

Environmental Accounting and Information Asymmetry

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ABSTRACT

The study examined environmental accounting and information asymmetry in developing economy with special focus on companies listed on Nigerian Stock Exchange. Four specific objectives are to assess environmental accounting (EA) practices and reporting among listed companies; assess the level of information asymmetry (IA) among stakeholders of listed companies; examine if there is significant association between EA and IA; and examine if there environmental accounting can significantly impact IA. Hypotheses were drawn from each objectives were tested. The study is of the view that information asymmetry is a perception issue on the part of external users of financial information. It therefore deviates from approaches adopted by most of the earlier studies (i.e. using secondary data) by using primary data to achieve its objectives. Population for the study was professional Accountants in Nigeria. Sample was selected using purposeful and convenient techniques to survey Fellows of the Institute of Chartered Accountants of Nigeria (ICAN). Out of the 200 copies of questionnaire distributed 151 copies were returned (76% success rate). Result of reliability test gives a value of 80.6%, therefore considered adequately reliable for decision making. The study found that (1) Environmental Accounting is very low in Nigeria, (2) The level of Information asymmetry is very high among stakeholders of listed companies (3) there is a negative correlation between environmental accounting and information asymmetry and (4) Environmental accounting has significant negative impact on information asymmetry. Recommendations were made thereafter for companies' stakeholders and the further the further studies on the topic.

Keywords: Environmental Accounting, Information Asymmetry, Developing Economy, Nigeria

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1. INTRODUCTION

Recently, mobile devices such as smartphones, personal digital assistants (PDAs), wireless tablets, and laptop computers transmit all kinds of data (Liébana-Cabanillas, Ramos de Luna and Montoro-Ríos, 2017). These devices are now used to pay for goods and services by means of the transmission of data, a system known as mobile payments (m-payments). Any wireless means to initiate, activate or confirm a payment is considered an m-payment (Geva, 2012). Liébana-Cabanillas (2012) goes on to propose that any personal or commercial activity involving an electronic device connected to a mobile network to complete an economic transaction can also be considered a mobile payment.

1. INTRODUCTION

Economy efficiency is a necessary but not sufficient condition for business sustainability (Savage & Jaseh, 2005; Abdalla, Siti-Nabiha and Md Shahbudin, 2014; Zhao, Zhang and Song, 2014; Ezejiofor, John-Akamelu, and Ben_Eucharia, 2016). Man and organisations depend on the environment to provide natural resources and ecosystems services. The environment also serves as “dust bin” for societies’ wastes and emissions (Eden, 2013). According to Chymis, Nikolaou and Evangelinos (2010) the last decades witnessed several environmental challenges. The effects of these and other human operations have been found to be calamitous on the ecosystem and carrying capacity of nature’s assets (Savage & Jaseh, 2005, Rubenstein, 2010; Basse, Obal & Onyah, 2013). This could represent inadequate matching of cost and revenue from accounting perspective (Eden, 2013) hence a question on the quality of firms share value. Therefore, giving serious pressures on the need for more innovative and more efficient ways to account for and match potential risks (costs) and reward (benefits) of companies’ activities and operations (Rubenstein, 2010; Ezejiofor, John-Akamelu, and Ben_Eucharia, 2016). EA therefore became a leading issue on the agenda of organisations, countries and business as early as 1990 for several reasons mostly at international level to become global issue (Okoye & Ngwakwe 2004; Ezejiofor, John-Akamelu, and Ben_Eucharia, 2016).

Stakeholders globally are thus increasingly interested and concerned with environmental issues and their related costs, revenues and benefits (ICAEW, 2004; Savage and Jaseh, 2005; Chymis, Nikolaou and Evangelinos 2010). Regulators have introduced policies, tools and instruments. Consequently contemporary research efforts by many interested parties have witnessed increased interest in environmental accounting (Albelda, 2011; Ezejiofor, John-Akamelu, and Ben_Eucharia, 2016).

1.1 Problem of the study

Literature finds traditional accounting to deficient in accounting for the effects of economic activities on the environment especially need to consider cost of depletion of natural capital especially and also consider sustainability (Eden, 2013). Sankar and Jaseh (2005) saw the need for more analysis so as to evaluate how it could be achieved effectively. Organizations may be environmental friendly either to aid decision in financial market to favour its products or to avoid potential risks. Peters (2015) argued that stakeholders have reiterated the needs to prove how long run value of firm’s are created viz-a-viz impacts of their operations on environmental sustainability.

With IA in environmental pollution cases around, pollutant organization have more knowledge of their pollution than they release to the other stakeholders. Oyadonghan & Ogiriki (2014) argues that regulators are excluded from the organizations daily day to day operations and are only limited when assessing compliance. So this limitation brings failure in regulations. Focus is therefore made on effort and mechanisms adopted to motivate parties with these information to disclose. According to Kamad, Lobo and Whalen (2013) EA theoretically is expected to improve both the quality and quantity of financial information disclosed, hence reduced information asymmetry. They are of the view that while good EA may improve quantity and quality of information, it may also reduce it especially if the disclosure of such environment information is costly due to its weakening impact on organisation’s competitiveness and reduction of firm value.

Several instances of environmental pollution in Nigeria cities have been identified in the literature (Ibembgor, 2011). Despite this, Ezejiofor, John-Akamelu, and Ben_Eucharia (2016) established that environmental accounting as a prevalent issue at international level is not seen as one in Nigeria.

On this initial review the following questions among others are found to be unanswered like: (1) what is the level of environmental accounting practices and reporting among listed companies in Nigeria? (2) What is the level of information asymmetry among stakeholders of listed companies in Nigeria? And (3) is there any significant relationship between EA and IA? These the current study intends to address with a focus on manufacturing companies in developing countries.

1.2 Objectives of the Study

The broad aim of the study is to assess EA practice and reporting IA in developing economy with special focus on companies listed on Nigerian stock exchange? Specific objectives drawn to drive home his aim are to:

1. Assess the level of environmental accounting practices and reporting among listed companies
2. Assess the level of information asymmetry among stakeholders of listed companies
3. Examine if there is significant association between AE and IA
4. Examine if the environmental accounting can significantly impact IA

1.3 Research Hypotheses

- ❖ Environmental accounting among listed companies is high
- ❖ Level of information asymmetry among stakeholders of listed companies is not high
- ❖ There is no significant relationship between EA and IA among stakeholders of listed companies
- ❖ EA does not have significant impact on IA.

The rest of the paper is arranged as follows. Next is the review of extant literature on the topic, followed by methodology and thereafter the results and findings before discussion and conclusions. Recommendations were made at the end of the report.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Concept of Environmental Accounting

Environmental accounting is a developing field of accounting (Okafor, 2010). It is a broad based concept and a “general term” that integrates environmental issues and costs from organisation’s actual and potential impacts on the environment (Okafor, 2010; Graff et al., 1998). (Okafor 2010) however opined that it is “more applicable to the micro level”. It can be used for accounting and management purposes (Ezejiofor, John-Akamelu, and Ben_Eucharia, 2016). There is no consensus in its meaning, practices, methodology and uses (Ahamid, 2002). US EPA (1995) sees environmental accounting (green accounting) as “...identifying and measuring the costs of environmental materials and activities using this information for environmental management decisions”.

It is “the generation, analysis and use of miniaturized environmentally related information in order to improve corporate environmental and economic performance. In addition to focusing on internal and external environment EA provides clear linkage between environmental and financial performance of organization (Howes, 2002). It assists in entrenching environmental sustainability into organisation’s operations and culture, and provides assistance in reducing costs and risks as well as value adding (Ibengbor, 2011). By incorporating both economic and environmental data, it could be seen as either “a subset or superset of accounting proper” (Ezejiyor, John-Akamelu, and Ben_Eucharia, 2016).

Environmental accounting provides reports for both internal use, generating environmental information to help make management decisions on pricing, controlling overhead and capital budgeting, and external use, for the public and to the financial community. Internal use is better termed environmental management accounting (Bartolomeo et al, 2000).

In this study environmental accounting is seen as any financial record periodically and regularly prepared to record and report cost and revenue (benefits) associated with environmental issues as it affects the reporting entity.

2.1.2 Concept of Information Asymmetry

George (2001) introduced information asymmetric as a concept in his work, “the market for lemons”, “quality uncertainty and the market mechanism” using quality and uncertainty in the market. The key idea is that stakeholders in a market have unequal level of information about the other party. That is managements have more information than other stakeholders especially investors in the market. Current studies show IA is so great to the extent that it leads to market failure, if regulations and intervention are not adopted (Sankar, 2000 in Oyadonghan and Tonye, 2014). The challenge from this situation of information asymmetry is that market will not be perfect and there will be sub-optimality in the market transactions as the investors are not adequate for them to make informed decision. To overcome this challenge, the less informed stakeholders would need to incur additional cost. Several theoretical studies provide information risk as a non-diversifiable risk factor (Mouselli, jawfar & Hussainey, (2012) citing O’Hara,2003 Easley & O’Hara (2007).

Studies have used IA to elicit several but diverse phenomena issue otherwise unexplainable since its introduction (Oyadonghan and Tonye, 2014). They opine that IA arises in a situation whereby a party has more or better information than others on an issue of common concern. Hence, “different people know different things (George, 2011; Oyadonghan and Tonye, 2014). Oyadonghan and Tonye (2014) argued that IA is not one way or one situation/circumstance/affair, and should not be limited to agency problem as claimed by some. It applies to several differs situation/circumstances. For instance an employee has more and better information about his ability than the employer, a person assuring his life has more and better information about his health condition than the insurance company. On the environment, a polluter organization knows more and better about her releases and emissions than the regulators and the entire community.

2.2 Theoretical Framework

The study adopted the stakeholder theory and signaling theory for the theoretical framework. Stakeholder theory opines that each organization (herein this study public limited companies) is made up of several stakeholders. These stakeholders are parties that have interest in the affairs of the company. Major of them are the managements (as operators), and investors as well as other capital providers. According to the framework for preparation of financial statements as issued by International Accounting Standards Board (IASB) the objective of financial reporting is to assist primary users to make informed decisions.

The signaling theory is of the view that information items are supplier to give a “signals”, “signs” or “message” to the recipients. The intensity of such “signals” depends on the ability of the information to meet the needs of the user stakeholders. This is expected to be greatly impacted by the relevance and faithful representation qualities of such information. When any of these qualities is absent it could lead to information asymmetry, whereby the management because of privileged position will be having more information than the investors and other capital providers that are external to the day-to-day operations of the company. Capitalizing on these “opportunities” the managements have motivation and to hide some of the essential information items that would have helped the users to be able to confirm and predict companies’ performance. This challenge is compounded by the issue of “limited liability” on the part of the investors.

2.3 Empirical Review

Earlier study opines that environmental accounting has being issues for discussion since the 1960s (Hecht, 1999). The research found that EA is neither quick in acceptance nor in process but with controversies and challenges. Despite all these environmental accounting has being witnessing growing interest from stakeholders. Opinion has been expressed that concerns for EA issues and reporting have been heightened by “growing associated costs and a surge of reporting standards, guidelines and awards” and that it has “effectively enhance the scope and technical quality of public reports”. Savage and Jasch, 2005; Basse, Obal & Onyah, 2013; Zhao, Zhang and Song, 2014; Ezejiofor, John-Akamelu, and Ben_Eucharia, 2016). According to FEE (2000) among various identifiable user groups, conventionally accounting and financial statements are premised on the perception that the primary concerns of financial statements is to satisfy shareholders, financial intermediaries and prospective investors (IASB, 2010).

The review also shows a number of methods are been used to account for environmental issues using different units of measurement and principles. Examples include life cycle costing, Environmental Management Accounting and Enviromental Accounting (Dorweiler and Yakhou, 2005 in Chymis, Nikalaou and Evangelinos, 2010). Savage and Jasch (2005) argued that because environmental accounting is a relatively emerging field, a certain level of variations and experimentations are expected. Types of Environmental accounting practiced listed to include (1) Environmental Financial Accounting, (2) Environmental National/Green Accounting (3) Environmental management accounting (Corporate EA, Eco-balance EA and Segment EA). Organizations are adapting general environmental accounting concepts, practices and languages to suit their own peculiarities. According to Ezejiofor, John-Akamelu, and Ben_Eucharia (2016) the metrics for measuring environmental sustainability are still evolving.

These metrics include indicators, indexes, benchmarks, audits and accounting. These confusions on the concept, definition, methodology, tools and benefit of environmental accounting are aggravated by a number of existing guidance documents on the issue. To meet these challenges the IFAC in 2005 took a step to “reduce some of the confusions” on the topic and “give introductory guidance document”. Despite this and other efforts environmental accounting I still facing various challenges.

Drivers of EA are listed to include: contribution to global warning IGHG emissions: need to account and report the metric to GHG emitted against the value added per unit depletion of non-renewable energy resources: organizations need to account for and report for energy consumed against the energy generated from further effort may be made in breakdown of those consumed; depletion/ Pollution of fresh water resources, and depletion of ozone layer (Holthansen & Walts, 2001; Yakhou & Dorweiler, 2003).

The benefits from improved environmental performance of organizations include support for sustainable development, enhanced efficient utilization of natural resources like water, energy resulting into improved environment, minimum resource usage plus reduced waste and emissions. Potential financial savings expected are material purchase costs and waste management, increasingly green business and consumer market, prompt and effective response ability to ever dynamic environmental regulatory framework and efficient stakeholders’ relationship (Ahamid, 2002; Savage & Jaseh, 2005; Ezejiolor, John-Akamelu & Ben_Eucharia, 2016). According to Rubensyein (2010) it gives better information and enlightenment on timely overall financial position including potential risks associated with ecological disasters and pre-emptive spending to relevant stakeholders.

Ezejiolor, John-Akalemu, and Ben_Eucharia (2016) however, pointed out that there are challenges of transparency, performance, prospects for future sustainability of environmental capital especially natural capital. The value of environmental accounting in respect of its acclaimed information benefits is thus questioned by stakeholders (Hasan & Hakan 2012; Ezejiolor, John- Akamelu, & Ben_Eucharia, 2016). Masud, Hossain and Khan (2016) assessed environmental accounting and reporting and its practices by Bangladeshi banks using secondary data (annual reports of the selected banks for 2010-2014). The study found that almost all the selected banks were voluntarily providing qualitative and quantitative environmental information. They concluded that environmental accounting and reporting practices in Bangladesh were satisfactory and the trend is improving.

To achieve the acclaimed benefits from EA management of companies must report their accounting to relevant stakeholders especially the investors and other capital providers. Because of the “opportunistic” position of the management they may not disclose or may inadequately disclose such information to the outside stakeholders (). This would therefore lead to information asymmetry. According to Chymis, Nikolaou and Evangelinos (2010) these information if given help financial market participants in preventing environmental related financial risks as well as helping in environmental sustainability (Chymis, Nikolaou and Eangelinos citing Giran and Moran 2007; Nikolaru and Giannakopoulos 2009). Mouseli et al. (2012) argued that EA transforms private information into public information thereby reducing information asymmetry between directors and outside investors.

The increased disclosure would improve outsiders' confidence on the fairness of the transaction pricing leading to higher liquidity, lower cost of capital and higher analytic. Chymis, Nikolaou and Evangelinos, 2010 citing Curen and Moran (2007) and Nikolaou and Giannakopoulos (2009) argued that information from environmental accounting helps not only the financial market participants to prevent environmental associated risks and also determine the premium to place on firms' value, it also help in environmental sustainability.

3. METHODOLOGY

3.1 Definition and Measurement of Variables

Information asymmetry is the dependent variable. This is measured as the perception of stakeholders on the level of information disclosed by managers of companies compared to their expectations to meet their need (usefulness for investment decision making). According to Mouseli et al. (2012) the major secondary used in the literature to measure IA are accrual quality (AC) and disclosure quality (DC). But there is no consensus on these proxies to measure this information risk as they do not have no universally accepted definition (Francis, Laford, Olsson & Schipper, 2005, Hussainey and Mouselli, 2010; Mouselli et al., 2012). This current study os the view that information asymmetry is a perception issue and therefore considers the stakeholders especially external stakeholders as the primary concern. To even out any bias from Opinion of external stakeholders the respondents were extended to include internal stakeholders opinions of these various stakeholders were sought on their perceptions on the topic.

Environmental accounting is the independent variable and was measured by two fundamental qualitative characteristics of financial statement (relevance and faithful representation)_ as defined by the IASB.

3.2 Model Formulation

EA is the independent variable which was used to represent the dependent variable of financial information as given by the IFAC i.e. relevance (REL) and Faithful Representation (FREP).

$$IA = f(EA) \dots\dots\dots (1)$$

$$EA = f(EA_{REL}, EA_{FREP}) \dots\dots\dots (2)$$

Substituting equation (2) into (1)

$$IA = f(EA_{REL}, EA_{FREP}) \dots\dots\dots (3)$$

Therefore;

$$IA = EA_{REL} + EA_{FREP} \dots\dots\dots (4)$$

$$IA = \beta_0 + \beta_1 EA_{REL} + EA_{FREP} + \mathcal{L} \dots\dots\dots (5)$$

Where;

IA represents information Asymmetry

EA_{REL} represents Relevance on Environmental accounting

EA_{FREP} represents faithful representation of environmental Accounting

\mathcal{L} represents the error term standing for other factors that can influence IA outside the consideration of current study.

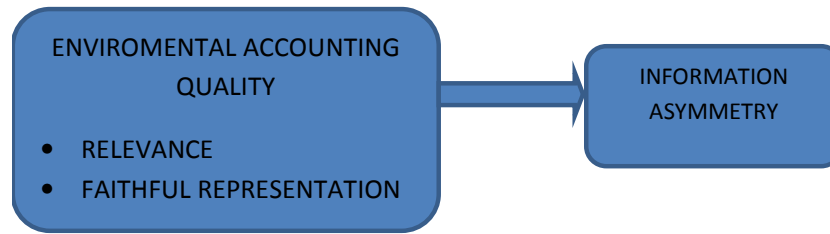


Figure 1: Conceptual Model of the Relationship between EA and IA

3.3 Research Design

This study deviates from the approach of earlier studies that have been adopting secondary data to measure information asymmetry. The study considers information asymmetry as a perception issue on the part of the users of financial statements, hence considers survey of their opinion a better measure. It adopted descriptive design using survey method to gather data. Population for the study covers stakeholders of companies listed on the floor of Nigeria Stock Exchange. Because of the technicality of the topic, enlightened, knowledgeable and experienced professionals were focused. For convenience in data collection these set of people were physically administered the questionnaire at the programme of the Institute of Chartered Accountants of Nigeria held for 2014 Fellows of ICAN. Out of the population of 1400 participants sample of 200 respondents were selected.

Population and Sampling: Purposeful and convenience non probability sampling methods were used in selecting the respondents. Because of the technicality of the topic, enlightened, knowledgeable and experienced professionals were focused based on purposeful sampling methods so as to have reliable opinion. On that note, Chartered Accountants of the Institute of Chartered Accountants (ICAN) with over years post qualification experience were focused. In order to have convenient access to a considerable number of them the questionnaire was administered at annual ICAN induction programme for the ICAN Fellows on April 25, 2017 in Lagos. This forum brought over 1400 fellows of ICAN that was used as the population out of which a sample of 200 was elected. A total of 151 copies were returned (76% success rate) and analyzed. The result gave Cronbach alpha of 85.6% reliability showing which is considered adequate for reliance on the results.

3.4 Data Collection and Analysis

Structured questionnaire was designed based on inductions from the reviewed literature. Although most of the earlier studies reviewed used secondary data to estimate market volatility, earnings quality, assets quality to measure IA, this study is of the view that IA is a perception issue on the part of stakeholders, especially external ones like investors and capital providers. It is therefore considered necessary to use primary data seeking opinion of various stakeholders on their perception on the level of information asymmetry. The fundamental qualitative characteristics of financial statement (relevance and faithful representation) as defined by the International Accounting Standards Board (IASB) were used to proxy EA.

The drafted questionnaire was validated through peer review among professional colleagues. After consideration of suggestions the instrument was administered. Responses were analyzed with SPSS 22 using both descriptive and inferential statistics. The result of reliability test ran on the instrument (86.8%) shows it is strongly reliable and results and findings therefrom could be used with reasonable assurance.

4. DISCUSSION OF FINDINGS

Reliability Test: The results of the test as shown on table 1 gives cronchbach's Alpha value of 0.806 (81% reliability). This is considered to be very strong testifying that result can be reliably used with a considerable level of assurance for decision make and any other use.

Table 1: Reliability statistics

Cronbach's Alpha	No of items
806	32

Source: SPSS Output

Table 2: Results of Test Hypothesis

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of ENVIRONACCT is normal with mean 3.993 and standard deviation of 0.72	One-sample Kolmogorov-smirnov Test	.070	Retain the null hypothesis
2	The distribution of INFOASYMMTRY is normal with mean 4651 and standard deviation of 0.66	One-sample Kolmogorov-smirnov Test	.000	Reject the null hypothesis
3	The distribution of EA vs IA is normal with mean 5.022 and standard deviation 0.75	One-sample Kolmogorov-smirnov Test	.000	Reject the null hypothesis

Asymptotic significance is displayed. The significance level is .05.

Lilliefors Corrected.

Source: SPSS Output

Hypothesis 1: Environmental accounting practice among listed companies is not low
Result of the test of hypothesis on figure 1 (0.070) shows the test of the hypothesis is not significant at 5% level. Thus, the null hypothesis should be retained (mean= 3993, SD= 0.72). it is therefore concluded that environmental accounting practice is considered low among listed companies.

Test of the individual components of individuals of environmental accounting shows that relevance of environmental accounting information to the needs of the users has a mean of 1.112, while its faithful representation has a lower mean of 0.371.

Hypothesis 2: Environmental accounting does not have significant relationship with level of Information asymmetry is not high among stakeholders of listed companies.

Table 2a: Correlation

	ENVIRONACCTG	INFOASYMMTRY
ENVIRONACCTG		
Pearson Correlation	1	-.037
Sig. (2 Tailed)		.658
N	148	146

Table 2a: Correlation

	RELVC	FATHREP	INFOASYMMTRY
REIVC			
Pearson Correlation	1	.653	-.028
Sig (2 Tailed)		.000	.735
N	150	148	147
FATHREP			
Pearson Correlation	.653	1	-.024
Sig (2 Tailed)	.000		.771
N	148	149	147
INFOASYMMTRY			
Pearson Correlation	-.028	-.024	1
Sig (2 Tailed)	.735	.771	
N	147	147	148

** Correlation is significant at the 0.01 level (2 tailed)

The result of correlation on tables 2a and 2ba show there is a negative relationship between environmental accounting and level of information asymmetry (-0.37 co efficient). This implies that environmental accounting and level of information asymmetry moves in opposite direction. An improvement in environmental accounting is expected to be associated with reduction in level of information asymmetry.

Further analysis (Table 2a) shows that individually the relevance and faithful representation of environmental accounting to information exhibits negative relationship with information asymmetry (coefficient of 0.028 and 0.024 respectively). Although the degree of the relationship in each case is low, the degree in case of relevance to users' need is found to be higher. This implies that stakeholder's values relevance of environmental accounting information than they do faithful representation.

Hypothesis 4: Environmental Accounting does not have significant impact on Information Asymmetry among stake holders of listed companies.

Table 3a: Test of Between- Subjects Effects
Dependent Variable: INFOASYMMTRY

Source	Type III sum of sqR	Df	Mean square	F	Sig.
Corrected Model	53.985 ^a	89	.607	3.258	.000
Intercept Model	1594.991	1	1594.991	8566.970	.000
RELVC	13.341	12	1.112	5.971	.000
FATHREP	8.153	22	.371	1.991	.020
RELVC*FATHREP	21.256	54	.394	2.114	.003
Error	10.462	56	.186		
Total	3218.000	146			
Corrected Total	64.411	145			

a. R squared = .838 (Adjusted R squared =.581)

Result of Analysis on Figure 1 (0.000) shows it is significant (mean = 5.022, SD= 0.75) and that null hypothesis should be rejected. The study therefore concludes that environmental accounting has significant impact on information asymmetry among stakeholders of listed companies. Results of regression analysis on table 3 shows that the combined effect of relevance and faithful representation as qualities of environmental accounting is averagely strong (Adjusted R²= 0.581 on table 3).

The policy implication of this finding is that the objective of reducing information asymmetry could be achieved if companies improve their environmental accounting practices.

Further analysis (Table 3) shows that individually the relevance and faithful representation of environmental accounting to information exhibits negative influence of information asymmetry (coefficient of -0.028 and -0.006 respectively). Although the degree of the relationship in each case is low, the degree in case of relevance to users' need is found to be higher. This implies that stakeholders' values of environmental accounting information than they do for faithful representation. Results on Table 3 show that the combined effect of relevance and faithful representation as qualities of environmental accounting is averagely strong (adjusted R²=0.581). Individually relevance has stronger impact on the level of information asymmetry than faithful representation as quality of environmental accounting with R² of 0.028 and 0.024 respectively.

Further analysis of Table 3 shows that both results on relevance and that of faithful representation are significant at 5% level but only relevance is found to be significant at 1% level of significance (0.000 and 0.020 respectively). The implication is that error tolerance of relevance on influencing information asymmetry is higher than that of faithful representation.

Comparison of the results on Table 2a and Table 3 though the faithful representation as a quality of environmental accounting to information exhibits negative association influence of information asymmetry, the degree of the impact is lower than its association with information asymmetry (-0.006 and -0.024 respectively). This shows there is regressing power of that quality is diluted by other factors.

These findings is supported by earlier studies like (Glosen & Milgrom 1985; Larg & Lundholm 1993, 1996, walker 1995) who found out that level of disclosure is negatively associated with the level of information asymmetry between directors and investors so higher disclosure quality of information leads to lower information asymmetry

5. CONCLUSIONS

The paper examined environmental accounting and information asymmetry focusing on companies listed on the Nigeria Stock Exchange (NSE). It was found dearth of studies on environmental accounting and the condition is more severe in developing economies. Most of earlier studies used secondary data but this study deviated from that approach of most of the earlier ones by using primary data. It used descriptive survey sourcing data via questionnaire measuring perception of stakeholders on information asymmetry and quality of environmental accounting. After analysis the study conclude that environmental accounting practices and reporting is significantly low among companies listed on the NSE. It also found level of information asymmetry among stakeholders of these companies to be very high. On a general note a negative association is found between environmental accounting and information asymmetry. Conclusion of the study's regression is that there environmental accounting has negative impact on information asymmetry. That is if environmental accounting is improved information asymmetry would reduce and that because of the regression impact of environmental accounting found on information asymmetry one can reduce the level of information asymmetry by improving the quality and quantity of environmental accounting.

Table 3a: Coefficients'

Model	Unstandardized coefficient		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta		
1 (constant)	4.747	.328		14.483	.000
RELVC	-.019	.074	-.028	-.256	.789
FATHREP	-.006	.109	-.006	-.051	.960

a. Dependent Variable: INFOASYMMTRY

Table 3b: Coefficients'

Model	Unstandardized coefficient		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta		
1 (constant)	4.784	.313		15.292	.000
ENVIRONACCTG	-.034	.077	-.037	-.443	.658

a. Dependent Variable: INFOASYMMTRY

Source: SPSS Output

These findings are supported by findings in earlier studies that used secondary data despite the difference in the data sources.

6. RECOMMENDATIONS

The study recommends management of companies should improve their environmental accounting practices and reporting so as to send a strong signal that would help their stakeholders make informed decisions. Likewise relevant regulatory authorities should give adequate laws and regulations that would make managements to be more environmental accounting so as to guide the interest of the external stakeholders and enhance market efficiency.

Further studies in this area is encouraged that would use triangulation methods due to level of studies on the topic in the developing countries.

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