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FIRM ATTRIBUTES AND CORPORATE VOLUNTARY INFORMATION DISCLOSURE OF LISTED INDUSTRIAL GOODS FIRMS IN NIGERIA

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Abstract

This study examines the impact of firm attributes on corporate disclosure by listed industrial goods firms in Nigeria over the period of 10 years (2010-2019). The study used census sampling technique to arrive at sample size of ten (15) industrial goods firms listed the floor of Nigerian Stock Exchange as at 31st December 2019. Secondary data extracted from annual reports and accounts of the sampled firms and was analyzed using multiple regression. The regression result shows that firm size, profitability, leverage, age and auditor type has a positive and significant impact on corporate information disclosure of the sampled firms, while liquidity and asset in place has positive and insignificant impact on corporate information disclosure. Based on the findings it is concluded that larger firms, profitable firms, more levered firm, older firm and company audited by big audit firms disclosed more information in their annual report and accounts. Therefore, the study recommends among other that the regulatory authorities should encourage companies to disclose more information beyond the mandatory requirement.

Key words: Asset in place, Auditor type, Corporate, Disclosure, Industrial, Goods, Firms, and Nigeria.

1. Introduction

Dramatic changes in the business environment, resulting from globalization and frequent business scandals and financial crises, have led stakeholders, such as shareholders, investors, policy makers, governments and researchers, to pay more attention to corporate voluntary information disclosure. The 2008 global financial crisis (GFC), proved to be a pivotal point that brought corporate disclosure back to the forefront of research and business discussion. The GFC highlighted the importance of corporate voluntary information disclosure and business honesty in avoiding further economic instability and widespread damage (Bose et al. 2018). To date, corporate voluntary information disclosure has become an important focus of research, as it is seen as an important tool to increase corporate transparency (Alhazmi 2017).

There have always been many ways for a company to disclose information. One of the most important, and required, methods that listed companies use to disclose and communicate with their stakeholders is the annual report (Chau & Gray 2010). Listed companies disclose financial and non-financial information in annual reports both mandatorily and voluntarily. Mandatory disclosure primarily focuses on presentation of financial statements and their complementary footnotes which are required by regulations and laws whereas voluntary disclosure allows the management to report information above minimum disclosure requirements (Uyar & Kiliç, 2012). Corporate voluntary information disclosure can be seen as a response to several factors, such as changes in the capital market, changes in business environment and globalization (Healy & Palepu, 2001), which demands greater accountability from firm's management.

Corporate voluntary information disclosure practices differ between countries and companies. This might be due to differences in institutional mechanisms, such as regulations, culture and corporate features, such as the size of a company and the sector in which it operates (Ling & Sultana 2015). Therefore, investigating the impact of firm attributes on corporate voluntary information disclosure must not be treated as a homogeneous study and must be carry out in each country independently. Corporate voluntary information disclosure involves many economic, political and cultural factors, which make it difficult to generalize results across different countries. Although several studies have been carried out on the effect of firm characteristics on corporate voluntary information disclosure particularly in developed nations and few in developing countries like Nigeria for examples, (Albitar, 2015; Tijjani & Garko, 2015; Filsaraei & Azarberahman, 2016; Monday & Nancy, 2016; Kolsi, 2017; Modugu, 2017; Sulaiman, Aruwa & Khadijah 2018; Nurudeen, Ahnda & Shalli 2018; Ahmed 2020; Innocent, Uchenna & Ukamaka 2020; Bicer & Milad 2020; Modugu 2020). Based on literature review, there is a scanty of studies in emerging countries and various avenues of corporate voluntary information disclosure that need to be explored more in detail.

However, studies conducted in Nigeria are usually associated with one limitation or the other, either in relations to the total number of items used in the voluntary accounting information disclosure checklists, the independent variable, the measurements of the dependent variable and explanatory variable, methodology used and the period covered by previous studies. Moreover, none of them was conducted in the listed industrial goods sectors, which is the sector to be covered by this study. For example, Madugu and Eboigbe (2017) investigated the impact of firm attributes on voluntary disclosure of listed companies in Nigeria. Their study covers a period of three (3) years (2012-2014). The study used firm size and leverage as determinant of corporate voluntary information disclosure and adopted disclosure index of 39 items. Modugu (2017) investigated the influence of company performance on voluntary disclosure of listed firms in Nigeria. The study covered only 3 years (2012-2014). The study used profitability and liquidity as determinant of corporate voluntary disclosure and adopted 31 checklist items. Another recent study by Innocent, et. al (2020) opined the influence of company attributes on corporate social responsibility disclosure of listed consumer goods companies for the period 2017. The study used firm size, performance and financial leverage as independent variable and adopted checklist of 45 items. In same vein Nurudeen, Ahnda and Shalli (2018) studied the influence of firms attributes on voluntary disclosure of listed financial service companies in Nigeria. The study adopted 25 checklists items. The study covered a period 4 year (2014 -2017). This study differs from previous studies in terms of variables examined and period of the study. This study used

more variables in order to have far reaching, this include (firm size, profitability, liquidity, leverage, age, audit type and asset in place). None of previous studies used this variable (asset in place). Additionally, the literature reviewed showed that some of the previous studies on corporate voluntary information disclosure in Nigeria used a period less than 5 years. Hence, their finding is limited to only that periods. Therefore, this study will cover a period of ten years 2010-2019 in which the findings covers longer trend.

The growth and performance of the Nigerian industrial goods sector is found to be in great need of reforms and improvement because the share of industrial goods sector in the country's GDP is just at 5% which is very low (Abubakar&Isa 2020). For this happen though, the government of Nigeria comes up with support policies that will encourage and promote the sector through Public Private Partnership (PPP) (Alli 2008). The performance of the Nigerian industrial goods sector over the last four decades shows that there are some vital problems that acted, and are still acting, as barriers to the growth and development of the sector. These include high production costs caused by energy, high interest and exchange rates, influx of inferior and substandard products from other nations, unpredictable government policies, non-implementation of existing policies, ineffective regulatory agencies, infrastructural inadequacies, dumping of cheap products, poor energy supply and energy price, used of old technology, poor research and development activities, lack of skilled workforce, unfair tariff regime, and low patronage, and these affected the capacity utilization in the sector to remains lower than 35% (Ayanwale 2007).

Despite the importance of industrial goodsfirms sector to the growth of the Nigerian economy, there is very little studyto examine the impact of firm attributes on corporatevoluntary accounting disclosure in the sector, thus, this study seeks to examine this important sector of the Nigerian economy with a view to filling the vacuum. Therefore, this study examines the impact of firm attributes on corporate voluntary information disclosure of listed industrial goods firms in Nigeria.

2. Review of Related Studies

In this section, related literatures on firm attributes and corporate voluntary disclosure are reviewed and the theoretical framework for the study is presented.

2.1 Firm Size and Corporate Voluntary Disclosure

Large companies are obvious as compared to small companies, and their public interest is also more visible (Watts, 1986). Therefore, firm size is a key aspect when forecasting the kind of relationship, a company maintains with an internal and external environment. It is expected that the firm with larger size has more impact on their various stakeholders. As (Bhayani, 2010) claimed that size of the firm plays a significant part in company's disclosures. Larger companies have high agency costs, convincing managers to release additional information to ease agency conflicts. Therefore, firm size is considered as vital feature towards to corporate disclosure practices (Tanq & Abass, 2013).

Several empirical studies have been carried out to examined the relationship between firm size and voluntary disclosure, for examples Ho and Taylor (2013) assessed the effect of corporate governances on voluntary disclosure of listed companies in Malaysia for the period of 1996 to

2006, the study utilized 85 voluntary disclosure checklist, the multiple regression results (OLS) showed firm sizes has negative and significant on voluntary disclosure.

In contrast to above findings Tijjani and Garko (2015) asserted the impact of firm characteristic on voluntary disclosure of s in Nigeria for the year (2008-2016), using thirteen companies as sample. The study used 87 voluntary disclosures checklist, the multiple regressions result shows positive and significant association between firm size with voluntary disclosure. More recent study by Bicer and Milad (2020) examined the effect of firm attributes on the level of voluntary disclosure of listed banks in Istanbul for the year (2013- 2017). The study utilized the checklist of 64 disclosure items. The result of multivariate statistical analyses shows that firm size is positively and statically significant related to voluntary disclosure. In same vein Isah (2020) examined the effect of corporate governances on voluntary information disclosures of listed Nigeria oil firms, the study used 7 quoted firms as sampled during period of (2008 – 2017). The multiple regressions reveal that firm size is positively and significantly associated with voluntary information disclosures. The findings from the reviewed literatures in this section shows inconsistencies results, while most of the studies uncovered positive and significant relationship between age and voluntary disclosure. Others do not found any significant relationship. Moreover, many of these studies used singles for examples

2.2 Profitability and Corporate Information Disclosure

Profitability is one of the variable that widely used in prior disclosure studies. Firm that have high profits may be release additional information in their financial statements than firm that have low level of profits (or losses) for different purposes. According to political costs theory, management of high profitable firms are encouraged to release additional information to validate their earnings (Hamid & Abubakar 2019).

However, signaling theory states that companies with high profits need to differentiate themselves to unprofitable companies through additional disclosure (Hamid & Abubakar 2019). Stakeholder theory also supported the opinion that profitability of a company is one of the fundamental information needs by different stakeholders, then shareholders. However, if the company recorded losses for a particular year, the mangers may be motivated to disclose more information voluntarily to minimize the danger of legal liability and serve the share reduction or loss of reputation (Albitar, 2015), so various theories can predict different ways of the relationship between profitability and corporate voluntary information disclosure.

Prior literature on the relationship between profitability and voluntary disclosure of accounting information provided inconclusive result. For examples Ghasempour and MdYusof (2014) examined the determinant of voluntary disclosure of non-financial information companies in Egypt. The stud used 65 companies as sampled, for the year 2005 to 2012. However, the study used 243 voluntary disclosure checklists items, the multiple regression result shows a negative and significant relationship between performance and voluntary disclosure. Similarly, Hieu and Lan (2015) examined the effect of firm attributes on voluntary disclosure of manufacturing firms in Vietnam for the year 2012. The study used 42 voluntary disclosure checklists items. The multiple regression result shows negative and insignificant associations among profitability and voluntary disclosure.

Tijjani and Garko (2015) asserted the impact of firm characteristic and voluntary disclosure of s in Nigeria for the period of ten (10), using thirteen companies as sampled. The study used 87 voluntary disclosures checklist, the multiple regression result shows a positive and significant association between profitability and voluntary disclosure. Similar, Bicer and Milad (2020) examined the effect of bank attributes on the extent of voluntary disclosure of listed banks in Istanbul for the year (2013- 2017). The study used the checklist of 64 items. The result of multivariate statistical analyses shows that firm profitability is positively and statically significant effect on voluntary disclosure. Also Ahmed (2020) investigated the effect of firm characteristics on disclosure of accounting information for the big five banks of China for the year (2014-2018). The study used disclosure checklist of 155 items. The multiple regression results show that profitability proxy by return on asset has a positive and significant influence on voluntary disclosure.

2.3 Liquidity and Corporate Information Disclosure

Liquidity is the capacity of company to meet its short-term debts. The assessment of company liquidity is important matter for those who use annual report and accounts to assess a company solvency. Liquidity is receiving attention to regulatory bodies as well as creditors. The incapable of a company to settle its current debts may mean a defaulting in payment of both interest and principal to the moneylenders and may lead to bankruptcy. To eradicate these issue, firms are to release more information (Wallace & Naser, 1995). Signalling theory proposes, according to Abd-Elsalam (1999) companies that have a greater level of liquidity percentage are willing to release more information to be differentiate from other firms suffered from a low level of liquidity share. While agency theory claimed that company that have a lower level of liquid disclose more information to avoid the clash of interest among the owners and lenders.

The Inconsistencies is not only happening between theories but also between empirical studies. For examples Akhtaruddin and Haron (2010) Investigated the effect of Board Ownership, Audit Committee's attributes on voluntary disclosures of 124 Malaysian firms for the year 2003. The voluntary checklists of 64 items were used. The univariate and multivariate result revealed that liquidity has a positive and insignificant effect on voluntary disclosure. Similarly, Agyei-Mensah (2012) examined the impact of company-specific attributes on voluntary disclosure of rural banks in Ghana for the period of 2009, using 21 rural banks as sample. The study used 27 voluntary disclosure checklists. The multiple regression result shows positive and insignificant impact of liquidity on corporate voluntary information disclosure.

In contrasts to above findings, Al-moataz and Hussainey (2012) assessed the determinant of corporate disclosure of 52 Arabian firms for the period of 2006 - 2007. The study used voluntary disclosure checklist of 25 items. The multiple regressions result showed that liquidity has a positive and significant on disclosure. Das (2014) asserted the effect of firm characteristics on voluntary disclosure of firms in Bangladesh for the period of 2004 to 2010, using 123 companies as sample. The study used 97 voluntary disclosure checklists items, the multiple regressions results shows a positive and significant association between liquidity and voluntary disclosure.

More recent study conducted by Modugu (2020) examined the impact of firm characteristicson Environmental Sustain disclosure of firms in United Arab Emirates. The study used 67 listed

firm as a sampled for the period of 2017. The multiple regressions result showed that liquidity is positive and significant related with ESG disclosure in UAE.

The findings from the above studies provide inconsistencies results, while a good number of the studies uncovered positive and significant association between liquidity and voluntary disclosure, others found negative relationship. Moreover, many of these used period less than 3 years for example (Madugu 2020; Al-moataz & Hussainey 2012; Akhtaruddin & Haron 2010). This study used the period of ten (10) years from 2010 to 2019.

2.3 leverage and Corporate Information Disclosure

Leverage refers to presents of long term debt in a company financial structure. Leverage may impact voluntary disclosure. For instance, firm with greater proportion of leverage may increase disclosure plan for managers and motivate them to release additional information to get investors' interests (Albitar, 2015). On the other side, a lower level of leverage can motivate management to turn their disclosure process towards shareholders more than lenders. Therefore, management are encouraged to release additional information in their financial statements to minimize their costs and to evade any creditor's request. A various number of studies do not find any impact of leverage on voluntary disclosure (Aksu & Kosedag, 2006). But, other studies found a positive and significant impact of leverage on disclosure.

Bhyani (2012) asserted the extent of corporate disclosure practices of listed non-financial firm in India for the year 2008- 2011, using 100 firms as sampled. The study used 74 voluntary disclosure checklists, the multiple regression result shows a positive and significant association among leverage and voluntary disclosure. Similarly, Kolsi (2012) examined the determinants of corporate voluntary disclosure of 52 Tunisian firms for the year 2009. The study developed 45 voluntary disclosure checklist items. The result of multivariate results showed that firm leverage is positively and significantly influence voluntary disclosure.

In contrast to above findings, Uyar and Kilic (2012) examined the impact of firms attributes on voluntary disclosure of listed manufacturing firm in Turkish for the period of 2010, using 129 manufacturing firms as sampled. The study used 96 voluntary disclosure checklists items, the univariate and multivariate (OLS) result shows a negative and significant association among leverage and voluntary disclosure. A recent study by Bicer and Milad (2020) examined the impact of bank attributes on voluntary disclosure of banks in Borsa Istanbul for the year (2013-2017). The study used the checklist of 64 items. The result of multivariate statistical analyses shows that leverage is positive and statically significant with voluntary disclosure. The aforementioned studies revealed inconsistencies results, while few of the studies showed positive significant association between leverage and voluntary disclosure of accounting information, others found negative insignificant relationship.

2.4 Firm Age and Corporate Voluntary Information Disclosure

Several theoretical ground to accept that elder firms are possibly to release additional information than newer companies. For instance, the competition argument suggests that newer firms are not possibly to release information beyond mandatory in their annual report and account, since this might ascertain to be negative if important information is released to their opponents. Contrary to above, older firms are less probable to be encouraged to hide information

since their competitive advantage cannot be simply challenge with increase disclosure (Owusu 1998). Because they are recognized and it is possible that the marketplace is already aware of these advantage. The reason behind for choosing the age as a variable is that older companies may expand their disclosure practice with passage of time (Alsaeed, 2006) just to developed their reputation (Akhtaruddin, 2005).

Previous studies that examined the relationship among voluntary disclosure and firm age have shown inconsistencies evidence. For instance, Bhayani (2012) investigated the impact of voluntary disclosure of non-financial firm in India. The study used 100 listed firms as sample for the period of 2008-2011, voluntary disclosure checklists of 74 was used. The multiple regressions result -shows that firm age is negatively and insignificantly related with corporate voluntary information disclosure.

In contrast to above findings Bicer and Milad (2020) assessed the impact of bank attributes on voluntary disclosure of banks in Borsa Istanbul for the year (2013- 2017). The study used the checklist of 64 items. The result of multivariate statistical analyses shows that age is positive and statistical significant associated with voluntary disclosure.

The findings from the reviewed literatures in this section also discovered inconsistencies results, while most of the studies uncovered positive and significant relationship between age and voluntary disclosure. Others do not found any significant relationship. Moreover, many of these studies used period less than 10 years.

2.5 Auditor Type and Corporate Voluntary Information Disclosure

Big audit firm are possibly to deals with many customers and not heavily reliant on one or few customers unlike indigenious audit firm, where big companies in this case exercise pressure on companies to release additional information in their financial statements. Also, as big audit firm have concerned about their image and mostly associates with companies that divulge additional information in their financial statement (Alsaeed, 2006). Consequently, indigenious audit firms that are associated with Big-4 audit firm will release additional information than those that are not associated with them (Wallace & Naser, 1995).

Akhtarudin and Harun (2010) assessed the effect of Board ownership, audit committee's attributes on voluntary disclosures of 124 Malaysian listed companies for 2003. Voluntary checklists of 64 items were used. The result of univariate and multivariate reveals that auditor type is negatively and statistically insignificant related with voluntary information disclosure. In contrast to above finding Qu, (2011) investigated the determinant of voluntary disclosure for 297 companies in China for the period of 11 years (1995-2006). The study utilized the checklist of 15 items and the OLS regression showed that auditor type is positively and significantly related with voluntary information disclosure.

The findings from the reviewed Literatures in this section provide inconsistencies result, while many of the studies uncovered positive and significant association between auditor type and voluntary accounting information disclosure.

2.6 Asset in place and corporate voluntary information disclosure

High clash of interest between lenders and stockholders, creditors having the risk of adverse selection and moral hazard. Therefore, creditors might request for collateral value (represent by fixed assets) which served as a main factor of corporate voluntary information disclosure. The total asset comprises of assets that used for day to day activities of the organization and future investments asset (Myers & Majluf 1977). The companies that have high future investments asset is possibly to have much agency problems. Since release information is among the various ways to minimized agency problems, thus, companies with better future investments assets may motivated release additional information voluntarily.

Though, the prior studies provide inconsistent result from different countries. Bradbury (1992) studied the effect of firm attributes on corporate voluntary segment disclosure for the period of 10 years, the study used 29 listed firms in New Zealand Stock Exchange as sampled. The regressions result show that asset in place has adverse and statistical insignificant association with voluntary segment disclosure. Hossain et. al (1994) asserted the influence of company attributes on voluntary disclosure by quoted companies in New Zealand Stock Exchange. The multiple regressions result reveled that asset in place has adverse and statically insignificant relationship with voluntary information disclosure. In contrast to above-mentioned studies Haniffa and Cooke (2002) assessed the determinant of voluntary disclosure of listed companies in China. The study utilized 1066 companies as sample for the period 10 years. The regressions result reveled that asset in place is positively and significantly related with voluntary information disclosure. More recent study by Kipngetch (2020) investigated effect of firm specific attributes on environmental accounting disclosure of companies in Kenya for the period of ten (10) year (2010-2019). The study used a 27 listed firms as sampled. The regression results showed that asset tangibility is positively and statistically significant related with environmental accounting disclosure. The findings from the reviewed Literatures in this section none of the Nigeria studies used asset in place as explanatory variable. Therefore, this study used asset in place as independent variable in order to fill the vacuum.

3. Methodology and Model Specification

This study adopted a quantitative research approach where data was gathered through secondary approach. The population is made up of entirely fifteen listed industrial companies whose shares are traded in the Nigerian Stock Exchange (NSE). The census sampling techniques were used to arrive at sampled. Data were extracted from annual reports and account of 15 listed industrial companies in Nigeria for the period of 10 years 2010 to 2019. Statistical tools such as descriptive, correlation and regressions were employed to analyze the results of the study.

Table 1: Variables and their Measurement

Variables	Proxies	Variables Measurement	Source
Dependent	Corporate voluntary Information Disclosure (VAID)	Number of items disclosed to the total number items to be disclosed	Kolsi,(2012) Garko (2015).
	firm size (FS)	Natural Logarithm of total assets.	Abubakar, Mazadu and Yusuf (2020)

Independent	Profitability (PRT)	Proportion of profit after tax to total assets.	Alsaeed, (2006). Kolsi (2020).
	Liquidity (LIQ)	Proportion of Current assets to current liabilities.	Alsaeed, (2006), Hassan and Bello, (2013)
	Leverage (LEV)	Proportion of total debt to total assets	Uyar and Kilic (2012) Nandi and Ghoshi, (2012).
	Firm Age (AGE)	No of years a firm listed in the stock market.	Das (2014), Hamid and Abubakar (2019). Abubakar and Isa
	Auditor Type (AUT)	1 if external auditor is Big4, 0 otherwise	Bhayani (2012).
	Asset in Place (AIP)	Proportion of fixed assets to total assets.	Hossain and Adams (1994).

Sources: Developed by the researcher

3.2 Model Specification

A multiple regression model is used to examine the impact of firm attributes on corporate voluntary information disclosure. The model for this study is specified as follows: -

$$VAID_{it} = \beta_{0it} + \beta_1 FSZ_{it} + \beta_2 PRT_{it} + \beta_3 LIQ_{it} + \beta_4 LEV_{it} + \beta_5 AGE_{it} + \beta_6 AUT + \beta_7 AIP_{it} + \epsilon_{it}$$

VAID = Corporate voluntary information disclosure

β_0 = Constant

$\beta_1 - \beta_7$ = Coefficient of independent variables.

FSZ= Firm Size.

PRF = Profitability.

LIQ = Liquidity.

LEV = Leverage.

AGE = Age

AUT = Audit Type

AIP = Asset in Place.

i=firm

t=period

ϵ = term error.

4 Results and Discussion

4.1 Descriptive Statistics

The descriptive statistics of variables under study were analyzed. The description of mean, standard deviation, minimum, and maximum of dependent and independent variables were computed using STATA version13.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Minimum	Maximum	Std. Dev
VAID	150	0.6894	0.5161	0.8065	0.0741
FSZ	150	7.4718	6.0374	9.2188	0.6356
PRT	150	0.1021	-0.1807	0.3759	0.0927
LIQ	150	1.2072	0.0969	2.3257	0.5002
LEV	150	0.5095	0.0659	0.7967	0.1649
AGE	150	33.100	3.0000	54,000	10.952
AUT	150	0.8000	0.0000	1.0000	0.4013
AIP	150	0.4434	0.1122	0.6972	0.1591

SOURCE: STATA Output, 2020

Table 2, describes corporate voluntary information disclosure practices for the sampled firms. The average corporate voluntary information disclosure for listed industrial goods firms in Nigeria for the period of ten (10) years 2010-2019 was 69% of the key items of 93 corporate voluntary information disclosure with standard deviation of 0.074 this signifying that the data deviate from the mean value by 7%. From the results, it can be inferred that there is no wide dispersion between the mean and the standard deviation. The mean value revealed that the average disclosure of voluntary information in the financial statement of listed industrial goods firms in Nigeria is 69%. The Table 2 revealed that minimum corporate voluntary information disclosure is 0.52 with maximum of 0.81. This implies that minimum information discloses by listed industrial goods firms in Nigeria in their annual reports and account during the period of study is 52% and maximum of 81%.

From the descriptive statistics in Table 2, it can be seen that the average total assets of listed industrial goods firms in Nigeria stood at ₦7.45 with standard deviation of 0.64 which indicates that there a wider range of disparity with the mean. This signifying that the average total assets of listed industrial goods firms in Nigeria have ₦ 7.45 billion with standard deviation of ₦ 0.64 billion. It can be seen from result that sampled industrial goods firms in Nigeria has a minimum value of 6.0374 with maximum value of 9.2188, this signifying that minimum total assets of sampled listed industrial goods firms in Nigeria is ₦ 6.0374 billion and maximum total assets value for listed industrial goods companies in Nigeria is ₦ 9.2188 billion during the period under the review.

In addition, the Table 2 showed that average profitability of 0.1021 with standard deviation of 0.0927. which implies that the average profitability of sampled firms is ₦ 0.1021 billion with a standard deviation of ₦ 0.0927 billion. This implies that there is no wide dispersion between the mean and standard deviation. The minimum and maximum of -0.1807 and 0.3759 respectively. This signifying that the sampled firms have a minimum value of ₦- 01807 billion and maximum reported of ₦ 0.3759 billion within a period of the study. The summary statistics with respect to liquidity has a mean value of 1.23 with standard deviation of 0.54, this indicates that there is no wide disparity in the level of liquidity among listed industrial goods companies in Nigeria This suggests that on average the sampled firms has liquid cash to settle its current liabilities by 123% The descriptive also shows that the sampled firms have ability to settle its minimum current liabilities of 9. 6% and maximum capacity to settle its current liabilities 269% respectively.

From Table 2, it can be observed that the average value of leverage is 51% from the average value of 0.51 with standard deviation of 0.21. This indicates that there is low level of dispersion with the mean. This signifying that debt financing is done against total assets in listed industrial goods firms in Nigeria over the period of the study and the minimum and maximum value of 0.04 and 0.88 respectively. This suggests that the minimum debt by the sampled firms is ₦ 0.04 billion with a maximum of ₦ 0.88 billion. It can, also, be observed from the result of descriptive statistics firm age has an average value of samples firms is 33 years with standard deviation of 10 years. This is signifying that there is no wide range of difference with the mean, the result shows a minimum number of years quoted in the Nigerian Stock Exchange is 3 years and maximum number of years is 54. Also, Table 4.1 revealed that auditor type has a mean value of 8.0 with a standard deviation of 0.4013. This implies that on average 80% listed industrial goods firm in Nigeria are audited by big four while 20% are audited by non-big four audit firms, the standard deviation of 40% signifies a high level of dispersion between mean and standard deviation. The descriptive statistics also shows that the sampled firms have a minimum and maximum value of 0.000 and 1.000 respectively.

Finally, asset in place has an average value of 44% with a standard deviation of 15%. This shows that there is low level of dispersion from the mean value. This suggests that 44% of total assets of listed industrial goods firms in Nigeria are fixed during the period of the study. The minimum and maximum value of 0.1122 and 0.6972 respectively. This signifying that sampled firms maintained a minimum fixed asset of 11% to their total asset and maximum of 70% to total assets during the period under the review.

4.3. Correlation Matrix

The correlation matrix is used to find out the degree of association between the dependent variable and Independent variables used in the study presented in Table 3.

Table 3: Correlation Matrix of the Dependent and Explanatory Variables

Variable s	VAID	FSZ	PRT	LIQ	LEV	AGE	AUT	AIP
VAID	1.0000							
FSZ	0.2033 0.0126	1.0000						
PRT	0.7237 0.0000	- 0.0659 0.4230	1.0000					
LIQ	0.2855 0.0004	0.0609 0.4592	0.2738 0.0007	1.0000				
LEV	0.5373 0.0000	0.1266 0.1228	0.4866 0.0000	0.1840 0.0242	1.0000			
AGE	- 0.0704 0.3921	0.1581 0.0534	- 0.2576 0.0015	- 0.2174 0.0075	- 0.1095 0.1821	1.0000		
AUT	0.4010 0.6184	0.0786 0.3392	- 0.1165 0.1556	- 0.0182 0.8252	- 0.0159 0.8472	0.0324 0.6935	1.0000	
AIP	0.5007 0.000	0.0706 0.3904	0.4929 0.0000	0.0552 0.5022	0.6565 0.0000	- 0.0200 0.8080	- 0.1144 0.1634	1.0000

Source: STATA output, 2020

From the correlation results presented in Table 3 indicates that corporate voluntary information disclosure is 21% positively related with firm size and significant at 5% level. This signifying that the higher the profit, the higher the level of corporate voluntary information disclosure by the sampled firms. The Table 3 also indicates that the correlation coefficient between corporate voluntary information disclosure and profitability is 72%. This positive correlation is significant at 1% level. This suggest that high profitable firms are more possible to release additional information voluntarily. Liquidity is positively and significantly related with corporate voluntary information disclosure at 1% level of significance considering the coefficient and the p- value. This signifies that increase in liquidity the corporate voluntary information disclosure also increases of the sampled firms.

The results from the Table 3 shows that there is positive relationship between corporate voluntary information disclosure and leverage from the correlation coefficient of 54% which is significant at 1% level of with p- value of 0.0000. This implies that as the leverage increase, equally the corporate voluntary information disclosure increase of the sampled firms. The Table 3 indicates negative insignificant correlation between age and corporate voluntary information disclosure of 7% from the correlation coefficient of -0.0704 which is not significant at all level with p- value of 0.3921. This signifying that as the firm age increase, the corporate voluntary information disclosure decrease. The Table also shows that auditor type is positively and insignificantly associated with corporate voluntary information disclosure from the coefficient of 0.041 with p- value of 0.6184 which is insignificant at all level of significance. This implies that as the use of big four audit firms increase, the corporate voluntary information disclosure decrease of the sampled firms. The Table 3 indicates that asset in place is positively significantly associated with corporate voluntary information disclosure considering the coefficient value of 0.5007 with a p- value of 0.000 which is significant at 1% level of significance. This implies that as the asset in place increase, the corporate voluntary information disclosure also increases.

4.4 Regression Results

This constitutes the summary of the multiple regression results obtained from the model using ordinary least square regression. The results show individual impact between the independent variables (firm size, profitability, liquidity, leverage, age, auditor type and asset in place) and finally the overall impact between the dependent variable and the independent variables. This is presented in table 4 below.

Variables	OLS Coefficients	P- Value	FE Coefficients	P- Value	RE Coefficients	P- Value
FSZ	0.054	0.000	0.066	0.000	0.057	0.000
PRT	1.382	0.000	1.816	0.000	1.403	0.000
LIQ	0.089	0.088	0.073	0.336	0.093	0.000
LEV	0.248	0.051	0.414	0.001	0.259	0.000
AGE	0.004	0.073	0.032	0.000	0.005	0.000
AUT	0.059	0.030	0.054	0.023	0.059	0.000
AIP	0.2023	0.192	0.147	0.343	0.198	0.000
CONSTANT	-0.365	0.000	-0.144	0.000	-0.408	0.005

R ² :	0.6439		
Within		0.7500	0.7095
Between		0.1940	0.5878
Overall		0.4722	0.6438
Adj. R ²	0.6264		
P- value	0.000	0.000	0.000
Hausman Specification test (Prob.> Chi 2)			0.0000

Source: STATA output, 2020

***, ** and * indicate 1%, 5% and 10% significant levels respectively.

Table 4.3 above, shows R² of (0.47) which is the multiple coefficient of determination and gives percentage or proportion of total variation in the dependent variable (Corporate voluntary information disclosure) which is jointly explained by the explanatory variables. Hence, the result of R² 0.47 signifies that 47% changes in voluntary accounting information is explained by the explanatory variables while remaining 53% is explained by other factors not accounted for in the model. This implies that the model is fit and the variables are appropriately selected.

From the regression results presented in Table 4 shows that firm size has a positive and significant impact on corporate voluntary information disclosure of listed industrial goods firms in Nigeria considering the coefficient value of 0.066 with a p-value of 0.000 which is significant at 1%. This signifying that firm size has direct effect on the level of corporate voluntary information disclosure of listed industrial goods firm in Nigeria. This suggests that as firm size increase, corporate voluntary information disclosure of the sampled firms also increase. The result supported with the results Hieu and Lan (2015), Tijjani & Garko (2015), Filsaraei and Azarberahman (2016), Scaltrito (2016), Monday, et. al (2016) and Egbunike and Tarilaye (2017).

The regressions result in Table 4 revealed that profitability as measured by return on asset is positively and significantly associated with corporate voluntary information disclosure from the coefficient of 1.816 which is significant at 1% from its p-value of 0.000. This implies that Profitability has direct impact on voluntary disclosure of listed industrial goods firms in Nigeria. This implies that high profitability enhanced corporate voluntary information disclosure of listed industrial goods firm in Nigeria. The result is consistent with those of Alfraih, and Almutawa (2014) Tijjani and Garko (2015), Albitar (2015) Abeywardana and Panditharathna (2016), Egbunike and Tarilaye (2017). However, this contradicts findings of Uyar, et al., (2013), Ghasempour and MdYusof (2014), Monday and Nancy (2016), Hieu and Lan (2015) and Madugu (2017) who reported negative significant relationship between profitability and corporate voluntary information disclosure. The regression results presented in Table 4 shows a positive and insignificant effect of liquidity on corporate voluntary information disclosure of listed industrial goods firm in Nigeria. This is evident from the coefficient of 0.073 with a p-value of 0.336. which is not significant at all level of significance. The result is consisted with those of Akhtaruddin and Haron (2010), Agyei-Mensah (2012), Mangala and Isha (2016), However, results contradict Al-moataz and Hussainey (2012), Nandi and Ghosh (2012), Das (2014), Albitar (2015) who reported positive significant relationship between liquidity and corporate voluntary information disclosure.

The result from the Table 4 shows that leverage has a positive and significant effect on the level corporate voluntary information disclosure of listed industrial goods firms in Nigeria, from coefficient 0.414 of which is significant at 1% level of significance from the p- value of 0.001. This implies that as leverage increase, corporate voluntary information disclosure equally increases. Table 4 shows that firm's age has a positive and significant impact on corporate voluntary information disclosure by listed industrial goods firms in Nigeria. This is evident from coefficient of 0.032 with a p- value of 0.000, which is significant at 1%. This indicates that the corporate voluntary information disclosure is affected by the firm age of the listed industrial goods firms in Nigeria. The result corroborates the findings of Najm-Ul-Sehar and Tufail (2013), Alfraih and Almutawa (2014), Albitar (2015), Abeywardana and Panditharathna (2016) which shows positive and significant impact of firm age on corporate voluntary information disclosure. However, this finding is in contrast with that of Ebrahimabadi and Asadi (2016) who report reports that firm age has negative and significant effect on corporate voluntary information disclosure.

The regression result also revealed that auditor type has a positive and significant effect on corporate voluntary information disclosure of the listed industrial goods firms in Nigeria. This is evident from coefficient of 0.054 with a p- value 0.023 which is significant at 5% level of significance. This implies that use of big four audit firms improve voluntary accounting information.

Finally, asset in place as measured by the proportion of fixed assets to total assets has a positive and insignificant relationship with corporate voluntary information disclosure by listed industrial goods firms in Nigeria. This is evident from coefficient of 0.147 with a p- value 0.343 which is not insignificant at all level of significance.

The above findings have implications for users of financial statement (internal and external) and regulatory authorities, professional Accounting bodies such as Institute of Chartered Accountants of Nigeria (ICAN) and Association of National Accountants of Nigeria (ANAN). In particular, users of accounting information should understand the importance of voluntary accounting information disclosure when taking decisions.

5. Conclusion and Recommendations

This study has empirically provided evidence on the relationship between firm attributes proxies by firm size, profitability, liquidity, leverage, age, auditor type and asset in place on corporate voluntary information disclosure of listed Industrial goods firms in Nigeria. Based on the findings, it is concluded that firm size, profitability, leverage, age and auditor type has significant impact on corporate voluntary information disclosure. However, study concludes that liquidity and asset in place has no any impact on corporate voluntary information disclosure during the period under review.

In line with findings and conclusions drawn from the study, therefore, the study recommends that regulatory authorities should encourage companies to disclosure more information beyond the mandatory requirement. This may attract more domestic and foreign investors in to capital market and also the management listed of industrial goods firms in Nigeria should stickily adhere to

internal control mechanisms to block wastes and improves income for high profitability as this increase, it would enhance the quantum voluntary information.

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