Investment in corporate social responsibility, disclosure practices, and financial performance of banks in Nigeria

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A B S T R A C T

Using panel data set from banks in Nigeria, a developing country, this paper examines the effects of corporate social responsibility (CSR) investment and disclosure on corporate financial performance. The results from the Wallace and Hussain estimator of component variances (a two-way random and fixed effects panel) suggest that CSR investment without due disclosure would have little or no contribution to corporate financial performance. This paper supports the argument that firms could benefit both financially and non-financially from a strategic CSR agenda.

1. Introduction

Hitherto, investment in corporate social responsibility (CSR) as a global phenomenon has remained a thriving corporate governance concept and management strategy in most multinationals (Peng & Yang, 2014; Amin-Chaudhry, 2016). It keeps attracting the interest of a vast number of scholars, economists, governmental and non-governmental organizations, and the public as a result of industrial growth and economic prosperity of many nations (Abiodun, 2012; Adeyemi & Ayanlola, 2014; Harpreet, 2009; Uadiale & Fagbemi, 2012; Uwuigbe & Uadiale, 2016). Documented evidence has shown that investments in CSR have the potentials of making positive contributions to the development of society and businesses (Harpreet, 2009; Helg, 2007; Wahba & Elsayed, 2015; Hategan & Curea-Pitorac, 2017). In effect, more organizations are beginning to see the benefits from setting up strategic CSR agenda (Chaudhary, 2017; Famiyeh, 2017).

Historically, the concept of CSR became pervasive in the 1960s. Since then, it has been narrowly construed, and used indiscriminately to cover legal and moral responsibilities (Uadiale & Fagbemi, 2012). In corporate sense, engaging in CSR activities is a way of firms making restitutions to the society in respect of social and environmental degradation caused by their business operations. It is also an act of appreciation to the host community. In reality, corporate entities are social creations, and they depend largely on the support of the society for survival (Reich, 1998). Arguably, while firms may engage in CSR activities to earn the continuous support of the society, the stalemate here is whether investment in CSR has any financial returns, or it is a mere drain of corporate resources (Galant & Cadez, 2017; Peng & Yang, 2014; Testa & D'Amato, 2017).

In the literature, there has been a deal of ambiguity and uncertainty about what CSR really means to a firm as well as the motivation behind a firm's engagement in CSR (Abiodun, 2012; Wahba & Elsayed, 2015; Galant & Cadez, 2017; Hategan & Curea-Pitorac, 2017). Business scholars and economic strategists have committed much research efforts to provide empirical evidence on whether a proactive stance towards CSR is just a mere drain of a firm's profit, or it is a source for sustainable success and competitive advantage (Hockerts, 2007; Famiyeh, 2017; Galant & Cadez, 2017). Generally, while it is assumed that firms act socially responsible

because they anticipate some benefits, theories of CSR assert that firms engage in profit-maximizing CSR, being their lead motivation (McWilliams & Siegel, 2001; Bagnoli & Watts, 2003; Amin-Chaudhry, 2016).

Accordingly, the proponents of CSR are convinced that it pays off for the firm as well as for the firm's stakeholders and the society. They believed that investment in CSR enhances a firm's public image, and gives the firm unique comparative marketing advantages, mostly among increasingly socially conscious consumers, which in turn, increases the firm's long-term revenue (Burke & Logsdon, 1996; Gras-Gil, Manzano, & Fernandez, 2016). In an international survey by PricewaterhouseCoopers, about 70% of the global chief executives believed that CSR was vital to their firms' profitability (Simms, 2002).

Generally, while studies on CSR abounds in the developed countries, evidence from a developing country's perspective appears to be limited (Wahba & Elsayed, 2015). Particularly, CSR study in Nigeria is still sparse. This paper therefore is designed to provide further empirical evidence on the effects of CSR investment and disclosure on corporate financial performance from the perspective of a developing country. According to Wahba and Elsayed (2015), much CSR studies reflect the context of developed countries, and so, adding evidence from less developed countries could possibly assist in developing existing theories of corporate finance as well as corporate social responsibility.

Besides, most CSR studies in Nigeria have concentrated on multinational firms. Particularly, the oil and gas firms in the Niger Delta region, while less has been done on indigenous firms and other industries like the banking industry (Amaeshi, Adi, Ogbechie, & Amo, 2006; Oluyemi, Yinusa, Abdulateef, & Akindele, 2016). According to Oluyemi et al. (2016), the demand for CSR in the Nigerian banking system is imperative seeing that the banks are instrumental to the development of the country. Hence, using data from banks in Nigeria, a developing country, this paper adds to our understanding on the interactions between CSR investment and disclosure, and banks' financial performance. It also adds to the limited CSR literature in Africa as a whole, and Nigeria in particular.

The remaining part of this paper is structured as follows: the second part presents the review of literature related to CSR and corporate financial performance. It also introduces the hypotheses formulated for the study. The third part presents the research method and design for the study. In the fourth part, the results and discussions of the findings are presented, while the fifth part concludes and presents the significance of the study.

2. Literature review and theoretical framework

Previously, the concept of CSR has been described extensively in different ways across the globe, with both similarities as well as considerable differences (Crane, Matten, & Spence, 2008; Uadiale & Fagbemi, 2012; Asatryan & Březinová, 2014). In the report of the National Association of Accountants (NAA) (1974), CSR is described as the identification, measurement, monitoring, and reporting of the social and economic effects of an organization on society. It is the disclosure of those costs and benefits that may or may not be quantified in monetary terms arising from the economic activities of firms, which are substantially borne by stakeholders and the community at large (Perks, 1993). Similarly, Brown and Dacin (1997) described CSR as a firm's status and activities with respect to its perceived societal or stakeholders' obligations. It is seen as a cluster concept, overlapping with concepts such as business ethics, corporate philanthropy, citizenship, environmental responsibility and sustainability (Al-Samman & Al-Nashmi, 2016; Gras-Gil et al., 2016; Matten & Moon, 2004).

Generally, there has not been a strong consensus on the concept of CSR, nor its constituents (Wahba & Elsayed, 2015). However, Belkaoui (1999) had earlier argued that the key features of social accounting include the 'measurement' and 'communication' of information concerning the effects of a business and its activity on the society and the environment. Building on Belkaoui, Crane et al. (2008) specified that the core essence of CSR is its voluntary feature, which goes beyond statutory obligations, managing externalities, and multiple stakeholders' orientation. They also noted that CSR feature goes beyond the alignment of social and economic responsibilities, practices, and corporate philanthropy. Functionally, CSR serves as a veritable strategic structure that ensures corporate and environmental sustainability.

In a more dynamic standpoint, CSR is being interpreted as the concept of triple bottom-line; people, planet, and profit, which captures an expanded range of values and criteria for measuring organizational success (Abiodun, 2012; Harpreet, 2009). Although, conflicting persuasions have emerged on the importance, or otherwise of CSR in business activity. For instance, the neoclassical economists advanced that firms should devote more energy to supplying quality goods and services to its customers, minimize costs, and maximize profits, all within the laws and regulations of the land (Carroll, 1979; Jamali & Mirshak, 2007; Quazi & O'Brien, 2000). Overtly, the neoclassical economists' position provides a motivated platform for firms to engage willingly in CSR so they can accrue certain benefits from their host community, and from the society as a whole.

In recent years, businesses have started responding to the growing interest of stakeholders regarding their social significance. While many of the individual policies, practices, and programmes toward societal development are not new as such (Al-Samman & Al-Nashmi, 2016; Peng & Yang, 2014), firms are addressing their societal role far more coherently, comprehensively, and professionally, an approach that is elegantly broadened by CSR (Crane et al., 2008; Galant & Cadez, 2017; Wahba & Elsayed, 2015). Accordingly, in explaining CSR paradigm among firms, different CSR theories and paradigms have been proposed by scholars and economists (Choi, 1999). For example, the enlightened shareholder model, legitimacy theory, and stakeholder theory have been applied in explaining the motivation behind firms' investments in CSR activities (Croker & Barnes, 2017; Hamid & Atan, 2011). Recent studies have also employed the institutional theory in explaining CSR and firms' motivations toward CSR investments (Bradly, 2015; Ruiviejo & Morales, 2016).

2.1. Investment in CSR and financial performance

Largely, a number of emerging evidences have suggested that firms could benefit both financial and non-financial from CSR activities (Famiyeh, 2017; Hategan & Curea-Pitorac, 2017). This position is generally described as the enlightened shareholder approach. It suggests that corporate decision-makers must consider a range of social and environmental matters if they are to maximize long-term financial returns (Harpreet, 2009). However, the business case for CSR agenda has been subjected to much debate and criticism. Promoters of CSR have argued that firms would benefit in multiple ways by operating with a CSR perspective that is broader and longer than their own immediate, short-term profits, while critics of CSR argued contrarily that CSR distracts from the fundamental economic role of businesses, which is just nothing more than superficial window-dressing (Harpreet, 2009).

The study of Soana (2011), which sampled banks both at the national and international levels, investigated the possible connection between social performance and financial performance in the banking sector. From the results of the study, no statistically significant link was found to support any positive or negative correlation between social performance and financial performance.

In Uadiale and Fagbemi (2012), the impact of CSR on the financial performance of selected quoted firms in Nigeria was examined. From the results of the investigation, CSR was found to have positive impacts on firms' return on equity (ROE) and return on assets (ROA). They argued that firms in Nigeria could boost their reputation and increase their returns by investing in CSR activities. This therefore could mean that a CSR agenda for firms in Nigeria may serve as an image booster. Especially, for firms whose business operations impact on the environment negatively.

The study of Baird, Geylani, and Roberts (2012) reexamined the relationship between corporate social performance (CSP) and financial performance from an industry perspective using a linear mixed model analysis. The findings of their study suggest that a significant relationship between corporate social performance and corporate financial performance exists, and that the relationship is conditioned on the firms' industry specific context. This could also be interpreted to mean that the effect of a firm's performance in CSR activities on its financial performance would depend largely on the type of industry. Similarly, the study of Peng and Yang (2014) examined the effect of corporate social performance on financial performance and the moderating effect of ownership concentration of Taiwan firms. The results suggest a negative relationship between corporate social performance and financial performance.

Asatryan and Březinová (2014) likewise examined the relationship between CSR and financial performance of firms in the airline industry in Central and Eastern Europe. From the results of the study, CSR initiatives were found to correlate positively with the financial indicators of the firms examined. Contrarily, Bradly (2015) argued that the rationale for engaging with and supporting local community investment is more concerned with long-term sustainability than short-term profitability. That is, the issues of legitimacy, interdependence, and risk management are important strategic reasons for undertaking community investment (CSR activities) than profit seeking.

Famiyeh (2017), which examined the relationship between CSR initiative and firms' performance in Ghana, demonstrated that CSR initiative by firms in Ghana correlated positively with the firms' operational competitive performance in terms of cost, quality, flexibility, and delivery performance as well as overall performance. Furthermore, Famiyeh demonstrated that competitive operational capabilities in terms of cost and flexibility would lead to firms' overall performance from the Ghanaian business environment, whereas delivery and quality would have little or no effect on the overall performance of the firms.

While the study of Hategan and Curea-Pitorac (2017) found strong statistical supports that suggest positive correlations between CSR initiatives and the financial performance measures of Romanian listed firms, Jain, Vyas, and Roy (2017) found a weak positive relation between CSR and financial performance.

From these studies, it is apparent that three principal strands of findings are associated with the relationship between CSR activities and firms' financial performance. These include; (1) the existence of a positive correlation between CSR and financial results; (2) the lack of correlation between CSR and financial results; and (3) the existence of a negative correlation between CSR and financial results (Galant & Cadez, 2017; Uadiale & Fagbemi, 2012; Peng & Yang, 2014; Baird et al. 2012).

Arguably, the positive correlation between CSR and financial performance reported in the literature may be interpreted to suggest that a firm's investment in CSR would somewhat lead to increased financial benefits through a wide range of other benefits such as corporate reputation and brand image, customers loyalty, cost reductions, operational flexibility, comparative advantage, and improved service delivery (Galant & Cadez, 2017; Lee, Chang, & Lee, 2017). According to Wahba and Elsayed (2015), a firm's investment in CSR builds up stocks of reputational capital, and create some organizational capabilities, which would help the firm in achieving some kind of competitive advantages, and financial boost. Hence, it could be concluded that the related benefits of engaging in CSR activities exceed the related costs.

On the other hand, the negative correlation between CSR and financial performance reported in the literature may be interpreted to agree with the conventional view of CSR, which holds that engaging in CSR is costly since being socially responsible incurs additional expenses. Critics have also argued that firms' engagement in CSR is nothing more than a superficial window-dressing, which is just to preempt the role of governments as a watchdog over powerful multinational corporations (Harpreet, 2009; Testa & D'Amato, 2017).

From the above discussions, it is obvious that the results on CSR and financial performance are somewhat mixed and inconclusive. Thus, this paper seeks to provide empirical evidence from a developing country's perspective to illustrate whether investment in CSR activities impacts positively (or negatively) on a firm's financial performance. Therefore, the first hypothesis of the paper, which is stated in the null, is as follows:

H1. : investment in CSR activities has no significant effect on the financial performance of banks in Nigeria.

2.2. Disclosure of CSR activities and financial performance

The legitimacy theory is probably one of the oldest and the most widely used in explaining the motivation behind firms' CSR initiatives and disclosure practices (Deegan & Gordon, 1996; Guthrie & Parker, 1989; Milne & Patten, 2002; Murthy & Abeysekera, 2008; Uwuigbe & Uadiale, 2016; Wilmhurst & Frost, 2000). This theory is based generally on the premise that firms would signal their legitimacy by making adequate disclosures of their activities (Gray, Kouhy, & Lavers, 1995).

As it applies to CSR studies, the legitimacy theory is not separated from the stakeholder theory; rather these theories are overlapping and complementary within the political economy assumptions (see Gray, Javad, Power, & Sinclair, 2001). According to Uwuigbe and Uadiale (2016), the legitimacy theory seeks to explain attempts by firms to narrow any perceived legitimacy gap as an effort to avoid sanctions or threats to their survival. This theory suggests that businesses operate in society via an expressed or implied social contract upon which their survival and growth are dependent. Patten (1992) had earlier noted that disclosure of CSR initiatives positively correlated with organizational legitimacy, which suggests that firms legitimized their operations through voluntary CSR disclosures.

Applying the legitimacy theory, Uwuigbe and Uadiale (2016) examined whether a significant difference exists in the level of corporate social environmental disclosure between building material and brewery industries. The results of the study suggest that the level of corporate social environmental disclosures differ significantly between the selected industries. They however noted that corporate social environmental disclosure among the selected listed firms in Nigeria is generally low and still at its nascent stage.

According to Perrini, Russo, Tencati, and Vurro (2011), CSR practices and related information disclosure usually become reliability indicators, and brand positioning for corporate entities. They inspire firms to understand their customers' needs better through open dialogue and transparent interaction. They further noted that the integration of CSR in a firm's disclosure practices is seen as a signaling exercise to avoid potential adverse selection risks and exposure to future social costs. That is, CSR disclosure facilitates a firm's visibility, which shareholders and financial partners may interpret as a signal of the firm's successful attempts to meet their expectations, thereby turning into lower perceived risks and easier access to capital markets. Likewise, voluntary CSR disclosure supports the firm in facing social and political pressures to act in socially acceptable ways.

Normally, with the legitimacy theory undertone, corporate management reacts to the community and other stakeholders' expectations because they continually seek to ensure that they are perceived as operating within the norms of their respective societies, and that their activities are perceived as being legitimate (Campbell, 2000; Deegan, Rankin, & Tobin, 2002; Hamid & Atan, 2011; Patten, 1992). Also, within this theory, it could be argued that with CSR disclosure, firms seek to create, maintain, or repair their societal legitimacy (Uwuigbe & Uadiale, 2016), which they also stand to benefit from the supportive influences of the society, and from the increased awareness of their products and services, and from the patronages of customers and other stakeholders.

It could also be argued that firms may be assumed to disclose their CSR activities voluntary, not with the expectation of any financial benefits, but as Deegan (2006) suggested, for ethical reasons with respect to the accountability model. The legitimacy theory in collaboration with the stakeholder theory, may assume that firms also legitimized their operations by treating all stakeholders fairly (Freeman, 1984; Al-Samman & Al-Nashmi, 2016). Thus, one major platform for firms to fulfill this obligation is to disclose their CSR activities voluntarily to meet the expectations of certain groups of stakeholders. Besides, CSR disclosure serves as channels of advertisement for a firm to maintain good public image and to ensure competitive sustainability (Lee et al. 2017).

In the study of Gras-Gil et al. (2016), explaining why companies involve themselves in socially responsible activity, CSR indicator was found to correlate significantly with ethical and moral issues concerning corporate decision-making. The authors suggested that investments in socially responsible activities not only improve stakeholder satisfaction, but also affect corporate reputation positively, and lead to effective use of resources.

Although, results regarding CSR disclosure have been mixed, many prior CSR studies have employed the legitimacy theory and the stakeholder theory in explaining firms' motivations in response to social responsibility (Guthrie & Parker, 1990; Gras-Gil et al., 2016; Gray et al., 1995; Patten, 1992). These inconsistent results may be due to different strategies used by firms to legitimize their behavior as well as different legislative jurisdictions (Cormier & Gordon, 2001; Newson & Deegan, 2002). Generally, while the discourses on CSR activities are broad, this paper is interested in testing whether CSR disclosure has any effect on the financial performance of banks in Nigeria. Therefore, the second hypothesis of this paper, which is stated in the null, is as follows:

H2. : disclosure of CSR activities by banks in Nigeria has no significant effect on their financial performance.

In summary, the proposed interactions between CSR investment and disclosure, and corporate financial performance are demonstrated in Fig. 1 below.
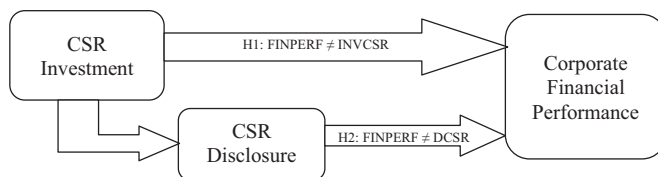

Fig. 1. Interaction between CSR investment and disclosure and Corporate Financial Performance.
Source: Authors' conceptualization, 2017

3. Research methods and data

By way of an explanatory and content analysis designs, this paper examines the effects of CSR investment and disclosure on the financial performance of banks in Nigeria. The sample consists of 21 money deposit banks in Nigeria (see Appendix A), which was obtained from the website of the Central Bank of Nigeria (CBN). After due screening, banks without consistent annual reports for the period (2010 to 2014) were eliminated, which reduced the sample to 12 banks with 60 observations. Content analysis was used to construct the panel dataset from the annual reports of the sampled banks within the reporting period (2010 to 2014).

3.1. Model specification

Descriptive statistics, Pearson correlation, and Wallace and Hussain estimator of component variances were performed on the panel data collected. The descriptive statistics was performed to give a summary of the variables. Each variable was presented in its mean and standard deviation measures. The Pearson correlation was performed to establish empirical relationship among the variables, and as a support to check for multicollinearity disturbances among the independent variables. Wallace and Hussain estimator of component variances was performed to test the hypotheses of the study.

Actually, panel data analysis was used based on its accorded advantages over conventional cross-sectional or time-series data sets. According to Hsiao (2003), panel data give researcher a large number of data points, increasing the degrees of freedom and reducing the collinearity among explanatory variables, therefore improving the efficiency of econometric estimates. Likewise, panel data allow researchers to construct and test more complicated behavioral models than purely cross-sectional or time-series data. Accordingly, panel data analysis was conducted to estimate the following model:

$$FINPERF_{it} = ß_0 + ß_1 INVCSR_{it} + ß_2 DCSR_{it} + ß_3 SIZE_{it} + ß_4 TANG_{it} + \varepsilon_{it} \tag{1}$$

Where $FINPERF_{it}$ is the financial performance of bank i at period t. It is the dependent variable, measured as return on assets (ROA). That is, the proportion of profit after tax to total assets (see Galant & Cadez, 2017). On the other hand, $INVCSR_{it}$ and $DCSR_{it}$ are the intrinsic explanatory variables for the model. $INVCSR_{it}$ represents bank i investment in CSR activities (see Appendix B) at period t (that is, preceding year basis). According to Galant and Cadez (2017), measurement of CSR variable in prior empirical studies was found to be the reason for the diverse outcome of relationship between CSR and corporate financial performance.

Accordingly, for this paper, a different measurement was used for CSR investment. Specifically, the natural log of the actual amounts spent in executing CSR activities as reported in the prior year's annual reports of these banks were extracted and used to measure this variable. The justification for this measurement is that, by plain reasoning, the actual effect of CSR investment in a particular year is expected to be observed, not in the year of investment, but in the succeeding years.

Likewise, $DCSR_{it}$ represents disclosure of CSR activities by bank i at period t. It is a dummy variable and measured as 1, if bank i has a dedicated section in the annual report that discloses CSR activities, and 0, if otherwise (note; prior year's disclosure was used to regress current year's financial performance to reflect the true effect). As discussed above, it is only logical to expect that the disclosure of CSR activities for a particular year would have impact, not on the same year's financial performance, but on the succeeding years' performance.

Furthermore, in order to control for the variation in the dependent variable, two control variables were initially included in the model. The first, which is $SIZE_{it}$, measured as the natural log of total assets for bank i at period t, and the second, $TANG_{it}$, which was measured as the proportion of non-current assets to total assets. The rationale for including these two variables was simply to control the variation in the dependent variable (see Wahba & Elsayed, 2015). β_0 is the intercept, and β_1 - β_4, are the coefficients for the explanatory variables, while ε is the error term.

4. Analysis and results

4.1. Descriptive analysis

As part of the procedure for data analysis and interpretation, the paper presented the descriptive statistics for both the outcome and explanatory variables required for analysis. Each variable was examined based on the mean score and standard deviation, alongside the normal Skewness and Kurtosis distributions. To account for the Skewness distribution, a right-tailed position indicates a positive Skewed distribution and a left-tailed position indicates a negative Skewed distribution, while Kurtosis distribution could indicate either substantial peak distribution, or flatter peak distribution (Field, 2009). Table 1 presents the results of this analysis.

To report the outcomes of the descriptive statistics displayed in Table 1, the mean score (0.0211) for FINPERF simply suggests low profitability across the sampled banks, having a right-tailed Skewness distribution with a substantial peak value (Skewness = 1.3533 & kurtosis = 9.7630 respectively). The mean score (4.1950) for INVCSR suggests that investment in CSR activities within the period of investigation was substantial and consistent. The Skewness distribution for INVCSR is left-tailed, with a substantial peak value (Skewness = -2.0720 & kurtosis = 8.7665 respectively). The mean score (0.6667) for DCSR indicates that more banks made disclosure of their CSR activities in their annual reports, having a section dedicated for CSR activities. This variable is Skewed toward the left and have a flattered peak value (Skewness = -0.7071 & kurtosis = 1.5000 respectively).

Whereas the mean score (5.9359) for SIZE suggests larger banks across the sample, with a left-tailed Skewness and a slightly peaked value (Skewness = -0.8862 & kurtosis = 3.2133 respectively), the mean score (0.0352) for TANG suggests very low tangibility across the sampled banks, having a right-tailed Skewness distribution and a substantial peak value (Skewness = 1.1004 &

Table 1
Descriptive Statistics.

	FINPERF	INVCSR	DCSR	SIZE	TANG
Mean	0.0211	4.1950	0.6667	5.9359	0.0352
Median	0.0166	4.2091	1.0000	5.9700	0.0328
Maximum	0.1736	4.7888	1.0000	6.5429	0.1071
Minimum	-0.0987	2.2430	0.0000	4.8604	6.8500
Std. Dev.	0.0369	0.4697	0.4754	0.4254	0.0186
Skewness	1.3533	-2.0720	-0.7071	-0.8862	1.1004
Kurtosis	9.7630	8.7665	1.5000	3.2133	5.7857
Sum	1.2677	251.6975	40.0000	356.1528	2.1114
Sum Sq. Dev.	0.0802	13.0186	13.3333	10.6747	0.0205
Observations	60	60	60	60	60

kurtosis = 5.7857 respectively).

To generalize, INVCSR, DCSR, and SIZE are negatively (left-tailed) distributed, while FINPERF and TANG are positively (right-tailed) distributed. Although, the normal distribution for statistical data should be a zero value with no right nor left tail distribution, and neither a leptokurtic (peak), or platykurtic (flat) distribution (Field, 2005, 2009). However, this should not be generalized as other factors such as sample size and population grouping may affect the normality of data distribution (Ajibolade & Sankay, 2013; Field, 2009; Sankay, Adekoya, & Adeyeye, 2013).

4.2. Correlation analysis

Towards establishing correlational interactions among the participating variables, and to test for collinearity disturbance, correlation matrix was computed, which is displayed in Table 2 below.

As displayed in Table 2, INVCSR and DCSR correlated significantly with the outcome variable – FINPERF (p-value = 0.0086 & 0.0076 respectively). The relationship between INVCSR and FINPERF is negative (r = -0.3362), while the relationship between DCSR and FINPERF is positive (r = 0.3414). Among the explanatory variables, it could be seen that no significant correlation was found except for SIZE, which significantly correlated with INVCSR (r = 0.0000). With the significant relationship reported between SIZE and INVCSR, no doubt, it calls for collinearity concerns. This is because the accuracy of the regression estimate stands threatened. Hence, in order to have a more accurate regression estimate, SIZE variable (a control variable) would be removed from *Model 1* (see Field, 2005, 2009). Accordingly, *Model 1* is modified as follows:

$$FINPERF_{it} = \beta_0 + \beta_1 INVCSR_{it} + \beta_2 DCSR_{it} + \beta_3 TANG_{it} + \varepsilon_{it} \tag{2}$$

Where all other variables remain unchanged, *Model 2* replaces *Model 1* to adjust for the threat posited by the presence of multi-collinearity interference caused by the SIZE variable. With this adjustment, the regression estimate is therefore free from multi-collinearity interference.

4.3. Model estimation analysis

As earlier noted in the literature, to provide empirical evidence on the effects of CSR investment and disclosure on the financial performance of banks in Nigeria, two hypotheses were formulated. The first hypothesis tests whether investment in CSR activities impacts positively (or negatively) on a firm's financial performance. The second hypothesis tests whether CSR disclosure has any

Table 2
Covariance Analysis.

Variables	FINPERF	INVCSR	DCSR	SIZE	TANG
FINPERF	1.0000				
INVCSR	-0.3362	1.0000			
	0.0086[**]				
DCSR	0.3414	0.1579	1.0000		
	0.0076[**]	0.2282			
SIZE	-0.2234	0.7477	0.1553	1.0000	
	0.0861	0.0000[**]	0.2362		
TANG	-0.0704	0.1087	-0.0956	-0.0197	1.0000
	0.5932	0.4086	0.4674	0.8811	

Covariance Analysis: Ordinary;
Sample: 2010 2014; Observations.: 60
** Correlation is significant at the 0.01 level (2-tailed); Dependent Var. FINPERF

Table 3

Correlated Random Effects - Hausman Test.

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Probability.
Cross-section random	1.340485	3	0.7195
Period random	0.000000	3	1.0000
Cross-section and period random	0.969256	3	0.8087

* Period test variance is invalid. Hausman statistic set to zero.

Test cross-section and period random effects

significant effect on the financial performance of banks in Nigeria. To test these two hypotheses, Wallace and Hussain estimator of component variances (a two-way random and fixed effects panel) was performed at a 0.05 level of significance.

Over time, when this tool is applied researchers are usually faced with the option of choosing between using the fixed-effect panel model or the random-effect panel model. As noted by Ajibolade and Sankay (2013), on one hand, the fixed-effects model is used when it is important to control for omitted variables that differ between cases but are constant over time. It allows the use of the changes in the variables over time to estimate the effects of the predictor (independent) variables on the outcome (dependent) variable. It is the main technique used for analysis of panel data. On the other hand, the random-effects model is used when there are reasons to believe that some omitted variables may be constant over time but vary between cases, and others may be fixed between cases but vary over time.

Therefore, to justify the choice of model, the Hausman specification test is largely suggested by scholars (Gujarati, 2004). Actually, this test checks for a more efficient model against a less efficient but consistent model. It ensures that the more efficient model also gives consistent results. It tests the null hypothesis that the coefficients estimated by the efficient random-effects estimator are the same as the ones estimated by the consistent fixed-effects estimator. If the p-value > χ^2 larger than .05, then it is safe to use random effects, but if the p-value < χ^2 is less than .05, then the fixed-effects model should be adopted (Gujarati, 2004; Ajibolade & Sankay, 2013). Table 3 shows the outcome of the Hausman specification Test.

Table 3 presents the outcome of the Hausman specification test. This classical test indicates to researchers whether to adopt the fixed effects model or random effects model. Usually, the question here is whether a significant correlation exist between the unobserved person-specific random effects and the regressors. If no such correlation exist, then the random effects model may be more powerful and parsimonious. But if such a correlation exist, the random effects model would be inconsistently estimated and the fixed effects model would be the model of choice. Accordingly, from Table 3, the Hausman test displayed no correlation between the unobserved person-specific random effects and the regressors (p = 0.8087 > α = 0.05). With this outcome, the random effects model is adopted for the panel analysis since it gives a more robust estimation of the model than the fixed model.

Accordingly, as suggested by the Hausman test of model efficiency, the random effects model was used to test the hypotheses (1 and 2) of the study. Table 4 presents the results of the Wallace and Hussain panel analysis for *Model 2*.

From the Table 4, it could be seen that INVCSR significantly predict FINPERF (p-value = 0.0015 < 0.05). However, this relationship is negative (coef. = -0.031341 & t-stat. = -3.347810), which means that these variables (INVCSR and FINPERF) are inversely related. Accordingly, with these outcomes, the first hypothesis of the study (H1) is rejected. This simply suggests that investment in CSR activities impacts negatively on the financial performance of banks in Nigeria. With respect to the effect of CSR disclosure on the banks' financial performance, it could be seen from Table 4 that DCSR significantly predict FINPERF (p-value =

Table 4

Wallace and Hussain estimator of component variances.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INVCSR	-0.031341	0.009362	-3.347810	0.0015
DCSR	0.030164	0.009387	3.213345	0.0022
TANG	-0.034132	0.234941	-0.145278	0.8850
C	0.133694	0.039063	3.422493	0.0012
Effects Specification				
			S.D.	Rho
Cross-section random			0.008285	0.0646
Period random			0.007908	0.0588
Idiosyncratic random			0.030528	0.8766
Weighted Statistics				
R-squared	0.253055	Mean dependent variable		0.014331
Adjusted R-squared	0.213040	S.D. dependent variable		0.034424
S.E. of regression	0.030538	Sum squared resid		0.052223
F-statistic	6.324029	Durbin-Watson stat		1.912344
Prob(F-statistic)	0.000904			

Dependent Variable: FINPERF; Method: Panel EGLS (Two-way random effects); Sample: 2010 2014

Periods included: 5; Cross-sections included 12. Observations: 60

0.0022 < 0.05), and this relationship is positive (coef. = 0.030164 & t-stat. = 3.213345), which means that DCSR and FINPERF are positively related. Accordingly, with these outcomes, the second hypothesis of the study (H2) is also rejected. This simply suggests that the disclosure of CSR activities by banks in Nigeria has a significant and positive effect on their financial performance. Still from Table 4, it could be seen that no significant relationship was found between TANG and FINPERF (p-value = 0.8850 > 0.05). This simply suggests that the banks' tangibility has no significant effect on their financial performance.

With respect to the combined effect of the explanatory variables (INVCSR, DCSR, and TANG) on the outcome variable (FINPERF), the F-test and its associated p-value (6.324029 & 0.000904 respectively) were reported in Table 4. By these outcomes, it is apparent that the combine effect of the explanatory variables on the outcome variable is significant and positive, which suggests that when the banks invest in CSR activities and disclose these activities in their annual reports, it will positively impact on their financial performance.

Furthermore, to assess the robustness of *Model 2*, that is, the strength of its predictions, the R^2 (0.2531) and adjusted R^2 (0.2130) were estimated alongside the panel analysis. The values suggest that *Model 2* significantly explains 25.31% (R^2) and 21.30% (Adj. R^2) variations in the outcome variable (FINPERF). In addition, to check for autocorrelation problem in *Model 2*, which is one of the challenges faced when selecting variables to be included in a model, the Durbin-Watson test was performed. By the suggestion of Kohler (1994), a value of four for this test indicates upper limit, while a value of zero indicates lower limit. If therefore the outcome value equals two, there is an absence of autocorrelation, but a value lesser or greater signifies the presence of positive or negative autocorrelation among the predictor variables. Akin to this assumption by Kohler (1994), the result of the Durbin-Watson test (1.9123) suggests that *Model 2* did not violate the independence of residuals assumptions (i.e. no collinearity problem).

5. Discussion of findings

The results of this research obviously suggest that banks' investments in CSR activities affect their financial performance negatively, which suggests that CSR investment depletes the financial resources of the banks. Arguably, it could be that the banks do not financially benefit commensurately in relation to the money spent on CSR activities. In reality, while the banks may enjoy some non-financial benefits from CSR investment, the associated financial benefits may not be commensurate with the related cost of CSR investment. This finding contradicts that of Uadiale and Fagbemi (2012), who reported that CSR impacted positively on the financial performance of selected quoted firms in Nigeria. It however agrees with the finding of Peng and Yang (2014), who reported a negative result between CSR and financial performance of Taiwan firms.

This finding also agrees with critics of CSR, which argued that investments in CSR activities distract firms from their fundamental economic roles, and deplete their financial resources. It also supports the legitimacy theory, where the focus of CSR is not necessary for any immediate financial benefit, but to have a good public image, and be in favor with the government of the host community where they operate. It could also be that banks invest in CSR activities, not with the immediate intention of profit making, but as a way of appreciating the society. This however helps the banks to create awareness of their banking services, and increase their customer base.

Some of the reasons that may help explain the outcome of the negative result could be measurement or theoretical issues (Galant & Cadez, 2017). Also, most positive results reported in the literature are from manufacturing and multinationals firms. The peculiarity of banking business is quite different from these manufacturing and multinationals firms. In addition, the negative result could be explained in the light that banks in Nigeria engage in CSR activities to contribute to the development of the Nigerian society, and not for profit making.

With respect to the positive impact of CSR disclosure on the banks' financial performance, it could be suggested that a firm's disclosure of its commitment to environmental sustainability through CSR activities to a spectrum of stakeholders would enhanced its reputation and goodwill among the host communities. It could also be that through legitimizing their operations, the firm may attract government's favorable disposition as well as increase the patronage of the host community, which will in turn, contributes to its long term financial benefits.

In addition, disclosing CSR information may serve as a channel of advertising the services and products of a firm, giving it a comparative marketing advantage within its industry. This paper therefore advocates for greater disclosure of CSR information, which would be beneficial to a range of stakeholders when making economic decisions.

6. Conclusion

The practice of CSR has gone beyond the conventional individual firm's practices. It has become a global phenomenon and a thriving corporate governance concept and management strategy in most multinationals. Although, while the motivation behind firms' investment in CSR has been an unresolved issue for which previous research has yielded mixed results (Gras-Gil et al., 2016), this paper has been able to provide empirical evidence on the effect of CSR investment and disclosure on the financial performance of banks in Nigeria.

This paper has also added to the growing number of CSR studies in developing countries by focusing on the Nigerian banking industry, which has lacked sufficient research of a CSR nature despite the industry's imperative contributions to the development of the Nigerian economy. The evidence presented in this paper suggests that in the context of the Nigerian banking industry, legitimacy, rather than financial benefits may be the key motivation behind banks' investments in CSR activities. As it were, the banking industry is distinctive because its operations do not cause any harm to the society nor degradation to the environment like the oil and gas industry as well as the manufacturing industry. Hence, banks' motivations for investing in CSR activities may be quite different from

that of other industries like the oil and gas industry, and may be best explained within the legitimacy theory.

Consequent to the findings of this paper, the conclusion reached is simply that, mere investing in CSR activities without a channel of disclosure of such activities to stakeholders will not impact positively on the firm's financial performance. Rather, it would only be a depletion of its financial resources to service CSR activities. The paper therefore recommends that, if the motive for engaging in CSR activities is for financial profiting, banks in Nigeria should also communicate their CSR activities to the different stakeholders by making adequate disclosure of their CSR activities, which would in turn accrue some future financial benefits.

7. Policy implication and suggestion for future research

One major implication of this paper is that it supports the argument that corporate entities stand to benefit from voluntary disclosures of CSR activities than mere engaging in CSR activities without proper channels of communicating to stakeholders. Hence, banks should not only engage in CSR activities, but also make deliberate efforts to disclose such activities appropriately to accrue certain financial benefits in the long run.

Presently, in Nigeria, CSR initiative is not mandatory for corporate entities, however firms should adopt voluntary CSR initiative as part of management strategy, which would give them good public image and create a sustainable operational environment for more business opportunities. Most especially, in the wake of civil unrest and infrastructural deplorability.

Although, this paper reported a negative impact of CSR investment on banks' financial performance, it does not suggest that firms' involvement in CSR activities is a waste of financial resources. The paper rather foresees future benefits (financial and non-financial), than immediate financial returns.

A certain number of constraints limited the scope of this paper. First, it was limited by the dearth of scholarly evidence on the impact of CSR activities on the financial performance of non-manufacturing firms in developing countries. Secondly, data availability limited the sample size, and observation period. This is quite peculiar to most developing countries, where the issues of data availability pose serious hindrances to empirical research.

This paper can be improved upon by expanding the scope and period of observation. Also, adopting other measures of financial performance may improve on the findings of the paper. Though, this paper reported a negative relationship between CSR and corporate financial performance; however, this result is limited to banks in Nigeria. Perhaps, research into other non-manufacturing industries may report different results.

Appendix A

See Table A1.

Table A1
List of registered banks in Nigeria.
Source: retrieved from CBN website on the 30th December, 2014
(http://www.cenbank.org)

S/N	Banks
1	Access Bank Plc
2	Citibank Nigeria Limited
3	Diamond Bank Plc
4	Ecobank Nigeria Plc
5	Enterprise Bank
6	Fidelity Bank Plc
7	First Bank of Nigeria Plc
8	First City Monument Bank Plc
9	Guaranty Trust Bank Plc
10	Heritage Banking Firm Ltd.
11	Keystone Bank
12	MainStreet Bank
13	Skye Bank Plc
14	Stanbic IBTC Bank Ltd.
15	Standard Chartered Bank Nigeria Ltd.
16	Sterling Bank Plc
17	Union Bank of Nigeria Plc
18	United Bank For Africa Plc
19	Unity Bank Plc
20	Wema Bank Plc
21	Zenith Bank Plc

Appendix B

See Table B1.

Table B1
Corporate social responsibility coding theme.
Sources: Guthrie and Parker (1989), Gray et al. (2001), Hamid and Atan, (2011), and Uadiale and Fagbemi (2012)

Community development/Performance	Human resource/Employee relations	Environmental management system
Donations to community groups and charitable bodies	Health and safety	General environmental considerations and statements
Sponsoring public health, sporting and recreational projects	Industrial relation	Environmental policy statement
Funding scholarship programs or activities	Employee training and conditions	Environmental education programs, awards and studies
Sponsoring national pride government sponsored project campaigns	Employee assistance, remuneration and benefits.	
Sponsoring communities programs and activities		

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