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EFFECT OF ENVIRONMENTAL DISCLOSURES ON FINANCIAL REPORTING QUALITY OF MANUFACTURING COMPANIES IN NIGERIA

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ABSTRACT

The study examined the effect of environmental accounting disclosures on financial reporting quality of the companies during the study period in Nigeria.

The study utilized secondary data which were sourced from the various Annual Reports and Statements of Accounts published by quoted manufacturing companies in Nigeria. Both descriptive and econometric techniques were employed in analysing the data. The econometric technique of analysis employed was logistic regression model as well as panel data model to capture the determinants of environmental disclosure and its impact on financial reporting quality in Nigeria.

The result of fixed effect panel revealed that only environmental disclosure (EC) had significant influence on the financial reporting quality (LFRQL). All other explanatory variables had insignificant effect on LFRQL. One percent increase in EC ($t = 3.67726$, $p < 0.05$) significantly increased LFRQL by 33 percent in Nigeria. The effects of variables such as LTASS, ($t = 0.88533$, $p < 0.10$), LLEV ($t = 0.07421$, $p < 0.10$) had insignificant positive relationship with LFRQL while LFS, ($t = 1.55617$, $p < 0.10$) had insignificant positive effects as one percent increase in the size of the firm reduced the extent of LFRQL by 47 percent. The study concluded that environmental disclosure (EC) had significant positive influence on the financial reporting quality (LFRQL) and this accounted for about 33 percent in Nigeria.

Keywords: Environmental disclosure, Financial Reports

1.0 INTRODUCTION

Environment is the condition of a particular geographical area especially as affected by various human activities. It is the status (positive or negative) stands of the social, economic and health of the host community in which the economic activity of manufacturing or production takes place. Environmental issues are harmful effects of human activities on the bio-physical environment. These harmful effects or key environmental issues affecting business include; industrial waste; sustainable development of raw materials; water and air emissions. However, the earth environment is a rich heritage handed over to us by previous generations. The present civilization has involved us in varied activities. Many of the activities generate waste with potential constituents. The ultimate disposal of the waste leads to environmental pollution in many parts of the world; the magnitude of pollution of the environment has already reached an alarming level (Pramanil and Shiland Das, 2007). Since

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Late eighties, due to growing public concern about the alarming impact of industrial activities on nature, companies are under pressure from both government and society to reduce adverse impacts of their activities on the environment.

The performance of an organization is now being judged not only on the basis of its financial results, but also with regards to its contribution to protect and improve environment. Thus, environmental Disclosure has become an important variable in the models used by the investors and creditors to determine the risk associated with their investment. As a result, accounting of environmental issues and the disclosure of such issues with their associated cost in the annual reports or by other medium has become an important part of corporate accounting and reporting system.

According to Corner and Gordon (2001), when company becomes more visible and accountable to the public and therefore more accountable with respect to environment issues such company's disclosure of Environmental Disclosure reduces its public pressure. Financial or annual report has been the primary means of corporate reporting and it is the fundamental source of environmental reporting. The usage of financial report has grown over the years. Environmental information was reported as one of the sections in the report and later as a separate section. Subsequently, the practice grew with the introduction of "Stand alone" environmental reports (O' Donovan 1999). In 1998, the United Nations released an interim statement of best practice guidance entitled "Environmental Financial Accounting and Reporting at the corporate level"; The first part of the paper "Accounting and Reporting for environmental liabilities and cost within the existing financial reporting framework" aimed to aid the determination of what is considered best practice in Accounting for environmental transactions and events in the financial statement and associated notes. The second part consider, "Linking Environmental and Financial performance : A survey of Best Practice Techniques went on to identify key environmental performance indicators (EPI's) and examined their relation to financial performance recommending improvement in the disclosure of Environmental performance indicators.

Thus, accountant as the basic custodian and light bearer of economic development can no longer shut their eyes to the effect of environmental issues on business management, accounting, and audit and disclosure system. Protection of environment and potential involvement of accountant is becoming a common subject of discussion among the accountants all over the world. Nowadays, accountants are expected to take a pro-active role in the environmental protection processes. With the advent of liberalization, removal of trade barriers makes it logical that the cost of environmental degradation due to industrial activities should be internalized in corporate account to the extent possible that is why environmental accounting and reporting is of paramount importance today. This brief overview is sufficient to suggest that pursuit of economic growth, industrialization and privatization process should not be at expense of the environment and that environmental protection and monitoring is vital for Nigeria and future of its citizens. Since Nigeria accounting for medium sized and big companies is based on IFRS/IAS (International Financial Reporting Standard/International Accounting Standards.) environmental accounting has not gained any considerable ground in Nigeria Corporate Financial reporting. Though, the Nigeria Accountants have been struggling with IFRS/IAS implementation, so that this area of environmental accounting that has been unfairly neglected for years would see the light, becoming a corporate practice.

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Hence, this study will focus only on the environmental information presented by the selected quoted manufacturing companies operating in different sectors in Nigeria using their annual reports. The study will ascertain the extent of disclosure (mandatory or voluntary) of information in annual reports of such manufacturing companies to assess the need for specific regulatory framework (including accounting guidelines, principles and standards) in the area of Environmental Accounting Reporting (EAR).

2.0 LITERATURE REVIEW

2.1 Concept of Corporate Environmental Disclosure

Corporate environmental disclosures can be defined as an umbrella term that describes various means by which companies disclose information on their environmental activities to users (Alok, Nikhil and Bhagaban, 2008).According to them, it is the process by which a corporation communicates information regarding the range of its environmental activities to a variety of stakeholder including employees, local communities, shareholders, costumers, government and environmental groups. Really, the objective of financial reporting is to provide information which should be comprehensible to those who have a reasonable understanding of business and economic activities and are willing to study the information with reasonable diligence. Against this backdrop, corporate reports which disclose the performance and position of companies without significant environmental cost disclosure will be showing a distorted view of the business (Pizzey, 1998). According to (Alok, el tal) corporate environmental disclosure serves many different purposes for different stakeholders, which include the following: it permits investors to harness the power of the capital markets to promote and ensure environmentally-superior business practices; it empowers people with the information they need to hold on corporation's accountable and invites shareholders more fully into the process of corporate goal setting; it allows companies and their stakeholders to measure companies adherence to the standards set forth in their statements of environmental principle, and their various goals and objectives; it will allow society to understand the false implications of corporate activity thereby to design where sustainable local and global systems; as an internal driver of change, it helps illuminate weaknesses and opportunities and set new goals.

As carried out by (Alok et. al.) and according to (Jones, 2000), the main reason for incorporating environmental information within the annual reports is to increase stakeholders' awareness of the company's activities, performance and interactions with the environment. It is hoped that stakeholders might use the information to assist their decision making process. Among the means of disclosing environmental information include newsletters, press release, magazine and corporate booklets (Zeghal and Ahmed, 1990) but the usage of annual reports has grown and this practice has grown with the introduction of "stand¬alone" environmental reports (O'Donovan, 1999).

Disclosure entails the release of a set of information relating to a company's past, current and future environmental management activities, performance and financial implications. It also comprises information about the implications resulting from corporate environmental management decision and actions. They may include issues such as expenditures or operating costs for pollution control equipment and facilities, future estimates of expenditures or

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operating costs for pollution control equipment and facilities. These may also include sites restoration cost, financing for pollution control equipment or facilities present or potential litigation, air, water, or solid waste releases; description of pollution control processes or facilities, compliance status of facilities; among others (Enahoro, 2009). By environmental disclosure, we mean all the information that the company communicates to its stakeholders about its environmental concerns.

In line with the global best practices on environmental reporting such as the Global reporting initiative (GRI) sustainability reporting guideline GSI (2006-2011), Greenhouse Gas (GHG) protocol developed by World Business Council for sustainability Development and World Resource Institute, the environmental index with which a company will be classified as environmentally responsible include:

- Environmental pollution and control policy;
- Compliance with environmental laws and Regulation;
- Material recycling and conservation of resources (Biodiversity);
- Waste management;
- Environmental impact assessment (on product or Services);
- Environmental audit;
- Award receive e.g. ISO14001 or penalty;
- Environmental research and development;
- Air emission information, and
- Energy policy.

In recent times, there is a growing demand on firms to give reports on the impact of their activities as it affects the environment by voluntary and mandatory disclosures. The increase in global awareness and the campaign for sustainable economic development is redirecting the attention of firms towards environment sensitivity (Collins, 2009). In Nigeria in particular, environmental regulation is relatively new in terms of enforceable regulatory standards except with the establishment of new regulatory authorities such as the Federal environmental protection Agency (FEPA) and the National Environmental standards and Regulations Enforcement Agency (NESREA). In the work of Rajanikanta (2014), Environmental reports is considered a sort of small world where many crucial points in the relationship between a company and its stakeholders meet together. According to him, there are three categories of environmental disclosures:

• Involuntary disclosure – the disclosure of information about a company's environmental activities without its permission and against its will. Examples of involuntary disclosures are environmental campaigns, press and media exposes and court investigations.

• Mandatory disclosure – the disclosure of information about a company's environmental activities that is required by law.

• Voluntary disclosure – the disclosure of information on a voluntary basis. There are two types of voluntary disclosures: confidential and non-confidential. Confidential voluntary disclosures are those required by banks, insurers, customers and joint venture partners that are not publicly available. Non-confidential voluntary environmental disclosures are practically any environmental information the company voluntarily makes available to the general public. Given the history of environmental regulation in Nigeria, it is understandable that sustainable business practice is new. However, some firms had established a culture of being environmentally friendly even before the existence of regulation in Nigeria. This was in keeping with the global sustainable movement which had changed the nature of the market form producer oriented to green consumer oriented (Collins, 2009). Such voluntary and discretionary disclosure is as a result of many companies especially those with a high public profile or perceived environmental impact have felt increasingly obliged to report externally to stakeholders on their environmental performance.

3.0 EMPIRICAL REVIEW

3.1 Review of Empirical Studies in Developed Countries

The large proportion of existing literature on environmental disclosure has focused on the relationship that exists between this phenomenon and financial performance.

Cohen et al (1997) examined the relationship between environmental performance and financial performance. The result shows that profitable firms are more environmentally responsible because they have superior financial performance. Similar result was reported by Russo and Fouts (1997), they also found a positive relation between firms' performance, as measured by return on assets and environmental rating. In the same vein, Belkaouri (1976) examined the information content of pollution control disclosures. He found a positive performance between economic performances and environmental reported.

Rockness et al (1966) conducted a research on hazardous waste disposal in the chemical industry (environmental performance) and the return on equity as a measure of financial performance. In their study, they found positive relations; companies with higher financial performance are those who have smaller amounts of chemical waste disposal. Bragdon and Marlin (1972) also produced a positive relation between profitability and the council on Economic priorities environmental performance ratings for pulp and paper firms. However, Chen and Metcalf (1980) using the same data argued that environmental performance was not related to financial performance when differences in firm size were not taken into account.
Freedman and Jaggi (1982), in their study conducted that environmental disclosure was measured against six accounting ratios to measure financial performance, the result shows that no long term association between pollution performance and financial performance in the pulp and paper industry. However, for very large firms with poor financial performance the pollution disclosure are more detailed.

Clarks et al (2006) investigated proactive corporate environmental policies and financial performance. Only firms with sufficient financial resources and management capabilities can pursue proactive environmental strategy. These firms will enjoy better financial performance subsequently. In 2007, Zhang and stern concluded that financial performance has a small positive impact on current environmental performance. Financially well-performed firms tend to invest more in environmental activities.

The work of Lars Henrik Natalia (2009), In line with their study, Clause and Rikardson (2008) studied the effect of environmental investment on environmental decision. The result suggests that environmental information disclosure influences investment allocation

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decisions. This imply that companies that are apathetic to their environmental responsibility might experience eventual crashes on their stock prices if their investors are rational in considering the future value of the firm based on its present state of environmental responsibility. For the level of environmental disclosure in annual report and its determinants, a number of studies have been conducted in the developed countries, some of which include: Adams et al (1998), the study carried out a content analysis of 150 annual reports from Netherland, Sweden, Switzerland, France, Germany and United Kingdom, the study revealed that higher level of customer related issues were disclosed and significant factors influencing social reporting patterns were found to company size, industry grouping and country of domicile. In the same vein, Gray, Jarad, Power and Sinclair, (2001) examined the relation between corporate characteristics and environmental disclosures by taking a sample of 100k companies drawn from centre for social Environmental Accounting Research (CSEAR). The authors observed that the volume of disclosure is related to the turnover, capital employed, number of employees and profit, as larger and more profitable firms have disclosed more environmental information.

Gamble et al (1995) investigated the quality of environmental disclosure in 10k and annual reports of 234 companies and concluded that companies belonging to petroleum refining, hazardous waste management steel works and blast furnaces industries provided the highest quality of disclosures.

4.0 REVIEW OF EMPIRICAL STUDIES IN DEVELOPING COUNTRIES

Imam (1999) conducted a study on environmental reporting in Bangladesh and reported that environmental disclosures remain at a minimal level. Other studies conducted in Bangladesh such as Shil and Igbai (2005); a study of the annual reports of 121 companies found that only 13 companies (11 percent) out of 121 disclosed the environmental related information in a qualitative way. Rahman and Muttakin (2005) also selected 196 companies in Bangladesh and gave the same result. In Finland, Niskala (1994) studied environmental accounting issues and concluded that issue relating to environmental accounting is just beginning to be evidently discussed in Finland.

In turkey, Surmen and Kaya (2003) examined environmental accounting and reporting and found that like other developing countries Turkey has not seen environmental issues as a priority. In line with this, Nuhoglu (2003) also examined environmental reporting practices in Turkish companies and reported that Turkish companies' reports were lower standard and prepared under much less seriously vis-a-visa multinational companies reports. In Malaysia, Romlah (2002) studied the practices in Malaysian companies and showed that 74 out of 362 companies in environmentally sensitive industries provide environmental information in their annual reports. In line with this, Ahamed and Sulaiman (2004) examined the extent and type of environmental disclosures in annual reports for the year 2000 by Malaysian companies belonging to construction and industrial product industries and concluded that the extent of environmental disclosure was very low. In line with this Thompson and Zakaril (2004) concluded that environmental reporting of these companies was poor in quality and low in quantity.

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Jamil (2003) conducted a study in Malaysia; he carried out a content analysis of 100 companies for the period 1995 to 1999 with a total of 500 annual reports and found out that disclosure level in Malaysia is considered low whereby less than 30 percent of companies studied made disclosure. In fact, companies in Malaysia prefer to disclose social accounting in Chairman's statement and directors report. The most popular disclosure among these companies are in the area of human resources involvement. An study conducted by Ponnu and Okoth (2009) in Kenya, in which content analysis and chi square of all the 54 listed companies in Nairobi stock exchange was examined, corporate reporting was fair only that the theme mostly commonly disclosed was community involvement. Rajanikanta (2014), in is study discover that India Corporate Environmental reporting has traditionally been a voluntary method of communicating environmental performance to stakeholders. More recently, there has been movement towards making environmental reporting mandatory. Denmark, New Zealand, France and Netherlands have already introduced legislation on environmental reporting. Another major challenge to reporting community at large in India is to improve comparability among environmental reports. Most of the corporate leaders are still confused to decide on what issues to be addressed or left out in its environmental report. Involvement and commitment of corporate accountants in environmental management appears to be limited due to lack of regional reporting guidelines. Policy makers and regulatory bodies have to take an eye on the mandatory disclosure of the environmental reporting practices. More importantly sustainable development is totally based on the attitude, eagerness and involvement of people, corporate leaders and policy makers. Kamala (2007).Carried out a content analysis of 68 companies annual report from Saudi Arabia, Quarter, Bahrain, Oman, Kuwait, Syria, Jordan and Egypt. The study revealed that environmental disclosures are low in Arab countries.

In Thailand, Kuasirikun and Sherer (2004) show that narrative form of reporting is high and the most disclosed subject in Thai corporate annual report is employee information. In the same vein, Suttipun (2012) examined the determinants of environmental disclosure in Thai annual reports and reveal that companies in the resources industry group made the most disclosure of environmental information, while the least disclosure was made by companies in the agricultural and food industries group. The most common themes of environmental disclosures were environmental policy, environmental activities, and waste management. There was a positive relationship between the amount of environmental disclosure and size of company. In the work of Junru (2013), environmental disclosure analysis showed that although mining industry disclosed slightly more information than electricity supply industry, the extent of environmental reporting for all three industries were typically low because information disclosed was limited to several categories. It was found that Chinese mining, electricity supply, and chemical industries are more likely to disclose the three sample industries. However, government ownership was found to be insignificant in the study.

5.0 REVIEW OF ENVIRONMENTAL STUDIES IN NIGERIA

In Nigeria, a large portion of the literature are based on the extent or level of environmental disclosures (Uwuigbe and Jimoh, 2012; Apah, 2011; Owolabi, 2008) carried out a content analysis of 20 companies from 2002 to 2006 and the result shows that 35% of companies sampled provide some form of social disclosure in their annual reports, hence the level of disclosure is still very low. Contrary to this, Mammah, 2004 explained that there is a growing

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tendency of firms reporting information on social performance in their annual reports. In line with this, Uwuigbe, 2012 revealed that environmental disclosure in annual reports is significant. Apah, 2011 revealed in his study that a large proportion of firm disclosure is in the area of social works in form of community development and human resources environment comes third.

Collins, 2009 examined environmental responsibility and firm performance. In his study of sixty Nigerian manufacturing firms observed that investment in social and environmental responsibility are related to improved return on total assets. In line with this, Obat, 2012 investigated the value relevance of environmental responsibility information disclosure in Nigeria. The study simply examined the association between environmental responsibility information disclosure and financial performance (Return on capital employed). the developing countries are still very scarce. This study therefore will adopt the Stakeholder theory. However, in most developing countries, environmental disclosures still heavily rely on voluntary initiatives of the reporting entities. In addition, despite the increase in research, studies in this area in ‟s theory examined the level of corporate environmental reporting practices in the selected manufacturing companies, listed on the Nigerian Stock Exchange. The study as part of its findings observed that the level of environmental disclosure practices in the industry Uwuigbe and Jimoh (2012)

Ayoola (2011) revealed that significant variations in gas flaring disclosure in the Nigerian Oil and Gas sector with no legislative support for disclosure and recommends accounting and reporting framework for gas flaring in line with global best practices in view of the legislative deadline for gas flaring on 31st December, There is an apparent lack of awareness and understanding of the magnitude of the environmental costs generated by organizations, and many opportunities for cost savings through good environmental management are thus lost. Conversely, conventional management accounting practices do not provide adequate information for environmental management purposes in a world where environmental concern as well as environment-related costs, revenues, and benefits are on the rise. (James and Ashamu, 2012).

According to Usman, Paul & Ochala, the product of environmental pollution on the society is increasingly alarming. It is so disturbing that nobody can claim to be undisturbed. This general concern has now placed an obligation on auditors and public managers who are seen to be working for some of these companies and are also seen to standing for public interest. The notion that the auditors are working for the public becomes controversial and very challenging as there seems to be no statutory environmental guidance and protection for them. Auditors are left to their fate. Acti, Lyndon and Bingilar (2013) in their study revealed that sustainable business practices and corporate performance is significantly related. And sustainability may be a possible tool for corporate conflict resolution as evidenced in the reduction of fines, penalties and compensations paid to host communities of oil companies, and that Nigeria should develop a well-articulated environmental costing system in order to guarantee a conflict free corporate atmosphere needed by managers and workers for maximum productivity and eventually improve corporate performance.

Beredugo and Mefor in their work evaluated the relationship between environmental accounting and reporting and sustainable development in Nigeria. And it was discovered that there is a significant relationship between environmental accounting and reporting and

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sustainable development; and that with environmental accounting encourage organizations to track their GHG emissions and other environmental data against reduction targets, and there are consequences for noncompliance with environmental accounting and reporting. In Nigeria, like the rest of the world there is need to evaluate and effect accounting reporting for raw materials, energy consumption and use of natural resources which have systematically depleted the environment. Besides, the nations' need to protect the environment, has made for global regulations and environmental laws which however require only voluntary disclosure of data and information in annual financial reporting of industrial emissions, degradations and all activities which impact negatively on the environment. In the light of the background for increasing environmental attention, and the fact that the oil and gas sector has profound production impact on the environment, the study explored a new paradigm for environmental accounting for the Oil and Gas sector in Nigeria.

Victor and Musa (2013), indicate in their work that the oil and gas industry provided a better disclosure level but this difference was not significant. More so, both industries presented very scanty environmental information in their annual reports which was in agreement with the arguments of the study. This paper however recommends amongst others that companies perceive environmental reporting as a moral and corporate duty, and that standard setters draft a comprehensive framework for reporting environmental concerns. Enahoro, Elizabeth and Ehi-Ebewele (2009) exclaimed that environmental reporting is an ingredient of sustainable development. However this ingredient seems to be inadequately recognized in Nigerian business terrains. The aim of this study is to examine the extent of environmental disclosures in quoted oil and gas and construction industries in Nigeria. A comparative analysis of the content of environmental information provided in the 2005-2009 annual reports of the sample firms was conducted to ascertain the degree of comprehensiveness of such disclosures and if there exists significant differences between both industries. Findings indicate that the oil and gas industry provided a better disclosure level but this difference was not significant. More so, both industries presented very scanty environmental information in their annual reports which was in agreement with the arguments of the study. Victor and Musa (2012) in their findings indicate that the oil and gas industry provided a better disclosure level but this difference was not significant. More so, both industries presented very scanty environmental information in their annual reports which was in agreement with the arguments of the study.

6.0 THEORETICAL FRAMEWORK

The need to anchor the concepts of environmental disclosure and financial reporting quality within the framework of certain theories cannot be over emphasized. The theories upon which this study was anchored were restricted to; "Stakeholders theory and Legitimacy theory". The general idea of Stakeholder theory is a redefinition of the organization. That is, what the organization should be and how it should be conceptualized. The theory as noted by Friedman (2006) states that the organization itself should be thought of as grouping of stakeholders and the purpose of the organization should be to manage their interests, needs and viewpoints. This stakeholder management is thought to be fulfilled by the managers of a firm. The managers should on the one hand manage the corporation for the benefit of its stakeholders in order to ensure their rights and participation in decision making and on the other hand, the management must act as the stockholder's agent to ensure the survival of the firm to safeguard the long-term stakes of each group.

Dabiri (2012) equally observes that Stakeholders theory takes account of a wider group of constituents rather than focusing on shareholders. Where there is an emphasis on stakeholders, the governance structure of the company may provide for some direct representation of the stakeholders groups. According to Friedman (2006), the main groups of stakeholders are: customers, employees, local communities, suppliers and distributors, shareholders, the media, general public, business partners, future generations, past generations (past founders) academics, competitors, NGOs, trade unions, competitors, regulators and governments.

For better decisions to be made, the Stakeholder theory further demands that managers should develop and run their enterprises in a way that is consistent with the demands of the theory i.e., stakeholder's value rather than shareholder's value maximization. In fact, Samuels and Wilkes (1986) posited that a company has responsibility towards its stakeholders and each of these interest groups sees the role of the company in a slightly different ways. This therefore means that a firm's value is influenced by the quality of its relationships with a range of internal and external stakeholders, and its ability to communicate its activities and performances effectively with its key stakeholders can be critical to its long-term success, viability and growth (KPMG, 2008).

On the other hand, Legitimacy theory is a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values and definitions (Suchman, 1995).

According to Tillong (2008), Legitimacy theory offers a powerful mechanism for understanding voluntary social environmental disclosure made by organizations and that this understanding would provide a vehicle for engaging a critical public debate.

The Legitimacy theory states that it is the moral obligation of companies to meet the expectation of the societal members and if company fulfills the expectation of the whole society then it would be treated as legitimate otherwise its legitimacy would be at risk (Woodward, pa metal 1996, Deegan and Jeffry 2006). So, organizations are expected to respond to the changing expectations of the society (Ismail and Craig 2008) to maintain their legitimacy. According to (Gray, Konhy& Lavers, 1995; Tilt, 1999; Tinker & Niemarks, 1987; Suchman, 1995), the Legitimacy theory argues that organizations seek to ensure that they operate within the bounds and norms of society. It is considered as a generalized perception or assumption that the actions of an entity are desirable, proper or appropriation within some socially constructed system of norms, values, beliefs and definitions and so organizations attempt to establish congruence between the social values associated with or implied by their activities and the norms of acceptable behaviour in the larger social system of which they are part.

The essence of legitimacy theory is to ensure that environmental information is disclosed as a way of legitimizing the operations of the firms (Evangeline, 2004). This theory is the most appropriate to explain social and environmental disclosure since it entails conformity of an organization with the value of the society within which it functions (Deegan, 2002).

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7.0 RESULTS AND DISCUSSION

Table No. 1 showed the results of descriptive analysis of the data collected for this study. It provides information about sample statistic mean, median, maximum and minimum value and distribution of the sample measured by the skewness, kurtosis, and Jarque-Bera statistics for 50 manufacturing companies given 170 observations. The dependent variable is Financial Reporting Quality (FRQL). The result showed that the average value of FRQL is -1.106076 with variation of 0.253899. The average values of other variables such as Firm Size (FS), Leverage (LEV), Total Asset (TASS) and Environmental Compliance (EC) were 1.878563, -1.957147, 1.898004 and 0.788235 with standard deviations of 0.113003, 1.429060, 0.161288 and 0.409766 respectively. The standard deviations measured the extent to which the data series dispersed around the mean in the statistical analysis of this study. The skewness of the variable measures the asymmetry of the distribution of the series around the mean. Almost all variables were little bit skewed. Only dependent variable (FRQL) was negatively skewed, others are positively skewed. The variable that was negatively skewed was not more than those that were positively skewed which indicated that the data sets had long right tail.

Kurtosis measures the peakness or flatness of the data relative to normal distribution. The value of kurtosis indicated that the variables like FRQL (5.25818), FS (3.725486), LEV (6.436097) and TASS (3.770992) had high peaked or leptokurtic distribution. Being peaked, however, was an indication that there were very few observations within the region where the median value resided. However, EC (2.99087) had approximately normal distribution.
The Jarque-Bera (JB) test of normality provides joint hypothesis of Skewness and Kurtosis. It suggests that if the computed P value of a variable is zero or very low and the value of the respective statistic is different from zero, then its residual is not normally distributed. The residuals for all variables included in this study were not normally distributed.

Table 1: Descriptive Statistics

	LFRQL	LFS	LLEV	LTASS	EC
Mean	-1.106076	1.878563	-1.957147	1.898004	0.788235
Median	-1.049822	1.864995	-1.737815	1.885229	1.000000
Maximum	-0.393043	2.229779	5.029601	2.317219	1.000000
Minimum	-2.302585	1.534925	-5.874424	1.458297	0.000000
Std. Dev.	0.253899	0.113003	1.429060	0.161288	0.409766
Skewness	-0.611521	0.298392	0.227901	0.520214	-1.410985
Kurtosis	5.258183	3.725486	6.436097	3.770992	2.990879
Jarque-Bera	46.71616	6.250917	85.10285	11.87817	56.40883
Probability	0.000000	0.043917	0.000000	0.002634	0.000000

Source:Author'sComputation(2016)

8.0 MULTICOLINEARITY TESTS

The correlation matrix was carried out in order to test for correlation among the independent variables. The correlation matrix shows the correlation between the independent variables which should be in low degree or moderate degree to suggest the absence of multicolinearity between independent variables. As suggested by Bryman and Cramer (1997), the correlation between each pair of independent variables should not exceed 0.8; otherwise, the variables may be suspected of exhibiting multicolinearity. Multicolinearity is usually regarded as a problem because it means those regression coefficients may be unstable. The result under this objective showed that all possible combinations of the explanatory variables had correlation coefficients, whether negative or positive, were very low, weak and even less than 0.8. If the correlation coefficient between two variables is one, the variables are perfect substitute for each other and the two cannot be included in a particular model for analysis. The correlation matrix for variables is specified in table 2. The results in the below table showed that the independent variables were independent of each other. Thus, all the explanatory variables can be included in the regression analysis.

Table 2: Correlation Matrix for the Determinants of Financial Reporting Quality

	LFS	LTASS	EC	LLEV
LFS	1.000000			
LTASS	0.496902	1.000000		
EC	0.150053	0.211133	1.000000	
LLEV	-0.223242	-0.124716	0.032017	1.000000

Source:Author'sComputation(2016)

9.0 UNIT ROOT TEST RESULTS

The variables used in the regression analysis were further subjected to unit root tests using Levin, Lin & Chut, Im, Pesaran & Chi-square, ADF-Fisher Chi-square as well as PP-Fisher Chi-Square, to reinforce, ensure robustness and boost the confidence in the reliability of the results. Unit root tests were carried out to determine the order of integration of all variables employed. The result revealed that all variables are stationary at level as shown in table 3 above; hence the test of null hypothesis for the presence of a unit root was rejected.

Table 3: Unit Root Test Result

Variables	**Levin, Lin &Chu t**	**Im, Pesaran & Chi-square**	**ADF-Fisher Chi-square**	**PP-Fisher Chi-Square**	**Order of Integration**
$LFRQL_{it}$	-6.46704*** (0.0000)	0.61784 (0.7317)	93.6497 (0.6596)	104.518 (0.3588)	I(0)
LFS_{it}	-0.51578 (0.6970)	2.13420 (0.9836)	72.0472 (0.9175)	122.831*** (0.0123)	I(0)
$LLEV_{it}$	-48.4091*** (0.0000)	-5.79417*** (0.0000)	38.0395** (0.0344)	57.2718*** (0.0002)	I(0)
$LTASS_{it}$	-177.815*** (0.0000)	-19.3791*** (0.0000)	136.543** (0.0003)	130.341*** (0.0009)	I(0)
EC_{it}	-0.00590 (0.4976)	0.05852 (0.5233)	10.0713 (0.6097)	19.7258** (0.0725)	I(0)

Source: Author's Computation 2016

Note: ***, **,*, (.) denote significance at 1%, 5%, 10% level, and probability respectively.

10.0 ANALYSIS OF REGRESSION RESULT

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The results of regression analysis were estimated using pooled, fixed and random effect panel method. Pooled effects have the problem of heterogeneity and different variances thereby violate the assumptions of classical linear regression model and also, based on the validation test conducted as shown in the table 5, the study rejects the null hypothesis of redundancy fixed effect test. Thus, the result obtained from fixed effect method was found appropriate over random effect for this study. Table 4 showed the results of pooled, fixed as well as random effect panel analysis.

Table 4: Summary Result of the Regression Analysis on Financial Reporting Quality

Variable	**Pool Effect (1)**	**Fixed Effect (2)**	**Random Effect (3)**
Intercept	-2.07212*** (-6.2293) [0.0000]	-2.79776*** (-3.53197) [0.0006]	-2.036874*** (-4.873002) [0.0000]
LFS_{it}	0.5178** (2.5994) [0.0102]	-0.466302 (1.556176) [0.1221]	0.420060** (1.89209) [0.0602]
EC_{it}	0.0448 (0.3515) [0.9342]	0.329074*** (3.67726) [0.0003]	0.136006** (2.30331) [0.0225]
$LTASS_{it}$	-0.02567 (-0.18520) [-0.8533]	0.294372 (0.88533) [0.3776]	0.017938 (0.10029) [0.9202]
$LLEV_{it}$	-0.003401 (-0.2467) [0.8054]	0.001223 (0.074210) [0.9410]	-0.001411 (-0.10230) [0.9186]
Adj. R^2	0.038812	0.338615	0.041074
F-Statistic	2.706017	3.163110	2.809698
Prob (F-Statistics)	0.032158	0.000000	0.027271
D. W. Statistics	0.571959	1.185173	0.561327

Source: Author's Computation 2016

Note: *, **,*** denote 1%, 5% and 10% level of significance respectively;

(), [] denote t-statistics and p-values respectively.

Using pooled effect, all other explanatory variables had negative effects on financial reporting quality (LFRQL) except LFS and EC. One percent increase in firm size (LFS) (β =0.5178, p<0.05) would statistically and significantly increase LFRQL by 52 percent while the environmental disclosure (EC) (β =0.0448, p >0.10) led to insignificant increase in LFRQL by 5 percent. The effects of other variables such as Total Asset (LTASS), (β = -0.02567, p>0.10) and Leverage (LLEV), (β = -0.00340, p>0.10) were insignificant and negatively influence LFRQL.

When fixed effect panel method was employed, only environmental disclosure (EC) had significant influence on LFRQL, all other explanatory variables had insignificant effect on LFRQL. One percent increase in EC (β =0.329074, p>0.05) would significantly increase LFRQL by 33 percent. The effects of variables such as LTASS, (β =0.294372, p>0.10), LLEV (β = 0.00122 p>0.10) had insignificant positive relationship with LFRQL while LFS,

(β = -0.466302,p> 0.10) had insignificant positive effects as one percent increase in the size of the firm would reduce the extent of LFRQL by 47 percent. With random effect panel method, only Leverage (LLEV) had negative and insignificant effect on LFRQL. Variables such as LFS and EC had positive and significant relationship with LFRQL, as one percent increase in both LFS (β = -0.42006, p<0.10) and EC (β=0.1360, p<0.05) would significantly

increase LFRQL by 42 percent and 14 percent respectively. Other variables such as LTASS (β = 0.01793, p>0.10) and LLEV (β = -0.0014, p>0.10) had insignificant relationship with

LFRQL.

However, as shown in the table 5, this study found that the appropriate model for estimation for this study was fixed effect technique of analysis. This is because the probability value was significant at all conventional level of significance which led to the rejection of null hypothesis of redundancy fixed effect test and it was upon this conclusion that the study found fixed effect panel data model adequate.

Table 5: Validation test table for financial reporting quality

Redundant Fixed Effects Tests
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	13.978214	(13.29)	0.0000
Cross-section Chi-square	97.177736	13	0.0000

Source: Author's Computation (2016)

11.0 CONCLUSION AND RECOMMENDATIONS

From the findings of this study, it could be reasonably concluded that environmental disclosure (EC) had significant positive influence on the financial reporting quality (LFRQL) which accounted for about 33 percent in Nigeria.

It is therefore recommended that there should be more emphasis on research and development (RD) as it played significant role in influencing positively the environmental disclosure (EC) which further driven positively the quality of financial report in Nigeria.

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