CHAPTER ONE INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Despite the contribution of companies to economic and technological development of Nigeria economy, there are significant number of firms that suffer criticisms for having created social and environmental problems with their host community. Some of the social and environmental problems are air and water pollution, waste, resource depletion, the rights and status of workers, and the power of large corporations become the focus of increasing attention and concern (Reverte, 2009). According to Manik & Yardley (2012) these social and environmental problems have claimed hundreds of lives and destroyed the natural environment. Many companies are allegedly held liable for such practices of environmental damage and social problems which has led to global outcry. It has made the public to be more aware of damages caused by companies in carrying out their activities to achieve maximum profit.

Therefore, companies are expected to be socially responsible in the process of carrying out their activities. The companies should not be solely oriented to the interests of shareholders through profit maximization, but also the interests of other stakeholders (Zhang, 2013). Corporate social responsibility has been commonly adopted by companies in their response to a public claim for corporate liabilities. The company stakeholders like shareholders, government, potential investors among others want to know the commitment of the organization to corporate social

responsibility practices. Therefore, corporate social responsibility has to be reported or disclosed to stakeholders.

The concept of social and environmental reporting was added by the corporate entities to their public reports from the mid-1980s (Campbell, 2009). Campbell (2009) say that this was the period when the concept of social and environmental accounting began and civil societies vehemently argued that there was a moral case for organizations to report and account for impact of their activities on social and natural environments. Social and environmental reporting is commonly referred to as corporate social responsibility reporting (Deegan, 2007).

Gray (1996) describes corporate social disclosure as the process of communicating environmental and social impact of the organization's activity to the society. Ali & Rizwan (2013) view corporate social disclosure as dissemination of information about company's human resources related practices, community involvement project and activities, safety and quality of products and environmental contribution. Corporate social disclosure covers the wide variety of environmental and social impacts which the organization was increasingly perceived to have on the community. Therefore, corporate social disclosure is a report published by a company about the economic, social and environmental impacts caused by its everyday activities on its stakeholders.

In the views of Carroll & Bucholtz, (2006) corporate social disclosures reduce information asymmetries between the company and its stakeholders, and assists pressure groups in making more informed decisions through corporate social involvement. Despite the importance of corporate social disclosure, its reporting

remains voluntary in Nigeria. So far the firms have the choice to report their corporate social responsibility, logical economic thinking says that they will only engage in corporate social disclosure practice if the benefits they will derived from it will be more than the costs they will incurred. However, business always goes for the minimum when it comes to reporting (Hooghiemstra, 2000).

Ionel-Alin, Emil & Maria (2012) states that firms in countries where there are no laws enforcing corporate social disclosure will continue engaged in their own forms of reporting. As a result, there exist differences on amount and content of social and environmental information reported by firms across industries and countries. Corporate social disclosure now serves as a management tool for managing information to satisfy the needs of various company stakeholders.

However, Rouf (2011) argues that such corporate social reporting does not usually serve the need of the user because managers are likely to consider their own interests when exercising managerial judgment and as such increase the disclosure gap – difference between expected and actual disclosure. Due to afore mentioned problem, the Nigerian Stock Exchange held a Sustainability Reporting Seminar to intimate stakeholders with the Guidelines, the reporting format and template, coupled with the real value proposition of reporting. The Nigerian Stock Exchange encourages all Issuers to consider and adopt the practice of sustainability reporting in 2015. Despite the measure taken by the Nigerian Stock Exchange, the problem of the decision to provide or not to provide information about social and environmental issues among Nigeria companies still remains. Against this background, the question posed by policy makers, academics and other stakeholders is "How does corporate

attributes affect voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange?"

1.2 STATEMENT OF PROBLEM

It is a fact that activities of corporate organizations has contributed to social and economic development of Nigerian economy. The contribution of corporate organizations to the economic development was accompanied by social and environmental problems. There is continuing concern about loss of biodiversity, air pollution, water pollution, shortage of fresh water availability, waste management problem, global warming, employee health and safety, environmental noise and disregard for the protection of the immediate environment. This makes it necessary for companies to report and account for effect of their activities on natural and social environments.

So far, firms have the choice to report or not to report their corporate social responsibility to their stakeholders. Many companies are reporting their corporate social responsibility while some companies are not reporting their corporate social responsibility. Many studies examine the factors that motivate companies to disclose their corporate social responsibility. The factors associated with voluntary corporate social disclosure are corporate attributes like company age, company size, financial leverage, audit firm size, firm profitability and ownership structure among others.

The result of most researches conducted on corporate attributes and corporate social disclosure are either inconclusive or contradictory, reporting positive or sometimes negative results. Rahman & Widyasari (2008); Tampubolon (2008); Putra (2009); Veronica (2009); Yulita (2010); Ibrahim (2014) discover that company size has no

effect on corporate social responsibility disclosure. In contrast to those studies, Sembiring (2005); Apriwenni (2009); Prihandono (2010); Untari (2010); Fahrizqi (2011); Purnasiwi (2011); Uwuigbe (2011) maintains that company size has effect on corporate social responsibility disclosure.

Untari (2010) discover that company's age affects corporate social responsibility disclosure. However, this does not correspond with the results of the Putra (2009); Prihandono (2010); Ibrahim (2014) who maintains that company's age does not affect corporate social responsibility disclosure.

The result of Hendrasaputra (2007); Bramono (2008); Putra (2009); Nurdin (2009); Veronica (2009); Prihandono (2010); Sari (2010); Untari (2010); Amal (2011); Uwuigbe (2011); Fahrizqi (2011) indicates that company profitability affects corporate social responsibility disclosure. In contrast, studies conducted by Sembiring (2005); Rahman & Widyasari (2008); Apriwenni (2009); Yulita (2010); Purnasiwi (2011) on the other hand states that company profitability has no effect on corporate social responsibility disclosure.

The result of Sembiring (2005); Rahman (2008); Putra (2009); Veronica (2009); Untari (2010); Yulita (2010) states that financial leverage has no effect on corporate social responsibility disclosure. Apriwenni (2009); Purnasiwi (2011); Kolsi, (2012); Hajji & Ghazali (2013 discover in their studies that financial leverage affect corporate social responsibility disclosure. However, Amal (2011) discover that ownership structure affects corporate social responsibility disclosure. Rahman & Widyasari (2008); Apriwenni (2009) maintain that ownership structure has no effect on corporate social responsibility disclosure. Samaha & Dahawy (2010); Uwuigbe (2011) find positive and significant relationship between audit firm size and corporate social disclosure, while Ballou, Heitger & Landes (2006) maintain that there is no significant relationship between audit firm size and corporate social disclosure in their studies. The result of most researches conducted on corporate social reporting and firm characteristics are either inconclusive or contradictory, reporting positive or sometimes negative results.

The research design and methodology used by some studies like, AL- Shubiri1, Alabedallat, & Abu Orabi, (2013),Bakr &Redhwan(2016), Chutimant, Wanchai, & Panarat (2017) among others, varies greatly.

Due to inconsistent results of previous studies on corporate attributes and voluntary corporate social disclosure and methodology differences that indicate a research gap, this study is set to find out the effect of corporate attributes on voluntary corporate social disclosure of selected manufacturing firms on the Nigerian Stock Exchange.

1.3 OBJECTIVE OF THE STUDY

The main objective of the study is to ascertain the effect of corporate attributes on voluntary corporate social disclosure of selected listed manufacturing firms on the Nigerian Stock Exchange.

The specific objectives of this research are as follows:

- 1. To ascertain the effect of company size on voluntary corporate social disclosure.
- 2. To determine the effect of company age on voluntary corporate social disclosure.
- 3. To ascertain the effect of profitability on voluntary corporate social disclosure.

4. To ascertain the effect of audit firm size on voluntary corporate social disclosure.

5. To determine the effect of financial leverage on voluntary corporate social disclosure.

6. To determine the effect of ownership structure on voluntary corporate social disclosure.

7. To ascertain whether the interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure) affect voluntary corporate social disclosure.

1.4 RESEARCH QUESTIONS

The study seeks to answer the following questions:

1. To what extent does company size affect voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange?

2. How does company age significantly affect voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange?

3. To what extent does profitability affect voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange?

4. How does audit firm size affects voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange?

5. How does financial leverage affects voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange?

6. To what extent does ownership structure affect voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange?

7. How does interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure) significantly affect voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange?

1.5 RESEARCH HYPOTHESES

The work is guided by the following hypotheses:

i. **Ho:** Company size does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

Hi: Company size has significant effect on voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

ii. **Ho:** Company age does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

Hi: Company age has significant effect on voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

iii.**Ho:** Profitability does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

Hi: Profitability has significant effect on voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

iv. **Ho:** Audit firm size does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

Hi: Audit firm size has significant effect on voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

v. **Ho:** Financial leverage does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

Hi: Financial leverage has significant effect on voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.vi. Ho: Ownership structure does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

Hi: Ownership structure as significant effect on voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

vii. **Ho:** The interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure) does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

Hi: The interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure) has significant effect on voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange

1.6 SIGNIFICANCE OF THE STUDY

An understanding of corporate attributes that affect managers' decisions regarding voluntary corporate social disclosure is very crucial in determining the reasons why some firms are disclosing their corporate social and environmental activities and some firms failed to disclose their corporate social and environmental activities to both their stockholders and their stakeholders.

This study will help regulatory authorities like the legislative arm of government and Corporate Affairs Commission in understanding the effect of corporate attribute on voluntary corporate social disclosure and put in place regulations that will encourage voluntary corporate social disclosure.

The study will contribute to the enrichment of the literature on corporate social disclosure practices among listed firms on Nigeria Stock Exchange. It will also serve as a body of reserved knowledge for researchers.

This research dwells on contemporary issue on accounting field. Therefore, this study will enrich the mandatory continuing programs of professional accountancy bodies in Nigeria. Moreover, the study will show more light to students, scholars and academics on the relationship between corporate attributes and corporate social disclosure practices among listed firms on the Nigerian Stock Exchange.

1.7 SCOPE OF THE STUDY

The focus of this study is on the effect of corporate attributes on voluntary corporate social disclosure of selected listed manufacturing firms on the Nigerian Stock Exchange. The study covers thirty seven (37) consumer and industrial goods manufacturing firms listed on the Nigerian Stock Exchange for the period of the study. The preference for these firms is based on the fact that their activities impact most on the social and natural environment and their annual reports are easily accessible and capable for comparison. The study covers the period of 2008 to 2017 for statistical analysis.

1.8 LIMITATIONS OF THE STUDY

The study intended to use the entire population of industrial and consumer goods firms listed on Nigerian Stock Exchange to constitute the population of the study. But some firms do not have complete financial records either on their website or in the office of the Nigerian Stock Exchange during the period of the study. The study considered only those firms that meet up with the criterion to form the adjusted population. Therefore, the findings and recommendations of the study may not apply to the firms that were not covered by the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Conceptual Framework

2.1.1 Corporate Social Responsibility

Corporate social responsibility is a concept that has attracted worldwide attention and acquired a new resonance in the global economy (Jamali, 2006). Heightened interest in corporate social responsibility in recent years has stemmed from the advent of globalization and international trade, which have reflected in increased business complexity and new demands for enhanced transparency and corporate citizenship. Moreover, while governments have traditionally assumed sole responsibility for the improvement of the living conditions of the population, society's needs have exceeded the capabilities of governments to fulfill them (Jamali, 2006). In this context, the spotlight is turning to focus on the role of business in society, and companies are seeking to differentiate themselves through engagement in what is referred to as corporate social responsibility.

According to Joseph (2007) corporate social responsibility is the company's responsibility to its stakeholders to behave ethically, minimizing negative impacts and maximize positive impacts include the economic, social and environment in order to achieve sustainable development goals. World Business Council for Sustainable Development (2001) says corporate social responsibility is the commitment of business to contribute to sustainable economic development, working with employees, their families and the local communities. It is described as a set of policies, practices, and programs that are integrated throughout business

operations and decision-making processes, and intended to ensure the company maximizes the positive impacts of its operations on society (Business for Social Responsibility, 2003). This concept assumes that an entity is influenced by and, in turn, has influence upon the society in which it operates (Deegan 2002).

The current globalization trend and the growing demand from stakeholders towards companies to adopt corporate social responsibilities encourage the involvements of companies in corporate social responsibilities practices (Chapple & Moon, 2005). Corporate social responsibility is a general statement indicating a company's obligation to utilize its economic resources in its business activities to provide and contribute to its internal and external stakeholders (Yoon, Giirhan-Canli & Schwarz, 2006).

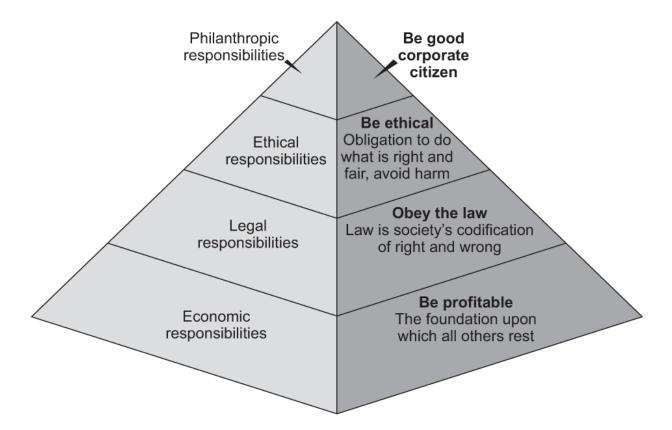
Bhatt (2002) notes that corporate social responsibility ranges from empowering the host community members by giving them financial aid, provision of scholarships for both employees children and indigenes of host communities, adequate working facilities, provision of social amenities among others. There are variations in corporate social responsibility activities held by the company because the company looked at the importance of corporate social responsibility in different ways. There are three reasons why companies perform corporate social responsibility are: (1) compliance, (2) minimizing the risk and (3) creating value (Bhatt, 2002).

Kotler & Lee (2005) identified six major initiatives under which most corporate social responsibility related activities fall generating a positive impact on the firm. Firstly, corporations provide funds, in-kind contributions or other corporate resources to build awareness and concern for social cause or to support fundraising, participation or volunteer recruitment for a cause. Secondly, corporations commit to donating a percentage of revenues to a specific cause based on product sales. Thirdly, corporations support the development and/or implementation of a behavior change campaign intended to improve health, safety, the environment or community well-being. Fourthly, corporations directly contribute to charity or causes in the form of cash donations and/or in-kind services. Fifthly, corporations support and encourage retail partners and/or franchise members to volunteer their time to support local community organizations and causes. Finally, corporations adopt and conduct discretionary business practices that support social causes to improve community well-being and protect the environment.

i. Corporate social responsibility models

Carroll (1991) makes a distinction between different kinds of corporate social responsibilities. This distinction is referred to as a firm's "pyramid of corporate social responsibility".

Figure 2.1: Pyramid of corporate social responsibility



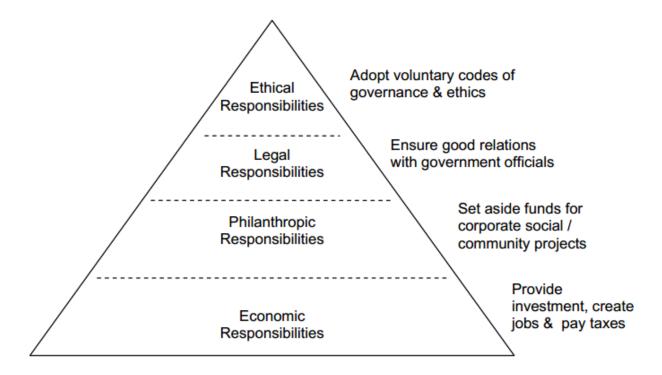
Source: Adapted from Carroll's (1991).

Carroll (1991) argues that business institutions are basic economic units in society and have a responsibility that is economic in nature or kind. The economic responsibility is the most fundamental responsibility of a firm, which reflects the essence of a firm as a profit-making business organization. Economic responsibility implies that society expects business to produce those goods and services demanded and make a profit as an incentive or reward for the business efficiency and effectiveness. The legal responsibilities entail expectations of legal compliance and playing by the "rules of the games". From this perspective, society expects business to fulfill its economic mission within the framework set forth by the society's legal system (Jamali, 2006). Crane & Matten (2007) further add that all companies attempting to be socially responsible are required to follow the law.

According to Schwartz (2011), the ethical responsibilities embody those standards, norms or expectations that reflect a concern for what consumers, employees, shareholders and the community regards as fair, just or in keeping with the respect or protection of stakeholders moral rights. Therefore, society expects corporations to act ethically towards its stakeholders (Crane & Matten, 2007).

Visser (2006) supported the empirical studies undertaken by Pinkston & Carroll (1996); Edmondson & Carroll (1999) to underline the fact that culture may have an important influence on perceived corporate social responsibility priorities. As such, the widely accepted Carroll (1991) pyramid is revisited in the context of developing countries as shown in table 2.

Figure 2.2: Corporate social responsibility pyramid in developing countries



Source: Adapted from Visser, 2006.

Visser (2006) contends that the order of corporate social responsibility layers in developing countries differs from Carroll (1991) classic pyramid. In developing countries, even if economic responsibilities still get the most emphasis, philanthropy is given the second highest priority followed by legal and ethical responsibilities. This is explained partly by the traditional attachment to philanthropy by the fact that it is most direct way to improve living conditions in their immediate surroundings.

ii. Corporate Social Responsibility Disclosure

Holder-Webb et al. (2009) said it is not enough for corporations to simply engage in corporate social responsibility activities but it is also important and desirable to make information about these activities available to stakeholders. Corporate social responsibility has become an important topic in academic writing and the business field. Many organizations or institutions worldwide strongly emphasize that firms must take into consideration the economic, social and environmental effects of their activities (World Business Council for Sustainable Development 2000; European Commission 2002; World Bank 2004).

Gray et al. (2001) describes corporate social responsibility disclosure as a process of providing information about interactions between companies with regard to environment, employees, society and consumer issues. It is also a process of providing financial and non-financial information in the social and environment context (Hackston & Milne 1996). In addition, corporate social responsibility disclosure is an extension of the financial disclosure system, which reflects the wider anticipation of society concerning the role of the business community in the economy. Corporate social responsibility disclosure includes all information reported to stakeholders about social and environmental effects of a company's actions. As such, it involves extending the accountability of company beyond the traditional role of providing a financial account to the owners of capital. This information could be of qualitative or quantitative nature or both and it may be reported in annual reports, a specific report, a media release or other form as a means of achieving company's objectives. (Adams & Shavit, 2011).

According to Tilt (1999), corporate social disclosure is seen as a mechanism whereby companies disclose the social and environmental aspects of their corporate activities to their stakeholders. It is also seen as the process of communicating information (both financial and non-financial) about the resources and social

performance of the reporting entity (Dutta & Bose, 2007). Parker (1986) describes corporate social and environment disclosure as the reporting by corporations on the social impact of corporate activities, and the effectiveness of corporate social programs, as a way corporation's discharging of its social responsibilities, and the stewardship of its social resources.

According to Blowfield and Murray (2011), corporate social reporting is a part of corporate reporting process, in which a company demonstrates its accountability to shareholders as well as other stakeholders. Corporate social responsibility disclosure is a process of providing information about interactions between companies with regard to environment, employees, society and consumer issues (Gray et al. 2001). In addition, corporate social responsibility disclosure is an extension of the financial disclosure system, which reflects the wider anticipation of society concerning the role of the business community in the economy.

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According to Deegan (2007) social and environmental reporting is commonly referred to as corporate social responsibility disclosure. The concept of corporate social and environmental responsibility was first introduced in 1990s by

multinational companies, but no attention was given at that time to environmental disasters and global warming which have increased corporate social and environmental responsibility awareness (Villiers & Staden, 2011).

Firms in Nigeria try to contribute to economy development and maximize their profit by implementing different technological techniques and methodologies that eventually lead to the deterioration of the environment and polluting the climate leading to several natural problems. These natural changes and the welfare of employees set the alarm for stakeholders in the society to demand that firms should show some concern with regard to their social and natural environment (Pahuja, 2009). It became an obligation on the firms to disclose their responsibility toward the society and the environment and since then environmental information disclosure has become an important part of the accounting information system (Iwata & Okada, 2011; Ahmad & Mousa, 2010).

Ali & Rizwan (2013) states that corporate social and environmental disclosure is information dissemination about the companies human resource related practices, community involvement project and activities, safety and quality of products and services and environmental contribution.

McWilliams and Siegel (2001) describe social and environmental reporting as the process of communicating the social and environmental effects of organizations' economic actions to particular interest groups within the society and to the society at large. Hubbard (2009) defines corporate social disclosure as reporting by a company on matters related to its social, environmental and sustainability performance.

According to Othman & Ameer (2009) corporate social disclosure is a process of communicating the social and environmental effects of firms' economic actions to particular interest groups and society at large. It is the disclosure of information regarding companies' interaction with the environment and the immediate community. Corporate social disclosure reports both the positive and negative impacts of business operations on labour standards, the environment, economic development, and human rights.

Joseph (2007) emphasize that corporate social disclosure is a firm's responsibility to behave ethically, minimize negative effect and maximize positive effect of their activities on economic, social and environment in order to achieve sustainable development goals to its stakeholders. Schaltegger (2004) in Jasch & Stasiskiene (2005) maintain that corporate social disclosure is a subset of accounting and reporting that deals with the measurement, analysis and communication of interactions and links between social, environmental and economic issues that constitute the dimensions of sustainability.

The objective of corporate social disclosure is to generate new and better information on the performance of firms, to support more informed decision-making by key stakeholders, and ultimately to create new incentives for firms to reduce adverse impacts of their activities (Bramono,2008; Putra,2009). Public access to this information is hypothesized to support market incentives, reputational pressures, and new forms of regulation motivating firms to improve practices (Nurdin, 2009). Corporate social disclosures provide a firm the opportunity to spread value

information mainly to financial stakeholders as stock analysts, capital markets and

institutional investors and there as get evaluated on its financial measures (Brammer & Pavelin, 2008). Despite the necessity for disclosures on social and environmental issues, there has been a variety of factors, which may affect either positively or negatively firms to provide these reports. Firm's size and the characteristics of industry seem to play the most important role in the disclosure of environmental issues, according to many studies (Da Silva Monteiro & Aibar-Guzmán, 2009; Magness, 2006).

iii.Rationale for Corporate Social Disclosure

Corporate social disclosure concepts have evolved overtime due to the interaction between companies and their stakeholders. Lantos (2001) observes that the challenges in the current social and business environment have brought about increasing public demand for business leaders to include social and environmental issues as part of their strategies. Managements therefore, are frequently being pressured by various stakeholder groups to allocate financial resources to corporate social responsibility activities and disclose them. McWilliams & Siegel (2001) notes that stakeholders such as employees, consumers, communities and environmental groups have exerted one form of pressure or the other on business organization. Disclosure of corporate social responsibility activities by business organizations is part of strategy to manage the pressures from the aforementioned stakeholders.

Pressures from employees (human resource) take the form of heightening public recognition of certain employee rights in the workplace, non-discrimination in hiring, firing and promotion (Musah, 2008). Matten & Moon (2008) said that

corporate social responsibility has clearly addressed issues bothering on working hours and conditions, fair wages, health care, redundancy and protection against unfair dismissal of employee. Aguilera *et al.* (2007) emphasizes the potency of employees in pressuring companies to engage in corporate social responsibility initiatives which is suggestive of the fact that the perception of corporate social responsibility influences employee behaviour towards companies. It is widely believed that employees will be happy and motivated to put in their best when an organization is fair in its engagements with employees.

In the same vein, customers wield considerable power because of competition of varying dimension among business organizations. Customer pressures include the expectation that companies will produce safe products, quality and provide more reliable consumer information on their products. According to Berman *et al.* (1999) treatment of customers and employees has the most influence on corporate performance. Therefore, Maignan *et al.* (2005) concludes that a better way to improve the treatment of the customer is to apply corporate social responsibility disclosure as a marketing strategy. If a business organization fails to consider its customer needs, it runs the risk of losing its share of market.

The Community expects that company will provide improved healthcare facilities, children education support, creation of work condition for the disabled, and participate in occupational qualification programmes. According to Idemudia & Ite,(2006) corporate social responsibility practices mainly target efforts to alleviate poverty, prevent violation of human rights and protect the environment. However, firm stakeholders and company expectations are divergent; business organizations

seek to maximize profit, whereas customers expect good quality and safe, lowly priced and a variety of services (Ite, 2004). These differences result in pressure on business organizations which if not carefully manage; it may leads to disruption in operation.

The operational impact of manufacturing companies on the environment is largely about pollution. Shrivastava (1995) states that maintaining a clean and safe environment is a major responsibility of organizations. In accordance with global environmental policy, protection rather than pollution of the environment is crucial. Shrivastava (1995) analyses the critical environmental damage such as ozone depletion caused by chlorofluorocarbons, global warming caused by industrial atmospheric pollution, acid rain, urban air pollution, toxic and nuclear wastes and the extinction of natural resources. The need to reduce the harmful effects of the foregoing on life has placed considerable pressure on business organizations to be socially responsible.

iv. Themes of corporate social disclosure

This study applies eight themes of corporate social disclosure measurement. The majority of these themes are those most cited and relevant in the corporate social disclosure literature, namely: environment, energy, human resources, community involvement, products, sustainability, external relations, and other issues in corporate social disclosure (Deegan, Rankin, & Tobin, 2002; Kuasirikun & Sherer, 2004; Raar, 2002; Ratanajongkol, Davey & Low, 2006; Thompson & Zakaria, 2004; Wilmshurst & Frost, 2000). Each theme has either a single item or is elaborated into

a few items. In total, there are 75 items used as measures to examine the extent of corporate social disclosure through a content analysis process. These items have been previously tested for their appropriateness for the Indonesian situation (Gunawan, 2007). A brief discussion of each theme is provided below:

Environment

The natural environment cannot be separated from social issues. The World Summit Conference in 2002 reached a consensus that businesses should have social and environmental responsibility to protect the planet and sustain life (Watson & Mackay, 2003). Most items in corporate social disclosure relate to environmental information, which may signify its importance compared to other issues in corporate social disclosure.

Energy

Non-renewable energy is becoming a crucial issue due to the huge exploitation of fossil related energy globally. Energy also relates to the importance of existing natural resources. If companies continue to exploit nonrenewable energy, the environment is also likely to suffer. Therefore, information about the importance of energy conservation can be a good campaign for raising energy awareness and showing the company's responsibility.

Human resources

Human resources among corporate social disclosure themes identify employees as a key issue for businesses. Employees are categorized as primary stakeholders who need to be served and maintained to ensure good relationships within the companies. Employees are crucial as they are directly associated with business operational activities, including the practice of corporate social disclosure (Ramasamy & Hung, 2004).

Community

A business cannot survive without permission from its surrounding communities. Some companies were forced to close its business because of community riots, violence, or litigation. The company has to be a corporate citizen in its environment. Therefore, company should report how its activities affect its hosting community.

Product

Products are essential for a company's existence, and thus, information about products is important. Through product information, a company may deliver its image to the public so that they can evaluate the company's performance. Product quality provides a basis for a company's strategic advantage and any improvement in this quality may lead to enhanced company performance (Dunk, 2002).

Other information

The other information' theme in this corporate social disclosure list covers other relevant issues in social disclosures, such as corporate objectives, disclosures about consumers or suppliers, and receiving awards other than those awards related to environmental issues. It is expected that useful public information can be included in this theme.

v. Global Reporting Initiative (GRI) and Corporate social disclosure

In recent years most policy makers, firms, academia and other stakeholders have come to realize the significance of social and environmental information disclosure and this has led to the development and enforcement of standards, guideline, legislation and even treaties. According to Othman & Ameer (2009) global sustainability reporting organizations sprang up between 1985 and 2000, each with its own unique standards and membership. However, the most popular Standards and Guidelines on environmental reporting (Asaolu, Agboola, Ayoola & Salami, 2011) are those of the Global Reporting Initiative (GRI), Oil and Gas Industry Guidance on Voluntary Sustainability Reporting, Organization for Economic Cooperation and Development Guidelines, ISO14001, Greenhouse Gas Protocol, Global Compact and United Nations Norms and AA1000 for Auditing The most popular standard among the lists is the Global Reporting Initiative (GRI) framework (Ballou, Heitger & Landes, 2006; Creel, 2010).

The Global Reporting Initiative (GRI) was founded by a group of firms in 1997 who are members of the Coalition for Environmentally Responsible Economies (CERES), with the aim of standardizing global reporting on economic, environmental and social performance by providing standards and guideline for sustainability reporting (Arshad & Vakhidulla, 2011). The guideline is intended for use by business firms, government or non-governmental organization (GRI, 2011). The Global Reporting Initiative as an organization is represented by various firms from diverse locations and regions of the world, the non-governmental organizations and the United Nations Environment Program (UNEP) as well. The guidelines issued by Global Reporting Initiative are continuously improved by the stakeholder council who evaluate the content and structure of the required report in order to ensure that it serves it purpose (GRI, 2011).

It is the most widely accepted globally with the aim of enhancing quality, rigorous and utility sustainability reporting (Ballou, Heitger & Landes, 2006). Global Reporting Initiative reporting standards and guidelines are based on five major principles. These are the principles of materiality, stakeholders, inclusiveness, completeness, timeliness and reliability; all geared towards defining the code of conduct of social and environmental reporting through the framework. Since its inception the Global Reporting Initiative have released different versions of reporting standards and guidelines which, include G1 (2000), G2 (2002), G3.0 (2006), G3.1 (2011); G4 (2013) which is the latest version. The G4 version primarily targets:

a. The production of reports that matters

b. Show critical economic, environmental and social issues

c. Establish a sustainability reporting benchmark.

The Global Reporting Initiative (GRI 2006) characterizes sustainability as the practice of measuring performance on economic, environmental, and social impacts to internal and external stakeholders. KPMG (2008) uses the term 'corporate responsibility' to describe the ethical, economic, environmental and social impacts and issues that concern the private sector. The Global Reporting Initiative's current "G4 sustainability guidelines" standard appears to be the most generally accepted and applied standard for corporate responsibility guidance and reporting (Tschopp

&Nastanski, 2014). Frost, jones, loftus & Van der Laan (2005) argue that Global Reporting Initiative is employed as an indicator of the content and scope of corporate social disclosure. This study adopts the definition used by GRI (2006), because it is broader than other definitions in that it encompasses six comprehensive key themes. These important global themes are economic, environment, labour practices and decent work, human rights, society, and product responsibility.

vi. Nigerian Stock Exchange and Corporate social disclosure

The Nigerian Stock Exchange recognizes the importance of sustainability performance on the overall performance of businesses. While governments have historically initiated and led sustainability policies and regulation, market regulators and operators are increasingly playing a central role in encouraging good corporate governance and transparency among companies or Issuers listed on their stock exchanges.

In view of the aforementioned, The Nigerian Stock Exchange has commenced a phased project to integrate corporate social reporting for its listed companies. The implementation process which started in 2014 is expected to end in 2016. The first major step in this implementation was the hosting of the inaugural Nigerian Capital Market Sustainability Conference (NCMSC), which served as a stakeholder engagement session to discuss the business value of sustainable investment, enhancing corporate transparency and ultimately performance on Environmental, Social and Governance issues (Nigeria Stock Exchange, 2016). The outcomes from the conference and results from relevant assessments have resulted in the production

of the Sustainability Disclosure Guidelines (SDG) or Corporate Social Disclosure Guidelines.

Consequently, the Nigeria Stock Exchange also held a Sustainability Reporting Seminar on June 8, 2016 to intimate stakeholders with the Guidelines, the reporting format and template, coupled with the real value proposition of reporting. According to Nigeria Stock Exchange (2016) these guidelines provide the value proposition for sustainability. They provide a step by step approach on integrating sustainability in organisations, and detail indicators that should be considered when providing annual disclosure to the Nigerian Stock Exchange.

For the purpose of these Guidelines, corporate social disclosure will encompass the following areas:

Economic:

This relates to the organization's impact on the economic conditions of its stakeholders and the interaction or relationship with the economic systems at local, national, and global levels. It does not merely focus on the financial conditions of organizations. Financial performance is fundamental to understanding an organization and its own sustainability.

However, this information is normally already reported in financial accounts. What is often reported less, and is increasingly sought by users of sustainability reports such as investors, is the organization's contribution to the sustainability of a larger economic system.

Environmental:

The environmental dimension of sustainability concerns an organisation's impact on living and non-living natural systems, including ecosystems, land, air, and water. Environmental indicators cover performance related to inputs (e.g., material, energy, water) and outputs (e.g., emissions, effluents, waste).

Social:

The social dimension of sustainability concerns the impacts an organisation has on the social systems such as labour practices, human rights and relationship with communities within which it operates.

According to Nigeria Stock Exchange (2016) all listed companies should ensure that the sustainability report contains information that is relevant and meaningful to stakeholders. In identifying the material sustainability matters, the listed company should also consider the themes and guidance provided in internationally accepted standards such as the Global Reporting Initiative (GRI) Standard.

Nigeria Stock Exchange (2016) states that the following key areas should be considered:

(a) The overall context on the internal structure, strategy, profile and governance of how the economic, environmental, social risks and opportunities are managed. While highlighting how the organization addresses a specific disclosure theme.

(b) The scope and boundaries of the report. The report could be scoped on the basis of physical locations of the organization (geographical boundary); entities within the organization (organizational boundary); and operations within the entire value chain. (c) The material sustainability matters and how they are identified and managed. Materiality is topic that reflect the organization's significant economic, environmental, and social impacts, or that would substantively influence the assessments and decisions of stakeholders.

d) Stakeholder inclusiveness. The organization should identify its stakeholders, and explain how it has responded to their reasonable expectations and interests.

Nigeria Stock Exchange (2016) emphasize that this guide is not comprehensive. The Nigeria Stock Exchange encourages an Issuer to identify and disclose additional Economic, Social and Governance issues that are relevant and material to its business. It may also refer to existing internationally accepted sustainability reporting guidance such as the Global Reporting Initiative (GRI) Standards for its relevant industry or sector.

2.1.2 Corporate Attributes

One great characteristic in corporate disclosure is that a company generally provides information to release specific obligations: to society, investor, supplier, creditors and other stakeholders. However, the decision to provide or not to provide certain information is likely to be influenced by a variety of factors known as company attributes like firm size, firm age, ownership structure profitability among others (Veronica, 2009).

i. Company size and corporate social disclosure

Firm size is the most common variable in disclosure literature either in developed or developing countries. The firm size of a certain corporation is considered to be the most statistically significant variable in examining the differences between voluntary reporting practices of firms (Hossain & Adams 1995; Ahmed & Courtis 1999). Availability of money and expertise in large companies enable them to engage in more activities (which likely to have great impacts on society and environment), produce more information on these activities and their implications, and bear the cost of such processes (Ahmed & Nicholls, 1994). Lastly, growth of large firm entails external capital, which is more likely to be obtained in case of availability of high quality information (Wallace & Naser, 1995).

Cowen, Ferreri, & Parker (1987) revealed that larger companies do a lot more activity, causing a great impact on the environment, have more shareholders who may be concerned with corporate social programs, and its financial reports provide an efficient tool in communicating corporate social information.

The size of the company is based on specific indicators such as total assets, value of stocks, total employment, sales, and market capitalization (Haninun & Nurdiawansyah, 2014). Watts & Zimmerman (1986) argue that large companies are more visible to the public, have more market power, and are more news worthy. Hence, they are more likely to be subject to public resentment, consumer hostility, militant employees, and the attention of government regulatory bodies. Large corporations do have a bigger effect on the community, and therefore normally have a bigger group of stakeholders that influence the corporation (Hackston & Milne,

1996). Hence, voluntary disclosures can be explained as an effort to avoid regulations and reduce political costs (Clarke & Gibson-Sweet, 1999; Gray, Owen & Adams, 1996; Ness & Mirza, 1991).

Company size has been viewed from different perspectives. For instance, Hanafi (2006); Williams (1999) used firm's market capitalization to measure the impact of firm's size on the level of corporate social disclosure. The direction of influence of firm size on extent of disclosure can be positive or negative. That is depending on the situation (contingency theory perspective). On the positive side, it can be argued that since large companies usually operate over wide geographical areas and deal with multiple products and have several divisional units, they are likely to have wellbuilt information system that enables them to track all financial and non-financial information for operational, tactical and strategic purposes (Cerf, 1961). With this type of well-structured internal reporting system, the incremental costs of supplying information to external users will be minimal. This will make them disclose more information than their smaller counterparts. However, Street & Gray (2001); Wallace & Naser (1995) found no such association.

According to Owusu – Ansah (1998), intuition and empirical studies suggest that firm size positively influences mandatory disclosure practices of firms. On the other hand, Wallace & Naser (1995) admitted that although there is overwhelming support for a positive relationship between firm size and level of disclosure, the theoretical basis is unclear. Despite the differences in the approach of company size, results from the previous studies indicated that the size of the firm is an important determinant of corporate social disclosure.

ii. Company age and corporate social disclosure

According to Elijido-Ten (2009) firm age is usually measured by computing the true age of the firm from the date of incorporation. In contrast, Sudaryono (2007) states that company age is the length of time companies are listed on the Stock Exchange. By listing the company on the Stock Exchange, the public accountability of companies towards stakeholders will also increase. This means that such companies are required to perform more responsible business operations as well as have better disclosure of information in the economic and environmental aspects of the companies, labor practices and decent work matters, human rights, products and customer safety, as a means of maintaining public accountability.

Older companies also illustrates that the companies have a longer experience in overcoming related issues such as environmental and social waste pollution, human rights issue, employment practices and workplace safety as well as corruption (Bhayani, 2012).

The level of a firm's disclosure may be influenced by its age, that is, stage of development and growth (Owusu-Ansah 1998; Aktharuddin 2005). Older, well established companies are likely to disclose much more information in their annual reports than younger companies. On the other hand, younger firms might also exhibit better reporting quality since they need to compete with older firms to survive.

Generally, old firms are believed to disclose more information because they are more likely to have established, well-organized professional staff to deal with the technical aspects of their financial statements (Demir & Bahadir, 2014). Glaum

&Street (2003) compared older and younger firms and argued that younger firms tend to concentrate on product and market development when establishing their businesses, rather than accounting. In addition, managers of younger firms tend to be less experienced in running a listed corporation and complying with regulatory requirements. Consequently, Glaum & Street (2003) argued that younger firms' accounting systems tend to be inadequate, resulting in lower quality accounting and disclosures.

iii.Profitability and corporate social disclosure

Economic performance of a firm affects management's decision to engage in corporate social and environmental reporting or disclosure. When companies are not performing well, economic demands take precedence over social and environmental responsibility expenditures (Roberts, 1992). Profitability is defined as an indicator to the firm's performance in managing its assets (Omar, 2014). Profitability is the company's ability to produce a profit that would sustain long-term and short-term growth. Profitability is a factor that makes the management decides either to report or not to their social and environmental issues to their stakeholders (Anggraini, 2006). Webster's New College Dictionary (2008) states that profit is the return received on an investment after meeting all operating expenses.

The higher the level of corporate profitability should be the greater the level of social disclosure (Preston, 1978 in Hackston & Milne, 1996). Hossain & Hammami (2009) considered political costs, financial performance justification, and self-interest of managers as explanatory factors for profitability being a motive for disclosing more

social and environmental information. A corporation management might feel that it has to prove that its profits were not on expense of its social and environmental performance, that is, it did not cause any harm to society or environment while achieving its profits.

Ng& Koh (1993) point to the fact that profitable corporations are more exposed to political pressure and public scrutiny, and therefore use more self-regulating mechanisms, for instance voluntary disclosure of information, in order to avoid regulation. The most obvious and explicit explanation might be that profitable corporations have the necessary economic means - the so-called organizational slack (Hackston & Milne, 1996; Rahman & Widyasari, 2008). In a corporation with less economic resources, management will probably focus on activities that have a more direct effect on the corporation's earnings than the production of social and environmental disclosures (Roberts, 1992; Ullmann, 1985). However, profitability can be regarded to be either positively or negatively related to corporate social disclosure (Neu, Warsame & Pedwell, 1998).

The literature research results on corporate profitability as a determinant of corporate social disclosure appear inconclusive. They present a mixed reaction in the form of a positive, negative or uncertain relationship between a firm's profitability and corporate social disclosure. Some researchers failed to find any association between profitability and corporate social disclosure (Porwal & Sharma, 1991; Hackston & Milne, 1996; Arshad & Vakhidulla, 2011). Other researchers found a positive and significant relationship between profitability and corporate social disclosure (Roberts, 1992; Waddock & Gravess, 1997).

iv. Financial leverage and corporate social disclosure

According to Raheman & Nasr (2007), Leverage means funds taken from outside parties like companies, capital market, money market and other financial institutions. Leverage has been considered as an important company characteristic that can have an influence on the corporate social disclosure. It is possible to say that there is no consensus in the literature on the relationship of this characteristic with corporate social disclosure practices. According to Andrikopoulos & Kriklani (2013) leverage can affect corporate social disclosure in two-ways. Pahuja, (2009); Freedman & Jaggi,2005; Andrikopoulos & Kriklani, 2013; Huang & Kung, 2010 said as firm debt (leverage) increases, the investors' monitoring demand for information also increases in order to keep themselves informed about operating performance of the company, including corporate social responsibility performance.

Furthermore it is suggested that companies with higher leverage are more likely to increase the volume of corporate disclosure to reduce agency costs (Ho & Taylor, 2007). Therefore, a positive relationship between leverage and corporate social disclosure can be expected and this argument is supported by the results of the empirical studies such as Clarkson et al. (2008), Meng et al. (2013), Huang and Kung (2010).

On the other hand, Brammer & Pavelin (2008) argue that companies with relatively lower leverage may be able to have sufficient funds for financing environmental disclosures and to have the opportunity to focus organizational activities that are only indirectly affect the financial success of the company such as voluntary disclosure by the reason of facing less pressure from creditors (Brammer & Pavelin, 2006; Brammer & Pavelin, 2008). In a similar vein, Cormier & Gordon (2001) suggest that corporate social disclosure may increase proprietary costs for high leveraged firms and such costs could make credit negotiations more difficult and costly (Cormier & Gordon, 2001). Moreover, it is argued that highly leveraged firms have less environmental issues to report because such companies are more likely to comply with corporate social responsibility regulations (Wu et al., 2010). By these reasons, a negative relationship between financial leverage and volume of corporate social disclosure can also be expected. This negative relationship has also been documented by empirical studies such as Brammer & Pavelin (2006); Andrikopoulos & Kriklani (2013); Wu et al. (2010); Ahmad et al. (2003); Ho & Taylor (2007); Eng & Mak (2003).

Belkaoui & Karpik (1989); Waryanti (2009) describe how the company's leverage ratio excess competencies of debt holders compared with powers shareholders. The company's dependence on debt to finance its operations is reflected in the level of leverage. Accordingly, this leverage also reflects the company's financial risks. Based on agency theory, the level of leverage has a negative impact on disclosure of social responsibility. According Belkaoui & Karpik (1989), the higher the leverage the greater the possibility of agreement violated the loan agreement, so the company will try to report higher profits now that can be done by reducing costs, including costs to disclose social information.

Ahmad & Nicholls (1994) argued that in countries where financial institutions are a primary source of company funds, there is an expectation that companies, which have large sums of debt on their balance sheet, will disclose more information in their annual reports. Also, such companies tend to disclose detailed information to enhance their chance of getting funds from financial institutions.

v. Ownership structure and corporate social disclosure

Ownership structure is an important mechanism which plays a critical role in influencing a corporate social disclosure practices (Sukcharoensin, 2012). The ownership structure is very important since it can influence strategic aspect of the company including corporate social responsibility as said by Porter (1990) that the purpose of the company was determined by the structure of ownership, owners and creditors motivation, corporate governance, and processes that made up the incentive motivation of the manager. The ownership structures are divided into institutional ownership, managerial ownership, and foreign ownership.

The study of Chau & Gray (2002) on ownership structure and corporate voluntary disclosure in Hong Kong and Singapore is revealed that the extent of outside ownership is positively associated with voluntary disclosures while family-controlled companies have less impact on the level of disclosure.

Eng & Mak (2003) examine the relationship between ownership structure and voluntary disclosures in Singapore. Their results revealed a significant negative relation between managerial ownership and level of voluntary disclosure, and a significant positive relation between government ownership and voluntary disclosure. However, they found no significant association between blockholder ownership and voluntary disclosures.

Nazli & Ghazali (2007) examined the influence of ownership structure on corporate social responsibility disclosure in Malaysia. Their results showed that, companies in which the directors hold a higher proportion of equity shares disclosed significantly less information, while companies in which the government is a substantial shareholder, disclosed significantly more information. Dincer (2011) examine the effect of ownership structure on corporate social disclosure in the Istanbul Stock Exchange as the corporate social disclosure was measured by the report that refers to the Global Research Initiative (Global Reporting Initiative, 2006). The results indicated that ownership by the government had a positive effect on corporate social disclosure.

Porta, Lopez-de-Silanes, & Shleifer (1999) investigate the ownership structure too. The sample was large and small companies in various countries around the world. The ownership structure divided into five types. There are the family or the individual, state ownership, the ownership by a financial institution (bank or insurance), the ownership of the company, and the mixed ownership (cooperatives or trust). The results show that only about 36% percent of the large companies in the world whose ownership was in the company (spread). 30% were in control of the family, 18% were state ownership, and the rest was institution and mix. The results also showed that the share ownership was relatively widespread in the country that had a good legal system that was deemed capable of protecting the interests of individual shareholders like in the United State of America.

According to Oh et al. (2011), the institutional ownership had the positive effect on corporate social disclosure. On the contrary, Pushner (1995) stated that there was a

negative relationship between institutional ownership with leverage and the leverage with productivity. Then, Shleifer & Vishny (1997) argued that institutional ownership can influence the organization decision by applying power. Institutional ownership also had adequate information about both the businesses and the ability to forecast it.

In their examination of the relationship between corporate social reporting (CRS) discoveries and ownership Khan *et al.* (2013) discovered mixed results with an inverse association on managerial ownership and a direct and significant relationship for public and foreign ownership.

vi. Audit firm size and corporate social disclosure

The primary responsibility for preparing the annual report lies with company management; external auditors play a major role in the disclosure policies and practices of their clients. Ali, et. al. (2004) said that big auditors exert a monitoring role in limiting the opportunistic behaviour by management. Fama & Jensen (1983) suggest that large audit firms have a greater incentive to report. If the client issues inadequate disclosure, this is likely to diminish the reputation of large audit firms more than small audit firms, which causes large audit firms to be more diligent. Previous research suggested that auditing firms that belong to the Big 4, Big 5 or Big6 (Big N) are more sophisticated or have better audit quality (Gupta & Nayar, 2007) than non-Big N auditing firms. Higher quality auditor may help clients prepare more sophisticated annual reports with advanced financial and non-financial information, including corporate social responsibility disclosures.

The selection of the audit firm type as one of the important factors that affects the corporate social disclosure practices is based on evidence in the literature of corporate social responsibility (Hussainy et al. 2011). For example, Khasharmeh & Desoky (2013) argue that, an auditing firm may have a significant role to play with respect to the amount of information disclosed by the company. Moreover, Hail (2002) sees that the type of audit firm as an important factor in improving firms' reporting practices.

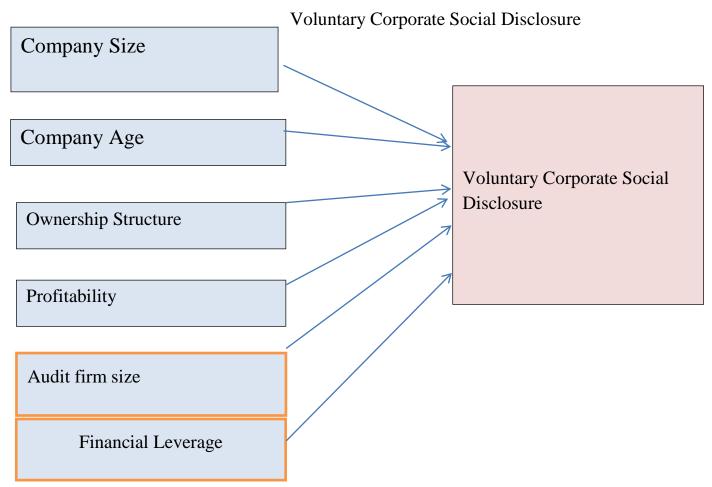
Although the type of auditor is an important factor to facilitate the disclosure of corporate information, Hussainy et al. (2011) argue that the previous literature has submitted mixed results regarding the impact of the type of auditor firm on the level of corporate social disclosure practices. Several studies have indicated that the international audit firms such as big-4 audit firms has a significant influence on the level of corporate social disclosure in corporate reports than the local audit firms (Samaha & Dahawy 2011; Hussainy et al. 2011; Barako et al 2006; Hossain et al. 2006; Xiao et al., 2004). In contrast, other studies have indicated that there is no relationship between audit type and corporate social disclosure practices in the annual reports (Khasharmeh & Desoky, 2013; Huafang & Jianguo, 2007; Chau & Gray, 2010).

The audits indicator is a measure of the reliability of financial accounting disclosures (Bushman et al., 2004). Earlier studies have investigated the association between auditor size and the disclosure level of corporations (Wang et al., 2008; Wallace et al., 1994; Bonsón & Escobar, 2006). Malone et al., (1993) argue that smaller auditing firms are more sensitive to client demands because of the economic

consequences associated with the loss of a client; on the other hand, larger firms have a greater incentive to demand adverse disclosures from the client. A number of studies failed to discover a significant relationship between the auditor size and disclosure level (Wallace et al., 1994; Hossain et al., 1995; Malone et al., 1993). On the other hand, many earlier studies have found a positive association between the auditor size and the extent of disclosure (Patton & Zelenka, 1997; Raffournier, 1995; Bonsón & Escobar, 2006).

Figure 2.3: Model of corporate attributes and corporate social disclosure

Corporate Attributes



Source: Researcher, 2018

The factors that differentiate companies known as companies' attributes consisting of company size, profitability, company age, audit firm size, financial leverage and ownership structure that affects the company's corporate social disclosure (Veronica, 2009). The above conceptual framework model capture corporate attributes that affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

2.2Theoretical Framework

2.2.1. Legitimacy theory

Legitimacy theory is derived from the concept of organizational legitimacy, which has been defined by Dowling &Pfeffer, 1975 in Deegan (2002) as:

... a condition or status which exists when an entity's value system is congruent with the value system of the larger social system of which the entity is a part. When a disparity, actual or potential, exists between the two value systems, there is a threat to the entity's legitimacy.

Legitimacy theory posits that organisations continually seek to ensure that they operate within the bounds and norms of their respective societies. In adopting a legitimacy theory perspective, a company would voluntarily report on activities if management perceived that those activities were expected by the communities in which it operates (Deegan 2002; Deegan, Rankin & Voght 2000; Cormier & Gordon 2001).

As corporate social disclosures are largely of a voluntary nature, it is logical to suggest, as O'Donovan (1999) argued, that such disclosures would only be included if management know that it have some benefit to the organization. Research has made considerable efforts to understand the motivations for reporting, and one motivation may be the desire to legitimize certain aspects of an organization's activities (Deegan, 2002).

Legitimacy theory attempts to explain why a firm makes social and environmental disclosure, and argues that a firm is legitimized when its value system matches that of the social system of which it forms a part, and that the legitimacy is threatened when the firm's value system does not match that of the social system (Lindblom,

1994). Legitimacy theory implies that a company's activities must be legitimate in the eyes of society to allow it to continue its operation within the society. Legitimacy theory argues that firms seek to ensure that they operate within the bounds and norms of society (Tilt, 1999; Suchman, 1995). It relies on the notion that the legitimacy of a business entity to operate in the society depends on an implicit social contract between the business entity and society (Guthrie & Parker 1989) and they will adopt disclosure strategies to conform to society's expectations (Deegan 2002).

Legitimacy theory predicts that companies adopt environmental and social responsibility disclosure to legitimize their operations when society's norms and expectations of the business entities change or the business entities perceive themselves in breach of existing norms and expectations of society (Deegan, 2002; O'Donovan, 2002). Legitimacy theory assumes that the firms have contract with the society as a whole (Dowling & Pfeffer, 1997).

It is moral obligation of the firm to meet the expectations of the societal members (Ahmad & Sulaiman, 2004). Legitimacy therefore becomes a resource that a firm can create, influence, or manipulate through various disclosure-related strategies (Woodward et al., 2001). A firm may be motivated to disclose social and environmental information to legitimize its status within society (Deegan, 2002). Deegan & Unerman (2011) emphasize that the legitimacy theory relies upon the notion that there is a social contract between an organization and the society in which it operates. Therefore, company try to legitimize their corporate actions by engaging in corporate social disclosure to get the approval from the society and thus, ensuring their continuing existence.

The disclosure-related strategy may be either proactive for a firm to gain or maintain the support of the general public and particular interest groups (O'Donovan, 2002; Van Staden & Hooks, 2007) or reactive for the firm to repair its legitimacy threats (Cho, 2009). If the firm reaches the expectations of the society then it would be considered as legitimate otherwise its legitimacy would be at risk (Deegan & Jeffry, 2006).

The legitimacy theory provides a more comprehensive perspective on corporate social disclosure as it explicitly recognizes that businesses are bound by the social contract in which the firms agree to perform various socially desired actions in return for approval of their objectives and other rewards, and this ultimately guarantees their continued existence (Brown & Deegan, 1998; Deegan, 2002; Guthrie & Parker, 1989). Gray et al. (1995); Hooghiemstra (2000) emphasize that most insights into corporate social disclosure emanate from the use of this theoretical framework which posits that social and environmental disclosure is a way to legitimize a firm's continued existence or operations to the society.

A number of corporate social responsibility studies have employed the framework of legitimacy theory in order to examine possible motivations for corporate social and environmental disclosures. An early study based, on disclosures by BHP Ltd over the period 1885 - 1985, discovered that legitimacy theory was generally not adequate as a means of explaining BHP's social disclosures during the period studied, but argued that a relationship between legitimacy theory and disclosure was marginally supported for environmental issues (Guthrie & Parker, 1989). Many later papers

have linked corporate social disclosures to legitimacy theory, but have found varying degrees of explanatory power in the theory.

Patten (1992) said that the increased environmental disclosures of petroleum companies after the Alaskan oil spill can be interpreted as evidence in support of legitimacy theory. Walden & Schwartz (1997) discover that increase in environmental disclosures were not simply limited to the oil industry after such incidents, and concluded that companies report disclosures in response to public policy pressure following such events.

Brown & Deegan (1998); O'Donovan (1999) explain that some companies provide social disclosures in annual reports in response to the perceived concerns of society. Wilmshurst & Frost (2000) study show limited support for the applicability of legitimacy theory as an explanation for the decision to disclose environmental information.

Campbell, Craven & Shrives (2003) examined the extent to which voluntary disclosures represent an attempt to close a perceived legitimacy gap. They contended that the level and patterns of disclosure by a company may vary depend on whether the company's main product has negative connotations or whether the company's main product is an essentially desirable product which may give rise to some undesirable by-products (Campbell, Craven & Shrives 2003). Specifically, they argued that, in the case of structural illegitimate companies, it is likely that legitimacy can never be attained in the eyes of some constituencies and the objective cannot be to restore something they never had. In such cases, the aim of disclosure might simply be to limit damage or to convince society that they are 'not all that

bad'. It is thus possible that companies repairing or maintaining legitimacy may view disclosure entirely differently from those who have to build or establish it.

2.2.2. Stakeholder theory

Stakeholder of the firm can be defined as "any identifiable group or individual who can affect the achievement of an organization's objectives, or is affected by the achievement of an organization's objectives" (Freeman & David, 1983). The stakeholder theory asserts that firms have relationships with many constituent groups and that these stakeholders both affect and are affected by the actions of the firm (Freeman, 1984). Stakeholder theory states that the company's objectives are not solely oriented to intensify value of the owner, but also of other parties who are interested in the company (Lawrence & Weber, 2011). Therefore, Gray, Owen & Maunders (1987) said that stakeholders have the right to specific information about social, environmental and economic issues to make an informed decision.

Stakeholder theory has been divided into two branches: normative (ethical) branch of stakeholder theory and managerial branch of stakeholder theory. The normative perspective of stakeholder theory equally treats all the stakeholders of the company and does not take into account the power of each stakeholder (Deegan & Jeffry 2006). The normative perspective of stakeholder theory asks the managers to work for the benefits of all the stakeholders (Hasan 1998 cited in Deegan & Unerman, 2011). According to normative perspective of stakeholder theory, all the stakeholder of the company has equal right to the company information. Under normative branch of stakeholder theory, social and environmental performance information is disclosed to all the stakeholders.

The managerial perspective of stakeholder theory is concerned with the interests of limited number of stakeholders, who have significant power to influence the organization. The power of the company depends upon the nature of (critical) resources that are held by the stakeholders (Ullmann 1985). Stakeholders were divided according to their importance, into primary group of stakeholders (comprise group of people without their continuing cooperation a company can't survive) and secondary group of stakeholders (group of people who does not make any transaction with the company and survival of the company does not depend upon them) (Polonsky 1995).

Primary stakeholders have more power as compared to secondary stakeholders. Companies can disclose social and environmental responsibility information to meet the expectations of powerful stakeholders and to show their accountability to them (Gray, Owen, & Adams, 1996). Different stakeholders have different expectations from the company. In this conflicting situation, the manager following managerial branch of stakeholder theory would take into account powerful stakeholders interest (Deegan & Jeffry 2006) while disclosing their social and environmental information. Thus under managerial branch of stakeholder theory, social and environmental performance information is disclosed to comply with the expectations of powerful stakeholders (example, government, international buyers, and shareholders etcetera) rather than all the stakeholders of the firm.

The philosophical framework of the stakeholder theory is based on trying to pay attention to all parties that are associated with companies, either through a direct or an indirect relationship. Differences in the level of this relationship, balancing of economic and social interests and equal treatment among all stakeholders, are the key ideas that underlie this theory (Harrison & Freeman, 1999).

Stakeholder theory seeks to interpret the complex relationships and regulatory interactions, which intertwined between the external and internal environment for companies. Therefore, the basic argument for the stakeholder theory is an attempt to expand the concept of individuals who have a legitimate claim on the firm from shareholder into stakeholder (Marcoux 2003; Solomon & Linda 2002). In the same vein, Gray et al (1996) argue that, stakeholder theory focused on identifying the responsibility and accountability between a firm and its stakeholders, which seeks to encourage corporate bodies to align corporate needs with its environment (Aribi, 2009).

According to this perspective, it could be argued that the stakeholder groups have the capacity to manipulate/control how companies perform their duties (Wilson, 1997). In this regard, Gray et al., (1995) argue that: the corporation's continued existence requires the support of the stakeholders and their approval must be sought and the activities of the corporation adjusted to gain that approval.

In line with the stakeholder theory, corporate social disclosure is considered as an effective mechanism to be used by organizations for managing and developing relationships with its stakeholders, in order to gain their support and approval, or to distract their opposition (Gray et al, 1996). Similarly, Roberts, (1992) asserts that the

corporate social disclosure is one of the most successful means in the interpretation and negotiation of the relationships between the internal and external parties. Moreover, Guthrie and Parker (1990) argued that the corporate social disclosure is an important way to reflect public social priorities, respond to government pressure, accommodate environmental pressures and sectional interests and protect corporate prerogatives.

2.2.3. Social contract theory

Donaldson (1982) views the business and society relationship from the philosophical thought. He argues that there exist an implicit social contract between business and society and this contract implies some indirect obligations of business towards society. Social contract thinking is explicitly recognized as a form of post conventional moral reasoning (Rest, 1999). The social contract theory is further extended by Donaldson and Dunfee (1999) who in turn propose an integrative social contract theory as a way for managers to take decision in an ethical manner. According to the societal approach, firms are responsible to society as a whole, of which they are an integral part. The main idea behind this view is that business organizations operate by public consent in order to serve constructively the needs of society to the satisfaction of society (Van Marrewijk, 2003).

2.2.4. Signalling theory

Signaling theory explains why firms have an incentive to report information voluntarily to the stakeholders. Voluntary disclosure is necessary in order for firms to compete successfully in the market for risk capital. Insiders know more about a company and its future prospects than investors do; therefore, investors will protect

themselves by offering a lower price for the company (Omran & El-Galfy, 2014; Thorne et al., 2014). However, the value of the company can be increased if the firm voluntarily reports (signals) private information about itself (i.e., corporate social disclosure) that is credible and reduces outsider uncertainty (Connelly, Certo, Ireland, & Reutzel, 2011; Mahoney, 2012). Although the signaling theory was originally developed to clarify the information asymmetry in the labour market (Spence, 1973 cited in Mahoney, 2012), it has been used to explain voluntary disclosure in corporate reporting (Ross, 1977 cited in Sari, 2010). As a result of the information asymmetry problem, companies signal certain corporate social disclosure information to investors to show that they are better than other companies in the market for the purpose of attracting investments and enhancing a favourable reputation (Verrecchia, 1983). Corporate social disclosure is one of the signaling means, where companies would disclose more corporate social disclosure information than the mandatory ones required by laws and regulations in order to signal that they are better (Mahoney, 2012; Thorne et al., 2014). Hasseldine, Salama, & Toms (2005) integrate quality-signaling theory and the resource based view of the firm to test the differential effects of the quantity and quality of social and environmental disclosures on the firm's environmental reputation. Thorne et al. (2014) suggest that quality of corporate social disclosure rather than mere quantity has a stronger effect on the creation of social and environmental reputation amongst executive and investor stakeholder groups.

Corporate social disclosure is one of the signaling means, where firms would disclose more information than the mandatory ones required by laws and regulations

in order to signal that they are superior (Campbell, Shrives, & Saager, 2001). The signaling theory is better suited to a situation where firms are competing for resources (Thorne et al., 2014).

In summary, this work is anchored on legitimacy theory because companies' attempts to establish congruence between the social values associated with their activities and the norms of acceptable behaviour in the community in which they are operating. Therefore, company enhances its legitimacy by ensuring that its output, methods or goals conform to stakeholders' expectation and demonstrate greater accountability and transparency by reporting their corporate social responsibility activities to better meet stakeholders' expectations.

2.3 Empirical Review

Modugbu & Eboigbe (2017) examined corporate attributes and corporate disclosure level of listed companies in Nigeria. The study specifically investigates the relationship between firm size, leverage and corporate social disclosure level. The study adopted the longitudinal research design. The result of their study show a significant positive association between firm size and mandatory disclosure while it reveal a significant negative relationship between leverage and mandatory disclosure. the study recommend that the Financial Reporting Council of Nigeria and other regulatory agencies should intensify efforts towards enforcement of companies' compliance with the requirements of International Financial Reporting Standards and other relevant statutory provisions. Elshabasy (2017) examined the impact of corporate characteristics on environmental information disclosure among listed firms in Egypt. The study discovered that there is an insignificant relationship between Firm Size and Firm Financial Leverage on environmental information disclosure, while Firm's Profitability showed a positive significant relationship with environmental information disclosure.

Soyinka, Sunday & Adedeji (2017) examined the relationship between firm size, leverage and return on asset on corporate social responsibility disclosure. The study used data from audited annual reports and accounts of the listed Deposit Money Banks in Nigeria. The study embraces the use of panel regression techniques as tool of analysis. They discovered that firms' size and return on asset has positive significant effect on corporate social responsibility disclosure while leverage was found to exhibit a negative relationship with corporate social responsibility.

The topic for the study is determinants of corporate social responsibility disclosure in Nigeria, while the main objective is to evaluate the determinant of corporate social responsibility in Nigeria. There is disparity between the topic and the objective because there is different between corporate social responsibility disclosure and determinant of corporate social responsibility. The study focus on money deposit banks quoted on Nigerian Stock Exchange for the year 2015. The period covered for the study is too small to accept the findings and conclusion of the researchers.

Tareq, Reza & Aminu (2017) investigated the impact of corporate characteristics on social and environmental disclosure in the manufacturing sector in Jordan. The study discover that firm size, audit firm and financial performance are the strongest factors

that have affected the Jordanian corporate social disclosure; while, profitability, ownership structure have no effect on corporate social disclosure among firms in the manufacturing sector.

The study developed a disclosure index to measure corporate social disclosure when there is a standardized disclosure index from Global Reporting Initiative (GRI). The researcher self-developed disclosure may be prone to personal bias and may affect the content analysis used for the study.

Egbunike, & Tarilaye, (2017) examined the association between firm's specific attributes (firm size, earnings, leverage and governance) and voluntary environmental disclosure with evidence from listed manufacturing companies in Nigeria. The study adopted a longitudinal survey research design. The study discovered that there is a positive relationship between environmental disclosure, firm size and leverage of the studied manufacturing companies in Nigeria.

Chutimant, Wanchai, & Panarat (2017) examined the effect of ownership structure on corporate social responsibility disclosure of the Thai listed companies. The ample for the study was selected from Thai publicly listed firms at 2014. A census approach was used, since the overall number of firms is relatively small. The technique used for data analysis in the study was structural equation modeling (SEM) in the measurement models that represents the relationship between latent variables and observed measures. The study discovers a significant positive relationship between ownership structure and corporate social responsibility disclosure.

The researcher failed to specify the model used for the analysis. The census approach used in selecting sample population was not explained and no previous study was cited for using the approach. This may likely affect the result of the study. Alhassan & Mohammed (2016) examined the relationship between firm age, audit firms and corporate social reporting among quoted firms on Nigerian Stock Exchange. The study focused mainly on environmental reporting aspect of corporate social disclosure. The specific objective of the study is to determine the influence of firm age and audit firm on environmental reporting. The research design used by the study is not clearly defined before stating the statistical tools used for the study. The study finds a significant relationship between firm age, audit firm and environmental reporting.

Cahyani, & Suryaningsih, (2016) examined the effect of leverage, board of commissioner, foreign ownership, company age and company size towards the disclosure of corporate social responsibility implementation. Leverage was measured by debt to asset ratio (DAR), board of commissioner was measured by the number of commissioners, company age was measured by the difference of research year and listing year, and company size was measured by the in total asset. The study used published reports and financial statements of 55 companies listed in the manufacturing sector of the Indonesia Stock Exchange from the period of 2013-2014. The study used purposive sampling technique to select sample population. The result of the study shows that foreign ownership and company size have a significant effect on corporate social responsibility disclosure implementation.

However, leverage and company age has no effect towards the corporate social responsibility disclosure implementation.

Umoren, Isiavwe-Ogbari,,& Atolagbe (2016) investigated the influence of company size, profitability and auditor type on corporate social responsibility disclosure practices of Nigerian quoted companies and their determinants. Ex-post facto research design was adopted. The population for this study consisted of 188 quoted companies on the Nigerian Stock Exchange. Judgmental sampling technique was used to select the samples of 45 out 188 quoted companies.

The findings show that profitability does not have significant effect on corporate social responsibility disclosure, while company size and auditor type have positive significant effect on corporate social responsibility disclosure.

Bakr & Redhwan (2016) investigated firm characteristics and corporate social responsibility disclosure among listed firms on Saudi Stock Exchange. The specific objective of the study was to investigate the of influence size of the company, industry type, government ownership, the age of the company, capital raised, and the size of audit firm on the general level of corporate social responsibility disclosure.

The study did not state the research design used for the study. The study crafted a disclosure index to measure corporate social responsibility information disclosed by the examined firms because the researchers said there is no generally accepted disclosure index. However, according to Tschopp & Nastanski (2014) the Global Reporting Initiative (GRI) is the most accepted and applied standard for corporate responsibility guidance and reporting. The study discovered a positive relationship between size of the company, company age, the size of the audit firm

and corporate social responsibility information disclosure. While, there is negative relationship between ownership, industry type and corporate social responsibility information disclosure.

Ikpor & Agha (2016) examined the determinants of voluntary disclosure quality among listed firms on Nigeria Stock Exchange. The study focus on how profitability, leverage, size and board composition affect the quality of corporate social disclosure. The study used Ex-post facto research design and judgmental sampling technique to determine sample population. The study excluded some firms based on the fact that some firms' usage of financial leverage substantially differs from the other.

The study failed to recognize that debt to equity ratio can be applied generally to all the firms. This could have help to increase the sample population of the study. The study discovered that firm size has significant and positive relationship with disclosure practices of listed firms in Nigeria. On the other hand, profitability and leverage were found to be significant and negatively related to the disclosure quality of listed firms in Nigeria.

Ofoegbu & Megbuluba (2016) examined the influence of firm characteristics on the quality of corporate environmental information disclosure among Nigeria manufacturing companies. The primary objective of the study was to examine the influence of firms' size on the quality of corporate environmental information disclosure. The study adopted the content analysis and ex-post facto research designs. The study shows that firm size affect does not significantly affect quality of corporate environmental information disclosure.

Mahammed, Abdullah, & Nabi (2015) examine the firm social responsibility disclosure practices in Kuwait by analyzing 2012 annual reports of industrial and service firms listed on Kuwait Stock Exchange. They examined whether the level of social disclosure is influenced by firm-specific characteristics. The study showed that the majority of the firms somehow disclose social information and revealed that the level of firm social responsibility disclosure is influenced by firm size, profitability and government ownership. The study also demonstrated that social responsibility disclosure has a significant positive association with both firm size and profitability and negative marginal association with government ownership. Moreover, the study confirmed that other variables such as leverage; liquidity, firm age and type of industry have no significant impact on the social responsibility disclosure on industrial and service firms listed on Kuwait Stock Exchange.

Samuel, Ferdinand, Abubakar, & Ifeatu, (2015) examined evidence and patterns of corporate social and environmental disclosure through annual reporting by firms in Nigeria. A total of 154 annual reports of 40 Nigerian Stock Exchange (NSE) listed firms were analyzed. The study used an exploratory correlation descriptive research methodology based on an analysis of content themes and word count. The top 100 companies that are listed on the Nigerian stock exchange (NSE) were selected as sample. The study did not state how the sample population was selected and the justification for selecting 100 companies.

The study found a positive relationship between company size, industry type and corporate social and environmental disclosure. They recommend that future

researchers should investigate the degree to which each of the content theme factors contribute to overall firm disclosure.

Ahmed & Nurul (2015) conducted an empirical investigation on extent of corporate responsibility disclosure and its determinants by listed companies on Saudi Stock Exchange. The study discovered that company size, type of industry and ownership concentration affect corporate responsibility disclosure.

Adekanmi, Adedoyin & Adewole (2015) examined the determinants of social and environmental disclosure of listed firms in Nigeria. The study discovers that firm size, profitability and ownership structure have positive effect on social and environmental disclosure of listed firms in Nigeria.

In Jordan, Khaldoon (2015) studied firm characteristics, governance attributes and corporate voluntary disclosure among listed companies on Jordan Stock Exchange. The study discovered that firm size, firm age and profitability have a significant effect on voluntary corporate social disclosure while ownership structure does not affect voluntary disclosure.

Istianingsih (2015) examined the impact of firm characteristics on corporate social disclosure among listed firms in Indonesia. The study discovered that firm size has positive significant effect on corporate social disclosure, while profitability, leverage, ownership structure does not have significant effect on corporate social disclosure.

Ibrahim (2014) examined firm characteristics and voluntary segments disclosure among listed firms in Nigeria. The result showed that firm size and industry type have positive association with voluntary segments disclosure. In addition, negative

association is observed between firm listing age, ownership diffusion and voluntary segments disclosure.

Mishari & Abdullah (2014) investigated the association between firm-specific characteristics and corporate financial disclosure among Kuwait Stock Exchange (KSE)-listed firms. The study used regression analysis to analyze their data. The study finds a positive and significant relationship between corporate financial disclosure and firm age, firm size, profitability.

Aljifri, Alzarouni., Ng, & Tahir (2014) investigated the impact of firm specific characteristics on corporate financial disclosures amongst United Arabic Emirate companies. The study examines the relationship between listing status, industry type, size of firm, and the extent of disclosure in corporate annual reports. The results of this study show that listing status, industry type, and size of firm are significantly associated with the level of disclosure.

Kabir (2014) examined the association between firm characteristics and the extent of voluntary segments disclosure among the largest firms in Nigeria. The results shows that firm size and industry type have positive association with voluntary segments disclosure. While negative association is observed between firms listing age, growth, return on investment, ownership diffusion and voluntary segments disclosure.

Akbas (2014) investigate the relationship between company characteristics and the extent of the environmental disclosures of Turkish companies. The sample of the study consists of 62 non-financial firms listed on the BIST-100 index at the end of 2011. The result of their regression analysis showed that company size and industry membership are positively related to the extent of environmental disclosure, while

profitability is negatively related. However, neither leverage nor age has a statistically significant relationship with the extent of disclosure.

Ali, Merve & Nizamettin (2013) examined the association between firm characteristics and corporate voluntary disclosure among Turkish listed companies. The study discovered that firm size, audit firm size and ownership structure have positive significant effect on voluntary corporate disclosure. However, leverage was found to have negative significant relationship with voluntary corporate disclosure. The remaining variables, namely, profitability, listing age, and board size were found to be insignificant.

Sufian & Zahan (2013) examined the effect of ownership structure on corporate social responsibility disclosure in Bangladesh. The study used ex – post factor design and multivariate regression has been used to analyze the collected data through the Statistical Package for the Social Sciences (SPSS). The study discovered that the ownership structure has a positive association with corporate social responsibility disclosure.

The study is one year study of non – financial companies listed with DSE. The period used for the study is too small to make robust findings about ownership structure and corporate social responsibility disclosure.

Ebiringa,, Yadirichukwu,, Chigbu. ,& Obi, (2013) examined the effect of firm size and profitability on the extent of corporate social disclosures by Oil and Gas firms in Nigeria. The design adopted for the study is cross-sectional research design. The population of the study consists of all quoted companies in the oil and gas sector. The study cover the period of 2011 and content analysis was adopted in extracting the data from annual reports and account of the sample population. The study discovered an insignificant negative correlation between corporate social responsibility disclosure and firm size. Profitability is significantly positively related to corporate social responsibility disclosure of the sample companies. The study recommends investigation to other corporate factors that influences corporate social responsibility reporting.

Mohamed (2013) investigated the association between voluntary disclosure level in annual reports and firm characteristics of 50 Egyptian companies listed on the Egyptian Stock Exchange of the non-financial sector during the period 2007-2010. The results of univariate and multivariate analyses indicated that firm size and profitability have significant positive association with voluntary disclosure level in annual reports. However, auditor size and firm's age do not have any significant association with voluntary disclosure level.

Osazuwa, Francis & Izedonmi (2013) examined the impact of corporate attributes on environmental disclosure among quoted firms in Nigeria. The researchers investigated a sample of one hundred randomly selected firms on the Nigerian Stock Exchange. Data were extracted from the financial statements of the companies and Nigerian Stock Exchange Factbook. The data were analyzed using descriptive statistics, and Binary probit regression analysis. It was observed that performance of the firm (profitability) and the industry type had a significant influence on environmental disclosure.

AL- Shubiri1, Al-abedallat, & Abu Orabi, (2013) investigate financial and nonfinancial determinants of corporate social responsibility reporting among industrial

companies listed on the Amman Stock Exchange in Jordan. The study adopted the 60 industrial companies listed on Amman Stock Exchange in Jordan which published annual reports in 2006 to 2010 as its sample population. The study did not state research design used for the study but the authors said the methodology of the study is to develop model to test their hypotheses.

The study measured corporate social disclosure with research and development with training and education as employee responsibility. However, the study discovered significant relationship between firm size, leverage, firm age and voluntary corporate social reporting. This design and methodology used by the study will make difficult to compare its results with relevant studies.

Uwuigbe & Egbide (2012) investigated the relationship between firms' financial leverage, size of audit firms and the level of corporate social responsibility disclosures among listed firms in the Nigeria stock exchange. The study was silent about its research design but used content analysis in eliciting data from annual report of selected sample.

The result of their study shows that firms audited by big and prominent auditing firms tend to disclose more corporate social responsibility information than companies audited by small auditing firms. That is, firms audited by big auditing firms with international affiliations (such as the KPMG, the PricewaterhouseCoopers and the Akintola Williams Deloitte) tend to have a significantly higher level of corporate social disclosure than others that are audited by small local audit firms. On the other hand, the study observed a significant negative association between firms' financial leverage and the level of corporate social responsibility disclosures among

the selected listed firms. This finding invariably portends that firms with high debt profile and a higher risk of insolvency would be unwilling to devote extra cost on corporate social issues.

Macarulla & Talalweh (2012) examined the determinants of corporate social disclosure practices of Saudi firms. They found that the level of corporate social responsibility disclosure is fairly low. They also found that firm size is the main variable linked to all corporate social responsibility categories. The study observed that economic sector and profitability play important role in determining the level of corporate social responsibility disclosure.

The study made use of secondary data without clearly defines the research design used by the study. The study used simple random sampling technique to select its sampling population without justification for the use of the sampling technique.

Faisal, Tower, & Rusmin, (2012) investigated corporate social disclosure practices in a global context. The study used sample populations of 2009 corporate social reports from some of the world's largest companies in 24 diverse countries are examined using a comprehensive disclosure index. These reports are analysed to better understand how company characteristics and institutional factors explain sustainability communication using a legitimacy theory framework. The world renowned Global Reporting Initiative 2006 guidelines are used as the benchmark disclosure index checklist.

The study discovered that voluntary disclosure play an important role in improving the credibility of corporate social disclosure. The study finds a significant relationship between corporate social reporting and firm size. The study

recommends that qualitatively-oriented research techniques could be employed to obtain interview and focus group style data from key senior corporate managers to better understand their constraints and incentives to communicate corporate social information.

Lucyanda & Siagian (2012) examined the influence of company characteristics on corporate social disclosure. The populations of the study were companies on Indonesia Stock Exchange from 2007-2008 periods. The study found that company size, company profitability, company profile, earning per share, and environmental concern have an influence toward corporate social disclosure. The study also found that leverage and company age has no influence on the corporate social responsibility disclosure.

Bayoud & Kavanagh, (2012) examined factors influencing levels of corporate social disclosure by Libyan firms. The study discovered that firm's size is not significantly associated with the level of corporate social disclosure. Hussainy, Elsayed & Abdelrazek (2011) investigated factors affecting corporate social disclosure in Egypt. They discovered that firm size does not affect corporate social disclosure among listed firms on Egyptian Stock Exchange. Glaum & Street (2003) discovered no evidence of relationship between company profitability and corporate social disclosure social disclosure among listed firms on German Stock Exchange.

Bhayani (2012) examined the association between firm-specific characteristics and corporate disclosure among listed firms on India Stock exchange. The study discovered that firm age does not affect corporate social disclosure among listed firms in India. However, firm size affects corporate social disclosure.

Uwuigbe (2011) investigated the relationship between management ownership and the level of corporate social responsibility disclosure of listed firms in Nigeria. Judgmental sampling technique was used for the study. The simple regression analysis was employed as a statistical technique for analyzing the data collected. The study revealed that managerial ownership structure has a significant positive impact on the level of corporate social responsibility disclosures among firms.

Uwuigbe (2011) investigated the relationship between firms' characteristics and the level of corporate social disclosures among listed firms in the financial sector of the Nigerian stock exchange. Using judgmental sampling technique, a total of 31 listed firms were selected for the study based on their level of market capitalization and direct financing of most firms from the manufacturing industry. The study discovered that size of firms, profitability and the size of audit firms has a significant effect on the level of disclosure among the selected listed firms in Nigeria.

Mahadeo, Oogarah-Hanuman, & Soobaroyen, (2011) examined corporate social disclosures practices in Mauritius. The study focus attention on the annual reports of all companies listed on the Stock Exchange of Mauritius (SEM). The period 2004-2007 was selected since it coincided with the publication of the local Code of Corporate Governance (published in 2004 but made applicable from 2005)

The study adopts a longitudinal approach and use pooled regression analysis to investigate the influence of firm size, leverage, profitability and industry affiliation on corporate social disclosure. The study discovered that firm size and leverage has positive significant effect on corporate social disclosure, while profitability and industry affiliation are not significantly linked to corporate social disclosure.

Uwuigbe, Uwuigbe, & Ajayi (2011) examined the association between corporate environmental visibility and the level of corporate social responsibility disclosures among listed firms in Nigeria. Some of the attributes of environmental visibility used in this study include: size of firms, profitability and board size. The study measured corporate social responsibility disclosure with Kinder Lydenberg Domini (KLD) scoring scheme and used content analysis method of data collection. The study did not did not state the research design used.

The study observed that there is a significant positive relationship between the size of firms and corporate social responsibility disclosures. The study discovered that there is no significant relationship between profitability and corporate social responsibility disclosures.

Rouf. (2011) investigated the extent and nature of corporate social responsibility disclosure (CSRD) in corporate annual reports of listed companies in Bangladesh. The specific objective of the study is to examine the factors that influence companies to disclose social responsibility information in their annual reports. The result of the study shows that the relationship between the corporate responsibility disclosure and firm size is positive.

The study constructed disclosure index for the study which is very sensitive and can affect the results because it is not widely acceptable disclosure index like Global Reporting Initiative (GRI). The study considers data of only one year. The results may differ across different years if multiple years are considered for analysis.

Echave & Bhati. (2010) examined the determinants of corporate non-financial disclosures practices of Spanish firms using annual reports of 41 Spanish firms for

the year 2007. The study used ex- post facto design. Secondary data collected was analysed with regression analysis. The study revealed that there is positive relationship between firm size, profitability, auditor type and level of corporate social and environmental disclosure practices among listed firms in Spain.

Yulita (2010) examine corporate social disclosures in an African developing economy as provided in the annual reports of listed companies. The study adopts a longitudinal approach to examine corporate social disclosures patterns over a 4-year period (2004-2007). The study used pooled regression analysis to investigate the influence of various firm-level factors on corporate social disclosures. The study found that firm size and profitability does not significantly affect corporate social disclosure, while leverage is positively related to *c*orporate social disclosure.

Reverte (2009) examined whether industry characteristics and media exposure are potential determinants of corporate social responsibility disclosure practices. The characteristics investigated are size of the firm (measured by the natural logarithm of market value of the firm), industry environmental sensitivity, profitability, ownership structure, international listing, and media exposure. These characteristics were regressed against corporate social responsibility ratings using multiple regression equation. The study finds that larger size, higher exposure, and environmental sensitivity of the industry of operation affect corporate social responsibility disclosure practices, while profitability or leverage does not.

Jinfeng & Huifeng (2009) examined the characteristics that impact the level of information disclosed on environment protection of manufacturing companies listed on Shanghai Stock Exchange. They found a positive influence of industry type, firm

size, audit firm's type on the corporate social responsibility disclosure index. Eleftheriadis & Anagnostopoulou (2014) examined factors that influence environmental disclosure in companies listed on Athens Stock Exchange. They found a significant positive impact of firm size on the environmental disclosure, while leverage and profitability do not.

Hossain and Hammami (2009) investigated voluntary social disclosure in the annual reports of firms listed on Doha Securities Market (DSM) in Qatar. The study finds a positive and significant relationship between firm age, size, complexity and assetsin-place are significant. However, profitability is not significant with voluntary disclosure in the annual reports.

Barako, Hancock & Izan (2006) investigated the extent to which ownership structure and company characteristics influence voluntary disclosure practices among Kenyan companies. The study discovered that ownership structure, firm size and leverage positively and significantly affect voluntary disclosure, while profitability and type of external audit firm do not have significant influence on the level of voluntary disclosure.

Ahmed & Courtis (1999) conducted meta-analysis based on 29 disclosure studies between 1968 and 1997 by using variables such as corporate size, listing status, leverage, profitability, and audit firm size. They confirmed significant and positive relationship between disclosure levels and corporate size, listing status, and leverage, but they found no significant relationship between disclosure levels and profitability, and audit firm size.

Table 2.1 Summary of empirical review

S/N	Author (s)	Year	Topic	Method	Findings	Recommendation
1	Modugu, K. P., & Eboigbe, S. U	2017	Corporate attributes and corporate disclosure level of listed companies in Nigeria: A post - IFRS adoption study	longitudinal research design.	Significant positive association between firm size and mandatory disclosure while it reveal a significant negative relationship between leverage and mandatory disclosure.	
2	Chutimant B.l, Wanchai P., & Panarat P.	2017	Ownership structure and corporate social responsibility disclosure of the Thai listed companies.	ex-post factor design	significant positive relationship between ownership structure and corporate social responsibility disclosure	
3	Egbunike, P.A. & Tarilaye, N.	2017	Firms specific attributes and voluntary environmental disclosure in Nigeria: Evidence from listed manufacturing companies.	Longitudinal survey research design	positive relationship between environmental disclosure, firm size and leverage	
4	Elshabasy	2017	The impact of corporate characteristics on environmental information disclosure an empirical study on the listed firms in Egypt.	ex-post factor design	insignificant relationship between Firm Size, Leverage and environmental information disclosure, while Firm's Profitability showed a positive significant relationship with environmental information disclosure.	Other independent ariables could be added o test their impact on the nvironmental nformation disclosure
5	Soyinka, Sunday & Adedeji	2017	Determinants of corporate social responsibility disclosure in Nigeria.	Cross sectional survey with panel data	Firm size has positive relationship with corporate social disclosure while leverage has negative relationship with corporate social responsibility. disclosure.	Research could be undertaken to examine other factors that might affect corporate social disclosure.

S/N	Author (s)	Year	Торіс	Metho d	Findings	Recommendation
6	Tareq, Reza & Aminu	2017	The impact of corporate characteristics on social and environmental disclosure: The case of Jordan	ex-post factor design.	Firm size and audit firm affected corporate social disclosure; while, profitability, ownership structure have no effect on corporate social disclosure.	Future studies should look at a larger sample and inter sector analysis to give a wider picture of the scope
7	Ikpor I. M., & Aghan,N,	2016	Determinants of voluntary disclosure quality in emerging economies: Evidence from firms listed on Nigeria Stock Exchange.	Ex-post facto research design	firm size has significant and positive relationship with disclosure practices of listed firms in Nigeria. On the other hand, profitability and leverage were found to be significant and negatively related to the disclosure quality	
8	Ofoegbu, G. N. & Megbuluba, A.	20 16	Corporate environmental Information disclosure in the Nigeria manufacturing companies.	ex-post facto research designs	firm size affect does not significantly affect quality of corporate environmental information disclosure.	
9	Bakr A. A., &Redhwan A. A.	20 16	Firm characteristics and corporate social responsibility disclosure.	Not stated	a positive relationship between size of the company, company age, the size of the audit firm and corporate social responsibility information disclosure.	
10	Alhassan H., & Mohammed H. B.	2016	Corporate Characteristics and Sustainability Reporting Environmental Agencies' Moderating Effects	Not stated	Significant relationship between firm age, audit firm and environmental reporting.	
11	Umoren, A. O., Isiavwe-Ogbari, M.E.,& Atolagbe, T. M.	2016	Corporate social responsibility disclosure and firm performance: A study of listed firms in Nigeria	Ex-post facto research design	Profitability does not have significant effect on corporate social responsibility disclosure, while company size and auditor type have positive significant effect.	

s/n	Author (s)	Year	Topic	Method	Findings	Recommendation
12	Cahyani, C., &	2016	The effect of	Ex – post	ownership and company	
12	Suryaningsih, R		leverage, board of	facto design	size have a significant	
	, , ,		commissioner,	U	effect on corporate	
			foreign		social responsibility	
			ownership,		disclosure, while	
			company age and		leverage and company	
			company size		age has no effect on	
			towards the		corporate social	
			disclosure of CSR		responsibility disclosure.	
			implementation in			
10		2015	Indonesia.	1		
13	Samuel, N. A.,	2015	Patterns of	exploratory	positive relationship	
	Ferdinand, C.,		corporate social	correlational	between company size,	
	Abubakar, R., &		and environmental disclosure in	descriptive	industry type and	
	Ifeatu, U			research	corporate social and environmental	
			Nigeria	methodolog y	disclosure.	
14	Adekanmi, A.D,	2015	Determinants of	ex-post	firm's size, profitability	Socio-environmental
11	Adedoyin,R.A &	2010	socio-	factor		ccounting could be
	Adewole J.A		environmental	design		mployed to enhance
			reporting of			ustainable business
			quoted companies		reporting of listed firms	ractice in quoted
			in Nigeria		in Nigeria.	ompanies.
15	Ahmed & Nurul	2015	Extent of	ex-post	They discover that	Ahmed & Nurul
			corporate social	factor design	company size affect	
			responsibility		corporate responsibility	
			disclosure and its		disclosure	
			determinants:			
			Evidence from			
			Kingdom of Saudi Arabia.			
16	Khaldoon	2015	Firm	ex-post factor	Firm size, firm age and	compare disclosure
10	Knaldoon	2015	characteristics,	design		compare disclosure between Jordan and
			governance	design	1 2	other developing
			attributes and		-	countries.
			corporate voluntary		while ownership structure	countries.
			disclosure: A study		does not affect voluntary	
			of Jordanian listed		disclosure.	
			companies			
17	Istianingsih	2015	Impact of Firm	Not stated		Further research is
	U		Characteristics on			recommended to test the
			CSR Disclosure:			difference each year so
			Evidence from		profitability and leverage	
			Indonesia Stock			more complete.
			Exchange		significant effect on	
					corporate social	
					disclosure.	

s/n	Author (s)	Year	Topic	Method	Findings	Recommendation
18	Mahamme Abdullah, & Nabi ,	2015	Corporate social disclosure practices in Kuwait	<i>ex-post facto</i> design	social responsibility disclosure has a significant association with b firm size, age and profitability.	Examine why some firms do not disclose such information in their annual reports.
19	Kabir	2014	Firm characteristics and voluntary segments disclosure among the largest firms in Nigeria	<i>ex-post facto</i> design.	firm size have positive association with voluntary segments disclosure. While negative association is observed between firms listing age, and voluntary segments disclosure.	Investigate further on level of disclosure among small and medium scale enterprises.
20	Akbas H.E	2014	Company characteristics and environmental disclosures: An empirical investigation on companies listed on Borsa Istanbul 100 index.	Ex- post facto design	company size is positively related while profitability is negatively related to the extent of environmental disclosure	investigate changes in the level of disclosure and the factors Influencing disclosure levels over time.
21	Aljifri, K., Alzarouni, A., Ng, C., & Tahir	2014	The association between firm characteristics and corporate financial disclosures: Evidence from UAE Companies.	Panel data	Listing status, industry type, and size of firm are significantly associated with the level of disclosure.	
22	Mishari M.O & Abdullah M.A	2014	Firm specific characteristics and corporate financial disclosure: Evidence from emerging market	Cross sectional data	Significant relationship between corporate financial disclosure and firm age, firm size and profitability	Investigate changes in the level of disclosure and factors influencing disclosure level
23	Ibrahim, K	2014	Firm characteristics and voluntary segments disclosure among the largest firms in Nigeria.	ex-post factor design	Firm size and industry type have positive association with voluntary segments disclosure. In addition, negative association is observed between firm listing age, ownership diffusion and voluntary segments disclosure.	Add more variables to increase the strength of evidence beyond what is presented in this study.

s/n	Author (s)	Year	Topic	Method	Findings	Recommendation
24	Eleftheriadis, I. M., & Anagnostopoulou, E. G.	2014	Relationship between Corporate Climate Change Disclosures and Firm Factors.	ex-post factor design	A significant positive impact of firm size on the environmental disclosure, but not with leverage and profitability	
25	Ebiringa,O.T.,,Y adirichukwu,E., Chigbu E.E.,& Obi J. O.,	2013	Effect of firm size and profitability on corporate social disclosures: The Nigerian oil and gas sector in focus	ex-post factor design	Insignificant negative correlation between corporate social responsibility disclosure and firm size. Profitability is significantly positively related to corporate social responsibility disclosure.	Investigation to other corporate factors that influences corporate social responsibility reporting.
26	Osazuwa, N., Francis, O. & Izedonmi, F.	2013	Corporate attributes and environmental disclosures of Nigerian quoted firms: an empirical analysis	ex-post factor design	firm profitability and the industry type had a significant influence on environmental disclosure	
27	AL- Shubiri1,F.N., Al-abedallat,A.Z., & Abu Orabi,M.M.	2013	Financial and non- financial determinants of corporate social responsibility reporting.	Not stated	Significant relationship between firm size, leverage, firm age and voluntary corporate social reporting.	
28	Mohamed	2013	Firm characteristics and the extent of voluntary disclosure: Thecase of Egypt	Cross sectional survey with panel data.	Firm size and profitability have significant positive association with voluntary disclosure level.	Regulatory authority should make corporate responsibility disclosure mandatory.
29	Ali, Merve ,and Nizamettin	2013	Association between firm characteristics and corporate voluntary disclosure: Evidence from Turkish listed companies	Cross sectional survey with panel data.	The study discover that firm size and ownership structure affect voluntary information disclosure, while profitability and firm age do not have significant effect on voluntary information disclosure.	

s/n	Author (s)	Year	Topic	Method	Findings	Recommendation
30	Sufian &Zahan Faisal, F.,	2013	ownership structure and corporate social responsibility disclosure in Bangladesh. Legitimising	ex-post factor design ex-post factor	Ownership concentration of firm has a positive association with corporate social responsibility disclosure.	Researchers should examine more corporate characteristics of large number of sample firms should be studied.
	Tower, G., & Rusmin, R.,		corporate social reporting throughout the World	design	play an important role in improving the credibility of corporate social disclosure. The study finds a significant relationship between corporate social reporting and firm size	
32	Macarulla, F., & Talalweh, M.	2012	Voluntary corporate social responsibility disclosure: A case study of Saudi Arabia	Not stated	relationship between firm size and voluntary	Other firm haracteristics should be sed to test voluntary orporate social lisclosure.
	Uwuigbe, U. & Egbide, B.,	2012	Corporate social responsibility disclosures in Nigeria: A study of listed financial and non-financial firms.	Not stated	firms audited by big and prominent auditing firms tend to disclose more corporate social responsibility information than companies audited by small auditing firms.	
34	Bhayani	2012	Association firm-specific characteristi cs and corporate disclosure among listed firms on India Stock exchange	ex-post factor design	firm age does not affect corporate social disclosure among listed firms in India.	
	Bayoud, Kavanagh & Slaughter	2012		ex-post factor design	Firm's size is not significantly associated with the level of corporate social disclosure.	

s/n	Author (s)	Year	Topic	Method	Findings	Recommendation
36	Lucyanda &	2012	The Influence of	ex-post	Company size and	
30	Siagian	2012	Company	factor design	company profitability	
	Slagian		Characteristics	nactor design	have an influence	
			Toward Corporate		toward the corporate	
			Social		social disclosure while	
			Responsibility		company age and	
			Disclosure		management ownership	
			Disclosure		have no influence	
					toward the Corporate	
					Social Responsibility.	
37	Rouf M.A.	2011	The corporate	Ex – post	The relationship	
57	Roui M.A.	2011	social	factor design	between the	
			responsibility	fuetor design	corporate	
			disclosure: A		responsibility	
			study of listed		disclosure and	
1			companies in		firm size is	
			Bangladesh.		positive.	
1					r	
38	Uwuigbe, U.,	2011	Corporate social	Ex – post	Significant positive	
	Uwuigbe, O.,&		responsibility	factor design	relationship between	
	Ajayi, A.O.		disclosures by	U	the size of firms and	
	5 .		environmentally		corporate social	
			visible		responsibility	
			corporations: A		disclosures, while	
			study of selected		profitability has	
			firms in Nigeria.		negative relationship.	
39	Mahadeo, J. D.,	2011	A Longitudinal	Ex – post	firm size and leverage	
	Oogarah-Hanuman		Study of Corporate	factor design	has positive significant	
	, V.,& Soobaroyen,		Social Disclosures		effect on corporate	
	Τ.		in a Developing		social disclosure, while	
			Economy		profitability and industry	
					affiliation are not	
					significantly linked to	
1					corporate social	
					disclosure.	
	Hussainy,	2011	Factors affecting		firm size does not affect	
	Elsayed &			ordinary least		
	Abdelrazek		responsibility	-	disclosure among listed	
	-		disclosure in Egypt	on a cross-	firms on Egyptian Stock	
<u>/1</u>	T T • 1 T T	2011	A	sectional data	Exchange	
41	Uwuigbe, U	2011	An examination of	Judgmental	ownership structure has	The study calls for the
			he relationship	ampling	significant positive	ncouragement of more
			etween	echnique	mpact on the level of	nanagerial investors to
			nanagement		orporate social	articipate in the
			wnership and		esponsibility disclosures	wnership of firms.
			orporate social		mong firms	
1			esponsibility			
			isclosure: A study f selected firms in			
			Vigeria		1	

s/n	Author (s)	Year	Topic	Method	Findings	Recommendation
	Uwuigbe, U.	2011	An empirical nvestigation of the ssociation between irms' haracteristics and orporate social isclosures in the ligerian financial ector.	Judgmental ampling echnique.	There is a significant ositive relationship etween firms' size and he level of corporate ocial disclosure among isted firms in the Jigerian financial sector. Iore so, a similar	Future research in this rea of study should be xtended into other ectors of Nigerian conomy, in order to vaint a meaningful omparison about the vhole picture of orporate social
43	Uwuigbe, U	2011	Web-Based corporate environmental reporting in Nigeria: A study of listed companies	<i>ex-post facto</i> design	profitability and the size of audit firms significant effect on the level of disclosure among the selected listed firms in	standard setting bodies to set up a social environmental reporting framework in order to improve the level of corporate social /sustainability disclosures among of listed firms
44	Echave, J. & Bhati, S. S.	2010	Determinants of social and environmental disclosures by Spanish Companies.	ex- post facto design	Positive relationship between firm size, profitability, auditor typeand level of corporate social and environmental disclosure practices among listed firms in Spain.	
45	Yulita	2010	corporate social disclosures in an African developing economy	ex-post factor design	They discover that firm size and profitability does not significantly affect corporate social disclosure	
46	Jinfeng,Z & Huifeng,X	2009	Empirical Research on Factors Influencing Level of Environmental Protection Information Disclosure	ex-post factor design.	Positive influence of the industry type, firm size, audit firm's type and the CSR disclosure index.	

s/n	Author (s)	Year	Topic	Method	Findings	Recommendation
47	Hossain &	2009	Voluntary	ex-post	positive	
.,	Hammami	2007	disclosure in	factor	relationship	
	Tammann		the annual	design	between firm age,	
			reports of an	C C	size and voluntary	
			emerging		social disclosure	
			country: The			
			case of			
			Qatar			
48	Reverte	2009	Determinants of	ex-post facto	The study finds that	
10	Revente	2007	corporate social	design	larger size ffect	
			responsibility		corporate social	
			disclosure ratings		responsibility disclosure	
			by Spanish listed		practices, not	
			firms.		profitability	
49	Barako,	2006	The effect of	ex-post factor	Ownership structure	
	Hancock & Izan		wnership structure	lesign	ffects corporate	
			nd company	_	oluntary disclosure.	
			haracteristics on		Iowever liquidity,	
			oluntary disclosure		rofitability and audit	
			ractices in Kenyan		irm size do not have a	
			ompanies		ignificant influence on	
					orporate voluntary	
					isclosure.	
50	Glaum and	2003		ex-post factor	no evidence of	
	Street		the disclosure	design	relationship between	
			requirement of		company profitability	
			German's new market, IAS Versus		and corporate social	
			US GAAP		disclosure among listed firms on German Stock	
			US GAAF		Exchange	
51	Ahmed and	1999	Association	Cross sectional	significant and positive	future research is to
51		1,7,7	between Corporate	survey with	relationships between	assess the level of
	Courtis		Characteristics and	panel data	disclosure levels and	voluntary disclosure
			Disclosure Levels	Parior Guiu	corporate size, and	and the
			in Annual Reports:		listing age, but they	factors behind the
			A Meta-Analysis		found no significant	variations in the level of
			<i>j</i>		association between	voluntary disclosure
					disclosure levels and	
					profitability	
52	Roberts R.W	1992	Determinants of	Cross survey	Profitability affect	
			corporate social	design	corporate social and	
			responsibility		environmental	
			disclosure: An		disclosure	
			application of			
			stakeholder			
			theory.			

Source: Researcher, 2018

2.4 Summary of Reviewed Literature

Corporate social disclosure is a concept used for providing financial and nonfinancial information relating to an organization's interaction with its physical or natural environment and social environment in its daily activities, as stated in corporate annual reports or separate social reports. It provides opportunity for corporate organization to communicate information to a wider range of stakeholders about the environmental, social and economic performance of the business.

It is a known fact that it is the responsibility of management to report their corporate social responsibility to firm's stakeholders. However the decision of management to communicate information about firm's interaction with physical, natural and social environment may be affected by corporate attributes such as; firm size, firm age, ownership structure profitability, audit firm size and financial leverage.

Corporate social disclosure measure corporate performance on economic, social and environmental impacts on firm's stakeholders, the Global Reporting Initiative (GRI) encompasses six comprehensive key themes. These important global themes are economic, environment, labour practices and decent work, human rights, society, and product responsibility. Frost et al. (2005) argue that Global Reporting Initiative is employed as an indicator of the content and scope of sustainability reporting.

Some of the theoretical perspectives offered for corporate social disclosure include; stakeholder theory where corporate social disclosure should meet various stakeholders' information needs.

Signaling theory suggests that firm should report credible and widely accepted information about its operation to its stakeholders as signal to reduce information asymmetry. Legitimacy theory posits that the legitimacy of a business entity to operate in society depends on an implicit social contract between the business entity and society. Companies can lose their license to operate in society by breaching society's norms and expectations. Accordingly, legitimacy theory predicts that companies adopt environmental and social responsibility reporting to legitimize their operations when society's norms and expectations of the business entities change or the business entities perceive themselves in breach of existing norms and expectations of society (Deegan 2002; Deegan & Blomquist 2006; O'Donovan 2002).

This work is therefore anchored on legitimacy theory because companies' attempts to establish congruence between the social values associated with their activities and the norms of acceptable behaviour in the community in which they are operating. Therefore, company enhances its legitimacy by ensuring that its output, methods or goals conform to stakeholders' expectation and demonstrate greater accountability and transparency by reporting their corporate social responsibility activities to better meet stakeholders' expectations.

2.5 Gap in literature

Review of empirical studies on the effect of corporate attributes on voluntary corporate social disclosure practices indicates that the results of most of these researches are either inconclusive or contradictory with some reporting positive and others negative effect of corporate attributes on corporate social disclosure practices and methodology differences, hence the gap this research intends to cover.

CHAPTHER THREE

METHODOLOGY

3.1 Research Design

This study employs *ex-post facto* design. According to Louis, Lawrence and Keith (2005) *ex-post facto* design is a method of teasing out possible antecedents of events that have happened and cannot, therefore, be engineered or manipulated by the researcher. The data for the study already exists in corporate annual reports. This *expost facto* design is suitable for the purpose of this research because the events have already taken place and the researcher has no control over any of the independent variables.

3.2 Population of the study

The population of the study is made up of consumer and industrial goods manufacturing firms listed on the Nigerian Stock Exchange (NSE) as at December, 2017 and have consistently submitted their annual reports to the Nigerian Stock Exchange. As at 31st December 2017, thirty seven (37) firms were listed, out of the number; only thirty (30) firms have their financial statements available either on their website or in the office of the Nigerian Stock Exchange. Accordingly, the population of the study consists of the thirty (30) firms that satisfy the criterion. The choice of consumer and industrial goods manufacturing firms is based on the fact that their activities affect both the social and physical environments.

3.3 Sample and Sampling technique

The total consumer and industrial goods manufacturing firms that have their financial statements available either on their website or in the office of the Nigerian Stock Exchange as at 31st December, 2017 is adopted as our sample. The selected companies are listed below:

	of companies selected for the study.
S/N	COMPANIES
1	First Aluminum (Nig) Plc
2	Lafarge Africa Plc
3	PZ Nig Cussion Plc
4	Portland Paints and Products Nig Plc
5	DN Meyer Plc
6	Dangote Cement Plc
7	Curtix Plc
8	Berger Paints
9	CAP Plc
10	Beta Glass
11	Austin Laz & Company
12	Cement Company of Northern Nig
13	Guinness Nig. Plc
14	Mc Nichols
15	Champion Brewery
16	Paints and Coatings Manufacturer
17	Cadbury Nig Plc
18	Flour Mills Nig Plc
19	Honey Well Nig Plc
20	Nestle Nig Plc
21	Dangote Sugar Refinery
22	Nigerian Enamel Ware
23	Ashaka Cement
24	Union Dicon Salt
25	Nigerian Brewery
26	Northern Nigeria Flour Mill
27	Dangote Flour Mills
28	Unilever Nig plc
29	Nascon Allied Industries
30	International Brewery

Table 3.1: List of companies selected for the study.

Source: Nigerian Stock Exchange Fact book 2017

3.4 Method of data collection

Secondary data was used for the study. The sources of data include annual reports and accounts of companies, corporate website of companies and the Nigerian Sock Exchange Fact books. According to Gray, Kouhy, and Lavers (1995), annual reports should be used in determine social and environmental disclosures because such information is produced regularly and will be in the public domain. Management use annual reports as means of communicating their company activities to their stakeholders.

3.5 Procedure for data analysis

We applied linear regression analysis and analysis of variance (ANOVA) with the aid of SPSS 20.0 software for the panel data in order to determine the relationship between the variables. This linear regression analysis is considered appropriate because it help to ascertain the cause and effect.

Where CSDic is the dependent variable which describes corporate social disclosure indicators such as;

- i. Economic performance disclosure
- ii. Environmental performance disclosure
- iii.Social performance disclosure

While the independent variables which represent the components of corporate attributes indicator are;

i. size = Company size

ii. age = Company age

iii.pft = Profitability

iv.audsize = Audit firm size

v. ownstr = Ownership structure

vi.lev = Financial leverage

In this study, the effect of corporate attributes on corporate social disclosure is estimated by using the following linear regression model to empirically test the hypotheses formulated is as follows:

CSDI = f (size, age. Pft, audsize, ownstr, lev)(i)

Below is the linear regressionmodel guiding the research which is adopted from Creel (2010); Nurkhin (2009); Echave & Bhati. (2010) is modified by inserting the variables of this study.

Explicitly, the regression model is:

$LOGCSDI_{it} = \beta_{0it} + \beta_1 LOGsize_{it} + e_{ij}$. (ii)
$LOGCSDI_{it} = \beta_{0it} + \beta_2 LOGage_{it} + e_{ij} \dots$	(iii)
$LOGCSDI_{it} = \beta_{0it} + \beta_3 LOGpft_{it} + e_{ij} \$	(iv)
$LOGCSDI_{it} = \beta_{0it} + \beta_4 LOGaudsize_{it} + e_{ij}$	(v)
$LOGCSDI_{it} = \beta_{0it} + \beta_5 LOGLev_{it} + e_{ij}$	(vi)
$LOGCSDI_{it} = \beta_{0it} + \beta_6 LOGownstrit + e_{ij}$	(vii)

General linear regression model which is adopted from Creel (2010); Nurkhin (2009) is modified by inserting the variables to test hypothesis seven.

 $CSDI_{it} = \beta_0 + \beta_1 size_{it} + \beta_2 age_{it} + \beta_3 pft_{it} + \beta_4 audsize_{it} + \beta_5 ownstrit + \beta_3 pft_{it} + e_{ij}$(viii)

 β is intercept

e is error term capturing other explanatory variables not explicitly included in the model.

it is Firm i at Time t

3.6 Variables Specification

The measurements of Independent variables were:

Company size

The size of a company depends on some factors, such as gross receipts, the number of workers and total assets. The size of a company in this study was specifically measured by total assets (Titik, 2004; Rita et al., 2013). Therefore, the log of total asset was used to measure company firm size. The rationale of using the total assets as the measurement of the size of a company is that it reflects the magnitude of the resources owned by the company.

Profitability

There are different measures of profitability such as net income, profit margin, return on assets, and return on equity. In this study return on assets was chosen as a proxy for profitability. Company profitability was measured by Return on Assets (ROA) with the formula of net income divided by total assets.

Company age

Listing age is the length of time a company has been listed on a capital market, and it may be relevant in explaining the voluntary disclosure level (Haniffa & Cooke, 2002). Company age was calculated by subtracting from date of last annual reports and account obtained from the company and the date that the company was listed on the Nigerian Stock Exchange.

Ownership structure

Ownership structure will be measure by the percentage of shares owned by the members of the board of directors to the total issued shares as used by Sanda, Mika["]il and Tukur, (2005), Kurawa and Kabara (2014).

Financial leverage

Financial leverage was measured by Debt to Equity Ratio. The formula that was used is total liabilities divided by shareholder equity.

Audit firm size

To measure audit firm size, dummy variable was created. 1 was assigned to company that her auditor's firm is an international audit firm (Big 4). While 0 was assigned to company that her auditor's firm is not an international audit firm (Big 4).

The dependent variables were measured by scoring index based on performance indicators selected from Global Reporting Initiative guidelines as applied in previous studies (Burhan & Rahmanti, 2012). The economic, environmental and social disclosure index is calculated based on the number of indicators that are disclosed (occurrence) and the level of disclosure (quantitative and qualitative).

Corporate social disclosure was measured by corporate social responsibility disclosure index (CSDic) which refers global report initiatives (GRI) indicators. GRI indicators consist of three focuses of disclosure, namely economic, environmental and social as a basis for sustainability reporting. The GRI indicators are international rules that have been recognized by the companies in the world. Corporate social responsibility disclosure index measurement refers to the study by Nurdin (2009), which uses content analysis to measure the variety of corporate social disclosure index.

Content analysis is most often viewed in corporate social reporting as a technique for gathering data that consists of codifying qualitative information in anecdotal and literary form into categories in order to derive quantitative scales of varying levels of complexity (Abbot & Monsen, 1979 in Nurdin, 2009). According to Roberts et al (2005) content analysis is considered the most commonly used method in analytical

uses for both qualitative and quantitative data. Content analysis-based disclosure checklists are designed to measure whether or not an item is disclosed and also to record the form that disclosure takes. Cooke (1989) argues that the focus of the research should determine whether to use a weighted or an unweight system. A weighted system is preferable for research targeting a particular user group because that system attaches a higher weight to items considered important to that group. In contrast, if the research focuses on all financial statement users rather than one particular user group, an unweight system is preferable because the implied assumption is that each disclosure item is equally important among the different groups (Cooke, 1989). The researcher uses an un-weighted approach as a measure to evaluate the level of corporate social disclosure practices in the annual reports because all disclosure items is assumed of equal importance for all financial report users.

In consistent with Cooke (1989); Al-Shammari *e*t al. (2008); Aljifri et al. (2014); each disclosure requirement mentioned in the global reporting initiative (GRI) is assigned an equal weight. Each disclosure is coded one (1) if the required disclosure was made and zero (0) if it was not. If a disclosure is not applicable to the firm, the item is dropped from the scoring system for that firm. This scoring procedure is based on a careful review of the firm's complete annual reports. Following Cooke (1989), a company's total disclosure (TD) score is additive, as follows:

$$TD = \sum_{j=1}^{m} di$$

Where:

d = 1 if item di is disclosed;

d = 0 if item *di* is not disclosed; and,

 $m \leq n$

After the total disclosure score (TD) is obtained for a firm, an index is constructed to measure that firm's relative disclosure level. The index is the ratio of a firm's actual disclosure score (TD) to the maximum score (M) that the company could achieve by fully complying with the global reporting initiative (GRI) requirements. So far a firm is not penalized for omitting a disclosure item that is irrelevant or not applicable to its business, the maximum score (M) that a company can earn may vary from firm to firm, and is computed as follows:

$$m = \sum_{j=1}^{n} di$$

Where:

d is the number of items disclosed by the firm.

n is the number of items that the firm is required to disclose.

Accordingly, each firm's corporate social disclosure is calculated by dividing the total number of global reporting initiative (GRI) disclosures that the firm provides by the total number of applicable mandatory disclosures (M):

$\frac{\mathrm{TD}}{\mathrm{CSD}} = \mathrm{M}.$

However, given that the data on the above variables were collected from different companies with different status, the model was logged by taking the double logarithm of the model so as to overcome the problem of heteroskedasticity that the model is vulnerable to. According to Koutsoyiannis (2000) data on variables with different units of measurement results into the problem of heteroskedasticity, and the problem can be solved by taking the logarithm of the variables. Thus, each of the stochastic equation is logged.

Seven hypotheses were advanced for confirmation in this study.

The first null hypothesis is;

Company size does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

The model to be used to confirm this proposition is presented below:

 $LOGCSDI_{it} = \beta_{0it} + \beta_1 LOGsize_{it} + e_{ij}$

 $\beta_1 > 0; r^2 > 0.$

 β_1 measure the effect of company size on voluntary corporate social disclosure.

The second null hypothesis is:

Company age does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

The model to be used to confirm this proposition is presented below:

 $LOGCSDI_{it} = \beta_{0it} + \beta_2 LOGage_{it} + e_{ij}$

B₂> 0; $r^2 > 0$.

 β_2 measure the effect of company age on voluntary corporate social disclosure.

The third null hypothesis is:

Profitability does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

The model to be used to confirm this proposition is presented below:

 $LOGCSDI_{it} = \beta_{0it} + \beta_3 LOGpft_{it} + e_{ij}$

B₃> 0; $r^2 > 0$.

 β_3 measure the effect of firm profitability on voluntary corporate social disclosure.

The forth hypothesis is:

Audit firm size does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

The model to be used to confirm this proposition is presented below:

 $LOGCSDI_{it} = \beta_{0it} + \beta_4 LOGaudsize_{it} + e_{ij}$

B4> 0; $r^2 > 0$.

B4 measure the effect of audit firm size on voluntary corporate social disclosure.

The fifth hypothesis is:

Financial leverage does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

The model to be used to confirm this proposition is presented below:

 $LOGCSDI_{it} = \beta_{0it} + \beta_5 LOGLev_{it} + e_{ij}$

 $\beta_{5} > 0; r^{2} > 0.$

β5 measure the effect of financial leverage on voluntary corporate social disclosure.

The sixth hypothesis is:

Ownership structure does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange.

The model to be used to confirm this proposition is presented below:

 $LOGCSDI_{it} = \beta_{0it} + \beta_6 LOGownstrit + e_{ij}$

 $\beta_6 > 0; r^2 > 0.$

 β 6 measure the effect of ownership structure on voluntary corporate social disclosure.

The seventh hypothesis is:

The interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure) does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on the Nigerian Stock Exchange

The general linear regression model to be used to confirm this proposition is presented below:

 $LOGCSDI_{it} = \beta_{0it} + \beta_1 LOGsize_{it} + \beta_2 LOGage_{it} + \beta_3 LOGpft_{it} + \beta_4 LOGaudsize_{it} + \beta_5 LOGLev_{it} + \beta_6 LOGownstr_{it} + e_{ij}$

 $\beta > 0; r^2 > 0.$

B_{1 to 6} measure the effect of company size, company age, profitability, audit firm size, financial leverage and ownership structure on voluntary corporate social disclosure.

All the hypotheses were tested using the student t-test statistic at 5% level of significance.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 INTRODUCTION

The main objective of the study is to ascertain the effect of corporate attributes on corporate social disclosure practices of selected listed companies on the Nigerian Stock Exchange. In this chapter therefore, the data collected using the research method described in chapter three is presented and analyzed. Test of research hypotheses are performed with the aim of providing empirical evidence to answer the research questions earlier stated in the study.

The data used for the study were obtained from the Annual Reports and Accounts of 30 sampled companies (see appendix i and ii). These analyses are carried out with the aid of Statistical Package for Social Sciences (SPSS version 20.0).

4.2 DATA ANALYSIS

4.2.1 Descriptive Statistics

With the aid of SPSS 20.0, the researcher used the data in Appendix ii and computed the mean, standard deviation and variance which form the descriptive statistics for both the dependent and the independent variables. The result of the computation is presented below:

Table 4.2.1 Descriptive Statistics

	Ν	Minimum	Maximum	М	ean	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
audit firm size	300	.00	1.00	.6566	.04797	.47727	.228
corporate social disclosure	300	2.15	4.99	3.8196	.03727	.37079	.137
company age	300	.85	1.72	1.3622	.02978	.29634	.088
company size	300	4.84	10.30	7.3335	.10543	1.04903	1.100
financial leverage	300	.09	2.03	1.6481	.03299	.32826	.108
ownership structure	300	.04	1.68	.7785	.03829	.38095	.145
Profitability	300	.02	1.97	.8510	.03907	.38871	.151
Valid N (listwise)	300						

Source: SPSS Output

Table 4.2.1 Reports for voluntary corporate social responsibility disclosure among listed manufacturing firms producing consumer and producer goods product between the period of 2008 to 2017 ranged from 21.5% to 49.9% and with average values of the dependent variable of 38.1 % and the standard deviation of 0.37079 indicating that on average, 38.1 % of the observations disclosed corporate social responsibility related information, it shows that the minimum disclosure is 21.5% while the maximum disclosure was 49.9 %. It is an indication that most of the firms disclosed their corporate social responsibilities.

The average of firm size is 73.3% with the standard deviation of 1.04903. The firm size varies widely across the sample firms as the minimum and maximum is 48.4% and 103% respectively. The important factor that explains the large disparity of the size could be connected with the wide difference of the sample firm's sizes as represented by their total assets.

The firm age varies across the sample firms as the minimum is 1 year and the maximum is 53 years. The descriptive statistic for the sample population shows the minimum of 0.85% and the maximum of 17.2%, while the standard deviation is .29634 and the mean value is 13.6%. Audit firm size among the sample population varies with the minimum of 00% and maximum of 10%. The standard deviation is 0.47737, while the mean value is 6.5%. This shows that majority of the sample population engaged international audit firm (Big 4).

However, firm's profitability between the periods of 2008 to 2017 ranged from 0.02% to 19.7%. The firms' profitability average is 8.5% and the standard deviation of 0.38871. Ownership structure has 0.04% minimum and 16.8% maximum. Its standard deviation is 0.38095, while the mean value is 7.78%. Financial leverage value ranges from 0.09% minimum value to 20.3% maximum value. It has the standard deviation of 0.32826 and mean value of 16.48%.

4.2.2 Validity Test

The accuracy and reliability of the regression models used in this study was verified using the following tests:

Model fitness and robustness was tested using significant F- change obtained in the summaries. It shows that, the models were fit as 6.0%, 2.0%, 0.01%, 0.00%, 8.0%, 2.9% and 1.7% for ownership structure, company size, profitability, financial leverage, firm age, audit firm size and interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure) respectively.

The problem of multi- co linearity among the independent variables (corporate attributes indices) was tested using variance inflation factor (VIF). It shows that VIF fall clearly short of 5 as propagated by Gujarati and Sangeetha (2007). This indicates the absence of multi-co linearity problem that might affect the accuracy and reliability of the result and ultimately, the findings and conclusions generated from this study. The problems of independence of the error terms were tested using Durbin-Watson statistics. It indicates the statistic of close to 2 and above 2 in all the models. This shows that, there is positive autocorrelation between the residuals of the data used in this study. This further shows that, the statistic favours the accuracy and reliability of the results generated from the study as propagated by Berenson & Levine (1999), Gujarati & Sangeetha (2007).

4.3 TESTING OF HYPOTHESES

In this section, the hypotheses stated in chapter one of this study in their null form were analyzed by Regression analysis and Analysis of variance (ANOVA). The decisions reached on hypotheses are based on the result obtained from regression calculation and the tabulated value of the regression distribution.

Decision rule:

If the computed value of regression is less than the critical value, the null hypotheses (Ho) are rejected and the alternative hypotheses (Hi) accepted. However if the value of regression is greater than the critical value, the alternative hypotheses (Hi) are rejected and the null hypotheses (Ho) accepted.

Hypothesis One

Ho: Company size does not significantly affect voluntary corporate social disclosure

among listed manufacturing firms on Nigerian Stock Exchange.

Hi: company size has significant effect on voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange.

 Table 4.3.1a: Regression coefficient for Voluntary Corporate Social Disclosure

 Index on Company Size

Model	Unstandardized		Standardized	Т	Sig.
	Coefficients C		Coefficients		
	B Std. Error		Beta		
(Constant)	3.446	.263		13.098	.000
company size	.051	.036	.144	1.436	.154

a. Dependable variable: voluntary corporate social disclosure index

Table 4.3.1b: Model Summary for Voluntary Corporate Social Disclosure Index on Company Size

Model	R	R	Adjusted	Std Error of	Durbin –
		Square	R. Square	the Estimate	Watson
1	.144 ^a	.021	.011	.36879	1.515
Neter 2	1 f(1, 200)	2.062	4	•	

Note: $r^2 = .21$, f(1, 298) = 2.063, p = .154

Table 4.3.1c: ANOVA^a Result : Voluntary Corporate SocialDisclosure Index on Company Size

Model	Sum of	Df	Mean	F	Sig.
	Squares		Square		
Regression	.725	1	.725	2.063	.154 ^b
Residual	66.883	298	.224		
Total	67.609	299			

a. Dependent Variable: voluntary corporate social disclosure

b. Predictors: (Constant), company size

The *f*-ratio (2.063) shows that the variable (company size) is not the major determinant in explaining voluntary corporate social disclosure. It can be observed that the independent variable does not give a significant effect on the dependent variable based on the *f*-ratio, Company size explains 21 percent of the variation experienced in voluntary corporate social disclosure among selected manufacturing firms listed on Nigerian Stock Exchange. The independent variable is not statistically significant because its significance value is 0.154, which means P > 0.05.

Decision:

Based on the analysis above, the alternative hypothesis (Hi) is rejected while null hypothesis (Ho) is accepted; which state that company size does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange.

Hypothesis Two

Ho: Company age does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange.

Hi: company age has significant effect on voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange.

		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	1.322	1	.249	1.829	.179 ^b
1	Residual	66.286	298	.136		
	Total	67.609	299			

Table 4.3.2a:ANOVA^a Result : Voluntary Corporate SocialDisclosure Index on Company Age

a. Dependent Variable: corporate social disclosure

b. Predictors: (Constant), firm age

M	odel	Unstand	lardized	Standardized	Т	Sig.
		Coefficients		Coefficients		
	B St		Std. Error	Beta		
1	(Constant)	3.716	.085		43.610	.000
1 firm age		.004	.003	.136	1.352	.179

 Table 4.3.2b: Regression coefficient for Social Disclosure Index on Company age

 Table 4.3.2c: Model Summary for Voluntary Corporate Social Disclosure Index on Company Age

	Model	R	R	Adjusted	Std Error of	Durbin –			
			Square	R. Square	the Estimate	Watson			
	1	.136 ^a	.019	.008	.36923	1.543			
l	Note: $r^2 = .19$, f(1, 298) = 1.829, p = .179								

The *f*-ratio (1.829) shows that the variable (company age) is not the major determinant in explaining voluntary corporate social disclosure among the sample population. It can be observed that the independent variable does not give a significant effect on the dependent variable based on the *f*-ratio, Company age explains 19 percent of the variation experienced in voluntary corporate social disclosure among selected manufacturing firms listed on Nigerian Stock Exchange. The independent variable is not statistically significant because its significance value is 0.179, which means P > 0.05

Decision:

Based on the analysis above, the alternative hypothesis (Hi) is rejected while null hypothesis (Ho) is accepted; which state that company age does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange.

Hypothesis Three

Ho: Profitability does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange.

Hi: profitability has significant effect on voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange.

	Disclosure index on Frontability									
		Sum of	Df	Mean	F	Sig.				
		Squares		Square						
	Regression	.002	1	.002	.017	.896 ^b				
1	Residual	13.471	298	.139						
	Total	13.473	299							

Table 4.3.3a:ANOVA^a Result : Voluntary Corporate SocialDisclosure Index on Profitability

a. Dependent Variable: corporate social disclosure

b. Predictors: (Constant), profitability

Table 4.3.3b:	Regression	coefficient	for	Voluntary	Corporate	Social	Disclosure
Index on Prof	itability						

Model		dardized ficients	Standardized Coefficients	Т	Sig.
	В	Std. Error	Beta		
(Constant)	3.830	.091		42.314	.000
¹ Profitability	013	.097	013	130	.896

a. Dependent Variable: corporate social disclosure

Table 4.3.3c: Model Summary for Voluntary Corporate Social Disclosure

Index on Profitability

Model	R	R	Adjusted	Std Error of	Durbin –
		Square	R. Square	the Estimate	Watson
1	.013 ^a	.010	.010	.37266	1.533
Nata 2 1	0 f(1, 200)	0.017 - 90	C	•	

Note: $r^2 = .10$, f(1, 298) = 0.017, p = .896

The *f*-ratio (0.017) shows that the variable (profitability) is not the major determinant in explaining voluntary corporate social disclosure. It can be observed that the independent variable does not give a significant effect on the dependent variable based on the *f*-ratio, profitability explains10 percent of the variation experienced in voluntary corporate social disclosure among selected manufacturing firms listed on Nigerian Stock Exchange. The independent variable is not statistically significant because its significance value is 0.896, which means P> 0.05

Decision:

Based on the analysis above, the alternative hypothesis (Hi) is rejected while null hypothesis (Ho) is accepted; which state that profitability does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange.

Hypothesis Four

Ho: Audit firm size does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange.

Hi: Audit firm size has significant effect on voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange.

Μ	odel	Sum of	Df	Mean	F	Sig.
		Squares		Square		
	Regression	2518.742	1	2518.742	23.818	.001
1	Residual	10257.803	298	105.751		

Table 4.3.4a: ANOVA^a Result : Voluntary Corporate Social **Disclosure Index on audit firm size**

12776.545 a. Dependent Variable: corporate social disclosure

b. Predictors: (Constant), audit firm size

Total

Table 4.3.4b: Regression coefficient for Social Disclosure Index on audit firm size

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Model		Unstand Coeffi	lardized	Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	54.147	1.764	Dotti	30.702	.000
1	audit firm size	10.622	2.177	.444	4.880	.001

a. Dependent Variable: corporate social disclosure

Table 4.3.4c: Model Summary for Voluntary Corporate Social Disclosure Inde	X
on audit firm size	

	Model	R	R	Adjusted	Std Error of	Durbin –			
			Square	R. Square	the Estimate	Watson			
	1	.444 ^a	.197	.189	.1028351	.615			
1	Note: $r^2 = 197 f(1, 298) = 23,818 p = 0.01$								

Note: $r^2 = .197$, f(1, 298) = 23.818, p = .001

The *f*-ratio (23.818) shows that the variable (audit firm size) is the major determinant in explaining voluntary corporate social disclosure. It can be observed that the independent variable does not give a significant effect on the dependent variable

based on the *f*-ratio, audit firm size explains 19.7 percent of the variation experienced in voluntary corporate social disclosure among selected manufacturing firms listed on Nigerian Stock Exchange. The independent variable is statistically significant because its significance value is 0.001, which means P < 0.05.

Decision:

Based on the analysis above, the null hypothesis (Ho) is rejected while alternative hypothesis (Hi) is accepted; which state that audit firm size has significant effect on voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange.

Hypothesis Five

Ho: Financial leverage does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange.

Hi: Financial leverage has significant effect on voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange.

Table 4.3.5a: ANOVA^a Result : Voluntary Corporate Social DisclosureIndex on Financial leverage

	Sum of	Df	Mean	F	Sig.
	Squares		Square		
Regression	.000	1	.000	.002	.965 ^b
1 Residual	13.473	298	.139		
Total	13.473	299			

a. Dependent Variable: corporate social disclosure

b. Predictors: (Constant), financial leverage

M	Iodel	Unstandardized		Standardized	Т	Sig.
		Coefficients C		Coefficients		
		В	Std. Error	Beta		
1	(Constant)	3.828	.193		19.867	.000
1	financial leverage	005	.115	005	045	.965

 Table 4.3.5b: Regression coefficient for Voluntary Corporate Social disclosure

 Index on financial leverage

a. Dependent Variable: corporate social disclosure

 Table 4.3.5c: Model Summary for Voluntary Corporate Social Disclosure Index on financial leverage

Model	R	R Square	Adjusted R.	Std Error of	Durbin Watson			
			Square	the Estimate				
1	.015 ^a	.011	.010	.37269	1.537			
Note: $r^2 = .11$, f(1, 298) = .002, p = .965								

The *f*-ratio (0.002) shows that the variable (financial leverage) is not the major determinant in explaining voluntary corporate social disclosure. It can be observed that the independent variable does not give a significant effect on the dependent variable based on the *f*-ratio;financial leverage explains 11 percent of the variation experienced in voluntary corporate social disclosure among selected manufacturing firms listed on Nigerian Stock Exchange. The independent variable is not statistically significant because its significance value is 0.965, which means P> 0.05

Decision:

Based on the analysis above, the alternative hypothesis (Hi) is rejected while null hypothesis (Ho) is accepted; which state that financial leverage does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange.

Hypothesis Six

Ho: Ownership structure does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange.

Hi: Ownership structure has significant effect on voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange.

 Table 4.3.6a: ANOVA^a Result :Corporate Social disclosure Index on

 Ownership structure

Model		Sum of	Df	Mean	F	Sig.
		Squares		Square		
	Regression	.785	1	.785	6.005	.016 ^b
1	Residual	12.688	298	.131		
	Total	13.473	299			

a. Dependent Variable: corporate social disclosure

b. Predictors: (Constant), ownership structure

Table 4.3.6b:	Regression coefficient for	Voluntary	Corporate Social	disclosure Index
onOwnership) structure			

Model			lardized icients	Standardized Coefficients	Т	Sig.
		В	Std. Error	Beta		
1	(Constant)	3.637	.083		43.792	.000
	ownership structure	.235	.096	.241	2.450	.016

a. Dependent Variable: corporate social disclosure

Table 4.3.6c: Model Summary for Voluntary Corporate Social Disclosur	e Index on
Ownership structure	

	Model	R	R Square	Adjusted	Std Error of	Durbin –
				R. Square	the Estimate	Watson
	1	.241ª	.058	.049	.36167	1.562
ъ т ¹	2 = -	6 (1 3 6 0)				-

Note: $r^2 = .58$, f(1, 298) = 6.005, p = .016

The *f*-ratio (6.005) shows that the variable (ownership structure) is not the major determinant in explaining voluntary corporate social disclosure. It can be observed that the independent variable does not give a significant effect on the dependent variable based on the *f*-ratio, Company size explains 58 percent of the variation experienced in voluntary corporate social disclosure among selected manufacturing firms listed on Nigerian Stock Exchange. The independent variable is statistically significant because its significance value is 0.154, which means P < 0.05

Decision:

Based on the analysis above, the null hypothesis (Ho) is rejected while alternative hypothesis (Hi) is accepted; which state that ownership structure significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange.

Hypothesis Seven

Ho: The interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure) does not significantly affect voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange

Hi: The interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure) has significant effect on voluntary corporate social disclosure among listed manufacturing firms on Nigerian Stock Exchange

Table 4.3.7a: ANOVA^a Result :Corporate Social disclosure Index on interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure).

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	2.410	б	.402	1.693	.131 ^b
1	Residual	65.199	293	.223		
	Total	67.609	299			

a. Dependent Variable: voluntary corporate social disclosure

b. Predictors: (Constant), audit firm size, profitability, company size, ownership structure, financial leverage, company age

Table 4.3.7b: Regression coefficient for Voluntary Corporate Social disclosure Index on interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure).

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	3.505	.313		11.186	.000
	company size	.056	.040	.158	1.381	.170
	company age	.000	.003	013	104	.918
1	ownership structure	.187	.100	.192	1.872	.064
	Profitability	045	.106	048	431	.668
	financial leverage	171	.139	152	-1.232	.221
	audit firm size	.139	.099	.179	1.400	.165

a. Dependent Variable: corporate social disclosure

Table 4.3.7c: Model Summary for Voluntary Corporate Social Disclosure Index on interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure).

Model	R	R	Adjusted	Std Error of	Durbin –				
		Square	R. Square	the Estimate	Watson				
1	.315 ^a	.099	.041	.36316	1.632				
Note: $r^2 = .315$, f(6, 293) = 1.693, p = .131									

The *f*-ratio (1.693) shows that the variable (interaction of company size, company age, profitability, audit firm size, financial leverage and ownership structure) does not has synergy to be the major determinants in explaining voluntary corporate social disclosure. It can be observed that the independent variables does not give a significant effect on the dependent variable based on the *f*-ratio, The interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure) explains 99 percent of the variation experienced in voluntary corporate social disclosure among selected manufacturing firms listed on Nigeria Stock Exchange. The independent variables are not statistically significant because its significance value is 0.131, which means P > 0.05

Decision:

Based on the analysis above, the alternative hypothesis (Hi) is rejected while null hypothesis (Ho) is accepted; which state that the interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure) does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange

4.4.Discussion of findings

Table 4.2.1 the descriptive statistics shows that voluntary corporate social responsibility disclosure among listed manufacturing firms producing consumer and producer goods product between the period of 2008 to 2017 ranged from 21.5% to 49.9% and with average values of the dependent variable of 38.1 % and the standard deviation of 0.37079 indicating that on average, 38.1 % of the observations disclosed corporate social responsibility related information, it shows that the minimum disclosure is 21.5% while the maximum disclosure was 49.9 %. It is an indication that most of the firms disclosed their corporate social responsibilities.

The firm size varies widely across the sample firms as the minimum and maximum is 48.4% and 103% respectively. The important factor that explains the large disparity of the size could be connected with the wide difference of the sample firm's sizes as represented by their total assets. The firm age varies across the sample firms as the minimum is 7 years and the maximum is 52 years. The descriptive statistic for the sample population shows the minimum of 0.85% and the maximum of 17.2%. Audit firm size among the sample population varies with the minimum of 00% and maximum of 10%. This shows that majority of the sample population engaged international audit firm (Big 4).

However, firm's profitability between the periods of 2008 to 2017 ranged from 0.02% to 19.7%. Ownership structure has 0.04% minimum and 16.8% maximum while financial leverage value range from 0.09% minimum to 20.3% maximum value.

As could be seen in hypothesis one, company size does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange. This study is consistent with Ibrahim (2014); Ebiringa,, Yadirichukwu,, Chigbu. ,& Obi, (2013); Yulita (2010) and Veronica (2009) who discovered that company size has no effect on corporate social disclosure. The implication of this finding is that majority of both small and big companies report their corporate social responsibility to their stakeholders. Therefore, the regulatory authority like Financial Reporting Council of Nigeria and Nigerian Stock Exchange should make corporate social disclosure mandatory for firms listed on Nigerian Stock Exchange.

Hypothesis two shows that company age does not have positive significant effect on voluntary corporate social disclosure. It was revealed that company age does not affect voluntary corporate social disclosure. Therefore as older firms are reporting their corporate social responsibility, the young firms are also reporting their corporate social responsibility. Though, there is variation on economic performance, environmental performance and social performance items reported in their annual reports and financial statement among the firms. This result is consistent with Ibrahim (2014); Prihandono (2010) and Putra (2009) who maintains that company's age does not affect corporate social responsibility disclosure. Younger firms might also exhibit better reporting quality since they need to compete with older firms to survive.

The implication of this finding is that both young companies, like firms listed on the Nigerian Stock Exchange seven years ago, and old companies listed on the Nigerian Stock Exchange fifty two years ago are reporting their corporate social responsibility to their stakeholders. Since company age does not affect corporate social disclosure,

the regulatory authority should make corporate social disclosure mandatory for firms listed on Nigerian Stock Exchange.

Hypothesis three reveals that Profitability does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange. This result is consistent with Umoren, Isiavwe-Ogbari,,& Atolagbe (2016); Ebiringa,, Yadirichukwu,, Chigbu. ,& Obi, (2013) and Uwuigbe, Uwuigbe,& Ajayi (2011) that discovered that there is no significant relationship between profitability and corporate social responsibility disclosures. The implication of this finding is that corporate social responsibility disclosure reduce information gap between company and its stakeholders. The management does disclose their corporate social responsibility, either making profit or not, in order to maintain relative peaceful or stable working environment with their stakeholders, especially the employee and the hosting communities.

Hypothesis four shows that Audit firm size has significant effect on voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange. This study revealed that firms audited by big auditing firms with international affiliations (such as the KPMG, the PricewaterhouseCoopers and the Akintola Williams Deloitte) tend to have a significantly higher level of corporate social disclosure than others that are audited by small local audit firms. This result is consistent withUwuigbe & Egbide (2012); Uwuigbe (2011) and Samaha & Dahawy (2010) who discovered a positive and significant relationship between audit firm size and voluntary corporate social disclosure.

The implication of this finding is that big auditing firms do comply with international reporting standards and not to tarnish the image of their auditing firms. However, small local audit firms have to please their clients in order to keep them by complying with the directive of firm management at the expense of international reporting standards.

Hypothesis five shows that financial leverage does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange. This result is consistent with Modugbu & Eboigbe (2017); Uwuigbe & Egbide (2012) and Ikpor & Agha (2016) who found a significant negative relationship between leverage and corporate social disclosure. The implication of this finding is that companies with relatively lower financial leverage will have sufficient funds for financing corporate social responsibility and report its activities to its stakeholders. Corporate social disclosure will help the management to reduce pressure from creditors. However, highly financial leverage companies are more likely to comply with corporate social responsibility regulations. This may encourage them to report their corporate social responsibility activities to their stakeholders.

Hypothesis six reveals that ownership structure significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange. Our result is consistent with Amal (2011), Bakr &Redhwan (2016)and Chutimant, Wanchai, & Panarat (2017)who discovered that ownership structure has positive significant effect on corporate social responsibility disclosure. The implication of this finding is that the majority of the board of

directors of sample population sees the necessity to report their corporate social activities to their stakeholders and this encourage voluntary corporate social disclosure.

Hypothesis seven shows that the interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure) does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on the Nigerian Stock Exchange. There is no synergy in the interaction of company size, company age, profitability, audit firm size, financial leverage and ownership structure to affect voluntary corporate social disclosure. The implication of this finding is that regulatory authority should mandate firms listed on Nigerian Stock Exchange to report their corporate social disclosure to their stakeholders.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY OF FINDINGS

Based on data analysis, the specific findings of this study are:

i. Company size does not significantly affect voluntary corporate social disclosure of sample population because its significance value is 0.154, which means P > 0.05.

ii. Company age does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange because its significance value is 0.179, which means P > 0.05

iii. Profitability does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange because its significance value is 0.896, which means P > 0.05.

iv. Audit firm size has significant effect on voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange because its significance value is 0.001, which means P < 0.05.

v. Financial leverage does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange because its significance value is 0.965, which means P > 0.05

vi. Ownership structure significantly affects voluntary corporate social disclosure among selected l listed manufacturing firms on Nigerian Stock Exchange because its significance value is 0.154, which means P < 0.05.

vii. The interaction of independent variables (company size, company age, profitability, audit firm size, financial leverage and ownership structure) does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange because its significance value is 0.131, which means P > 0.05.

5.2 Conclusion

In view of the findings of this study, it can be seen that firm size does not have significant effect in corporate social disclosure practice among industrial and consumer goods firms listed on Nigeria Stock Exchange. It shows that both large firms and small firms engage in voluntary corporate social disclosure.

Firm age does not affect corporate social disclosure practice among listed firms on Nigeria Stock Exchange. Therefore as older firms are reporting their corporate social responsibility, the young firms are also reporting their corporate social responsibility. Though, there is variation on economic performance, environmental performance and social performance items reported in their annual reports and financial statement among the firms.

Audit firm size has significant effect on voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange. This study revealed that firms audited by big auditing firms with international affiliations tend to have a significantly higher level of corporate social disclosure than others that are audited by small local audit firms.

Profitability, ownership structure and financial leverage do not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange.

There is no synergy in the interaction of company size, company age, profitability, audit firm size, financial leverage and ownership structure to have positive significant effect on voluntary corporate social disclosure.

5.3 Recommendations

Based on the finding of this study, the following recommendations are made:

i. The study revealed that company size does not affect voluntary corporate social disclosure among the sample population. This implies that larger firms and some small firms engaged in voluntary corporate social reporting, therefore regulatory authorities should mandate all listed firms on the Nigerian Stock Exchange to report their corporate social responsibility.

ii. The study found that company age does not affect voluntary corporate social disclosure among the sample population. This shows that some young firms and older firms engaged in voluntary corporate social reporting, therefore regulatory authorities should make it compulsory for all listed firms on the Nigerian Stock Exchange to disclose their corporate social responsibility.

iii. The study discovered that despite the level of firm profitability level, it does not induce them to involve in corporate social disclosure. We hereby recommend that, management should start reporting their social responsibility activities to their

stakeholders. This will help to reduce information asymmetry between the firm and its stakeholders.

iv. The study discovered that firms audited by big auditing firms with international affiliations (such as the KPMG, the PricewaterhouseCoopers and the Akintola Williams Deloitte) tend to have a significantly higher level of corporate social disclosure than others that are audited by small local audit firms. We hereby recommend that the small local audit firm should try to emulate the big auditing firms with international affiliations. This will help firms to report their corporate social responsibilities activities to their stakeholders.

v. The study found that companies with high financial leverage increase their volume of corporate social disclosure to reduce their agency cost while companies with relatively lower financial leverage may be able to have sufficient funds for financing corporate social disclosure and it will reduce pressure from their creditors. Therefore, we recommend that firms should engage in voluntary corporate social disclosure no matter the level of their financial leverage..

vi. The study discovered a significant relationship between ownership structure and voluntary corporate social disclosure among the sample population. The study recommends that board members should be encouraged to acquire more shares from the shares issued by the company.

vii. The study found that there is no synergy in the interaction of company size, company age, profitability, audit firm size, financial leverage and ownership structure to have positive significant effect on voluntary corporate social disclosure. The Financial Reporting Council of Nigeria, Nigerian Stock Exchange and other

regulatory authorities should encourage board of directors of listed firms to have interest in acquiring more shares from the company. Local audit firms should be encouraged to emulate big audit firms. Moreover, corporate social disclosure should be made mandatory for all listed firms on the Nigerian Stock Exchange. In addition, regulatory authorities should come out with a local Corporate Social Disclosure standard or guidelines or adopt and modify other standards for use in the country for the moment.

5.4 Contributions to Knowledge

A very important aspect of every research work is how that work contributes to the body of knowledge. This study has contributed to the body of knowledge in the following areas:

This study supports the use of legitimacy theory to explain companies' motivations for providing corporate social responsibility disclosure. Using legitimacy theory, companies' attempts to establish congruence between the social values associated with their activities and the norms of acceptable behaviour in the community in which they are operating. Therefore, company enhances its legitimacy by ensuring that its output, methods or goals conform to stakeholders' expectation and demonstrate greater accountability and transparency by reporting their corporate social responsibility activities to better meet stakeholders' expectations.

The study has provided empirical validation that company age and company size does not affect firms' voluntary corporate disclosure. This shows that both old companies,

young companies, big or small companies are supposed to report their corporate social responsibility activities to their stakeholders.

The study discovered that firms audited by big auditing firms with international affiliations (such as the KPMG, the PricewaterhouseCoopers and the Akintola Williams Deloitte) tend to have a significantly higher level of corporate social disclosure than others that are audited by small local audit firms.

The study has provided an empirical validation that ownership structure have significant effect on voluntary corporate social disclosure. This implies that board of directors that have substantial amount of shares in the company influence company's decision to report their corporate social activities to their stakeholders in order to reduce information gap and protect company reputation.

The study identified that there is no synergy in the interaction of company size, company age, profitability, audit firm size, financial leverage and ownership structure to affect voluntary corporate social disclosure.

5.5 Suggestions for Further Studies

The study investigated manufacturing companies listed on the Nigerian Stock Exchange.

For future research into effect of corporate attributes on voluntary corporate social disclosure on listed health care firms on Nigerian Stock Exchange.

The proxies used for corporate attributes for this study are; company size, company age, profitability, audit firm size, financial leverage and ownership structure. The number of corporate attributes proxies should be increased by future researchers.

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	APPENDIX 1	
GRI Report	ing Template	
STANDARD	DISCLOSURES PART III: Performance Indicators.	
REPORT FULL	Y ON 10 CORE OR ADDITIONAL PERFORMANCE INDICATORS - A	ΑT
	ROM EACH DIMENSION	
(ECONOMMIC	C, ENVIRONMENTAL AND SOCIAL)	
economic	Description	
Performance		
Indicator		
Econo	omic Performance	
EC 1	Direct economic value generated and distributed, including	
	revenues, operating costs, employee compensation, donations and	
	other community investments, retained earnings, and payments to	
	capital providers and governments.	
EC 2	Financial implications and other risks and opportunities for the	
	organization's activities due to climate change.	
EC 3	Coverage of the organization's defined benefit plan obligations.	
EC 4	Significant financial assistance received from government.	
Marke	et presence	
EC 5	Range of ratios of standard entry level wage by gender compared	
	to local minimum wage at significant locations of operation.	
EC 6	Policy, practices, and proportion of spending on locally-based	
	suppliers at	
	significant locations of operation.	
EC 7	Procedures for local hiring and proportion of senior management	
	hired from the local community at significant locations of	
	operation.	
	irect economic impacts	
EC 8	Development and impact of infrastructure investments and	
	services provided primarily for public benefit through commercial,	
	in-kind, or pro bono engagement.	
EC 9	Understanding and describing significant indirect economic	
	impacts, including the extent of impacts.	
	ronmental	
Performance	Description	
indicators		
EN 1	Materials used by weight or volume.	
EN 2	Percentage of materials used that are recycled input materials.	
Ene	rgy	
EN 3	Direct energy consumption by primary energy source.	
EN 4	Indirect energy consumption by primary source.	
EN 5	Energy saved due to conservation and efficiency improvements.	
EN 6	Initiatives to provide energy-efficient or renewable energy based	
	products and services, and reductions in energy requirements as a	
	result of these initiatives.	
EN 7	Initiatives to reduce indirect energy consumption and reductions	
	achieved.	

Wat	er				
EN 8	Total water withdrawal by source.				
EN 9	Water sources significantly affected by withdrawal of water.				
EN 10	Percentage and total volume of water recycled and reused.				
	iversity				
EN 11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.				
EN 12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.				
EN 13	Habitats protected or restored.				
EN 14	Strategies, current actions, and future plans for managing impacts on biodiversity.				
EN 15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.				
Emission,	effluents and waste				
EN 16	Total direct and indirect greenhouse gas emissions by weight.				
EN 17	Other relevant indirect greenhouse gas emissions by weight.				
EN 18	Initiatives to reduce greenhouse gas emissions and reductions achieved.				
EN 19	Emissions of ozone-depleting substances by weight.				
EN 20	NOx, SOx, and other significant air emissions by type and weight.				
EN 21	Total water discharge by quality and destination.				
EN 22	Total weight of waste by type and disposal method.				
EN 23	Total number and volume of significant spills.				
EN 24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.				
EN 25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.				
Products	s and services				
EN 26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.				
EN 27	Percentage of products sold and their packaging materials that are reclaimed by category.				
Compli	ance				
EN 28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.				
Transp	· · · · · · · · · · · · · · · · · · ·				
EN 29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.				
Overall					
EN 30	Total environmental protection expenditures and investments by type.				

Social : Labou	r Practices and Decent Work						
Performance	Description						
Indicator							
Employment							
LA 1	Total workforce by employment type, employment contract, and region,						
	broken down by gender.						
LA 2	Total number and rate of new employee hires and employee turnover by						
	age group, gender, and region.						
LA 3	Benefits provided to full-time employees that are not provided to						
	temporary or part time employees, by major operations.						
LA 4	Return to work and retention rates after parental leave, by gender.						
Lal	oour / Management Relations						
LA 5	Percentage of employees covered by collective bargaining agreements.						
LA 6	Minimum notice period(s) regarding significant operational changes,						
	including whether it is specified in collective agreements.						
Oce	cupational Health and safety						
LA 7	Percentage of total workforce represented in formal joint management-						
	worker health and safety committees that help monitor and advise on						
	occupational health and safety programs.						
LA 8	Rates of injury, occupational diseases, lost days, and absenteeism, and						
	number of work-related fatalities by region and by gender.						
LA 9	Education, training, counseling, prevention, and risk-control programs in						
	place to assist workforce members, their families, or community members						
	regarding serious diseases.						
LA 10	Health and safety topics covered in formal agreements with trade unions.						
Trair	ning and Education						
LA 11	Average hours of training per year per employee by gender, and by						
	employee category.						
LA 12	Programs for skills management and lifelong learning that support the						
	continued employability of employees and assist them in managing career						
	endings.						
LA 13	Percentage of employees receiving regular performance and career						
	development reviews, by gender.						
	and equal opportunity						
LA 14	Composition of governance bodies and breakdown of employees per						
	employee category according to gender, age group, minority group						
	membership, and other indicators of diversity.						
-	eration for women and men						
LA 15	Ratio of basic salary and remuneration of women to men by employee						
	category, by significant locations of operation.						

Social: Human	n Right
Performance	Description
indicator	
	tment and Procurement Practices
HR 1	Percentage and total number of significant investment agreements and
	contracts that include clauses incorporating human rights concerns, or that
	have undergone human rights screening.
HR 2	Percentage of significant suppliers, contractors and other business
	partners that have undergone human rights screening, and actions taken.
HR 3	Total hours of employee training on policies and procedures concerning
	aspects of human rights that are relevant to operations, including the
	percentage of employees trained.
Non – o	liscrimination
HR 4	Total number of incidents of discrimination and actions taken.
Freed	lom of association and collective bargaining
HR 5	Operations and significant suppliers identified in which the right to
	exercise freedom of association and collective bargaining may be violated
	or at significant risk, and actions taken to support these rights.
Child La	bour
HR 6	Operations and significant suppliers identified as having significant risk
	for incidents of child labor, and measures taken to contribute to the
	effective abolition of child labour.
Forced an	nd compulsory labour
HR 7	Operations and significant suppliers identified as having significant risk
	for incidents of forced or compulsory labor, and measures to contribute to
	the elimination of all forms of forced or compulsory labour.
Security	
HR 8	Percentage of security personnel trained in the organization's policies or
	procedures concerning aspects of human rights that are relevant to
	operations.
Indigen	pus right
HR 9	Total number of incidents of violations involving rights of indigenous
	people and actions taken.
Assessment	
HR 10	Percentage and total number of operations that have been subject to
	human rights reviews and/or impact assessments.
Remediation	
HR 11	Number of grievances related to human rights filed, addressed and
	resolved through formal grievance mechanisms.

Social: Society	,
Performance	Description
indicator	
Local Commu	nities
SO 1	Percentage of operations with implemented local community engagement,
	impact assessments, and development programs.
SO 9	Operations with significant potential or actual negative impacts on local
	communities.
SO 10	Prevention and mitigation measures implemented in operations with
	significant potential or actual negative impacts on local communities.
Anti – compet	itive behavior
SO 7	Total number of legal actions for anti-competitive behavior, anti-trust,
	and monopoly practices and their outcomes.
Complianc	e
SO 8	Monetary value of significant fines and total number of non-monetary
	sanctions for non-compliance with laws and regulations.
Social : Produ	ct Responsibility
Performance	Description
Indicator	
Customer heal	
PR 1	Life cycle stages in which health and safety impacts of products and
	services are assessed for improvement, and percentage of significant
	products and services categories subject to such procedures.
PR 2	Total number of incidents of non-compliance with regulations and
rk 2	voluntary codes concerning health and safety impacts of products and
	voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.
Product and S	voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes. ervice Labeling
	voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes. ervice Labeling Type of product and service information required by procedures, and
Product and S	voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes. ervice Labeling Type of product and service information required by procedures, and percentage of significant products and services subject to such
Product and S PR 3	voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes. ervice Labeling Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.
Product and S	voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes. ervice Labeling Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements. Total number of incidents of non-compliance with regulations and
Product and S PR 3	voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes. ervice Labeling Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements. Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling,
Product and S PR 3 PR 4	voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes. ervice Labeling Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements. Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.
Product and S PR 3	voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes. ervice Labeling Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements. Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling,

Source: Adopted from GRI (2011).

	company	year	OSTRUC	SIZE	PROF	LEV	AGE	AUD
1	1	2008	0.082785	7.794889	0.507856	1.627775	1.278754	0.00
2	1	2009	0.045323	7.904649	0.509203	1.54058	1.30103	0.00
3	1	2010	0.09691	6.910828	0.376577	1.522183	1.322219	0.00
4	1	2011	0.093422	7.895416	0.152288	1.643058	1.342423	0.00
5	1	2012	0.089905	5.909951	0.235528	1.639088	1.361728	0.00
6	1	2013	0.100371	6.915874	0.506505	1.520221	1.380211	0.00
7	1	2014	0.307496	6.923757	0.577492	1.648848	1.39794	0.00
8	1	2015	0.361728	6.911309	0.133539	1.661245	1.39794	0.00
9	1	2016	0.380211	6.914615	0.926342	1.661623	1.39794	0.00
10	1	2017	1.361728	6.979397	2.733999	1.672098	1.447158	0.00
11	2	2008	1.453777	8.541333	1.032619	1.689486	1.50515	1.00
12	2	2009	1.453777	8.517109	0.921166	1.802432	1.518514	1.00
13	2	2010	1.453777	8.571264	0.768638	1.787673	1.531479	1.00
14	2	2011	1.455606	8.915793	1.060698	1.680607	1.544068	1.00
15	2	2012	1.45894	8.549772	1.374198	1.546789	1.556303	1.00
16	2	2013	1.455302	8.507347	0.776701	1.566791	1.568202	1.00
17	2	2014	1.455302	8.553407	1.064458	1.772762	1.579784	1.00
18	2	2015	1.472318	8.61481	0.919078	1.793441	1.579784	1.00
19	2	2016	1.472025	8.730458	0.586587	1.565021	1.579784	1.00
20	2	2017	1.322219	8.761723	1.431364	2.862131	1.612784	1.00
21	3	2008	0.079181	7.674233	0.840106	1.662002	1.591065	1.00
22	3	2009	0.082785	7.801137	0.777427	1.675045	1.60206	1.00
23	3	2010	0.049218	7.674101	0.630428	1.587037	2.613842	1.00
24	3	2011	0.08636	7.590216	0.58995	1.657343	1.623249	1.00
25	3	2012	0.089905	7.696558	0.802089	1.655427	1.633468	1.00
26	3	2013	0.100371	1.672098	0.828015	1.659155	1.643453	1.00
27	3	2014	0.075547	7.750208	0.887054	1.668293	1.653213	1.00
28	3	2015	0.082785	7.682205	0.653213	1.650599	1.653213	1.00
29	3	2016	0.235528	7.713442	0.840733	1.601299	1.653213	1.00
30	3	2017	0.238046	7.954665	0.837904	2.697229	1.681241	1.00
31	4	2008	0.369216	6.355359	1.090258	1.788027	0.30103	1.00
32	4	2009	0.376577	6.420712	1.795463	1.794767	0.477121	1.00
33	4	2010	0.332438	6.276387	0.866287	1.766264	0.60206	1.00
34	4	2011	0.376577	5.295989	1.738622	1.742018	0.69897	1.00
35	4	2012	0.371068	7.355805	1.669503	1.750663	0.778151	1.00
36	4	2013	0.383815	6.420712	0.921686	1.796297	0.845098	1.00
37	4	2014	0.378398	6.357469	0.814913	1.773786	0.90309	1.00
38	4	2015	0.201849	6.278589	1.08849	1.803321	0.90309	1.00
39	4	2016	0.372912	6.244109	1.690196	1.77873	0.90309	1.00
40	4	2017	0.367356	6.321236	1.230449	2.495544	1.531479	1.00

41	5	2008	0.033424	6.375025	0.127105	1.856789	1.50515	1.00
42	5	2008	0.037426	6.345494	0.209515	1.877659	1.518514	1.00
43	5	2005	0.025306	6.364478	0.152288	1.865222	1.531479	1.00
44	5	2010	0.037426	6.400094	0.161368	1.895146	1.544068	1.00
45	5	2011	0.025306	6.382482	0.454845	1.878637	1.556303	1.00
46	5	2012	0.037426	5.335867	0.588832	1.871806	1.568202	1.00
47	5	2013	0.037420	6.383566	0.133539	1.884455	1.579784	1.00
48	5	2014	0.103804	6.361939	0.502427	1.858958	1.579784	1.00
49	5	2015	0.225309	6.338198	0.654177	1.906066	1.579784	1.00
50	5	2010	1.612784	6.335301	1.653213	2.892651	1.612784	1.00
50	6	2008	0.344392	5.944311	1.275081	1.509606	0.041393	1.00
52	6	2009	0.346353	5.894145	1.281488	1.521792	0.322219	1.00
53	6	2010	0.361728	5.944297	1.323871	1.524266	0.491362	1.00
55	6	2011	0.365488	5.899741	1.297542	1.514813	0.612784	1.00
55	6	2012	0.346353	6.978709	1.295567	1.516932	1.556303	1.00
56	6	2013	0.361728	6.799503	1.296226	1.524526	1.568202	1.00
57	6	2014	0.201849	5.983825	1.286232	1.527888	0.845098	1.00
58	6	2015	0.367356	6.05095	1.277609	1.524136	0.845098	1.00
59	6	2016	0.371068	6.176833	1.389166	1.540079	0.845098	1.00
60	6	2017	0.369216	6.207119	2.198657	2.585461	0.954243	1.00
61	7	2008	0.161368	6.238966	1.054613	1.762904	0.041393	0.00
62	7	2009	0.158362	6.236449	1.049606	1.730944	0.322219	0.00
63	7	2010	0.164353	6.243837	0.902003	1.726483	0.491362	0.00
64	7	2011	0.161368	6.218333	0.994317	1.760799	0.612784	0.00
65	7	2012	0.161368	7.235644	1.065206	1.794697	0.69897	0.00
66	7	2013	0.164353	6.219396	1.06558	1.730621	0.778151	0.00
67	7	2014	0.164353	6.241713	1.074451	1.777354	0.954243	0.00
68	7	2015	0.161368	6.294205	0.879096	1.79393	0.954243	0.00
69	7	2016	0.155336	6.276857	1.003029	1.732313	0.954243	0.00
70	7	2017	1.672098	6.367317	2.045323	2.752048	1.079181	0.00
71	8	2008	0.864511	6.513121	0.514548	1.573915	0.477121	1.00
72	8	2009	0.859138	6.53506	0.534026	1.513883	0.60206	1.00
73	8	2010	0.871573	6.517213	0.515874	1.553519	0.69897	1.00
74	8	2011	0.871573	6.553012	0.859138	1.527888	0.778151	1.00
75	8	2012	0.871573	6.572897	0.687529	1.547529	0.845098	1.00
76	8	2013	0.871573	6.577738	0.915927	1.525304	0.90309	1.00
77	8	2014	0.872739	6.561119	0.61066	1.510813	1.633468	1.00
78	8	2015	0.883093	6.590604	0.928908	1.526081	1.633468	1.00
79	8	2016	0.883093	6.613024	0.737193	1.562412	1.633468	1.00

80	8	2017	1.863323	6.634621	1.792392	2.587711	1.662758	1.00
81	9	2017	0.779596	6.458318	1.726075	1.782114	1.568202	1.00
82	9	2009	0.781037	6.320952	1.805637	1.743588	1.579784	1.00
83	9	2005	0.781037	6.440809	1.731428	1.730944	1.591065	1.00
84	9	2011	0.781037	6.461748	1.72214	1.738543	1.60206	1.00
85	9	2011	0.781037	6.379441	1.720903	1.731428	1.612784	1.00
86	9	2012	0.781037	6.457243	1.731991	1.745777	1.623249	1.00
87	9	2013	0.870989	6.488675	1.731991	1.790144	1.591065	1.00
88	9	2015	0.781755	6.532665	1.70774	1.743588	1.591065	1.00
89	9	2016	0.812913	6.691612	1.513351	1.728678	1.591065	1.00
90	9	2017	0.716838	6.700183	2.475671	2.742725	1.623249	1.00
91	10	2008	0.731589	7.426986	0.893207	1.609061	1.518514	1.00
92	10	2009	0.731589	7.426924	0.896526	1.553519	1.531479	1.00
93	10	2010	0.731589	7.434095	0.902547	1.554368	1.544068	1.00
94	10	2011	0.740363	7.445997	0.950365	1.552547	1.556303	1.00
95	10	2012	0.739572	6.436775	0.85187	1.554852	1.568202	1.00
96	10	2013	0.739572	7.431133	0.872156	1.578868	1.579784	1.00
97	10	2014	0.761928	7.43021	0.947924	1.610128	1.491362	1.00
98	10	2015	0.740363	7.434107	0.85248	1.547775	1.491362	1.00
99	10	2016	0.729974	7.52093	1.058426	1.547529	1.491362	1.00
100	10	2017	0.718502	7.582195	1.322219	2.534026	1.531479	1.00
101	11	2008	0.184691	6.331081	0.896526	1.085291	1.39794	0.00
102	11	2009	0.178977	6.454369	0.687529	0.898725	1.414973	0.00
103	11	2010	0.181844	6.309371	0.770115	0.933487	1.431364	0.00
104	11	2011	0.181844	6.332899	0.897077	1.049606	1.447158	0.00
105	11	2012	0.184691	6.298276	0.909556	1.08636	1.462398	0.00
106	11	2013	0.184691	6.310034	0.921166	0.992554	1.477121	0.00
107	11	2014	0.716003	6.309905	0.89098	1.090258	0.845098	0.00
108	11	2015	0.70927	6.271374	0.499687	0.865696	0.845098	0.00
109	11	2016	0.738781	6.245704	0.918555	0.965672	0.845098	0.00
110	11	2017	1.322219	6.893486	1.414973	1.919078	0.954243	0.00
111	12	2008	0.068186	10.19507	0.975432	1.599665	1.230449	0.00
112	12	2009	0.068186	10.17297	0.941511	1.597914	1.255273	0.00
113	12	2010	0.075547	10.23007	0.952792	1.620032	1.278754	0.00
114	12	2011	0.374748	10.20058	0.902003	1.620968	1.303196	0.00
115	12	2012	0.374748	10.19816	0.980912	1.622939	1.322219	0.00
116	12	2013	0.374748	10.16936	0.977266	1.626853	1.342423	0.00
117	12	2014	0.255273	10.19811	0.991669	1.603577	1.380211	0.00
118	12	2015	0.396199	10.23419	0.845098	1.610979	1.380211	0.00

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119	12	2016	0.597695	10.30169	1.796505	1.629613	1.380211	0.00
120	12	2017	0.845098	7.158724	2.350248	2.850033	1.431364	0.00
121	13	2008	0.872739	8.121357	0.83187	1.799134	0.041393	1.00
122	13	2009	0.872156	8.087669	0.840733	1.829175	0.30103	1.00
123	13	2010	0.873902	8.089528	0.864511	1.78739	0.491362	1.00
124	13	2011	0.885926	8.123828	0.859138	1.811441	0.612784	1.00
124	13	2012	0.894316	8.088022	0.801404	1.788593	0.70757	1.00
126	13	2013	0.894316	8.121125	0.900367	1.835627	0.78533	1.00
127	13	2014	0.872739	8.121653	0.859138	1.819149	1.716003	1.00
128	13	2015	0.883093	8.087237	0.804139	1.781396	1.716003	1.00
129	13	2016	0.876795	8.136697	0.127105	1.842484	1.716003	1.00
130	13	2017	0.850279	8.164467	1.113943	2.848805	1.740363	1.00
131	14	2008	0.103804	8.574232	0.992554	1.623042	1.255273	0.00
132	14	2009	0.100371	8.461311	1.157759	1.570776	1.278754	0.00
133	14	2010	0.09691	8.546387	1.168203	1.546789	1.303196	0.00
134	14	2011	0.093422	8.577795	1.119256	1.616265	1.324282	0.00
135	14	2012	0.093422	8.574334	1.142389	1.552425	1.344392	0.00
136	14	2013	0.093422	8.575516	1.156246	1.572058	1.361728	0.00
137	14	2014	0.431364	8.577806	1.029789	1.61616	0.90309	0.00
138	14	2015	0.562293	8.623404	1.156852	1.579784	0.90309	0.00
139	14	2016	0.798651	8.676822	1.085291	1.56265	0.90309	0.00
140	14	2017	1.431364	8.713364	1.672098	2.562293	1.041393	0.00
141	15	2008	0.161368	5.993159	0.89487	1.577607	1.69897	0.00
142	15	2009	0.161368	7.009329	0.873902	1.502017	1.672098	0.00
143	15	2010	0.127105	6.981015	0.841359	1.579669	1.681241	0.00
144	15	2011	0.356026	6.976733	0.870404	1.360972	1.690196	0.00
145	15	2012	0.389166	6.983955	0.840733	1.512551	1.69897	0.00
146	15	2013	0.389166	6.988321	0.864511	1.565966	1.70757	0.00
147	15	2014	0.747412	6.981926	0.895423	1.588832	1.531479	0.00
148	15	2015	0.934498	7.014065	0.872156	1.492062	1.531479	0.00
149	15	2016	0.848805	6.998313	0.725912	1.361539	1.531479	0.00
150	15	2017	0.845098	6.992243	1.939519	1.322219	1.568202	0.00
151	16	2008	0.245513	6.514178	0.764923	1.356217	0.322219	0.00
152	16	2009	0.247973	6.375083	0.733197	1.439017	0.491362	0.00
153	16	2010	0.245513	7.805028	0.720159	1.830653	0.90309	0.00
154	16	2011	0.245513	7.832148	0.214844	1.845656	0.90309	0.00
155	16	2012	0.245513	7.88108	0.598791	1.894759	0.90309	0.00
156	16	2013	0.245513	5.097091	1.342423	1.748188	1.041393	0.00
157	16	2014	0.245513	6.522981	0.784617	1.700358	0.845098	0.00

158	16	2015	0.245513	6.364704	0.733999	1.358506	0.845098	0.00
159	16	2016	0.245513	6.3875	0.938019	1.439491	0.845098	0.00
160	16	2017	0.245513	6.424451	1.880814	2.513218	0.845098	0.00
161	17	2008	0.588832	7.446122	0.858537	1.763353	1.447158	1.00
162	17	2009	0.577492	7.454407	0.599883	1.781684	1.462398	1.00
163	17	2010	0.595496	7.452124	0.558709	1.753736	1.477121	1.00
164	17	2011	0.595496	8.441086	0.474216	1.754501	1.491362	1.00
165	17	2012	0.595496	7.452082	0.459392	1.746089	1.50515	1.00
166	17	2013	0.595496	8.531857	0.451786	1.723866	1.518514	1.00
167	17	2014	0.575188	8.472114	0.869818	1.746245	1.612784	1.00
168	17	2015	0.672098	8.535624	0.607455	1.754042	1.612784	1.00
169	17	2016	0.710963	8.538257	0.017033	1.785686	1.612784	1.00
170	17	2017	0.710117	8.626981	0.474216	1.763428	1.568202	1.00
171	18	2008	0.676694	9.462317	0.324488	1.852541	0.041393	1.00
172	18	2009	0.673942	8.459937	0.392697	1.859978	0.322219	1.00
173	18	2010	0.677607	8.470515	0.390935	1.852358	0.491362	1.00
174	18	2011	0.676694	8.474718	0.371068	1.870872	0.612784	1.00
175	18	2012	0.676694	7.485001	0.252853	1.858477	0.69897	1.00
176	18	2013	0.676694	7.473987	0.515874	1.863263	0.778151	1.00
177	18	2014	0.676694	8.472114	0.167317	1.856245	1.591065	1.00
178	18	2015	0.676694	8.535624	0.390935	1.872331	1.591065	1.00
179	18	2016	0.676694	8.538257	0.620136	1.858898	1.591065	1.00
180	18	2017	0.676694	5.626981	1.491362	2.866878	1.623249	1.00
181	19	2008	0.089905	7.797547	0.664642	1.795463	1.544068	1.00
182	19	2009	0.100371	7.802968	0.716003	1.762829	1.556303	1.00
183	19	2010	0.093422	7.800988	0.673942	1.830589	1.568202	1.00
184	19	2011	0.093422	8.799338	0.708421	1.852602	1.579784	1.00
185	19	2012	0.093422	7.798971	0.586587	1.805365	1.591065	1.00
186	19	2013	0.093422	7.804359	0.717671	1.811374	1.60206	1.00
187	19	2014	0.093422	7.078491	0.559907	1.873379	1.591065	1.00
188	19	2015	0.093422	7.069473	0.222716	1.829882	1.591065	1.00
189	19	2016	0.093422	7.117229	0.49693	1.823409	1.591065	1.00
190	19	2017	0.093422	7.157187	0.30103	0.49693	2.623249	1.00
191	20	2008	0.155336	8.024634	1.286905	1.812312	1.518514	1.00
192	20	2009	0.139879	8.058965	1.311118	1.821448	1.531479	1.00
193	20	2010	0.079181	8.034977	1.299071	1.831294	1.544068	1.00
194	20	2011	0.075547	8.072151	1.324488	1.835183	1.556303	1.00
195	20	2012	0.158362	8.063931	1.270213	1.880127	1.568202	1.00
196	20	2013	0.082785	8.065889	1.277609	1.833211	1.579784	1.00
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197	20	2014	0.158362	8.02556	1.321391	1.820267	1.579784	1.00
197	20	2014	0.138302	8.02330	1.299071	1.833211	1.579784	1.00
198	20	2013	0.075547	8.22939	0.666518	1.9127	1.579784	1.00
200	20	2010	0.029384	2.95193	0.359835	1.841485	1.612784	1.00
				7.978996				
201	21	2008	0.206826		1.104146	1.573336	1.518514	1.00
202	21	2009	0.209515	7.940907	1.087426	1.600755	1.531479	1.00
203	21	2010	0.025306	7.992875	1.08636	1.57588	1.544068	1.00
204	21	2011	0.025306	7.983878	1.073352	1.754501	1.556303	1.00
205	21	2012	0.025306	7.996598	1.077368	1.590396	1.568202	1.00
206	21	2013	0.025306	7.950729	0.992111	1.579669	1.579784	1.00
207	21	2014	0.025306	7.988058	1.087781	1.600319	1.004321	1.00
208	21	2015	0.025306	8.028048	1.074085	1.577032	1.004321	1.00
209	21	2016	0.025306	8.245355	0.906874	1.760422	1.004321	1.00
210	21	2017	0.025306	8.269686	2.161368	2.719331	1.113943	1.00
211	22	2008	0.987666	6.475359	0.428135	1.778079	0.322219	1.00
212	22	2009	0.987666	6.461988	0.363612	1.762978	0.491362	1.00
213	22	2010	0.987666	6.514688	0.296665	1.868527	0.612784	1.00
214	22	2011	0.987666	6.476448	0.274158	1.869232	0.70757	1.00
215	22	2012	0.987666	6.490771	0.432969	1.829625	0.78533	1.00
216	22	2013	0.987666	6.490273	0.453318	1.868527	0.851258	1.00
217	22	2014	0.987666	6.489117	0.445604	1.776265	1.579784	1.00
218	22	2015	0.987666	6.700924	0.170262	1.869232	1.580126	1.00
219	22	2016	0.987666	6.657026	0.468347	1.838345	1.580126	1.00
220	22	2017	0.987666	6.483971	2.767156	2.720986	1.612784	1.00
221	23	2008	0.049218	7.848354	0.586587	1.45194	0.041393	1.00
222	23	2009	0.049218	7.859542	0.698101	1.391817	0.322219	1.00
223	23	2010	0.089905	7.239962	0.708421	1.542576	0.491362	1.00
224	23	2011	0.089905	7.847815	0.674861	1.420451	0.612784	1.00
225	23	2012	0.089905	7.844085	0.800717	1.421768	1.556303	1.00
226	23	2013	0.089905	7.846862	0.826723	1.452859	1.568202	1.00
227	23	2014	0.089905	7.854469	0.804821	1.452247	1.431364	1.00
228	23	2015	0.089905	7.847425	0.593286	1.391993	1.431846	1.00
229	23	2016	0.089905	7.850962	0.71265	1.42341	1.431846	1.00
230	23	2017	0.089905	7.838681	0.90309	0.60206	1.477121	1.00
231	24	2008	0.10721	4.829297	0.800029	0.123852	0.612784	0.00
232	24	2009	0.082785	4.967291	0.580925	0.217484	0.70757	0.00
233	24	2010	0.103804	4.971818	0.519828	0.190332	0.70757	0.00
234	24	2011	0.082785	4.969467	0.378398	0.136721	0.78533	0.00
235	24	2012	0.082785	4.834872	0.49276	0.143015	0.851258	0.00

236	24	2013	0.082785	4.905099	0.503791	0.245513	0.908485	0.00
237	24	2014	0.775246	4.972874	1.969695	0.093422	1.380754	0.00
238	24	2015	0.865696	4.835545	0.584331	0.227887	1.380754	0.00
239	24	2016	0.970347	4.909615	1.744762	0.155336	1.380754	0.00
240	24	2017	0.954243	4.930801	2.620136	3.021189	1.431364	0.00
241	25	2008	0.117271	8.539361	0.540329	1.803252	1.579784	1.00
242	25	2009	0.190332	8.514841	0.545307	1.710371	1.591065	1.00
243	25	2010	0.127105	8.517904	0.600973	1.699924	1.60206	1.00
244	25	2011	0.167317	8.549281	0.941014	1.729489	1.612784	1.00
245	25	2012	0.31597	8.527924	0.865104	1.705265	1.612784	1.00
246	25	2013	0.294466	8.570686	1.021603	1.716003	1.623249	1.00
247	25	2014	0.127105	8.543111	0.553883	1.705436	1.643749	1.00
248	25	2015	0.164353	8.551717	1.028571	1.712818	1.643749	1.00
249	25	2016	0.318063	9.565423	0.887617	1.738225	1.643749	1.00
250	25	2017	0.318063	6.637234	2.416641	1.851258	1.672098	1.00
251	26	2008	0.033424	6.511163	0.85248	1.641672	1.519828	1.00
252	26	2009	0.029384	6.365808	0.914343	1.65906	1.532754	1.00
253	26	2010	0.033424	6.512633	0.569374	1.45894	1.545307	1.00
254	26	2011	0.033424	6.384481	0.756636	1.579669	1.557507	1.00
255	26	2012	0.037426	6.371366	0.921686	1.634578	1.569374	1.00
256	26	2013	0.029384	6.384086	0.750508	1.660581	1.580925	1.00
257	26	2014	0.029384	6.514098	0.853698	1.659821	1.591399	1.00
258	26	2015	0.029384	8.551717	0.9154	1.590284	1.591399	1.00
259	26	2016	0.029384	6.24024	1.054613	1.448861	1.591399	1.00
260	26	2017	0.029384	8.582889	1.934498	3.725912	1.623249	1.00
261	27	2008	0.677607	7.729985	1.046495	1.915453	0.491362	1.00
262	27	2009	0.63093	7.738078	1.403292	1.968996	0.612784	1.00
263	27	2010	0.673021	7.684459	1.121231	1.933133	0.70757	1.00
264	27	2011	0.677607	7.715179	1.183839	1.909396	0.78533	1.00
265	27	2012	0.677607	7.730447	1.12483	2.005652	0.851258	1.00
266	27	2013	0.677607	7.730003	1.223496	1.941462	0.908485	1.00
267	27	2014	0.677607	7.738792	1.145818	1.916243	0.955688	1.00
268	27	2015	0.677607	7.693331	1.12483	2.026206	0.955688	1.00
269	27	2016	0.677607	7.897517	1.126456	1.841172	0.955688	1.00
270	27	2017	0.677607	8.11179	1.199206	2.851258	1.079181	1.00
271	28	2008	0.426511	7.669589	0.708421	1.915558	1.580925	1.00
272	28	2009	0.429752	7.717446	0.726727	1.929981	1.592177	1.00
273	28	2010	0.428135	7.668118	0.708421	1.925364	1.603144	1.00
	28	2011	0.429752	7.528097	0.445604	1.92205	1.613842	1.00

28	2012	0.429752	7.687663	0.680336	1.928447	1.624282	1.00
28	2013	0.429752	7.710269	0.758155	1.941462	1.634477	1.00
28	2014	0.429752	7.738792	0.721811	1.922414	1.643749	1.00
28	2015	0.426511	7.693331	0.374748	1.924486	1.643749	1.00
28	2016	0.423246	7.897517	0.62634	1.923607	1.643749	1.00
28	2017	0.421604	8.083088	0.778151	1.568202	1.672098	1.00
29	2008	0.029384	7.091378	1.117603	1.684217	1.281033	1.00
29	2009	0.089905	7.18619	1.146438	1.693111	1.303196	1.00
29	2010	0.271842	7.14224	1.156852	1.700444	1.324282	1.00
29	2011	0.324282	7.132192	1.120903	1.698883	1.344392	1.00
29	2012	0.324282	7.211541	1.158664	1.680426	1.363612	1.00
29	2013	0.324282	7.113058	1.139564	1.73981	1.382017	1.00
29	2014	0.916454	7.660261	1.172019	1.69688	1.398461	1.00
29	2015	1.52763	7.700466	1.111263	1.69688	1.398461	1.00
29	2016	1.539076	7.860286	0.991669	1.752048	1.398461	1.00
29	2017	0.537819	7.478902	0.993436	1.827951	1.447158	1.00
30	2008	0.053078	7.385078	0.914343	1.716921	1.20412	0.00
30	2009	0.049218	7.404354	0.959518	1.757624	1.230449	0.00
30	2010	0.089905	7.451463	0.810904	1.710202	1.257679	0.00
30	2011	0.120574	7.419609	0.969882	1.73488	1.281033	0.00
30	2012	0.184691	7.547546	0.863917	1.773128	1.303196	0.00
30	2013	0.056905	7.421444	0.882525	1.725176	1.324282	0.00
30	2014	0.056905	7.386865	0.936011	1.730378	1.343014	0.00
30	2015	0.056905	7.479598	0.80956	1.775683	1.343014	0.00
30	2016	0.056905	7.524813	0.898725	1.764848	1.343014	0.00
30	2017	0.056905	8.652853	1.342423	1.838849	1.39794	0.00
	28 28 28 28 29 29 29 29 29 29 29 29 29 29 29 29 29	28 2013 28 2014 28 2015 28 2016 28 2017 29 2008 29 2009 29 2010 29 2011 29 2012 29 2013 29 2014 29 2015 29 2015 29 2016 29 2017 30 2008 30 2008 30 2010 30 2010 30 2011 30 2012 30 2013 30 2014 30 2013 30 2014 30 2015 30 2015 30 2015 30 2015 30 2015	28 2013 0.429752 28 2014 0.429752 28 2015 0.426511 28 2016 0.423246 28 2017 0.421604 29 2008 0.029384 29 2009 0.089905 29 2010 0.271842 29 2011 0.324282 29 2012 0.324282 29 2013 0.324282 29 2014 0.916454 29 2015 1.52763 29 2016 1.539076 29 2017 0.537819 30 2008 0.053078 30 2009 0.049218 30 2010 0.89905 30 2011 0.120574 30 2012 0.184691 30 2013 0.056905 30 2013 0.056905 30 2014 0.056905 30 2015	2820130.4297527.7102692820140.4297527.7387922820150.4265117.6933312820160.4232467.8975172820170.4216048.0830882920080.0293847.0913782920090.0899057.186192920100.2718427.142242920110.3242827.1321922920120.3242827.2115412920130.3242827.1130582920140.9164547.6602612920151.527637.7004662920161.5390767.8602862920170.5378197.4789023020080.0530787.3850783020100.0899057.4514633020110.1205747.4196093020120.1846917.5475463020130.0569057.4214443020140.0569057.3858653020150.0569057.4214443020160.0569057.4214443020150.0569057.4214443020160.0569057.4214443020150.0569057.4214443020160.0569057.4214443020160.0569057.4214443020160.0569057.4214443020160.0569057.421444302016 <td< td=""><td>2820130.4297527.7102690.7581552820140.4297527.7387920.7218112820150.4265117.6933310.3747482820160.4232467.8975170.626342820170.4216048.0830880.7781512920080.0293847.0913781.1176032920090.0899057.186191.1464382920100.2718427.142241.1568522920110.3242827.1321921.1209032920120.3242827.2115411.1586642920130.3242827.1130581.1395642920140.9164547.6602611.1720192920151.527637.7004661.1112632920161.5390767.8602860.9916692920170.5378197.4789020.9934363020080.0530787.3850780.9143433020100.0899057.4514630.8109043020110.1205747.4196090.9698823020120.1846917.5475460.8639173020130.0569057.4214440.8825253020140.0569057.4795980.809563020150.0569057.4795980.809563020160.0569057.4795980.809563020160.0569057.4795980.80956</td><td>2820130.4297527.7102690.7581551.9414622820140.4297527.7387920.7218111.9224142820150.4265117.6933310.3747481.9244862820160.4232467.8975170.626341.9236072820170.4216048.0830880.7781511.5682022920080.0293847.0913781.1176031.6842172920090.0899057.186191.1464381.6931112920100.2718427.142241.1568521.7004442920110.3242827.2115411.1586641.6804262920120.3242827.2115411.1586641.6804262920130.3242827.2115411.1586641.696882920140.9164547.6602611.112631.696882920151.527637.7004661.1112631.696882920161.5390767.8602860.9916691.7520482020170.5378197.4789020.9934361.8279513020080.0530787.3850780.9143431.7169213020090.0492187.4043540.9595181.7576243020100.899057.4514630.8109041.7102023020110.1205747.4196090.9698821.734883020120.1846917.5475460.8639171.773128302014</td><td>2820130.4297527.7102690.7581551.9414621.6344772820140.4297527.7387920.7218111.9224141.6437492820150.4265117.6933310.3747481.9244661.6437492820160.4232467.8975170.626341.9236071.6437492820170.4216048.0830880.7781511.5682021.6720982920080.0293847.0913781.1176031.6842171.2810332920090.0899057.186191.1464381.6931111.3031962920100.2718427.142241.1568521.7004441.3242822920110.3242827.2115411.1586641.6804261.3636122920120.3242827.2115411.1586641.6804261.3636122920140.9164547.6602611.112631.696881.3984612920151.527637.7004661.112631.696881.3984612920161.5390767.8602860.9916691.7520481.3984612920161.5390767.480220.9934361.8279511.4471583020080.0530787.3850780.9143431.7169211.204123020100.0899057.4514630.8109041.7102021.2576793020110.1205747.4196090.9698821.734881.2810333020120.184691</td></td<>	2820130.4297527.7102690.7581552820140.4297527.7387920.7218112820150.4265117.6933310.3747482820160.4232467.8975170.626342820170.4216048.0830880.7781512920080.0293847.0913781.1176032920090.0899057.186191.1464382920100.2718427.142241.1568522920110.3242827.1321921.1209032920120.3242827.2115411.1586642920130.3242827.1130581.1395642920140.9164547.6602611.1720192920151.527637.7004661.1112632920161.5390767.8602860.9916692920170.5378197.4789020.9934363020080.0530787.3850780.9143433020100.0899057.4514630.8109043020110.1205747.4196090.9698823020120.1846917.5475460.8639173020130.0569057.4214440.8825253020140.0569057.4795980.809563020150.0569057.4795980.809563020160.0569057.4795980.809563020160.0569057.4795980.80956	2820130.4297527.7102690.7581551.9414622820140.4297527.7387920.7218111.9224142820150.4265117.6933310.3747481.9244862820160.4232467.8975170.626341.9236072820170.4216048.0830880.7781511.5682022920080.0293847.0913781.1176031.6842172920090.0899057.186191.1464381.6931112920100.2718427.142241.1568521.7004442920110.3242827.2115411.1586641.6804262920120.3242827.2115411.1586641.6804262920130.3242827.2115411.1586641.696882920140.9164547.6602611.112631.696882920151.527637.7004661.1112631.696882920161.5390767.8602860.9916691.7520482020170.5378197.4789020.9934361.8279513020080.0530787.3850780.9143431.7169213020090.0492187.4043540.9595181.7576243020100.899057.4514630.8109041.7102023020110.1205747.4196090.9698821.734883020120.1846917.5475460.8639171.773128302014	2820130.4297527.7102690.7581551.9414621.6344772820140.4297527.7387920.7218111.9224141.6437492820150.4265117.6933310.3747481.9244661.6437492820160.4232467.8975170.626341.9236071.6437492820170.4216048.0830880.7781511.5682021.6720982920080.0293847.0913781.1176031.6842171.2810332920090.0899057.186191.1464381.6931111.3031962920100.2718427.142241.1568521.7004441.3242822920110.3242827.2115411.1586641.6804261.3636122920120.3242827.2115411.1586641.6804261.3636122920140.9164547.6602611.112631.696881.3984612920151.527637.7004661.112631.696881.3984612920161.5390767.8602860.9916691.7520481.3984612920161.5390767.480220.9934361.8279511.4471583020080.0530787.3850780.9143431.7169211.204123020100.0899057.4514630.8109041.7102021.2576793020110.1205747.4196090.9698821.734881.2810333020120.184691

Source: Researcher, 2018

	company	Year	ENVICSD	SOCSCSD	ECOCSD	CSDI
1	1	2008	2.884602805	2.841678503	2.999613306	2.881002127
2	1	2009	2.895908507	2.843313772	2.948515658	2.826864888
3	1	2010	2.8928345	2.842534355	2.948202615	2.883025139
4	1	2011	2.865038796	2.805194909	2.949014106	2.882587145
5	1	2012	2.895539116	2.838704302	2.949058059	2.882837481
6	1	2013	2.883042195	2.836317785	2.948760067	2.8842231
7	1	2014	2.98527375	2.84163473	3.00004343	2.88081359
8	1	2015	2.77822363	1.45767342	2.94884802	2.88101355
9	1	2016	2.84516008	2.84163473	2.94884313	2.88087073
10	1	2017	2.884602805	2.841634728	2.883786312	2.881567239
11	2	2008	2.996559827	2.964415213	2.950632554	2.97021201
12	2	2009	2.988161936	2.987715411	2.994022243	2.975987534
13	2	2010	2.990432098	2.959618477	2.953058651	2.952952188
14	2	2011	2.959694729	2.985026577	2.942166852	2.953909423
15	2	2012	2.989596634	2.965253456	3.897492384	2.988161936
16	2	2013	2.996117476	2.968973004	2.994655832	2.993581706
17	2	2014	2.95429076	2.97517437	3.00004343	2.97343268
18	2	2015	2.95429076	2.98776455	3.00004343	3.97592648
19	2	2016	2.97003523	2.98776455	3.00004343	3.93462721
20	2	2017	2.800792661	2.805174505	2.949009222	2.936624313
21	3	2008	2.829516043	2.9440531	2.950904952	2.969979384
22	3	2009	2.995244593	2.895483321	2.895544087	2.975941633
23	3	2010	2.965253456	2.948725858	2.828227965	2.943647827
24	3	2011	2.952898946	2.994462333	2.952898946	2.989645562
25	3	2012	2.978221615	2.882644052	2.96262974	2.992257407
26	3	2013	2.953044135	2.974101614	2.988211025	2.984126587
27	3	2014	2.97003523	2.98776455	3.00008685	3.98242683
28	3	2015	2.97003523	2.96220828	3.00005211	3.96854505
29	3	2016	2.95429076	2.98776455	3.00008685	4.45897671
30	3	2017	1.642650813	2.843575343	3.948801603	2.883723878
31	4	2008	2.800792661	2.823617666	2.960204316	2.865222456
32	4	2009	2.793322323	2.81646005	2.953919081	2.857869001
33	4	2010	2.802164602	2.878073483	2.980203419	2.865956322
34	4	2011	2.813801082	2.801753475	2.999569835	2.864576339
35	4	2012	2.800806402	2.809108353	2.831511445	2.858266431
36	4	2013	2.8158632	2.809094872	2.970913786	2.858597345
37	4	2014	2.80163006	2.87511917	3.00004343	3.86512353
38	4	2015	2.80163006	2.85866951	3.00005211	3.84657708
39	4	2016	2.8239044	2.9060925	3.00005645	2.87647187
40	4	2017	2.955355771	2.975537497	2.999652425	2.975178971

APPENDIX III: Corporate Social Disclosure index data

41	5	2008	2.735774498	2.74445728	2.953856298	2.876281363
42	5	2009	2.656203647	2.80086823	2.99610433	2.828298908
43	5	2005	2.669521425	2.808433804	2.969513757	2.809169011
44	5	2010	2.648242882	2.878067732	2.951332661	2.826936055
45	5	2011	2.727630709	2.867461595	2.948574329	2.801657489
46	5	2012	2.726792389	2.830800312	2.953919081	2.814627104
47	5	2013	2.71803642	2.97517437	2.94884802	2.80662761
48	5	2014	2.66900058	2.97518817	2.89078418	3.86516263
49	5	2015	2.69905685	2.98793873	2.94884313	2.88328091
50	5	2010	2.974613001	2.964782732	2.999761072	2.985570167
50	6	2017	2.941730016	2.815723817	2.948564551	2.888353626
52	6	2000	2.950471954	2.809094872	2.99004123	2.949072709
53	6	2005	2.941178379	2.888286228	2.997001728	2.994901978
54	6	2010	2.942122195	2.809781855	2.99878227	2.994901978
55	6	2011	2.94316298	2.89382277	2.949975178	2.999608959
56	6	2012	2.890616603	2.941665446	2.999182758	2.953861128
57	6	2013	2.95429076	2.8928345	3.00004343	3.97592143
58	6	2014	2.97003523	2.98924953	3.00009988	3.98919744
59	6	2015	2.97003523	2.97517897	3.00013027	2.87634488
60	6	2010	2.974700475	2.969513757	2.994989854	2.983725492
61	7	2008	2.537957544	2.823611147	2.94315803	2.953904593
62	7	2009	2.537113581	2.817710771	2.99235466	2.948593884
63	7	2010	2.658211794	2.809364407	2.810225795	2.992208773
64	7	2011	2.647979226	2.823552473	2.952952188	2.949064408
65	7	2012	2.625651932	2.81646005	2.943257023	2.992747869
66	7	2013	2.636698473	2.801170377	2.99484485	2.99499864
67	7	2014	2.66900058	2.98060778	2.89676865	3.94222837
68	7	2015	2.69905685	2.88548561	2.82391091	3.97605408
69	7	2016	2.69905685	2.8239044	2.89078976	3.78752282
70	7	2017	2.964876917	2.964782732	2.948632992	2.969513757
71	8	2008	2.97510999	2.830723362	2.994413945	2.997285882
72	8	2009	2.937673328	2.801540906	2.948515658	2.953861128
73	8	2010	2.816161727	2.786687551	2.920295548	2.94316298
74	8	2011	2.888914868	2.83083237	2.937738494	2.987621582
75	8	2012	2.932133705	2.871053106	2.896592349	2.949009222
76	8	2013	2.878130984	2.878142484	2.953812828	2.949062943
77	8	2014	2.77822363	2.87511917	2.94884313	3.84902302
78	8	2015	2.80163006	2.9060925	2.94211723	3.86526155
79	8	2016	2.80163006	2.84163473	3.00008685	3.84919392

80	8	2017	2.944206215	2.969467167	2.942112271	2.972660967
81	9	2008	2.871695501	3.896648718	2.99484485	2.994849244
82	9	2009	2.823676331	2.893267839	2.994950312	2.953856298
83	9	2010	2.816976657	2.884415827	2.990036786	2.964825118
84	9	2011	2.871695501	2.878194228	2.948857792	2.999617653
85	9	2012	2.852138279	2.953856298	2.996410967	2.985174897
86	9	2013	2.889424969	2.99482727	2.994462333	2.990005679
87	9	2014	2.84516008	2.93505863	3.00012159	3.91042268
88	9	2015	2.90314427	2.94316298	3.00009553	3.93771243
89	9	2016	2.90314427	2.93784875	3.00010856	3.97017108
90	9	2017	2.802397402	2.875772923	2.993780003	2.948887105
91	10	2008	2.801486033	2.744551136	2.949145952	2.937668314
92	10	2009	2.823767572	2.753437504	2.953861128	2.928042332
93	10	2010	2.802164602	2.809101612	2.999608959	2.94317288
94	10	2011	2.753153914	2.816440168	1.947041405	2.916511851
95	10	2012	2.816837631	2.786183346	2.994901978	2.953861128
96	10	2013	2.819642628	2.809182489	2.948999454	2.830870836
97	10	2014	2.8239044	2.80163006	2.8237024	3.80430576
98	10	2015	2.8239044	2.58920094	2.94884802	3.72773965
99	10	2016	2.82449031	2.67414438	2.89085119	2.94299464
100	10	2017	2.809781855	2.860068361	2.942994641	2.992155711
101	11	2008	2.81646005	2.658211794	2.735782478	2.878079233
102	11	2009	2.859468548	2.636588184	2.735862271	2.830870836
103	11	2010	2.809094872	2.646609551	2.737343745	2.94314813
104	11	2011	2.824275565	2.636698473	2.735694689	2.94992644
105	11	2012	2.809054427	2.625415352	2.613958041	2.94877473
106	11	2013	2.810380395	2.647588331	2.734967756	2.994849244
107	11	2014	2.82230541	2.64781314	2.74461369	3.66908898
108	11	2015	2.66900058	2.61978181	2.74493417	3.64842442
109	11	2016	2.69905685	2.67414438	2.82393046	3.70435045
110	11	2017	2.646521352	2.648564911	2.949053176	2.989992347
111	12	2008	2.809101612	2.830716949	2.994950312	2.949072709
112	12	2009	2.888342394	2.896697036	2.89114145	2.999174056
113	12	2010	2.858531182	2.94860855	2.888246908	2.953914252
114	12	2011	2.894498827	2.950418408	2.890884689	2.991717702
115	12	2012	2.893389984	2.909090464	2.937573053	2.896829236
116	12	2013	2.915220381	2.914401341	2.920910815	2.951172319
117	12	2014	2.95429076	2.94884313	2.89080651	3.94549567
118	12	2015	2.95477299	2.97517437	2.89092377	3.15610979

119	12	2016	2.92081702	2.98462631	3.00013027	3.97600819
120	12	2017	2.94315803	2.940511504	2.998407566	2.999652425
121	13	2008	2.943148129	2.959613711	2.920879551	2.990094551
122	13	2009	2.953817658	2.897242103	2.948672096	2.999656772
123	13	2010	2.953952883	2.920754474	2.943222378	2.994963493
124	13	2011	2.994950312	2.920754474	2.909791297	2.944206215
124	13	2012	2.94317783	2.911748699	2.937633221	2.999713271
126	13	2013	2.95161433	2.94319763	2.990059004	2.953928739
127	13	2014	2.98527375	2.98776455	3.00008685	3.98813739
128	13	2015	2.98572279	2.98472529	3.00008685	3.98834577
129	13	2016	2.98459482	2.98776455	3.00009988	3.9882909
130	13	2017	2.994923949	2.999265421	2.970449161	2.948143894
131	14	2008	2.753506457	2.734175533	2.947100275	2.970118975
132	14	2009	2.801486033	2.793860201	2.946309769	2.949082476
133	14	2010	2.830665642	2.828227965	2.94506956	2.998834528
134	14	2011	2.830723362	2.830800312	2.942618118	2.990085665
135	14	2012	2.884359152	2.742952821	2.948094954	2.990094551
136	14	2013	2.823565513	2.949355847	2.947056124	2.953919081
137	14	2014	2.98522882	2.98422568	2.89092377	3.82395195
138	14	2015	2.98526476	2.87511917	2.99983928	3.88198632
139	14	2016	2.69910027	2.94321743	2.94955101	3.84077459
140	14	2017	2.937678341	2.943445049	2.980094314	2.999495926
141	15	2008	2.736085611	2.896581328	2.99484485	2.994928343
142	15	2009	2.742890022	2.887217701	2.963839751	2.996117476
143	15	2010	2.726898286	2.871701337	2.995064534	2.994475529
144	15	2011	2.74647851	2.888858777	2.989947903	2.996205106
145	15	2012	2.753054231	2.870982969	2.980130685	2.985134451
146	15	2013	2.717820234	2.882581454	2.99484485	2.975027198
147	15	2014	2.92081702	2.89085119	2.99984363	3.91048193
148	15	2015	2.92185288	2.93505863	2.89091261	3.87868089
149	15	2016	2.92077532	2.93612149	2.94884313	3.93106205
150	15	2017	2.993572891	2.990072335	2.990281123	2.999082671
151	16	2008	2.870462432	2.94167538	2.989992347	2.980139778
152	16	2009	2.942687998	2.893328916	2.994888795	2.986820981
153	16	2010	2.93784875	2.99005456	2.95348908	3.98545117
154	16	2011	2.93779864	2.98870607	3.00037333	3.98840019
155	16	2012	2.93784875	2.98776455	3.00027352	3.98260271
156	16	2013	2.883786312	2.989694484	2.994906372	2.953938397
157	16	2014	2.89499135	2.89085119	2.95402531	3.8884912

158	16	2015	2.84516008	2.94316298	3.00027786	3.88845976
159	16	2016	2.84577997	2.92081702	3.00041672	3.90589136
160	16	2017	2.944477737	2.964886335	2.99992182	2.995183118
161	17	2008	2.947595449	2.823102377	2.999448095	2.954189426
162	17	2009	2.953904593	2.994800899	2.99489319	2.999274122
163	17	2010	2.946063978	2.953861128	2.953928739	2.99482727
164	17	2011	2.946599625	2.891107968	2.949355847	2.995082104
165	17	2012	2.931625657	2.896746616	2.995068927	2.994915161
166	17	2013	2.872272846	2.896586838	2.99484485	2.995099673
167	17	2014	2.97004453	2.98776455	3.00031692	3.98243678
168	17	2015	2.98520186	2.98999235	3.00037333	3.98553604
169	17	2016	2.97004453	2.98776455	3.00023012	3.99454678
170	17	2017	2.953034457	2.990081221	2.990707272	2.99516116
171	18	2008	2.830813135	2.953870787	2.994800899	2.949292401
172	18	2009	2.827433895	2.994901978	2.953909423	2.953919081
173	18	2010	2.827950528	2.994950312	2.954102548	2.994906372
174	18	2011	2.826864888	2.990130095	2.953919081	2.994950312
175	18	2012	2.821670711	2.995152377	2.953928739	2.953754861
176	18	2013	2.823108903	2.994510716	2.998925966	2.996752394
177	18	2014	2.88471609	2.98915158	3.00016934	3.96692337
178	18	2015	2.98512097	2.99269929	3.00037333	3.9854404
179	18	2016	2.97003523	2.98776455	3.00020841	3.94268007
180	18	2017	2.994413945	2.985170403	2.996240153	3.96692337
181	19	2008	2.658326265	2.896708054	2.949258234	2.949067826
182	19	2009	2.753153914	2.86522838	2.949267997	2.949048292
183	19	2010	2.745254409	2.865956322	2.994901978	2.891225144
184	19	2011	2.81571054	2.884529157	2.884789702	2.949122516
185	19	2012	2.742968519	2.890594255	2.948134106	2.994901978
186	19	2013	2.75076288	2.943217429	2.99670426	2.999991314
187	19	2014	2.81837767	2.93505863	2.94884313	3.95743679
188	19	2015	2.90314427	2.96220828	2.99504696	3.99271519
189	19	2016	2.77822363	2.97147996	2.89080093	3.97007803
190	19	2017	2.953938397	2.994950312	2.995156769	2.999456792
191	20	2008	2.883723878	2.953919081	2.999374165	2.954194252
192	20	2009	2.953865958	2.948515658	2.954001168	2.999291522
193	20	2010	2.86563097	2.949058059	2.953865958	2.943276819
194	20	2011	2.92087434	2.949009222	2.949170364	2.999226267
195	20	2012	2.889071886	2.943222378	2.954117028	2.995003034
196	20	2013	2.94315308	2.949341207	2.999986971	2.831223288

197	20	2014	2.97003523	2.98959663	3.00038635	3.98365109
198	20	2015	2.97003523	2.98840733	3.00023446	3.99044719
199	20	2016	2.98527375	2.98776455	3.00018671	3.98827617
200	20	2017	2.953972198	2.948119424	2.994906372	2.999469837
201	21	2008	2.943148129	2.943054062	2.954030136	2.99499864
202	21	2009	2.920759686	2.94315803	2.94847654	2.998899843
203	21	2010	2.948070482	2.94167538	2.94811453	2.959904351
204	21	2011	2.896526217	2.914924648	2.915061978	2.994910767
205	21	2012	2.943054062	3.896979014	2.896713563	2.999617653
206	21	2013	2.954001168	2.824756958	2.994550298	2.995077712
207	21	2014	2.93785376	2.98781369	3.00028654	3.89502896
208	21	2015	2.93784875	2.98979231	3.00042974	3.96700149
209	21	2016	2.95413151	2.98776008	3.00033428	3.94902094
210	21	2017	2.9951919	2.999456792	2.999469837	2.995095281
211	22	2008	2.80918249	2.753123245	2.994854518	2.999056557
212	22	2009	2.872045499	2.752977535	2.995727308	2.999274122
213	22	2010	2.997194099	2.744472924	2.99499864	2.954237684
214	22	2011	2.994950312	2.742897872	2.999439398	2.99175754
215	22	2012	2.995003034	2.735686708	2.994954706	2.949355847
216	22	2013	2.994901978	2.708701274	2.999204513	2.995095281
217	22	2014	2.93785376	2.74472315	3.00024748	3.75376991
218	22	2015	2.98527375	2.80541929	2.89085119	3.94430151
219	22	2016	2.69905685	2.83186338	2.94883825	3.78771262
220	22	2017	2.949814334	2.954194252	2.999330671	3.948880266
221	23	2008	2.896708054	2.896829236	2.943489569	2.991359003
222	23	2009	2.89664745	2.932067692	2.99489319	2.998934673
223	23	2010	2.943123377	2.893312259	2.995143593	2.94987283
224	23	2011	2.890365121	2.937733481	2.995038178	2.982519976
225	23	2012	2.917794243	2.947541547	2.991323559	2.995095281
226	23	2013	2.937738494	2.94847654	2.999739345	2.99499864
227	23	2014	2.97003662	2.98776455	3.00029088	3.98365109
228	23	2015	2.97003523	2.98870607	3.00037333	3.98453721
229	23	2016	2.98527375	2.9887551	3.00038635	2.99995222
230	23	2017	2.994462333	2.999656772	2.999561141	2.994647038
231	24	2008	2.88417207	2.633801624	2.951929776	2.994901978
232	24	2009	2.890543968	2.648467351	2.945138554	2.995828171
233	24	2010	2.879222076	2.647598108	3.948818705	2.999474185
234	24	2011	2.888864386	2.646609551	2.940127837	2.987715411
235	24	2012	2.888291845	2.61734638	2.947105181	2.994901978

236	24	2013	2.889581802	2.646511551	2.947105181	2.996800522
237	24	2014	2.97003523	2.67414438	2.99018785	3.94221746
238	24	2015	2.93784875	2.69905685	2.94874052	3.75843194
239	24	2016	2.75332256	2.69915237	2.89085119	3.82933208
240	24	2017	2.996647368	2.735950025	2.985125463	3.82933208
241	25	2008	2.889525797	2.871701337	2.999369816	2.95402048
242	25	2009	2.809249875	2.831793014	2.999335021	2.954237684
243	25	2010	2.831159227	2.831223288	2.999330671	2.999561141
244	25	2011	2.865956322	2.830800312	2.995077712	2.953145739
245	25	2012	2.871695501	2.878774486	2.952952188	2.999474185
246	25	2013	2.87583073	2.954131509	2.9951919	2.995560612
247	25	2014	2.93790888	2.98776544	3.00038201	3.99403325
248	25	2015	2.98527375	2.9892985	3.00040371	3.98827617
249	25	2016	2.98527375	2.98920056	3.00042974	3.94399974
250	25	2017	2.98527375	2.98920056	2.98920056	3.94399974
251	26	2008	2.883848737	2.948192828	2.943217429	2.99166458
252	26	2009	3.823952602	2.943380734	2.947703234	2.989694484
253	26	2010	2.884727412	2.937673328	2.91557394	2.995143593
254	26	2011	2.871893868	2.948197721	2.946830389	2.994704193
255	26	2012	2.891286509	2.943222378	2.948276004	2.99558255
256	26	2013	2.953972198	2.947110086	2.949004338	3.995137006
257	26	2014	2.93789886	2.97517897	2.99485364	3.99403325
258	26	2015	2.93784875	2.9750732	3.00019105	3.98827617
259	26	2016	2.95429076	2.98964556	2.94917525	3.94399974
260	26	2017	2.95429076	2.98964556	2.94917525	3.94399974
261	27	2008	2.994752549	2.896746616	2.897071499	3.757606292
262	27	2009	2.954136336	2.994462333	2.994317153	3.896844106
263	27	2010	2.948867563	2.999321972	2.990187847	3.949216254
264	27	2011	2.94597054	2.994655832	2.999465489	3.588270586
265	27	2012	2.949170364	2.896774158	2.999417655	3.859244605
266	27	2013	2.999969598	2.999500274	3.370326157	3.896721826
267	27	2014	2.95450783	2.9755329	3.0002822	3.94410941
268	27	2015	2.97011432	2.98791194	2.82368937	3.96632339
269	27	2016	2.97003523	2.98805928	3.00029088	3.97023387
270	27	2017	2.954237684	2.953058651	3.890712128	3.944301514
271	28	2008	2.9532715	2.944097559	3.890718272	3.883282611
272	28	2009	2.995630808	2.953919081	3.896587389	3.87750553
273	28	2010	1.451430715	2.944314844	3.510811671	3.889936149
274	28	2011	2.953218298	2.902062752	3.367624243	3.32919238

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275	28	2012	2.994752549	2.985174897	3.124862728	3.801564225
276	28	2013	2.952952188	2.985125463	3.508513559	3.99438535
277	28	2014	2.97104379	2.98880413	3.00041672	3.96990724
278	28	2015	2.98502208	2.98780922	2.99979149	3.97604398
279	28	2016	2.98513445	2.98776455	2.94884313	3.9856209
280	28	2017	2.98513445	2.98776455	2.94884313	3.9856209
281	29	2008	2.937683354	2.944211153	2.995046963	2.99461186
282	29	2009	2.896829236	2.948086633	2.954068757	2.897621594
283	29	2010	2.949014106	2.948955495	2.953870787	2.751101962
284	29	2011	2.890107901	2.943218914	2.944423446	2.831216883
285	29	2012	2.943271871	2.948373838	2.954237684	3.942768271
286	29	2013	3.937885833	2.942672635	2.89679619	3.944175103
287	29	2014	2.97011432	2.98904916	2.94886268	3.98928648
288	29	2015	2.90314427	2.92098375	3.00021275	3.94975827
289	29	2016	2.9209056	2.94884313	3.9542261	3.98954859
290	29	2017	2.9209056	2.94884313	3.9542261	3.98954859
291	30	2008	2.943276819	2.943054062	3.999321102	3.99460043
292	30	2009	2.948143894	2.943983934	2.954189426	3.896643042
293	30	2010	2.891219565	2.926455637	2.995090889	2.995538674
294	30	2011	2.94316298	2.943217429	2.999321972	3.537986486
295	30	2012	2.926517364	2.943252074	2.994559093	2.14610472
296	30	2013	2.943326306	2.945414418	2.895549611	3.94153876
297	30	2014	2.93764325	2.90627038	2.99289357	3.94905904
298	30	2015	2.93784374	2.87826321	3.00026918	3.93114093
299	30	2016	2.943271871	2.799795286	3.99536181	3.93668109
300	30	2017	2.94272219	2.998503451	2.994669022	3.98874708

Source: Researcher, 2018