CORPORATE VISIBILITY AND SOCIAL AND ENVIRONMENTAL DISCLOSURE: A DESCRIPTIVE LONGITUDINAL STUDY OF LISTED NIGERIAN OIL AND GAS COMPANIES

Mohammed Sani Damamisau¹, Abubakar Magaji Adamu², Muhammad Muhammad Sallau³, Yusuf Abdu Gimba³ and Aishatu Danjuma Adam⁴

1. Lecturer Department of Taxation, Federal University Dutse, Jigawa State, Nigeria.
2. Senior Lecturer, Department of Business Administration Federal University Dutse, Jigawa State, Nigeria.
3. Assistant Lecturer, Department of Taxation, Federal University Dutse, Jigawa State, Nigeria.
4. Graduate Assistant, Department of Taxation, Federal University Dutse, Jigawa State, Nigeria.

Abstract

The exploration and production of oil and gas by Listed Nigerian oil and gas companies that are becoming significant players in the industry are embedded with lots of social and environmental impacts. Conversely, the society is demanding for accountability on these impacts which could be discharged through social and environmental disclosure. However, the size of a corporate organisation measured either by sales volume, asset value or number of employees determines the levels of disclosure. Therefore, the aim of this paper is to descriptively assess the impact of size on social and environmental disclosure practices of listed Nigerian oil and gas companies 2004 – 2018. Data was collected from the online annual reports and accounts of sampled companies by means of modified word count content analysis benchmarked on Global Reporting Initiative guideline. Collected data was analysed by means of numeric and graphical descriptive statistics while legitimacy theory is employed as theoretical framework. Results from the study indicated that largest companies in terms of sales volume disclosed more social and environmental information 2004 – 2018; thereby confirming corporate size as a determinant. Largest companies in the sample perhaps provided the volume of social and environmental information as medium of gaining and maintaining legitimacy which is consistent with legitimacy theory. Results from the study suggest that public policy makers should ensure that sampled companies are reporting the factual social and environmental negatives of their operations which may be a means of ensuring peace and stability in the oil producing region.

Introduction:

Over time, awareness about the impacts of businesses and their interplay with society, environment and socio-regulatory pressures resulted into demand for businesses to give due consideration to the society and the environment (Mohammed 2016, Hassan and Kouhy 2015, Rajat, et al., 2006). Indeed, modern corporate business environment is surrounded by strong public scrutiny from diverse stakeholder groups that are calling on businesses...
to accept accountability for not only their economic actions, but also the social and environmental implications of their activities (Mohammed 2016, Hassan 2012, Chen and Wang, 2011; Deegan, Rankin and Voght, 2000). Consequently, businesses are today not only paying attention to the social and environmental needs of their stakeholders, but are communicating same through disclosures (Akparhuere 2019, Li and Liu 2018, Chen and Wang, 2011; Deegan, Rankin and Voght, 2000). By providing social and environmental information of their activities, businesses are portraying their being sustainable (Jenkins and Yakoleva, 2006). This is consistent with the concept of sustainable development (United Nations, 1987) as elaborated by the Triple Bottom Line concept of Elkington (1993) and McLamb’s (2011) position of having a viable economy built on bearable environment and equitable society. In fact, by being socially and environmentally responsible corporate organisations are improving their corporate image, enhancing better relationship with suppliers and customers and easing recruitment of best labour and lowering staff turnover. Similarly, it increases the confidence of investors and financial analysts, open opportunity to attract ethical investors, reduces anticipated future regulation cost and future liabilities that may arise from progressive externalities (Husser, and Evaert-Bardine 2018, Khilif, Guidara and Souissi 2015, Gallego, 2006; Kotler and Lee, 2005; Azapagic, 2003). Likewise, it is a vehicle for providing environmental data that may satisfy accountability relationships with stakeholders (Hassan and Kouhy 2015, Shearer, 2002). This accountability which is an indication of corporate moral consciousness on the society and the environment (Shearer, 2002) is helping in creating a just society among business corporations and the larger society (Deegan and Gordon, 1996).

Despite the aforementioned and other benefits of social and environmental disclosure to corporate organizations, the practice is more in developed economies (Bhatia and Makkar 2019, John, Daniel and Angel, 2012; Dobers and Halme, 2009; Tsang, 1998). Similarly, studies into social and environmental disclosure practices of corporate organisations are more prevalent in the developed countries (Mohammed 2016, Juhmani, 2014; John, Daniel and Angel, 2012). On the contrary, corporate social and environmental disclosure studies are still evolving in developing and emerging economies like Nigeria (KPMG 2013, Tsang 1998). Consequently, the literature is calling for more studies on social and environmental disclosures in developing countries (Akparhuere 2019, Belal, Cooper and Roberts, 2013). In fact, social and environmental disclosure studies are more essential in developing countries where there are lots of social and environmental impacts of corporate organizations (Akparhuere 2019, Mohammed 2016, Hannafi, 2006; Gray and Kouhy, 1993; Maunder et al., 1990). This is premised on the argument that findings and recommendation from these studies may be useful to corporate organizations and policy makers such that corporate organisations could embrace the practice (Mohammed 2016, Hannafi, 2006; Hamil, 1999; Prakash and Rappaport, 1977). Embracing the practice will result into informative accountability (Hassan, 2012) which has the ability to induce changes in corporate behaviours (Hamil, 1999; Prakash and Rappaport, 1977). This information inductance effect could serve as a solution or at least a means to reducing the social and environmental impacts of corporate organizations in developing countries (Hani, 2006; Hamil, 1999; Prakash and Rappaport, 1977).

Nigeria is one of the emerging and developing economies of the world located in the tropical zone of West Africa. It is situated between latitudes 4° and 14°N and longitudes 3° and 15°E with an estimated landmass of 923,770km² (Balarabe et al., 2016; Falola and Heaton, 2008). The country’s population as at end of 2018 is estimated to be 195,874,740 (World Bank 2019a) while the United Nations World Population Prospect for 2017 projected Nigeria’s population will be 410 million by 2050 (UNWPP 2017). The country is endowed with oil and gas natural resources having proved oil reserves of 37.50 billion barrels which is the eleventh in global ranking as at end of December 2018. Similarly, it has 180.80 trillion cubic feet of proved natural gas reserves placing it in the tenth position of global ranking as at the end of December 2018 (BP 2019). The Nigerian oil and gas industry is the major source of revenue to the three tiers of governments in the country; thus, it is playing significant roles in the socio-economic development of the country providing about 54% of total government revenue in 2019 (CBN 2019). However, activities associated with the processes of exploring and producing oil and gas natural resources that are providing the country with revenues are associated with lots of social and environmental negative effects (Mohammed et al 2020c, Mohammed 2018, Hassan and Kouhy 2015, Ebeegbulem, Ekpe and Adejumo 2013, Allen 2012, Benedict 2011, Jike 2004). Some of these impacts are peculiar to the oil and gas producing region described as a fan shaped third largest wetland area in the world after Mississippi and Pantanal (Benedict, 2011). Other problems such as gas flaring with its associated carbon emissions are problems to the country in particular and the world in general (Hassan, 2012).

Converting scarce farming and fishing lands to oil and gas wells and fields reduces food and cash crops production to indigenes of the oil and gas producing region (Jike, 2004; Allen, 2012) which in turn create social problems of hunger, poverty and high frequencies of teenage girls’ pregnancies (Okereke and Orjiafor, 2011). The problem of
poverty is in turn responsible for increased child mortality, maternal morbidity and mortality, malaria and typhoid fever (Okerere and Orjiafor, 2011). Poverty is also responsible for massive rural – urban youth migration causing over population in cities, resulting into increased crime rates and pressure on limited social amenities in the urban areas (Mohammed 2016, Mabogunje, 1968). Gas flaring which is a significant contributor to increasing global Carbon Dioxide emissions (Mohammed 2019, Hassan and Kouhy 2015, Hassan 2012) is a major environmental problem of the Nigerian oil and gas industry. Indeed, Nigeria is in the seventh position among the 30 top most gas flaring nations of the world as at end 2018 (World Bank 2019b). Long term exposure to gas flaring is found responsible for bronchial and respiratory diseases, skin disorders, child deformities and other skin disorders, and other health risks among people in the oil and gas producing region (Ebegbulem, Ekpe and Adejumo, 2013, Myneppalli and Bamgboye, 2009, Akoroda, 2000). Oil spillage with its associated social and environmental impacts is another major environmental impact of the Nigerian oil and gas industry. With listed Nigerian oil and gas companies which are required by law to make disclosures becoming significant players in the industry (Shosanya, 2013, Obasi, 2013); their adoption of social and environmental disclosures could serve as means of informative accountability to stakeholders. This may in turn serve as a solution or a means to solving the numerous social and environmental impacts affecting communities where they are operating, Nigeria and globally (Mohammed et al 2020c, Belal, Cooper and Roberts, 2013; Hannafi, 2006).

However, corporate size measured by sales volume, asset value and number of employees is an important determinant of social and environmental disclosure (Salehi, Tarighi and Rezanezhad 2019, Adriana and Dewi 2019, Elshabasy 2018, Welbeck et al 2017, Mohammed 2016). The argument being that corporate size is a source of public and political visibilities and scrutinise; thus, large firms are likely to make more disclosure (Adriana and Dewi 2019, Elshabasy 2018, Mohammed 2016, Mackinnon and Dalimunthe, 1993, Brammer and Pavelin, 2008, Ayadi, 2004). There are existing studies on the effect of corporate size on the social and environmental disclosure practices of oil and gas companies in emerging and developing economies including Nigeria. Consequently, review of some of these studies is of importance in the conduct of this study. Abdull Razak, Al Hujaili and Al Ahmedi (2019) studied the environmental disclosure practices of Saudi listed oil and gas and materials companies for the year 2018 aimed at evaluating whether these samples as the largest and most profitable sectors in Saudi Arabia are following GRI standards and compliance with Saudi Arabia’s Presidency of Meteorology and Environment (SAPME) on environmental programs to help achieve vision 2030. Data for the study was collected from annual reports and accounts, sustainability report and board of directors’ reports for the year 2018 to observe the existence of GRI 2016 elements in the report. The study is not guided by any theoretical framework while collected data was analysed descriptively. The results of the study indicated low levels of disclosure and sampled companies do not comply with PME programs among the largest and smallest companies in the sample. Aldrugi (2013) investigated the environmental disclosure practices of oil and gas companies operating in Libya with the objectives of identifying the current state of the disclosure practice, its determinants and the influence of company characteristics on the disclosure. Content analysis of annual reports and accounts was conducted to collect data for the study and in addition questionnaires were administered and interviews conducted to achieve the aims of the study. However, the study is not guided by any theoretical framework. Results of the study indicated that almost all companies provide some environmental information, which are mostly positive and neutral than negative information. Similarly, significant positive association was found between levels of environmental disclosure and corporate size. Studies on the influence of corporate characteristics on social and environmental disclosure are also conducted on Nigerian oil and gas industry.

Mohammed (2016) comparatively examined the social and environmental disclosure practices of listed Nigerian and UK oil and gas companies 2004 to 2013 with the objectives of determining the nature, quality and quantity, trends of the disclosure, and explore the effects of corporate characteristics on the disclosures. Data for the study was collected from the annual reports and accounts of sampled companies by means of word counts content analysis. Vulnerability and exploitability analytical framework and legitimacy theory are employed to underpin the study. Descriptive statistical tools and Panel Corrected Standard Errors (PCSE’s) regression analyses are utilized to analyse collected data. Results from the study indicated that Nigerian companies are making disclosure on fewer social and environmental aspects than UK companies. Similarly, the quantity and quality of disclosure by Nigerian companies are low compared to UK companies, while corporate size is found statistically positive and significant on quantity and quality of social disclosure by listed Nigerian and UK oil and gas companies. Dibia and Onwuchekwa (2015) empirically analysed the determinants of environmental disclosures of oil and gas companies listed in the Nigerian Stock Exchange (NSE) with the objective of determining the effect of Firm size, Profitability, Leverage and Audit firm type on environmental disclosures. The study covered the period 2008 to 2013 while data for the study was
collected from secondary source in form of annual reports and accounts of sampled companies. Stakeholder theoretical framework was utilized as a guide to understanding the disclosure practices of sampled companies while collected data was analysed by means of Binary regression technique. Findings from the study show significant relationship between company size and corporate social responsibility disclosures while no significant relationships are found between corporate profitability, leverage and audit type and social responsibility disclosures. The study concludes that sampled companies are hiding under the cover of voluntary stance of environmental reporting to under report their effect on the environment. This may perhaps be responsible for the apparent negligence of several corporate entities on corporate social and environmental reporting. However, there are studies that found corporate size as negatively related with social and environmental disclosure (Samaha and Dahaway 2011, Prado-Lorenzo, et al., 2008).

This study differs from Abdull Razak, Al Hujaili and Al Ahmedi (2019); Aldrugi (2013); Mohammed (2016); Dibia and Onwuchekwa (2015) on its aim, time period of the study and theoretical frameworks underpinning the studies. It also differs with Dibia and Onwuchekwa (2015) on its method of analysis. Therefore, results from this study may reveal new findings or confirm existing ones on the effect of corporate size on social and environmental disclosure practices of oil and gas companies especially from emerging and developing economies. However, the study is situated within the context of the study conducted by Abdull Razak, Al Hujaili and Al Ahmedi (2019) on its adoption of descriptive statistics to analyse the effect of corporate size on social and environmental disclosure. Therefore, the aim of this study is to descriptively evaluate the effect of corporate size on the social and environmental disclosure practices of sampled listed Nigerian oil and gas companies 2004 to 2018. The evaluation takes the form of determining volume of social and environmental disclosure by sampled companies by means of word counts content analysis using sales volume as proxy for size. Content analysis assumes that volume of disclosures signifies the importance of the disclosed topic to reporting entity (Krippendorf, 1980). This introduction is section I of the study, method of conducting the study is section II, results obtained from the study are presented as section III while discussions on obtained results constitute section IV; subsequent section is method of the study.

Method:-
To conduct empirical investigations, there is need for data to be collected and analysed appropriately which will in turn lead to obtaining findings from the study, this is referred to as method of conducting research (Collis and Hussey 2014). However, investigating the social world may be impacted by researchers’ perceptions and attitudes; thus, it is important to identify and link what is being investigated with philosophical assumptions that will underpin the study. These assumptions are ontological, epistemological and methodological (Collis and Hussey 2014). Ontology is about the nature of reality whether it could be regarded as objective; therefore, it is something external to the researcher or reality emanates from within the individual; hence, subjective (Burrell and Morgan 1979). Epistemology deals with what constitute valid (Collis and Hussey 2014) or acceptable knowledge in a particular field (Bryman and Bell 2007). Methodology of research is about whether on one hand only observable and measurable phenomena constitute acceptable or valid knowledge; thus, following positivism methodological approach or the belief that the process of carrying an investigation should involve the participation of the researcher in what is being researched; thus, following interpretivism methodological approach (Collis and Hussey 2014). Ontologically, this study assumes that the social and environmental disclosure practices of sampled listed Nigerian oil and gas companies in their annual reports and accounts represent an objective reality. Epistemologically, the study assumes that the social and environmental disclosure practices of sampled companies in their annual reports and accounts as medium of medium of discharging corporate accountability Zeghal and Ahmed 1990, Gray, Kouhy and Lavers 1995b) constitutes valid knowledge. Content analysis employed in the study to collect quantitative data is a method that is consistent with positivism research methodology. Consequently, the real meaning of collecting the data in this study is to test chosen theory underpinning the study (Collis and Hussey 2014). Therefore, the task is to find out possible explanations or theoretical arguments that explain the social and environmental disclosure practices of sampled listed Nigerian oil and gas companies (Collis and Hussey 2014, Blaie 2007). Content analysis employed in this study is “a method by which selected items of qualitative data are systematically converted to numerical data for analysis” (Collis and Hussey 2014, p. 166). This method of data collection assumes that volume of disclosure indicates the significance of the disclosed topic to the reporting organisation (Krippendorff 1980). There are various methods of conducting content analysis which could be counting number of words (Mohammed et al 2020c, Wasara and Ganda 2019, Lee 2015, Zeghal and Ahmed 1990); counting number of sentences (Jessop et al 2019, Hackston and Milne 1996); taking average lines (Belal and Lubinin 2009) or taking proportion of pages (Lungu, Caraiani and Dascâlu 2011a). While a researcher is free to choose from these (Williams 1999), word count content analysis is projected as capable of providing maximum robustness when assessing quantity of disclosure.
(Wilmshurst and Frost 2000), even though the method is criticized for lacking meaning to provide sound basis of coding (Hassan 2012). This study adopts modified words count content analysis (Mohammed et al 2020b, Mohammed 2018, Mohammed 2016) in which only words in sentences or phrases conveying meaningful social or environmental information are counted, rather than individual social or environmental words that have no meaning. This method has taken the advantage of word count content analysis postulated by (Wilmshurst and Frost 2000) while overcoming the criticism raised by Hassan (2012).

Data and its Collection:
The aim of this research is to descriptively evaluate the effect of corporate size measured by sales volume on social and environmental disclosure practices of listed Nigerian oil and gas companies. To achieve this, data must be collected from either primary or secondary sources (Collis and Hussey 2014, Creswell 2013, Morgan and Smircich 1980) which depend on the what the researcher consider most suitable to achieve the aim of the investigation (Collis and Hussey 2014, Spencer et al. 2003). This study collected secondary data from the annual reports and accounts of sampled companies online for the period covering 2004 to 2018. Therefore, it is a longitudinal study that reveals trends of the disclosure over the study period (Mohammed 2016, Caruana et al 2015, Zainal, Zulkifli and Saleh 2013). However, collected annual reports and accounts are in PDF format; therefore, the reports were converted to words documents using ABBYY PDF transformer. To assist in determining the social and environmental disclosure, GRI disclosure guideline is used as benchmark while modified words count analysis is conducted by reading all the reports and identifying disclosures as specified in the GRIs. These are then recorded against the relevant Performance Indicator (PI) of the GRI and then sum up at the end of reading annual report and account of a particular year. In this way, all collected annual reports and accounts for the period 2004 to 2018 for all sampled companies are read and data collected. However, there different versions of GRI guidelines with the first version issued in 1999 referred to as G1; this is followed by the second version issued in 2002 (G2); the third was issued in 2006 (G3); the fourth version issued in 2011 (G3.1) while the fifth version was issued in 2016 (G4). Therefore, the period covered by this study 2004 to 2018 is covered by the regimes of G2, G3, G3.1 and G4 while effective 2018, GRI standards supersede these versions. Thus, while G2 is the first employed version, the study adopted all modification in subsequent guidelines.

Population and sample of the study:
There are total of twelve (12) listed oil and gas companies on the Nigerian Stock Exchange (NSE) from 1st January 2004 to 31st December 2018; these constitute the population of the study (Banerjee and Chaudhury 2010). However, one of the companies has online annual reports and accounts only from 2012 to 2018; another company has no online annual reports and accounts from 2004 to 2009; another company has no online annual reports and accounts from 2004 to 2013; while another company was listed in April 2014. Therefore, there are no adequate annual reports and accounts for all these four companies 2004 to 2018; thus, do not possess all the needed requirements to achieve the aim of this research. Removing these four companies from the population leaves total of eight (8) companies that have met all the requirements of conducting this study; hence, they constitute the sample of the study (Asiamah et al 2017). Table I indicate population and sample of the study, 1s indicating availability and 0 signifying non-availability of annual reports and accounts 2004 to 20158.

Table I: Inclusion and Exclusion Criteria of Sampled Listed Nigerian Oil and Gas Companies.

| S/n | Name of Company                    | Annual Report and Accounts Available for: | Remarks |
|-----|-----------------------------------|------------------------------------------|---------|
|     |                                   | 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 |         |
| 1   | Amino International Plc           | 0  0  0  0  0  0  0  0  1  1  1  1  1  1  1 | Not     |
| 2   | Ardova                           | 1  1  1  1  1  1  1  1  1  1  1  1  1  1  1 | Sample  |
| 3   | Capital Oil                      | 0  0  0  0  0  0  0  1  1  1  1  1  1  1  1 | Not     |
| 4   | Conoil                           | 1  1  1  1  1  1  1  1  1  1  1  1  1  1  1 | Sample  |
| 5   | Eterna Plc                       | 1  1  1  1  1  1  1  1  1  1  1  1  1  1  1 | Sample  |
| 6   | Japaul Oil & Mar. Serv.           | 1  1  1  1  1  1  1  1  1  1  1  1  1  1  1 | Sample  |
| 7   | Mobil - 11 Plc                   | 1  1  1  1  1  1  1  1  1  1  1  1  1  1  1 | Sample  |
| 8   | MRS Oil Nig Plc                  | 1  1  1  1  1  1  1  1  1  1  1  1  1  1  1 | Sample  |
| 9   | Oando Plc                        | 1  1  1  1  1  1  1  1  1  1  1  1  1  1  1 | Sample  |
Thus, within the context of legitimacy theory it is the society (Suchman, 1995). A particular feature of legitimacy theory is the assumption of the existence of a social contract between an organisation and society (Deegan, 2007a, 2006; Branco and Rodrigues, 2006; Magness, 2006; Campbell, 2003; Donaldson, 1982). Thus, within the context of legitimacy theory it is the society that allows corporate organisations to continue their operations on compliance with the expectations of the society (Deegan, 2007a). Where an organisation is perceived as failing in its social contract, a legitimacy gap is said to arise (Branco and Rodrigues, 2006) with the possible consequences of the society imposing sanctions by restricting its operations, limiting its access to resources and boycotting the products or services of such an organisation (Deegan and Rankin, 1996). Similarly, dynamisms of societal expectations also create legitimacy gap (Deegan and Blomquist, 2006; Cormier and Gordon, 2001). One medium of narrowing legitimacy gaps between corporate organisations and the society is through social disclosure (Campbell, Craven and Shrives, 2003). Indeed, Lindblom (1994) suggested that corporate organisations should change the perceptions of relevant publics by means of social disclosures through four methods. The disclosures could be one; to educate corporate “relevant publics” about changes in activities or performance, two; change the perceptions of the relevant publics, three, contrive the perception of the relevant publics, four; change the perceptions of their performance by the relevant publics. Therefore, corporate organisations facing public or political pressure and scrutinise are most likely to use social disclosure as a legitimacy tool. Previous studies have found corporate organisations making social and environmental disclosure to gain legitimacy with the relevant publics (Mohammed et al 2020a, Kuruppu., Milne. and Tilt 2019, Ratmono and Juliarto 2019, Zyznarska-Dworczak 2018, Bani-Khalid and Ahmed 2017, Mohammed 2016, Lu and Abeyesekera, 2014, Hrasky, 2012, Tilling and Tilt, 2010, Cho and Patten, 2007, Craven and Shrives, 2003). From the perspective of legitimacy, large-sized companies proxied by sales volume in this study will make more social and environmental disclosure due to more public and political pressure and scrutinies on them; subsequent section presents results of the study.

Results:-
This section is devoted to presenting results obtained from collected and analysed data in this study which aims to descriptively evaluate the effect of corporate size measured by sales volume on the social and environmental disclosure practices of sampled Nigerian listed oil and gas companies. Thus, Table II is the total sales volume of sampled companies 2004 to 2018 which forms the basis of subsequent results.

Table II:- Total Sales Volume of Sampled Listed Nigerian Oil and Gas Companies 2004 to 2018.

| S/N | Companies                  | Total Sales Volume in Trillions of Naira (₦) | Total Sales Volume in United States’ Dollars (US$)** | Ranking |
|-----|----------------------------|---------------------------------------------|-----------------------------------------------------|---------|
| 1   | Company 1                  | 1,109,459,968,700.00                        | 3,077,558,859.08                                     | 5       |
| 2   | Company 2                  | 274,487,882,150.00                          | 761,408,827.05                                       | 7       |
| 3   | Company 3                  | 1,076,204,186,581.00                        | 2,985,309,810.21                                     | 6       |
| 4   | Company 4                  | 80,714,737,005.00                            | 223,896,635.24                                       | 8       |
| 5   | Company 5                  | 1,134,353,709,000.00                        | 3,146,612,230.24                                     | 4       |
| 6   | Company 6                  | 1,155,116,553,000.00                        | 3,204,206,804.44                                     | 3       |
| 7   | Company 7                  | 5,666,594,542,000.00                        | 15,718,708,854.37                                    | 1       |
| 8   | Company 8                  | 2,434,163,874,000.00                        | 6,752,188,277.39                                     | 2       |

**Conversion to US dollar is based on Central Bank of Nigeria Average Exchange Rate of N360.50 to 1S as at 22/07/2020.

From Table II, the largest company among the sample in terms of sales volume over the period of the study is Company 7 (C7). The second largest is Company 8 (C8), the third largest is Company 6 (C6), the fourth largest is...
Company 5 (C5), the fifth largest is Company 1 (C1), the sixth largest is Company 3 (C3), the seventh largest is Company 2 (C2) while the eighth and smallest is Company 4 (C4). Figure I compare the total sales volume of the companies and total social and environmental disclosure 2004 to 2018.

**Figure I:** Total Sales Volume by Sampled Companies Compared with Total Social and Environmental Disclosure 2004-2018.

From Figure I, the first largest company with sales volume of ₦5.67trillion or $15.72billion sales volume 2004 to 2018 is having the highest volume of social and environmental disclosure words of 56,645 words. However, the sixth largest company with sales volume of ₦1.08trillion or $2.98billion has the second largest volume of social and environmental disclosure words of 24,834 words. The Third largest company with sales volume of ₦1.15trillion or $3.20billion disclosed 24,006 words to be the third largest company in terms of volume of social and environmental disclosure. The second largest company with sales volume of ₦2.4trillion equivalent to $6.75billion has the fourth largest volume of social and environmental disclosure of 23,837 words. Conversely, the fifth largest company with sales volume of ₦1.10trillion equivalent to $3.07billion disclosed 17,458 words to be the fifth largest company on social and environmental disclosure. The fourth largest company with sales volume of ₦1.13trillion or $1.15billion has the sixth largest volume of social and environmental disclosure of 15,339 words. The seventh largest company with sales volume of ₦0.274trillion or $761million disclosed 12,952 words to have the seventh largest social and environmental disclosure. Similarly, the eighth largest company with sales volume of ₦0.80trillion or $223million disclosed 8,317 words as the eighth largest company on volume of social and environmental disclosure. Table III presents results in Figure I for better understanding.

**Table III:** Total Sales Volume and Total SED and Rankings.

| S/N | Companies | Total Sales Volume in Trillions of Naira (₦) | Total Sales Volume in Billions of United States’ Dollars (US$)** | Ranking Based on Sales Volume | Total SED Words | Ranking Based on SED |
|-----|-----------|---------------------------------------------|---------------------------------------------------------------|-----------------------------|----------------|------------------|
| 1   | C1        | 1.10                                        | 3.07                                                         | 5                           | 17,458         | 5                |
| 2   | C2        | 0.27                                        | 0.76                                                         | 7                           | 12,952         | 7                |
| 3   | C3        | 1.07                                        | 2.98                                                         | 6                           | 24,834         | 2                |
| 4   | C4        | 0.80                                        | .0223                                                        | 8                           | 8,317          | 8                |
| 5   | C5        | 1.13                                        | 3.14                                                         | 4                           | 15,339         | 6                |
| 6   | C6        | 1.15                                        | 3.20                                                         | 3                           | 24,006         | 3                |
Having presented the results of this study, the next section is discussions of obtained results within the context of theory, practice and reviewed literature to assist in achieving the aim of the study.

**Discussions:-**

In this section obtained results are thoroughly looked into within the light of reviewed literature, theory and practice to assist in explaining possible new findings or confirming existing knowledge about corporate social and environmental disclosure in the Nigerian oil and gas industry, the country and globally. From overall results, the first three largest companies in the sample account for $9.25\text{trillion} ($25.67\text{billion}) or 71.58% of the $12.93\text{trillion} ($35.87\text{billion}) of sales volume over the period of the study. These three largest companies disclosed 104,488 words or 56.98% of total social and environmental disclosure words of 183,388 words over the period of the study. The remaining four companies in the sample which could be termed as medium and small compared to the three largest have total sales volume of $3.68\text{trillion} ($10.19\text{billion}) or 28.42% of the total sales volume over the period of the study. The entire four companies disclosed total of 78,900 social and environmental words representing 43.02% of total disclosure. This result indicates that corporate size measured by sales volume in this study determines the social and environmental disclosure practices of sampled companies. The result is consistent with previous studies that statistically found positive relationship between corporate size and social and environmental disclosure (Abdull Razak, Al Hujaili and Al Ahmedi 2019, Mohammed 2016, Dibia and Onwuchekwa 2015, Aldrugi 2013).

Conversely obtained result revealing corporate size as determinant of social and environmental disclosure by listed Nigerian oil and gas companies is inconsistent with (Abdull Razak, Al Hujaili and Al Ahmedi 2019, Prado-Lorenzo, et al., 2008, Tom 2002). Within the light of practice, finding in this study revealing largest companies making more social and environmental disclosure is consistent with the argument that larger companies are more visible; thus, faces more public and political pressure and scrutinise (Adriana and Dewi 2019, Elshabasy 2018, Mohammed 2016, Mackinnon and Dalimunthe, 1993, Brammer and Pavelin, 2008, Ayadi, 2004). One way of maintaining corporate legitimacy with legitimacy conferring stakeholders is for large companies to make more social and environmental disclosure (Lindblom 1994) as obtained in this study. Sales volume as a measure of corporate size in this study is indicating large volume of customers who are buying goods or services from sampled companies. Having large volume of customers is an indication of visibility; thus, sampled companies in this study perhaps resort to provision of large volume of social and environmental disclosure to continue gaining or maintaining legitimacy of operations (Lindblom 1994, Deegan and Rankin, 1996). Therefore, legitimacy theory better explained the social and environmental disclosure of sampled listed Nigerian oil and gas companies in this study. Future studies may expand the time period covered in this study, employ the use of other methods of data collection and analysis and different theoretical framework which may reveal results different from what is obtained in this study.

**References:-**

1. Abdull Razak, R., Al Hujaili, R., and Al Ahmedi, R. (2019): Environmental Disclosure Practices of Saudi Companies According To The New Gri Standards, 5th Asia Pacific Institute of Contemporary Research, Asia Pacific Institute of Advanced Research (APIAR).
2. Adriana, J. and Dewi, N.H.U. (2019): The Effect of Environmental Performance, Firm Size, and Profitability on Environmental Disclosure. The Indonesian Accounting Review, 8(1): 1 – 11.
3. Akoroda, M. (2000): Remediation response in the Niger-Delta. In: The Anniversary of Jesse Fire Disaster, Nigeria Institute of International Affairs, Lagos, 20, August 2000. Nigeria: Nigeria Institute of International Affairs, Lagos.
4. Akparhuere, G.O. (2019): Environment Reporting in Annual Reports: A Comparative Analysis of Reporting Practices of Listed Firms in Nigeria, Archives of Business Research. 7(2): 183-206.
5. Aldrugi, A.M. (2013): Environmental Disclosure in the Libyan Oil and Gas Sector, PhD Thesis, Nottingham Trent University, UK. Online, available from http://irep.ntu.ac.uk/id/eprint/206/1/ 214551_ Ali%20Aldrugi %202013.pdf [Accessed 21 July 2020].
6. Alkababji, M. W. (2014): Voluntary disclosure on corporate social responsibility: a study on the annual reports of Palestinian Corporations. European Journal of Accounting Auditing and Finance Research. 2(4): 59-82.
7. Allen, F. (2012): The Enemy Within: Oil in the Niger Delta. World Policy Journal. 29(4): 46-53.
8. Asiamah, N., Mensah, H.K., and Oteng-Abayie, E.F. (2017): General, Target, and Accessible Population: Demystifying the Concepts for Effective Sampling. The Qualitative Report, 22(6): 1607-1622.
9. Ayadi, S.D. (2004): Determinants of the corporate decision to disclose stakeholders' reports in France. In: 27th Annual Congress of the European Accounting Association 2004. Prague: Czech Republic.
10. Azapagic, A. (2003): Systems Approach to corporate sustainability: A general management framework. Process, Safety and Environmental protection. Transactions of the Institution of Chemical Engineers. 81(5): 303-316.
11. Balarabe M, Abdullah K, Nawawi M, Khalil AE (2016): Monthly Temporal-Spatial Variability and Estimation of Absorbing Aerosol Index using Ground-Based Meteorological Data in Nigeria. Atmospheric and Climate Sciences. 6(6):425-444.
12. Banerjee, A. and Chaudhuy, S. (2010): Statistics without tears: Populations and samples. Industrial Psychiatry Journal, 19(1): 60-65.
13. Bani-Khalid, T.O. and Ahmed, A.H. (2017): Corporate Social Responsibility (CSR): A Conceptual and Theoretical Shift. International Journal of Academic Research in Accounting, Finance and Management Sciences, 7(1): 203-2012.
14. Belal, A. and Lubinim, V. (2009): Russia: Corporate social disclosures. In: S. O. Idowu and W. L. Filho. eds. Global practices of corporate social responsibility. Germany: Springer- Verlag Berlin Heidelberg. 165-179.
15. Belal, A. R., Cooper, S. M. and Roberts, R. W. (2013): Vulnerable and exploitable: The need for organizational accountability and transparency in emerging and less developed economies. Accounting Forum. 37(2): 81-91.
16. Benedict, A. O. (2011): Tragedy of Commons: Analysis of Oil Spillage, Gas Flaring and Sustainable Development of the Niger Delta of Nigeria. Journal of Sustainable Development. 4(2): 200-210.
17. Bhatia, A. and Makkar, B. (2019): CSR disclosure in developing and developed countries: a comparative study. Journal of Global Responsibility. 11(1): 1-26.
18. Blaikie, N. (2007): Approaches to social enquiry: Advancing knowledge. (2 ed. ed. India: Replica Press Pvt Ltd).
19. BP (2019): BP Statistical Review of World Energy, Online from https://www.bp.com/content/dam/bp/businesssites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2019-full-report.pdf. [Accessed 8 October 2019].
20. Brammer, S. and Pavelin, S. (2008): Factors influencing the quality of corporate environmental disclosure. Business Strategy and the Environment, 17(2): 120-136.
21. Branco, M. C. and Rodrigues, L. L. (2006): Communication of corporate social responsibility by Portuguese banks: A legitimacy theory perspective. Corporate Communications: An International Journal, 11(3): 232-248.
22. Bryman, A. and Bell, E. (2007): Business research methods. (3rd ed. New York: Oxford University Press).
23. Burrell, G. and Morgan, G. (1979): Sociological paradigms and organizational analysis. USA: Ashgate publishing company.
24. Campbell, D. (2003): Intra- and inter sectoral effects in environmental disclosures: Evidence for Legitimacy Theory? Business Strategy and the Environment, 12(6): 357-371.
25. Campbell, D., Craven, B. and Shrives, P. (2003): Voluntary social reporting in three FTSE sectors: A comment on perception and legitimacy. Accounting, Auditing & Accountability Journal, 16(4): 558-581.
26. Caruana, E.J., Roman, M., Hernández-Sánchez, S. and Solli, P. (2015): Longitudinal studies, Journal of Thoracic Disease, 7(11): E537-E540.
27. Central Bank of Nigeria (2019e): Statistical Bulletins, Public finances. Online, available from https://www.cbn.gov.ng/documents/StatBulletin.asp [Accessed 30 March 2020].
28. Chen, H. and Wang, X. (2011): Corporate social responsibility and corporate financial performance in China: an empirical research from Chinese firms. Corporate Governance. 11(4): pp.361-370.
29. Cho, C.H. and Patten, D. (2007): The Role of Environmental Disclosure as Tools of Legitimacy: A Research Note. Accounting Organisation and Society, 32(7): 639-647.
30. Collis, J. and Hussey, R. (2014): Business research: A practical guide for undergraduate & postgraduate students. (4th ed. UK: Basingstoke: Palgrave Macmillan).
31. Cormier D., Gordon I.M. (2001): An Examination of Social and Environmental Reporting Strategies. Accounting, Auditing and Accountability Journal, 14(5): 587-616.
32. Creswell, J. W. (2013): Qualitative inquiry and research design: Choosing among five approaches. (3rd ed. London: Thousand Oaks).
33. Deegan, C. and Blomquist, C. (2006): Stakeholder Influence on Corporate Reporting: An Exploration of the Interaction between WWF-Australia and the Australian Minerals Industry. Accounting Organisation and Society, 31(4-5): 343-372.
34. Deegan, C. and Goordon, B. (1996): A Study of the Environmental Disclosure Practices of Australian Corporations. Accounting and Business Research. 26(3): 187-199.
35. Deegan, C. and Rankin, M. (1996): Do Australian Companies Report Environmental News Objectively? An Analysis of Environmental Disclosures by Firms Prosecuted Successfully by the Environmental Protection Authority. Accounting, Auditing & Accountability Journal. 9(2): pp.50-67.
36. Deegan, C. and Unerman, J. (2006): Financial accounting theory. UK: McGraw-Hill.
37. Deegan, C. M. (2007): Financial accounting theory. (2nd ed ed. Australia: McGraw-Hill).
38. Deegan, C., Rankin, M. and Voght, P. (2000): Firms disclosure reactions to major social incidents: Australian evidence. Accounting Forum. 24(1): 101-130.
39. Dibia, N.O. and Onwuchekwa, J.C. (2015): Determinants of Environmental Disclosures in Nigeria: A Case Study of Oil and Gas Companies, International Journal of Finance and Accounting. 4(3): 145-152.
40. Dobers, P. and Halme, M. (2009b): Editorial Corporate Social Responsibility and Developing Countries. Corporate Social Responsibility and Environmental Management. 16(1): 237-249.
41. Donaldson, T. (1982): Corporations and morality. UK: Prentice Hall.
42. Dowling, J. and Pfeffer, J. (1975): Organizational legitimacy: social values and organizational behaviour. Pacific Sociological Review. 18(1): 122-136.
43. Ebegbulem, J. C., Ekpe, D. and Adejumo, T. O. (2013): Oil Exploration and Poverty in the Niger Delta Region of Nigeria: A Critical Analysis. International Journal of Business and Social Science. 4(3): 279-287.
44. Elkington, J. (1993): Coming Clean: The Rise and Rise of the Corporate Environmental Report. Business Strategy and the Environment. 2(2): 42-44.
45. Elshabasy, Y.N. (2018): The impact of corporate characteristics on environmental information disclosure: an empirical study on the listed firms in Egypt. Journal of Business and Retail Management Research, 12(2J): 232-241.
46. Falola, T. O. and Heaton, M. M. (2008): A history of Nigeria. 1 ed. United Kingdom: Cambridge University Press.
47. Gallego, I. (2006): The Use of Economic, Social and Environmental Indicators as a Measure of Sustainable Development in Spain. Corporate Social Responsibility and Environmental Management. 13(1): 78-97.
48. Gray, R. H. and Kouhy, R. (1993): Accounting for the environment and sustainability in lesser developed countries: An exploratory note. Research in Third World Accounting. 2(2): 387-399.
49. Gray, R., Kouhy, R. and Lavers, S. (1995b): Methodological themes Constructing a research database of social and environmental reporting by UK companies. Accounting, Auditing & Accountability Journal, 8(2): 78-101.
50. Hassan, A. and Kouhy, R. (2015): From environmentalism to corporate environmental accountability in the Nigerian petroleum industry: Do green stakeholders matter? International Journal of Energy Sector Management. 9(2): 204-226.
51. Hackston, D. and Milne, M. J. (1996): Some determinants of social and environmental disclosures in New Zealand companies. Accounting, Auditing & Accountability Journal, 9(1): 77-108.
52. Hamil, S. (1999): Corporate Community Involvement: A Case for Regulatory Reform, Business Ethics: A European Review. 8 (1): 14-25.
53. Hanafi, R. A. (2006): An exploration of corporate social and environmental disclosure in Egypt and the UK: A comparative study, PhD. University of Glasgow.
54. Hassan, A. (2012): Corporate Environmental Accountability in the Nigerian Oil and Gas Industry: The Case of Gas Flaring. PhD. Abertay University.
55. Hassan, M. K. (2012): A disclosure index to measure the extent of corporate governance reporting by UAE listed corporations. Journal of Financial Reporting and Accounting. 10(1): 4-33.
56. Hrasky, S. (2012): Carbon footprints and legitimation strategies: symbolism or action? Accounting, Auditing & Accountability Journal, 25(1): 174-198.
57. Husser, J. & Eevaert-Bardinet, F. (2014): The effect of social and environmental disclosure on companies’ market value. Management international. 19(1): 61–84.
58. Jenkins, H. and Yakovleva, N. (2006): Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosures. Journal of Cleaner Production. 14(1): 271-284.
59. Jessop, A., Wilson, N., Bardecki, M. and Searcy, C. (2019): Corporate Environmental Disclosure in India: An Analysis of Multinational and Domestic Agrochemical Corporations. Sustainability, 11(4843): 1-23.
60. Jike, V. T. (2004): Environmental Degradation, Social Disequilibrium, and the Dilemma of Sustainable Development in the Niger-Delta of Nigeria. Journal of Black Studies. 34(5): 686-701.
61. John, W.E., Daniel, C.E. and Angel, H. (2012): Environmental Performance Index and Pilot Trend Environmental Performance Index. USA: University of Yale Centre for Environmental Law and Policy. Online, available from https://epi.yale.edu [Accessed 14 October, 2013].
62. Juhmani, O. (2014): Determinants of Corporate Social and Environmental Disclosure on Websites: The Case of Bahrain. Universal Journal of Accounting and Finance. 2(4): 77-87.
63. Khlif, H., Guidara, A. and Souissi, M. (2015): Corporate social and environmental disclosure and corporate performance, Journal of Accounting in Emerging Economies. 4(1): 51-69.
64. Kotler, P. and Lee, N. (2005): Corporate social responsibility. Doing the most good for your company and your cause. Hoboken: John Wiley & Sons.
65. KPMG (2013): International Survey of Corporate Sustainability Reporting 2013. Online, available from https://assets.kpmg/content/dam/kpmg/pdf/2013/12/corporate-responsibility-reporting-survey-2013.pdf [Accessed 20 January 2020].
66. Krippendorff, K. (1980): Content analysis: An introduction to its methodology. Newbury Park: Sage Publications.
67. Kuruppu, S.C., Milne, M.J. and Tilt, C.A. (2019): Gaining, maintaining and repairing organisational legitimacy: When to report and when not to report. Accounting, Auditing & Accountability Journal, 32(7): 2062-2087.
68. Lee, K. (2015): Does Size Matter? Evaluating Corporate Environmental Disclosure in the Australian Mining and Metal Industry: A Combined Approach of Quantity and Quality Measurement. Business Strategy and the Environment, 26(2): 209-223.
69. Li, S., and Liu, C. (2018): Quality of Corporate Social Responsibility Disclosure and Cost of Equity Capital: Lessons from China, Emerging Markets Finance and Trade, 54(11), 2472-2494.
70. Lindblom, C.K. (1994): The implications of organizational legitimacy for corporate social performance and disclosure. In: Critical Perspectives on Accounting Conference 1994. New York, NY.
71. Lu, Y. and Abeysekera, I. (2014): Social and environmental disclosure by Chinese firms. (1 ed. UK: Routledge).
72. Lungu, C. I., Caraiani, C. and Dascalu, C. (2011a): Research on corporate social responsibility reporting. Corporate Social Responsibility, 13(29):117-131.
73. Mabogunje, A. L. (1968): Urbanization in Nigeria. London: University Press.
74. Mackinnon, J. L. and Dalimunthe, L. (1993): Voluntary disclosure of segment information by Australian diversified companies. Accounting and Finance, 33(1): 33-50.
75. Magness, V. (2006): Strategic posture, financial performance and environmental disclosure: an empirical test of legitimacy theory. Accounting, Auditing & Accountability Journal, 19(4): 540563.
76. Maunder, K. T., Gray, R. H. and Owen, D. L. (1990): Managerial Social Accounting. In Developing Countries: Towards The Operationalization of Social Reporting. Research in Third World Accounting. 1(7): 87-101.
77. McLamb, E. (2011): What is Sustainability? UK: Ecology Global Network.
78. Mohammed, S. D., Aishatu, D. A., Muhammad, M. S., Yusuf, A. G. and Bashir, A. S. (2020c). A Longitudinal Study of the Social and Environmental Accountability Practices of Listed Nigerian Oil and Gas Companies, International Journal of Advanced Research, 8(04), 477-492.
79. Mohammed, S. D., Yusuf A. G., Bashir, A. S., Aishatu D. A., and Muhammad, M. S. (2020a): An Evaluation of Corporate Social And Environmental Accountability By Listed Nigerian Construction And Building Materials Companies, International Journal of Advanced Research, 8(03): 21-35.
80. Mohammed, S.D. (2016): Social and Environmental Disclosures: A Comparative Analysis of Listed Nigerian and UK Oil and Gas Companies, PhD Thesis, University of Abertay, Dundee, United Kingdom.
81. Mohammed, S. D. (2018): Mandatory Social and Environmental Disclosure: A Performance Evaluation of Listed Nigerian Oil and Gas Companies Pre- and Post-Mandatory Disclosure Requirements. Journal of Finance and Accounting, 6(2): 56-68.
82. Mohammed, S.D. (2019): Clean development mechanism and carbon emissions in Nigeria, Sustainability Accounting, Management and Policy Journal. (11)3: 523-551.
83. Mohammed, S.D., Muhammad, M.S., Yusuf, A.G., Bashir, A.S. and Aishatu, D.S. (2020b): A Descriptive Analysis of Nigeria and United State’s Energy Consumption and Economic Growth, American International Journal of Business Management, 3(4): 31-45.
84. Morgan, G. and Smircich, L. (1980): The Case for Qualitative Research. Academy of Management Review, 5(4): 491-500.
85. Mynepalli, R. G. and Bangboye, E. (2009): Environmental risk factors and health outcomes in selected communities in Niger delta area. Nigerian Perspectives in Public Health. 129(4): 183-191.
86. Obasi, S. (2013): Nigeria loses N159trn as IOCs divest. Vanguard. 2 July, 2013. Online, available from https://www.vanguardngr.com/2013/07/nigeria-loses-n159trn-as-iocs-divest/ [Accessed 20 July 2020].
87. Okereke, N. E. and Orjiafor, K. C. (2011): Women in the Environment: The Impact of Oil and Gas Exploration on the Women in the Niger-Delta States of Nigeria since 1960: An Historical Perspective. Journal of Environmental Management and Safety. 2(3): 75-95.

88. Prado-Lorenzo, J. et al. (2009): Factors influencing the disclosure of greenhouse gas emissions in companies worldwide. Management Decision, 47(4): 1133-1157.

89. Prakash, P. and A. Rappaport (1977): Information Inductance and Its Significance for Accounting, Accounting Organizations and Society. 2 (1): 29-38.

90. Rajat, P. et al. (2006): Corporate Responsibility: Balancing Economic, Environmental, and Social Issues in the Forest Industry. Forest Products Journal. 56(2): pp.4-12.

91. Ratmono, D. and Juliarto, A. (2019): Disclosure of Corporate Social Responsibility (CSR) As A Means of Legitimacy: It’s Impact on The Level of Tax Aggressiveness. International Journal of Civil Engineering and Technology, 10(8): 101-111.

92. Salehi, M., Tarighi, H. and Rezanezhad, M. (2019): Empirical study on the effective factors of social responsibility disclosure of Iranian companies. Journal of Asian Business and Economic Studies, 26(1): 34-55.

93. Samaha, K. and Dahaway, K. (2011): An empirical analysis of corporate governance structure and voluntary disclosure in volatile capital market: The Egyptian Experiences. International Journal of Accounting and Performance Evaluation, 7(1): 61–93.

94. Shearer, T. (2002): Ethics and accountability: from the for-itself to the for-the-other, Accounting, Organizations and Society. 27(6): 541-73.

95. Shosanya, M. (2013): Divestment of international oil companies' assets unsettles stakeholders. Daily Trust, 7 April, 2013. Online, available from https://allafrica.com/stories/201304070186.html [Accessed 20 July 2020].

96. Spencer, L. et al. 2003. Quality in qualitative evaluation: A framework for assessing research evidence. Available at: Http://www.Policyhub.gov.Uk[Accessed on 21 February 2014].

97. Suchman, M. C. (1995): Managing Legitimacy: Strategic and Institutional Approaches. Academy of Management Review, 20(3): 571-610.

98. Tilling, M. V. and Tilt, C. A. (2010): The edge of legitimacy Voluntary social and environmental reporting in Rothmans' 1956-1999 annual reports. Accounting, Auditing & Accountability Journal, 23(1): 55-81.

99. Tsang, E. W. (1998): A longitudinal study of corporate social reporting in Singapore: The case of the banking, food and beverages and hotel industries. Accounting Auditing & Accountability. 11(5): 624-635.

100. United Nations. (1987): Report of the World Commission on Environment and Development. A/42/427. New York: United Nations Commission on Environment and Development.

101. United Nations World Population Prospect (2017). World Population Prospects. Online, available from https://population.un.org/wpp/Publications/Files/WPP2017_DataBooklet.pdf [Accessed 12 May 2020].

102. Wasara, T.M., and Ganda, F. (2019): The Relationship between Corporate Sustainability Disclosure and Firm Financial Performance in Johannesburg Stock Exchange (JSE) Listed Mining Companies. Sustainability, 11(16): 1-23.

103. Welbeck, E.E., Owusu, G.M.Y., Bekoe, R.A. and Kusi, J.A. (2017): Determinants of environmental disclosures of listed firms in Ghana. International Journal of Corporate Social Responsibility, 2(11), 1-12.

104. Williams, S. M. (1999): Voluntary environmental and social accounting disclosure practices in the Asia-pacific region: an international empirical test of political economy theory. The International Journal of Accounting, 34(2): 209-238.

105. Wilmsmurst, T. and Frost, G. (2000): Corporate environmental reporting - a test of legitimacy theory. Accounting, Auditing and Accountability Journal, 13(1): 10-26.

106. World Bank (2019a): Population, total Nigeria. Online, available from https://data.worldbank.org/indicator/SP.POP.TOTL?locations=NG [Accessed 12th May 2020].

107. World Bank (2019b): Global Gas Flaring Reduction Partnership. Online, available from http://pubdocs.worldbank.org/en/887251581002821897/Revised-2014-2018-flare-volumes-estimates.pdf [Accessed 20 July 2020].

108. Zainal, D., Zulkifli, N. and Saleh, Z. (2013): A longitudinal analysis of corporate social responsibility reporting (CSRR) in Malaysia public listed firms: pre- and post-mandatory CSRR requirement. International Journal of Advanced Research in Management and Social Sciences, 2(1): 245-262.

109. Zeghal, D. and Ahmed, S. A. (1990): Comparison of Social Responsibility Information Disclosure Media Used by Canadian Firms. Accounting, Auditing & Accountability Journal, 3(1): 38-53.

110. Żywnarska-Dwórczak, B. (2018): Legitimacy Theory in Management Accounting Research. Problemy ZarzEdzania, 16(1): 196-203.