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Effect of Measurement of Environmental Liability on Quality of Disclosure: Evidence from Shipping Companies in Nigeria

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Abstract: *This paper examines the effect of measurement of environmental liability on quality of disclosure on shipping companies. Other objectives are to; determine the effect of external legislation on quality of disclosure, to establish the effect of contemporary management accounting techniques on quality of disclosure, to examine the effect of the components of firm value on quality of disclosure on shipping companies in Nigeria and to investigate the effect of environmental commitment on quality of disclosure on shipping lines in Nigeria. This study adopts both descriptive design and correlation analysis and the population of the study is the registered shipping companies in Nigeria. This study makes use of primary data. Primary data was collected through administering of questionnaires to the respondents who are staff of the shipping companies in Nigeria. Multiple regression models was used to establish the relationship between the dependent variable and the independent variables. Data analysis was done using Statistical Package for Social Sciences (SPSS) generating both descriptive and inferential statistics like Pearson's correlation. The findings show that measurement of environmental liability influences quality of disclosure on shipping companies in Nigeria. Based on the findings of this study, it is highly recommended that companies should consider the current laws and regulations, extent of regulatory involvement, prior legal, economic, political and scientific experience, the complexity of the problem, existing technologies and available technological experience. Furthermore, information available prior to assurance of the financial statements indicates that it is probable that an asset had been impaired or a liability incurred at the date of the financial statements should be considered.*
Keywords: *Quality of Disclosure, Environmental Liability, Shipping Companies, Environmental Commitment, External Legislation and Management Accounting Techniques*

I. Introduction

Environmental issues can have an impact on financial statements prepared on an accrual basis in many ways. There are international accounting standards such as International Accounting Standard Board (IASB), Financial Accounting Standard Board (FASB), and International Financial Reporting Standard (IFRS), which address the general principles for the recognition, measurement and disclosure of environmental matters in a financial report (IAS-39). The introduction of environmental laws and regulations may involve an obligation to recognize impairment of assets and consequently a need to write down the carrying value. A failure to comply with legal requirements concerning environmental matters such as emission or waste disposal may require accrual of remediation works, compensation or legal costs (Rahman, 1999).

External pressures such as legislation and public concern, as well as market opportunities arising from environmental concerns, have compelled firms to integrate environmental issues into their strategic planning process literature by describing organization participation in a wide range of environmental activities in a number of industry sectors (Banerjee, 2001). Findings from UNEP (1996) reveal that although not many nations are currently reporting disclosures on environmental issues in financial statements, but quite a growing number do so to internal management. Pressure is mounting for mandatory rather than voluntary reporting worldwide. Corporate organizations are engaging more actively in environmental disclosure in their annual financial statements. Rezaee and Rick Elam (2000) discussed a substantial number of environmental laws and regulations, which have been enacted to hold businesses accountable for their environmental responsibilities. They further mentioned that the growing interest in environmental concerns by the public, government, and business community, environmental accountability has become an important issue. Currently, there are two significant types of environmental accountability; mandatory requirements where the corporations must comply with applicable governmental laws and regulations, and voluntary initiatives as an integral part of social responsibilities.

Measuring environmental performance and setting targets is a critical component for organizations to become more productive, more profitable, and more sustainable (Freedman, *et al*., 2006). Monitoring key metrics such as energy, waste, and water usage leads to reductions in greenhouse gas emissions as well as operational efficiency improvements and cost savings. Accounting reports in shipping companies have been found to be deficient over time in the sense that they lack vital information that will enable stakeholders make informed decisions (Nzekwe, 2009). The financial information in corporate annual reports includes both mandatory and their determinants have attracted considerable research attention in developed countries rather than developing ones (Akhtaruddin, 2005:40; Barako, 2007:114). Ali *et al*. (2004:183) opined that the government regulatory bodies and the accountancy profession of emerging nations suffer from structural weaknesses and often take a lenient attitude towards default of accounting regulations. Consequently, private and institutional investors (local and foreign) are hesitant in investing in such emerging economies due to lack of transparency. It is widely believed that the lack of proper use of International Accounting Standards in affected countries (of which Nigeria is a part) hinders "transparency" in the financial statements of corporations. Hence, this study is set to examine the effect of measurement of environmental liability on quality of disclosure on shipping companies in Nigeria**.**

Objectives of the Study

The objective of this paper is to examine the effect of measurement of environmental liability on quality of disclosure on shipping companies in Nigeria. In order to achieve this aim, the study seeks to:

i. To determine the effect of external legislation on quality of disclosure on shipping companies in Nigeria.
ii. To establish the effect of contemporary management accounting on quality of disclosure on shipping companies in Nigeria.
iii. To examine the effect of the components of firm value on quality of disclosure on shipping companies in Nigeria.
iv. To investigate the effect of environmental commitment on quality of disclosure on shipping companies in Nigeria.

Research Hypothesis

The above objectives will be guided by the following research hypothesis:

i. H_0: There is no significant relationship between external legislation and quality of disclosure on shipping companies in Nigeria.
ii. H_0: There is no significant relationship between contemporary management techniques on shipping companies in Nigeria.
iii. H_0: There is no significant relationship between components of firm value on quality of disclosure on shipping companies in Nigeria.
iv. H_0: There is no significant relationship between environmental commitment on quality of disclosure on shipping companies in Nigeria.

II. Literature Review

Theoretical Framework

Stakeholder Theory

The stakeholder theory is one of the various approaches that try to explain or rationalize strategy of organizations. It has its main underpinning on the emphasis placed on the role of stakeholders of a firm in the pursuit of its objectives. "Stakeholder theory attempts to articulate a fundamental question in a systematic way: which groups are stakeholders deserving or requiring management attention, and which are not?" (Mitchell *et al*, 1997). It acknowledges the dynamic and complex relationships between organizations and their stakeholders and that these relationships involve responsibility and accountability (Gray *et al*, 1996). "Stakeholder analysis enables identification of those societal interest groups to whom the business might be considered accountable, and therefore to whom an adequate account of its activities would be deemed necessary" (Woodward & Woodward, 2001). The stakeholders of a firm are viewed as being a critical factor to the survival of the organization.

Porter's Hypothesis

Traditionally, responding to environmental challenges has been seen as a no-win proposition for business, with the related expenditure seen as a net cost. However, in 1991 Porter posited that stricter environmental regulation would lead to innovative approaches that would enhance competitiveness (Porter 1991 cited in Porter & Van der Linde, 1995) - Porter's hypothesis. The hypothesis suggests that strict environmental regulation triggers the discovery and introduction of cleaner technologies and environmental improvements, the innovation effect, making production processes and products more efficient. The cost savings that can be achieved are sufficient to overcompensate for both the compliance costs directly attributed to new regulations and innovation costs. In the first advantage, a company is able to exploit innovation by learning effects and attains a dominating competitive position compared to companies in countries where environmental regulations are enforced much later. Porter's view was critiqued by various authors (Walley & Whitehead 1994; Palmer *et al*. 1995; Maxwell, 1996) as being too simplistic. Wagner *et al*. (2001) moderated Porter's hypothesis and developed a model in which the traditionalist view and Porter's hypothesis were combined. The moderated Porter hypothesis argues that companies implementing corporate environmental accounting will perceive some benefits from doing so.

Signalling Theory

Signalling theory was used in prior studies to explain why managers voluntary disclose forward-looking information in their annual report narratives (Hussainey *et al*. 2003; Schleicher *et al*, 2007, & Hussainey & Walker, 2009). Signalling theory can be traced back to Akerlof (1970) who explained signalling theory in a general product market setting. This theory is based on the idea of information asymmetries between insiders (managers) and outsiders (i.e. investors). Managers usually have better information than other stakeholders, and therefore outsiders may interpret any additional information as signals to the stock market. Corporate environmental responsibility represents a firm's strategy to respond adequately to the expectations of society in which it operates. Signalling theory suggests that firms provide information that could be used by individuals who are seeking to form impressions about the firm, its values and the overall future direction (Jones & Murrell, 2001). These individual evaluations of firms are relevant in a variety of settings and circumstances. For example, individuals need information to make various decisions concerning investing in the firm.

Empirical Literature

Measurement of Environmental Liability

Li and McConomy (1999) found that Canadian companies with strong environmental commitment were able to adopt new environmental accounting standards quicker than companies with less environmental commitment, thereby enhancing credibility and reducing litigation risk. Making adequate provisions for environmental liabilities also prevents the company from going bust or suddenly developing a serious cash flow problem. Timely identification and planning for these events enables the company to incorporate such issues in its strategic planning. Evidence in support of a view that environmental disclosures as such enhance market valuation of a company seems to be inconclusive (Cormier & Magnan 1997). However, it could be argued that companies that consistently report on environmental matters in their financial statements, be it good or bad news, create confidence in investors and creditors. This may lead to improved market ratings and enable access to capital on easier terms. Firms are concerned with the environment due to various reasons. (Banerjee, 2001) found that external pressures such as legislation and public concern, as well as market opportunities arising from environmental concerns, have compelled firms to integrate environmental issues into their strategic planning process literature by describing organization participation in a wide range of environmental activities in a number of industry sectors. Findings from UNEP (1996) reveal that although not many nations are currently reporting disclosures on environmental issues in financial statements, but quite a growing number do so to internal management. Pressure is mounting for mandatory rather than voluntary reporting worldwide. Corporate organizations are engaging more actively in environmental disclosure in their annual financial statements.

Liaqat (2006) carried out an empirical study to find out the Application of Contemporary Management Accounting Techniques in Indian industry through a survey of 530 member companies of the National Association of Financial Directors and Cost Controllers. Sixty three companies responded which constituted the sample; a response rate of about 12%. The sample was stratified in two segments; activity based cost management (ABCM) user firms and Non ABCM user firms. A five point Likert scale was used. The focus of the study was to find evidence on how widely traditional and contemporary management accounting practices were adopted by Indian industry. The investigations revealed that improvement of overall profitability and cost reduction were the motivating factors for using management accounting in Indian companies. The researcher found a positive association between the adoption of activity based cost (ABC) and company characteristics (e.g. degree of customization, pressure of competition, business size, and proportion of overhead to total cost).

Plumlee, Brown and Marshall (2010) conducted a study on Voluntary Environmental Disclosure Quality and Firm Value. This study examined the relationship between the quality of a firm's voluntary environmental disclosures and firm value by exploring the relationship between the components of firm value (cost of equity and future expected cash flows) and voluntary environmental disclosure quality. The authors measured voluntary environmental disclosure quality using a disclosure index consistent with the Global Reporting Initiative disclosure framework for a sample of US firms across five industries and documented a positive relation between voluntary disclosure quality and firm value through both the cash flow and cost of capital components. In addition to overall disclosure quality, the authors consider the type (e.g., hard/soft) and content of different types of disclosure in their analysis. Based on this analysis, they documented an inverse association between voluntary disclosure quality and a firms cost of equity, in contrast with prior research.

Deegan and Rankin (1996) (Australia) analyzed environmental disclosures made by firms which had been successfully prosecuted by the Australian Environmental Protection Authority (EPA). Using legitimacy theory as their theoretical basis, the authors examined a sample of annual reports to determine whether there was any difference in the disclosure patterns of firms which had been prosecuted by the EPA, compared to those which had not been prosecuted. The authors concluded that where there are no regulations or requirements to the contrary, Australian companies willingly provide information favourable to their image, even after prosecution.

Deegan and Gordon (1996) (Australia) analyzed the environmental disclosure practices of Australian corporate entities in three ways. Firstly, by reviewing the annual reports of a sample of companies for the 1991 financial year, secondly, by determining the change in corporate disclosure practices for the period 1980-1991 and thirdly, by investigating the role of environmental lobby groups. Overall, they found an increase in environmental disclosures over the period 1980-1991, but the standard of the 1991 disclosures was not necessarily very impressive, with an average of 186 words of self-laudatory material per annual report. Environmental lobby groups appeared to have an effect because there was a positive correlation between environmental sensitivity and the level of disclosure, and in some sensitive industries between environmental disclosure levels and firm size.

III. Methodology

The research design for this study was based on descriptive survey and correlation analysis where the relationship of the independent variable and dependent variable was identified. The population of this study was the 101 shipping companies in Nigeria. The target population was restricted to three departments. However, the respondents of the target population comprise of the legal department, finance and account department and technical and marine department of each company selected. The sampling frame is the list of 101 registered shipping companies in Nigeria. Sample of the respondents was grouped into strata of the legal department, finance department and the technical and marine department staff of the shipping lines in Nigeria. Within each of the strata, simple random sampling was used to identify individual respondents who will be issued with a questionnaire to respond to research statements.

For the purpose of this study, primary data was collected through use of questionnaires. A total of 505 questionnaires were distributed to the respondents while 410 questionnaires were returned. A pilot study was carried out to test the reliability and validity of the instrument. In this study, the pilot test was conducted using 10% of the sample size. Reliability was used to test the consistency of a set of measurement items. Validity was used to test the degree to which results obtained from the analysis of the data actually represent the phenomenon under study. For this study, questionnaires were pre-tested to ensure they are not faulty and that the participants understood them. Descriptive and inferential statistics was used to analyze and interpret the data used in this study which include means and frequencies. Inferential statistics included regression and correlation analysis. To test and analyze the quantitative data, a multiple regression model was used as laid below where the independent variables were regressed against the dependent variable to obtain inferential results. Furthermore, multiple regression was useful in showing whether the identified linear relationship was significant or not. A regression coefficient with a p value of less than 0.05 indicated that the variable (external legislation, contemporary management techniques, components of firm value and environmental commitment) significantly influence the quality of disclosure. Therefore, the study used the following model to test whether quality of disclosure is a function of the independent variables.

$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$

Where Y – dependent variable –odds of Quality of disclosure

X_1 – external legislation (EL)

X_2 – contemporary management techniques (CMT)

X_3 – components of firm value (CFV)

X_4- environmental commitment (EC)

ε – is the error term which is assumed to be normally distributed with mean zero and constant variance

β – Parameters to be estimated, while β_1, β_2, β_3, β_4 are coefficient of the independent variable.

β_0 is a constant (intercept)

IV. Results and Discussion

Introduction

This chapter contains the presentation and discussion of the findings of this study. The main objective of the study was to examine the effect of measurement of environmental liability on quality of disclosure on shipping companies in Nigeria. The specific objectives were the following, to determine the effect of external legislation on quality of disclosure on shipping companies in Nigeria, to establish the effect of contemporary management techniques on quality of disclosure on shipping companies in Nigeria, to examine the effect of components of firm value on quality of disclosure on shipping companies in Nigeria. The study was guided by three independent variables and one dependent variable. The independent variables were external legislation, contemporary management techniques, components of firm value and environmental commitment and quality performance. The dependent variable was quality of disclosure.

Pearson Correlation Matrix for independent and Dependent Variables

Correlation matrix is used to determine the extent to which changes in the value of an attribute is associated with changes in another attribute. The correlation coefficient can range from -1 to +1, with -1 indicating a perfect negative correlation, +1 indicating a perfect positive correlation, and 0 indicating no correlation at all. The correlation between quality of disclosure and the independent variables were ranked from the highest to the lowest. Table 4.1 shows there is a strong positive correlation between quality of disclosure and external legislation at 0.527, there is a strong correlation between quality of disclosure contemporary management techniques at 0.442, there is a weak correlation between quality of disclosure and components of firm value 0.099 and finally a weak correlation also exists between quality of disclosure and environmental commitment at 0.098. It implies that the highest strong positive correlation is between quality of disclosure and identification of external legislation at 0.527. The p values of the independent variables are all less than 0.05 implying that the variables were all correlated with the dependent variable.

External legislation was leading with the highest influence on quality of disclosure with a correlation of 0.527, followed by contemporary management techniques with a correlation of 0.442, followed by components of firm value with a correlation of 0.099 and finally was environmental commitment with a correlation of 0.098. The study therefore concluded that all the independent variables were indicators of the quality of disclosure on shipping companies in Nigeria. According to Murray and Conner (2009), correlation coefficient should not go beyond 0.8 to avoid multicollinearity. Multicollinearity is a statistical phenomenon in which two or more independent variables in a multiple regression model have a high degree of correlation (Kothari, 2014). There was no multicollinearity problem in this research since the highest correlation coefficient was 0.246 existing between contemporary management techniques cost and external legislation. In conclusion the correlation coefficient between contemporary management techniques and external legislation was less than 0.8 at 0.246.

Table 4.1 Pearson Correlation Matrix for Independent and Dependent Variables

		Quality Disclosure	External Legislation	Contemporary Management Techniques	Components of Firm Value	Environmental Commitment
Quality Disclosure	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	410				
External Legislation	Pearson Correlation	.527**	1			
	Sig. (2-tailed)	.000				
	N	410	410			
Contemporary Management Techniques	Pearson Correlation	.442**	.246**	1		
	Sig. (2-tailed)	.000	.000			
	N	410	410	410		
Components of Firm Value	Pearson Correlation	.099*	.059	.130**	1	
	Sig. (2-tailed)	.045	.234	.009		
	N	410	410	410	410	
Environmental Commitment	Pearson Correlation	.098*	.083	.088	.094	1
	Sig. (2-tailed)	.047	.093	.074	.057	
	N	410	410	410	410	410

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Source: Researchers compilation, 2016

Test for Multicollinearity

Multicollinearity is an unacceptable high level of inter correlation among the independent variables, such that effects of independent variables cannot be separated (Garson, 2012). In multiple regression, the variance inflation factor (VIF) is used as an indicator of multicollinearity. Variance inflation factor (VIF) is a factor by which the variance of the given partial regression coefficient increases due to given variable's extent of correlation with other predictors in the model (Dennis, 2011). As a rule of thumb, lower levels of variance inflation factor (VIF) are desirable as higher levels of VIF are known to affect adversely the results associated with multiple regression analysis. A simple diagnostic of co linearity is the variance inflation factor for each regression coefficient.

Garson (2012) asserts that the rule of thumb is that VIF > 4.0 multicollinearity is a problem and other scholars use more lenient cut off of VIF > 5.0 when multicollinearity is a problem. This study adopted a VIF value of 4.0 as the threshold. External legislation had a VIF of 3.333, contemporary management techniques 3.436, components of firm value 2.033, and environmental commitment 1.7756. These results indicate that the VIF values of the independent variables were within the threshold of 4.0. This indicated that that there was no threat of multicollinearity problem and therefore, the study used linear regression model. The results of the analysis are shown in table 4.2.

Table 4.2: Multicollinearity Test

Variable	Tolerance	VIF
External Legislation	0.300	3.333
Contemporary management Techniques	0.291	3.436
Components of Firm Value	0.492	2.033
Environmental Commitment	0.563	1.776

Source: Researchers compilation, 2016

Multiple Linear Regressions

The researcher regressed quality of disclosure against four independent variables which are: external legislation, contemporary management techniques, components of firm value and environmental commitment. From table 4.3, results show that R=0.982 and R-Square =0.964 which is a strong relationship between the independent variables and the dependent variable. This meant that 96.4% variability in quality of disclosure could be accounted for by all the independent variables combined while 5.4% of the variation in quality of disclosure is unexplained by the model.

$$\mathbf{Y = \beta_0 + \beta_1 EL_1 + \beta_2 CMT_2 + \beta_3 CFV_3 + \beta_4 EC_4}$$

This supports the argument by Cormier & Magnan (1997) who indicates that environmental disclosures enhance market valuation of a company. Stangliano (1991) found that companies with better environmental disclosure track records experience fewer declines in market valuation following the introduction of more stringent environmental legislation than companies with poorer disclosure practices.

Table 4.3 Model Summary on Dependent and Independent Variables

R	R Square
.982[a]	.964

Source: Researchers compilation, 2016

ANOVA Results for Multiple Regression Model

The ANOVA test in Table 4.4 on the overall regression model shows that the independent variables external legislation, contemporary management techniques, components of firm value and environmental commitment has significant effect on quality of disclosure of shipping companies in Nigeria since the p value 0.000 is less than 0.05. Therefore, it implies that the null hypothesis is rejected and conclude that there is a relationship between all independent variables jointly and quality of disclosure. In support of these results, Banerjee (2001) found that external pressures such as legislation and public concern as well as market opportunities arising from environmental concerns have compelled firms to integrate environmental issues into the strategic planning process of the company. Li and McConomy (1999) found that companies with strong environmental commitment were able to adopt new environmental accounting standards quicker than companies with less environmental commitment.

Table 4.4: ANOVA for Multiple Regression Model

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	279709.587	4	69927.397	2716.832	.000
Residual	10449.863	406	25.739		
Total	290159.450[d]	410			

Source: Researchers compilation, 2016

Coefficients of Regression

The summary of multiple regression results is presented in table 4.5. From table 4.5 below, it was observed that external legislation, contemporary management techniques, components of firm value and environmental commitment are good predictor of quality of disclosure. The findings in Table 4.5 indicated that external legislation positively and significantly influence quality of disclosure of shipping companies in Nigeria with $\beta = 0.303$ with p-value = 0.000 < 0.05. It implies that for every unit increase in external legislation there is an increase in Quality of Disclosure by 0.303. The result is in line with Banerjee (2001) who found that external pressures such as legislation and public concern, as well as market opportunities arising from environmental concerns, have compelled firms to integrate environmental issues into their strategic planning process.

The findings in Table 4.5 indicated that contemporary management techniques positively and significantly influence quality of disclosure of shipping companies in Nigeria with $\beta = 0.179$ with p-value = $0.000 < 0.05$. It implies that for every unit increase in contemporary management techniques there is an increase in Quality of Disclosure by 0.179. The result is in line with Liaqat (2006) who found a positive association between the adoption of activity based cost (ABC) and company characteristics (e.g. degree of customization, pressure of competition, business size, and proportion of overhead to total cost).

The findings in Table 4.5 indicated that environmental commitment positively and significantly influence quality of disclosure of shipping companies in Nigeria with $\beta = 0.405$ with p-value = $0.000 < 0.05$. It implies that for every unit increase in environmental commitment there is an increase in Quality of Disclosure by 0.405. The result agrees with Li and McConomy (1999) who found that companies with strong environmental commitment were able to adopt new environmental accounting standards quicker than companies with less environmental commitment, thereby enhancing credibility and reducing litigation risk.

The findings in Table 4.5 indicated that components of firm value positively and significantly influence quality of disclosure of shipping companies in Nigeria with $\beta = 0.316$ with p-value = $0.000 < 0.05$. It implies that for every unit increase in components of firm value there is an increase in Quality of Disclosure by 0.316. The result concurs with Plumlee, Brown and Marshall (2010) who documented a positive relation between voluntary environmental disclosure quality and firm value through both the cash flow and cost of capital components. Based on this analysis, they documented an inverse association between voluntary disclosure quality and a firms cost of equity.

Table 4.5: Overall Regression Model Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
External Legislation	.303	.042	.253	7.288	.000
Contemporary Management Techniques	.179	.040	.156	4.494	.000
Components of Firm Value	.405	.050	.321	8.070	.000
Environmental Commitment	.316	.044	.270	7.192	.000

a. Dependent Variable: Quality of Disclosure

Source: Researchers compilation, 2016

Hypotheses Results

The researchers used the results in table 4.6 to decide on whether to accept or reject the study hypotheses.

Hypotheses

1. **Ho:** The regression result presented in table 4.5 above indicated that the null hypothesis was rejected and the alternative hypothesis was accepted. This indicates that there is significant relationship between external legislation and quality of disclosure of shipping companies in Nigeria. This is because the p value 0.000<0.05 making the coefficient level of external legislation significant in the model.
2. **Ho:** The regression result presented in table 4.5 above indicated that the null hypothesis was rejected and the alternative hypothesis was accepted. This indicates that there is significant relationship between contemporary management techniques and quality of disclosure of shipping companies in Nigeria. This is because the p value 0.000<0.05 making the coefficient level of contemporary management techniques significant in the model.
3. **Ho:** The regression result presented in table 4.5 above indicated that the null hypothesis was rejected and the alternative hypothesis was accepted. This indicates that there is significant relationship between components of firm value and quality of disclosure of shipping companies in Nigeria. This is because the p value 0.000<0.05 making the coefficient level of components of firm value significant in the model.
4. **Ho:** The regression result presented in table 4.5 above indicated that the null hypothesis was rejected and the alternative hypothesis was accepted. This indicates that there is significant relationship between environmental commitment and quality of disclosure of shipping companies in Nigeria. This is because the p value 0.000<0.05 making the coefficient level of environmental commitment significant in the model.

V. Conclusions and Recommendation

Based on the findings it was concluded that external legislation is a critical determinant to quality of disclosure. This study determined that external legislation enhance quality of disclosure of shipping companies in Nigeria. The regression analysis showed that there is a positive joint relationship between the independent variable external legislation and quality of disclosure. It can be concluded from this study that there exists a positive significant relationship between external legislation and quality of disclosure of on shipping companies in Nigeria.

The study concludes that contemporary management techniques influence the quality of disclosure on shipping companies in Nigeria. It can be concluded from this study that there exists a positive and significant relationship between contemporary management techniques cost and quality of disclosure. The regression analysis showed that there is a positive joint relationship between the independent variable contemporary management techniques and quality of disclosure. This implies that contemporary management techniques were statistically significant in explaining the quality of disclosures of shipping companies in Nigeria.

Pertaining to components of firm value, the study concluded that there exist a weak relationship between components of firm value and quality of disclosure. The regression analysis showed that there is a weak joint relationship between the independent variable components of firm value and quality of disclosure. This implies that components of firm value were statistically significant in explaining the quality of disclosures of shipping companies in Nigeria.

The study concluded that there exist a weak relationship between environmental commitment and quality of disclosure. The regression analysis showed that there is a weak joint relationship between the independent variable environmental commitment and quality of disclosure. It can be concluded from this study that there exists a positive significant relationship between environmental commitment of disclosure of shipping companies in Nigeria.

The following recommendations were derived from the findings and conclusions of the study. Companies should consider the current laws and regulations, extent of regulatory involvement, prior legal, economic, political and scientific experience, the complexity of the problem, existing technologies and available technological experience. Furthermore, information available prior to assurance of the financial statements indicates that it is probable that an asset had been impaired or a liability incurred at the date of the financial statements should be considered.

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