Long-Run Relationship of Corporate Social Responsibility and Cost of Capital of Quoted Companies in Nigeria Stock Exchange: Nigeria Evidence

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Abstract There has been moderately scarce literature on the relationship between company social responsibility (CSR) and the cost of capital (COC) in Nigeria. Numerous studies have analysed the association between the CSR of the companies quoted within the Nigeria Stock Exchange (NSE) relating to their overall performance neglecting the COC component. This study examined the long-run relationship between CSR dimensions (Corporate social performance (CSP), environmental performance (ENP) and corporate governance (CGP) dimensions and cost of debt (COC). It seeks to investigate if CSR has, in the long run, reduce the cost of capital. Annual panel data of 96 companies for the duration; 2005-2020 quoted in the NSE were selected judgmentally. Thomson Reuther Index (TRI) was used as a measure of CSR, whilst the cost of equity (COE) and cost of debt (COD) were used as a measure of COC. Panel ARDL model was adopted to analyse the long-run relationship between CSR and COC. Findings revealed that companies that spend on CSR have a better chance of accessing capital at a reduced cost. The results support the findings of scholars works, especially in the developed countries. In conclusion, companies that spend on CSR have a better chance of accessing capital at a better and low cost. Based totally on the findings, the researcher advocates an on-stop investment on issues that concerns CSR as this may, if consistent, ease the getting of funds at a reduced cost in the long run.

Keywords Corporate Social Responsibility, Cost of Capital, Thomson Reuther Index, Cost of Equity, Cost of Debt, Corporate Social Performance, Environmental Performance, Corporate Governance Performance

JEL Classification: M1, M4

1. Introduction

Company social responsibility (CSR) all over the world has turned out to be exceptionally essential as supported by the growth in academic works of literature highlighting the practical reasons for firms to integrate CSR into their practices (Joëla, [42]). Barbara and Maria [11] stipulated in their work that a growing range of companies have focused attention on corporate responsibility issues. The motivation that leads corporations towards CSR accordingly is related to legitimacy, reputation, brand
image related issues and a better relationship between all stakeholders.

CSR, according to Oikonomou, Brooks, & Pavelin, [53] is a way a company consider the environmental, social and governance factors in their business decision and processes in conjunction with the strength of their relationship with various stakeholders.

CSR, in the past years, turn out to be the most crucial subject issue in business. The argument over the intrinsic value of CSR revolves around if such investments are value-enhancing or whether they are the value-destroying manifestation of agency conflicts (Allen and Gordon [6]). Even though there is considerable research on CSR in Nigeria, most of them centre on the connection between CSR and the overall performance of companies.

On the contrary, the COC view of CSR has not been studied expansively. This aspect has been neglected in Nigeria. There is a lack of works of literature on this aspect. This is why the central point here is to explore the long/short-run relationship of CSR on the COC. COC consists of the cost of equity and the cost of debt. Therefore, to assess the relationship between CSR and COC, the cost of equity and the cost of debt ought to be considered.

CSR is, to some extent, connected to the COC alongside investor’s funds allocation decisions. More disclosure of CSR, as opined by Healy & Palepu [29] could provide added facts and consequently decrease the information irregularity dilemma. It is a well-known fact that without adequate information, investors will find it tough to differentiate between good and bad investments. Introducing CSR disclosure would align the interest of the parties concern and create incentives for CSR disclosure.

The information disclosed must be useful, timely, and not too costly to collect (Dubbink, Graafland, VanLiedekerke [20]). Regrettably, CSR implementation is more complicated to execute than to explain. The reason is those companies’ interests and culture differs (that is, humanistic vs profit maximisation), and the probable difference of interest that is present between the managers and shareholders differs (Banerjee [11]).

Firms regarding culture may be classified into humanistic and profit-maximising firms. Humanistic corporations generally tend to behave in a socially responsible manner (Walker & Wan [60]; Smith [58]; Banerjee [10]; Lee [37] while the profit-maximising firms seek their interest not minding if it is at the expense of anyone else (Dugger [21]; Lee [37]; Menz [38]; Halley [30]; Basu & Palazzo [12]. Accordingly, society tends to be at an advantage with firms that act in a socially context responsible manner than their counterpart. It is therefore imperative for firms to channel their societal performance, and this usually may be done through the disclosure of CSR information which will, in the end, be beneficial to all in the society (Dhaliwal, Li, Tsang, and Yang [18]).

Previous empirical studies in Nigeria focused primarily on CSR and performance. Good numbers of the researches were on the connection between CSR and the economic performance of corporations listed within theNSE (Agbiogwu, Ihendinhu and Okafor[4], Wekesa [49], Okegbie and Egbonike [41], Bala, Abdulrazzaq [9], Yusuf, Maryam [51], Ohiokha, Odion, and Akhalumeh [42], Aliyu, Noor [52], Abdulaziz [1], Yushauand Mercy [50], Odunayo and Ibiodapo [39], Ehioghion and Eneh, [22], Stephen and Rebecca [47]. These studies tested the relationship between CSR and economic performance why neglecting CSR and its impacts on the COC; COD, and COE. This study aims to analyse the long-run relationship between CSR and the COC of listed companies in the NSE. This study differs from other studies on CSR as it focuses on the COC view. It seeks to investigate the long-run relationship between CSR and the COC. Based on the argument above, the following two hypotheses were formulated:

**Hypothesis One:** Corporate social responsibility has no long-run relationship with the Cost of equity of quoted companies in the NSE

**Hypothesis Two:** Corporate social responsibility has no long-run relationship with the Cost of debt of quoted companies in the NSE

## 2. Literature Review

Lots of studies have examined the link between CSR and financial performance through a theoretical and empirical lens in Nigeria. Relatively, there is a lack of literature regarding the relationship between CSR and the COC in Nigeria. CSR depicts the capacity of companies to be responsible socially for growth and development in society. It emphasised that organisations have a commitment to consider all stakeholders and also the environment in all facets of their operations (Rondinelli & Vastag [45], Berkowitz, Kerin, Hartley, Rudelius [13]). World Bank Council for Sustainable Development defined CSR as the continuous obligation of business organisations to act ethically and also contribute to economic development and at the same time improve the quality of life of its workforce and families as well as of the local community and society at large. CSR of business encompasses the economic, legal, ethical and discretionary expectation that the society has of the organisation at a given time Carroll [54]. According to Clarkson [55], the economic and social purpose of any organisation is to create and distribute the increased wealth and value to all of its primary stakeholder groups without favouring one group at the expense of others. Considering his view, the organisation ought to go beyond the traditional perception of profit as their main aim and emphasis the importance of human, social, and environmental values to ensure that their activities contribute to protecting the environment, consumers and
society at large.

The investor's base can increase through CSR performance Wenxia and Mingzhi [56]. Social conscious investors, according to Heinkel, Kraus, & Zechner [57], prefers including firms with low CSR performance from their investment portfolio. By implication, firms with high CSR performance can increase the relative size of their investor base. Merton [58] opined that the larger the relative size of the investor's base, the lower the cost of capital and the higher the market valuation.

Dhariwal, Li, Tsang, & Yang [59] findings revealed that the voluntary disclosure of CSR leads to a better CSR performance and a considerable decrease in the cost of equity capital. Ghoul, Guedhami, Kwok, Mishra [60], and Plumlee et al. [61] revealed that better environmental performance led to a lower cost of equity capital.

2.1. CSR and COE

Empirical findings have revealed that companies that disclose CSR have better and quicker access to capital at reduced costs. Companies show probable shareholders that they are competitive and lower the menace of investment by reporting on CSR (Chengloannou, Serafeim [16]). It was argued by Cheng et al. [16] that the extent of CSR can lessen the COE capital for companies. This is also owing to a better commitment and engagement with stakeholders based on mutual trust and cooperation (Jones [35]). CSR adoption makes stakeholders have stronger self-assurance in the companies. It makes the stakeholders see the companies share the same common belief, and agency costs are reduced. In another study, Dhaliwal [18] revealed that investors are most likely to invest in a more transparent company. With reliance on the increased trust in these companies, investors are more prone to lessen the COE capital.

2.2. CSR and COD

More to the point increased CSR decreases the COE; studies in the past also revealed that performing CSR can, in the long run, result in reducing the COD. An example is a survey carried out by Goss & Robert [26]; this study suggests that CSR statistically significantly lowers 7 to 18 basis points on bank loans.

In yet another study, Drucker & Puri [19]established that loans have an additional and preventive debt agreement, mainly when agency costs and information asymmetry are stricter. CSR has been seen in previous studies to lower information asymmetry and trust(Cheng et al. [16]; Dhaliwaletal., [18]). Debt holders have a lesser threat with lending when businesses undertake CSR and will be more liable to lend and ask for lower interest. Therefore it is deemed that CSR will decrease the COD.

Demiroglu & James [17] accordingly stipulate that borrowers that take more risk are more prone to obtain loans with a tight agreement. Chava [15] discovered that lenders charge lesser interest charges on bank loans to organisations that derive significant revenue from environmentally beneficial products.

Attig, ElGhoul, Guedhami, and Suh [8] further revealed that CSR has a significant positive impact on a firm’s credit rating. Companies with high social performance proofs are rewarded with high credit ratings by rating agencies. Accordingly, CSR communicates vital non-financial information which credit rating agencies use in evaluating the companies. Goss & Roberts [26] stipulate that with healthier credit ratings, companies can get debt at a lesser cost owing to the trust these agencies have in their operations. By implication, companies tend to engage in projects that will provide social benefit to those concerns. Accordingly, when companies perform their function in such a way that is perceived socially desirable by the stakeholders, the companies will be able to receive high credit ratings, and this may, in the long run, result in a lessened COD.

In yet another study, Menz [38] fail to establish that CSR lowers the COD. However, it was revealed that socially responsible companies receive lower risk premiums. One reason for this could be that credit ratings matter more for bond investors than CSR ratings. His results revealed a non-positive correlation between CSR and the COD. Nevertheless, the result demonstrates that high credit ratings, to an extent, add value to the COD of companies.

2.3. CSR as it relates to Cost of Capital

Disciples of the shareholder’s view of the firm see the firm's primary responsibility as wealth creation for the shareholders. CSR initiatives, accordingly, are viewed as a wasteful use of the firm’s scarce resources. Nevertheless, the stakeholder's disciples sought to reconcile CSR with the view of the shareholder's theory. They argued that addressing the expectations of multiple components may, in the long run, boost the performance of firms as this may attract supportive stakeholders that are willing to invest in business operations (Waddock & Graves, [62]). DiGiulio, Migliavacca, & Tencati, [63] and Orlitzky & Benjamin [65] opined that on the whole, socially responsible firms are less volatile and risky as they are in a better position to avoid the burden of adverse financial consequences like legal costs, damages, and fines that emanate from poor CSR practices. Be that it may, It can be inferred the firms with lower operational and financial risk enjoy CSR initiatives, and this should result in easy access to capital.

Another reason why CSR could lead to more accessible access to funds, according to Robson & Wakefield [66], is because socially responsible investment (SRI) has gained fame. Sparkes [67] stipulate that SRI has gained prominence both as an appropriate substitute and
complement to usual investment. SRI, as specified by Cheah, Jamali, Johnson, & Sung [68], is the viewpoint and practice of making tactical investment choices by integrating financial and non-financial considerations, as well as personal values, societal demands, environmental concerns and corporate governance issues. A suitable medium for addressing most non-financial issues is corporate social responsibility [Abraham, [64]. Socially responsible investors are more prone to putting their resources in companies likely to address environmental and social worries. Sparks [67] accordingly discussed the connection between CSR and SRI extensively. He described CSR and SRI as a mirror image of one another.

Finally, Goss and Roberts [69] provide two alternative viewpoints on CSR investment: the over-investment view and risk mitigation perspectives. The over-investment view indicates that CSR investments represent costly diversions of firm resources, and therefore managers will over-invest in CSR to gain personal benefits at the expense of shareholders. Thus, higher CSR performance is positively associated with the cost of debt (Menz, [70]; Sharfman & Fernando, [71]). The risk mitigation perspective argues that CSR investment can reduce risk (Boutin-Dufresne & Savaria [72]; Lee & Faff [73]); thus, banks are more willing to provide attractive loan terms to socially responsible firms. These points of view are pointers that better CSR performance can lower the cost of capital.

2.4. Brief Profile of Some Selected Companies

Total Nigeria PLC

Total is a Nigeria based company that operates in the downstream sector of the oil and gas industry. Primarily, the company engaged in the marketing and distribution of refined petroleum products. Some segment of the company includes Network, General Trade and Aviation. The network section consists of sales to service stations. On the order hand, the General trade segment operation involves sales to corporate customers; this excludes the customers in aviation. The aviation segment operation involves sales to customers in the aviation industry. Total Nigeria has over 500 service stations, bottling plants, liquefied petroleum gas (LPG) and lubricants blending plants (three). The company has amenities spread all over the country and also operates out of five aviation storage facilities.

Total and CSR

Since its inception in 1962, TEPNG has made a remarkable impact on its stakeholding communities and the country. There has been a commendable evolution of corporate social responsibility (CSR) initiatives and execution methodologies, from archaic methods of appeasing community leaders to the “new thinking”; a scientifically proven “power to the people” approach, yielding noticeable and sustainable results within the company’s host communities (Company’s website).

First Bank of Nigeria Ltd.

First Bank Nigeria is the foremost financial institution in Nigeria by assets and gross earnings. With approximately 760 branches and more than 2,600 ATMs, it maintains the largest branch network in the banking industry in Nigeria. It also has subsidiaries in West African countries and the United Kingdom and representative offices in Johannesburg, Abu Dhabi and Beijing. First Bank’s ownership is well diversified with over 1.3 million shareholders, and no shareholder holds over a 5% stake. The most significant shareholding is the staff pension fund, which has 3.35%. First Bank is the last of the old generation banks operating in the Nigerian banking sector. The Bank came into existence in 1894, and its headquarters is in Lagos. It was converted to a public company in 1970 and listed on the Nigerian Stock Exchange in 1971. First Bank Group comprises subsidiaries spanning asset management, investment banking, capital markets, insurance, microfinance, private equity, mortgage and pension fund custodian services—making it one of the most diversified financial conglomerates on the continent. FBN was named “The Best Bank Brand in Nigeria” in 2011, 2012, 2013, 2014 and 2015 by The Banker Magazine and the “Best Retail Bank in Nigeria” by The Asian Banker. First Bank of Nigeria operates as a subsidiary of FBN Holdings plc. FBN Holdings, the largest financial services group in Nigeria, runs through the units which include; Asset Management, Commercial Banking, Investment Banking, Insurance and many other financial services. FBN Holdings PLC total assets amounted to N5.066 trillion (US$16.2 billion) as of September 30, 2016.

First Bank and CSR

As a responsible organisation, the first bank is committed to growing the people, minimising environmental impacts, meeting the needs of their customers and investing in the communities in which they operate (Company’s website).

Julius Berger Nigeria PLC

Julius Berger Nigeria PLC is a foremost Nigerian company providing many services spanning; design, planning, construction, operation, maintenance of the building, infrastructure, industrial project and engineering in Nigeria. The record of accomplishment, alongside its shared values, describes the customs and approach to work and gives the company’s customers the self-assurance to believe in the company with their most demanding projects. Operating sustainability, the company sticks to the uppermost standard for excellence.
as well as protection. Toup holds superior priority in construction, the company stays at the forefront of the industry, continuously building on the robust experience and technical expertise through development and innovation to create long-term value for stakeholders. The company is a professional with comprehensive and country-specific know-how, vital wealth and the ability to convey excellent results on time and within budget, no matter the projects cope or challenge. The breadth and depth of the company’s expertise are improved by the vastly skilled staff and the commitment to implementing innovative solutions to construction challenges.

**Julius Berger Nigeria PLC and CSR**

Julius Berger thinks sustainable trade is an excellent trade. The company, therefore, constantly evaluates the impact of the production activities and seeks proactive opportunities to create shared worth for the company as well as the country. This action includes the staff and society. In order words, fineness in health, safety, environmental protection and investments into professional team development are an essential part of the company’s corporate customs and trade practice. CSR plans are developed and executed with the impression of focusing on features that support economic feasibility, social and environmental responsibility inclusion. With this in mind, the company increases considerably. In support of the company’s commitments, the company pledged alignment with the ten universal principles of the United Nations Global Compact (Company’s website).

**Theories**

Friedman [24] upholds that the shareholder theory emphasised a firm’s top priority as maximising the firm’s value. Therefore, expenditures, as it relates to CSR, are conceived as a poor way of using shareholder money and this practice digresses from the shareholder value maximisation theory. The theory upholds that performing CSR activities will consume the resources that could have otherwise facilitated the generation of more profit for shareholders; for the shareholder's theory, a higher performance of CSR could affect shareholders’ interest, when interest is reduced, the capacity to or interest to pay is also reduced, and this can result in an enhanced distress risk and both can be related to higher costs of debt financing.

Freeman [23] propounded the stakeholder’s theory. His theory opposed the shareholders 'theory and held that businesses must consider stakeholders in all facets of their operations. The theory proposes that corporations, in doing business, should go beyond the benefits shareholders stand to get to put into account the interests of a wider group of stakeholders in the society Freeman, [23]. Jones [35] broadens the theory by indicating that CSR is an indispensable part for corporations to obtain essential resources and stakeholder support. Considering the theory standpoint, performing CSR may result in a discount cost of acquiring capital for two reasons. The first reason is that CSR-associated facts capture the organisational environmental peril and lead to a decline in information asymmetry. This could in return have an effect on the COE, Heinkel, Kraus, Zechner [31]; Hongand Kacperczyk [32], Jones [35]; Orlitzky, Schmidt, Rynes [43].

According to Jensen and Meckling [34], any information that eases information asymmetries among contracting parties and, as such, reduces adverse selection and ethical hazard problems would be value relevant.

**2.5. Knowledge Gap**

The majority of the empirical studies on the relationship between CSR and COC were done in developed countries like the USA, United Kingdom, China, etc. empirical works on the connection between CSR and COC are missing empirically, especially in developing economic systems like Nigeria. Despite the numerous studies on CSR in Nigeria, not much has been done on the effect of CSR on the COC especially testing the long run/short-run of listed companies in the NSE. This is an exciting area as it is essential to know if performing CSR, in the long run, will lead to better and quicker access to capital at reducing cost. Again, most studies in Nigeria on CSR used either questionnaire; Odunayo and Ibiodapo [39], amount disclose in the report; Joseph and Michah [78], and the KLD Index Ajide and Aderemi [5]. This study, however, adopted Thomson Reuter’s environment, social, and governance performance (ESG) Index as a gauge of CSR because the Thomson Reuter’s (ESG) Index was prepared considering the company’s reported data and it cut across globally. These issues created a gap in the literature, which this study seeks to fill.

**3. Methodology**

The study’s Population comprises 159 companies quoted in the NSE as of 2020. A sample of 96 companies was selected judgementally using the non-probability sampling technique from each sector of; the Industrial sector, Consumers goods Sector, Financial Service Sector, Health Care Sector, Technology Sector, Basic material Sector, Oil and Gas Sector, and Consumer Services Sector and it covers a 15 years period; (2005-2019). The selection was based on the availability of a complete published annual report. Based on these criteria, 96 companies were chosen from the quoted companies. The study used content analysis to collect and collate panel data from the financial report of the companies. The study
adopts the ARDL estimation method to analyse the long-run impact of CSR on the COC of the sampled companies in Nigeria.

**Dependent Variable**

The dependent variable is the COC measured using COE and COD. Regarding COE, the dividend capitalisation model (DCM) is used to estimate the COD. This model applies mainly to companies that pay a dividend. The formula to compute the DCM is stated below:

\[ R_e = \frac{D_1}{P_0} + g \]

Where:
- \( R_e \) = Cost of Equity
- \( D_1 \) = Dividends per share next year
- \( P_0 \) = Current share price
- \( g \) = Dividend growth rate

The dividend growth for each year can be obtained by applying the equation below:

\[ \text{Dividend growth} = \frac{D_1}{D_{t-1}} - 1 \]

Where:
- \( D_1 \) = Dividend Payment of year \( t \)
- \( D_{t-1} \) = Dividend Payment of year \( t-1 \) (one year before year \( t \))

**Cost of debt (COD)**

COD is the effective interest rate a company pays on its current liabilities to the debtholders. In general, it refers to the after-tax COD. In order words, the difference between the before-tax cost of debt and the after-tax cost of debt depends on the interest expenses deducted. As regards the COD, it is one minus tax rate into interest expenses. Thus the formula for calculating the COD is stated below as:

\[ \text{COD} = \text{Interest Expenses} \times (1 - \text{Tax Rate}) \]

**Independent Variable--CSR**

Previous studies in Nigeria used diverse CSR measurements. For example, Asian and Uche [7] used dummy variables, Abideen, Abayomi, and Nureni [2] used donations made by the companies to the community at the period, Adeyanju [3] and Godwin [25] used questionnaires, Ajide and Aderemi [5] used Morgan Stanley Capital International Environment Social and Governance Index (MSCI ESG Index)–formerly Kinder, Lydenberg, Domini index (KLDIndex)–While, Olaoye, Oluwadare, [42] used CSR disclosure Index. However, in this present study, the TRI was adopted. The index measures CRS via three dimensions; CSP, ENP, and CGP.

**Control Variables--COE**

To recognise the effect of CSR disclosure on COE, some variables are used as a control to that effect. Considering the study carried out by Reverte [44], market to book value (MB), Beta (BETA), and firm’s size (SIZE) were found to be connected to COE. Accordingly, Reverte [56] and Botosan & Plumlee [14] COE should be negatively associated with the market to book value and size. Alternatively, COE ought to be positively correlated with the beta. In addition, Hail [27] and Hail & Leuz [28] opined that many proxies have variously represented the magnitude of the firm; this includes; total assets, the market value of equity, total sales, number of employees, and market capitalisation. Dhaliwal et al. [18] conversely used the Logarithm of total assets to represent the firm's size. Regarding data availability, this study uses the logarithm of the total assets to signify firm size and market to book value (MBV) as CVs for COE. The data were extracted from the published annual report of the sampled companies. The market to book value is calculated using the formula below:

\[ \text{MBV} = \frac{\text{Share Price}}{\text{Net Book Value per Share}} \]

Where:
- \( \text{NetBook Value} = \text{Total Assets} - \text{Total Liabilities} \)

**Control Variables--COD**

Izzo & Magnanelli [33] and Goss & Roberts [26] stipulate that profitability is connected negatively to COD. For this reason, return on Assets (ROA) is used as a proxy for profitability. Additionally, Izzo & Magnanelli [33] argue that financial leverage (LEV) and Beta (BETA) are found to be positively correlated with the COD. In that regard and based on data availability, ROA and leverage are used as CVs for COD. Leverage is derived by dividing the total debt by the market value of equity, while return on asset is derived using the formula stated below:

\[ \text{ROA} = \frac{\text{Net Income}}{\text{Average Total Asset}} \]

To calculate for ROA of a company, it is more accurate to use average total assets. This is necessary as the company’s total assets can change over a while. This may be due to the purchase or sale of fixed assets like vehicles, lands, and equipment. Consequently, upon this, calculating the average total assets is more accurate than the total assets for one period.

**3.1. Model Specification**

The functional relationship between CSR and COC; COE, and COD can be identified as follows:

\[ y_{it} = \sum_{j=1}^{q} \beta_{j} x_{ijt} + \sum_{j=0}^{q} \gamma_{j} z_{itj} + \phi_{i} \gamma_{r} + \mu_{t} + \xi_{it} \]  

(1)
Where:
\( y_t \) is the dependent variable
\( X_{i,t-j} \) is explanatory vector variables for group \( i \) and \( \mu_i \) represent the fixed effect.

There-parameterised ARDL (p,q,p……q) error correction model is specified as:

\[
\Delta Y_k = \theta [Y_{i,t-1} - \lambda_i X_{i,t-1}] + \sum_{j=1}^{p-1} \gamma_j \Delta Y_{i,t-j} + \sum_{j=0}^{q-1} \beta_i \Delta X_{i,t-j} + \mu_i e^t
\]

Where:
\( \lambda_i \) is the long-run parameters
\( \theta_i = -(1-\delta_i) \), group-specific speed of adjustment coefficient (expected that \( \theta_i < 0 \))
\( Y_{i,t-1} - \lambda_i X_{i,t-1} \) the error correction terms
\( \gamma_i j \) and \( \beta_i j \) are the short term dynamic coefficients

This equation can be rewritten as:

\[
\Delta \text{COE}_k = \theta_i [\text{COE}_{i,t-1} - \lambda_i X_{i,t-1}] + \sum_{j=1}^{p-1} \gamma_j \Delta \text{COE}_{i,t-j} + \sum_{j=0}^{q-1} \beta_i \Delta X_{i,t-j}
\]

\[
\Delta \text{COD}_k = \theta_i [\text{COD}_{i,t-1} - \lambda_i X_{i,t-1}] + \sum_{j=1}^{p-1} \gamma_j \Delta \text{COD}_{i,t-j} + \sum_{j=0}^{q-1} \beta_i \Delta X_{i,t-j}
\]

where:
\( \text{COE} = \) Cost of Equity
\( \text{COD} = \) Cost of Debt; both represent the dependent variables
\( X \) is a set of independent variables
\( \Gamma \) and \( \beta \) represent the short-run coefficient of the speed of dependent and independent variables, respectively
\( \lambda \) is the long-run coefficient
\( \theta \) is the coefficient of the speed of adjustment to the long-run status
\( i \) and \( t \) represent the country and time, respectively. The terms in the square bracket contain the long-run growth regression.

### 3.1. Pooled Mean Group (PMG)

The PMG estimators can be used as estimators for Equations 3 and 4. It considers the long-run equilibrium and the heterogeneity of the dynamic adjustment process (Demetriades and Law [74]). Furthermore, these estimators are computed by maximum likelihood estimations. One good thing about the PMG estimator is that it allows short-run coefficients; this includes intercepts and speed of adjustment to the long-run equilibrium values, and the error variances to be heterogeneous, company by company, whereas the long-run slope coefficients are restricted to be homogeneous across companies.

For validity, consistency and efficiency of this methodology, the main requirements follow that; (i) for the existence of a long-run relationship among the dependent variable of interest, it is required that the coefficient on the error terms should be negative and not lower than -2. (ii) an essential assumption for the consistency of the PMG estimator is that the resulting result of the error correction model should be serially uncorrelated, and the explanatory variables can be treated as exogenous. This condition was fulfilled as it includes the ARDL (p,q) lags aspect for the dependent (q) and the independent variables (p) in the error-correction form. (iii) the comparative size of T and N are fundamental as both are large. This allows one to work on a dynamic panel technique that helps prevent the bias in the average estimators and resolve the issues of heterogeneity. Eberhardt and Teal [76] argued that the treatment of heterogeneity is fundamental to understanding the development progression. Furthermore, for small N (cross-section), the average estimators in this approach are quite sensitive to outliers and small model permutations (Favara [77]).

For this study, underneath the assumption of long-run slope homogeneity, the PMG estimator presents an increase in the efficiency of the estimates with regards to the MG estimators (Pesaran et al. [75]). This could be a result of a homogeneous nature that exists in the studied companies. There is, therefore the assumption that the long-run relationship between CSR and COC would be more homogeneous across the companies under study.

### 3.2. Estimation Procedure

The estimation process follows a collection of pre-estimation tests, diagnostics tests and Panel Autoregression Distribution Lag (ARDL) estimation method.

### 4. Data Analysis and Results

Considering the data gotten from the published financial statement of the companies; 2005-2019 with 15 years of observation, 1440 observation data were obtained.

#### 4.1. Pre-test

4.1.1. Descriptive Statistics (DS)

Table 3 shows the result of the DS for all variables from 2005-2019.
Table 1. Descriptive statistics

| Variable | COE  | COD  | CSP  | ENP  | CGP  | LFIRMSIZ | MBV  | ROA  | LEV  |
|----------|------|------|------|------|------|----------|------|------|------|
| Mean     | 5.834| 12.624| 33.875| 23.952| 32.842| 16.798| 3.785| 0.168| 5.880|
| Median   | 1.342| 12.455| 35.000| 24.000| 34.000| 17.008| 2.995| 0.077| 1.750|
| Maximum  | 283.000| 20.442| 47.000| 43.000| 54.000| 23.039| 9.970| 4.652| 680.144|
| Std.Dev. | 19.569| 2.759| 9.198| 8.050| 10.238| 2.340| 2.414| 0.316| 35.727|
| Skewness | 9.404| 0.064| -1.675| 0.012| -1.577| -0.152| 0.756| 8.317| 16.033|
| Kurtosis | 113.039| 2.638| 6.779| 2.482| 6.444| 2.799| 2.469| 101.816| 282.879|
| Jarque-Bera | 249244.7| 2.944| 510.115| 5.384| 436.019| 2.649| 51.297| 200825.9| 1583903.|
| Observations | 1440| 1437| 1440| 1440| 1440| 1434| 1440| 1440| 1437|

Source: E-views 10 (2021)

Variable Construe: cost of equity (COE), log of COD (COD), corporate social (CSP), performance (ENP), corporate governance performance (CGP), log of firm size (LFIRMSIZ), market book value (MBV), return on asset (ROA) and leveraged (LEV), (ii) P-values in parenthesis; *p<0.10, **p<0.05, ***p<0.01

Table 2. Pearson’s correlation matrix among the variables

| Variable | COE  | LCOD | CSP  | ENP  | CGP  | LFIRMSIZ | MBV  | ROA  | LEV  |
|----------|------|------|------|------|------|----------|------|------|------|
| COE      | 1.000000 |      |      |      |      |          |      |      |      |
| LCOD     | 0.039* | 1.000000 |      |      |      |          |      |      |      |
| CSP      | -0.014 | 0.004* | 1.000000 |      |      |          |      |      |      |
| ENP      | -0.072* | 0.001* | 0.029* | 1.000000 |      |          |      |      |      |
| CGP      | 0.041 | 0.932* | 0.586*** | 0.010** | 1.000000 |        |      |      |      |
| LFIRMSIZ | 0.089* | 0.752*** | -0.049* | 0.049* | -0.047* | 1.000000 |      |      |      |
| MBV      | 0.069** | -0.053* | 0.022* | 0.048* | 0.047* | 0.002* | 1.000000 |      |      |      |
| ROA      | -0.041* | -0.007 | -0.001* | -0.069* | -0.099** | -0.086** | 0.013* | 1.000000 |      |      |      |
| LEV      | 0.094** | 0.181*** | -0.150*** | -0.098** | -0.195*** | 0.158*** | -0.012* | -0.003* | 1.000000 |      |      |      |

Source: E-views10 (2021)

Table 1 shows the result of the DS of the individual variables, respectively. Regarding the COC: COE, and COD, the arithmetic mean is 12.624 and 5.834 respectively. By implication, the cost of financing debt in the sampled companies is moderately expensive. For CSP, ENP, and CGP, the mean scores are 33.875, 23.952, and 32.844 respectively. By implication, 33.875 for CSP, 23.952 for ENP, and 32.844 for CGP of our analysis have a healthier performance of CSR. For the control variables, the mean of LFIRMSIZ, MBV, ROA, and LEV are 16.798, 3.785, 0.168, and 5.880, respectively. The std dev. for COE stood at 19.569, COD at 2.756, CSP at 9.198, EP at 8.050, CGP at 10.238, LFIRMSIZ at 2.340, MBV at 2.414, ROA at 0.316, and LEV at 35.727, respectively. All variables demonstrate a positive value for kurtosis. COE shows a kurtosis of 113.039 > 3, COD at 2.944 < 3, CSP at 6.779 > 3, ENP at 2.482 < 3, LFIRMSIZ at 2.799 < 3, MBV at 2.469, ROA at 101.861 > 3 and LEV at 282.879 > 3 and CGP at 6.284 > 3. These revealed that the degree of tailedness of all variables except COD, ENP, and LFIRMSIZ has a heavier tail, and this is called leptokurtic distribution. COD, ENP, and LFIRMSIZ have a lighter tail, and this is called platykurtic distribution.

Table 2 demonstrates the result of Pearson's correlation among the proxies of COC, CSR, and the control variables. The outcome of the result revealed that our variables are not highly correlated among themselves.
Table 3. Summary of Panel Unit Root Test

| Variables | Levin, Lin & Chut | Im, Pesaran and Shin W-stat | ADF-Fisher Chi-square | PP-Fisher Chi-square | Status |
|-----------|------------------|--------------------------|----------------------|---------------------|--------|
| COE       | -26.1006***      | -9.09385***             | 154.784***           | 246.747***          | 1(0)   |
| LCOD      | -11.0390**       | -8.13000***            | 188.976***           | 410.870***          | 1(0)   |
| CPS       | -1.29763**       | -3.25021***            | 98.3057***           | 214.417***          | 1(0)   |
| ENP       | -6.51652***      | -9.16233***            | 203.642***           | 203.642***          | 1(0)   |
| CGP       | -7.67429***      | -8.43960***            | 189.210***           | 489.592***          | 1(1)   |
| LFIRMSIZ  | -27.7669***      | -5.93797***            | 92.5118**            | 102.638***          | 1(1)   |
| MBV       | -16.9331***      | -12.1742***            | 239.945***           | 421.513***          | 1(1)   |
| ROA       | -19.7947***      | -5.51490***            | 110.923***           | 219.401***          | 1(1)   |
| LEV       | -582.245***      | -92.8617***             | 177.392***           | 383.500***          | 1(1)   |

Source: E-views10 (2021)

P-values are in parenthesis; results are at 1%, 5% and 10% level of significant
***p is less than 0.01, **p is less than 0.05, *p is less than 0.10

The summary methods of the panel unit root test were applied. Table 3 shows the result of the unit root test. All variables are stationary at levels and first difference.

4.2. Panel Regression Analysis

Hypothesis One: CSR has a long-run relationship with the Cost of equity of quoted companies in the NSE

Table 4. Panel ARDL Estimation of 96 companies quoted in the NSE

| Variable | Coefficient | Std. Error | t-Statistic | Prob.* |
|----------|-------------|------------|-------------|--------|
| CSP      | 0.037137    | 0.006443   | 5.763928    | 0.0000*** |
| ENP      | -0.047363   | 0.006632   | -7.141563   | 0.0000*** |
| CGP      | 0.005696    | 0.005431   | 1.048746    | 0.2952   |
| LFIRMSIZ | 0.059770    | 0.016077   | 3.717761    | 0.0002*** |
| MBV      | -0.167299   | 0.025685   | -6.513557   | 0.0000*** |

Source: Source: E-views10(2021)

Note: *, **, and *** indicate significance level at 10%, 5% and 1%. Estimations are done in E-views Version 10.
To investigate the long-run relationship between CSR and the COE, the ARDL estimation method was adopted. The regression outcomes for both the long run and short run are as shown in table 4 for hypothesis one. From the result, the cointegrating equation, also know as the error correction term, has a negative (the proper sign) value of -0.555763 and is statistically significant with a probability value of 0.0000. This implies a long-run equilibrium relationship between the dependent and the independent variables because the error term is statistically significant, negative and less than 1. The coefficient values of 56% implies if there is any disequilibrium in the system, it will take an average speed of 56% for the system to return from the short run to the long run annually across the sampled companies. By implication, there is a high speed of adjustment from the short run to the long if there is any disequilibrium in the system.

Looking at the long-run result, CSP is positive and statistically significant with COE; ENP is negative but statistically significant with COE, while CGP has a positive but insignificant relationship with COE. The implication is that in the longrun, CSP will significantly impact COE; ENP will also affect COE but negatively, while CGP, in the longrun, will not affect COE.

In the short run, the result revealed that CSP is negative but statistically significant with COE, ENP is positive but has an insignificant relationship with COE while CGP has a positive and significant relationship with COE. This implies in the short run, CSR will have a negative effect on COE while in the long run, it will affect COE significantly. ENP in the short run does not affect COE, but in the long run, it affects COE significantly but negatively. CGP, on the other hand, has a positive and significant relationship with COE in the short run whilst in the long run, it has a non-significant relationship with COE. This is to say the performance of CSR by the samples companies in the long-run has led to easy access to capital in the sampled companies for the period under study.

The findings support the stakeholder’s theory which emphasizes that to make success, businesses should consider the interest of all stakeholders in their daily operations. The result also supports Goss & Robert [26] and Chava [15]. Their studies revealed that CSR significantly lowers bank loans.

The control variables for COE, in the long run, are both significant while in the short run, LFIRMSIZ is significant whilst MBV is not substantial.

**Hypothesis Two:** Corporate social responsibility has no long-run relationship with the Cost of debt of quoted companies in the NSE.

The regression outcomes for both long run and short run for hypothesis two are as shown in table 5. From the result, the cointegrating equation has a negative (the proper sign) value of -0.439058 and is statistically significant with a probability value of 0.0000. This implies a long-run equilibrium relationship between the dependent and the independent variable because the error term is statistically significant, negative and less than 1. The coefficient value of 43% simply means if there is any disequilibrium in the system, it takes an average speed of 43% to return from the short run to the long run annually across the sampled companies. By implication, there is a high speed of adjustment from the short run to the long if there is any disequilibrium in the system.

**Table 5.** CSR correlates with the COD of listed companies in NSE

| Variable | Coefficient | Std. Error | t-Statistic | Prob.* |
|----------|-------------|------------|-------------|--------|
| **Long Run Equation** | | | | |
| CSP | 0.198561 | 0.039964 | 4.968523 | 0.0000*** |
| ENP | -0.194854 | 0.057572 | -3.84543 | 0.0008*** |
| CGP | 0.310371 | 0.053732 | 5.815223 | 0.0000*** |
| ROA | -0.319380 | 2.683325 | -1.607912 | 0.1086* |
| LEV | -0.033030 | 0.046521 | -0.709990 | 0.4783* |
| **Short Run Equation** | | | | |
| COINTEQ01 | -0.439058 | 0.028972 | -1.348135 | 0.1787* |
| D(CSP) | -0.012866 | 0.018163 | -0.708365 | 0.4793* |
| D(ENP) | 0.028326 | 0.017949 | 1.578100 | 0.1157* |
| D(CGP) | 0.000646 | 0.016232 | 0.039791 | 0.9683* |
| D(ROA) | -1.185896 | 1.711261 | -0.692995 | 0.4889* |
| D(LEV) | 0.204526 | 0.084379 | 2.423888 | 0.0160*** |

Source: E-views10 (2021)

Looking at the long-run result, CSP is positive and statistically significantly with COD; ENP is negative but statistically significant with COD, while CGP has a significant positive relationship with COD. The implication is that in the long run, CSP will substantially impact COD; ENP will also affect COD but negatively while CGP, in the long run, will affect COD significantly.

For the short-run, it was revealed that CSP is negative and has an insignificant relationship with COD; ENP is positive but has an insignificant relationship with COD, while CGP has a positive but insignificant relationship with COD. This implies in the short run, CSR will affect COD, while in the long run, it affects COD significantly. ENP in the short run has no impact on COD but in the long run, it has a significant negative relationship with COD. CGP on the other hand has a positive and significant relationship with COD both in the short run and in the long run. This is to say the performance of CSR
by the samples companies has led to easy access to COD in the long run, whilst in the short run, performing CSR does not affect COD.

The findings support the stakeholder’s theory which emphasized that to be successful in business, businesses should consider the interest of all stakeholders in their daily operations. The result also supports Goss & Robert [26] and Chava [15], whose studies revealed that CSR significantly lowers bank loans on the one hand and also in line with the findings of Menz [38], whose study fails to establish the fact that CSR reduces the COD. The control variables for COD, in the long run, are both negative and insignificant while in the short run, ROA is negative and insignificant whilst LEV is negative but significant.

To further support the consistency of the data set, the normality test (diagnostic) was conducted. This is carried out to confirm that there are no violations of the assumption of the regression model. Such a violation will cause doubts about the validity and reliability of the regression model. The result is proven in Figure1.

4.2.1. Diagnostic Test

The result above presents a histogram and DS of the data set, including the Jarque-Bera statistic for testing normality. The rule is that if the data sets are normally distributed, the histogram should be bell-shaped, and the Jarque-Bera statistic must not be significant at 5% degrees.

Figure 1 reveals that the hypothesis of non-normality is accepted since the p-value of the Jarque-Bera statistics > 0.05; (340.3911) and the histogram is bell-shaped. We, therefore, conclude that the data set is normally distributed and can be used for a meaningful analysis.
4.3. Conclusion and Recommendation

This study explored the long-run relationship between CSR and the COC of selected companies quoted in NSE for 15 years, 2005-2019. The result revealed that performing CSR to a very great extent leads to better access to capital and reduces the COC for the period. This study expanded the frontier of knowledge in Nigeria by investigating the long-run relationship between CSR and the COC: COE and COD. In conformity with studies done in the developed countries, Menz[38], Goss & Robert [26], and Chava [15], mixed results were obtained in this current study. For the first hypothesis, the result showed a significant long-run relationship between CSR and the cost of equity. As the sampled companies engaged in CSR activities for the period, the companies built up a good reputation in society. With the reputation created already, their chances of getting capital from both banks and individuals were guaranteed in the long run. It was not so clear the benefits in the short run but in the long run, it speaks out. Conclusively for hypothesis one, as the sampled companies engaged in CSR activities for the period studied, they got a fair deal for access to capital at a reduced cost, the amount paid to service cost of equity was reduced. For hypothesis two, though the individual effect of the different dimensions of CSR differs, there is strong evidence that performing CSR in the course of carrying on business will in the long run, led to a better option to access capital at a reduced cost. From the result, in the short run, performing CSR had no effect on COD for the period but in the long run, the companies began to rip the fruit of good deeds for performing CSR. These findings are consistent with the results of most international empirical studies and also emphasizes the stakeholder's theory as the companies adopted this theory, acted accordingly and in the end, it easy access to the capital at a reduced cost, the amount paid to service cost of debt was reduced.

This study will practically spur those companies in Nigeria and outside that are yet to adopt CSR practice as they see CSR performance as a waste of shareholders resources according to the shareholders to embrace the practice as it is evident from the findings that practising CSR is not a waste of shareholders resources.

In conclusion, companies that invest in CSR have a better chance of accessing capital at reduced costs. The results obtained from the current study using the sampled companies quoted in the NSE proved this.

To this effect, the study recommends, based on the findings, that continuous investment on issues that concern CSR for the companies study and for those companies who are yet to embrace the practice to do so as a constant investment on issues that relates to CSR will, if consistent, leads to easy access to capital and at a reduced cost in the long run.

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REFERENCES

[1] Abdulaziz, A., “CSR: Concepts, Perspectives, and Link with Corporate Performance: Literature Review” International Journal of Business and Management Review, Vol.6, No.2, pp.1-14, 2018.

[2] Abideen, A. T., Abayomi, O. A., S. Anureni, “Effects of CSR on Banks’ Performance in Nigeria: A Study of United Bank of Africa,” International Journal of Business, Economics and Management vol.4, no.6, pp. 136-147, 2017. DOI:10.18488/journal.62.2017.46.136.147.

[3] Adeyani, O. D., “An assessment of the impact of CSR on Nigerian society: The examples of banking and communication industries,” Universal Journal of Marketing and Business Research vol.1, no.1, 017-043, 2012.

[4] Agbisogwu, A. A., Hendinihu, J. U., M. C Okafor, “Impact of Environmental and Social Costs on Performance of Nigerian Manufacturing Companies,” International Journal of Economics and Finance; Vol.8, No.9, 2016. doi:10.5539/ijef.v8n9p173.

[5] Ajide, F. M. A. A. Aderemi, “The effects of CSR activity disclosure on corporate profitability: Empirical evidence from Nigerian commercial banks,” IOSR Journal of Economics and Finance (IOSRJEF), 2(6), 17-25, 2014.

[6] Allen G., S. R. Gordon, “The impact of corporate social responsibility on the cost of bank loans,” vol. 35, no. 7, pp. 1794-1810, 2011. RePEc:eee:jbfina:v:35:y:2011:i:7:p:1794-1810.

[7] Asian A U. T. A Uche, “Financial Performance and CSR of Quoted Firms in Nigeria,” International Journal of Innovative Social Sciences & Humanities Research vol.6, no.1, pp.14-30, 2018. ISSN:2354-2926.

[8] Attig, N., E I. Ghouls, S., Guedhami, O., J. Suh, “CSR and credit ratings. Journal of business ethics,” 117(4), 679-694, 2013.

[9] Bala, A. K. M. and S. I Abdulrazaq, “Financial Performance and CSR of Some Selected Banks in Nigeria”Vol.5, No.2, pp. 951-967, 2017. ISSN2348-7585.

[10] Banerjee, S. B., “CSR: The Good, the Bad, and the Ugly” Critical Sociology, vol.34 no.1, pp.51–79, 2008. https://doi.org/10.1177/0896920507084623.

[11] Barbara, S.M. and F.I Maria, “Corporate social performance and cost of debt: The relationship,” Social Responsibility Journal, vol13, no2, pp.250-265, 2017. DOI:10.1108/SRJ-06-2016-0103.

[12] Basu, K., & G. Palazzo, “CSR: A process model of sense
making” Academy of Management Review, vol.33, no.1, pp.122–136, 2008.

[13] Berkowitz E. N., Kerin, R. A. Hartley S. W., W. Rudelius, “Does Radio Advertisement Influence Sale of Herbal Products in Ghana? Evidence from HoMunicipality,” vol.6, pp.12-24, 2000. DOI:10.4236/iject.2016.62004.

[14] Botosan, C. A., M. A. Plumlee, “Assessing alternative proxies for the expected risk premium,” The Accounting Review, vol.80 no.1, pp.21–53, 2005.

[15] Chava, S., “Environmental externalities and cost of capital,” Management Science, 2014.

[16] Cheng, B., Ioannou, I., G Serafeim, “Corporate social responsibility and access to finance,” Strategic Management Journal, vol.35 no.1, pp.1-23, 2014.

[17] Demiroglu, C., C. M. James, “The information content of bank loan covenants,” Review of Financial Studies, vol.23, no.10, pp.3700-3737, 2010.

[18] Dhaliwal, D. S., Li, O. Z., Tsang, A., Y. G Yang, “Voluntary Non-financial-disclosure and the Cost of Equity Capital: The Initiation of Corporate Social Responsibility Reporting” The Accounting Review, vol.86 no.1, pp.59–100, 2011. https://doi.org/10.2308/accr.00000005.

[19] Drucker, S., M. Puri, “Onloansales, loan contracting, and lending relationships,” Review of Financial Studies, vol.22 no.7, pp.2835-2872, 2009.

[20] Dubbink, W., Graafland, J., & L.L.Van, “CSR, transparency and the role of intermediate organisations” Journal of Business Ethics, vol. 82, no 2, pp. 391–406, 2008.

[21] Dugger, W. M, “Corporate hegemony” Praeger Pub Text, 1989.

[22] Ehioghiren, E. E, O. Eneh, “CSR Accounting and Financial Performance of Insurance Companies In Nigeria” International Journal of Academic Accounting, Finance & Management Research (IJAAFMR), Vol. 3, No. 5, pp. 16-25, 2019.

[23] Freeman Edward, (1984), Strategic Management: A Stakeholder Approach, Pitman Pub. Journal of Marketing 70(4), 1–18.

[24] Friedman, M., “Capitalism and Freedom. Chicago,” University of Chicago Press, 1962.

[25] Godwin, U. O, “Community Perception and Oil Companies CSR Initiative in the Niger Delta,” vol. 3, no. 4, pp. 11-21, 2012. DOI:10.3968/j.issn.1923018420120304.600.

[26] Goss, A., G. S Roberts, “The impact of CSR on the cost of bank loans” Journal of Banking & Finance, vol. 35; no.7, pp. 1794-1810, 2011.

[27] Hail, L. “The impact of voluntary corporate disclosures on the ex-ante cost of capital for Swiss firms,” European Accounting Review, vol.11 no.4, pp.741–773, 2002. https://doi.org/10.1080/0963818022000001109.

[28] Hail, L., & C. Leuz, “International Differences in the Cost of Equity Capital: Do Legal Institutions and Securities Regulation Matter? International Cost of Equity Capital,” Journal of Accounting Research, vol.44 no3, pp.485–531, 2006. https://doi.org/10.1111/j.1475-679X.2006.00209.x.

[29] Healy, P. M., K. G. Palepu, “Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature,” Journal of Accounting and Economics, vol.31 no.1, pp. 405–440, 2001.

[30] Healy, P. M., & K. G. Palepu, “The fall of Enron. The Journal of Economic Perspectives, vol.17 no.2, pp. 3–26, 2003.

[31] Heinkel, R., Kraus, A., J. Zechner, “The effect of green investment on corporate behaviour” J. Financ. Quant. Anal, vol.36, pp.431-449, 2001.

[32] Hong, H., M. Kapeczyk, “The price of sin: The effects of social norms on markets” J. Financ. Econ, vol. 93, pp. 15-36, 2009.

[33] Izzo, M. F., B. S. Magnanelli, “Does it pay or does the firm pay? The relation between CSR performance and the cost of debt,” 2012.

[34] Jensen, M., W. Meckling, “Theory of the firm: Managerial behaviour, agency costs, and ownership structure,” J.Financ.Econ.Vol.3no.4, pp. 305-360, 1976.

[35] Jones, T. M, “Instrumental stakeholder theory: A synthesis of ethics and economics,” Academy of management review, vol.20 no.2, pp. 404-437, 1995.

[36] Kim, K. H., Kim, M., C. Qian, “Effects of corporate social responsibility on corporate financial performance: A competitive-action perspective,” Journal of Management, vol.44, pp 1097-1118, 2018. https://doi.org/10.1177/0149206315602530.

[37] Lee, M. D. P, “A review of the theories of CSR: Its evolutionary path and the road ahead” International Journal of Management Reviews, vol. 10, no. 1, pp. 53–73, 2008. https://doi.org/10.1111/j.1468-2370.2007.00226.x.

[38] Menz, K. M, CSR: “Is it rewarded by the corporate bond market? A critical note” Journal of Business Ethics, vol. 96, no. 1, pp. 117-134, 2010.

[39] Odunayo, F. O. E. A. Ibidolapo, “CSR on the Performance of Private Telecommunication in Nigeria (A Study of Mtn)” Canadian Social Science Vol.14, No.8, pp. 45-54, 2018. DOI:10.3968/10511.

[40] Ohiokha, F. I., Odion, O. A., P BAkhalumeh, “CSR and corporate financial performance: the Nigerian experience” International Journal of Accounting Research (IJAR), vol.2 no.10, 2012.

[41] Okegbe, T. O. F. C Egbonike, “CSR and financial performance of selected quoted organisation in Nigeria,” Journal of Social Development, Vol.5, No.4, 2016. https://doi.10.12816/0033096.

[42] Olaoye, O. F., O. E. Oluwadare, “Corporate Social Responsibility and Stock Price Market of Selected Listed Companies in Nigeria” International Journal of Academic Research in Business and Social Sciences, vol.8 no.7, pp. 872–886, 2018. DOI:10.6007/IJARBSS/v8/i7/4425

[43] Orlitzky, M., Schmidt, F., S. Rynes, “Corporate social and financial performance: A meta-analysis,” Organ Stud.Vol.24, pp.403-441, 2003.
[44] Reverte, C. “The impact of better CSR disclosure on the cost of equity capital,” Corporate Social Responsibility and Environmental Management, vol.19 no. 5, pp. 253–272, 2012.

[45] Rondinelli D. A, G. Vestag, “International standard sand corporate policies: An integrated framework,” California Management Review, 106-22, 1996

[46] Smith, N. C., “CSR: Whether or how?” California Management Review, vol.45, no.4, pp.52–76.

[47] Stephen, E., O. D. Rebecca, “CSR and Bank Performance in Nigeria” Srijwiyaja International Journal of Dynamic Economic and Business, Vol.2, No.4, pp.317-330, 2018. DOI:https://doi.org/10.9259/sijdeb.v2i4.317-330.

[48] Walker, K., & F. Wan, “The harm of symbolic actions and green-washing: Corporate actions and communications on environmental performance and their financial implication” Journal of Business Ethics, vol.109, no2, pp.227–242, 2012.

[49] Wekesa, R. N, “CSR and Financial Performance: The Case of Safaricom Ltd.” International Journal of Finance and Accounting. Vol.6, No.6, pp167-171, 2017. https://doi.org/10.5923/j.ijfa.20170606.02.

[50] Yushau, I. A., Mercy, “Effect of Corporate Social Responsibility on Firms Performance in Nigeria”, Online Journal of Arts “Management and Social Sciences (OJAMSS), Vol.3 No.2, pp.91–102, 2018.

[51] Yusuf, B. A., A. Maryam, “CSR and company performance,” Journal of Business Studies Quarterly, Vol7, No.1, 2015. ISSN2152-1034.

[52] Aliyu B. U., A. B. A. Noor, “Corporate social responsibility practice and corporate financial performance: evidence from Nigeria companies,” vol.11, no4, pp.749–763, 2015.

[53] Oikonomou, I., Brooks, C., & Pavelin, S. The effects of corporate social performance on the cost of corporate debt and credit ratings. 2014, Financial Review, 49(1), 49-75.

[54] A. B. Carroll, A three-dimensional conceptual model of corporate performance. Academic Management Review. 1979, 4, 497–505.

[55] M. B. E. Clarkson, A stakeholder framework for analyzing and evaluating corporate social performance. Academic Management Journal, 1995, 20, 92–118.

[56] Wenxia, G. & L. Mingzhi, Corporate Social Responsibility and the Cost of Corporate Bonds. Journal of Accounting and Public Policy, 2015, 34(6): 597-624.

[57] Heinkel, R., Kraus, A., & J. Zechner, The effect of green investment on corporate behaviour. Journal of Financial and Quantitative Analysis, 2001, 36, 431-449, DOI:10.2307/2676219.

[58] R. Merton, A simple model of capital market equilibrium within complete information. Journal of Finance 1987. 42, 483-510.

[59] Dhaliwal, D. S., Li, O. Z., Tsang, A., & Y. G. Yang, Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. Accounting Review 2011, 86(1), 59-100, http://dx.doi.org/10.2139/ssrn.1687155.

[60] Gholu, S. E., Guedhami, O., Kwok, C. C. Y., D. Mishra, Does corporate social responsibility affect the cost of capital? Journal of Banking Finance, 2011, 35(9), 2388-2406 https://doi.org/10.1016/j.jbankfin.2011.02.007.

[61] Plumlee, M., Brown, D., R. S. Marshall, Voluntary environmental disclosure quality and firm value: Further evidence. Journal of Accounting and Public Policy, 2010, 34(4), DOI:10.1016/j.jaccpubpol.2015.04.004

[62] Waddock, S. A., & S. Graves, The corporate social performance-financial performance link. Strategic Management Journal, 1997, 18(1), 303–319, https://doi.org/10.1002/(ISSN)1097-0266.

[63] DiGiulio, A., Migliavacca, P. O., & A. Tencati, What relationship between corporate social performance and the cost of capital, 2007, (Working Paper). Bocconi University.

[64] A. Abraham, Corporate social responsibility and access to finance among Ghanaian SMEs: The role of stakeholder engagement. Cogent Business & Management, 2017, 4:1, 1385165, DOI:10.1080/23311975.2017.1385165.

[65] Orlitzky, M., & J. D. Benjamin, Corporate social performance and firm risk: A meta-analytic review. Business & Society, 2001, 40(4), 369–396. https://doi.org/10.1177/00076503010400402

[66] Robson, A., & S. E. L. Wakefield, Socially responsible investing in “high-net-worth” asset management firms in Canada: An exploratory study. Journal of Business Ethics and Organization, 2007, 12(1), 29–34.

[67] R. Sparkes, Ethical investment: Whose ethics, which investment? Business Ethics: A European Review, 1991, 10, 194–213.

[68] Cheah, E. T., Jamali, D., Johnson, J. E., & M. C. Sung, Drivers of corporate social responsibility attitudes: The demography of socially responsible investors. British Journal of Management, 2011, 22(2), 305–323, https://doi.org/10.1111/bjom.2011.22.issue-2.

[69] Goss, A., & G. S. Roberts, The impact of corporate social responsibility on the cost of bank loans. Journal of Banking and Finance, 35(7), 1794-1810.

[70] K. M. Menz, Corporate social responsibility: Is it rewarded by the corporate bond market? A critical note. Journal of Business Ethics, 2010, 96(1), 117e134.

[71] Sharfman, M., & C. Fernando, Environmental risk management and the cost of capital. Strategic Management Journal, 2008, 29(6), 569e592.

[72] Boutin-Dufresne, F., & P. Savaria, Corporate social responsibility and financial risk. Journal of Investing Spring, 2004, 13(1), 57e66.

[73] Lee, D., & R. Faff, Corporate sustainability performance and idiosyncratic risk: A global perspective. Financial Review, 2009, 44(2), 213e237.

[74] Demetriades, P., & L. S. Hook, Finance, Institutions and Economic Development. International Journal of Finance and Economics, 2006, 11(3), 245-260.
[75] Pesaran, H. and R. Smith, Estimating Long-Run Relationships From Dynamic Heterogeneous Panels, Journal of Econometrics, 1995, 68(1), 79-113.

[76] Eberhardt, M., & F. Teal, Econometrics for Grumblers: A New Look At Cross-Country Growth Empirics, 2010, Economic Watch (2013) Grow thin Africa to Outpace World Average http://www.economywatch.com/inthe-news/growth-in-africa-to-outpace-world-average.16-04.html.

[77] Favara, G. An Empirical Reassessment of the Relationship between Finance and Growth. Washington, 2003, DC:IMF.

[78] Joseph, U. M., C. O. Michah, “Impact of CSR on Financial Performance: Evidence from Listed Banks in Nigeria,” Expert Journal of Finance. Vol.4, pp.1-9, 2016. ISSN 2359-7712.