that providing high quality financial reporting information is important because it will positively influence capital providers and other stakeholders in making investment, credit and similar resource allocation decisions enhancing overall market efficiency. The quality of financial reporting indicates a limit in which the financial reports of a company, its economic status, and functions, which are measured over period of time, are presented honestly (Talebinia, Salehi & Jabberzabe,

2011). Truthfulness of the trust in the financial reporting system depends on far more than the actions and decisions of individuals or sophisticated mechanisms for the whole system (Enderl, 2006). Companies in the energy, accounting and banking industries and the professional associations of the certified public accountants and the investment managers and researcher have, in varying degrees, affected the quality of confidence in the financial reporting systems. Therefore, truthfulness of the trust in the financial reporting system cannot be a matter of either personal or institutional ethics alone (Brenkart, 2004). Behaving ethically in accounting is more important than auditing because accounting system prepares financial statements for auditing (Mahdavikhou & Khotanlou, 2011). Accountants have obligations to shareholders, creditors, employees, suppliers, the government, the accounting profession and the public at large. In other words, their obligations go beyond their immediate client. Therefore behaving ethically is an essential and expected trait (Carrol, 2005). Professional ethics is important to accountants and those who rely on information provided by accountants because ethical behavior entails taking the moral point of view. Internalizing and developing professional ethics in accounting profession lead to promoting the quality of financial reporting.

## **Statement of the Research Problem**

Individual from time to time have to face ethical dilemmas and the problem of weakness of will. Accountants are no different. In the working life of an accountant they encounter numerous situations where they are tempted to choose between right or wrong. That is why a feature of accountancy's claim to professionalism is its commitments to ethical standards. This involves an assurance that the accountancy bodies and their members will not pursue their material self-interests in ways that conflict with their duties to the public interest (Appah, 2010). Mathews and Perera (1996) observes that every profession has a built in code of ethics to compel ethical behavior on its members. The rationale for this is obvious. The Nigerian society over the years have witnessed its fair share of corporate scandals in the financial (Societe general bank, Oceanic bank etc). and non-financial (Cadbury Plc and African Petroleum) sectors of the economy. As Ogbonna (2010) argues that any organization that lacks ethical consideration may not survive for a long time to achieve its desired goals and objectives and that of its stakeholders. These failures of corporate entities have been attributed to accountants not adhering to the codes of conduct evidenced not only in the contents of financial statements but also in its reliability by end users. Hence adequate care has to be taken on how these financial statements are presented. Aguolu (2006) says that these failures have brought to greater scrutiny the work of the accountant from both within the profession and from outside. Several ethical issues have been discussed in recent times ranging from conflict of interest, insider's dealings, objectivity, acceptance of gifts etc. scholars are of the opinion that all these ethical issues affect the quality of financial statements. The code of corporate governance (2011) provided for the composition of an ethics committee in an organization where the committee is responsible for deliberating on ethical issues as well as upholding ethical standards in the organization. This has not really yielded the right result as intended as some of the scandals over the past decade have been traced to ethical issues where most times management and auditors compromised integrity for personal and selfish gain to the detriment of the organization. Enron manipulated its statement through off balance sheet financing because they lacked independence from senior executives, Cadbury overstated its audited financial statements, African petroleum concealed its indebtedness to the tune of 22 billion, the financial sector crisis also witnessed few years ago also revealed that the banks connived with the auditors to issue a true and fair view. A critical look at all these cases show that they all were as a result of the violation of ethical practices, hence there's need to critically appraise ethical issues in an organization and how they affect financial reporting quality. The aforementioned issues above lead us to the following questions

- 1. What is the effect of ethics on disclosure of financial reports of Nigerian firms?
- 2. What effect does ethics have on the objectivity of financial reports of Nigerian firms?
- 3. To what extent do ethics affect the integrity of financial reports of Nigerian firms?

## **Research Objectives**

The broad objective of this study is to examine the effect of accounting ethics on the quality of financial reports of Nigeria firms. The specific objectives are to;

1. Examine the effect of ethics on disclosure of financial reports of Nigerian firms

- 2. Investigate the effect of ethics on objectivity of financial reports of Nigerian firms.
- 3. Ascertain the effect of ethics on integrity of financial reports of Nigerian firms

#### **Research Hypothesis**

Ho 1. There is no significant relationship between ethics and disclosure of financial reports of Nigerian firms

Ho 2. Ethics has no significant effect on the objectivity of financial reports of Nigerian firms

Ho 3. There is no significant relationship between ethics and integrity of financial reports of Nigerian

firms

Scope of the Study

This study focused on the effect of ethics on financial reporting quality. Geographically, this study was limited to firms operating in Nigeria. The study focused on firms operating in Edo State, Benin City.

#### **Conceptual Framework**

#### The Nature of Scope of ethics

According to Ogbonna and Appah (2011), Ethics are the moral principles that an individual uses in governing his or her behaviour. It is the personal criteria by which an individual distinguishes right or wrong". In Ogbonna's view, when we talk about ethics and ethical values, we mean our concern about things, which we think, say and/or practice that may not necessarily violate the rules of the organization or infringe the law of the land or amount to outright crime or felony, but which borders on our sense of morality, our sense of right and wrong. It concern itself with issues like conflict of interest, insider's dealings, compromising integrity, objectivity, independence, confidentiality, disclosure of official secrets and destruction of official documents for financial benefits and other similar acts that are against moral principles and ethical standards. Nwagboso (2008) argues that ethics or morality as matters of good and evil, right and wrong and subscribes to the fact that "we are living today in an ethical wilderness". He believes that ethics is in ferment and chaos among all people. Hayes. Schilder, Dassen and Wallage (1999) argue that ethics represent a set of moral principles, rules of conduct or values. Ethics apply when an individual has to make a decision from various alternative regarding moral principles. Ethical behaviour is necessary for society to function in an orderly manner. The need for ethics in society is sufficiently important that integrity, loyalty, and pursuit of excellence cannot be incorporated into law.

They further stated that the following ethical principles incorporate the characteristics most people associate with ethical behaviour; honesty, integrity, promise keeping, loyalty, fairness, caring for others, respect for others, pursuit of excellence and accountability. Ajibolade (2008) divided the field of ethics into Meta ethics, ethical theories and applied ethics. Meta ethics is the reflection upon ethics concepts and theories. Ethical theories is the substantive proposals regarding those consideration that would determine morally acceptable conduct and applied ethics is the deliberation related to a specific field of enquiry. Examples include ethics in business, public service and general professional ethics. Mathews and Perera (1996) states that a formal code of ethics ensures that professional members will be more aware of the moral aspects of their work; an accessible reference tool for managers to keep ethical concerns in mind; abstract ideas will be translated into concrete terms applicable to every situation; members as a whole will act in a more standardized fashion throughout the profession. According to Jenfa (2000) and Nwagboso (2008), professional ethics provides accountants with certain advantages such as determining the professional posture he should adopt if he is to succeed and determining the prosperity of his conduct in his professional relationship.

#### **Empirical Review**

Mahdi and Mohsen (2011) carried out a study on the impact of professional ethics on financial reporting quality in Iran they employed a 24 item questionnaire and worked with a sample of 205 Iranian companies. The result of their findings showed that professional ethics have a significant impact on the quality of financial reporting. Masoud and Mahbude (2013) investigated the impact of professional ethics on financial reporting quality and found that developing professional ethics in accounting will help promote financial reporting quality. Tae and Jinhan (2011) examined the effect of business ethics on financial reporting quality using Korea firms. They found out that companies with a higher level of ethical commitment are engaged in less earnings management, report earnings more conservatively, and predict future cash flows more accurately than those with a lower level of ethical commitment. We also find that corporate commitment to business ethics has perpetuating effects on future financial reporting quality.

Ogbonna and Appah (2011) investigated the effect of ethics on financial reporting quality in Nigeria using a sample of 123 accountants. The study found out that ethical compliance by the accountant positively and significantly affects the quality financial reports. Flugrath, Bennie & Chen (2007) conducted a study on ethics

and financial reporting quality using a sample of 112 professional accountants using primary data. The results indicate that the presence of ethics has a positive impact on the quality of the judgement made by professional accountants. Berrone, suroca, Tribo (2009) carried out a study using 515 companies using OLS regression analysis. Their study reveals that a strong corporate ethical identity was positively related to high levels of stakeholder satisfaction. In turn stakeholder satisfaction had a positive influence on the financial performance of the firm.

# Methodology

The research design adopted for this study was the survey research designs as it enabled the researcher elicit information from the respondents on the subject matter under investigation. Primary data was used to carry out this study and it was gotten through the use of a 5 point Likert Scale questionnaire. The population consisted of all accounting practitioners in Nigeria. The sample was restricted to accounting practitioners in Edo State, Benin City. A total of fifty questionnaires were completed and used for the analysis. The data generated were analyzed using the OLS regression technique.

# Presentation and Analysis of data

The data were analyzed using OLS regression technique. The result of the analysis is presented below. Table 4.1: Accounting ethics and financial information presentation

Dependent Variable: OBJ				
Method: Least Squares				
Sample: 1 50				
Included observations: 50				
Variable	Coefficient	Std. Error	t- Statistic	Prob.
С	17.80177	2.394912	7.433164	0
ETH	0.084379	0.240673	0.350597	0.0274
R-squared	0.42554	Mean dependent var		18.6
Adjusted R-squared	0.418226	S.D. dependent var		5.205962
S.E. of regression	5.253189	Akaike info criterion		6.194726
Sum squared resid	1324.608	Schwarz criterion		6.271207
Log likelihood	-152.868	Hannan-Quinn criter.		6.22385
F-statistic	4.122918	Durbin-Watson stat		2.199665
Prob(F-statistic)	0			

Source: Author's computation

The result of the analysis above shows the relationship between ethics and financial reporting quality as represented by financial report objectivity. The result of the analysis shows a R-square of 0.42 indicating that 42 percent of systematic variation in financial report objectivity has been explained by the explanatory variable. The result showed that ethics had a positive and significant relationship with financial information objectivity. The prob (F-stat) is 0.0000 indicating that the model is significant at 5%. The Durbin Watson value is 2.1 indicating the absence of auto correlation.

Dependent Variable: INT				
Included observations: 50				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	20.49183	2.104182	9.738624	0
ETH	-0.16616	0.211457	-0.78577	0.0059
R-squared	0.6127	Mean dependent var		18.92
Adjusted R-squared	0.57869	S.D. dependent var		4.597426
S.E. of regression	4.615479	Akaike info criterion		5.935886
Sum squared resid	1022.527	Schwarz criterion		6.012367
Log likelihood	-146.397	Hannan-Quinn criter.		5.965011
F-statistic	8.61743	Durbin-Watson stat		1.914696
Prob(F-statistic)	0.0006			

Table 4.2: Accounting ethics and financial report reliability

Source: Author's computation

The result of the analysis above shows the relationship between ethics and financial reporting quality as represented by financial report integrity. The result of the analysis shows a R-square of 0.61 indicating that 61 percent of systematic variation in financial report integrity has been explained by the explanatory variable. The result showed that ethics had a positive and significant relationship with financial report integrity. The prob (F-stat) is 0.0006 indicating that the model is significant at 5%. The Durbin Watson value is 1.9 indicating the absence of auto correlation.

Table 4.3: Accounting ethics and objectivity of financial reports
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Dependent Variable: DIS				
Included observations: 50				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	11.8163	1.55979	7.575567	0
ETH	0.325973	0.156749	2.079585	0.0429
R-squared	0.682651	Mean dependent var		14.9
Adjusted R-squared	0.663539	S.D. dependent var		3.535534
S.E. of regression	3.421368	Akaike info criterion		5.337136
Sum squared resid	561.8764	Schwarz criterion		5.413617
Log likelihood	-131.428	Hannan-Quinn criter.		5.36626
F-statistic	4.324674	Durbin-Watson stat		2.217199
Prob(F-statistic)	0.042928			

Source: Author's computation

The result of the analysis above shows the relationship between ethics and financial reporting quality as represented by faithful disclosure of financial report. The result of the analysis shows a R-square of 0.68 indicating that 68 percent of systematic variation in disclosure of financial reports has been explained by the explanatory variable. The result showed that ethics had a negative and significant relationship with faithful disclosure of financial report. The prob (F-stat) is 0.042928 indicating that the model is significant at 5%. The Durbin Watson value is 2.2 indicating the absence of auto correlation.

# **Conclusion and Recommendations**

In this study, the effect of accounting ethics on the quality of financial reports of firms in Nigeria was evaluated. This hypothesis was tested by using data from the administered questionnaires using the Ordinary Least Square regression technique. The analysis of the data showed that accounting ethics had a significant relationship with financial reporting quality. The result is consistent with the study of Ogbonna and Appah (2011) that ethics in the accounting profession is fundamental in the quality of financial reports of organizations. On the basis of the findings, the study concludes that high ethical standard is fundamental in achieving an objective, reliable and transparent financial report. The following recommendations are provided to improve the financial reporting framework:

- 1. The employment processes of firms should be improved upon so that men and women with high level of ethical standing would be employed.
- 2. Firms in Nigeria should put in place ethics and compliance department to direct and monitor ethics implementation in their day-to-day operations.
- 3. Firms reporting structure should adhere strictly to the financial reporting framework issued by the International Financial Reporting Standards for better and more acceptable financial reports.
- 4. Accountants as custodians of good financial reports should follow the codes of professional practice issued by the Institute of Chartered Accountants of Nigeria (ICAN) for their day-to-day responsibilities.
- 5. All the relevant professional accounting bodies in Nigeria should monitor the activities of their members to ensure that codes of ethics are followed in the preparation of quality financial reports in the country.

## References

Aguolu, O. (2006). Ethics and integrity in the accounting profession. *Nig. Accountant.*, 41(3), 54-59.

Alexander, D., & Britton, A. (2000). Financial Reporting. (5th Ed.). London: Thomson Learning.

Appah, E. (2010). Ethical accounting standards and societal expectations. *International Journal of Social*. *Policy Issues*, 7(1), 53-63.

Brenkert, G.G. (2004). Corporate integrity and accountability: Thousand Oaks.

Beuselinck, C., & Manigart, S. (2007). Financial reporting quality in private equity backed companies: The impact of ownership concentration. *Small Business Economics*, 29, 261-274.

Catacutan, R. (2006). A humanistic perspective in teaching business ethics in accountancy, paper presented at the 6th Annual Ben-Africa Conference University of Stellenbosch, Cape Town, South Africa 26-28 Strathmore University Nairobi, Kenya, 1-6.

Carrol, R.A. (2005). Model for ethical education in accounting, In Gowthorpo, C. and Blake J. (Eds.)

"Ethical Issues in Accounting" (2nd ed). Taylor and Francis e-Library, 149-164.

Enderl, G. (2006). Confidence in the financial reporting system: Easier to lose than to restore.10In: Lu, X and Enderle, G. (Eds.) Developing Business Ethics in China. New York: Palgrave Macmillan.

Filipe, J.A., Alberto, M., & Ferreira, M. (2011). An ethical issue in anti-commons management

aquaculture case in Portugal. International Journal of Academic Research, 3(1), 250-252.

Gowthorpe, C. (2005). Ethical issues and the auditor. In Gowthorpe, C. and Blake J (Eds.). Ethical Issues in Accounting" (2nd ed.): Taylor and Francis.

IASB, 2008. Exposure Draft on an improved conceptual framework for financial reporting: The objective of financial reporting and qualitative characteristics of decision usefulness financial reporting information, London. IFAC (2005). Building an investment climate of trust: IFAC IFAC's Role and Major Initiatives.FCM Seminar, Cairo, Egypt.

Jenfa, B.I. (2000). *Elements of Professionalism and Practice of Accountancy*. Jos: Ehindero Nigeria Limited. Kim, J., Simunic, D., Stein M., & Yi, C.H. (2007). Voluntary Audits and the Cost of Debts Capital for Privately Held Firms. Working Paper Series, Korean Evidence.

Mahdi, M., & Mohsen, K. (2011) the impact of professional ethics on financial reporting quality. *Australian Journal of Basic and Applied Research*, 5(11), 2092-2096.

Maines, L., & Wahlens, J. (2006). The nature of accounting information reliability: inferences from archival and experimental research. *Accounting Horizons*, 20(4), 399-425.

Masoud, B., & Mahbube, A. (2013). Impact of professional ethics on financial reporting quality. *American* – *Eurasian Network for Scientific Information*, 7(10), 2862-2866.

Mathews, M.R., & Perera, M.H.B. (1996). Accounting Theory and Development. South Melbourn, Australia: Thomson Publishing Company.

Nwagboso, J. (2008). Professional Ethics, Skill and Standards. Inspirations Media, Jos.

Nzotta, S.M. (2008). Accounting: Theory and Principles. Good-Davis Associate, Owerri.

Ogbonna, G.N., & Appah, E. (2011). Ethical compliance by the accountant on the quality of financial reporting and performance of quoted companies in Nigeria. *Asian Journal of Business Management, 3*(3), 152-160. Ogbonna, G.N. (2010). Ethical considerations in corporate governance: A Survey of governance practices of corporate stakeholders in Nigeria. *International Journal of Business and Science Research, 1*(1), 91-108. Rockness, H.O., & Rockness, J.W. (2010). Navigating the complex maze of ethics. *Accountingand the Public Interest, 10, 88-104.* 

Tae, H.C., & Jinhan, P. (2011). Business ethics and financial reporting quality: evidence from *Journal of Business Ethics 103*(4), 403-427.

Talebinia, G., Salehi M., & Jabbarzade, S. (2011). A study of the impact of collapse bon financial reporting quality of listed companies. Some Iranian evidence. African Journal of Business Management, 5(10), 3858-3865.

Willekens, M. (2008). Effects of external auditing in privately held companies: Empirical evidence from Belgium. Working Paper Series.

#### **QUESTIONNAIRE**

Department of Accounting, Faculty of Management Science, University of Benin, Benin City. March, 2015.

Dear Sir/Madam,

# **REQUEST FOR YOUR COOPERATION IN COMPLETING THIS QUESTIONNAIRE**

I am a postgraduate student undergoing the Master degree program in Accounting from University of Benin. As part of the requirement for the program, I am undertaking a study on the effect of accounting ethics on financial reporting quality. In this regard you have been duly selected as a member of the sample.

I wish to appeal to you to assists this study by kindly sparing a few minutes to complete this questionnaire. You are not required to disclose your identity. I also wish to assure you that your answer will be treated in strict confidence and used for the stated academic purpose only.

## SECTION A: PERSONAL DATA

- 1. Sex: Male [ ] Female [ ]
- 2. Age: Below 25 years [] Between 26 and 35 years [] Between 36 and 45 []46 and above []
- 3. Educational Qualification: WAEC/SSCE/GCE/NECO [ ] OND/NCE [ ] HND/B.SC [ ] M.SC/MBA/PH.D [ ]
- 4. Working Experience : 1-5 [ ] 6-10 [ ] 10-15 [ ] 15 and above [ ]

# **SECTION B**

Below are list of statement that may affect your assessment on the effect of ethics on financial reporting quality. Kindly indicate the extent which you agree or disagree with the statement using the following.

SA	Strongly Agree
A	Agree
UD	Undecided
02	
SD	Strongly Disagree
D	Disagree

	Financial reporting quality	SA	Α	UD	SD	D
1	High ethical standards promotes financial reporting quality					
2	The quality of financial report is affected by situational factors surrounding the accountant					
3	There is lack of awareness on the effect of ethics on financial reporting quality					
4	Ethics has not been sufficiently taught in our institutions of learning					
5	Ethics has no influence on financial reporting quality.					
	Objectivity					
	The objective presentation of financial statement is not affected by					
6	ethical values prevalent in an organisation.					
7	Financial statements should be prepared and presented in accordance with ethical guidelines within the organisation.					
8	Professional accountants are always objective in the preparation of financial statements.					
9	The value system of professional accountants affects the objective presentation of financial statement.					
10	Ethical standards are duly observed in the presentation of financial statement of Nigerian firms.					

	Disclosure			
11	Ethics has a significant effect on the faithful disclosure of financial reports.			
12	Disclosure of items in the financial statement is affected by personal interest of the professional accountant.			
13	Non-disclosure of material facts in the financial statement affects the quality of financial reports.			
14	Financial statement disclosure is affected by the professional competence of accountants.			
15	Quality disclosure of items in the financial statement is a reflection of compliance with ethical standards.			
	Integrity			
16	Adherence to high ethical standards helps boost the integrity of financial statements.			
17	Accountants engaging in insider dealings tend to compromise the integrity of financial reports.			
18	Acceptance of gift items by professional accountants affects the integrity of financial report.			
19	The existence of ethical committee in an organisation positively influences financial report integrity.			
20	Violation of ethical core values undermines the integrity of financial reports.			

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