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Editorial

Dear Readers; welcome to the 2nd special issue of the African Accounting and Finance Journal!

The six papers in this special edition are among the top five papers that won the award of the call for research initiatives in Africa. The paper selection process was consistent with the Memorandum of Understanding (MOU) signed between African Accounting and Finance Association (AAFA) and Pan African Federation of Accountants (PAFA). Out of the five papers, the authors of the top three papers were sponsored to present their papers at the African Congress of Accountants (ACOA) in Morocco June 2019. Contemporaneously, the papers' authors were mentored in the production of papers to the current published standard by Professors: Venancio Taurigana, Teerooven Soobaroyen and Stephen K. Nkundabanyanga. The process was sponsored by World Bank Group.

The papers in this issue address pertinent issues of portfolio managers' inertia towards published information, sustainable development goals, IFRS/IPSAS adoption and disclosure/reporting quality. Looking ahead, research on accounting and finance in Africa is still in its infancy. What is known is patchy. Thus, in general, the African terrain, offers scholars a minefield of untapped research opportunities with regard to the nature and character of accounting and finance in Africa.

African Accounting and Finance Journal (AAFJ) is, of course, the official Journal of the African Accounting and Finance Association. Producing it is one of the main activities that the Association undertakes. All papers in this special issue, as in all other issues to come, (will) have in common that they investigate an aspect of accounting and finance – and one feature of accounting and finance is that it is a very wide and a very interdisciplinary field spanning (perhaps significantly) to economics and sustainable development. With that I leave you to read the papers, hoping that they will inspire you to read and act and to contribute to future editions.

Prof. Stephen K. Nkundabanyanga (Ph.D.)
Editor

Contents

Editorial Board	2
Acknowledgements	3
Editorial	4
Contents	5
Portfolio Managers' Inertia towards published information: The Case of Intermediation Companies on the West African Regional Stock Exchange.	6
Does Public Transparency and Accountability Impact Sustainable Development Goals? A Case Study of Selected African Countries.....	24
Culture, Legal origin and the Asymmetric Earnings timeliness before and after the adoption of IFRSs.....	53
Current reporting and relationship with integrated reporting for listed companies in Kenya: disclosure levels and company factors.....	71
Board Diversity and Financial Reporting quality of listed deposit money banks in Nigeria	101
International Public-Sector Accounting Standards adoption and implementation issues in Africa.....	119

Portfolio Managers' Inertia towards published information: The Case of Intermediation Companies on the West African Regional Stock Exchange.

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Abstract

Purpose: This paper investigates the portfolio managers' behavior in the Regional Stock Exchange (BRVM) of the West African Economic and Monetary Union (WAEMU).

Design/Methodology/Approach: This is field survey of a population of 22 intermediation companies (and responses obtained from 11 fund managers) using a questionnaire and Likert-scale type questions

Findings: The results show that companies listed on the Regional Stock Exchange do not communicate sufficiently. The results also identify two (2) major profiles (styles) in the behavior of portfolio managers working in intermediation companies: a lack of information from listed companies and an inertia of portfolio managers toward information disseminated on the market.

Implication: As part of their investment decision, a greater portion of the portfolio managers of the management and intermediation companies focus more on the publication of information as regards to the financial health and performance of the company publishing it, and pay less attention to the company's capacity for innovation and its mode of governance as well. They are relatively indifferent regarding the information based on the company's business sector and the performance of its stock market shares and its financial communication, but they favor it more than the information based on the capacity for innovation and the mode of governance.

Originality: The results are the first to offer a portrait of the behavior of portfolio managers in management and intermediation companies of the Regional Stock Exchange

Key words: Behaviors, information publishing, investor's profiles

Introduction

The opening up of companies to the stock markets allows for the mobilization of investment funds but, it requires the provision of all useful information to allow investors weigh the investment opportunities that are offered to them (Dumontier and Maghraoui, 2006). To this purpose, listed companies are therefore required by Regulators¹ to publish their financial statements and to inform the public about any new developments that are price-sensitive. However, most African countries in general and, particularly those of the Sub-Saharan countries have equipped themselves with stock markets of which their microstructures meet the set standards, such as developed stock markets in America and Europe but, each of these markets face many challenges, including the reliable information deficit. In fact, many studies highlight that some stock exchanges, such as Morocco's and Tunisia's, for example, are

¹ Financial market regulation organizations such as the Regional Stock Exchange of the West African, New York Stock Exchange

slowly adjusting to the publication of new information, as pointed out by Bakir (2002) and Trabelsi (2009) respectively. This means that investors do not react to the publication of information on these two stock exchanges. This lack of overreaction can be linked to the quality of the information published and/or the judgment that investors grant to the information. It seems in this regard that the Tunisian investor lacks confidence in the financial information reported by the publication of the accounting results (Houcine, 2014). With regards to the above, Dieng (2016) finds out on the Regional Stock Exchange a lack of information of publication on the market and the various listed companies, likewise his Tunisian counterpart despite his strong growth potential. This information deficit limits investors in their decision making. If the disposal of information is indispensable for the investor, then the information must be of a better quality. A quality financial information published improves investors' behavior (Bushman and Smith 2001, Houcine 2014). The quality of the information contained in the financial accounts has several attributes, including reliability, relevance, predictability, Francis et al (2005). Their imperfection may lead investors to a certain inertia or, as De Blic (2004) points out, to financial scandals. Nevertheless, the content of the financial accounts, including the accounting and audit professionals who have certified them, should not be blamed – given that the financial information users very often make misinterpretations. On the one hand, it is true that investors are able to interpret the content of financial accounts and to make complex calculations in order to make a good management decision, but they also face constraints that lead them to use shortcuts or rely on their emotions or intuitions, De Winne and D'Hondt (2017). On the other hand, Van der Bile (1994) emphasizes that the credibility of information on the stock market also depends on the seriousness with which the rules imposed by the Regulators are respected, the type of information available, their relevance and the requirements in terms of how the issuers communicate this information. This leads to the assumption that the disclosure of information, as well as the sincerity of the financial accounts and the way investors interpreted them play a crucial role in the good functioning of stock markets.

The question of the disclosure and use of information has been widely discussed in developed stock markets (Botosan and Forst, 2000; Bailey et al, 2003), Heflin et al, 2005; Francis et al, 2005; Cohen, 2006). But there are few studies which have dealt with the behavior of portfolio managers in the case of the Regional Stock Exchange (BRVM, now called Regional stock market) of the West African Economic and Monetary Union (WAEMU). From this point of view, it seems legitimate to question the behavior of the managers of securities portfolio within management and intermediation companies toward information disseminated on the Regional Stock Exchange. Hence, this paper has a dual purpose. First, it will theoretically study the behavior of portfolio managers in management and intermediation companies. Secondly, this paper will deduce the effects of this behavior in managerial ways. The article first presents a summary review of the literature (1) on the subject by recalling the bases of the information disclosure, its theoretical and managerial implications as well as some empirical results. The study methodology (2) and the results (3) are then presented. Finally, the article opens up a discussion (4) based on the results obtained and makes suggestions (5) to the professionals. In doing so, the paper contributes to the literature on the behavior of portfolio managers in the African and developing economies context.

1. Literature Review

After presenting the context in which stock markets in general and the Regional Stock Exchange in particular are, it seems important to us to take stock of

research on the issue of publishing of information and the theoretical contributions of its work. We do not pretend to be exhaustive because of the already existence of much work on the issue, but we will only explore the key points. The objective in this paragraph is to first recall the theoretical foundations of the disclosure of information (2.1) and then the results of empirical studies (2.2).

1.1. The theoretical foundations of information publishing

Disclosure of information, communication of information, or publication of information by listed companies comes from the signal theory - under the assumption that there are information gaps between company executives and investors. So, to reduce these information gaps, it is necessary to make public the financial accounts which are thought to reveal the fundamental value of the company. Most research shows that the disclosure of information has a significant impact on the trading costs of securities and, in turn, on their liquidity. For example, press media information has a positive informational impact on the qualitative variation in the price of securities, Boya (2009), on the liquidity of securities, Saada et al (2010), Beaupain and Joliet (2011). Opaque firms, that is, firms that communicate less, therefore attract less, as Bagehot (1971), Glosten and Milgrom (1985), Kyle (1985) point out. However, investors have bought stocks and they intend to make profits from them. In a context of information asymmetry, as pointed out by Myers and Majluf (1984), they will have difficulty judging the real value of assets in order to make good investments. Because of this difficulty of having reliable information, they most often resort to portfolio managers, who are supposed to have good quality information. The literature considers this practice as delegated management. This type of management has undeniable advantages but, theoretically and managerially, this management method poses a problem of organization - in which there may be a conflict of interest - since the interests of managers are not necessarily the same as those of investors, Bellando (2008), Le Quéré (2010). According to these authors, investors expect managers to maximize their investments - while managers seek to achieve maximum profit for themselves. From this point of view, the stakes in delegated management are significant and raise questions. First, one may wonder about the willingness of portfolio managers to use information disseminated on the market and to correctly anticipate their effects on the profitability of the stock they are managing. Secondly, one may wonder about the existence of information on the market that can be of interest to managers.

1.2. The results of prior empirical studies

Although the publication of financial accounts is legitimate and common occurrence for the company and benefit of its investors, the literature bemoans of the illicit practices relating to the content of the financial statements. Smaili et al (2009) summarizes the literature on non-standard and fraudulent financial information practices, their motivations and their consequences. These authors show that between 2002 and 2006 the Security Exchange Commission in the United States ordered 676 companies listed on the American stock exchange, and suspected of fraud, to correct their financial statements - reprocessed by accounting and auditing professionals. The motivations for this reprocessing are disparate. Srinivasan (2005) distinguishes three (3) types - including reprocessing made for the sole purpose of reducing the accounting results. As a result, this reprocessing has a negative impact on the price of securities, as highlighted by Callen et al (2006).

Studies that have examined the impact of the disclosure of information by listed companies have focused on the relationship with market liquidity, Healy et al

(1999), Botosan and Forst (2000), Bailey and al (2003), Heflin et al (2005), Francis et al (2005) Cohen (2008), Espinosa et al (2008), Gruning (2010) or informational asymmetries, Dumontier and Maghraoui (2006), Petersen and Plenborg (2006), Lakhali (2008), Sougné and Ajina (2010). On the Ghana Stock Exchange, Bokpin (2013) empirically studies the impact of financial disclosure and transparency. Using a multi-dimensional approach on 27 listed companies from 2003 to 2008, he indicates that disclosure and transparency can significantly reduce the asymmetry of information among all stakeholders. In this sense, Sougné and Ajina (2010) study the communication of information on information asymmetry on a sample of 196 listed companies in the SBF index 250, over a period from 2004 to 2007. Their results conclude that the disclosure of information in the annual reports, has a positive impact on the liquidity of the French market.

The application of the international standards of financial information (IFRS)² confirm this impact even more. This implies that companies that apply, for example, international standards such as IFRS, suffer less information asymmetry compared to those applying local standards, Jacquillat and Levasseur (1984). In theory, this phenomenon is due to the requirements of the standards of IFRS which contain more informative figures, Pourtier (2004), Dumontier and Maghraoui (2006). However, the communication of information is costly for the company that distributes it and for the investor who wishes to use it. This cost refers to the transaction costs (commission, fees, etc.) that an investor has to bear and can therefore lead them to a certain inertia. While disclosure of information is a condition of transparency, it can also hinder the liquidity of securities - as investors may be reluctant to reveal their trading intentions, Wuyts (2007). He shows that it is unlikely to have the same effect on all market participants - because some investors who are better informed than others prefer less transparency while liquidity investors prefer broader and more frequent instances communication.

2. Methodological approach

In order to identify behaviors, Shiller (1989) focused on signals, Serret (2002) focused on economic variables, and Aaron et al (2005) focused on how portfolio managers select their securities and on their frequencies of intervention on the market. The current research is inspired by the methodology of these authors using Likert's scale. The goal is to quantify information which was originally qualitative in order to eventually lead to a score. In order to select only reliable information, we first constructed a compilation of items based on lessons learned from the literature. These items have been grouped in the form of financial and non-financial variables. Each time a "subject" responds, we calculated their score by adding the points for each modality chosen - with the assumption that each item has the same weight. This enables us to conduct an analysis of the correlations between the scores of each item and the total score of all the subjects surveyed, based on the Principal Components Analysis (PCA). The advantage of this methodology is that it reveals the styles of portfolio managers by responding to a particular category of variables. Then, in order to perceive their feelings or perception of the market, we assumed that all managers are familiar with the items and questions that are administered to them. We did so with the intention of not dissuading them from answering if the questions are asked openly. We will resort to their proposal by giving them time to express their expectations to the market authorities. This method triangulation, or even the

² International Financial Reporting Standards enacted by the International Accounting Standards Board

redundancy of the collected qualitative and quantitative data, will contribute to improve the reliability or the internal coherence of the results.

2.1. The variables of selected analysis

Portfolio managers' attention to informational publishing may be one of the determining factors behind investment decisions, Demarchi and Thomas (1997). Table 1 shows the information variables in which portfolio managers may be interested in according to the literature. On the basis of the variables in Table 1, it is possible to discriminate among the styles of managers - insofar as the knowledge of a piece of information is considered as a signal and could, from this point of view, influence a portfolio manager to adopt such or such behavior - depending on the circumstances at hand. By focusing particularly on the process which leads them to decide, we can attempt to analyze their rationale and their styles on the stock market. This exercise is difficult and delicate because of the absence of an economic theory of styles or at least of behaviors.

Table1. The main communication variables

<i>Financial variables</i>	<i>Encoding</i>	<i>Non-financial variables</i>	<i>Encoding</i>
financial health	health_fin	area of activity	sect_activity
financial performance	perform_fin	innovation capacity	Capac_innova
performance of the price of one's securities	perform_act ^o	policy of distribution of stock dividend	pol_distri_divid
financial communication	comm_fin	type of its governance	mod_govern

However, from the literature we can select a multiplicity of styles that sometimes derive from the various behaviors of professionals, Aaron et al (2005). This diversity can be explained by the fact that portfolio managers who select stock market values do not necessarily judge the same market the same way, do not have the same information, nor the same level of risk tolerance - as is taught in the theory of portfolio management.

2.2. Descriptive analysis and data processing

Data are obtained from a field survey³. From August 15 to December 12, 2017 a questionnaire was given exclusively to the 22 intermediation management companies⁴ which are key players in the trading of securities held by the Regional Stock Exchange during this period. This questionnaire was used to indirectly collect information on their behavior in relation to the information that is disseminated on the market on the one hand, and to collect their opinions on the Regional Stock Exchange on the other hand. Some companies were not accessible for the survey. For these cases, the questionnaire was administered electronically. Subjects were asked to express their degree of "agreement" or "disagreement" on scale-type questions with modalities that vary on a scale increasing from 1 to 5, depending on the desired accuracy: "1. none"; "2. little"; "3. average"; "4. enough"; "5. high". From the responses provided, we

³ This survey was initially conducted as part of a doctoral research. The questions were grouped into three (3) parts. The first part of the questions (II.1) is about the stock market. The second (II.2) focuses on the bond market and the third (II.3) on the regional market clientele. Only a few answers extracted from the first part are used in this article, the others are kept for future dissemination.

⁴ Management and intermediation companies are a type of exclusively authorized financial institutions, to engage in listed securities trading on behalf of third parties. They are entitled to receive and hold public funds for this activity. All transfers on securities listed on the Regional Stock Exchange are carried out through these companies, except in case of derogation granted by the Regulator.

performed a factor analysis, notably the Principal Component Analysis (PCA). Among the factor analysis techniques, the PCA is very suitable in this case - given the category of data and the number of variables. Furthermore, the limited amount of data does not enable for further statistical analysis, but gives an opportunity for exploratory factual analysis such as ACP. Some studies have made use of the ACP and have yielded interesting results with a reduced size sample (N), N = 20 (Reichert et al, 2007), N = 15 (Marsat, 2006). In fact, the advantage of using the Principal Component Analysis (ACP) lies in its ability to represent individuals and variables in the same space. It remains a relevant method, if the individuals for whose similarity it claims to evaluate are similar or are actually close to each other and if the variables whose links it seeks to evaluate have a high correlation coefficient. At the time of the survey, the Regional Stock Exchange adds up to 22 active management and intermediation companies. Finally, on the total sample, we received responses from 11 managers, which equals a 50% response rate. This rate seems important and representative - as some similar studies have obtained a 15% response rate Michaïlesco (1999), 24% Serret (2002), 22% Aaron et al (2005), 20.65% Cauvin et al (2006) although we agree that they have submitted their questionnaires to larger number of respondents.

3. Results

The objective in this paragraph is to mainly present the results. This paragraph begins with the evaluation of the accuracy of the measuring tool (4.1) and then the profiles of portfolio managers in intermediation companies (4.2) as well as their expectations (4.3).

3.1. Reliability estimation

The reliability of the results depends not only on the rigor of a methodological approach but also on the metrological quality in terms of accuracy and validity of the measuring tool, as indicated by Fortin (1994). This author indicates, however, that there is no absolute validity but that it is necessary to make the choice of evaluation tools depending on the context in which we are and the goal we are seeking to meet. Validity can only be established if the measuring tools are accurate, Usunier et al (1993: 197). This means that accuracy is a necessary condition for validity. According to Churchill (1979), a valid scale is necessarily accurate, but the opposite is not true - explains Legardinier (2013). It is necessary to emphasize that accuracy corresponds to the degree to which the tool used constantly measures the phenomenon studied. Most often a coefficient (Cronbach's alpha) is determined to ensure that the statements are consistent, Carricano et al (2010, p.53). Some studies consider a scale fairly accurate if Cronbach's alpha is at least 0.8 to 0.9, Churchill (1979), Peter et al (1984). However, the statistical tests carried out indicate in our case that an alpha is 0.8205. This enables us to affirm that the items contained in Table 1 above, have a relationship with the attitude or behavior that we are studying.

3.2. The profile of portfolio managers

Before getting to the graphical representation, we will highlight the relationships between the variables we are studying. Table 2 shows the correlation matrix between the variables.

Table 2: Correlation matrix

| santefin performfin sectactivite performact capacinnova poldistribdiv modgouvern commfin

santefin	1.0000							
performfin	0.2406	1.0000						
sectactivite	0.5052	0.0833	1.0000					
performact	0.4787	0.5528	0.6219	1.0000				
capacinnova	0.3028	0.1656	0.4693	0.3663	1.0000			
polidistribdivi	0.3464	-0.1000	0.1750	0.0000	0.6515	1.0000		
modgouvern	0.3712	0.3540	0.4053	0.6489	0.7038	0.3130	1.0000	
commfin	0.7534	0.1603	0.6010	0.2278	0.5688	0.5632	0.2304	1.0000

We can see that the variable "performfin" (financial performance) and "polidistribdivi" (Policy of distribution of stock dividend) have a very low negative correlation compared to the others. Without questioning the internal⁵ coherence, we will leave out the two variables for the rest of the analysis, as shown in Table 3. Finally, we select the factors that render more the information according to Kaiser's criterion. The observation of the statistical results provided in Table 3 selects 6 factorial axes or components - ordered on the basis of their eigenvalues.

According to Table 3, the first factor accounts for 57.01% of the total variance and 18.25% for the second factor. This means that the first 2 factors alone account for 75.26% of the total variance. According to the Kaiser criterion, we must keep the components which each have a specific eigenvalue greater than 1. In these conditions we will only keep the first 2 factors which contribute more to the formation of the axes. Charts 1 and 2 place each variable (individuals) in space with respect to the principal components. Overall, all variables appear to be well represented, except for the variable "capacinnova" and "sectactivity" (innovation capacity and area of activity).

The variables that contribute more to the formation of an (component) axis are those that have positive coordinates close to 1 on this axis. The root of the average contribution is 40.82% (1/6), that is, $(1/\sqrt{6})$. From this point of view, the variable "sectactivity" (area of activity) is that which participates in the formation of component 1 and possibly (santefin, capacinnova and commfin, ie financial health, innovation capacity and financial communication) which are close to the average contribution. It seems interesting to observe no negative contribution of variables as shown in Table 4 - while in Component 2, the variable that participates more in its training is "modgovern" (governance mode) and possibly (healthfin and commfin, ie, financial health and financial communication) which contribute negatively. This means that the two components contrast fund managers of the intermediation companies of the Regional Exchange who use non-financial information (governance mode) to those using financial information (financial health and financial communication).

Table 3. Principal components/covariance

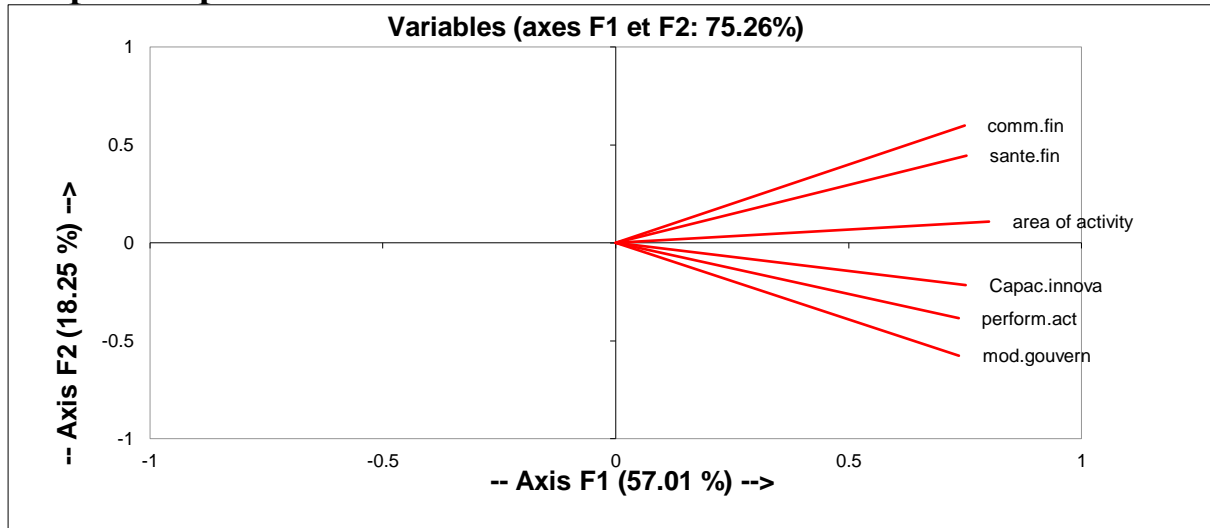
Number of obs.	=	11
Number of comp.	=	2
Trace	=	6
Rotation: (unrotated = principal)	Rho	= 0.7526

Component Cumulative	Eigenvalue	Difference	Proportion
Comp1 0.5701	3.42071	2.32572	0.5701
Comp2 0.7526	1.09498	.314138	0.1825
Comp3 0.8828	.780846	.281346	0.1301

⁵ Alpha de cronbach always greater than 6. In fact, with 8 variables this coefficient is 0.8205 and 0.8156 when we go down to 6 variables.

Comp4		.499499	.344824	0.0832
0.9660				
Comp5		.154676	.105387	0.0258
0.9918				
Comp6		.0492886	.	0.0082
1.0000				

Graph 1. Representation of the variables



Graph 2. Representation of individuals

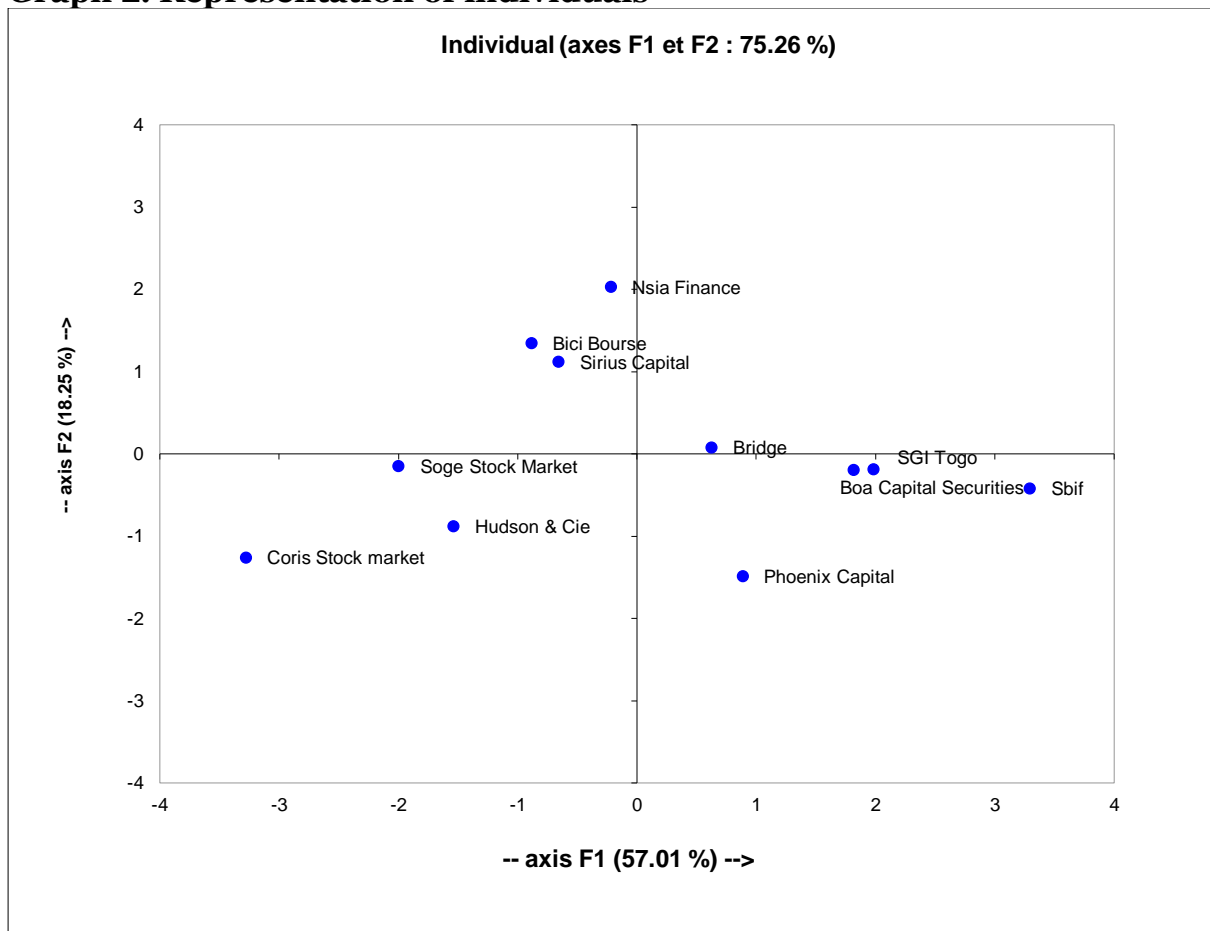
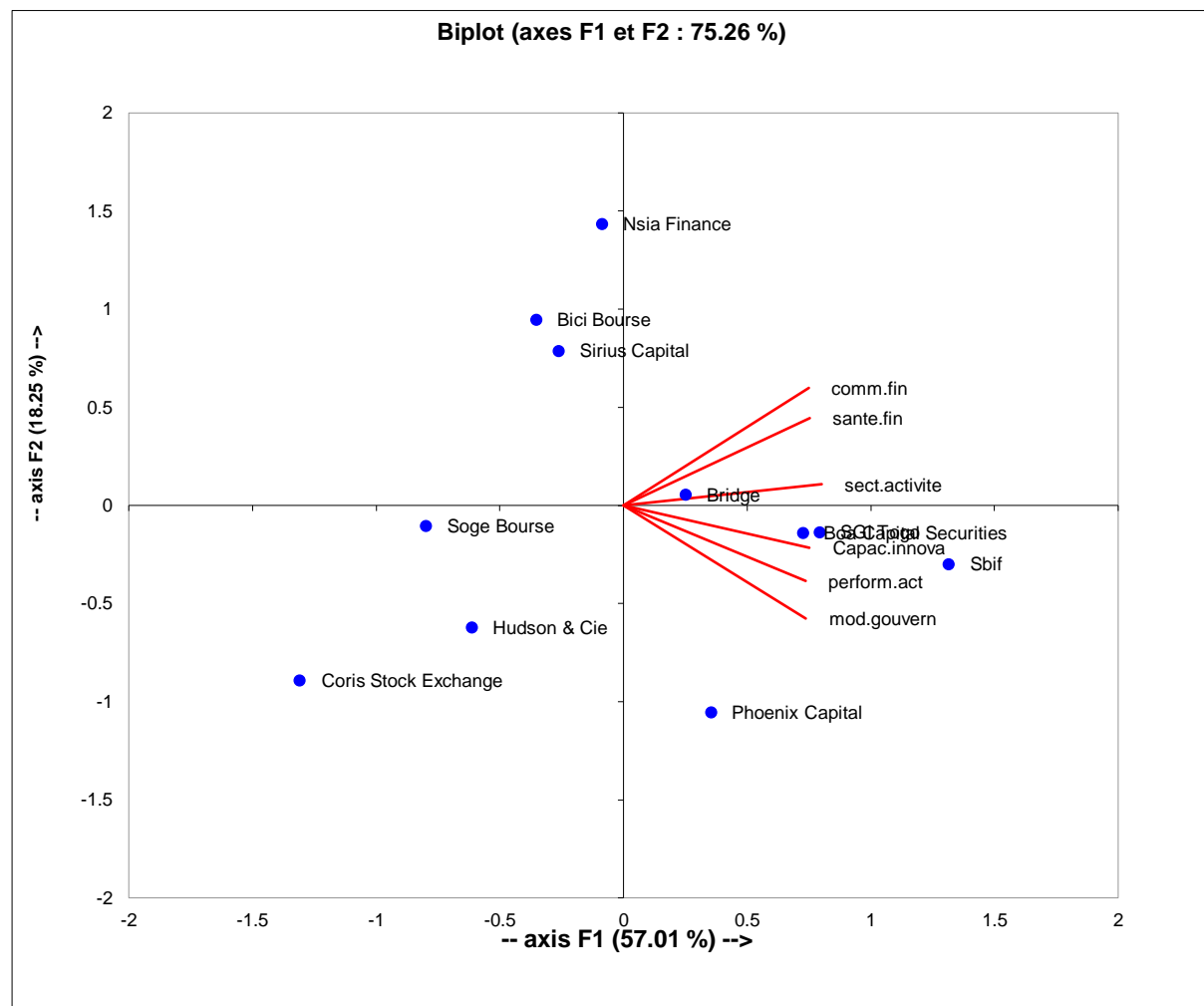


Table 4. Principal components

Variable Unexplained	Comp1	Comp2	
healthfin	0.4072	-0.4250	
.2351			
sectactivite	0.4333	-0.1034	
.346			
performact	0.3982	0.3677	
.3095			
capacinnova	0.4062	0.2064	
.3889			
modgovern	0.3984	0.5509	
.1248			
commfin	0.4051	-0.5722	
.08003			

We notice that managers have heterogeneous behaviors. Graph 3 allows us to visualize at the same time this heterogeneous behavior between managers because of their scattering in graph 3, and to identify their profiles.

Graph 3. The profile of portfolio managers on the Regional stock exchange.

The scattering of managers of intermediation companies along with their distance from the informational variables observed in Chart 3 is a sign of a variety of

styles. This result is in line with the main conclusions of similar studies (Aaron et al 2005), especially on the multiplicity of styles.

The distribution analysis of the total score (353) obtained reveals furthermore that the information content of the variables that have been studied (items) does not have the same importance for all the portfolio managers as part of their investment decision. In fact, the portfolio managers of management and intermediation companies on the West African Regional Stock Exchange pay a closer attention to the publication of information as related to health (52 out of 353) and financial performance (53) of the company publishing it and grant less importance to its capacity for innovation (32) as well as its mode of governance (37). They are relatively indifferent regarding the information based on the company's business sector (45) and the performance stock market share (44), and its financial communication (48), but they favor it more than the information based on the capacity for innovation and the mode of governance.

3.3. The expectation of the managers of intermediation companies

Without relying on the previous results based on a quantitative processing of item data, we will now look at the views of managers of intermediation companies. The goal of such an approach is twofold. First, because of the sample size, and secondly, due to the survey bias. On the one hand, the goal is to uncover other factors that we have not identified and that could contribute to the explanation of their behaviors regarding the allocation of the funds they manage. On the other hand, the objective is to avoid that the subjects provide wrong answers, as for Michelat (1975) to whom, the recourse to the free choice makes it possible to overcome certain constraints of the questionnaire surveys which generally ask for close-ended questions. In this perspective, we have chosen to give managers time to express themselves on the following question: «*What are your specific expectations vis-à-vis the authorities of the Regional Stock Exchange?* ». The answer to such a question, is likely to lead to any direction. But it should be highlighted that, in general, what is outside the field of study is often of a paramount importance, Raymond (1968). From this standpoint and beyond the objectives mentioned above, the issue related to managers' expectations can be of a great benefit. We agree that the exploitation of such qualitative remarks is very delicate, in the sense that the exact transcription is not obvious. Nevertheless, to avoid and mitigate this bias, we have included in the questionnaire a reserved space for comments. Without doubt, this rigor helps to treat the content of the speeches without being mistaken. The comments' analysis goes in all directions but matches up. The results are presented in Table 5 in the form of a matrix that faithfully repeats the words in the lines and the variables observed in the columns - under the mark of a distinctive sign (x). The analysis of the content of the words of managers as they appear in Table 5 enables us to select 5 variables which characterize the market. Out of seven (7) comments, we have noted the lack of communication from listed companies (cited 5 times); the quality of the information that is disseminated (twice); lack of stock exchange culture (once); the non-compliance with the regulations (3 times) and the creation of a section dedicated to small and medium-sized companies (once). As shown, the lack of dissemination of information is more predominant in the words of the managers of management and intermediation companies.

Table 5. Matrix of the expectations, opinions and perception of managers

	lack of communication	quality of the information	absence of stock exchange culture	non-compliance with regulations by listed companies	new section for SMEs
The creation of a section dedicated to small and medium size companies					X
Work to improve the quality of information provided by the issuers	X	X			
A flowing communication of tools that take into account the lack of market culture of the WAEMU population	X	X	X	X	
Publish the results of listed companies within three months after the closure of each financial year	X			X	
Require listed companies to comply with market regulations				X	
Publish financial statements within the deadline	X				
Communicate more on the evolution of the activities of listed companies	X				

4. Discussions on the results

The objective in this paragraph is to discuss results – while highlighting the need for information (5.1) the styles of portfolio managers within management and intermediary companies (5.2).

4.1. The need for financial and non-financial information

All observations show that companies listed on the Regional Stock Exchange communicate less on the market. These facts undoubtedly reflect a presence of information asymmetry between companies and portfolio managers. As a result, this significantly reduces transactions, thus reducing the liquidity of the market, Myers and Majluf (1984). Yet, as pointed out by Depoers (2000), the dissemination of information by listed companies is essential not only for themselves – because it improves their accounting reputation – but, also for investors because it allows them to assess risk along with investment opportunities. According to Bushee and Noe (2000), companies that communicate more attract more investors. Without information, it will be difficult for a manager to anticipate the future. In such a context, everyone will have to build their own vision of the future, as pointed out by Bourghelle and Hyme (2010). This situation may create, on the one hand, a climate of suspicion between portfolio managers and the Regional Stock Exchange through the securities it lists, and on the other hand, promote a lasting conservation of securities by those who hold them. Thus, securities will become scarce over time and cause a scarcity of liquidity of the market. Under these conditions, market orders are likely to not find buyers immediately - due to the lack of regular listing of securities. The choice of the political authorities of the OHADA (Organization for the Harmonization of Business Law in Africa) space and that of the authorities of the Regional Stock Exchange to require listed companies to establish and present financial statements respectively according to IFRS, and to establish the summary of financial statements and the

decision of allocation of the result, are efforts to reduce the asymmetry of information, but these alone aren't enough. It is still necessary that these financial statements be sincere and faithful. However, through the words of portfolio managers in management and intermediation companies, we have noted that the quality of information provided on the market is called to question. This leads us to think that financial statements are the only ones that bear the blame—given that they are the only ones the regulator requires to be published. Nevertheless, it would be a mistake to think that just disseminating a given quantity of information and making it available to investors, is likely to attract them regularly on the market. Too much information flow can alter the investor's choices due to the dissonance in the information processing. As a result, this situation may make them decide to preserve their securities for a long time, Séjourné (2007). This means that both the investor and the portfolio managers need information, but that too much information flow can sometimes lead to unsatisfactory results.

4.2. The styles of portfolio managers

Charts 1 and 2, highlighted above, provide insights into the profile of managers and allow us to observe managers with exceptional styles. Indeed, we can observe 2 major profiles (styles). The first managers who are the least numerous (3), are mainly motivated by informational factors which are both financial and non-financial. On the other hand, the second type of managers are totally different from the first ones and are looking for personal information. The latter are the most numerous (8). Obviously, the former place great importance on the business sector to which the company belongs as well as its capacity for innovation and, to a lesser extent, the performance of its stock - whereas the latter rarely use the information. Our results seem to contrast with the results of the survey conducted by Demarchi and Thomas (1997) among the largest managers of French stock market, where nearly 80% of the managers surveyed pointed out that information is at the center of the factors which motivate their decision to invest. This does not mean that the informational need is called into question in the specific case of the behavior of managers of intermediation companies on the Regional Stock Exchange. The lack of information that emerges from their comments undoubtedly helps to explain their inertia. Indeed, taking this factor (the lack of information) into account could cause them to remain insensitive towards information that is disseminated on the market or to rely primarily on their own private information to intervene into the stock market. We can thus deduce from this inertia, that the dominant strategy in the context of delegated management of funds to managers within management and intermediation companies of the Regional Stock Exchange, moves toward a passive management strategy rather than toward an active management strategy. The disadvantage when passive management is more practiced as a management strategy is that it makes securities unavailable at a given moment. Each shareholder prefers to wait ("buy and hold"). Some empirical results such as those of Gallais-Homonno and Arbulo (1995) tend to show that the longer the investor is willing to wait, the more he/she is rewarded with much higher earnings. This period of holding can last more than 4 years on average according to Séjourné (2007). When such behavior occurs and is perpetuated, the immediate impact is undoubtedly on the liquidity of the market because of the scarcity of securities it implies or creates.

5. Implications and contribution of the research

The previous discussions provide contributions to the existing literature - especially the behavior of portfolio managers in management and intermediation companies. The purpose of this paragraph is therefore to highlight these scientific

and practical implications (5.1) and to make recommendations for professionals (5.2).

5.1. Implications of the research

Our results are the first to offer a portrait of the behavior of portfolio managers in management and intermediation companies of the Regional Stock Exchange. From this point of view, this research provides explanations that will be of interest to all the shareholders of the Regional Stock Exchange and to any natural or legal person who is directly or indirectly interested in the stock market. On the one hand, our results make it possible to meet the needs of market authorities as Regulators and, on the other hand, of management and intermediation companies as securities portfolio managers. Beyond the Regional Stock market, the results of this work could also be of interest to other actors of stock exchange which are similar to the Regional Stock Exchange and to accounting and auditing professionals.

5.2. Recommendations for professionals

The dissemination of information, whether financial or not, imposed by the Regulator or made on a voluntary basis, helps to improve the image of the company. Although the Regulator imposed that listed companies communicate a certain amount of information, the regulations do not constitute a means of pressure in the first place, but for the sole purpose of allowing the company to communicate with its financial partners. It should be understood that the Regulator, by this requirement, attempts to stabilize the powers of a particular stakeholder, which could have a negative impact - either against the company itself - or against its partners. The obligation to make public certain information such as financial statements is one of the rules of this requirement, Micchalesco (1999). Penman (1980) maintains that companies with poor prospects avoid communicating - while companies with good prospects communicate more. From this point of view, not communicating can be interpreted as an unfavorable signal in the eyes of investors. Under these conditions, the legitimacy of the dissemination of information becomes advantageous, and even necessary for listed companies. It is therefore important that listed companies communicate more to gain their partners' trust, notably investors in general and portfolio managers in a particular way. This form of communication can be done through a voluntary offer of communication, either via a channel of the stock exchange or via any other media - such as the written or visual press, or the participation in communication events days organized by market participants. The use of websites is also of great contribution in terms of visibility that can be strongly encouraged. Numerous works, such as those of Cauvin et al (2006) for example, highlight a number of informational factors that the company can emphasize in its communication strategy. Among these factors, we can cite the dividend distribution policy, its share in the market compared to its competitors, its commitment to environmental standards, its CSR (Company Social Responsibility) policy, its innovation policies and its commitment to research and to development.

Voluntarily communicating information is beneficial not only to listed companies but also to investors - because it constitutes an alternative mechanism for reducing information asymmetry. The need for information is certainly crucial in the specific case of the Regional Stock Exchange, but the abundance of information often causes a cognitive dissonance as mentioned above. Too much information can alter investors' vision and lead to investment illusions. Portfolio managers and investors therefore need to be cautious in the handling of information. However, one needs to have the right information to be able to make wise allocation choices in order to hope

for better gains. It is sure that most often this leads the individual investor to an arbitration that is not easy because of the diversity of the information that is presented to him, but a simple familiarization with the basic rules of portfolio management can help them in this situation - or simply asking for the help of management and intermediation companies which can serve as a point of reference.

It should also be noted that investors are concerned by the inherent risk in their investments and therefore need to get information about the prospects and commitments made by the managers of the company. As pointed out by Dumontier & Maghraoui (2006) and Cormier et al (2012), the application of IFRS produces more informative accounting and financial figures than those resulting from the application of local standards at European level. Compliance with the provisions of the financial reporting standards and the obligations concerning the permanent dissemination of information imposed by the accounting standards and the regulations governing the functioning of the Regional market is incumbent upon the accounting and auditing professionals - because the accounting documents they certify are of major interest to investors. These investors are very sensitive to the financial aspects as well as to the economic aspects⁶. It should be noted that financial statements have not yet lost their usefulness despite the growth of financial analysts and rating agencies, Francis et al (2002). However, the informative content of accounting figures depends on their informational added value and the credibility with which these figures have been prepared by professionals. Accounting and audit professionals are therefore invited to pay attention to these important facts. Their role must not only be subordinated to the certification of financial accounts, but also to advise companies subject to the publication of information within the required deadlines - in order to balance the powers between company executives and stock investors.

Conclusion

The purpose of this paper was to study the behavior of managers in management and intermediation companies of the Regional Stock Exchange towards information that is disseminated on the market. The results mainly display two major lessons. First, it is about the lack of information from companies and second, the inertia of portfolio managers towards the information that is disseminated in the market. However, as part of their investment decision, a larger portion of the portfolio managers of the management and intermediation companies focus more attention on the publication of information regarding the health and financial performance of the investment of the company publishing it and give less importance to its capacity for innovation as well as its mode of governance. They are relatively indifferent regarding the information based on the company's business sector and the performance of its shares on the stock market as well as its financial communication, but they favor it more than the information based on the capacity for innovation and the mode of governance. Most of them make use of information of their own (private information) - despite the publication of financial accounts (public information). This attitude allows them to make abnormal profits - as long as everyone has different information than what the other has. All these lessons suggest two (2) implications. First, the lack of information can lead managers of management and intermediation companies to influence the behavior of investors to hold their securities for long periods of time. On the one hand, this will inevitably lead to a reduction of the depth and liquidity of the market due to the scarcity of securities on the market that this situation entails - on the other hand, it will lead to an informational asymmetry and high transaction costs.

⁶ Uniform Act on accounting law and financial information and the OHADA accounting system p.73

Therefore, an investor will have difficulty finding immediate buyers. Second, the rate of managers who are willing to use the information remains low, only 3 out of 11 use it. This is probably due to the delays in the publication of financial statements, the quality and reliability of the information they contain. Rating agencies and accounting and audit professionals - must be very strict regarding these key points. These lessons and implications constitute a rich contribution to this paper but, it would be useful to include, in future analysis, the behavior of all the (and a much larger sample of) actors in order to better understand and identify their styles or profiles and their attitudes towards the stock market.

References

- Aaron, C., Bilon, I., Galanti, S., & Tadjeddine, Y. (2005). Les styles des gérants d'OPCVM actions françaises en 2003. *Revue d'économie financière*, No. 81, pp. 171-188;
- Admati, A. R. (1985). A noisy rational expectations equilibrium for multi-asset securities markets. *Econometrica: Journal of the Econometric Society*, Vol. 53, No. 3, pp. 629-658;
- Bagehot, W. (1971). The only game in town. *Financial Analysts Journal*, Vol. 27, No. 2, pp. 12-14;
- Bailey, W., Li, H., Mao, C. X., & Zhong, R. (2003). Regulation fair disclosure and earnings information: Market, analyst, and corporate responses. *The Journal of Finance*, Vol. 58, No. 6, pp. 2487-2514 ;
- Bakir, K. (2002). L'efficacité des marchés financiers des pays émergents : l'exemple de la bourse de Casablanca. ANRT, Université Pierre Mendès France (Grenoble II)
- Beaupain, R., & Joliet, R. (2011). Corporate drivers of market liquidity on the Warsaw stock exchange. *Economie internationale*, Vol. 1, No. 125, pp. 83-104 ;
- Bellando, R. (2008). Le conflit d'agence dans la gestion déléguée de portefeuille : une revue de littérature. *Revue d'économie politique*, Vol. 118, No. 3, pp. 317-339 ;
- Bielecki, T. R., Chancelier, J. P., Pliska, S. R., & Sulem, A. (2004). Risk-sensitive portfolio optimization with transaction costs. *Journal of computational Finance*, Vol. 8, pp. 39-64;
- Bokpin, G. A. (2013). Corporate disclosure, transparency and stock liquidity: Empirical estimation from the Ghana Stock Exchange. *African Journal of Business Management*, Vol. 7, No. 22, pp. 2143-2150;
- Botosan C., Frost C. (2000), « Regulation, Disclosure and Market Liquidity », Working paper, Washington University and Dartmouth College
- Bourghelle, D., & Hyme, P. (2010). Du mythe de l'efficacité des marchés au krach. L'illusion de la liquidité boursière. *Revue de la régulation. Capitalisme, institutions, pouvoirs*, No.8 ;
- Boya, C. (2009). Analyse des informations exogènes secondaires et mesure d'impact sur le marché action. *Revue internationale d'intelligence économique*, Vol. 1, No. 2, pp. 237-253;
- Brown, K. C., Harlow, W. V., & Starks, L. T. (1996). Of tournaments and temptations: An analysis of managerial incentives in the mutual fund industry. *The Journal of Finance*, Vol. 51, No. 1, pp. 85-110;
- Bushee, B. J., & Noe, C. F. (2000). Corporate disclosure practices, institutional investors, and stock return volatility. *Journal of accounting research*, pp. 171-202;
- Bushman, R., & Smith, A. (2001). Financial accounting information and corporate governance. *Journal of Accounting and Economics*, 31: 237-333.

- Callen, J. L., Livnat, J., & Segal, D. (2005). Accounting restatements: Are they always bad news for investors?
- Carricano, M., Poujol, F., & Bertrandias, L. (2010). Analyse de données avec SPSS ; Pearson Education France, 216 p ;
- Cauvin, É., Good, C. D., & Bescos, P. L. (2006). La perception des entreprises françaises en matière de diffusion d'informations non financières : une enquête par questionnaire. *Comptabilité-Contrôle-Audit*, Vol. 12, No. 2, pp. 117-142 ;
- Chevalier, J., & Ellison, G. (1997). Risk taking by mutual funds as a response to incentives. *Journal of Political Economy*, Vol. 105, No. 6, pp. 1167-1200;
- Christensen, H.B., Lee, E., Walker, M. (2009). Do IFRS reconciliations convey information? The effect of debt contracting. *Journal of Accounting Research*, Vol. 47, No. 5, pp. 1167-1199;
- Cohen D. (2006). Does information risk really matter? An analysis of the determinants and economic consequences of financial reporting quality, working paper, North-western University,
- Cormier, D., Demaria, S., Lapointe-Antunes P. (2012). La valorisation boursière des états financiers des sociétés françaises : pertinence du référentiel IFRS, *Comptabilité - Contrôle – Audit*, Vol. 2, (Tome 18), pp. 99-124 ;
- De Blic, D. (2004). La comptabilité à l'épreuve du scandale financier, *Comptabilité-contrôle-audit*, Vol. 10, No. 3, pp. 7-27 ;
- Demarchi, M., & Thomas, S. (1997). Actions françaises : interactions entre la gestion de portefeuille et la négociation en bourse. *Revue d'économie financière*, pp. 107-121 ;
- Depoers, F. (2000). L'offre volontaire d'information des sociétés cotées : concept et mesure. *Comptabilité Contrôle Audit*, Vol. 6, No. 2, pp. 115-131 ;
- Dieng, M. (2016). La Contribution de la bourse Régionale de Valeurs Mobilières (BRVM) à la croissance économique de l'Union Economique et Monétaire Ouest Africaine (UEMOA). *Revue d'Economie Théorique et Appliquée ISSN*, 1840, 7277 ;
- Dumontier, P., & Maghraoui, R. (2006). Adoption volontaire des IFRS, asymétrie d'information et fourchettes de prix : l'impact du contexte informationnel. *Comptabilité-Contrôle-Audit*, Vol. 12, No. 2, pp. 27-47 ;
- Espinosa M., Tapia M., Trombetta M. (2008). Disclosure and Liquidity in a Driven by Orders Market: Empirical Evidence from Panel Data. *Investigaciones Económicas*, Vol. 32. No. 3, pp. 339-370;
- Francis J., K. Schipper et L. Vincent (2002). Earnings Announcements and Competing Information, *Journal of Accounting and Economics*, Vol. 33, No. 3, pp. 313-342;
- Francis, J., LaFond, R., Olsson, P., & Schipper, K. (2005). The market pricing of accruals quality, *Journal of accounting and economics*, Vol. 39, No. 2, pp. 295-327;
- Francis, J., LaFond, R., Olsson, P.M., & Schipper, K. (2004). Cost of equity and earnings attributes, *The Accounting Review*, Vol. 79, No. 4, pp. 967-1010;
- Gallais-Hamonno, G., & Arbulu, P. (1995). La rentabilité réelle des actifs boursiers de 1950 à 1992, *Économie et statistique*, Vol. 281, No. 1, pp. 3-30 ;
- Glosten, L. R., & Milgrom, P. R. (1985). Bid, ask and transaction prices in a specialist market with heterogeneously informed traders, *Journal of financial economics*, Vol. 14, No. 1, pp. 71-100;
- Grossman, S. J., & Stiglitz, J. E. (1976). Information and competitive price systems, *The American Economic Review*, Vol. 66, No. 2, pp. 246-253;
- Grüning, M. (2011). Capital market implications of corporate disclosure: German evidence, *Business Research*, Vol. 4, No. 1, pp. 48-72;

- Healy, P. M., Hutton, A. P., & Palepu, K. G. (1999). Stock performance and intermediation changes surrounding sustained increases in disclosure, *Contemporary accounting research*, Vol. 16, No. 3, pp. 485-520;
- Heflin, F., & Shaw, K. W. (2000). Blockholder ownership and market liquidity, *Journal of Financial and Quantitative Analysis*, Vol. 35, No. 4, pp. 621-633;
- Houcine, A. (2014). Qualité de l'information financière et comportement d'investissement : Cas des entreprises tunisiennes cotées. *La Revue Gestion et Organisation*, Vol. 2, No. 6, pp. 104-116 ;
- Kyle, A. S. (1985). Continuous auctions and insider trading. *Econometrica: Journal of the Econometric Society*, Vol. 53, No. 6 pp. 1315-1335;
- Lakhal, F. (2006). Les mécanismes de gouvernement d'entreprise et la publication volontaire des résultats en France, *Comptabilité-Contrôle-Audit*, Vol. 12, No. 2, pp. 69-92 ;
- Lakonishok, J., Shleifer, A., & Vishny, R. W. (1992). The impact of institutional trading on stock prices. *Journal of financial economics*, Vol. 32, No. 1, pp. 23-43 ;
- Le Quéré, F. (2010). L'habillage de portefeuille par les gérants de fonds dans la littérature : incitations, effets et risques. *Revue d'économie financière, Regards sur la crise financière*, No. 97 pp. 275-293,
- Lefrancq, S. (2009). La comptabilité, la communication financière et la fraude : quelques éléments d'analyse du cas de la Société Générale, *Comptabilité - Contrôle – Audit*, Vol. 2, (Tome 15), pp. 37-59 ;
- Legardinier, A. (2013). Comment limiter les biais liés au choix des échelles de mesure dans les études marketing ? (No. dumas-00933905). ;
- Marsat, S. (2006). Approches de la genèse des comportements mimétiques sur le marché des actions (Doctoral dissertation, Université d'Auvergne-Clermont-Ferrand I) ;
- Michaïlesco, C. (1999). Une étude empirique des déterminants de la qualité de l'information diffusée par les entreprises françaises au cours de la période 1991-1995, *Comptabilité-Contrôle-Audit*, Vol. 5, No. 1, pp. 83-108 ;
- Michelat, G. (1975). Sur l'utilisation de l'entretien non directif en sociologie, *Revue française de sociologie*, Vol. 16, No. 2, pp. 229-247 ;
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have, *Journal of financial economics*, Vol. 13, No. 2, pp. 187-221;
- Penman, S. H. (1980). An empirical investigation of the voluntary disclosure of corporate earnings forecasts, *Journal of accounting research*, pp. 132-160;
- Petersen, C., & Plenborg, T. (2006). Voluntary disclosure and information asymmetry in Denmark, *Journal of International Accounting, Auditing and Taxation*, Vol. 15, No. 2, pp. 127-149;
- Pourtier, F. (2004). La publication d'informations financières volontaires : synthèse et discussions, *Comptabilité-Contrôle-Audit*, Vol. 10, No. 1, pp. 79-102 ;
- Pourtier, F. (2004). La publication d'informations financières volontaires : synthèse et discussions, *Comptabilité - Contrôle – Audit*, Vol. 1, (Tome 10), pp. 79-102 ;
- Raymond, H. (1968). Analyse de contenu et entretien non directif : application au symbolisme de l'habitat, *Revue française de sociologie*, Vol. 9, No. 2, pp. 167-179;
- Reicherts, M., Casellini, D., Duc, F., & Genoud, P. A. (2007, September). L'Ouverture émotionnelle dans les Troubles de la dépendance et les Troubles de la personnalité. In *Annales Médico-psychologiques, revue psychiatrique*, Vol. 165, No. 7, pp. 485-491 ;

- Séjourné, B. (2007). Comment les épargnants français intègrent-ils le paramètre temps dans la gestion de leur portefeuille ? *Les Cahiers scientifiques de l'AMF*, 4 ;
- Serret, V. (2002). Processus de gestion des O. P. C. V. M. actions et efficience des marchés financiers ;
- Shiller, R. J., & Pound, J. (1989). Survey evidence on diffusion of interest and information among investors, *Journal of Economic Behavior & Organization*, Vol. 12, No. 1, pp. 47-66;
- Smaili, N., Labelle, R., & Stolowy, H. (2009). La publication d'une information financière non conforme à la loi et aux normes : déterminants et conséquences, *Comptabilité-Contrôle-Audit*, Vol. 15, No. 1, pp. 159-198 ;
- Sougné, D., & Ajina, A. (2010). L'impact de la communication financière sur l'asymétrie d'informations et la liquidité des entreprises françaises cotées ;
- Srinivasan, S. (2005). Consequences of financial reporting failure for outside directors: Evidence from accounting restatements and audit committee members, *Journal of Accounting Research*, Vol. 43, No. 2, pp. 291-334;
- Thaler A. et C. Sunstein, 2009, "Nudge: Improving Decisions About Health, Wealth, and Happiness", Penguin Books;
- Trabelsi, M. A. (2009). Sur-réaction sur le marché tunisien des actions : une investigation empirique, *La Revue des Sciences de Gestion*, Vol. 2, No. 236, pp. 51-58 ;
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *science*, Vol. 185, No. 4157, pp. 1124-1131;
- Van der Bile, R. (1994). Environnement de réglementation sur les marchés émergents, *Revue d'économie financière*, No. 29, pp. 41-57 ;
- Verrecchia, R. E. (1990). Endogenous proprietary costs through firm interdependence, *Journal of accounting and economics*, Vol. 12, No. 1/3, pp. 245-250;
- Welker, M. (1995). Disclosure policy, information asymmetry, and liquidity in equity markets, *Contemporary accounting research*, Vol. 11, No. 2, pp. 801-827;
- Wuyts, G. (2007). Stock market liquidity: Determinants and implications, *Review of Business and Economics*, Vol. 52, No. 2, pp. 279-316.

Does Public Transparency and Accountability Impact Sustainable Development Goals? A Case Study of Selected African Countries

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Abstract

Purpose: This study examines the impact of public transparency and accountability on Sustainable Development Goals (SDG) of selected African countries for the period from 2016 to 2017.

Design/methodology/approach: The study adopts hierarchical regression method to determine the impact of public transparency and accountability on SDG performance in Africa. The study examined ten (10) African countries selected randomly from each of the different geographical zones. Two countries from each geographical zones; Nigeria and Ghana from West Africa region, Cameroon and Gabon from Central Africa region, Kenya and Uganda from East Africa region, Egypt and Morocco from North Africa region, South Africa and Zambia from the South African region. SDG was the dependent variable, measured through Sustainable Development Goal Index (SDGI) while independent variables which are public transparency and accountability were measured using Corruption Perception Index (CPI) and Accountability Index (AI) while the study controlled for other variables.

Findings: The empirical evidence presents mixed results, the finding shows that public transparency (CPI) is positively and significantly related with SDG performance while accountability (AI) presents a negative and insignificantly relationship with SDG performance for selected African countries. Also, the findings reveal that other variables such as global competitiveness index (GCI), global peace index (GPI), human development index (HDI) present a negative and insignificant relationship with SDG performance while world governance index (WGI) and environmental performance index (EPI) reveals a positive and significant relationship with SDG performance. The findings also observed that the inclusion of the control variables increased the adjusted r^2 from 51% to 62%.

Practical Implications: This study's findings call for improved public transparency, strong institutional framework, improved advocacy for good governance, holding both private and public institutions accountable for their actions.

Research Limitation: The study was limited by sample size which resulted in only 20 observations. It also suffers from the limitation of robustness in the empirical result. However, it sets the tone for future empirical research on the subject matter.

Originality/value: To the best of the authors' knowledge, this is the first empirical study that examined public transparency and accountability within the context of achieving SDG in Africa. The study, therefore, contributes to growing literature in the area of accounting, accountability, and SDG research in Africa.

Keywords: African Countries; Accountability; Governance; Public Transparency; Sustainable Development Goals

1. Introduction

Reference to public transparency and accountability has become obligatory in critical accounting research. In recent times, especially the last three decades, advocates from various interest groups such as civil societies, regulators, international organization, non-governmental organization (NGO) and environmentalists have demanded

increased public transparency and accountability from African leaders (Lydenberg, Roger & Wood, 2010). These interest groups have pressurized Africa's public officers to show commitment to public transparency due to the high level of corruption, gross under-development, poverty, social injustice and inequality that have been experienced over the decades. African Progress Report (2017) estimated that 138 million households live on less than US\$2.50 a day. The report presents a worrisome and ugly picture for the future of Africa. The Rio Earth summit of 1992 and 2002 drew the attention of African leaders on the need to develop the environment and consequently connect the economic, social and environmental issues into an integrated development process known as Sustainable Development Goals (SDG) (Uram, Ozer & Acheampong, 2014; Spence & Rinaldi, 2014). Therefore, public transparency and accountability serve as a link to the actualization of SDG.

In September 2015, about 193 countries of the United Nations member met to adopt the seventeen (17) new SDG to tackle climate change, end social injustice, solve inequalities and end poverty among others by the year 2030; and make the world more prosperous, sustainable and inclusive. These new SDG were built on the former Millennium Development Goals (MDG). In order to ensure countries show commitment to SDG target, countries are now rated on sustainable development matters through the Sustainable Development Goal Index (SDGI). This index objectively evaluates individual country compared to other countries on the issue of sustainable development progress. It is critical therefore for countries to take the issue of public transparency and accountability serious in order to achieve sustainable development goals in no distant time. The report of Global Reporting Initiatives (GRI) (2010) identified public transparency and accountability as a public disclosure requirement that is capable of improving the economic, social and environmental process of any country, which could lead to sustainable development. Public transparency and accountability help the government to show commitment to sustainable development that will be of tremendous benefits to its citizenry. In the same vein, the (GRI) (2010) believe that improved accountability and clear transparency is a major step towards achieving a sustainable global economy.

Recent studies revealed, on the average, that African countries exhibit high level of inequality, increasingly risk of greenhouse gas emissions beyond acceptable thresholds, high mortality rate, and increase in poverty level, low per capita income and gross under-development of critical infrastructures (Ockwell & Mallet, 2012; Uwuigbe & Egbide, 2012; Soobaroyen & Ntim, 2013; Ward & Mahowald, 2014; UNDP, 2015; World Bank, 2015; Tauringana & Chithambo, 2015; Chithambo & Tauringana, 2017; Hopper, Lassou, & Soobaroyen, 2017). All these problems have hampered the development of African countries. Therefore, the issue of sustainable development becomes critical for African countries. Also, the studies of (Everett, Neu, & Rahaman, 2007; Iyoha & Oyerinde, 2010; Bakre & Lauwo, 2015; Erin, Afeisume, & Owodunni, 2016; Olaope, 2016; Akinlolu, 2017) revealed that lack of public transparency and accountability on the part of government and African leaders have hindered critical development in recent times, coupled with high profile cases of corruption of public office holders. In order for African countries to measure up with the developed countries in terms of sustainable development, there is a need to critically examine the subject of public transparency and accountability in Africa. We are motivated therefore to examine the impact of public transparency and accountability on sustainable development goals of selected African countries.

Quite a number of literature on public transparency and accountability exist in Africa (Iyoha & Oyerinde, 2010; Tamoi, Faizah, Yussri & Mustaffa, 2013; Ngatia, 2014; Savocool & Andrew, 2015; Lassou, & Hopper, 2015; Bakre & Lauwo, 2015; Blake *et al.*,

2016) but none of these studies have investigated the impact of public transparency and accountability on sustainable development goals of African countries. Due to the timely importance of this study on African development; we are motivated to examine this study and present our findings that could help solve economic, social and environmental issues within the African context. Against this backdrop, this study, therefore, seeks to examine how public transparency and accountability has impacted the sustainable development goals of selected African countries. Also, this study shows the relevance of public transparency and accountability in improving sustainable development goal in Africa. Overall, the study seeks to answer the research question: do public transparency and accountability impact SDG performance in Africa? This study also recognizes other factors other than public transparency and accountability that affect SDG performance in Africa.

The proposed contribution of this study is in twofold. First, the study adds to accounting literature in the area of public transparency and accountability mechanism and how it supports the actualization of SDG performance in Africa. This study provides original insight on how commitment to accountability and public transparency affect sustainable development goals of African countries. Secondly, the study seeks to examine the expanded purpose of accountability and transparency within the SDG context and its transformative impact on African society.

The rest of the paper is organized as follows. Section 2 discusses the review of the literature and theoretical framework. Section 3 discusses the methodology adopted as well as research design. Section 4 presents information regarding the data analysis and empirical results and Section 5 concludes the paper and presents recommendation.

2. Literature Review

Theoretical Review

There are theories underpinning the motivation behind sustainable development goal studies. These theories are captured under social theories such as political economy theory (Cooper, 1988; Guthrie & Parker, 1990); stakeholder theory (Watts & Zimmerman, 1978; Clarkson, 1995); accountability theory (Gray *et al.*, 1995) and legitimacy theory (Deegan & Rankin, 1996; Milne & Patten, 2002; Mousa & Hassan, 2015). Proponents of political economic theory believe that governance is driven based on political, economic and social reasons (Cooper, 1988; Guthrie & Parker, 1990). Political economy perspectives view social responsibility and disclosure (SDG) as a proactive attempt by power holders to portray its own view of its social and political constituency (Guthrie & Parker, 1990; Buhr, 1998). This perception reveals why public institutions engage in SDG drive and endeavors which appears *prima facie* that they are benefiting the society by giving back to it. Gray *et al.* (1995) opined that is practically impossible to isolate economic domain from the social domain. Political economy perspective views the social, economic and political framework within which human life exists. Several authors have invoked the political economy theory in SDG studies (Uram *et al.*, 2014; Janowski, 2016; Olaope, 2016; Akinlolu, 2017; Fleming *et al.*, 2017; Xiao, Norris, Lenzen, Norris & Murray, 2017) due to its suitability in explaining the opportunistic nature of political institutions amongst other theories in accounting for society-people interaction.

Stakeholder theory is another theory that explains the motivation for engaging in SDG activities. Stakeholder theory is a widely used theory in most academic discourse, especially from the management perspectives. Most studies (Gray, 2014; Bebbington & Thomson, 2013; Spence & Rinaldi, 2014; O'Dwyer & Unerman, 2016)

argued that SDG should be anchored on stakeholder theory; since SDG performance primarily focused on the needs of various stakeholders in the society. The theory postulates that society is seen as a dynamic and interdependent network of relationship with a wide variety of stakeholders (Loosemore & Phua, 2011). To support this assertion, Zsolnai (2006) stated that the growth of any society depends largely on how well the government nurtures these relationships effectively and strategically in order to achieve societal objectives. In the same vein, Deegan & Blomquist, (2006) viewed stakeholders' engagement has the process of actualizing SDG which is critical to the survival, attainment, and development of any society of the organization. In the Gray, Adams & Owen (2014), of accountability framework model; accountability theory is based purely on agency relationship between the principal (society) and the agents (public officers). It is expected that society requires the agent to be accountable and disclose relevant information. From the SDG construct, the society has the right to good welfare, better education, good health and soon, all within the SDG framework. Some scholars (Bakre & Lauwo, 2016; Konstantinos & Dimitrios, 2016; Blake *et al.*, 2016) argued that accountability should drive the actualization of the UN 2030 agenda which is SDG. Similarly, Frink and Klimoski (2004); Xiao et al. (2017) emphasized the need for accountability in human service and there is no better time than now when the world is confronted with meeting the needs of its citizenry through a commitment to SDG.

Legitimacy theory has been used by several authors (Deegan, 2002; Holland & Foo 2003; Baughn, Bodie & McIntosh 2007; Adeyemi & Ayanlola, 2015) in a social context to explain social and environmental reporting. Under the SDG framework, Idowu (2014) and Mousa & Hassan (2015) argued that government and those saddled with responsibility are under pressure to disclose and drive sustainable practices in order to enjoy societal goodwill. Also, from the organizational perspective, legitimacy is important to an organization because it attracts the support of its stakeholders. Therefore, organizations especially multinationals support SDG fulfillment from the perspective of organizational legitimacy (Kolk & Perego, 2010; Faisal, Tower & Rusmin, 2015).

This study adopts the stakeholder theory because the whole essence of SDG is the people (stakeholders) (Zsolnai, 2016). There are several benefits of engaging stakeholders in SDG activities, these include: stakeholders are in the best position to contribute to decision affecting their future; it places them in a better position to understand their sustainability issues and take collective responsibility in managing them; it places higher level of trust with stakeholders group and stakeholders feel their interests are being protected. Since stakeholder theory emphasizes the contribution of every citizen in the SDG process, therefore, the issue of transparency and accountability becomes inevitable. Therefore, the concept of public transparency and accountability in stakeholder management are an essential ingredient for the actualization of SDG. Based on this premise, this study adopts the stakeholder theory as a theoretical framework underpinning this work.

Public Transparency

The concept of public transparency has been discussed by different scholars in literature. Carolyn (2009) viewed public transparency as a public value embraced by those in governance to counter corruption and public vices. Similarly, Lyrio, Lunkes, and Taliani (2018) opined that public transparency means a complex tool of good governance in policies and program to achieve organizational or nation's objective. Also, Laufer (2003), opined that transparency is very crucial to public accountability; he argued that public transparency is a corollary of public accountability. In our

opinion, we define public transparency as openness in carrying out public policies and programs in order to achieve public goals. Both accountability and transparency are both essential bedrocks upon which national development are anchored. Similarly, Adegbite (2009), posited that accountability is the demonstration that work has been done in accordance with established laid down rules and regulation. Mohammed (2014) reported that one of the important instruments to monitor and achieve sustainable development goal in any country is strict adherence to public accountability; which is able to facilitate the growth of SDG. It is therefore imperative for this study to critically examine the role of public transparency in achieving SDG in Africa.

Bakre and Lauwo (2016); Transparency International (2016) opined that the actualization of SDG is connected to the disposition of African leaders toward public transparency and accountability. Bakre and Lauwo (2016) found that accountability in African countries is becoming elusive due to corruption, cronyism, and lack of transparency. In support of this view, GRI (2017) advocated for improved accountability and clear transparency toward achieving SDG in Africa. GRI (2017) study revealed that the major obstacle to the issue of sustainability in Africa is the lack of commitment in terms of transparent policies and being accountable for policies made. In the same vein, Bucher (2018) averred that global accountability architecture is linked to SDG performance and 2030 agenda. His study further reiterated that global leaders should be held accountable for their inaction towards their contribution to the successful implementation of SDG in 2030. Bowen *et al.* (2017) revealed that realizing the aspiration of SDG is connected to ensuring that mechanism exist to hold societal actors accountable regarding the implementation of SDG targets. Okike *et al.* (2015) viewed accountability as an essential ingredient to the economic development of any nation.

Accountability

Ujah (2008); Okike, Adegbite, Nakpodia, and Adegbite (2015); O'Dwyer and Unerman (2016) viewed public accountability as a system where public officers and government officials give an account of their stewardship to members of the public. It can be deduced that accountability means responsibility, feedback, and transparency regarding the reporting mechanism. In our opinion, accountability can be explained as taking responsibility for good governance and being answerable for its resulting consequences. The studies of (Lederman, Loayza, & Soares, 2005; Khan, 2007; Hopper, Tsamenyi, Uddin, & Wickramasinghe, 2009; Arnold, 2012) pointed to high poverty and gross underdevelopment of Sub-Saharan African countries due to poor public transparency, bad governance and lack of accountability. To remedy these anomalies, the African Development Bank (2016) study revealed that clear transparency, strong institutional settings, and improved accountability are the main solutions to the menace of underdevelopment of African countries. Therefore, can we say that the neglect of accountability and public transparency is a major factor for the underdevelopment of African countries? Alawattage and Fernando (2017) examined the importance of social and environmental accountability in the actualization of SDG. They observed that accountability is a crucial factor in the achievement of SDG both at the corporate and country level. The assumption is that better clear transparency and improved accountability will combat the misuse of public funds through corruption which will eventually promote good governance and sustainable development.

Itheriohanma and Oguoma (2010); Iyoha and Oyerinde (2010) opined that transparency and accountability are both crucial factors upon which critical national

development are anchored. In Ghana, Betley, Bird & Gharthey (2012) found that the formulation of policies and law is not enough to facilitate developmental projects. It requires a commitment to public transparency and accountability for any meaningful development to take place. In this era of SDG implementation, strict adherence to clear transparency and enhanced accountability is sacrosanct or else actualization of SDG will become elusive. Rahaman (2010) stated that from a global perspective; economic, social and environmental development is rapidly being driven by government commitment to transparency and accountability in all forms. The lesson that can be drawn based on the assertion of Rahaman (2010), is that underdeveloped countries would not be those that lack resources (human, capital and material) but those countries that cannot account for her resources. In view of this, public transparency and accountability would continue to remain relevant to the development of a viable socio-political economy.

Sustainable Development Goal

On 25 September 2015, the United Nation General Assembly adopted the 2030 agenda for sustainable development goals (SDG) for 193 member countries. This agenda spelled out a set of 17 SDG with 169 targets (United Nations, 2015). These sustainable development goals replace millennium development goals. SDG is a global agenda for sustainable development with the purpose of providing a holistic strategy that combines social inclusion, economic development, and environmental sustainability. Adejumo and Adejumo (2014) viewed SDG as an approach to social, economic and environmental activities with the aim of providing sustainable future for all. Similarly, Bebbington and Larrinaga (2016) opined that for development to be sustainable there must be efficient management of resources (material and human) taken into cognizance both the present and future generation. This “efficient management of resources” cannot be effective without proper accountability and clear transparency on the part of managers or people saddled with such responsibility. Therefore, accountability and transparency is the connecting link between the SDG target and SDG implementation.

Sustainable Development Goals (SDG) is becoming a global phenomenon due to its impact in transforming the world and make it a better place. Sharma (2006); Eweje (2012); Gray (2014) noted that sustainable development is becoming relevant in the current and future business environment. Company’s executives, international organizations; NGOs, investors, and stakeholders are becoming aware that integrating environmental, social and governance issues into the nation’s strategy and vision is necessary to secure better future for her citizenry. These sustainable development goals replaced millennium development goals (MDG). SDG is a global agenda for sustainable development with the purpose of providing a holistic strategy that combines social inclusion, economic development, and environmental sustainability. The UN 17 SDG entail a common universal vision of how to combine these three pillars (social, economic and environment) of sustainable development into action at the local, national and international level.

Based on the literature reviewed, we develop the following hypothesis:

H₁: Public Transparency is positively related to SDG Performance.

H₂: Accountability is positively related to SDG Performance.

Sustainable Development Goals (SDGs) Framework

Different frameworks subsist for SDG performance after the pronouncement of the 17 SDG in 2015 (Amoako & Dixon, 2015). There are several SDG frameworks which are: Global SDG Indicator framework developed by the United Nations Statistical

Division (UNSD); World Bank SDG framework developed by the World Bank to monitor sustainable development for countries; European Sustainable Development framework developed by Organisation for Economic Cooperation and Development (OECD); Global Reporting Initiative framework for sustainable reporting developed by Global Reporting Initiative (GRI); KPMG SDG Reporting framework; Environmental Management (ISO 14000, EMAS); Sustainability Accounting Standard Board (SASB) framework for SDG reporting. This study focused on the two main SDG reporting frameworks which are Global SDG framework and World Bank SDG framework. We believe these two frameworks are more robust and comprehensive since they developed more indicators for measuring SDG performance than other SDG framework. These frameworks are discussed below:

- (i) Global SDG Indicator framework and;
- (ii) World Bank SDG framework

(I) Global SDG Indicator framework

The global SDG indicator framework is the definitive and commonly applied framework for SDG performance. To achieve these SDG, the UN set out a sustainable development strategy which is a set of global indicators/indices to monitor and assess the progress of each member countries against the overall goals and specific targets. The global SDG indicator framework was developed by the United Nations Statistics Commission (UNSC) under the purview of Interagency and Expert Group (IAEG). A total of 230 indicators were developed to measure various performance indices under SDG activities. The indicators were uniquely developed to address each of the goals and target in order to achieve the 2030 agenda for sustainable development.

The UNSC-IAEG developed sustainable development goal index (SDGI) as a performance measure to evaluate the performance of each country. In the study of Carlo, Lorenza, Fabio, and Luca (2015), sustainable development goal index (SDGI) is a strong performance indicator that provides an assessment of sustainability for each pillar of the UN SDG through multi-dimensional sustainability index. They argued that the high value of SGDI tends to address SDG challenges while a lower value of SDGI reflects a poor performance in addressing SDG challenges. Konstantinos and Dimitrios (2016) established that the main essence of SDGI is to provide a detailed database and set of tools to monitor and assess the progress of countries towards the achievement of SDG. SDGI helps countries to identify gaps and obstacles towards attaining sustainable development goals. The Sustainable Development Goal Index (SDGI) helps each country to compare her performance within its region and with other counterparts from the different region at similar levels of overall economic development and the entire world, including the best and worst performer.

(II) World Bank SDG framework

The World Bank (WB) SDG framework is a guideline on SDG implementation and reporting. The WB framework was developed to achieve vision 2030 agenda through three major areas: (i) finance, (ii) data and (iii) implementation. To achieve this target, WB set out a sustainable development framework which is a set of sustainable indicators to monitor the progress and performance of member countries under the United Nations. A total of 169 SDG indicators were developed by WB to assess and measure all the 17 SDGs and its targets. The WB framework builds on 5Ps- people, planet, profit, partnership, and prosperity (World Bank Report, 2017).

Control Variables/Factors Influencing Sustainable Development Goals

We observed there are other factors found in the literature that influence the actualization of SDG other than accountability and public transparency. In our opinion, as revealed by several authors (Spence & Rinaldi, 2014; O'Dwyer & Unerman, 2016; Olaope, 2016; Bucher, 2018); these factors should be taken into consideration when measuring the impact of SDG performance. We highlighted these factors:

Global Competitiveness. In 2004, World Economic Forum (WEF) developed a Global Competitiveness Report (GCR) to assess the ability of countries in response to how they are productive and how efficient they use their resources. Bucher (2018) in his study, found that global competitiveness is one of the major factors that determine the success or otherwise to achieving SDG. Global competitiveness is measured through the Global Competitiveness Index (GCI) which ranks countries how well they have been productive. The GCI is based on twelve pillars of competitiveness: appropriate infrastructure, efficient labor markets, stable macroeconomic framework, strong institutions, good health, and primary education, developed financial markets, efficient goods markets, market size (both domestic and international), technology capacity, innovation, higher education, and sophisticated production processes (WEF, 2010). Similarly, Olaope (2016) found that GCI is a major determinant of good governance and sustainable development in Africa.

Global Peace. Global peace is seen as one of the pillars of sustainable development (Simnett, Vanstraelen, & Chua, 2009); the absence of peace is a major obstacle to development in any society. The Institute of Economics and Peace (IEP) in 2007 developed a Global Peace Index (GPI) to measure the annual changes in respect to global peace at the national, regional and global levels. The vision for Humanity (2013a) revealed that SDG cannot be attained without a relative peace in any country; since peace is correlated to other indicators such as good health, education, regional partnership, and integration. The GPI is based on twenty-three indicators which are grouped into three main categories: (i) societal safety and security (ii) ongoing domestic and internal conflict (iii) militarism. Some of the indicators include a number of deaths from internal organized conflict, level of perceived criminality in society, the impact of terrorism, number of homicides per 100,000 people, level of violent crime, military expenditure as a percentage of GDP, ease of access to small arms and light weapons. To corroborates the study of Simnett, Vanstraelen, & Chua, (2009); GRI (2017) report found that global peace is the most important factor in determining the successful implementation of SDG by 2030.

Human Development

Different authors (Hou, Walsh, & Zhang, 2015; Hak, Janouškova, & Moldan, 2016; Fleming, Wise, Hansen & Sams, 2017) emphasized the role of human development in national development (both socio-economic and political development). Janez and Pieter (2017) explored the relationship between the UN human development index and sustainable development performance. The findings of the study revealed a positive and significant relationship between HDI and sustainable development; in fact, most SDG targets are embedded in HDI indicators. While SDG attempts to evaluate and measure several aspects of environmental sustainability, including global development sustainability, there is also a large drive toward human sustainability for all nations. HDI is measured based on three metrics: health, the standard of living and knowledge (UNDP, 2014). A healthy lifestyle is measured by life expectancy; the level of knowledge is measured by the average number of years of education in a lifetime, and standard of living is measured by Gross National Income (GNI) per capita.

Governance

In contemporary research, governance and development have become inseparable (Laura, Codruta & Maria, 2016). Governance is such an important process and mechanism in effecting sustainable development in any society. Governance is described by (Matt, Hay & Myers, 2010) as the determined and authoritative steering of social processes. These processes include the actions of governmental and non-governmental players such as NGOs, civic organizations, the private sector, and developmental partners. Similarly, Sustainable Development Solution Network (SDSN) (2016) viewed governance as a mechanism that should set a clear guideline to the articulation and implementation of SDG. Also, Stojanovic, Ateljevic, and Stevic (2016) revealed that good governance is a veritable tool for sustainable development. The forum for a new World Governance (FnWG) in 2008 developed World Governance Index (WGI) as an indicator to measure the activities of those charged with governance. WGI is based on five indicators: rule of law; sustainable development; human rights; human development; peace and security.

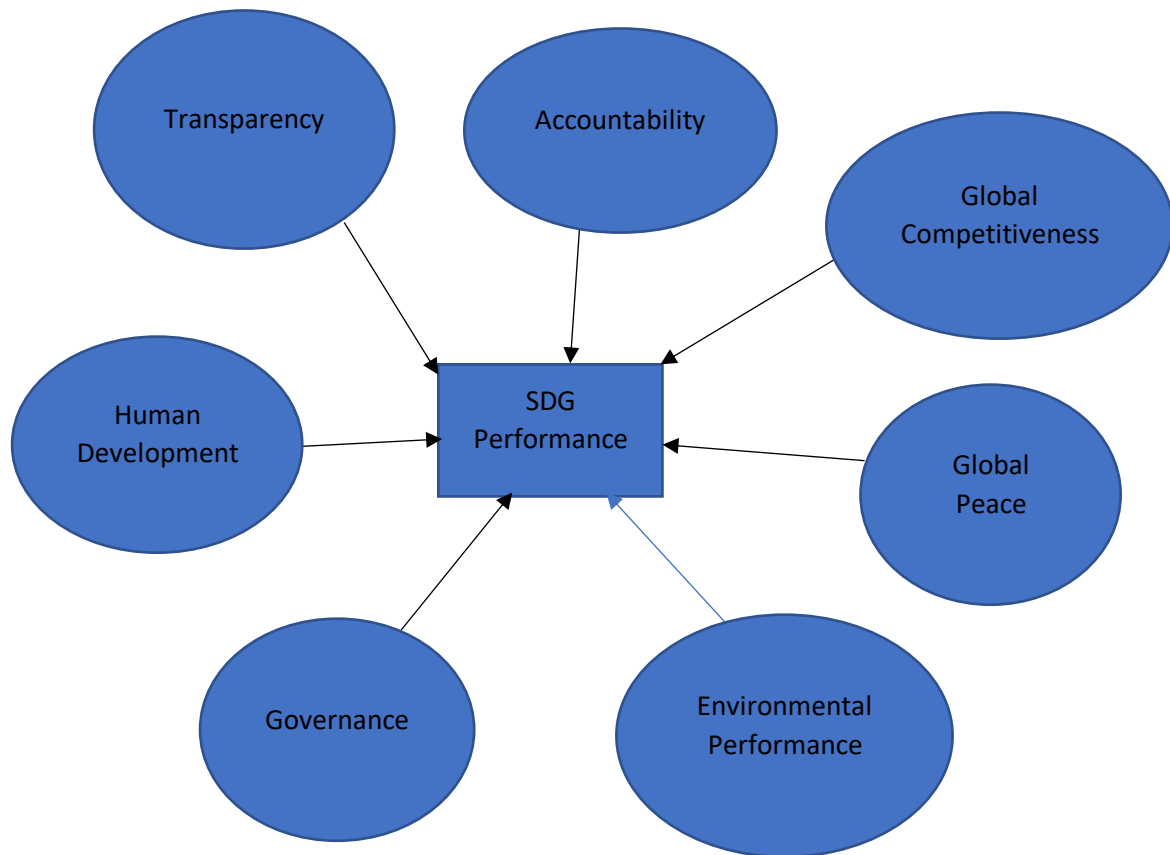
Environmental Performance

One of the pillars of SDG is environmental sustainability (Kroll, 2015; OECD, 2016, Sanyaolu *et al.*, 2018); it is argued that one of the critical measures of SDG performance is environmental governance, management, and performance (World Bank Report, 2016). Halkos and Zisiadou (2016) opined that environmental issues in SDG are very important because it covers all living and non-living things that may affect the human existence and their economic survival. One of the goals of SDG is to evaluate and measure several aspects of environmental sustainability. Yale and Columbia University developed a metrics for measuring environmental performance known as “*Environmental Performance Index*”. The motivating factor for the development of EPI was an attempt to measure environmental performance under the MDG established by the United Nations. Some of the EPI indicators include climate and energy; biodiversity and habitat; air quality; clean water and so on.

Conceptual Framework

The conceptual framework depicts the inter-relationship between factors that influence SDG.

Figure 1: Conceptual Framework showing the inter-relationship among factors that affect SDG performance



Source: Developed by Authors (2018)

The conceptual framework forms the basis on which this study is anchored. These factors affect one or more SDG which is depicted below:

Transparency- SDG 1; SDG 10

Accountability – SDG4; SDG 2

Global Competitiveness – SDG 9; SDG 17

Human Development – SDG 8

Governance – SDG 3; SDG 5

Environmental Performance – SDG 6; SDG 7; SDG 12; SDG 13; SDG 14; SDG 15

Global Peace- SDG 11; SDG 16

3. Research Methods

Research Design

The research design for this study is an ex-post factor; the study of Kerlinger (1970) opined that ex-post facto research is also called causal-comparative research. This research design is used when the researcher intends to determine cause and effect relationship between independent and dependent variables with a view to establishing a causal link between them. This research design was employed because of its suitability in research of this nature. Uniform information was collected across the selected countries over a period of two years (2016 to 2017) from all the desired elements. The study could only examine two (2) years since SDG implementation actually started in 2016. The population of the study is comprised of the 54 African

countries. However, purposive sampling techniques was applied to select an equal number of countries based on the geographical zones. We selected two countries each from the five geographical zones in Africa. Nigeria and Ghana from West Africa region, Cameroon and Gabon from the Central Africa region, South Africa and Zambia from the South Africa region, Egypt and Morocco from the North Africa region, Kenya and Uganda from the East Africa region.

Operationalization of Variables

Variable(s)	Symbols	Operationalisation/Definition	Apriori Expectation	Source	SDG Addressed
Dependent Variable Sustainable Development Goal Index	SDGI	To measure sustainable development goal performance for each country		UN Sustainable Development Report (2017)	SDGs 1 - 17
Independent Variables Corruption Perception Index	CPI	To measure the effect of public transparency on SDG performance	A decrease in CPI is expected to increase SDGI	Transparency International Report (2017)	SDG 1; SDG 10
Accountability Index	AI	To measure the impact of accountability on SDG performance.	An increase in AI is expected to increase SDGI	Mo Ibrahim Report (2017)	SDG4; SDG 2
Control Variables Global Competitiveness Index	GCI	To measure how productive and efficient countries use their resources vis-à-vis its impact on SDG performance.	An increase in GCI is expected to increase SDGI	World Economic Forum Report (2017)	SDG 9; SDG 17
Global Peace Index	GPI	To measure relative peace enjoyed by a country in comparison to other countries and its	An increase in GPI is expected	Institute of Economi	SDG 11; SDG 16

		impact on SDG performance.	to increase SDGI	cs and Peace Report (2017)	
Human Development Index	HDI	To measure relative health, the standard of living and knowledge within the SDG activities.	An increase in HDI is expected to increase SDGI	World Bank Report (2017)	SDG 8
World Governance Index	WGI	To measure the activities of those charged with governance with respect to SDG performance.	An increase in WGI is expected to increase SDGI	World Bank Report (2017)	SDG 3; SDG 5
Environmental Performance Index	EPI	To measure all environmental issues such as climate and energy; biodiversity and habitat; air quality; clean water.	An increase in EPI is expected to increase SDGI	Yale University Report and World Economic Forum (2017)	SDG 6; SDG 7; SDG 12; SDG 13; SDG 14; SDG 15

Source: Developed by the Author (2018)

Model Specification

We developed our models based on the conceptual issues reviewed in the literature. This model captured the public transparency and accountability as the main independent variables examined in this study. The estimated econometric model is expressed in the following equations:

Model 1

$$SDGI = f(CPI, AI) \dots\dots\dots$$

Eq. (1)

$$SDGI_{it} = \beta_0 + \beta_1 CPI_{it} + \beta_2 AI_{it} + \epsilon_{it} \dots\dots\dots Eq.$$

(2)

Where:

SDGI = Sustainable Development Goal Index

CPI = Corruption Perception Index

AI = Accountability Index

β_0 = Intercept of the regression line, regarded as constant.

$i = 1, 2, 3, \dots, 10$ indicating the number of countries that were used for the study

$t = 1, 2$ indicating the time period that was used for this study (2016 - 2017)

$\beta_1 - \beta_2$ = Coefficient or slope of the regression line or independent variables.

ϵ_{it} = The error term which account for other possible factors that could affect the dependent variable not captured in the model. (The stochastic error term is assumed to be identically and independently distributed).

Model 2

In order to use the hierarchical regression method, there are control variables (other than the main variables) that were added to know if it has more impact on the dependent variable. The econometric model is stated below:

$$SDGI = f(CPI, AI, GCI, GPI, HDI, WGI, EPI)$$

..... Eq. (3)

$$SDGI_{it} = \beta_0 + \beta_1 CPI_{it} + \beta_2 AI_{it} + \beta_3 GCI_{it} + \beta_4 GPI_{it} + \beta_5 HDI_{it} + \beta_6 WGI_{it} + \beta_7 EPI_{it} + \epsilon_{it}$$

..... Eq. (4)

Where:

GCI = Global Competitiveness Index

GPI = Global Peace Index

HDI = Human Development Index

WGI = World Governance Index

EPI = Environmental Performance Index

β_0 = Intercept of the regression line, regarded as constant.

$i = 1, 2, 3, \dots, 10$ indicating the number of countries that were used for the study

$t = 1, 2$ indicating the time period that was used for this study (2016 - 2017)

$\beta_1 - 7$ = Coefficient or slope of the regression line or independent variables.

ϵ_{it} = The error term which account for other possible factors that could affect the dependent variable not captured in the model. (The stochastic error term is assumed to be identically and independently distributed).

Data Analysis Techniques

This study used multiple regression analysis. The multiple regression method was used to analyze the data and measure the significant relationship between the dependent and independent variables. Econometric package of E-view, version 10.0 was applied to the data from 2016-2017 for the estimation of the respective models and their coefficient. The multiple regression analysis was complemented by some preliminary statistical analysis like descriptive statistics and correlation matrix, measurement of variables' normality and their relationship respectively. The result of the correlation was used to decide the measurements of the variables that should be included in the multiple regression models.

4. Results and Discussion

This section presents the descriptive and inferential results obtained from the dataset and discussion was made based on the findings.

Table 1: Descriptive Statistics

	SDGI	CPI	AI	GCI	GPI	HDI	WGI	EPI
Mean	0.4372	0.3335	0.3955	0.3925	0.469	0.5495	0.5015	0.627
Median	0.454	0.33	0.395	0.39	0.475	0.555	0.51	0.62
Maximum	0.551	0.45	0.55	0.48	0.55	0.7	0.59	0.74
Minimum	0.361	0.25	0.31	0.33	0.37	0.4	0.41	0.53
Std. Dev.	0.074456	0.067456	0.065089	0.043875	0.050565	0.074302	0.0505	0.063998
Skewness	0.448143	0.219268	0.528623	0.56031	-0.4612	0.080608	-0.2512	0.214847
Kurtosis	2.86078	1.665787	2.728668	2.395309	2.149066	3.180303	2.235461	1.909497
Jarque-Bera	0.685591	1.643699	0.992824	1.351201	1.312435	0.04875	0.697436	1.144861
Probability	0.709783	0.439618	0.608711	0.508851	0.51881	0.97592	0.705592	0.564152
Sum	9.744	6.67	7.91	7.85	9.38	10.99	10.03	12.54
Sum Sq. Dev.	0.105331	0.086455	0.080495	0.036575	0.04858	0.104895	0.048455	0.07782
Observations	20	20	20	20	20	20	20	20

Source: Authors Computation (2018) using E-view 10

The descriptive statistics for the variables examined are presented in Table 1. The dependent variable of SDGI range between 0.361 and 0.551 and a reported mean value of 0.4372. This implies that on average the actualization of SDG performance in this selected countries is about 44%. This performance is below average. From the independent variables, CPI reported a mean of 0.3335, a maximum of 0.45 and a minimum of 0.33. This shows that on average public transparency in Africa is low. A country like Uganda has the lowest rank of CPI while South Africa recorded the highest in terms of CPI (See appendix 1). AI reported a mean of 0.3955, a maximum of 0.55 and a minimum 0.31, which suggests that the sampled countries have a poor accountability attitude. GCI reported a mean of 0.3925, suggesting that on the average, the examined countries are not efficient in their productivity which has a negative impact on the SDGI of selected countries. GPI reported a mean of 0.469 which insinuates that on the average, there is relative peace in the sampled countries. HDI reported a mean of 0.5495, suggesting that on the average, human development is high among the selected countries. This is revealed by the maximum of 0.70 and a minimum of 0.40. WGI reported a mean of 0.5015, suggesting that on average governance among the selected countries are on the rise and been pursued. Furthermore, EPI reported a mean of 0.627 suggesting that on the average, the environmental performance of the selected countries is very high and are been pursued in the actualization of SDGI. This is further attested by the scatter graph analysis shown in appendix 2.

Table 2: Summary of Correlation Coefficients

<u>Correlation</u> <u>Probability</u>	<u>SDGI</u>	<u>CPI</u>	<u>AI</u>	<u>GCI</u>	<u>GPI</u>	<u>HDI</u>	<u>WGI</u>	<u>EPI</u>
SDGI	1							
CPI	0.573 0.008*	1 -----						
AI	0.311 0.181	0.705 0.005*	1 -----					
GCI	0.613 0.004*	0.537 0.014*	0.232 0.323	1 -----				
GPI	0.428 0.059*	0.388 0.091	0.435 0.055	0.383 0.095	1 -----			
HDI	0.441 0.051*	0.488 0.028*	0.425 0.061	0.675 0.001*	0.252 0.283	1 -----		
WGI	0.636 0.002*	0.724 0.003*	0.516 0.019*	0.527 0.016*	0.542 0.013*	0.568 0.008*	1 -----	
EPI	0.711 0.004*	0.651 0.001*	0.442 0.051*	0.675 0.001*	0.221 0.347	0.341 0.141	0.499 0.024*	1 -----

Source: Authors Computation (2018) * denotes 5% significance level

Table 2 above, shows the correlation coefficients of the variables examined to measure sustainable development goal index used in the study. As observed, the corruption perception index (CPI) is positively correlated with the sustainable development goal index (SDGI) with a value of 0.573692. Accountability index is positively correlated with the sustainable development goal index (SDGI) with a value of 0.311665. Also, Global competitiveness index (GCI), Global peace index (GPI), Human development index (HDI), World government index (WGI) and

Environmental performance index (EPI) all exhibit a positive correlation with sustainable development goal index with a value of 0.613, 0.428, 0.441, 0.636 and 0.714 respectively. The result implies that these variables influence the actualization of sustainable development goal in the selected countries in Africa.

Table 3: Variance Inflation Factor

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
CPI	0.129085	109.4423	4.094435
AI	0.116149	136.7418	3.430158
GCI	0.410843	469.9366	5.513016
GPI	0.120812	197.1440	2.153256
HDI	0.092319	208.0975	3.552856
WGI	0.179142	333.7813	3.184675
EPI	0.120914	352.2471	3.452202
C	0.031248	229.2859	NA

Source: Authors Computation (2018) using E-view 10

The results of the test of variance inflation factor is a further confirmation of the absence of the problem of collinearity of the regression variables. The centered variance inflation factor is all clustered around the value of 6.00 which indicates the absence of multicollinearity. The centered variance inflation factor has a benchmark of 10.00, beyond which is an indication of the problem of multicollinearity

Regression Results

Table 4: Hierarchical Regression Analysis

Variable	Model 1			Model 2		
	Coefficient	t-statistic	p-values	Coefficient	t-statistic	p-values
CPI	0.35772	2.65329	0.0192*	0.48059	2.17843	0.0209*
A1	-0.29591	-0.18568	0.4219	-0.12208	-0.39216	0.4458
GCI				-0.05279	-0.04406	0.2318
GPI				-0.01014	-0.00521	0.3536
HDI				-0.13192	-0.01512	0.1153
WGI				0.49499	3.01893	0.0007*
EPI				0.36687	2.07832	0.0339*
R ²		0.54			0.65	
Adjusted R ²		0.51			0.62	
Adjusted R ²		0			0.11	
Change						
Durbin-Watson stat		2.01613			2.15391	

Source: Authors Computation (2019) *5% significance level

The result of the hierarchical regression analysis is presented in table 4. Model 1 presents the public transparency and accountability variables that are linked with the dependent variable (SDG performance). The result showed a positive and significant

relationship between public transparency (CPI) ($0.0192 < 0.05$) and SDG performance (SDGI). On the contrary, the result shows a negative and insignificant relationship between accountability (AI) ($0.4219 > 0.05$) and SDG performance. The Durbin-Watson statistic of 2.01613 is not substantially different from the 2.00 benchmark which indicates the absence of serial correlation. The adjusted R^2 value of model 1 revealed 51%, which means that the combination of CPI and AI have 51% impact on SDI performance. Considering the model 2, where control variables (GCI, GPI, HDI, WGI, and EPI) were added to test their impact on SDG performance. From the analysis, GCI ($0.2318 > 0.05$), GPI ($0.3536 > 0.005$), and HDI ($0.1153 > 0.05$) showed a negative and insignificant relationship with SDG performance. On the other hand, WGI ($0.0007 < 0.05$) and EPI ($0.0339 < 0.05$) revealed a positive and significant relationship with SDG performance. The adjusted R^2 value of model 2 revealed 62%.

Overall, the combination of the explanatory variables of (Corruption Perception Index, Accountability Index), and control variables (Global Competitiveness Index (GCI), Global Peace Index (GPI), Human Development Index (HDI), World Government Index (WGI) and Environmental Performance Index (EPI) produced 62 % of the adjusted R^2 . This implies that the addition of the control variables increases the adjusted R^2 from 51% to 62% which gives an increase of 11%.

Restatement of Hypotheses and Discussion of Findings

H₁: Public Transparency is positively related to the SDG Performance

H₂: Accountability is positively related to the SDG Performance

The regression analysis focused on the impact of public transparency and accountability on SDG while the analysis controlled for other variables. From the hierarchical regression result, the CPI value ($p = 0.0192 < 0.05$) shows a positive and significant relationship with SDGI. This affirms the hypothesis that public transparency is positively related to SDG performance is accepted. On the contrary, accountability (AI) ($p = 0.4219 > 0.05$) reveals a negative and insignificant relationship SDGI. This means that accountability is not positively related to SDG performance. Other variables such as GCI ($p = 0.2318 > 0.05$), GPI ($p = 0.3536 > 0.05$), HDI ($p = 0.1153 > 0.05$) present a negative and insignificant relationship with SDG performance while WGI ($p = 0.007 < 0.05$) and EPI ($p = 0.0339 < 0.05$) shows a positive and significant relationship with SDG performance. Based on this empirical evidence, public transparency and accountability have impacted SDG performance to a reasonable extent for the selected African countries. This answers the research question of this study.

The foregoing results present a major implication for the growth and actualization of SDG in Africa. The positive relationship between public transparency and SDG performance connotes improvement in public transparency for African countries. However, this finding is not consistent with the studies of (Iyoha & Oyerinde, 2010; Lassou, & Hopper, 2016; Bakre & Lauwo, 2015) which documented that lack of public transparency and corrupt practices contributed to poor performance of MDG in Africa. The negative relationship between accountability and SDG performance implies the lack of accountability of African countries. This is a clarion call to institutionalized sound accountability framework, strong institutions, and ethical values in order to achieve sustainable development in Africa. Also, this finding corroborates the study of (Alawattage & Fernando, 2017) which found that accountability is a crucial factor in the achievement of SDG both at the corporate and country level. The assumption is that clear transparency and improved accountability will combat the misuse of public funds which will eventually promote good governance and sustainable development.

Since public transparency has a direct impact on SDG 1 (no poverty) and SDG 10 (reducing inequalities) while accountability has direct consequences on SDG 2 (zero hunger) and SDG 4 (quality education). It is imperative for government institutions to direct their effort in fighting endemic public sector corruption and promote accountability and transparency in public sector governance. The study also documents other variables that affect SDG performance other than transparency and accountability. The study found a negative and insignificant relationship between the Global Competitiveness Index (GCI) and SDGI. The implication of this is that African countries exhibit poor macroeconomic framework, inefficient labor market, poor production process, lack of innovation and small market size. This result has a direct impact on SDG 9 (industry, innovation, and infrastructure) and SDG 17 (partnership for the goals). Consistent with this result, the studies of Oloape, 2016 and Bucher, 2018 found that global competitiveness is one of the major factors that determine the success or otherwise to achieving SDGs.

Furthermore, the regression result reveals a negative and insignificant relationship between the Global Peace Index (GPI) and SDGI. Peace is required for any meaningful development in all countries. The insignificant relationship might be due to domestic and organized conflict, increased in criminality, violence and increased of terrorism in Africa. GPI has a direct influence on SDG 11 (sustainable cities and communities) and SDG 16 (peace, justice, and strong institutions). In recent times, some African countries have witnessed an increase in terrorism which has hindered meaningful sustainable development. Similarly, the regression result shows a positive and insignificant relationship between the Human Development Index (HDI) and SDGI. HDI influences SDG 8 (decent work and economic growth). Studies (Hou *et al.*, 2015; Hak *et al.*, 2016; Fleming *et al.*, 2017) have shown that poor standard of living, low per capita income and unemployment have negatively affected the growth of sustainable development in Africa. There is a need to address these problems by African leaders if the SDG vision of 2030 would be realized in no distance time.

While other control variables present a negative and insignificant relationship with SDG performance, the findings of World Governance Index (WGI) presents a positive and significant relationship with SDGI from the regression analysis. WGI has a direct impact on SDG 3 (good health and well-being) and SDG 5 (gender equality). This implies that a governance mechanism has improved in selected African countries. This might have contributed to the steady pace of sustainable development in Africa. However, few studies (Laura *et al.*, 2016; SDSN, 2016; Lassou & Hopper, 2016) have shown that nepotism, cronyism, miscarriage of justice, non-adherence to rule of law, and violation of human rights have hindered meaningful development in Africa in recent times. Lastly, the Environmental Performance Index (EPI) shows a positive and significant relationship with SDG performance. Within the SDG context, EPI influences the highest number of SDGs; SDG 6 (clean water and sanitation), SDG 7 (affordable and clean energy), SDG 12 (responsible consumption and production), SDG 13 (climate action), SDG 14 (life below water), SDG 15 (life on land). From the data gathered, in 2017, Morocco and South Africa scored 72% respectively in terms of environmental performance while Zambia and Egypt scored 68% and 62% respectively. While Nigeria and Uganda scored the lowest EPI of 53% each respectively. This result shows that African countries are moving in the right direction in terms of environmental protection, management, and performance.

5. Conclusion

This study focused on examining whether public transparency and accountability affect the performance of SDG in Africa. The approach followed was to analyze ten (10) African countries selected from the five (5) geographical zone in Africa. Bearing in mind that we could only examine two (2) years (2016, 2017); since SDG was globally adopted in 2015. The study documented a mixed result, public transparency (CPI) presents a positive and significant relationship with SDG performance while accountability (AI) presents a negative and insignificant relationship with SDG performance. Global competitiveness index (GCI), global peace index (GPI) and human development index (HDI) present a negative and insignificant relationship with SDG performance while the world governance index (WGI) and environmental performance index (EPI) revealed a significant relationship with SDG performance. This study presents a considerable implication for the future of sustainable development in Africa. This result calls for clear responsibility, transparent governance, credible participatory process, reduced corruption and proper accountability of public resources on the part of those charged with governance.

This study contributes to the growing research in the area of accounting, accountability and sustainable development in Africa. The empirical approach used in investigating the effect of public transparency and accountability on SDG contributes to the quality of this research in the area of sustainable development which reinforces the originality of this study. This study further used other controlled variables such as governance, global peace, human development, environmental performance and global competitiveness as metrics for determining the performance of sustainable development in Africa. To the best of the author's knowledge, this is the first study that used the combination of these variables to measure the performance of SDG in Africa.

The study suffered a few limitations. The study was limited by sample size which resulted in only 20 observations, it also suffers the limitation of robustness in empirical result due to the small sample size. However, it sets the tone for future empirical research on the subject matter. The study used both descriptive and inferential statistics to analyze the various variables. The researchers might not be able to attest to the genuineness and reliability of the data used. However, the findings of this study agree with previous studies (Iyoha & Oyerinde, 2010; Bakre & Lauwo, 2015; Tauringana & Chithambo, 2015; Lassou, & Hopper, 2016; Laura *et al.*, 2016; Olaope, 2016) in the area of public transparency and accountability issues in Africa. This study provides an avenue for future research in the area of accountability and sustainable development in Africa. Future studies could research into the comparative analysis of African countries compared to other continents of the world.

References

- Adeyemi, S.B., & Ayanlola, O.S. (2015).Regulatory perspective for deepening CSR disclosure practice in Nigeria. *African Journal of Business*, 9(6), 270-287.
- Adejumo, V., & Adejumo, O. (2014). Prospects for achieving sustainable development through the Millennium Development Goals (MDG) in Nigeria. *European Journal of Sustainable Development*, 3(1), 33-46.
- Adegbite, E. (2009). *Accounting, accountability and national development*. Retrieved from Compass Newspaper (Accessed on 16.09.2018), pp. 33-34.
- African Development Bank, (2016). *Solutions for a changing climate: The African Development Bank's Response to impacts in Africa*. Available online: <https://www.afdb.org/en/documents/document/the-solutions-for-a->

- changing-climate-theafrican-development-banks-response-to-impacts-in-africa-30097. (Accessed on 25.09.18)
- African Progress Report (2017). *Power, people, planet: Seizing Africa's energy and climate opportunities*. Retrieved online: http://www.seforall.org/2017_06_11_power-people-planet-report. (Accessed 12.09.2018)
- Alawattage, C., & Fernando, S. (2017). Postcoloniality in corporate, social, and environmental accountability. *Accounting, Organizations and Society*, 1-20.
- Arnold, P. J. (2012). The political economy of financial harmonization: The East Asian financial crisis and the rise of international accounting standards. *Accounting, Organizations and Society*, 37(6), 361-381.
- Akinlolu, G. (2017). Attaining sustainable development goals in Sub-Saharan Africa; the need to address environmental challenges. *Environment Development*, 14(1), 12-24.
- Amoako, O., & Dixon, K. (2015). Sustainability and environmental reports of mining firms in Ghana: A pilot study. *Journal of Finance and Accounting*, 3(2), 156-170.
- Bakre, O. & Lauwo, S. (2016). Privatization and accountability in a "crony capitalist" Nigerian state. *Critical Perspectives on Accounting*, 2(1), 1-14.
- Betley, M., Bird, A., & Ghartey, A. (2012). *Evaluation of public financial management reform in Ghana, 2001-2010 – Final country case study report*. Stockholm: SIDA.
- Bebbington, J., & Thomson, I. (2013). Sustainable development, management, and accounting: Boundary crossing. *Management Accounting Research*, 24(4), 277-418.
- Bebbington, J., & Larringa, C. (2014). Accounting and sustainable development: An exploration. *Accounting, Organizations and Society*, 37, 395-413.
- Blake, C., Annorbah-Sarpei, A., Bailey, C., Ismaila, Y., Deganus, S., Bosomprah, S.,Clark, S. (2016). Scorecard and social accountability for improved maternal and newborn health services: A pilot in the Ashanti and Volta regions of Ghana. *International Journal of Gynaecology and Obstetrics*, 35, 372-397.
- Buhr, N. (1998). Environmental performance, legislation, and annual report disclosure: The case of Acid Rain and Falconbridge. *Accounting, Auditing and Accountability Journal*, 11(2), 163-190.
- Bucher, S. (2018). The global competitiveness index as an indicator of sustainable development. *Herald of the Russian Academy Science*, 88(1), 44-57.
- Bowen, K., Craddlock-Henry, N., Koch, F., Patterson, J., Hayha, T., Vogt, J., & Barbi, F. (2017). Implementing the sustainable development goal: towards addressing three key governance challenges- collective action, trade-offs, and accountability. *Environmental Sustainability*, 26, 90-96.
- Baughn, C., Bodie, N., & McIntosh, JC (2007). Corporate social and environmental responsibility in Asian countries and other geographical regions. *Corporate Social Responsibility and Environmental Management*, 14(4), 189-205.
- Chithambo, L., & Tauringana, V. (2017). Corporate governance and greenhouse gas disclosures: A mixed-methods approach. *The International Journal of Business in Society*, 17(4), 678-699.
- Carlo, C., Lorenza, C., Fabio, E., & Luca, L. (2015). *Assessing sustainable development goals: A new methodology to measure sustainability*. FEEM Working Paper No 89.
- Cooper, D. (1988). A social analysis of corporate pollution disclosures: A Comment. *Advances in Public Interest Accounting*, 2, 179-186.

- Clarkson, B. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92-118.
- Deegan, C., & Rankin, M. (1996). Do Australian companies objectively report the environmental news? An analysis of environmental disclosures by firms successfully prosecuted by the Environmental Protection Authority. *Accounting, Auditing & Accountability Journal*, 9(2), 50-60.
- Deegan, C. (2002). The legitimizing effect of social and environmental disclosures: A theoretical foundation. *Accounting, Auditing and Accountability Journal*, 15(3), 282-311.
- Deegan, C., & Blomquist, C. (2006). Stakeholder influence on corporate reporting: An exploration of the interaction between WWF-Australia and the Australian minerals industry. *Accounting, Organizations and Society*, 31(4), 343-372.
- Eweji, G. (2011). A shift in corporate practice? Facilitating sustainability strategy in companies, *Corporate Social Responsibility and Environmental Management*, 18(2), 125-136.
- Everett, J., Neu, D., & Rahaman, A. (2007). Accounting and the global fight against corruption. *Accounting, Organizations and Society*, 32(6), 513-542.
- Erin, O., Afeisume, O., & Owodunni, K. (2016). Sustainability reporting and quality of corporate disclosure: Evidence from the Nigerian banking sector. *ICAN Journal of Accounting and Finance*, 2(1), 355-376.
- Fleming, A., Wise, R., Hansen, A., & Sam, L. (2017). The sustainable development goal: A case study. *Marine Policy*, 86, 94-103.
- Faisal, F., Tower, G., & Rusmin, R. (2015). Legitimizing corporate sustainability reporting throughout the world. *Australian Accounting, Business, and Finance Journal*, 6(2), 19-34.
- Frink, D., & Klimoski, J. (2004). Advancing accountability theory and practice: Introduction to the human resource management review. *Human Resource Management Review*, 14(1), 1-17.
- GRI (2010). *Sustainability reporting guidelines*. Amsterdam: GRI. Retrieved from: <http://www.globalreporting.org>
- GRI (2017). *G4 Sustainability Reporting Guidelines: Reporting Principles and Standard Disclosures, The Global Reporting Initiative, 2017* Retrieved from <https://www.globalreporting.org/reporting/g4/Pages/default.aspx>
- Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing, and Accountability*, 8(2), 47-77.
- Gray, R., Adams, C., & Owen, D. (2014). *Accountability, social responsibility, and sustainability: accounting for society and the environment*. Pearson Education Limited, Harlow, England.
- Guthrie, J. & Parker, L., (1990). Corporate social disclosure practice: A comparative international analysis. *Advances in Public Interest Accounting*, 3, 159-176.
- Hak, T., Janoušková, S., & Moldan, B. (2016). Sustainable development goals: A need for relevant indicators. *Ecological Indicators*, 60, 565-573.
- Hou, J., Walsh, P. P., & Zhang, J. (2015). The dynamics of the human development index. *The Social Science Journal*, 52, 331-347. doi:10.1016/j.soscij.2014.07.003
- Halkos, G. & Zisiadou, A. (2016). *Environmental performance index and economic welfare*. Paper presented in the 4th PanHellenic Conference in Natural Resource and Environmental Economics at Volos, 4-5 November 2016.

- Holland, L. & Foo, Y. (2003). Differences in environmental reporting practices in the UK and the US: The legal and regulatory context. *The British Accounting Review*, 3(1), 1-18.
- Hopper, T., Tsamenyi, M., Uddin, S., & Wickramasinghe, D. (2009). Management accounting in less developed countries: What is known and needs knowing. *Accounting, Auditing & Accountability Journal*, 22(3), 469-514.
- Hopper, T., Lassou, P., & Soobaroyen, T. (2017). Globalization, accounting, and developing countries. *Critical Perspectives on Accounting*, 43, 125-148.
- Idowu, A. (2014). Corporate social responsibility in the Nigerian banking industry: When will the lip-service games end? *Journal of Economics and Sustainable Development*, 5(22), 2126.
- Iheriohanma, J., & Oguoma, O. (2010). Governance, leadership crisis and underdevelopment in Africa: An explorative discourse. *European Journal of Social Sciences*, 12(3), 409-416.
- Institute of Economic and Peace (IEP) (2017). Global peace index 2017. Available online at <http://www.economicsandpeace.org/reports/2017>. (Accessed 01.10.2018)
- Iyoha, F., & Oyerinde, D. (2010). Accounting infrastructure and accountability in the management of public expenditure in developing countries: A focus on Nigeria. *Critical Perspectives on Accounting*, 21(5), 361-373.
- Khan, M. H. (2007). *Governance, economic growth, and development since the 1960s*. New York: UN Department of Economic and Social Affairs.
- Kroll, C. (2015). *Sustainable Development Goals: Are the rich countries ready?* Gutersloh: Bertelsmann Stiftung.
- Konstantinos, G., & Dimitrios, K. (2016). Drivers and barriers of sustainability reporting in the Greek public forest service, *Open Journal of Accounting*, 5(1), 1-14.
- Kolk, A & Perego, P (2010). Determinants of the adoption of sustainability assurance statements: An international investigation. *Business Strategy and the Environment*, 19(3), 182-198.
- Laura, S., Coduta, M., & Maria, A. (2016). Overall governance index for developed and emerging European Life Insurance Markets. *International Journal of Academic Research in Business and Social Sciences*, 6(10), 381-392.
- Laufer, W. (2003). Social accountability and corporate green-washing. *Journal of Business Ethics*, 43(3), 253-61.
- Lassou, P., & Hopper, T. (2016). Government accounting reform in an ex-French African colony: The political economy of neo-colonialism. *Critical Perspectives on Accounting*, 36, 39-57.
- Lederman, D., Loayza, V., & Soares, R. (2005), Accountability and Corruption: Political institutions matter. *Economics & Politics* 17(1): 1 – 35.
- Lydenberg, S., Rogers, J., & Wood, D. (2010). *From transparency to performance: Industry-based sustainability reporting on key issues*. Initiative for Responsible Investment (IRI), Harvard University.
- Loosemore, M., & Phua, F. (2011). *Stakeholder engagement in managing risk*. Taylor and Francis: London, UK.
- Mohammad, B. (2014). An overview of corporate social and environmental reporting in developing countries, *Issues in Social and Environmental Accounting*, 4(1), 3-17.

- Milne, M. & Patten, D. (2002). Securing organizational legitimacy: An experimental decision case examining the impact of environmental disclosures. *Accounting, Auditing, and Accountability Journal*, 15(3), 372-405.
- Mousa, G.A., & Hassan, N.T. (2015). Legitimacy theory and environmental practices: Short notes. *International Journal of Business and Statistical Analysis*, 2(1), 41-53.
- Mo Ibrahim Report (2017). *Accountability Index Report*. Retrieved online at: <http://www.mo.ibrahim.foundation/u/2017/11/21165610/2017-IIAG-Report.pdf>. (Accessed 21.09.2018)
- Mullins, L.J., & Christy, G. (2013). *Management and Organisational Behaviour*. Taylor and Francis: London
- Ngatia, C. (2014). Exploring sustainability reporting for the financial performance of selected companies listed on the Nairobi securities exchange in Kenya. *International Journal of Economics and Finance*, 1(4), 32-48.
- OECD (2016). *Green Growth and Developing Countries: A Summary for Policy Makers*. Available online at <https://www.oecd.org/dac/50526354.pdf> (Accessed 13.09.2018)
- Olaope, T. (2016). *Good governance: accountability and transparency for sustainable development in Africa*. 3rd International Conference on African Development Issues, Lagos, pp. 28-45.
- Ockwell, D., & Mallett, A. (2012). *Low Carbon Technology Transfer: From Rhetoric to Reality*. Available online at : <https://www.routledge.com/low-carbon-technology-transfer-from-rhetoric-to-reality/Ockwell-Mallett/p/book/9781849712699>
- O'Dwyer, B., & Owen, D. (2005). Assurance statement practice in environmental, social and sustainability reporting: a critical evaluation. *The British Accounting Review*, 14(2), 205-229.
- Okike, E., Adegbite, E., Nakpodia, F., & Adegbite, S. (2015). A review of internal and external influences on corporate governance and financial accountability in Nigeria. *International Journal of Business Governance and Ethics*, 10(2), 165-185. doi: 10.1504/IJBGE.2015.070933
- Rahaman A.S. (2010). Critical accounting research in Africa: Whence and Whither. *Critical Perspectives on Accounting*, 21(5), 420-427.
- Sharma, D. (2006). A risky environment for investment. *Environmental Health Perspectives*, 114(8), 478-481.
- Savacool, B. & Andrew, N. (2015). Does transparency matter? Evaluating the governance impacts of the Extractive Industries Transparency Initiative (EITI) in Azerbaijan and Liberia. *Resource Policy*, 45(2), 183-192.
- Sanyaolu, O., Adesanmi, D., Bello, Y., Erin, O., Ajetunmobi, O., & Ilogho, S. (2018). The nexus between environmental cost and financial performance: A trend analysis approach. *International Journal of Management, Accounting, and Economics*, 5(9), 1-20.
- Soobaroyen, T & Ntim, C. (2013). Social and environmental accounting as symbolic and substantive means of legitimation: The case of HIV/AIDS reporting in South Africa *Accounting Forum*, 37(2), 92-109.
- Stojanovic, I., Ateljevic, J. & Stevic, R. (2016). Good governance as a tool for sustainable development. *European Journal of Sustainable Development*, 5(4), 558-573.

- Spence, L., & Rinaldi, L. (2014). Governmentality in accounting and accountability: A case of embedding sustainability in a supply chain. *Accounting, Organisation and Society*, 39(6), 433-453.
- Simnett, R., Vanstraelen, A., & Chua, W. (2009). Assurance on sustainability reports: An international comparison. *Accounting Review*, 84(3), 937-967.
- Sustainable Development Solution Network (SDSN) (2016). *Vision and organization*. Available online at <http://www.unsdsn.org/about-us/vision-and-organization>. (Accessed 05.09.2018)
- Tamoi, J., Faizah, D., Mustaffa, M., & Yussri, S. (2013). Does good corporate governance lead to better sustainability reporting? An analysis using structural equation modeling. *Journal of Social and Behavioural Sciences*, 145(2), 138-145.
- Tauringana, V., & Chithambo, L. (2015). The effect of DEFRA guidance on greenhouse gas disclosure. *The British Accounting Review*, 47(4), 425-444.
- Transparency International (2017). *2017 Global Corruption Report*. Transparency International: Berlin.
- United Nations Development Program (UNDP). (2015). *Africa human development report: Towards a food secure future*. Available online at <http://www.undp.org/content/undp/en/home/librarypage/hdr/africa-human-development-report-2012/>
- United Nations (2015). *Transforming our world: The 2030 agenda for sustainable development*. New York: United Nations.
- Ujah, J. S. (2010). Public accountability in Nigeria; Problems and Prospects. *International Journal of studies in the Humanities*, 7(8), 77-89.
- Urama, K., Ozor, N. & Acheampong, E. (2014). *Achieving SDGs through transformative governance practices and vertical alignment at the national and subnational levels in Africa*. Available online at www.sdplannet.africa.org (Accessed 04.10.2018)
- Uwuigbe, U., & Egbide, B. (2012). Corporate social responsibility disclosures in Nigeria: A study of listed financial and non-financial firms. *Journal of Management and Sustainability*, 2(1), 160-169.
- Watts, R., & Zimmerman, J. (1978). Towards a positive theory of the determination of accounting standards. *The Accounting Review*, 53(1), 112-134.
- Ward, D., & Mohawald, M. (2014). Contributions of developed and developing countries to global climate forcing and surface temperature change. *Environmental Research Letters*, 9(7), 1-10.
- World Bank (2015). *Country and lending groups*. Washington D.C. World Bank
- World Bank (2017). *Governance and the law*. Available online at <http://www.worldbank.org/en/publication/wdr2017> (Accessed 11.10.2018)
- World Economic Forum (2017). *The global competitiveness report 2017-2018*. Available online at <http://www.weforum.org/reports/the-global-competitiveness-report-2017-2018>. (Accessed 24.09.2018)
- Xiao, Y., Norris, C., Lenzen, M., & Norris, G. & Murray, J. (2017). How social footprints of Nations can assist in achieving the sustainable development goals. *Ecological Economics*, 35, 55-65
- Zsolnai, L. (2006). Extended stakeholder theory, *Society and Business*, 1(1), 37 – 44

APPENDICES**Appendix 1: Data Collected for Analysis**

	SDGI	SDGI	CPI	CPI	AI	AI	GCI	GCI
	2016	2017	2016	2017	2016	2017	2016	2017
NIGERIA	0.361	0.372	0.28	0.27	0.32	0.36	0.33	0.33
GHANA	0.482	0.492	0.43	0.4	0.42	0.48	0.36	0.38
CAMEROON	0.463	0.492	0.26	0.25	0.37	0.39	0.35	0.36
GABON	0.512	0.561	0.35	0.32	0.31	0.38	0.46	0.48
SOUTH AFRICA	0.538	0.579	0.45	0.43	0.44	0.47	0.47	0.44
ZAMBIA	0.418	0.468	0.37	0.38	0.47	0.55	0.42	0.39
EGPYT	0.482	0.496	0.32	0.34	0.4	0.42	0.36	0.39
MOROCCO	0.616	0.651	0.37	0.4	0.42	0.4	0.42	0.4
KENYA	0.441	0.421	0.26	0.28	0.31	0.35	0.39	0.39
UGANDA	0.436	0.463	0.25	0.26	0.32	0.33	0.36	0.37

	GPI	GPI	HDI	HDI	WGI	WGI	EPI	EPI
	2016	2017	2016	2017	2016	2017	2016	2017
NIGERIA	0.37	0.39	0.4	0.53	0.45	0.47	0.58	0.53
GHANA	0.51	0.51	0.56	0.59	0.52	0.55	0.58	0.57
CAMEROON	0.48	0.45	0.42	0.57	0.41	0.45	0.57	0.58
GABON	0.52	0.51	0.58	0.7	0.51	0.54	0.67	0.63
SOUTH AFRICA	0.45	0.42	0.62	0.69	0.54	0.57	0.7	0.72
ZAMBIA	0.51	0.55	0.52	0.58	0.5	0.55	0.66	0.68
EGPYT	0.42	0.47	0.55	0.57	0.45	0.48	0.66	0.62
MOROCCO	0.51	0.5	0.51	0.51	0.53	0.59	0.74	0.72
KENYA	0.39	0.45	0.48	0.59	0.41	0.48	0.62	0.61
UGANDA	0.46	0.51	0.51	0.51	0.52	0.51	0.57	0.53

Source: Compiled by the Author (2018)

Appendix 2: Scatter Graph

Figure 1: SDGI and CPI

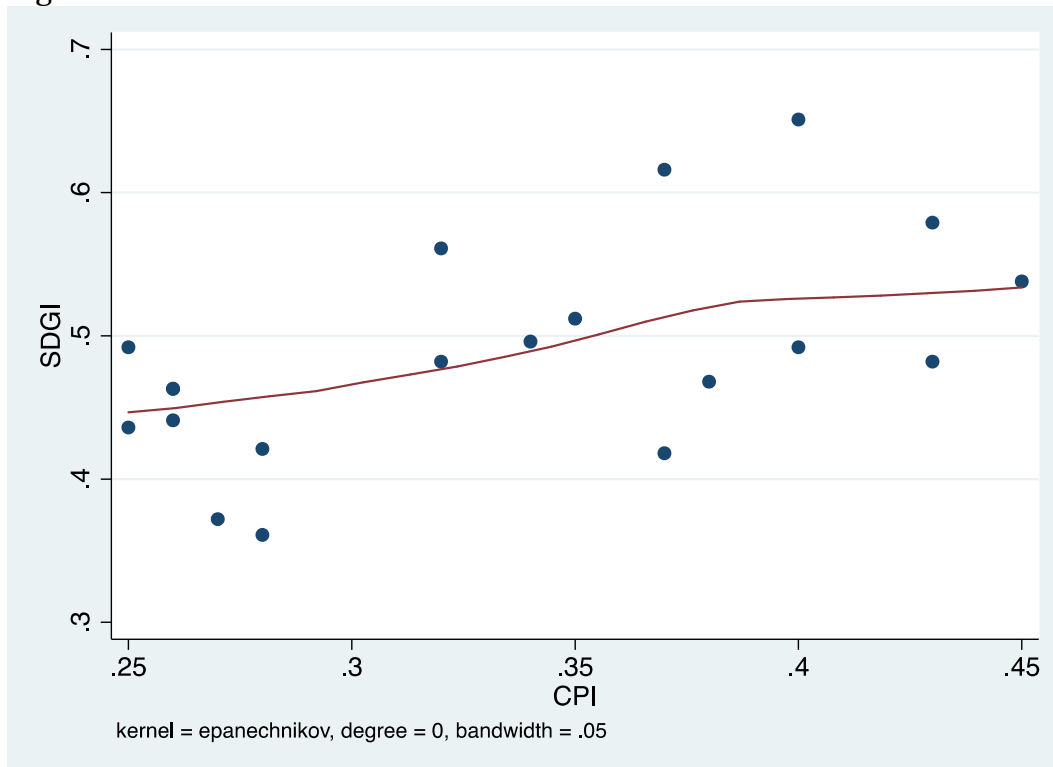


Figure 2: SDGI and AI

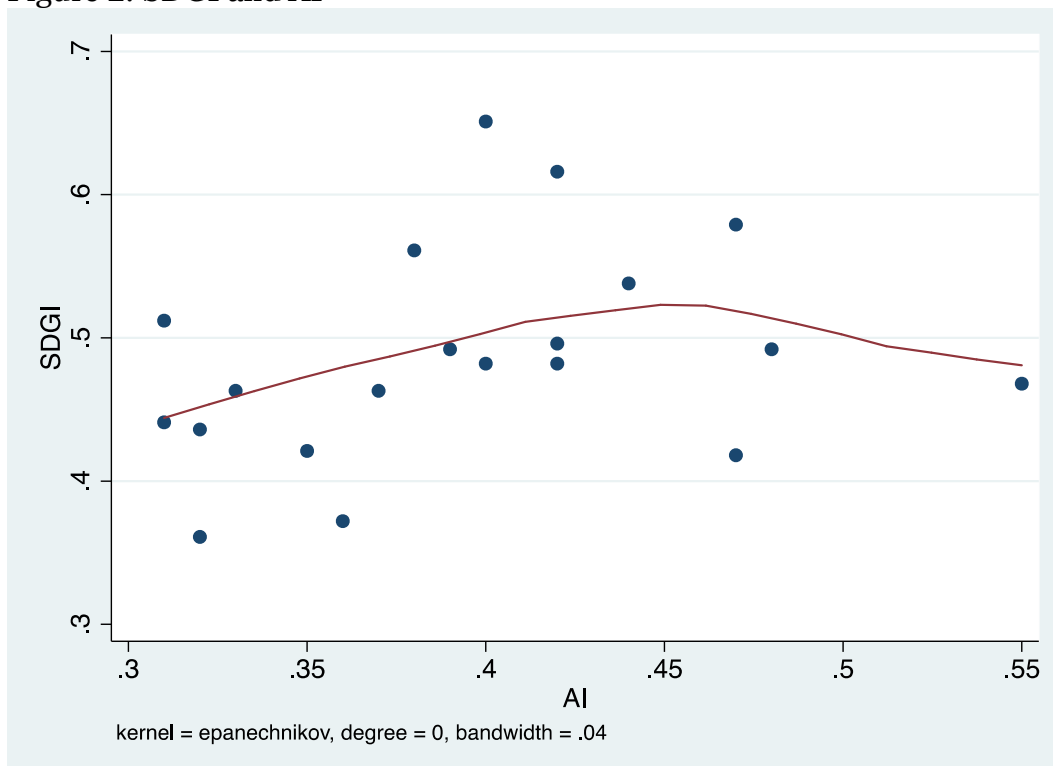


Figure 3: SDGI and GCI

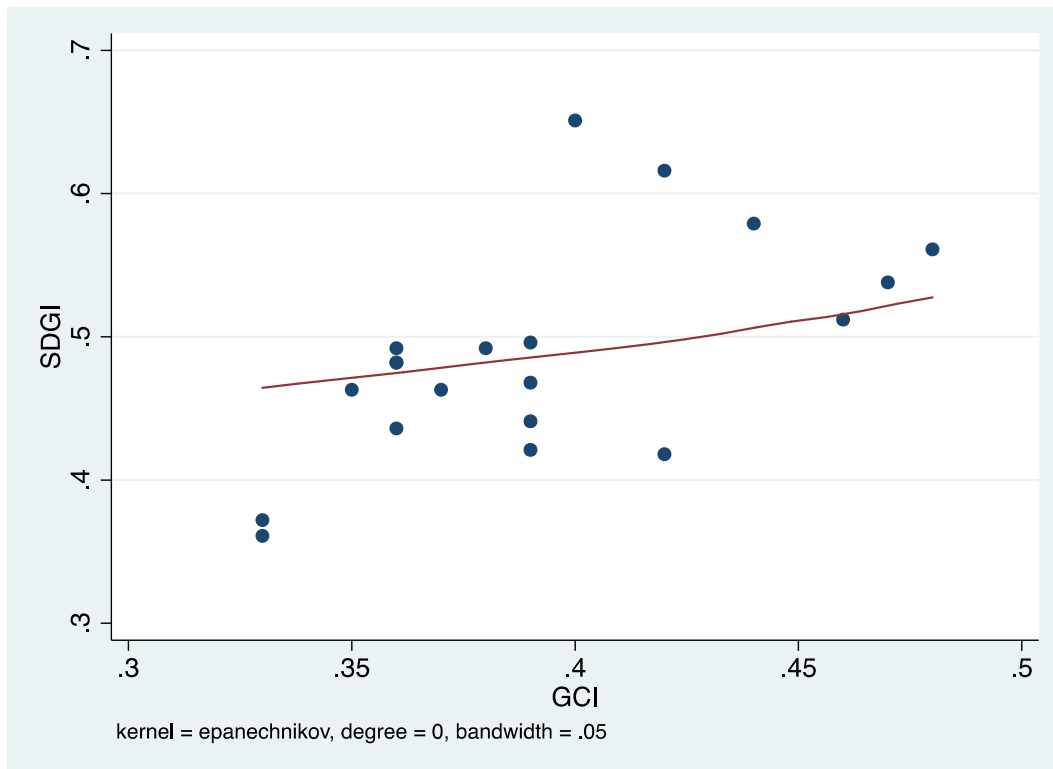


Figure 4: SDGI and GPI

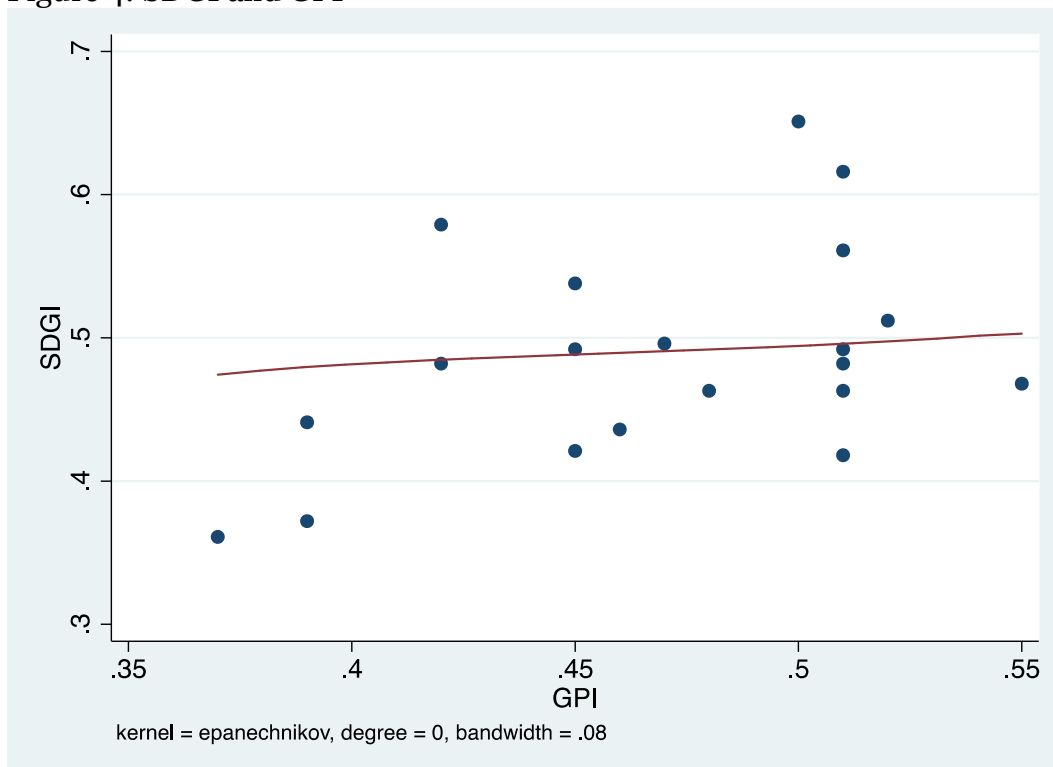


Figure 5: SDGI and HDI

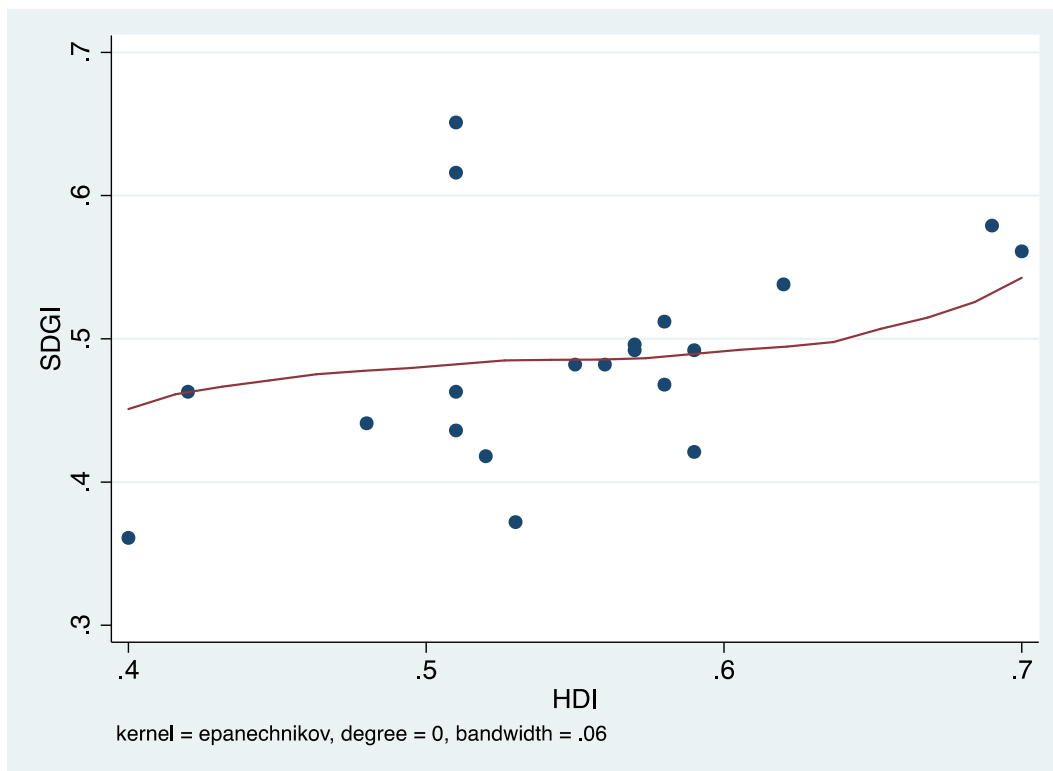


Figure 6: SDGI and WGI

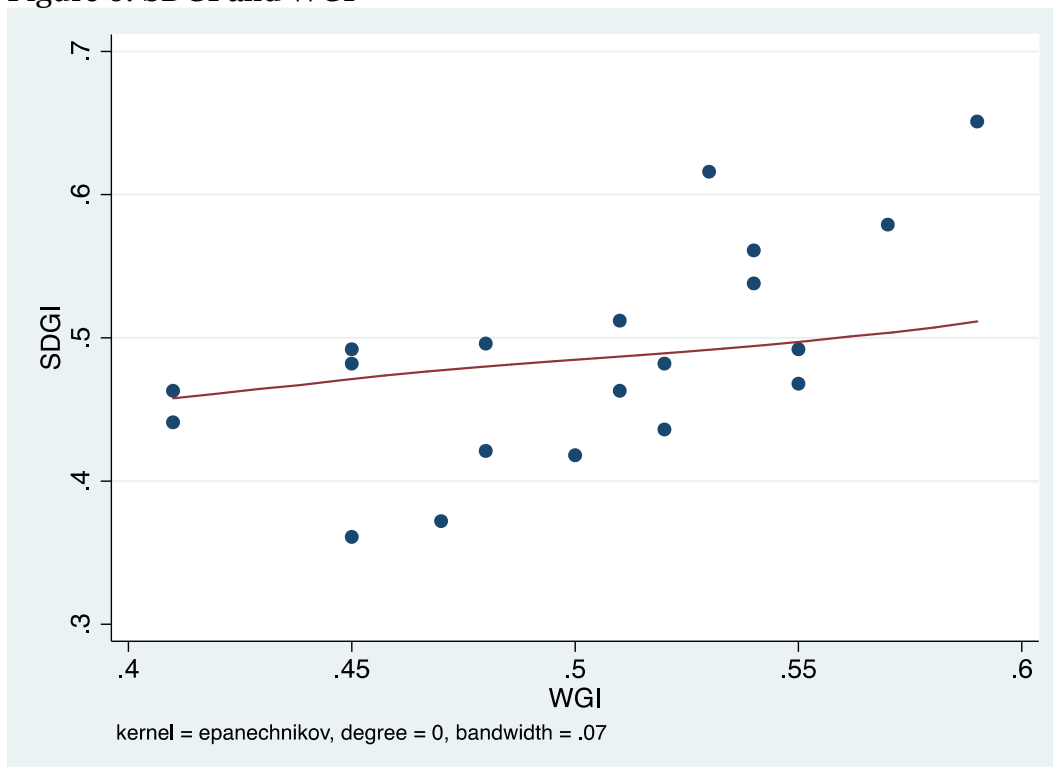
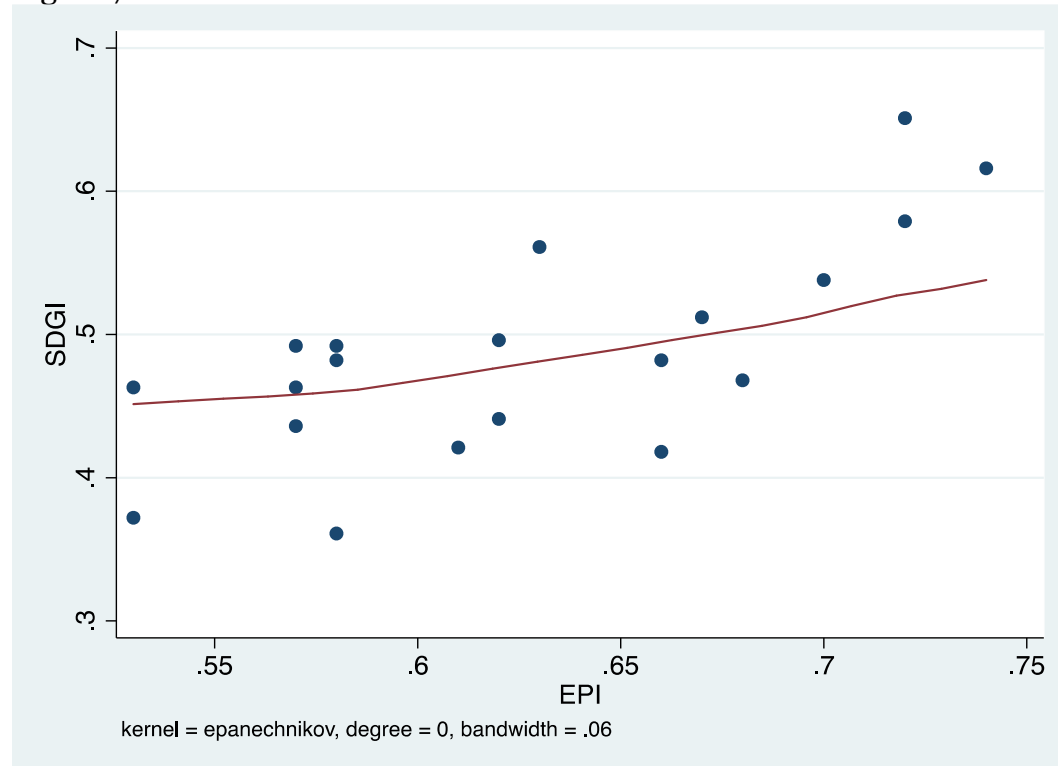


Figure 7: SDGI and EPI



Source Authors Computation (2018) using STATA 13

Appendix 3: List of SDGs

SDGs	Targets
SDG 1	No poverty
SDG 2	Zero Hunger
SDG 3	Good health and well-being
SDG 4	Quality education
SDG 5	Gender equality
SDG 6	Clean water and sanitation
SDG 7	Affordable and clean energy
SDG 8	Decent work and economic growth
SDG 9	Industry, innovation, and infrastructure
SDG 10	Reducing inequalities
SDG 11	Sustainable cities and communities
SDG 12	Responsible consumption and production
SDG 13	Climate Action
SDG 14	Life below water
SDG 15	Life on land
SDG 16	Peace, justice, and strong institutions
SDG 17	Partnership for the goals

Source: Compiled by the Author (2018)

Culture, Legal origin and the Asymmetric Earnings timeliness before and after the adoption of IFRSs

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Abstract

Purpose: This paper examines whether culture and legal origin influence the role of IFRS on the asymmetric earnings timeliness.

Design/Methodology/Approach: The research uses panel data of 330 listed firms from four African countries namely; Egypt, South Africa, Kenya and Morocco for a period of eight years from 2002 to 2009. The choice of this period is based on the fact that many African countries started adopting IFRS in 2005 as a result of the European Union accounting regulation number 1606/2002/EC of 2002 which required all public companies listed on stock markets to consolidate their financial accounts using IFRS with effect from January 2005.

Findings: The findings show that firms from common law countries are timelier in recognizing bad news but less timely in recognizing good news compared to firms from code law countries, consistent with prior studies. Nevertheless, the overall recognition timeliness of earnings measured through the adjusted R^2 decreases more in common law than code law firms post-IFRS. Further, the results indicate that culture is associated with a reduction in loss and incremental loss recognition timeliness prior and post IFRS. However, we find that conservative culture is associated with greater gains recognition timeliness particularly before IFRS.

Practical implications: The findings should be of interest to firm managers, policy makers and accounting standard setters such as IASB professional accounting bodies. Further, the results imply that the usefulness of IFRS through asymmetric earnings timeliness and its implementation are affected by culture and legal origin.

Research Limitation: This research is limited to four African countries and 330 listed firms. Future research may increase the sample in order to increase diversity and get more insight on the impact of culture and legal environment on asymmetric earnings timeliness.

Originality/value: The study contributes to the meager literature on the efficacy of IFRS in emerging economies with different institutional settings, culture and legal origin.

Key words: IFRS, Asymmetric Earnings Timeliness, Prudence Accounting Principle, Culture, Legal Origin.

1. Introduction

This paper examines whether International Financial Reporting Standards (IFRS) adoption improves asymmetric timeliness of earnings as a measure of stewardship of management to owners irrespective of the differences in hosting country's institutional settings, culture and legal origins. Earnings timeliness is *the ability of net income to incorporate contemporary economic events* and asymmetric earnings timeliness is *the ability of earnings to recognize economic losses more timely than economic gains due to prudence principle in accounting*. There are two types of prudence accounting principle namely; *news-dependent prudence accounting principle* and *news-independent prudence accounting principle*.⁷ This study is based on news-dependent prudence

⁷ News-dependent prudence accounting principle refers to; "*the more timely recognition of bad news than good news into earnings*" whilst news-independent prudence accounting principle refers to; "*understatement of assets and revenues and overstatement of liabilities and expenses*".

accounting principle as accountants require more verifiable evidences to recognize revenues than they do for losses; thus losses are recognized more quickly than revenues. The research objective is important in African settings where culture is conservative (Hofstede, 1980, Gray, 1988), legal origins are mixed and other institutional settings are less established (La Porta *et al.*, 1997, 1998).

IFRS are principles-based accounting standards as opposed to rules-based Financial Accounting Standards issued by the US-based Financial Accounting Standards Board (FASB). Thus, as a result of their flexibilities, their implementations are based on management judgment and discretion. Besides, IFRS use fair value measurement and Anglo-Saxon principles which require the existence of well-established capital markets in order to provide pricing mechanisms on constant and continuous basis. However; African capital markets are epitomized by illiquidity and pricing inefficiencies (Onyema, 2016).

There are competing propositions regarding the impact of IFRS on earnings quality and timeliness. The principles-based rather than the rules-based accounting standards provide avenues for opportunistic behaviour and judgment by managers leading to distortion of reported earnings (Schipper, 2003). On the other hand, 'rules' based accounting standards undermine professional accounting judgment by putting in place well defined rules or guidance on accounting treatment in financial statements (Benston *et al.*, 2006). As a result, it may lead to misrepresentation of firms' underlying economic phenomena and smoothing of income in order to avoid large losses and hence favour the firms' contractual obligations and debt covenants (Barth *et al.*, 2008).

The inefficiency and illiquidity of African capital markets (Onyema, 2016), are likely to hinder the quicker incorporation of accounting information, especially earnings into share prices and the way earnings incorporate economic income (i.e. good and bad news). Furthermore, the less conservative nature of IFRS, culture and mixed legal origins inherent in most African countries are likely to affect the asymmetric earnings timeliness. Many African countries started adopting IFRS in 2005 as a result of the European Union accounting regulation number 1606/2002/EC of 2002 which required all public companies listed on stock markets to consolidate their financial accounts using IFRS with effect from January 2005.

The theoretical and empirical literature on the link between IFRS issues and implementation on one hand and earnings quality through asymmetric earnings timeliness on the hand point out that culture; legal origins and other institutional settings are likely to be the main impediments to the successful implementation of IFRS (See for instance; Zeghal and Lahmar; 2018, Enomoto, 2018, Manganaris *et al.*, 2015, André *et al.*, 2013, and Ball 2006). For instance; Ball (2006) argue that; *"the notion that uniform standards alone will produce uniform financial reporting seems naïve, if only because it ignores deep-rooted political and economic factors that influence the incentives of financial statement preparers and that inevitably shape actual financial reporting practice"*. This implies that, financial reporting quality is likely to differ from one country to another due to differences in institutional settings, political and economic factors, culture and legal origins.

Previous studies in this strand of literature mainly link culture and asymmetric earnings timeliness only and focus on European countries (See for instance; Zeghal and Lahmar; 2018, Manganaris *et al.*, 2015, André *et al.*, 2013) and other developed countries (Enomoto, 2018 and Noravesh *et al.*, 2015, Ball *et al.*, 2000, 2003, Ball and Shivakumar, 2005, Barth *et al.*, 2008, Ball *et al.*, 2008). There are relatively few studies which link culture and legal origin to accounting in Africa and they focus on value relevance and predictive ability of IFRS earnings see for instance; Hillier *et al.* (2015) and Ngole (2016). In a cross-country research on earnings quality, Enomoto (2018) finds that earnings quality varies with the institutional factors (legal tradition, investor protection, tax system,

regulation financial development, market competition, accounting standards and enforcement of accounting standards), and cultural factors of the country. Further, Enomoto (2018) calls for future research to examine the impact of IFRS adoption on the contracting role of accounting through the change in earnings quality in an international setting.

This study therefore extends previous studies which examine the impact of IFRS on asymmetric earnings timeliness. Thus, the current study examines the influence of conservative culture and legal origin on asymmetric earnings timeliness role of IFRS. Conservative culture is defined based on Gray's (1988) *conservatism hypothesis* which asserts that; '*countries which are highly ranked in uncertainty avoidance but lower in individualism and masculinity are more likely to rank highly in terms of conservatism*'.

The findings show that firms from common law countries are timelier in recognizing bad news but less timely in recognizing good news than firms from code law countries. However, overall good and bad news timeliness of earnings (measured through the adjusted R^2) decreases to a greater extent in common law than code law countries. Moreover, consistent with prediction, there is evidence showing that conservative culture is associated with a reduction in loss, incremental loss recognition timeliness before and after IFRS. However, the results also suggest that conservative culture leads to greater gains recognition timeliness especially before IFRS adoption. This may be attributed to the behaviour of managers in countries with high degree of conservative culture reporting higher earnings to fulfil their expectations (Risberg, 2005).

One major policy implication of this study is that culture and legal origins matter on the efficacy of IFRS earnings quality and on the way IFRS earnings incorporate economic gains and losses. The study makes two main contributions to the existing literature; one, it examines the impact of culture and legal origins on IFRS earnings quality and timeliness in emerging African economies setting and two, it provides an informed feedback to the standard setters (IASB, FASB and accounting professional bodies) on the efficacy of IFRS in different institutional settings and information environments.

2. Literature Review and Hypotheses Development

2.1 Theoretical Framework

This study is underpinned by the agency theory and contract theory. Agency theory is one of the compensation theories (others being equity theory and Reinforcement/Expectancy theory) which was established by Jensen and Meckling (1976). Fligstein and Choo (2005) argues that; "agency theory views the firm as a nexus of contracts and as such sees the firm as a 'useful fiction'. The theory explains the relationship between ownership and management of the firm i.e. *principal-agent relationship*. It suggests that the governance of a company is based on the conflicts of interest between the company's owners (Principals-shareholders), its managers and major providers of debt finance. Each of these groups has different interests and objectives. The owners entrust the management to run companies and the expectation is that managers will act to the best interests of the owners. This is called the stewardship role of the management to owners. However; this expectation is not always fulfilled due to the conflicts of interests between managers and owners. Agency theory is the amplification of the old adage by Smith (1776) that; "*being the managers of other people's money (rather than their own) it cannot be expected that they should watch over it with the same anxious vigilance.*"

Due to separation of ownership and management of the firm, owners and lenders are usually less informed about the operations of the company when you compare with managers as the result; they depend greatly on financial reporting. Thus; this is increasing the importance of how quickly (timely) the available information is captured in financial statements. Ball *et al.* (2008) argue that timeliness affects debt

contracting because reported financial statement variables affect various covenanted financial ratios including balance sheet leverage, liquidity and earnings-based interest coverage ratios. Moreover; they argue that financial reporting is shaped by debt markets not equity markets and that earnings timeliness is a measure of the stewardship of management and it increases contractual obligations and covenants. Agency theory asserts that, timely loss recognition increases the effectiveness of contractual restrictions on the decision rights of loss-making managers that are based on financial statement outcomes. In summary, the earnings timeliness and asymmetric earnings timeliness measure the stewardship role of the management. The IASB (2010) conceptual framework lists ‘timeliness’ as one of the enhancing qualitative characteristics of accounting information, others being verifiability, understandability and comparability. The usefulness of accounting information *inter alia* empirically depends on how timely it incorporates the economic gains or losses (Basu, 1997).

Contract theory guides the development of formal and informal legal agreements in a situation where there is asymmetric information between parties. This is a principal-agent case where agents (management) are more knowledgeable about the operations of firms than principals (owners). Further, Arrow (1984) asserts that; *“contract theory offers insights used in the construction of contracts to guide and influence principal-agent relations in the real world, at the same time it represents an attempt to explain observed phenomena in the empirical economic world, particularly exchange relations that are not explained by more standard economic theory”*. Thus, contract theory draws upon principles of financial and economic behavior as different parties have different incentives to perform or not perform particular actions. In constructing and developing contracts between firms and management, usually owners link the performance of managers to accounting numbers particularly earnings. Say it differently; contract theory aims at designing a metric that will optimize the manager’s decisions. Contract theory is categorized into three types or models namely; moral hazard, adverse selection and signaling model.⁸

Earnings which recognize economic losses more timely than economic gains have the ability of increasing contracting efficiencies through several agency relationships such as between shareholders and management, debt holders and shareholders and other firms’ contracting parties (Ball *et al.*, 2008). This is done by providing more timely information on bad news than good news (Ball *et al.*, 2000, and Basu, 1997). The concept of recognition timeliness is thoroughly examined empirically in the Basu’s (1997) seminal paper. Using a U.S. sample for the period from 1963 to 1990 and a reverse ERC model, Basu (1997) predicts and confirms that earnings respond more rapidly to negative returns than positive returns and refers this phenomenon to as asymmetric timeliness of earnings. He argues that this finding is attributable to the differential accounting treatment on economic gains and losses whereby losses are recognised immediately as they occur while gains are deferred to future periods.⁹

In short, Basu (1997) intends to measure how timely earnings are in recognizing information in stock prices (good and bad news) which are based on investors past

⁸ In moral hazard, a principal has an incentive to engage in risky behaviors because the associated costs are incurred by the other contracting party. Adverse selection depicts a principal who has more or better information than the other contracting party and therefore distorts the market process. Signaling depicts transferring of information from one party to the other in order to arrive at a mutual understanding. It occurs when one party adequately conveys knowledge and characteristics about itself to the principal.

⁹ Basu (1997) argues that accountants require a higher degree level of verification for recognizing good news in earnings than bad news.

trading decisions. He assumes a semi-strong efficient market and the idea that accounting data lags stock prices (stock returns) hence accounting information confirms and verifies stock market information (Risberg, 2005). Despite the predictions of theories, institutional settings, culture and legal origins in African countries are different from those in US and the rest of developed countries, thus one would expect earnings timeliness and asymmetric earnings timeliness to be different as well. African countries have mixed legal origins emanating from colonialism, conservative culture and less established institutional settings which are unlikely to foster the usefulness of IFRS.

2.2 Prior Research

2.2.1 Legal Origin and Asymmetric Earnings Timeliness

The influence of legal origin on earnings recognition has been a focus of accounting researchers pioneered by Ball *et al.* (2000, 2003). For example; Ball *et al.* (2000) find that common law countries earnings are significantly timelier in recognizing bad news than earnings in code-law countries.¹⁰ This may be attributable to quicker incorporation of economic losses in common versus code law countries. Ball *et al.* (2000) argue that the demand for accounting income is higher in common than code law countries because the latter takes a stakeholders approach of corporate governance thus solve the effects of asymmetry of information through the insider channels and family networks.

Ball *et al.* (2003) compare the timeliness recognition of economic gains and losses of the four East Asian countries of Hong Kong, Thailand, Singapore and Malaysia with the matched sample of common and code law countries for the period from 1984 to 1996.¹¹ Using the Basu (1997) model, they find that the East Asian countries have similar overall earnings timeliness (measured through the adjusted R²) to code law countries but it is much lower than those of common law countries. The incremental loss recognition coefficient shows that both Asian countries and code law countries have little evidence of incremental loss recognition although code law countries are somewhat better than Asian group. However, the results indicate that common law countries are timelier in recognizing bad news over good news. Ball *et al.*, (2003) attribute these findings to dominance of financial reporting incentives over accounting standards because all four East Asian countries accounting standards are common law in nature.

Ball and Shivakumar (2005) document that timely loss recognition is substantially less prevalent in private companies than in public companies for a U.K. sample. This is despite the fact that both private and public firms face similar regulatory rules. Moreover, Risberg (2005) examines the contractual effectiveness embedded in public financial reporting between the firm and the outside investor in nine different countries consisting of eight European code law countries and one Anglo-Saxon country, the U.K. Consistent with Ball *et al.* (2000), she finds that independent firms' earnings incorporate economic losses more timely than firms in

¹⁰ Common law countries include; Australia, Canada, U.K. and U.S. while the code law countries are France, Germany and Japan for the primary sample (Firm year observations exceeding 1000). The secondary sample (with firm year observations between 100 and 1000) consists of eight common law countries including South Africa and ten code law countries (for further detail see Ball *et al.*, 2000, p.20).

¹¹ The common law sample comprises of Australia, Canada, U.K. and U.S. while the code law sample consists of Germany, France and Japan.

pyramid groups.¹² However, firms in pyramid groups are more aggressive reporters of economic income than independent firms.

In a study involving 78,949 firm-year observations from 22 countries during the period 1992-2003, Ball *et al.* (2008) hypothesize and confirm that debt markets and not equity markets are associated with the level of timely loss recognition.¹³ They argue that the demand for financial reporting is primarily triggered by debt markets contrary to the widespread belief that equity markets and not debt markets should shape corporate financial reporting. Moreover, they find that timely gain recognition is independent of equity markets and that legal origin is positively and significantly associated with timely loss recognition. Thus, the incremental loss recognition coefficient confirms the importance of debt markets not equity markets.

Barth *et al.* (2008) examine whether the application of International Financial Reporting Standards (IFRS) is associated with higher loss recognition timeliness than non-U.S. domestic standards. They compare the loss recognition timeliness of IFRS firms and non-IFRS firms before and after adoption periods on a large sample of 1896 firm-year observations (327 firms) for the period spanning from 1994 to 2003 involving 21 countries.¹⁴ They find that IFRS firms recognize large losses more frequently than non-IFRS firms in both periods before and after IFRS adoption. In summary, this strand of literature suggests that legal origin has an impact of asymmetric earnings timeliness and accounting practices in general.

2.2.2 Culture and Asymmetric Earnings Timeliness

The concept that culture is a determinant of accounting practices and institutions is a developing phenomenon in accounting literature. See for instance; Hillier *et al.* (2015) and Ngole (2016). Culture-accounting literature suggests that culture dominates accounting and institutions; in other words; as far as accounting is part of the country's institutional settings, it is more likely to be affected by culture. The theory of national culture was pioneered by Hofstede (1980). The Hofstede's (1980, 1991, and 2001) seminal works remain pivotal in terms of culture related research. Hofstede (1980, p.25) defines culture as *'the collective programming of the mind which distinguishes the members of one human group from another'*.

Hofstede (1980) developed four dimensions of culture namely; uncertainty avoidance (UA), power distance (PD), individualism (IND) versus collectivism (COL) and masculinity (MASC) versus femininity (FEM). Later on, Gray (1988) developed a framework that links Hofstede (1980) cultural dimensions (society values) and accounting values and accounting practices. Gray (1988) came up with four hypotheses i.e. the *secrecy*, *conservatism*, *uniformity* and *professionalism* hypotheses.

Using a sample of 800 firm year observations from 21 countries during the period 1993-2001, Kang *et al.* (2004) examine the relationship between conservative culture and news-independent prudence accounting. They use Schwartz (1994) culture conservatism index score. Their findings indicate that conservative culture is

¹² Risberg (2005) defines independent firms as firms not owned by another firms or with less ownership concentration most found in Anglo-Saxon countries. Pyramid firms are the ones which are owned by other firms, with higher level of ownership concentration and are prevalent in corporate Europe.

¹³ The sample included eight common law countries i.e. Australia, Canada, U.K., U.S., South Africa, Malaysia, Singapore and Thailand and fourteen code law countries including; Brazil, Chile, France, Indonesia, Italy, Netherlands, Spain, Germany, Japan, South Korea, Denmark, Finland, Norway, and Sweden.

¹⁴ The countries include; Australia, Austria, Belgium, China, Czech Republic, Denmark, Finland, Germany, Greece, Hong Kong, Hungary, Poland, Portugal, Russian Federation, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, and United Kingdom.

negatively related to non-operating accruals (a proxy for news-independent prudence accounting). This implies that the higher the conservative culture the higher is prudent accounting. Also, they find that culture and legal origin are independent in explaining incremental loss recognition timeliness.

Dragomir *et al.* (2010) examine the relationship between accounting conservatism (using a ratio of provisions to total liability, *PLR* as a proxy) and national accounting culture (countries classified into IFRS compliant, conservative and liberal). The sample comprises of 388 firms (IFRS compliant-147, Conservative-179 and Liberal-62) from 17 European countries during the period between 31st December 2007 and 30th September 2008.¹⁵ The results indicate that firms from conservative culture recognize significantly greater amounts of provisions than firms from IFRS-compliant and Liberal accounting culture. This implies that conservative culture directly relates to news-independent prudence accounting. To this end, there is no study examining the relationship between conservative culture and news-dependent prudence accounting surrogated by incremental loss recognition timeliness. As Risberg (2005) argues that managers in conservative culture tend to report more gains than losses, one would expect conservative culture to adversely affect asymmetric earnings timeliness. This implies that although IFRS provides more incremental loss recognition timeliness than local GAAP (Barth *et al.*, 2008), the conservative culture widespread in African countries is more likely to reduce its usefulness in terms of asymmetric earnings timeliness.

In a cross-country research, Enomoto (2018) finds that cultural and institutional factors affect the quality of earnings. This suggests that a single set of accounting standards (IFRS) that are generally viewed as of high quality does not always improve earnings quality. Moreover; the author argues that the relationship between IFRS adoption and earnings quality is moderated by culture and institutional settings. Zeghal and Lahmar (2018) examine the effect of culture on prudence in accounting during the adoption of IFRS in fifteen European Union countries during the period 2000-2010. Their study finds that the variation of news-dependent prudence accounting is influenced by all six cultural dimensions (individualism, power distance, uncertainty avoidance, masculinity, long term orientation, and indulgence) established by Hofstede (1980) and Hofstede *et al.* (2010) whilst news-independent prudence accounting is only affected by power distance. In another European countries' study, Manganaris *et al.* (2015) find that country specific features affect both the accounting quality and the relationship between value relevance and news-dependent prudence accounting.

Noravesh *et al.* (2015) test the Gray's (1988) model in Iran and find that one-half of the Gray hypotheses are supported. They attribute the lack of full support to *abnormal evolution of accounting in Iran, the impact of unstable economics, inappropriate use of accounting methods and procedures, the impact of governmental ownership, and the lack of well-developed capital market tradition.*

In summary, prior studies have concentrated in developed economies (for example, U.S., U.K., Germany, Australia, Canada, and France among others). These economies have developed stock markets which are a prerequisite condition for timely incorporation of bad and good news into earnings. Unlike developed countries, African markets are unsophisticated and information inefficient (Onyema, 2016, Smith *et al.*,

¹⁵ IFRS compliant countries include; United Kingdom, Ireland, Norway and Sweden. Conservative countries include; Germany, France, Switzerland, Finland, Netherlands, Belgium, and Austria. Liberal countries include; Spain, Italy, Denmark, Portugal, Greece and Luxembourg. The measurement and recognition of provisions in all firms is done under IFRS regulations.

2002 and Kenny and Moss, 1998), thus earnings may not capture market news in a timely fashion. To conclude; there is a gap in the literature on the studies examining the impact of culture and legal origin on asymmetric earnings timeliness during the accounting regime change from the local GAAP to IFRS.

2.3 Hypotheses Development

2.3.1 Culture

Agency theory and Contract theory are principally explaining the principal-agent relationship in the assumption that information is asymmetric among the contracting parties. Since managers are engaged in daily firm's operations, they usually possess information which owners do not have, thus asymmetry of information. The theoretical argument is that managers are expected to act in the best interests of the owners although this is not the case always. One way of solving the agency problems is to ensure that the contract aligns the interests of managers (e.g. salary and other perks) with performance. The performance of managers is usually measured through accounting numbers especially profits or earnings. The higher the earnings, the greater is the performance. Sometimes managers manipulate earnings in order to attain the set performance metrics and improve the principal-agent relationship and this behaviour is even greater in culturally embedded countries (Risberg, 2005). This prediction is confirmed by Kang *et al.* (2004) and Dragomir *et al.*, (2010).

Kang *et al.* (2004) predict and find that conservative culture is directly related to prudence in accounting. Dragomir *et al.* (2010) hypothesize and find that even under IFRS; the national accounting culture still affects prudence in accounting. Kang *et al.*, (2004) use non-operating accruals (NOA) while Dragomir *et al.* (2010) use the ratio of provisions to total liability (PLR) as measure of prudence in accounting. The lower value of NOA and the higher value of PLR are indicative of prudent accounting.

Based on agency and contract theory and the findings by Risberg (2005), Kang *et al.* (2004) and Dragomir *et al.* (2010), we argue that even if IFRS is regarded as a set of high quality accounting standards (Barth *et al.*, 2008), the prevailing conservative culture in Africa may influence firms' managers to report more gains than losses to avoid being held accountable by external investors. Also, they are likely to anticipate all profits but not losses in order to make income statements look attractive to current and potential investors and of course to improve the principal-agent relationship. Moreover, due to the principles-based nature of IFRS, conservative culture ubiquitous in African countries is likely to facilitate managers to choose accounting choices in their favour rather than exercising professional judgement. Thus, we suggest that conservative culture affects gains and loss recognition timeliness differently. Basing on above theoretical assertions and arguments, we predict and test the following hypothesis:

H1: Conservative culture positively (negatively) affects gains (loss and incremental loss) recognition timeliness in African capital markets before and after IFRS

2.3.2 Legal origin

The nexus of the agency theory hinges on whether the separation of ownership from control is the same when firms are banks-oriented or markets oriented.¹⁶ For example; Fligstein and Choo (2005) assert that agency problems and the need for firms to obtain capital are solved differently in different societies because of the opportunities and

¹⁶ The shareholding pattern in banks, family or financial institutions is widespread and concentrated whilst in market based firms is less spread and concentrated. Thus, the focus of agency theory is likely to be different.

constraints of the existing political and legal systems. This implies that the application of agency theory is likely to be based on the cultural tradition of the legal systems, such as civil (code) and common law legal systems.

Common legal systems emphasize on the shareholders protection rules and market-orientations. This implies that; the institutional settings in common legal systems foster the corporate financial reporting as a mechanism for shareholders to monitor the agents and measure their performances. This assertion is supported by Ball *et al.*, (2003) who argue that; timely financial accounts or reports are primarily needed for common law than code law countries users because in code law countries information is also channelled through other private networks and insider dealings. However, in Germany, Hung and Subramanyam (2007) document that IFRS earnings are not exhibiting the incremental loss recognition timeliness over the German GAAP earnings. This study compared asymmetric earnings timeliness under two accounting regimes (IFRS and Germany GAAP) but it did not examine the impact of legal origin on accounting regime change. This calls for more empirical research in this strand of literature.

Generally, many previous studies conclude that; common law earnings are of higher quality than code law earnings (see for instance; Barth *et al.*, 2008, Prather-Kinsey, 2006, Ball *et al.*, 2003 and Ball *et al.*, 2000, Prather-Kinsey, 2006). Thus, they exhibit more earnings timeliness and asymmetric earnings timeliness. For instance, Ball *et al.*, (2003) report higher earnings timeliness for common law countries than East Asian and code law countries.

Based on the above theoretical assertions, we argue that the market infrastructure necessitating the timely incorporation of market news (good or bad) into earnings is better for common law than code law countries. This is accentuated by the adoption of IFRS in African countries. Thus; we predict and test the following hypothesis:

H2: *Asymmetric earnings timeliness increases more significantly after IFRS adoption in African common law countries than African code law countries.*

3. Data and Research Method

3.1 Data

The data spans eight years from 2002 to 2009, and involves four African countries, namely, South Africa, Egypt, Kenya, and Morocco. The sample selection criteria are such that a country must have adopted IFRS during the study period; and firm must have both accounting and financial data. In total, there were 330 firms distributed as follows; South Africa (242), Morocco (24), Kenya (24) and Egypt (40). Botswana had accounting, financial and legal origin data but it lacked culture data thus; it was dropped. The data were obtained from data stream, Thomson one banker (World Scope), www.africanfinancials.com and respective companies' websites. The culture data were obtained from Hofstede (1980, 2001) and House *et al.*, (2004); while legal origins' classifications were found in La Porta *et al.*, (1997, 1998).

3.2. Research Method

The base model is the Basu (1997) reverse ERC model. This model is extended by introducing an IFRS dummy (D) to capture the impact of IFRS on asymmetric earnings timeliness, forming the equation below.

$$E_{i,t} = \alpha_0 + \alpha_1 NEG_{i,t} + \alpha_2 NEG * RET_{i,t} + \alpha_3 D * NEG * RET_{i,t} + \alpha_4 RET_{i,t} + \alpha_5 D * RET_{i,t} + \varepsilon_{i,t} \quad (1)$$

Where, D is an IFRS dummy equal to 1 if a firm observation is from years following the IFRS adoption year and 0 otherwise. $E_{i,t}$ is the earnings per share deflated by beginning period share price, $NEG_{i,t}$ is a dummy variable equal to 1 if $RET < 0$, = 0 otherwise, $RET_{i,t}$ is returns calculated as change in price levels divided by original prices on firm i extending from nine months prior to fiscal year end to 3 months after the fiscal year. $NEG_{i,t} * RET_{i,t}$ is an interaction variable capturing the sensitivity of earnings to bad news (negative returns) before IFRS. $D * NEG_{i,t} * RET_{i,t}$ is an interaction variable capturing the incremental effect of IFRS on bad news coefficient. $D * RET_{i,t}$ measures the incremental effect of IFRS on the arrival of news to the market (returns), i and t indicates firm and time respectively and $\varepsilon_{i,t}$ is a random or disturbance term of firm i at the end of the period t . The intercept (α_0) captures prior news incorporated into earnings and is expected to be positive (Pope and Walker, 1999). The coefficients α_4 and α_5 measure the sensitivity of earnings to good news before and after IFRS respectively and represent the cost of capital if all available market information is fully incorporated into earnings. Moreover, α_2 and α_3 measure incremental loss recognition timeliness of earnings before and after IFRS respectively.

To assess the impact of culture on asymmetric earnings timeliness pre and post-IFRS, we extend equation 1 by introducing a culture variable, CON to form equation 2. It is an indicator variable equal to 1 if the conservatism value is greater than its median value and 0 otherwise. The inclusion of this variable is motivated by Kang *et al.*, (2004) and Dragomir *et al.*, (2010) who find that there is a direct relationship between conservative culture and prudent accounting.

$$E_{i,t} = \alpha_0 + \alpha_1 NEG_{i,t} + \alpha_2 NEG * RET_{i,t} + \alpha_3 CON * NEG * RET_{i,t} + \alpha_4 D * NEG * RET_{i,t} + \alpha_5 CON * D * NEG * RET_{i,t} + \alpha_6 RET_{i,t} + \alpha_7 CON * RET_{i,t} + \alpha_8 D * RET_{i,t} + \alpha_9 CON * D * RET_{i,t} + \varepsilon_{i,t} \quad (2)$$

Where conservative culture (CON) is defined as uncertainty avoidance (UA) minus the summation of individualism index (IND) and masculinity index ($MASC$) (Hope *et al.*, 2008 and Gray, 1988) computed using Hofstede (1980) and House *et al.* (2004) cultural dimension scores. However, consistent with prior studies such as Hope *et al.*, (2008), we exclude the masculinity index because it has insignificant influence on conservatism. Thus, conservatism is computed as, $CON = UA - IND$. $CON * NEG * RET_{i,t}$ and $CON * RET_{i,t}$ are interaction variables capturing the impact of conservative culture on the sensitivity of earnings to bad and good news respectively before IFRS. $CON * D * NEG * RET_{i,t}$ and $CON * D * RET_{i,t}$ are interaction variables capturing the impact of conservative culture on the sensitivity of earnings to bad and good news respectively after IFRS.

To assess the impact of legal origin on earnings timeliness and conditional conservatism, we introduce a legal origin dummy, C on the test variables in equation 1 to form equation 3. C is an indicator variable equal to 1 if a firm observation is from common law countries and zero otherwise.

$$E_{i,t} = \alpha_0 + \alpha_1 NEG_{i,t} + \alpha_2 NEG * RET_{i,t} + \alpha_3 C * NEG * RET_{i,t} + \alpha_4 D * NEG * RET_{i,t} + \alpha_5 C * D * NEG * RET_{i,t} + \alpha_6 RET_{i,t} + \alpha_7 C * RET_{i,t} + \alpha_8 D * RET_{i,t} + \alpha_9 C * D * RET_{i,t} + \varepsilon_{i,t} \quad (3)$$

Where $C * NEG * RET_{i,t}$ and $C * D * NEG * RET_{i,t}$ are interaction variables capturing the Common law legal effect on the sensitivity of earnings to bad news before and after adoption of IFRS. $C * RET_{i,t}$ and $C * D * RET_{i,t}$ are interaction variables capturing the impact of common law legal origin on the sensitivity of earnings to good news before and after IFRS respectively. Consistent with prior studies, this study includes the

following control variables; firm size, leverage and accruals ratio. All variables used in this study are winsorized at 5% to mitigate the effect of outliers.

4. Results

This section reports the results on the impact of culture and legal origins on asymmetric earnings timeliness before and after adoption of IFRS.

4.1 Common versus Code Law Countries

Table 1 reports the regression results based on legal origin classification. Panel A represents dummy variable regression results while panel B represents separate sample regression results. Panel A results show that loss and incremental loss recognition timeliness is greater for common law than for code law firms (see Model 1-Model 4). However, gains recognition timeliness is greater for code law than for common law firms. This implies that earnings in common law firms are timelier (untimely) in recognizing bad news (good news) than earnings in code law firms.

While there is no evidence suggesting that loss and incremental loss recognition timeliness increase after IFRS in both groups, there is evidence showing that gains recognition timeliness decreases significantly after IFRS for both common and code law firms. Similarly, Model 6 and Model 7 indicate that the common law legal origin incremental effect coefficient is significantly positive for incremental loss recognition timeliness and negative for gains recognition timeliness before IFRS. However, after IFRS, the common law legal origin incremental coefficient for incremental loss recognition is negative while that of gains recognition timeliness is positive (see Model 7).

The explanatory and predictive power (capturing the overall earnings timeliness) increases from 5% to 5.5% in common law firms and from 9.7% to 10.2% in code law firms (Model1-Model 4). Also, it increases slightly from 6.1% in Model 5 to 6.5% in Model 6 and 7.4% in Model 7. Furthermore, results in panel B are qualitatively similar to results in panel A. Overall earnings timeliness decreases from 9.8% to 4.9% in common law firms and from 14.6% to 8.1% in code law firms. In general, these findings are consistent with prior studies which find no evidence suggesting that IFRS leads to increased gains and loss recognition timeliness (e.g. Hung and Subramanyam, 2007) and those which find evidence that common law earnings exhibit more incremental loss recognition timeliness than code law earnings (e.g. Hung and Subramanyam, 2007 and Ball *et al.*, 2000, 2003).

Table 1 The Impact of Legal Origin on Asymmetric Earnings Timeliness
Panel A Dummy Variable Regressions

Variable	Common Law		Code Law		Whole Sample		
	Before M1	After M2	Before M3	After M4	M5	M6	M7
α_0	0.171*** (10.85)	0.229*** (8.367)	0.259*** (6.702)	0.256*** (6.551)	0.175*** (12.287)	0.179*** (12.502)	0.244*** (12.669)
NEG _{i,t}	0.065*** (-4.786)	0.065*** (-4.683)	-0.009 (-0.317)	-0.014 (-0.487)	0.054*** (-4.399)	-0.031** (-2.326)	-0.026** (-1.962)
NEG*RET _{i,t}	0.110*** (2.833)	0.182*** (2.748)	-0.060 (-0.774)	-0.088 (-0.796)	0.067* (1.951)	-0.05 (-0.936)	-0.014 (-0.157)
C*NEG*RET _{i,t}						0.269*** (3.222)	0.360*** (2.969)
D*NEG*RET _{i,t}		-0.078 (-1.141)		0.070 (0.504)			-0.049 (-0.576)
C*D*NEG*RET _{i,t}							-0.176 (-1.195)
RET _{i,t}	-0.015 (-1.365)	-0.006 (-0.489)	0.119*** (3.704)	0.153*** (4.217)	0.001 (0.122)	0.066*** (2.949)	0.089*** (4.053)
C*RET _{i,t}						0.073*** (-2.964)	0.094*** (-3.790)
D*RET _{i,t}		-					-
C*D*RET _{i,t}		0.037*** (-2.592)		-0.118** (-2.230)			0.056*** (-4.580)
							0.076** (2.573)
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2128	2128	512	512	2640	2640	2640
Adj. R ² (%)	5.0	5.5	9.7	10.2	6.1	6.5	7.4

Notes: This panel reports results about the impact of legal origin on asymmetric earnings timeliness from dummy variable regressions. The robust t-statistics are in parentheses. ***, ** and * denote robust statistical significance at the 1%, 5% and 10% levels according to a two tailed t-test. M stands for Model.

Panel B Separate Sample Regressions

Variable	Common Law Sample		Code Law Sample	
	Before M1	After M2	Before M3	After M4
α_0	0.192*** (8.894)	0.151*** (13.654)	0.215*** (4.763)	0.090*** (4.836)
$NEG_{i,t}$	-0.122*** (-3.930)	-0.035*** (-2.602)	-0.017 (-0.405)	0.006 (0.404)
$NEG*RET_{i,t}$	0.236** (2.031)	0.088*** (2.703)	-0.043 (-0.346)	-0.009 (-0.247)
$RET_{i,t}$	-0.057*** (-2.903)	-0.014 (-1.034)	0.108* (1.740)	0.059*** (3.465)
Year Effects	Yes	Yes	Yes	Yes
Country Effects	Yes	Yes	Yes	Yes
N	798	1330	264	248
Adj. R ² (%)	9.8	4.9	14.6	8.1

Notes: This panel reports results about the impact of legal origin on asymmetric earnings timeliness from separate sample regressions. The robust t-statistics are in parentheses. ***, ** and * denote robust statistical significance at the 1%, 5% and 10% levels according to a two tailed t-test. M stands for model.

4. 2 Culture and the Asymmetric Earnings Timeliness

Table 2 reports results on the impact of culture on asymmetric earnings timeliness before and after IFRS adoption. Countries with high degree of conservatism in the sample include Morocco, Egypt and Kenya while South Africa is lowly ranked. Model 1 is a base model; Model 2 and Model 3 represent the Hofstede (1980) sample regressions while Model 4 and Model 5 represent House *et al.* (2004) culture sample regressions.

The Hofstede (1980) results indicate that conservative culture is associated with greater gains recognition timeliness before IFRS; however it decreases after IFRS. This finding may be explained by the tendency of managers in culturally embedded societies to report higher earnings than losses and by the lower quality of accounting disclosure in local African GAAP relative to IFRS. However, after IFRS the culture influence on the sensitivity of earnings to good news is likely to decline due to application of a less conservative standard, IFRS. Also, it may be interpreted that the internationalization of accounting standards through IFRS mitigates the influence of conservative culture on gains recognition timeliness.

On the other hand, the House *et al.* (2004) results show positive gains recognition timeliness coefficients before and after IFRS although the coefficient is only statistically significant after IFRS. This may imply that culture still positively influences gains recognition timeliness after IFRS and is consistent with Dahawy *et al.* (2002) who find that culture still affects disclosure of accounting information after IFRS adoption in Egypt.

Table 2 The Impact of Culture on Asymmetric Earnings Timeliness

Variable	Hofstede (1980) Scores			House <i>et al.</i> , (2004) Scores	
	M1	M2	M3	M4	M5
α_0	0.177*** (12.207)	0.182*** (12.396)	0.182*** (10.734)	0.167*** (11.267)	0.058 (1.512)
NEG _{i,t}	-0.058*** (-4.530)	-0.057*** (-4.383)	-0.060*** (-4.433)	-0.064*** (-4.718)	-0.056*** (-4.084)
NEG*RET _{i,t}	0.058* (1.649)	0.073** (1.997)	0.079** (2.039)	0.071** (1.976)	0.100*** (2.626)
CON* NEG*RET _{i,t}		-0.335* (-1.712)	-0.135 (-0.616)	-0.909** (-2.305)	-0.511 (-1.191)
D* NEG*RET _{i,t}			0.007 (0.168)		0.019 (0.445)
CON* D* NEG*RET _{i,t}			-0.056 (-0.748)		-0.232*** (-2.617)
RET _{i,t}	-0.002 (-0.155)	-0.006 (-0.555)	-0.006 (-0.523)	-0.006 (-0.556)	-0.005 (-0.399)
CON*RET _{i,t}		0.088** (2.243)	0.131*** (3.122)	0.078 (1.459)	0.022 (0.347)
D*RET _{i,t}			-0.003 (-0.163)		-0.02 (-1.068)
CON* D*RET _{i,t}			-0.691*** (-3.978)		0.085*** (2.955)
Year Effects	Yes	Yes	Yes	Yes	Yes
Country Effects	Yes	Yes	Yes	Yes	Yes
N	2640	2640	2640	2448	2448
Adj. R ² (%)	6.2	6.3	7.1	4.9	5.3

Notes: This table reports the OLS results on the impact of culture on asymmetric earnings timeliness. The robust t-statistics are in parentheses. ***, ** and * denote robust statistical significance at the 1%, 5% and 10% levels according to a two tailed t-test. For Hofstede (1980) culture scores, the sample involves 330 firms from four countries namely; South Africa, Kenya, Egypt and Morocco. However, for House *et al.*, (2004) the sample comprises of from South Africa, Morocco and Egypt. Kenya is dropped out due to lack of culture data. M stands for Model.

The incremental effect of conservative culture leads to a decrease in loss recognition timeliness after IFRS for both Hofstede (1980) and House *et al.*, (2004) culture sample dummy variable regressions (see Model 3 and Model 5). Similarly, due to the same effect, incremental loss recognition timeliness declines across all models before and after IFRS. As predicted, this suggests that conservative culture results in a reduced loss recognition timeliness, and incremental loss recognition timeliness. The

findings also suggest that conservative culture facilitates managers to conceal economic losses in order to fulfill their firms' contractual obligations.

Overall earnings timeliness increases marginally in Hosfede (1980) regression results. Furthermore, it decreases in House *et al.* (2004) sample regression results. For instance, the adjusted R^2 increases from 6.2% in Model 1 to 6.3% and 7.1% in Model 2 and Model 3 respectively. However, for House *et al.*, (2004) regressions, overall earnings timeliness decreases from 6.2% in Model 1 to 4.9% and 5.3% in Model 4 and Model 5 respectively. These findings suggest that conservative culture is associated with reduced overall earnings timeliness. While prior studies such as Dragomir *et al.* (2010) and Kang *et al.* (2004) find that conservative culture is directly related to prudent accounting especially news-independent prudence accounting, we find that it is associated with greater (lower) gains recognition timeliness (loss and incremental loss recognition timeliness). Stated differently; conservative culture is associated with a reduction in contracting efficiencies between firm parties (e.g. managers, shareholders and debtholders) and the stewardship role of management to capital providers. In summary, these findings imply that national culture especially conservative culture is an important determinant of asymmetric earnings timeliness. The reported findings are robust to a number of tests including; using a four months period returns, quartile regressions, weighted least squares regressions, earnings persistence tests, fixed effects models, one step GMM and Clarkson *et al.* (2011) model for handling uneven representation of sample. The results for these additional tests are not reported for brevity reasons but are available upon requests.

5. Conclusion

The main objective of this paper is to examine whether culture and legal origin impact on asymmetric earnings timeliness before and after adoption of IFRS in African countries. Two hypotheses are developed and tested.

The results indicate that earnings in common law countries exhibit more incremental loss recognition timeliness than earnings in code law countries consistent with prior studies such as Ball *et al.* (2003). However; the findings show no evidence suggesting that loss and incremental loss recognition timeliness increase after IFRS in both common law and code law countries whilst findings indicate that gains recognition timeliness decreases significantly after IFRS for both common and code law firms. In the case of culture, the findings indicate that culture is associated with greater gains recognition timeliness before but not after IFRS. However, culture leads to reduced loss and incremental loss recognition timeliness before and after IFRS. These findings are consistent with the view that firms from countries with high degree of conservative culture are aggressive reporters of gains rather than losses (Risberg, 2005).

One major policy implication of this study is that culture and legal origins matter on the efficacy of IFRS earnings quality and on the way IFRS earnings incorporate economic gains and losses. The study makes two main contributions to the existing literature; one: unlike previous studies such as Zeghal and Lahmar (2018), Manganaris *et al.* (2015), André *et al.* (2013), Enomoto, (2018), Noravesh *et al.*, (2015), Ball *et al.*, (2000, 2003), Ball and Shivakumar, (2005), Barth *et al.* (2008), Ball *et al.* (2008), Hillier *et al.*, (2015) and Ngole (2016), it examines the impact of culture and legal origins on IFRS earnings quality and timeliness in emerging African economies setting. Two, it provides an informed feedback to the standard setters such as IASB and accounting professional bodies on the efficacy of IFRS in different institutional settings and information environments.

Future research may increase the sample size in terms of countries and firms to get more insight on the impact of culture and legal environment on asymmetric earnings timeliness. Also, they may control for individual sophistication of market participants and use the Kaufmann Governance Database (Country wide Rule-of-Law Metric) to distinguish common law from Code law Countries (Dam, 2006). Moreover; future research may examine the moderating effect of audit firms on the relationship between IFRS adoption and asymmetric earnings timeliness in presence of cultural and legal origin differences.

References

- André, P, Filip, A and Paugum, L. (2013). Impact of Mandatory IFRS Adoption on Conditional Conservatism in Europe, *ESSEC Working Paper*, Research Center, ESSEC Business School
- Arrow, Kenneth, J. (1984). A report of the Centre for Research on Organizational Efficiency, Stanford University, Technical Report No. 451, The Economics Series, Institute for Mathematical Studies in the Social Sciences.
- Ball, R. (2006). International Financial Reporting Standards: Pros and Cons for Investors, *Accounting and Business Research*, International Accounting Policy Forum, 36 (Special issue), 5-27.
- Ball, R, A. Robin and J.S. Wu. (2003). Incentives Versus Standards: Properties of Accounting Income in Four East Asian Countries and Implications for Acceptance of IAS. *Journal of Accounting and Economics*, 36 (1-3), 235–270.
- Ball, R and L. Shivakumar. (2005). Earnings Quality in U.K. Private Firms: Comparative Loss Recognition Timeliness, *Journal of Accounting and Economics*, 39 (1), 83-128.
- Ball, R, S.P. Kothari, and A. Robin. (2000). The Effect of International Institutional Factors on Properties of Accounting Earnings, *Journal of Accounting and Economics*, 29 (1), 1-51.
- Ball, R, A. Robin, and G. Sadka. (2008). Is Financial Reporting Shaped by Equity Markets or by Debt Markets? An International Study of Timeliness and Conservatism, *Review of Accounting Studies*, 13(2-3), 168-205.
- Barth, M. E, W.R. Landsman and M.H. Lang. (2008). “International Accounting Standards and Accounting Quality.” *Journal of Accounting Research*, 46 (3), 467-498.
- Basu, S. (1997). The Conservatism Principle and the Asymmetric Timeliness of Earnings, *Journal of Accounting and Economics* 24 (1), 3-37.
- Benston, J. G, M. Bromwich and A.Wagenhofer. (2006). Principles-Versus Rules-Based Accounting Standards: The FASB’s Standard Setting Strategy, *Abacus*, 42(2), 165-188.
- Clarkson, P, J. D. Hanna, G.D. Richardson and R. Thompson. (2011). The Impact of IFRS Adoption on the Value Relevance of Book Value and Earnings, *Journal of Contemporary Accounting and Economics*, 7(1), 1-17.
- Dahawy, K, B.D. Merino and T. L. Conover. (2002). The Conflict between IAS Disclosure Requirements and the Secretive Culture in Egypt, *Advances in International Accounting*, 15(1), 202-228.
- Dam, W. K., (2006), “Legal Institutions, Legal Origins, and Governance,” In John. M. Olin, *Law Working Paper No. 303*, (2nd Seies), Chicago.
- Dragomir, V. D, L. Feleagă and N. Feleagă. (2010). National Accounting Culture and Empirical Evidence on the Application of Conservatism, *Economic Computation and Economic Cybernetics Studies and Research*, 44(3), 43-60.
- Enomoto, M. (2018). Cross-Country Research on Earnings Quality: A Literature Review and Future Opportunities, *Discussion Paper Series*, RIEB, Kobe University, Japan.

- Fligsten, N and J. Choo. (2005). Law and Corporate Governance, Institute for Research on Labour and Employment, Working Paper Number 114-05, Berkeley, University of California.
- Gray. S. J. (1988). Towards a Theory of Cultural Influence on the Development of Accounting Systems Internationally, *Abacus*, 24 (1), 1-15.
- Hillier, D, Hodgson. A, and Ngole, S. (2015). IFRS and Secrecy: Assessing Accounting Value Relevance across Africa, *Journal of International Financial Management & Accounting* 27 (3), 238-268.
- Hofstede .G. (1980). *Culture's Consequences: International Differences in Work-Related Values*, Integral edition, Beverly Hills, CA, Sage.
- Hofstede, G. (1991). *Cultures and Organizations: Software of the Mind: Intercultural Cooperation and its Importance for Survival*, New York, McGraw-Hill.
- Hofstede. G. (2001). *Culture's Consequences: Comparing Values, Behaviours, Institutions, and Organizations Across Nations*, second edition, London, Sage Publications.
- Hofstede, G., Hofstede, G.J. and Minkov, M. (2010), *Cultures and Organizations: Software of the Mind: Intercultural Cooperation and Its Importance for Survival*, McGrawHill, New York, NY.
- Hope. O.K, T. Kang, W. Thomas and Y.K. Yoo. (2008). Culture and Auditor Choice: A Test of the Secrecy Hypothesis, *Journal of Accounting and Public Policy*, 27 (5), 357-373.
- House. R.J, P. J. Hanges, M. Javidan, P. W. Dorfman and V. Gupta. (2004). *Culture, Leadership, and Organizations: The GLOBE study of 62 societies*, USA, Sage.
- Hung, M. and Subramanyam, K (2007). "Financial Statement Effects of Adopting International Accounting Standards: The Case of Germany", *Review of Accounting Studies*, 12 (4), 21-48.
- IASB. (2010). International Accounting Standards Board: The Conceptual Framework on Objectives and Qualitative Characteristics issued jointly by the IASB and FASB on 12th January 2018.
- Jensen. M. C and Meckling. W. H. (1976). Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure, *Journal of Financial Economics*, 3(4), 305-360.
- Kang. T, L.L. Fen, T. Y. J. Ng and J.S. W. Tay. (2004). The Impact of Culture on Accounting Choices: Can Cultural Conservatism Explain Accounting Conservatism? Research Collection School of Accountancy, Paper 275, available at http://ink.library.smu.edu.sg/soa_research/275 [Accessed on 30th August 2018].
- Kenny. C.J and T. J. Moss. (1998). Stock Markets in Africa: Emerging Lions or White Elephants? *World Development*, 26(5), 829-843.
- La Porta. R, F. Lopez-de-Silanes, A. Shleifer and R.W. Vishny. (1997). Legal Determinants of External Finance, *Journal of Finance*, 52(3), 1131-1150.
- La Porta. R, F. Lopez-de-Silanes, A. Shleifer and R.W. Vishny. (1998). Law and Finance, *Journal of Political Economy*, 106 (6), 1113-1155.
- Manganaris, P, C. Spathis and A. Dasilas. (2015). The Effects of Mandatory IFRS Adoption and Conditional Conservatism on European Bank Values, *Journal of International Accounting, Auditing and Taxation*, 24, 72-81.
- Ngole, S. (2016). Culture, Legal Origin and the Predictive Ability of IFRS Earnings and Cash flows, *The African Journal of Finance and Management*, 25(2), 1-15.
- Noravesh, I, Dilami, Z.D, and Bazaz. M.S. (2015). The Impact of Culture on Accounting: Does Gray's Model apply to Iran? *Review of Accounting and Finance*, 6(3), 254-272.
- Onyema, O., (2016), "Tackling Liquidity Concerns in African Capital Markets, 5th Building African Financial Markets (BAFM)," Capacity building seminar organized the Nigerian Stock Exchange (NSE) in collaboration with the African Securities Exchanges Association (ASEA) in 25th May, 2016, available at www.thisdaylive.com/index.php/2016/05/25

- [tackling -liquidity-concerns-in-African-capital-markets](#), [accessed on 20th August, 2017 at 1330Hrs).
- Prather-Kinsey. J. (2006). Developing Countries Converging with Developed-Country Accounting Standards: Evidence from South Africa and Mexico, *The International Journal of Accounting*, 41 (2), 141-162.
- Risberg. M. (2005). Corporate Governance and Accounting Quality: Is bad news good news? *Work in Progress*, Department of Economics, University of Gøteborg.
- Schipper. K. (2003). Principles–Based Accounting Standards, *Accounting Horizons*, 17(1), 61-72.
- Schipper. K. (2005). The Introduction of International Accounting Standards in Europe: Implications for International Convergence, *European Accounting Review*, 14(1), 101-126.
- Schwartz. S.H. (1994). Beyond Individualism/ Collectivism: New Cultural Dimensions of Values, In U. Kim, H.C. Triandis, C. Kagitcibasi, S. C. Choi, and G. Yoon. (eds.), *Individualism and Collectivism: Theory, Method and Applications*, Sage, 85-119.
- Smith, A. (1776). *An Inquiry into the Nature and Causes of Wealth of Nations*, William Straham and Thomas Cadell, Scotland, Kingdom of Great Britain.
- Smith. G, K. Jefferis and H. Ryoo. (2002). African Stock Markets: Multiple Variance Ratio Tests of Random Walks, *Applied Financial Economics*, 12(7), 475-484.
- Zeghal. D and Lahmar, Z. (2018). The Effect of Culture on Accounting Conservatism during adoption of IFRS in the EU, *International Journal of Accounting and Information Management*, 26(2), 311-330.

Current reporting and relationship with integrated reporting for listed companies in Kenya: disclosure levels and company factors

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Abstract

Purpose – This study draws on agency, stakeholder and legitimacy theories, to analyze the extent to which ‘integrated reporting’ information is currently being disclosed by Kenyan listed companies and to investigate the firm-level factors associated with the disclosures.

Design/methodology/approach – The study relies on content analysis procedures to assess the level of disclosure of integrated reporting information in the annual reports (2010-2016) of 50 companies listed on the Nairobi Securities Exchange (NSE). The study also uses the unbalanced panel data econometric models to establish the association between the integrated reporting disclosures and firm-level factors (including corporate governance and sustainability reporting).

Findings - As of 2016, the formal adoption of integrated reporting was very low at the rate of only 14% (i.e., 7 out of the 50 companies). Nonetheless, disclosure levels for information required as per the integrated reporting framework have increased from 59% in 2010 to 72% in 2016. Disclosures are mainly for organizational overview, strategies, governance, risk and performance. Stakeholder engagement, business model, future challenges and outlook are the notable areas of non-compliance. Findings also show that large companies are likely to adopt integrated reporting due to their high levels of disclosures, while the nature of sectors, like banks, is also likely to influence the adoption of integrated reporting. Although integrated reporting is positively correlated to both financial and non-financial information (with high significance for both sustainability reporting and corporate governance reporting), sustainability reporting is still a challenge for companies.

Originality/value – There is little in the way of contemporary evidence establishing if/how companies in emerging markets are adopting the integrated reporting framework. Our findings are important for regulators and policymakers to establish the challenges of providing additional information in such contexts, e.g., sustainability reports.

Keywords International Financial Reporting Standards, Sustainability Reporting, Corporate Governance Reporting, and Integrated Reporting.

Paper type Research paper

1. Introduction

1.1 Introduction and motivation

Corporate reporting provides financial and non-financial information to aid in decision-making (Healy and Palepu, 2001). Financial information is guided by accounting standards such as the International Financial Reporting Standards (IFRS), and non-financial information comprises sustainability and corporate governance reporting. The preparation of sustainability reports is guided by national and global bodies such as the Global Reporting Initiative (GRI-G4) reporting guidelines (Drobetz et al., 2014). Corporate governance reporting is guided by local codes of corporate governance or global governance principles provided by bodies such as the Organization of Economic Cooperation and Development (OECD) corporate governance principles (Bouchez, 2017).

As the above reports are prepared separately, an attempt to blend the information in one report has been made through integrated reporting. The journey to integrated reporting commenced in 2010 by the formation of the integrated reporting council; subsequently, the IIRC launched the International Integrated Reporting Framework to guide companies on how to prepare an integrated report in 2013 (IIRC, 2013). The IIRC defines an integrated report as: “a concise communication about how an organization's strategy, governance, performance, and prospects, in the context of its external environment, leads to the creation of value over the short, medium and long term.” (IIRC, 2013, pg. 7)

According to Eccles and Sarafeim (2013), investors and other stakeholders consider financial performance, environmental, social and governance performance as intertwined and therefore, this provides the rationale for integrated reporting. This implies that integrated reporting combines financial, sustainability and governance issues into one report. IIRC encourages the global adoption of integrated reporting because its advocates view it as an improvement of corporate reporting (Krzus, 2011). In 2016, the Capital Markets Authority of Kenya (CMA) issued revised corporate governance guidelines, and one of the recommendations was for public companies to adopt integrated reporting voluntarily (CMA, 2016). However, efforts by IIRC and CMA to encourage adoption of integrated reporting assume that the current corporate reporting practices are ready for adoption of integrated reporting, i.e., annual reports contain sufficient financial and non-financial information that can then be integrated.

Integrated reporting as an innovation in corporate reporting, has seen the growth of research focusing on adopters, quality of the reports and views of various stakeholders. Based on the available literature, however, there is little evidence of studies carried out to evaluate whether companies in different jurisdictions are prepared to adopt or are engaging with the integrated reporting principles in terms of their level of disclosure in annual reports. Also, given contextual situations for some emerging economies, studies need to establish factors that may contribute to the adoption of integrated reporting. Emerging economies like those of Kenya, Egypt, and Nigeria have capital markets that are growing but less efficient in terms of equity prices, i.e., equity prices are highly volatile (Urban and Hwindingwi, 2016). Emerging markets have other challenges ranging from the unstable macro-economic environment to weak capital market regulation (Singh, 1999). Therefore, these features may pose a challenge for the adoption of integrated reporting or possibly provide an opportunity to improve the capital markets through the adoption of integrated reporting.

This paper has three main research questions: What are the current disclosure levels of financial and non-financial information for listed companies in Kenya? To what extent are companies providing information for integrated reporting? What is the association between various company factors and integrated reporting disclosures?

1.2 Institutional Background of Kenya

1.2.1 Economy and capital markets

Kenya, an East African country, has a population of about 47 million (Kenya, National Bureau of Statistics, 2017). The GDP of about \$69.5 billion as at the end of 2016 makes it the dominant economy in East Africa, fourth in Sub-Saharan Africa and ninth in Africa (Bhorat and Tarp, 2016). Kenya is also classified as an emerging economy (Schwab, 2014).

Kenya's capital market is vibrant but still developing. It is the largest in East and Central Africa and fifth in the continent with a market capitalization of \$20 billion as at the end of 2016. It is made up of the equity market, bond market, derivative market, and other products that comprise of exchange-traded funds and REITs. It has about 20% foreign investor participation outside East Africa. As a result, listed companies in Kenya are of interest to a broader category of investors and hence matters of corporate reporting are essential. The number of listed companies has increased from 55 in 2010 to 66 in 2016. The market capitalization had also increased from \$11 billion in 2010 to about \$20 billion in 2016. Total equity traded (turnover) has shown mixed results over the period, but with about \$2 billion by the end of 2016. In addition, it shows that foreign investors holding has increased from 12.6% to slightly over 20% (CBK, 2017).

1.2.2 Corporate Reporting Framework for listed companies in Kenya

The first perspective on the corporate reporting regulation in Kenya is based on the various laws and prudential guidelines provided by regulators in the banking and insurance sectors. Before 2017, companies in Kenya had to comply with the Companies Act of 1978 (Kenya's Companies Act, 1978), that required companies to present in their annual report financial statements, directors' and auditor's reports. From 2017, the new Companies Act of 2015 (Kenya's Companies Act, 2015) requires compliance with IFRS in addition to a company presenting a business review report, sustainability and future-oriented information in their annual report. The Banking Act (Banking Act, 2009) allows the Central Bank of Kenya to issue prudential guidelines, while the Insurance Act (2013) requires the Insurance Regulatory Authority to issue prudential guidelines. Both prudential guidelines require the preparation of a corporate governance report by banks and insurance companies. Also, insurance companies are required to comply with IFRS. The prudential guidelines provide banks with a template for presenting financial statements.

The second perspective looks at regulators. Listed companies in Kenya are subject to various regulators from Institute of Certified Public Accountants of Kenya (ICPAK), the Institute of Certified Public Secretaries of Kenya (ICPSK), the Capital Markets Authority (CMA), Nairobi Securities Exchange (NSE), Central Bank of Kenya (CBK) and the Insurance Regulatory Authority of Kenya (IRA). ICPAK, CMA, NSE, and IRA require compliance with IFRS, CMA, ICPSK, NSE, CBK, and IRA require the preparation of

Corporate governance reports and CMA, through the corporate governance code recommends the voluntary adoption of integrated reporting by listed companies. Given that the regulators and various laws pay less attention to sustainability matters, this paper expected the provision of financial information and non-financial information regarding corporate governance to be high, while that of sustainability to be low.

2. Literature Review, disclosure theories, and hypothesis development

2.1 Background to integrated reporting

The initial idea of integrated reporting began in 1999 from PWCs value reporting framework which required organizations to provide information on market overview, strategy, value-creating activities and financial information (PWC, 2018). The key point from the framework was the ability of the business to show how value is created from both financial and non-financial perspectives.

The path to integrated reporting started taking shape around 2002 when South Africa required companies to integrate their financial and non-financial information and to have social and environmental actions being given prominence just like financial information (Deloitte, 2012). Globally, the formal journey to integrated reporting commenced with the establishment of IIRC in 2010 whose primary objective was to promote integrated reporting and provide the relevant mechanism for adoption of integrated reporting (IIRC, 2010). Key stages and milestones up to the launch of the integrated reporting framework are summarized in Figure 1.

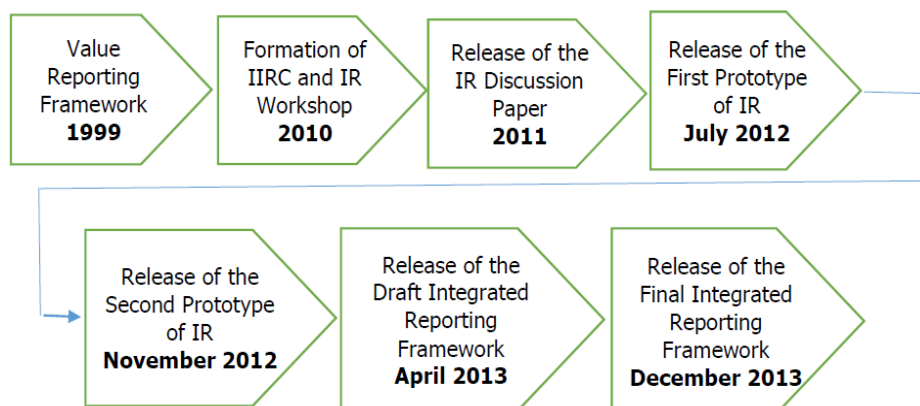


Figure 1: Key stages and milestones of integrated reporting (Source: Authors)

The formation of IIRC and the launch of the discussion paper provided an avenue for global adoption and gave the structure of an integrated report, and benefits and challenges of integrated reporting. The development of integrated reporting prototypes and finally the framework was meant to convince and guide companies to prepare an integrated report.

2.2 Summary of the content of an integrated report as per the framework

The framework provides seven content elements of an integrated report. These are; organizational overview and external environment, Governance, Business Model, Risks and Opportunities, Performance, Outlook and the basis of preparation and presentation. There are potential challenges in terms of the nature of some information. For example, organizational overview and external environment together with outlook are strategic and

hence the organization is exposed to competitive harm. The business model may enhance the ability of users to identify how the organization creates value, but the challenge is understanding the concept of the business model and the company providing competitive information. Zott, Amit, and Massa (2011) analyzed literature on the concept of business model and explained that there is a lot of discussion of business model, but there is no formal definition of a business model in academic literature. Risks disclosures are usually provided by accounting standards and other regulations like corporate governance and more detailed in the banking and insurance sectors. However, risk narratives vary across organizations with a lack of proper guidance (Linsley and Shrives, 2006). Information on opportunities fall within the concept of strategies, and this is also competitive. For performance, non-financial information is usually standardized, and hence it is possible to report on performance given IFRS. The major challenge is still on non-financial information, for which even though there are attempts to standardize disclosures, in many countries, non-financial information like sustainability is voluntary.

2.3 Key empirical studies on integrated reporting

Researchers in corporate reporting and other disclosures made in annual reports of companies have recently focused on integrated reporting. This section will highlight the relevant studies excluding stakeholder perspectives (see Gasperini et al., 2013; Slack and Tsilavoutas, 2018 for stakeholder views on integrated reporting).

Jensen and Berg (2012) used institutional theory to compare associated factors of sustainability reporting to those that are associated with integrated reporting by analyzing various variables (level of investor protection, tertiary education, corporate social responsibility, and secular values) in different countries. According to the findings integrated reporting companies are likely to come from countries where there is high investment in tertiary education, a high national corporate social responsibility, great self-expression of secular values, and high economic development. The study found that integrated reporting is driven by factors such as strong investor protection through capital markets and corporate social responsibility. Similar findings were made by Sanchez et al. (2013) using a sample of 750 companies from the Forbes Global list for 2008 to 2010 where companies from countries with legal systems that protect investors are more likely to prepare integrated reports.

Deloitte (2012), analyzed the quality of integrated reports of companies quoted on the Johannesburg Stock Exchange between March 2011 and February 2012 and classified the period into three, based on when the reports were submitted (Period 1 – March 2011 to May 2011; Period 2 – June 2011 to September 2011 and Period 3 – October 2011 to February 2012). The analysis reported that the overall quality of integrated reporting had improved, though the rate of improvement had decreased from period 2 to 3 as compared to period 1 to 2. Also, companies had challenges in engaging and reporting sustainability issues in their integrated reports. While the integrated reports are too long, ethical issues are not well articulated and assured by auditors. The study also revealed that industries in the financial services, extractive, and consumer businesses outperformed other industries in terms of quality of reporting.

Kass (2012) analyzed the rate of adoption of integrated reporting by South Africa companies and obtained the views of South African companies on integrated reporting, together with challenges and opportunities. The study found an adoption rate of about

58% for companies. The challenges highlighted are that integrated reporting requires more time and financial resources, the disclosure of confidential information and information overload and loss of target audience. The opportunities were that integrated reporting would enhance the inclusion of sustainability issues in corporate reporting, more integrated thinking in management and decision making and better risk identification and better management of the organization.

Van Zyl (2013) aimed to determine whether integrated reporting by large private companies in South Africa had led to an improvement in the quality of sustainability reports that are prepared. The study found that there is little improvement in social and environmental report and companies are yet to embed social and environmental issues in their strategies and in reporting. The study is very useful as it highlights the relationship between sustainability reporting and integrated reporting.

Isabel-María, Lázaro, and José-Valeriano, (2013) carried out a study that sought to establish how cultural systems may affect integrated reporting. The 1590 companies that cut across countries were selected from the Forbes Global 2000 list. The findings were that size, industry and profitability are positively correlated with integrated reporting and that countries with a collectivist, feminist cultural system tend to publish integrated reports. The findings are important as they contribute to company factors that may influence the adoption of integrated reporting.

In another study, Dragu and Tudor (2013), sought to determine the emergent factors for integrated reporting from an institutional perspective. The study used content analysis, disclosure indexing, and regression analysis. A sample was made up of 58 companies in the IIRC pilot program and had integrated reports between 2010 and 2012. The main conclusion was that the emerging determinants of the voluntary adoption of an integrated report are political, cultural and economic factors. The regression model showed a positive relationship between integrated reporting and political and economic factors, while a negative relationship with culture.

Another study by Chiara and Marco (2013) analyzed the determinants of materiality in the integrated reports of companies attempting integrated reporting as given by IIRC. According to the study, materiality disclosure is mainly affected by the industry the companies operate in rather than by company-specific factors. In the study, materiality, being the dependent variable, was regressed against various company-specific and industry factors. Materiality was transformed into quantitative data by using content analysis. The study used three proxies for materiality disclosures, i.e., Materiality Word Count, Materiality Word Count in the IR assurance statement and Relevance.

Stubbs and Higgins (2014) carried out 23 in-depth semi-structured interviews across 15 organizations in Australia who were at different stages of implementing integrated reporting. The purpose of the study was to investigate internal mechanisms that are employed by the companies in order to manage their reporting processes. According to their findings, even though organizations are changing their processes and structures, the adoption of integrated reporting has not led to innovations in disclosure mechanisms. The processes are moving incrementally towards sustainability reporting.

Churet and Eccles (2014) sought to determine whether there is a relationship between an integrated report and the quality of management and financial performance. In their study, the authors conducted a systematic search for a few specific indicators of Integrated Reporting in the 2011 and 2012 Annual Reports of over 2,000 companies

across the world. Based on a regression model, the study found that there is a positive relationship between the quality of management and integrated reporting, but no relationship between integrated reporting and firm profitability.

Haji and Hossain (2016), sought to determine how the adoption of integrated reporting by organizations in South Africa, has influenced their reporting practices especially with the focus of the multiple capitals. By use of qualitative analysis, the authors examined annual reports and other means of reporting like websites for the period between 2011 and 2014. The authors conclude that the concept of multiple capitals as promoted by integrated reporting has not improved organizational reporting practices. Instead, the authors posit that companies are using integrated reporting capitals as a means of defending and promoting the company's reputation rather than articulating clearly how the company's actions are impacting on the capitals.

Given the above studies, the general themes are based on country and company factors that may affect the adoption of integrated reporting. Jensen and Berg (2012) applied institutional theory to analyze the level of investor protection, tertiary education, corporate social responsibility, and secular values. Sanchez et al. (2016) focused on the laws while Isabel-Maria et al. (2013) focused on cultural systems and other company factors and finally, Dragu and Tudor (2013) focused on political, cultural and economic factors. In the studies of Deloitte (2012) and Van Zyl (2013), the focus was on the quality of integrated reporting and sustainability reporting where, even though the adoption of integrated reporting is claimed to make improvements on disclosures, there is little or no improvement in sustainability reporting. Factors like sector influence the quality of an integrated report. Also, the study of Stubbs and Higgins (2014) shows that there is no improvement in disclosure mechanisms.

These studies have focused on companies or countries that have already adopted integrated reporting and mostly in developed markets, rather than whether companies are prepared to adopt integrated reporting. Like the study of Kass (2012) which checked the adoption rate of integrated reporting, this study aimed to contribute to the literature by evaluating the extent to which companies in an emerging market like Kenya have adopted and made disclosures of integrated reporting. Also, the study evaluates company factors and the relationship between integrated reporting and other non-financial information.

2.4 Disclosure theories and hypothesis development

The relevant theories for this study are Agency (Jensen and Meckling, 1976), Stakeholder (Freeman, 1984) and Legitimacy (Suchman, 1995). According to the agency theory, a company prepares reports and other disclosures to shareholders to enable effective monitoring as one of the approaches of mitigating self-interest by management and directors. Therefore, this study expected the disclosures by listed companies in Kenya to be high (especially financial information). Stakeholders' theory as proposed by Freeman (1984), suggests that companies will provide more information, especially on corporate governance and sustainability, to demonstrate loyalty to all stakeholders. Therefore, this study expected companies to prepare annual reports that consists of both financial and non-financial (Sustainability and Corporate governance) to make them relevant for all stakeholders as posited by stakeholders' theory. In addition to stakeholders' theory, and relation to sustainability, the study also used the legitimacy

theory and expected that companies to provide sustainability reports, to prove their legitimacy.

Various studies on corporate disclosures have identified general or key company factors that contribute to levels of disclosures of financial information (compliance with IFRS) and non-financial information (sustainability reports and corporate governance reports). This section is not able to list all the studies, but for compliance with IFRS, Al-Shammari (2011) used Size as measured by total assets, Profitability (as measured by Profit after tax and return on assets and equity), Auditor and sector, Juhmani (2012) and Yiadom and Atsunyo (2014) added leverage to these factors while McFie (2010), added dividend pay-out and ownership, i.e., local or foreign. Most of these variables have also been used in non-financial information studies like those of Drobetz et al. (2014) and Sharif and Rashid (2014). Additional variables like Board Size (Number of directors on the board), Board composition (number of non-executive directors and women directors) and Ownership concentration (As given by block ownership) have been included in other studies like those of Barako et al. (2006), Cheung et al., (2007) and Elmagrhi et al. (2016). Isabel-María, Lázaro, and José-Valeriano, (2013) for integrated reporting used factors like size, industry, and profitability.

These studies have reported mixed results in terms of the association between disclosures and compliance levels, but generally, the trend is positive for the majority of the factors as given in their findings. In the current study, we also propose to include additional variables that are relevant for investment decisions to assess how they relate with integrated reporting disclosures. Variables such as Price-to-Book (Tam, Kiang and Chui, 1991 and Emans, 2015), Market Capitalization (Tam, Kiang and Chui, 1991 and Piotroski, 2002), Price/Earnings ratio (Schreiner and Spremann, 2007), Dividends Yield, Earnings Yield and Cashflows (Ohlson, 1990, 1991 and 1995) are essential investment variables. Please note that the majority of the studies on investment and various financial items focus on the relationship between key financial variables like book value, dividend yield and the share price (Omokhudu and Ibadin, 2015). In addition, the paper considered the relationship between integrated reporting disclosures and financial information (IFRS) and non-financial information (corporate governance and sustainability reporting).

Based on empirical literature and the theories, the following are the key variables (independent variables) and hypotheses (against the Integrated reporting disclosures as the dependent variable) are summarized in table 1:

Table 1: Hypothesis and Key variables

Variable	Hypothesis
Size (I)	H1: There is a positive relationship between Size and integrated reporting disclosures (Size = Total Assets, Total Equity, and Market Capitalization)
Profitability (I)	H2: There is a positive relationship between Profitability and integrated reporting disclosures (Profitability = Revenue, Profit after tax, Earnings Per Share, Return on Equity and Return on Assets)
Type of Auditor (M)	H3: There is a positive relationship between the type of auditor and integrated reporting disclosures
Sector (I)	H4: There is a positive relationship between the sector and integrated reporting disclosures
Leverage (I)	H5: There is a positive relationship between Leverage and integrated reporting disclosures (Leverage = Total Debt/Total Assets)
Investor value (I)	H6: There is a positive relationship between Investor value and integrated reporting disclosures (Investor Value = Dividend Yield, Dividend Payout, Cash Flow From Operations, Price-to-Book Value and Price Earnings Ratio)
Board Size (I)	H7: There is a positive relationship between Board Size and integrated reporting disclosures
Board Composition (I)	H8: There is a positive relationship between board composition and integrated reporting disclosures (Board Composition = Number of Non-Executive Directors and Number of Women on Board)
Ownership (I)	H9: There is a positive relationship between foreign ownership and integrated reporting disclosures
Ownership Concentration (I)	H10: There is a positive relationship between ownership concentration (measured as block shareholding) and integrated reporting disclosures.
IFRS, Sustainability and Corporate Governance Disclosures (I)	H11: There is a positive relationship between other corporate reporting disclosures (IFRS, Sustainability, and corporate governance disclosures) and integrated reporting.

Key:

D – Dependent Variable

I – Independent Variable

3. Methodology

3.1 Content analysis of audited annual reports

On average 65 companies were listed on the Nairobi Securities Exchange (NSE) between 2010 and 2016. However, the study examined the disclosures made in the annual

reports of 50 companies, because the annual reports of some companies were not available while others only contained extracts of financial statements rather than the complete annual report. Gray et al. (2001) explain that audited annual reports are more credible and more informative as compared to other sources of information like websites and company newsletters. Content analysis has been used by most of the studies provided in the empirical studies as a way of examining disclosures.

3.2 Measurement of the dependent and independent variables

The following independent variables were selected directly from the annual reports:

Table 2: Variables provided directly from the annual reports

Variables	Report
Total Assets	Statement of Financial Position
Total Equity	Statement of Financial Position
Revenue	Statement of Profit or Loss
Net Profit (Profit after tax)	Statement of Profit or Loss
Earnings Per Share (EPS)	Statement of Profit or Loss
Type of Auditor (With each auditor given a code)	Auditor's Report
Total Liabilities	Statement of Financial Position
Cash Flow From Operating Activities (CFO)	Statement of Cash Flows
Board Size	Corporate Governance Report
Board Composition as no. of non-executive directors	Corporate Governance Report
Board Composition as given by the number of women on board	Corporate Governance Report
Ownership concentration as provided by block shareholding	Report of Key Shareholders
Ownership as given by Foreign (1) or Local (0)	Report of Key Shareholders

Table 3: Independent variables

Variable	Measurement
Market capitalization	Number of ordinary shares issued x end of year market price
Debt ratio	Total liabilities/ Total Assets
Dividend Yield	Dividend per share/ End of year market price
Price-to-book value	Market Capitalization / End of year Equity
Price Earnings (P/E)	End of year Market price/ Earnings Per Share

The ten sectors were based on classification by Nairobi Securities Exchange and are provided in Table 4.

Table 4: Sector classification as provided by NSE

Agriculture	Energy & Petroleum
Automobile & Accessories	Insurance
Banking	Investments
Commercial & Services	Manufacturing and Allied
Construction & Allied	Telecommunication & Technology

The independent variables of IFRS disclosures' scores, sustainability disclosures' scores, and corporate governance disclosures' scores were computed by using constructed indices of IFRS (Note that the IFRS index is complex and hence not provided here), GRI-G4 for sustainability (Appendix A-1) and OECD/CMA for corporate governance scores (Appendix A-2). For the dependent variable of integrated reporting, the scores were determined from an index prepared from the integrated reporting framework as provided by IIRC (Appendix A-3). For all the indices, the study replicated the measuring level of Brennan's (2001) and Barako et al. (2006) two way 0 for required but missing and 1 for required and disclosed (Dichotomous) approach of grading. After that, the study used Maali et al. (2006) approach of unweighted disclosure index for disclosure practices. About eight coders with research and accounting background were trained on awarding scores, initial pilot grading was done and then any variations discussed and eliminated. Continued supervision was done to ensure consistency in scoring.

Due to the numerous disclosures required by IFRS, the first step was to determine which accounting standard was applicable, the relevant sector and then the number of disclosures that are required for each sector. These disclosures were also confirmed with those used in FiRe evaluation where various experts guide disclosures on grading. However, care was taken to ensure that if a disclosure item was required, then it was applicable to the company first and then confirm if it was disclosed.

3.3 Data and econometric models

The variables and scores for the companies were determined from the listed company's annual reports with year ends between 2010 and 2016. This data combines both cross-sections, and longitudinal features are referred to as a panel (Wooldridge, 2010). Some data items were missing for some companies in some years in which is unbalanced data and considering that the number of companies exceeds the number of years (seven years and about 50 companies), this is referred to as a short panel (Wooldridge, 2010).

Various econometric models apply to unbalanced panel data. These include: Pooled Ordinary Least Square (OLS); static models (Fixed effects and Random Effects) and dynamic Models (The Arellano-Bond and Arellano-Bover Models). Pooled Ordinary Least Square (or Pooled OLS) derives the standard linear regression of a panel data assuming that the cross-section data is pooled, and the population items have the same intercepts and slope coefficients (Greene, 2008). Panel data models are more beneficial than ordinary least squares because of the ability to control for individual differences, to measure changes in individual characteristics and features over time and reduce biases

by aggregating data across individuals and time (Hsiao, 2003). The Poolability test recommended by Chow (1960) aids the choice between Pooled OLS or Panel methods.

This paper considered several variants of the fixed effects model; One-way Fixed effects Models (Group-also called least square dummy variable), One-way Fixed Effects Model (Time), and Two- way fixed effect model (Park, 2009). One-way models use individual or time as a basis of the intercepts and check whether the model is suitable given the intercepts. The two-way model combines the effects of both group and time and hence is more efficient in inferences and estimations. The robust Hausman test is recommended to choose between the random effects and fixed effects model when we have unbalanced models and in the presence of autocorrelation (Cameron and Trivedi, 2010). If the robust Hausman test confirms that the random effects model is suitable, then the strength of the model is checked using the F statistic, and the R^2 in the model results. Besides, Breusch and Pagan (1980) devised a Lagrange Multiplier test for the random effects model based on the OLS residuals.

Due to the limitations of static models, dynamic panel data models are recommended. The static panel data models discussed in the previous paragraph usually assume strict exogeneity, i.e., the dependent variable is unaffected by the independent variables and errors in both current and future periods (Engle, 1983). When the strict exogeneity assumption is violated, static panel data models are poor estimators, because the value of the current dependent variable is affected by prior period errors or dependent variables.

In order to address this problem, dynamic panel data models include lagged levels of the dependent variable as regressors. The Arellano-Bond (1991) and Arellano-Bover (1995) dynamic panel estimators are increasingly popular. Arellano Bond estimation starts by transforming all regressors, usually by differencing, and uses the Generalized Method of Moments (Hansen 1982), and so is called Difference GMM. Rather than predict the lagged dependent variable based solely on its previous value, Arellano and Bond (1991) propose more instruments that use all previous values to predict the present. The Arellano-Bover estimator augments Arellano-Bond by making an additional assumption, that first differences of instrument variables are uncorrelated with the fixed effects. This assumption allows the introduction of more instruments that can dramatically improve efficiency. It builds a system of two equations—the original equation as well as the transformed one—and is known as System GMM.

This paper, therefore, settled on Pooled OLS, Fixed effects Two-way and Random effects Two-way models for static panel data analysis. Regarding dynamic panel models, this study settled for Arellano-Bover Estimator, with 1 and 2 lags.

4. Findings and discussions

4.1 Descriptive Statistics

Out of the 50 companies analyzed, only seven companies (14%) prepared an integrated report by the end of 2016. Four of the companies were banks. Table 5 presents the summary statistics for integrated reporting disclosure scores.

Table 5: Integrated reporting disclosures and other descriptive statistics

		2010	2011	2012	2013	2014	2015	2016
Mean Scores		58.96%	63.36%	64.22%	66.58%	69.83%	71.45%	71.28%
Std. Deviation		17.18%	16.94%	17.33%	17.37%	17.91%	18.30%	18.75%
95% Confidence Interval-Mean	Lower	53.39%	58.01%	59.01%	61.48%	64.74%	66.14%	65.78%
	Upper	64.53%	68.70%	69.42%	71.68%	74.93%	76.76%	76.79%
Median		62.45%	63.04%	65.22%	67.39%	68.48%	70.66%	71.74%
Minimum		28.26%	30.43%	30.43%	32.61%	26.09%	8.70%	6.52%
Maximum		97.83%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Range		69.57%	69.57%	69.57%	67.39%	73.91%	91.30%	93.48%
Interquartile Range		21.74%	23.39%	22.83%	28.26%	21.12%	21.20%	20.91%

Table 5 shows that integrated reporting scores are on an upward trend. In order to determine if the trend is significant, the test of normality is conducted (Ghasemi and Zahediasl, 2012) and the results presented as follows in table 6.

Table 6: Tests of normality for the trend in Integrated reporting scores

Year	Kolmogorov-Smirnov			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	Decision
2010	0.093	39	.200*	0.976	39	0.553	Normal
2011	0.068	41	.200*	0.981	41	0.725	Normal
2012	0.071	45	.200*	0.983	45	0.76	Normal
2013	0.072	47	.200*	0.982	47	0.658	Normal
2014	0.098	50	.200*	0.969	50	0.217	Normal
2015	0.096	48	.200*	0.948	48	0.033	Normal
2016	0.097	47	.200*	0.945	47	0.028	Normal

Based on the results in table 6, integrated reporting scores follow a normal distribution at both 95% and 99% confidence levels. A repeated measures ANOVA with a Greenhouse-Geisser correction determined that mean IR scores differed statistically significantly between the years $F(2.164, 80.082) = 15.01, P < 0.001$. Post hoc tests using the Least Significant Difference (LSD) correction revealed the mean IR score for the year

2016 is statistically significantly different from the mean IR scores for the rest of the years except 2013 to 2015. Therefore, we can conclude that there has been an increase in IR reporting from 2010 to 2013, but the difference in the increase in IR reporting from 2013 to 2016 is not statistically significant (this is contrary to expectations given that regulators made companies aware of integrated reporting at this time).

The increase in integrated reporting disclosures over time was mainly due to improvements in reporting organizational overview, external environment, governance, and risks. Generally, critical areas of non-disclosures by some companies include stakeholder engagement, outlook, and projections of future performance, challenges that may arise in the future and how the organization is equipped to face these challenges, the business model including a logical narrative of the flow of business, and key performance indicators.

After carrying out Principal Component Analysis (Recher, 2002), total asset (transformed to log of assets) was selected as the measure of size, Revenue and Return on Assets were selected for Profitability, while Dividend Yield and Dividends Paid (transformed to log of dividends) were selected as the measure for investor value. However, revenue was subsequently removed due to multicollinearity with total assets.

Table 7 also presents additional statistics that incorporate firm characteristics and relationship between integrated reporting and other scores. It shows that the average integrated reporting scores over the seven years as 67%, and due to some companies having adopted integrated reporting, 100% maximum score is reported. In addition, one of the companies prepares a sustainability report as per the GRI-G4 sustainability guidelines. However, overall IFRS compliance is high, followed by corporate governance and then sustainability reporting. In addition, table 7 shows that most of the variables (items) were different, i.e. variation across companies but not over time. The possible explanation for this observation is that differences in company characteristics may cause companies to report different results on a cross-sectional basis, but the same features cause companies to report the same results based on trends.

Table 7: Summary statistics for integrated reporting and independent variables

Variable		Mean	Std. Dev.	Min	Max	Observations
Integrated Reporting Scores	Overall	66.66%	18.17%	6.52%	100.00%	N = 318
	Between		16.01%	37.39%	99.69%	n = 50
	Within		8.67%	16.35%	87.97%	T-bar = 6.36
IFRS Scores	Overall	89.41%	4.55%	76.69%	95.93%	N = 318
	Between		4.53%	77.06%	95.34%	n = 50
	Within		0.84%	86.74%	91.90%	T-bar = 6.36
Sustainability Scores	Overall	29.18%	16.89%	3.90%	98.04%	N = 318
	Between		14.88%	7.98%	79.95%	n = 50
	Within		7.59%	-8.94%	71.50%	T-bar = 6.36
Corporate Governance Scores	Overall	77.34%	17.51%	22.22%	100.00%	N = 318
	Between		15.48%	22.22%	100.00%	n = 50
	Within		8.00%	39.25%	99.55%	T-bar = 6.36
Total Assets	Overall	66,800,000.00	99,200,000.00	4,479.00	595,000,000.00	N = 318
	Between		91,500,000.00	4,479.00	426,000,000.00	n = 50
	Within		35,600,000.00	108,000,000.00	240,000,000.00	T-bar = 6.36
Return on Assets	Overall	3.62%	22.90%	-330.10%	38.44%	N = 318
	Between		48.10%	-330.10%	31.00%	n = 50
	Within		10.00%	-140.29%	34.33%	T-bar = 6.36

Variable			Mean	Std. Dev.	Min	Max	Observations
Debt to Assets	Overall	0.60	0.28	0.05	3.31		N = 318
	Between		0.23	0.15	1.15		n = 50
	Within		0.16	0.15	2.76		T-bar = 6.36
Dividend Yield	Overall	3.96%	7.20%	0.00%	88.24%		N = 318
	Between		5.91%	0.00%	36.68%		n = 50
	Within		5.30%	- 32.72%	55.51%		T-bar = 6.36
Dividends Paid	Overall	1,567,494.00	3,647,104.00	0.00	30,400,000.00		N = 318
	Between		3,012,745.00	0.00	16,000,000.00		n = 50
	Within		1,912,551.00	0.00	16,000,000.00		T-bar = 6.36
Board Size	Overall	9.08	2.53	4.00	23.00		N = 318
	Between		2.35	4.71	15.43		n = 50
	Within		1.00	6.48	18.50		T-bar = 6.36
Non-Executive Directors	Overall	5.62	2.17	1.00	11.00		N = 318
	Between		2.08	1.00	9.57		n = 50
	Within		0.76	2.19	8.05		T-bar = 6.36
No of Women on Board	Overall	1.77	1.44	0.00	9.00		N = 318
	Between		1.34	0.00	4.71		n = 50
	Within		0.56	0.06	6.06		T-bar = 6.36
Age	Overall	62.06	30.55	4.00	130.00		N = 318
	Between		32.50	4.00	130.00		n = 50
	Within		0.00	62.06	62.06		T-bar = 6.36
Block Shareholding	Overall	30.88%	17.43%	2.50%	73.89%		N = 318
	Between		16.86%	3.57%	73.19%		n = 50
	Within		3.60%	15.11%	51.85%		T-bar = 6.36

Table 8: Correlation Matrix for all variables

Variables	1	2	3	4	5	6	7
IR Scores (1)	1.000						
IFRS Scores (2)	0.535*	1.000					
Sustainability Scores (3)	0.547*	0.204*	1.000				
Corporate Gov. Scores (4)	0.624*	0.0458	0.467*	1.000			
Log Assets (5)	0.531*	0.425*	0.279*	0.297*	1.000		
Return on Assets (6)	0.0128	0.0189	0.146*	0.023	0.221*	1.000	
Debt to Assets (7)	0.146*	0.326*	-0.048	0.007	0.419*	-0.304*	1.000
Dividend Yield (8)	0.042	-0.010	0.033	0.0034	0.095	0.102	0.023
Log of Dividends (9)	0.242*	0.135*	0.263*	0.178*	0.421*	0.279*	-0.036
Board Size (10)	0.488*	0.355*	0.382*	0.304*	0.549*	0.068	0.148*
Non-Executive Directors (11)	0.256*	0.167*	0.182*	0.262*	0.512*	0.047	0.210*
No. of Women on BD (12)	0.356*	0.459*	0.393*	0.195*	0.301*	0.097	0.056
Age (13)	0.123*	0.209*	0.139*	0.100	0.141*	0.135*	0.314
Block shareholding (14)	-0.050	-0.160*	-0.094	0.184*	-0.033	-0.0098	-0.046
Variables	8	9	10	11	12	13	14
Dividend Yield (8)	1.000						
Log of Dividends (9)	0.376*	1.000					
Board Size (10)	-0.034	0.342*	1.000				
Non-Executive Directors (11)	-0.016	0.273*	0.706*	1.000			
No. of Women on BD (12)	-0.005	0.137*	0.574*	0.259*	1.000		
Age (13)	-0.026	0.187*	0.075	0.030	0.104	1.000	
Block shareholding (14)	-0.059	-0.050	-0.09	0.006	-0.134*	0.173*	1.000

Significant at 5 Level.

Table 8 indicates that most of the variables are positively correlated with integrated reporting and are significant at 5% Level, except for block shareholding, which even though is negative, it is not significant.

4.2 Econometric Analysis

For the remaining variables, autocorrelation and heteroskedasticity were first tested and test results confirmed their existence. The panel data models were therefore analyzed where relevant using robust standard errors. Table 9 provides a summary of the output from the various panel models.

In order to establish whether Pooled OLS is suitable for the panel data, the Chow test of poolability returns an $F = 4.2985$. At $F(30,258) < 1.67$. Therefore, the null hypothesis of Poolability is rejected and hence Pooled OLS is not appropriate for this data.

Table 9 Summary of the panel data models

	Pooled OLS	Fixed Effects Two - Way	Random Effects Two - Way	Arellano - Bover	
				1 Lag	2 Lags
No. of Observations	318	318	318	268	219
F/Chi	.	13.42	1670.52	330.04	292.95
P> F/Chi	.	0	0	0	0
Integrated Reporting Disclosure Scores with:	Coeff. (Prob)	Coeff. (Prob)	Coeff. (Prob)	Coeff. (Prob)	Coeff. (Prob)
1 Lag				0.3387(0.001*)	0.2098(0.070)
2 Lags				N/A	0.0625(0.343)
Log of Total Assets	0.1082(0.000*)	0.0265(0.523)	0.1082(0.000*)	-0.0243(0.235)	-0.0132(0.512)
Return on Assets	-0.1242(0.139)	-0.126(0.024*)	-0.1242(0.119)	-0.0380(0.618)	-0.1120(0.169)
Audit Code 2	-0.0032(0.837)	Omitted	-0.0032(0.829)	0.0009(0.975)	-0.0166(0.647)
Audit Code 3	-0.087(0.001*)	Omitted	-0.0867(0.000*)	0.0009(0.975)	-0.0166(0.647)
Audit Code 4	-0.085(0.001*)	Omitted	-0.0849(0.000*)	0.0009(0.975)	-0.0166(0.647)
Audit Code 5	0.0491(0.179)	Omitted	0.0491(0.157)	0.0009(0.975)	-0.0166(0.647)
Audit Code 6	-0.160(0.015*)	Omitted	-0.1604(0.010*)	0.0009(0.975)	-0.0166(0.647)
Audit Code 7	0.0321(0.448)	Omitted	0.0321(0.425)	0.0009(0.975)	-0.0166(0.647)
Audit Code 8	0.0404(0.885)	Omitted	0.0404(0.879)	0.0009(0.975)	-0.0166(0.647)
Sector Code 1	-0.121(0.000*)	Omitted	-0.1205(0.000*)	0.0049(0.798)	0.0266(0.218)
Sector Code 3	-0.0668(0.150)	Omitted	-0.0668(0.129)	0.0049(0.798)	0.0266(0.218)
Sector Code 4	-0.0117(0.712)	Omitted	-0.0117(0.698)	0.0049(0.798)	0.0266(0.218)
Sector Code 5	0.0838(0.003*)	Omitted	0.0838(0.002*)	0.0049(0.798)	0.0266(0.218)
Sector Code 6	0.1482(0.000*)	Omitted	0.1482(0.000*)	0.0049(0.798)	0.0266(0.218)
Sector Code 7	0.0982(0.021*)	Omitted	0.0982(0.015*)	0.0049(0.798)	0.0266(0.218)
Sector Code 8	0.1508(0.002*)	Omitted	0.1508(0.001*)	0.0049(0.798)	0.0266(0.218)
Sector Code 9	0.0809(0.045*)	Omitted	0.0809(0.035*)	0.0049(0.798)	0.0266(0.218)
Sector Code 10	0.1498(0.012*)	Omitted	0.1498(0.008*)	0.0049(0.798)	0.0266(0.218)
Debt to Assets	-0.0365(0.484)	-0.0648(0.086)	-0.0365(0.461)	-0.0357(0.464)	-0.0788(0.134)
Dividend Yield	0.0910(0.323)	0.0202(0.726)	0.0910(0.298)	0.0107(0.893)	0.0901(0.579)
Log of Dividends Paid	0.0008(0.556)	0.0013(0.438)	0.0008(0.536)	-0.0005(0.660)	0.0002(0.849)
Board Size	0.0068(0.134)	-0.018(0.033*)	0.0068(0.114)	-0.0073(0.188)	-0.0081(0.172)
No. Non- Executive Directors	-0.0009(0.861)	0.0062(0.401)	-0.0008(0.854)	0.0013(0.834)	0.0071(0.339)
No of Women on Board	-0.015(0.012*)	0.026(0.023*)	-0.0152(0.008*)	0.0133(0.137)	0.0076(0.452)
Ownership Foreign	-0.051(0.003*)	Omitted	-0.0513(0.001*)	0.4854(0.016*)	0.5912(0.003*)
Age	0.0002(0.388)	Omitted	0.0002(0.364)	0.0035(0.002*)	0.0046(0.000*)
Block Shareholding	-0.0032(0.942)	0.0422(0.744)	-0.0032(0.939)	0.0375(0.766)	0.0775(0.534)
IFRS Disclosure Scores	-0.2419(0.324)	0.7563(0.189)	-0.2419(0.299)	-1.0619(0.057)	-1.218(0.045*)
Sustainability Discl. Scores	0.2380(0.000*)	0.2656(0.049*)	0.2380(0.000*)	0.2346(0.004*)	0.2165(0.008*)
Corp. Gov. Discl. Scores	0.4389(0.000*)	0.5803(0.000*)	0.4389(0.000*)	0.3608(0.000*)	0.3967(0.000*)
_constant	-0.3294(0.095)	-0.6329(0.279)	-0.3294(0.078)	0.8516(0.068)	0.7514(0.136)

*Significance at 5% Level

To determine which panel data model is suitable between fixed effects and random effects, the robust Hausman test was conducted. The model output from Stata reported a Chi-square value of 27.699, with a p-value of 0.0011. The test reveals that fixed effect is

more appropriate for the current panel data. However, the random effects is also considered due to the ability to measure time-invariant variables.

Using the Random Effects Model, reports a significant relationship between integrated reporting disclosures and Size, Sector, Foreign Ownership, Corporate Governance scores, and Sustainability Scores, while there is a negative and significant relationship between integrated reporting disclosures and auditor. Under the dynamic panel data model, size reported a negative and significant relationship with integrated reporting scores, while only corporate governance and sustainability reported a positive and significant relationship with integrated reporting scores.

Table 10 Provides a summary of the decisions regarding hypothesis provided in Table 1 (Recall that the hypothesis was that integrated reporting disclosures are positively related with the variables):

Table 10: Hypothesis testing Findings and Decision

Variable	Findings	Decision
Size (I)	Positive and Significant	Supported
Profitability (I)	Negative and not Significant	Not Supported
Type of Auditor (M)	Negative and not Significant	Not Supported
Sector (I)	Positive and Significant	Supported
Leverage (I)	Negative and not Significant	Not Supported
Investor value (I)	Positive and not Significant	Not Supported
Board Size (I)	Positive and not Significant	Not Supported
Board Composition (I)	Negative and Significant	Not Supported
Ownership	Negative and Significant	Not Supported
Ownership Concentration (I)	Positive and not Significant	Not Supported
IFRS, Sustainability and Corporate Governance	Positive and significant for Sustainability and Corporate Governance, but negative and not significant for IFRS	Supported for Sustainability and Corporate Governance

This means that for emerging markets like Kenya, large companies will likely adopt integrated reporting. In addition, the type of sector also plays an important role hence the adoption of integrated reporting is also dependent on the sector (The findings on size and sector support the study of Isabel-Maria et al. (2013)). The reason why sector may influence the adoption of integrated reporting like in the case of Kenya's listed companies is because of issues relating to the strict regulation in the banking and insurance sectors. A notable finding of this study is that profitability and IFRS disclosures report a negative relationship with integrated reporting, though this is not significant (The finding on profitability support the study of Churet and Eccles, 2014 while they contradict those of Isabel-Maria et al. (2013)). So, does it mean that high IFRS compliance does not necessarily contribute to the quality of integrated reporting? Alternatively, it may imply that integrated reporting gives prominence to disclosure of non-financial information.

Another finding is that the more women on board, the lower the integrated reporting disclosure. Besides, companies that have foreign ownership will likely make lower integrated reporting disclosures. The negative relationship between women on board and integrated reporting needs further research and assessment because board

composition such as the number of women on board generally reports a positive relationship with disclosures (see Ben-Amar and Boujenoui, 2012). For foreign ownership, if a parent is domiciled in a foreign country where integrated reporting is not practiced, then the subsidiary need not adopt integrated reporting.

Finally, integrated reporting disclosure is high and improving partially due to high levels of corporate governance disclosures. This study has also established that there is not only a positive relationship between integrated reporting and corporate governance, but this relationship is dynamic. The same case applies to sustainability disclosures, which means that corporate governance disclosures and sustainability reporting disclosures will likely influence subsequent period integrated reporting disclosures.

5. Conclusion

Corporate reporting provides financial and non-financial information that is useful for decision making and is therefore given a lot of attention by stakeholders. Even though companies usually prepare financial statements, corporate governance and sustainability reports separately, integrated reporting is an innovation that attempts to blend all these reports into one. The IIRC promotes the global adoption of integrated reporting, by working together with various regulators. In Kenya, the Capital Markets Authority issued revised corporate guidelines that recommended the voluntary adoption of integrated reporting. However, recommendations for companies to adopt integrated reporting assume that despite economic and capital market challenges that emerging markets face, companies are open to these innovations. Furthermore, such recommendations also assume that companies are providing sufficient financial and non-financial information to adopt integrated reporting.

Therefore, the main objective of this study was to augment studies on integrated reporting, by analyzing disclosures made in the annual reports of listed companies in Kenya from 2010 to 2016. The key questions were: What are the current disclosure levels of financial and non-financial information for listed companies in Kenya? To what extent are companies providing information for integrated reporting? What is the association between various company factors and integrated reporting disclosures? This is in order to establish the extent to which integrated reporting is being adopted and relationship with other company level features. The next paragraphs discuss the findings and implication for adoption of integrated reporting.

Findings show in terms of financial information, compliance with IFRS is high, while for non-financial information, corporate governance disclosure is also high, but sustainability disclosure is lower. Findings also show that that only seven companies out of the fifty, i.e., 14%, have adopted integrated reporting by the end of 2016. Besides, disclosure scores for integrated reporting are on an upward trend from 59% to 72%, with the trend being statistically significant between the year 2010 and 2015. Majority of companies disclose organizational overview, external environment, governance, and risks. Areas of non-disclosures by some companies include stakeholder engagement, outlook, and projections of future performance, challenges that may arise in the future and how the organization is equipped to face these challenges, the business model including a logical narrative of the flow of business, and key performance indicators. These findings imply that despite the low adoption of integrated reporting, high disclosures of financial information and corporate governance indicate a potential for

adopting integrated reporting. However, low sustainability disclosures indicate a challenge in support of integrated reporting as established in the studies of Deloitte (2012) and Van Zyl (2013).

According to the findings, large companies, those in sectors like banks, those that are foreign-owned and companies with higher corporate governance and sustainability disclosures will likely adopt and make better disclosures of integrated reporting. For size, the findings support the study of Isabel-Maria, Lázaro, and José-Valeriano, (2013). For banks, the findings are in support of Deloitte (2012). This study has established size for emerging market as a key company factor for adoption of integrated reporting. In addition, the current period corporate governance and sustainability disclosures influence the subsequent periods integrated reporting disclosures. These findings show support for the adoption of integrated reporting.

The above findings are very important for various stakeholders from preparers, users and regulators. Given the context of an emerging market where capital markets are still developing, even though innovations in corporate reporting like integrated reporting may take time to be actualized, high disclosures of financial information and corporate governance provide opportunities for adopting integrated reporting. However, stakeholders need to overcome a challenge of low sustainability disclosures. Either improvements are required to sustainability reporting first, or additional focus needs to be made by all stakeholders on how the adoption of integrated reporting can lead to better sustainability disclosures.

References

- Al-Shammari, B. (2011). "Factors influencing the extent of mandatory compliance with international financial reporting standards: the case of Kuwaiti listed companies." *Journal of International Business and Economics*, Vol. 11 No. 4, pp. 305–360.
- Arellano, M., and Bond, S. (1991). "Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations." *Review of Economic Studies*, 58(2), 277-297.
- Arellano, M. and Bover, O. (1995). "Another Look at the Instrumental Variable Estimation of Error-Component Models." *Journal of Econometrics*, 68, 29-52.
- Bankings Act of Kenya, (2009), Available at <http://www.kenyalaw.org/Downloads/Acts/Banking%20Act.pdf>
- Barako, D., Hancock, P. and Izan, H. (2006). "Factors influencing voluntary corporate disclosures by Kenyan companies," *Corporate Governance: An International Review*, Vol.14, pp.107-125.
- Ben-Amar, W., and Boujenoui, A. (2007). "Factors explaining corporate governance disclosure quality: Canadian evidence." *Illinois International Accounting Symposium* (pp. 1-39). Champaign, IL: University of Illinois.
- Bhorat, H. and Tarp, F. (2016). "The Pursuit of Long-Run Economic Growth in Africa: An Overview of Key Challenges", In H. Bhorat, & F. Tarp (Eds.), *Africa's Lions: Growth Traps and Opportunities for Six African Economies*, Brookings Institution Press, pp. 1-36.
- Breusch, T. S., and Pagan, A. R. (1980). "The lagrange multiplier test and its applications to model specification in econometrics." *The Review of Economic Studies*, 47(1), 239-253.

- Bouchez, L. (2007). "Principles of Corporate Governance: The OECD perspective," *European Company Law*, Vol. 4 Issue 3.
- Cameron, A. and Trivedi, P. (2010). "Microeconometrics Using STATA," Revised Edition, stat press.
- CBK, (2017). "Central Bank of Kenya Statistical bulletin June 2017" available at https://www.centralbank.go.ke/uploads/statistical_bulletin/1056636349_Statistical%20Bulletin%20June%202017.pdf
- Cheung, Y. L., Connelly, J. T., Limpaphayom, P., and Zhou, L. (2007). "Do investors really value corporate governance? Evidence from the Hong Kong market", *Journal of International Financial Management and Accounting*, Vol.18, pp. 86–122.
- Chiara, M. and Marco, F. (2013). "The determinants of materiality disclosures in integrated corporate reporting." Social Science Research Network.
- Churet, C. and Eccles, R. (2014). "Integrated reporting, quality of management and financial performance," *Journal of Applied Corporate Finance*, Vol. 26 No.1, pp. 56-64.
- Chow, G.C. (1960). "Tests of Equality between Sets of Coefficients in Two Linear Regressions," *Econometrica*, 28, 591-605.
- CMA, (2016). "Code of Corporate Governance Practices for Issuers of Securities to the Public 2015 - Code" available at <https://www.cma.or.ke/index.php/regulatory-framework/guidelines>
- Deloitte, (2012). "Integrated reporting: navigating your way to a truly integrated report." (3rd ed.). Deloitte.
- Dragu, M. and Tiron-Tudor, A. (2013). "The integrated reporting initiative from an institutional perspective: emergent factors." *Procedia - Social and Behavioral Sciences*, Vol. 92, pp. 275-279.
- Drobetz, W. Merikas, A. and Merika, A. (2014). "Corporate social responsibility disclosure: the case of international shipping," *Transportation Research: An International Journal*, Vol. 71, pp. 18-44.
- Eccles, R. and Serafeim, G. (2013). "A tale of two stories: sustainability and the quarterly earnings call." *Journal of Applied Corporate Finance*, Vol. 25, pp. 8-19.
- Elmagrhi H., Ntim G., and Wang Y. (2016). "Antecedents of voluntary corporate governance disclosure: post-2007/08 financial crisis evidence from the influential UK Combined Code." *Corporate Governance*, Vol. 16 No. 3, pp.507-538.
- Engle, R. F. (1983). "Estimates of the variance of US inflation based upon the ARCH Model." *Journal of Money, Credit and Banking*, 15(3), 286-301.
- Freeman, R. (1984). "Strategic management: a stakeholder approach". Boston: Pitman Publishing.
- Gasparini, A., Bigotto, P. and Doni, F. (2013). "The integrated report and the financial analysts' perception." *ELASM 9th Interdisciplinary Workshop on Intangibles, Intellectual Capital and extra financial information*, Denmark, pp. 1-22.
- Ghasemi, A. and Zahediasl, S. (2012). "Normality tests for statistical analysis: a guide for non-statisticians." *International Journal of Endocrinology and metabolism*, Vol. 10 No.2, pp.486.
- Gray R., Javad M., Power M., and Sinclair D. (2001). "Social and environmental disclosure and corporate characteristics: A research note and extension." *Journal of Business Finance and Accounting*, 28.3/4, April/May pp. 327-356.

- Healy, P. and Palepu, K. (2001). "Information asymmetry, corporate disclosure, and the capital markets: a review of the empirical disclosure literature. *Journal of Accounting & Economics*, Vol.31, pp. 1-3.
- IIRC.(2010). "Integrated Reporting Discussion Paper," available at http://integratedreporting.org/wp-content/uploads/2011/09/IR-Discussion-Paper-2011_spreads.pdf
- IIRC.(2013). "Integrated Reporting Framework" available at <https://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf>
- Insurance Act of Kenya Chapter 478 (2013). available at <http://www.kenyalaw.org/lex/actview.xql?actid=CAP.%20487>
- Isabel-María, G., Lázaro, R., and José-Valeriano, F. (2013). "The cultural systems and integrated reporting" *International Business Review*, pp. 828-838.
- Jensen, J. C., and Berg, N. (2012). "Determinants of traditional sustainability reporting versus integrated reporting." An institutionalist approach. *Business Strategy and the Environment*, 21(5), 299-316.
- Jensen, M. and Meckling, W. (1976). "Theory of the firm: Managerial behavior, agency costs, and ownership structure." *Journal of Financial Economics*, pp. 305-360.
- Juhmani, O. (2012). "Factors influencing the extent of corporate compliance with IFRS: Evidence from companies listed in Bahrain Stock Exchange," *Journal of International Business and Economics*, Vol. 12, pp.67-79.
- Kass, A. (2012). "Towards mainstreaming integrated reporting-theoretical landscape and practical insights." GRIN Verlag.
- Kenya's Companies Act (1978). available at: [http://kenyalaw.org/kl/fileadmin/pdfdownloads/RepealedStatutes/CompaniesAct\(Cap486\).pdf](http://kenyalaw.org/kl/fileadmin/pdfdownloads/RepealedStatutes/CompaniesAct(Cap486).pdf)
- Kenya's Companies Act (2015). available at http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/TheCompaniesAct_No17of2015_RevisedCompressed.pdf
- Krzus, M. (2011). "Integrated reporting: if not now, when?", *IRZ-Zeitschrift für International Rechnungslegung*, Vol. 6, pp. 271-276.
- Linsley, P. and Shrives, P.(2006). "Risk reporting: A study of risk disclosures in the annual reports of UK companies." *British Accounting Review*, Vol.38 No.4, pp. 387-404.
- Maali, B., Casson, P. and Napier, C. (2006). "Social Reporting by Islamic Banks." *Abacus*, Vol. 42 No. 2, pp. 266-289.
- Mcfie, J. (2010). "High-quality financial reporting, the case of Nairobi Stock Exchange." Lambert Academic Publishing.
- Nairobi Securities Exchange. (2018). "Regulatory Framework". Retrieved July 20, 2018, from [nse.co.ke](https://www.nse.co.ke): <https://www.nse.co.ke/regulatory-framework/nairobi-securities-exchange.html>
- Omokhudu, O. O., & Ibadin, P. O. (2015). "The value relevance of accounting information: Evidence from Nigeria." *Accounting and Finance Research*, 4(3), 20-30.
- Ohlson, J. (1990). "A Synthesis of security valuation theory and the role of dividends, cash flows, and earnings," *Contemporary Accounting Research*, Vol. 6 No. 2, pp. 648-676.

- Ohlson, J. (1991). "The theory of value and earnings and an introduction to the Ball Brown analysis," *Contemporary Accounting Research*, Vol. 8 No.1, pp.1-19.
- Ohlson, J. (1995). "Earnings, book values and dividends in equity valuation," *Contemporary Accounting Research*, Vol. 11 No.2, pp. 661-687.
- Park, H. M. (2009). "Practical guides to panel data modeling: A step-by-step analysis using Stata." Tutorial working paper. Tokyo, Japan: Graduate School of International Relations, International University of Japan.
- Piotroski, D. (2002). "Value Investing: The Use of Historical Financial Statement Information to Separate Winners from Losers," The University of Chicago Graduate School.
- PwC. (2018). "Value Reporting Framework." Retrieved from Integrated Reporting (IR): <http://integratedreporting.org/profile/pricewaterhousecoopers-nv-netherlands-accounting/>
- Rencher, C. (2002). "Methods of Multivariate Analysis," A. John Wiley & sons, inc. publication, Second Edition
- Schwab, K. (2014). "The Global Competitiveness Report 2013-2014", The World Economic Forum, Geneva.
- Sharif, M. and Rashid, K. (2014). "Corporate governance and corporate social responsibility (CSR) reporting: an empirical evidence from commercial banks (CB) of Pakistan. *Quality & Quantity*, Vol. 48 No.5, pp. 2501-2521.
- Singh, A. (1999). "Should Africa Promote Stock Market Capitalism?", *Journal of International Development*, Vol.11, pp. 343-365.
- Stubbs, W. and Higgins, C. (2014). "Integrated reporting and internal mechanisms for change." *Accounting, Auditing and Accountability Journal*, Vol. 27 No.7, pp. 1068-1089.
- Suchman, M. (1995). "Managing Legitimacy: strategic and institutional approaches." *Academy of Management Review*, pp. 571-610.
- Tam, K., Kiang, M. and Chi, R. (1991). "Inducing stock screening rules for portfolio construction," *Journal of the Operational Research Society*, Vol. 42 No.9, pp.747-756.
- Urban, B. and Hwindingwi, R. (2016). "The influence of institutional factors on MNC's triple-bottom-line reporting: A focus on African emerging markets (AEMs)," *International Journal of Emerging Markets*, Vol. 11 No. 4, pp.497-513.
- Van Zyl, A. (2013). "Sustainability and integrated reporting in the South African corporate sector," *International Business and Economics Research Journal*, Vol.12 No.8, pp. 903-926.
- Wooldridge, J. M. (2010). "Econometric analysis of cross section and panel data," (2. ed.). Cambridge, Mass. [u.a.]: MIT Press.
- Yiadom, E. and Atsunyo, W. (2014). "Compliance with International Financial Reporting Standards by listed companies in Ghana," *International Journal of Business and Management*, Vol.9 No.10, pp. 87-100.
- Zott, C., Amit, R. and Massa, L. (2011). "The Business Model: Recent Developments and Future Research." *Journal of Management*, pp. 1-25.

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Appendices

Appendix A-1 Summary GRI-G4 Disclosures

Key Aspect	Items for Disclosure
Economic	1.1 Economic Performance
	1.2 Market presence
	1.3 Indirect economic impacts
	1.4 Procurement practices
	1.5 Materials
Key Aspect	Items for Disclosure
Environmental	2.1 Energy
	2.2 Water
	2.3 Biodiversity
	2.4 Emissions
	2.5 Effluents and waste
	2.6 Products and services
	2.7 Compliance
	2.8 Transport
	2.9 Supplier environmental assessment
	2.10 Environmental grievance mechanisms
Key	Items for Disclosure
Social	3.1 Employment
	3.2 Labor/management relations
	3.3 Occupational health and safety
	3.4 Training and education
	3.5 Diversity and equal opportunity
	3.6 Equal remuneration for women and men
	3.7 Supplier assessment for labor practices
	3.8 Labor practices grievance mechanisms
	4.1 Investment
	4.2 Non- discrimination
	4.3 Freedom of association and collective bargaining
	4.4 Child labor
	4.5 Forced or compulsory labor
	4.6 Security practices
Key	Items for Disclosure
	4.7 Indigenous rights
	4.8 Assessment
	4.9 Supplier human rights assessment
	4.10 Human rights grievance assessment

5.1 Local communities
5.2 Anti-corruption
5.3 Public policy
5.4 Anti-competitive behavior
5.5 Compliance
5.6 Supplier assessment for impacts on society
5.7 Grievance mechanisms for impacts on society
6.1 Customer health and safety
6.2 Product and service labeling
6.3 Marketing communications
6.4 Customer privacy
6.5 Compliance

Appendix A-2 OECD 2015 Corporate Reporting Governance Guidelines

Key Item	Explanation
The financial and operating results of the company	Audited financial statements; The Balance Sheet, Profit and Loss statement, Cash Flow statement, and Notes
Company objectives	Policies relating to business ethics, the environment, and other public policy commitments.
Significant share ownership and voting rights	
Remuneration policy	Information about board members, their qualifications, selection process, other company directorships and whether they have independent status on the board should also be disclosed and the remuneration for the board and key executives together with remuneration policy.
Related party transactions	Material related party transactions to the market, either individually, or on a grouped basis, including whether they have been executed at arms-length and on standard market terms.
Foreseeable risk factors	Risks specific to the industry or geographies in which the company operates, Dependence on commodities, Financial market risks including interest rate or currency risk, Risk related to derivatives and off-balance sheet transactions and Risks related to environmental liabilities.
Issues regarding employees/stakeholders	This information may include; Management-employee relations, Relations with stakeholders such as creditors, suppliers, and local communities.
Governance structure and policies	Companies should disclose information on their governance structure and any corporate governance policy or code such as an ethics code. The process by which this code or policy is implemented should also be disclosed.

(Source: OECD, 2016)

Appendix A-3 Integrated Reporting Framework

CONTENT ELEMENTS	DETAILED CONTENTS
ORGANIZATIONAL OVERVIEW & EXTERNAL ENVIRONMENT	<p>Organizational Overview</p> <ol style="list-style-type: none"> 1. Organization's mission and vision 2. Culture, ethics, and values 3. Ownership and operating structure 4. Principal activities and markets 5. Competitive landscape and market positioning (Threat of new competition, substitute products, bargaining power of customers and suppliers, and the intensity of competitive rivalry) 6. Position within the value chain 7. Essential quantitative information (number of employees, revenues and number of countries in which the company operates) <p>External Environment</p> <p>Significant external factors that will affect the organization's ability to create value in the short, medium or long term:</p> <ol style="list-style-type: none"> 1. Legal (The legislative and regulatory environment in which the company operates) 2. Commercial (Macro and microeconomic conditions, market forces such as weaknesses and strengths of competitors and speed of technological change) 3. Social (Societal issues such as population and demographic changes, human rights, health, poverty, collective values, and educational systems) 4. Environmental (Challenges such as climate change, loss of ecosystems and resource shortages) 5. Political (in countries where the organization operates)
GOVERNANCE	<ol style="list-style-type: none"> 1. Organization's leadership structure including skills and diversity 2. Specific Processes used to make strategic decisions (risk attitude and mechanisms for addressing integrity issues) 3. Particular actions are taken to monitor the strategic direction of the organization 4. How the organization's culture, ethics, and values are reflected in the use of capital and relationship with stakeholders

	<ul style="list-style-type: none"> 5. Whether the organization is implementing governance practices that exceed legal requirements 6. The responsibility those charged with governance take for promoting and enabling innovation 7. How remuneration and incentives are linked to value creation in the short, medium and long term and to the organization's use of and effects on the capitals
BUSINESS MODEL	<ul style="list-style-type: none"> 1. Key Inputs (Those that have a material bearing on the ability to create value in the short, medium and long term) 2. Business activities (Differentiation, approach to innovation, adaptation to change and contributions made to promote long term success, e.g. training and relationships management) 3. Outputs (Key products and services) 4. Outcomes (Positive and negative) <ul style="list-style-type: none"> i) Internal (employee morale, reputation, revenues, cash flows) ii) External (tax payments, customer satisfaction, brand loyalty) 5. A Figure highlighting key elements and a detailed explanation of their relevance to the organization 6. Logical narrative flow of the business 7. Critical stakeholders and other dependencies
RISKS AND OPPORTUNITIES	<ul style="list-style-type: none"> 1. The specific source of risks and opportunities (internal and external) 2. Organization's assessment of the likelihood that the risk will come to fruition and the magnitude of its effect) 3. Specific steps being taken to mitigate or manage key risks or to create value for opportunities 4. Materiality (real risk even if the probability of occurrence may be small)
STRATEGY AND RESOURCE ALLOCATION	<ul style="list-style-type: none"> 1. Organization's short, medium and long term strategic objectives 2. Strategies in place to achieve those strategic objectives 3. Resource allocation plans to implement the strategy 4. Method of measuring achievements and target outcomes for the short, medium and long term 5. What differentiates the organization to give it an advantage and enable it to create value? (innovation, competitive intellectual capital, social and environmental considerations)

	6. Stakeholder engagements that were used in formulating its strategy and resource allocation plans
PERFORMANCE	<hr/> 1. Quantitative indicators concerning targets risk opportunities and the assumptions used in compiling them 2. Organization's effects on the capitals 3. The state of key stakeholder relationships and responses to their needs 4. Linkages between past, current performance, and future outlook 5. Key performance indicators
OUTLOOK	<hr/> 1. The organization's expectations about the external environment in the short, medium and long term 2. How those expectations will affect the organization 3. How the organization is currently equipped to respond to the critical challenges that are likely to arise 4. Management of key relationships and their importance to the organization's ability to create value over time 5. Projections and a summary of related assumptions <hr/>

Board Diversity and Financial Reporting quality of listed deposit money banks in Nigeria

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Abstract

Purpose: The corporate environment in Nigeria is believed to have experienced cases of earnings manipulations which have brought doubt to the credibility of financial reporting resulting in corporate failure. These have attracted the attention of practitioners, regulators, researchers and other stakeholders in getting possible solutions to poor quality of financial reporting in corporate businesses. Therefore, the purpose of the study is to investigate the effect of board diversity on financial reporting quality of listed Deposit Money Banks (DMBs) in Nigeria.

Methodology: The study uses panel data regression technique for data analysis. Data was obtained from the audited annual reports and accounts of the banks over the period 2006 - 2017. Robustness tests such as normality test of standard error, multicollinearity and heteroscedasticity tests were carried out to validate the results.

Findings: The study found that board remuneration, percentage of women board members and audit committee gender have significant positive effect on financial reporting quality implying lower earnings management. Also, board experience and board reputation have negative but weak effect on financial reporting quality. However, board ownership has a positive and significant effect on earnings management but board nationality and board age have positive but insignificant effect on financial reporting quality of banks. The two control variables (financial performance and leverage have significant negative influence in curtailing managers' opportunistic tendencies.

Policy Implications: The findings have important policy implication for the Central Bank of Nigeria (CBN) which is striving to improve transparency and quality of financial reporting in the financial sector. It also have policy implication which enables the CBN and the DMBs to reap the benefit of having a well re-structured, re-composed, re-organized and diversified board along the findings of the study.

Originality: The originality of study is in the use of comprehensive lists of board characteristics in the Nigerian banking sector. The study originality is also in the use of the entire population of the listed DMBs giving it a wider coverage and therefore more generalizable.

Keywords: Financial Reporting Quality, Echelon Theory, Gender Diversity, Board Experience and Board Reputation

1. Introduction

The need for financial reporting free of misstatement has occupied much of the discussion in literature of accounting and finance (Farouk, 2018, Shehu, 2012). This is as a result of financial scandals and collapse of giant multinational firms around the world such as Enron, WorldCom, Parmalat and Cardbury in Nigeria, among others. These have drawn the attention of regulators, policy makers, researchers and other stakeholders in

propelling the need for good corporate governance practice in developed and developing economy (Farouk, 2018). These corporate failures have led to international efforts towards adopting dynamism in corporate governance practice to mitigate opportunistic tendencies of managers that have weakened investors' and potential investors' confidence in companies' accounting information (Oba, 2014).

Corporations in Nigeria have also been found wanting on their pervasiveness towards manipulative accounting practice. Examples of these corporations are defunct Oceanic Bank Plc, Afribank Plc and Intercontinental Bank Plc. These have generally brought doubt to the credibility of financial reporting of listed companies in Nigeria. The perpetration of this act is to attract unsuspecting investors, or to obtain undeserved accounting-based rewards through the presentation of an exaggerated, misleading or deceptive state of bank financial affairs (Farouk, 2018). Therefore, it has become imperative to ascertain dynamics that could help increase the level of financial reporting quality through reduced earnings manipulations, particularly in the banking sector which serves as one of the pivots of the Nigerian Economy.

The inconsistency in regulation and the available choices to managers' in accounting policies have given room for exercise of judgments in preparing financial statements. Despite existence of accounting standards, it is difficult to have an accounting system that is totally rule-based without room for occasional judgment (Bello, 2002). Hence, efforts need to be made through research to ascertain factors that could help ensure reduction in the level of discretion by managers' when they prepare financial statements in order to guarantee quality financial reporting. Studies have shown that good corporate governance through diversity of the board reduces opportunistic tendencies of managers (Farouk, 2018, Isa & Farouk, 2018, Arun, Almahrog & Aribi, 2015).

The financial stability, quality of financial reports and continuity of bank have been a source of worry to investors, regulators, policy makers and researchers. Therefore, the banks survival and presentation of quality financial information could be linked to the qualities, strength, independence, dynamism and the degree of involvement of the board of directors in bank's affairs (Farouk, 2018 and Farouk & Shehu, 2014). Diversity of the board is seen as the variation of age, race, ethnicity, gender, and social/cultural identities among employees within a specific corporation (Marimuthu, 2008). Previous studies have examined some specific board diversity variables which have influence on financial reporting quality. This study is, however, unique because variables such as board ownership, board nationality, board remuneration, board experience, board reputation, board age and women board members and audit committee gender are examined against financial reporting quality of banks. Most studies such as Luo, Xiang and Huang (2017), Affan, Rosidi and Purwanti (2017) and Klai and Omri (2011) concentrated only on non-financial sector because of the peculiarity of the financial sector in measuring financial reporting quality.

Furthermore, studies of this nature were mostly conducted in developed countries, however, the few conducted in Nigeria either combine both financial and non-financial sectors together using a single model which may not be applicable to banking sector. For example, Oba's (2014) sample consists of 69 out of 219 companies listed in Nigeria Stock Exchange and used Dechow and Dichev (2002) model to measure financial reporting quality of the selected firms. The model used is not applicable to financial sector and as

such the findings, conclusions and recommendations from the study may not be appropriate. This is due to the use of wrong model to measure financial reporting quality of financial service firms which may have been included in the sample. Therefore, this study attempts to bridge the gap by investigating only the financial sector which is a vibrant sector of Nigeria's economy.

The rest of the paper is organized as follows. Section 2 discussed the prior literature and develop hypotheses. Methodology adopted is discussed in Section 3 and is followed by the presentation and discussion of the results in Section 4. The paper ends with conclusion and recommendations from the findings in Section 5.

2. Literature Review and Hypotheses Development

2.1 Theoretical Framework

It is an acknowledged that the principal-agent theory is generally considered the starting point for any debate on the issue of corporate governance. Corporate monitoring by diverse board are expected to constrain managers' behaviour because the board may force managers to focus more on corporate performance and less on opportunistic or self-serving behaviour. It is therefore, assumed that if board diversity enhances monitoring, it can be associated with lower use of discretionary loan loss provision in the banks.

Jensen and Meckling (1976) argued that agency relationship take place when the principals engage the agents to perform some of their duties on their behalf. Hence, an agency cost arises due to conflicting interests of the managers and owners. Consequently, agency theory views board of directors in corporations as an agent of the owners. Therefore, it is expected that the board of directors will act in the best interest of the owners. In acting for the best interest of the owners, the board will mitigate the opportunistic tendencies of the managers because the advocates of the agency theory view the managers (directors) as an economic institution that will mitigate problems and serve as guardian to the shareholders (Hermalin & Weisbach, 2003). When the board is well characterized through the number of members on board and its composition, their diversity is expected to prevent the managers from embarking on earnings manipulation. In addition to the separation of ownership and control, resources based theory as developed by Warnerfelt (1984) introduces accessibility to resources. This has critical dimension to the debate on corporate governance. Also, the theory asserts that firm often tends to decrease the ambiguity of outside influences by guaranteeing that resources are available for their survival and development. By implication, this theory may seem to suggest that separation between executive and non-executive directors is actually irrelevant but rather support strength in diversity. Hence, this theory shows that the strength of a corporate organization lies in the amount of relevant information it has at its disposal.

In the light of the above explanation, it can be argued that board diversity particularly the board nationality and board ownership seeks to protect the interest of all stakeholders of a firm. From the resource dependency perspective, qualified and skilful board members can be considered as a strategic resource to provide a strategic linkage to different external resources (Amit & Schoemaker (1998). Another important theory to underpin this study is the upper echelon theory.

Upper echelon theory suggests that organizations wishing to attract, retain and benefit from diverse talents should increase the diversity of their senior management

(Gelfand, Nishii, Raver, & Schneider, 2004). They concluded that, doing so does help, not only because of the signal that it sends to diverse employees about their advancement potential, but because a diverse senior management team is more likely to be sensitive to the issues that may affect the owners of the business. Thus, organizations with more diverse senior managers are expected to reduce the level of earnings management, thereby enhancing the financial reporting quality. Also, there is the notion that the characteristics of senior management or the upper echelon of an organization can influence the decisions made and practices adopted by an organization (Hambrick & Mason, 1984). In view of this above, this study adopts the upper echelon theory to underpin the relationship between board of directors, gender diversity and financial reporting quality. It is worthy to note that the upper echelon theory perfectly anchors board remuneration, board experience, board reputation, women board members and audit committee gender as drivers of financial reporting quality.

2.2 Prior studies and hypotheses development

Board ownership:

From perspective of interest held by directors in their organisation, there are two conflicting opinion. First, is the alignment of interest hypothesis which argues that increase in managers' ownership stake in a firm reduces the agency conflict between shareholders and managers (Jensen & Meckling, 1976). Therefore it could be expected that, this may reduce the scope for opportunistic behavior on the part of managers. For example, Mahboub (2017) and Adebisi and Olowookere (2016) examine the effect of ownership structure on quality of financial reporting of 22 Lebanese banks and Nigerian Deposit Money Banks respectively. They found that increase in ownership structure and managerial ownership positively affects financial reporting quality of banks. Also, Parveen, Malik, Mahmood and Ali Jan (2016) and Swai and Mbogela (2016) uses data from Pakistan and East Africa and found that director ownership negatively and significantly influence the tendencies of manipulative activities of the managers.

Second, is the entrenchment hypothesis which states that ownership stakes beyond a certain level could put managers in a dominant position and they can use it to exploit external minority shareholder. To support this argument, studies such as Ogbonnaya, Ekwe and Ihendinihu (2016) in Nigeria and Mustafa, Mehmet and Suleyman (2014) in Turkey documented that managerial ownership have positive significant effects on earnings management. They concluded that managerial ownership of firms does not mitigate the managers' opportunistic behavior. Based on these arguments, the study hypothesizes that:

H₁: *Board ownership has a significant influence on financial reporting quality of banks*

Board nationality

Foreign directors could be regarded as long-standing investors, this make them to have greater incentives to monitor the managers to protect their hard earned investment. The monitoring task exhibited by foreign directors is expected to curtail the opportunistic tendencies of managers towards discretionary choices. The findings of Xingqiang, Wei and Shaojuan (2017) documented that earnings management is negative and significant with the presence and ratio of foreign directors on China's corporate boards. Similarly, Makhoul, Al-Sufy and Almubaideen (2018) in their study, the results indicate that

nationality diversity is significantly positively correlated with accounting conservatism. However, there are studies that have documented contrary findings such as Van der Zwet (2015) and Van der Berg (2015) that examined the effect of board diversity on earnings management in U.S and U.K respectively. Also, Isa and Farouk (2018) in their findings revealed that, all board nationality has significant positive effect on earnings management of banks for both low and high leveraged banks. Their results did not support the hypothesis that firms with more foreign nationality on boards of firms have lower levels of earnings management. Thus, despite these findings, the study lay credence to earlier argument and hypothesizes that:

H₂: *Board nationality significantly influences financial reporting quality of banks*

Board remuneration

Remuneration of the board of directors of firm may have a significant effect on their financial reporting quality. However, there are two opposing questions about board remuneration. First, is a question on whether board remuneration influences financial reporting quality? Therefore, the focus of this study is on the belief that when board of directors are paid high, there will not be need for them to engage in earnings manipulation to get higher pay since their pay is not tied to performance. To support this stand, Hassen (2014) and Gong and Li (2007) found that total compensation and outside directors' equity-based compensation was negatively related to the earnings management. The second question is whether it is financial reporting quality that drives board remuneration? This implies that if their remuneration is tied to presentation and preparation of quality financial reporting, then, financial reporting quality will influence board remuneration. In agreement with this is a study by Wangaruro (2014) who found that executive compensation has positive and significant effect on earnings management of commercial banks in Kenya. Also, Gao and Shrieves (2002) found that executive compensation, the amounts of stock options, bonuses and the incentive intensity of stock options were positively related to earnings management, whereas salaries are negatively related. It is based on these arguments that this study hypothesizes that:

H₃: *Board remuneration significantly influences financial reporting quality of banks*

Board Experience:

There is an established link between financial reporting quality and board experience as the longer the tenure of board of directors, it increases their monitoring effectiveness on the activities of management. Abdelsalam and Street (2007) and Ebimobowei, and Yadirichukwu (2013) argued that long serving directors utilizes their expertise to effectively monitor management by ensuring quality accounting information. Their study found a significant and positive relationship between board experience and length of service by executive directors on financial reporting timeliness. Also, Chi-Chi and Friday (2016) found that board experience has positive impact on the financial reporting quality measured by the discretionary accruals of firm. On the other hand, Sengupta (2004) stated that length of engagement by directors may influence them to delay accounting information disclosure. Therefore, this study hypothesizes that:

H₄: Board experience significantly influences financial reporting quality of banks

Board reputation:

Reputable directors with national honours such as Grand Commander of the Order of the Federal Republic (GCFR), Grand Commander of the Order of the Niger (GCON), Commander of the Order of the Federal Republic (CFR), Commander of the Order of the Niger (CON), Officer of the Order of the Federal Republic (OFR), Officer of the Order of the Niger (OON), Member of the Order of the Federal Republic (MFR), Member of the Order of the Niger (MON) not only have the experience and knowledge needed to monitor effectively, but may also have strong incentives to ensure high quality monitoring because they are protecting their names and integrity build overtime, therefore ensuring high reporting quality (Segal, 2015). Segal (2015) argued that a negative causal effect is expected if reputable directors are ineffective monitors because they are too busy, whereas a positive causal effect is expected if reputable directors are more experienced and subject to significant reputation penalties in the case of a financial reporting failure. In his study, it was documented that reputation has a positive causal effect on monitoring and results in higher quality financial reporting. Therefore, this study hypothesizes that:

H₅: Board reputation significantly influences financial reporting quality of banks

Board age:

The experience of the directors can also be obtained from their age which is regarded as the main factor that is associated with more experience. The age of directors is expected to be brought to bear in terms of decisions making and providing management with guide in respect to their life experiences. In support of this, study by Gilpatrik (2000) establishes that the board of directors incorporates retiree's directors who had previously served as executive's directors at companies in the same sector. Also, Huse and Rindova (2001) highlight the significance of having a board of directors with heterogeneous ages in order to ensure the different views and ensure the alignment of directors with different stakeholders in society. To this end the study hypothesizes that:

H₆: Board age significantly influences financial reporting quality of banks

Women board members:

Studies on gender diversity have identified three explanations as to why gender diversity enhances financial reporting quality of firms (Gul, Srinidhi & Ng 2011). The first explanation is that female participation on board enhances the structure of the board and improves their skills and efficiency in mitigating managers' opportunistic tendencies. A board with diverse expertise does have comprehensive and strategic opinions for action and broader assessment in decision making (Srinidhi, Gul & Tsui, 2011). Therefore, female representation on board is expected to usher in diverse proficiencies that will deepen board deliberations and thereby increase the quality of their decisions (Hillma, Shropshire & Cannella, 2007). Precisely, works on organization theory advocate that female involvement ease deliberation of resilient issues and hence stimulates communications of the board (Huse & Solberg, 2007 and Joy, 2008).

Second, Adams and Ferreira (2009) found that female directors have better board attendance records than their male counterparts and the females are more likely to join monitoring committees. Therefore, female board membership improves a board's monitoring abilities and effectiveness. In addition, previous studies, it was opined that female board members are more inclined to act and reason more independently than their male board members (Adams, Gray & Nowland, 2010). Therefore, female board members as monitors can help boards to better mitigate earnings management and thus improve financial reporting quality of firm.

On a final note, female board members are likely to show less tolerance for managers' manipulative accounting practice because of their quest for a higher earnings quality from managers. Several studies gave evidence that women are usually more risk averse, less overconfident and less tolerant of opportunistic behavior than men. For example, Luo, Xiang and Huang (2017) examine the effect of female directors on real activities manipulation of Companies in China. The study found that higher female participation on board of directors is associated with lower levels of real activities manipulation. Also, Mason and Mudrack (1996) in their study revealed that men yearning for increased earnings and aiming business accomplishment have more likelihood to violate the law to reach enviable success than their female counterparts; hence, women are less likely to contravene business ethics. In summary, the study predicts that banks with female board members experience high quality of reported earnings. Therefore, the study hypothesizes that:

H₇: *Female board members significantly influence financial reporting quality of banks*

Audit committee gender:

Audit committee has been identified in corporate governance as core to financial reporting quality. Therefore, board of directors is expected to establish audit committees, made up of six members both from the non-executive and outside members (shareholders). Therefore just like the argument in respect of women directors, same hold for female in audit committee as the committee basic functions are to oversee the financial reporting process. Having women on the committee may help increase the monitoring and hence mitigates the managers' tendencies to manipulative accounting earnings. For example, Xi'an and Xi'an (2012) found that audit committee gender has a negative and significant effect on earnings management of firms. Also, Peni and Vahamaa (2010) provide considerable evidence that female chief financial officers are associated with income-decreasing discretionary accruals, thereby suggesting that they follow more conservative earnings management strategies. This implies that higher number of female on audit committee increases the quality of financial reporting. Contrary to this finding, Ioualalen, Khemakhem and Fontaine (2015) documented that audit committee diversity did not have any significant impact on earnings management of selected Canadian firms. Following this opposing arguments, the study hypothesizes that:

H₈: *Presence of female in audit committee significantly influences financial reporting quality of banks*

3. Methodology

The study adopts quantitative approach; it also aligns itself with the positivist paradigm because it is dependent on quantifiable observations that lead to statistical analysis to establish “what is” without any form of human interaction within the study. The study population covers fourteen (14) Deposit Money Banks listed on the Nigerian Stock Exchange between 31st December, 2006 and 31st December, 2017. All the fourteen banks were used for the analysis adopting census approach. Secondary source of data was used and data was extracted from the Published Audited Annual Reports and Accounts of the banks from 2006 - 2017. Selection of this period is considered imperative because the period under review has witnessed and continues to attract clamour for operational board dynamism, sound and credible financial reporting. Ordinary Least Square was adopted for the study. Descriptive statistics, correlation matrix and regression were estimated for purpose of analysis.

Model Specification

The study adopts Chang, Shen and Fang (2008) model to proxy financial reporting quality. The choice of the model is its suitability and applicability in the financial sector as highlighted below. The residual from this model is used to represent earnings management in the second regression. The model is presented below.

$$DLLP_i / TA_{t-1} = LLP_i / TA_{t-1} - \{\alpha_0 1/TA_{t-1} + \alpha_1 LCO_i / TA_{t-1} + \alpha_2 BBAL_i / TA_{t-1}\} \dots \dots \dots \text{Model 1}$$

Where DLLP = Discretionary loan loss provision, LLP = Loan loss provision, LCO = Loan Charge-off, BBAL = Beginning Balance of loan loss, TA_{t-1} = Lagged Total Assets and α_0 = Constant.

The intuition underlying the choice of these variables is that “in practice, most bank managers decide the amount of loan loss provisions every month according to individual risk assessment on potential uncollectible loans and loans write-offs”. Since discretionary accruals cannot be observed directly, it is estimated by regressing loan loss provision on the independent variables.

The equation above forms the final parsimonious model of the study using balanced panel multiple regression. It has been posited in extant literature that there are firm characteristics that influence the degree of earnings management by firms. Therefore, there is need to control for it in the estimations of discretionary accruals. Scholars have advanced argument from diverse viewpoint that firm’s financial performance whether positive or negative gives managers incentive to manage earnings. This may be in order to avoid heavy tax or have access to loan (Farouk, 2014). If not controlled for, it may affect the level of earnings manipulation if tests in relation to accounting discretion are often mis-specified if not controlled for using performance (Roodposhti, Haybati, Talebnia & Chasmi, 2012 and Kothari, Leone & Wasley, 2002).

In addition, a study by Wasimullah et al. (2010) and that of Bartov (1993) have argued that financial difficulties offer firms with increased incentives to embark on earnings management. While the later control for financial difficulties using book to market ratios and financial leverage, the former measures financial leverage as long term financial liabilities plus debt included in the current liabilities. Therefore, these variables were used in the study model as displayed below.

$$FRQ_{it} = \beta_{0it} + \beta_1 BOW_{it} + \beta_2 BNA_{it} + \beta_3 BRE_{it} + \beta_4 BEX_{it} + \beta_5 BRP_{it} + \beta_6 BAG_{it} + \beta_7 BWM_{it} + \beta_8 ACG_{it} + \beta_9 ROA_{it} + \beta_{10} LEV_{it} + \mu_{it} \dots \dots \text{Model 2}$$

Where:

FRQ = Financial reporting quality, BOW = Board ownership, BNA = Board nationality, BRE = Board remuneration, BEX = Board experience, BRP = Board reputation, BAG = Board age, BWM = Board women members, ACG = Audit committee gender, ACG = Return on Assets, LEV = Leverage, β_1 - β_8 = Coefficient of explanatory variables, β_0 = Constant, μ = Error Term and it = Banks and Time. The way the independent variables are measured is described in Table 1.

Table 1: Variable Definition and Measurement

Variable	Proxy (ies)	Measurement
Board Diversity	Board Ownership	Board of directors shares over outstanding shares (Farouk, 2018).
„	Board Nationality	Number of foreign directors divided by the total number of board members (Ibrahim & Hanefah, 2016 and Farouk, 2018).
„	Board Remuneration	Total amount of remuneration paid to the board of directors excluding bonuses (Farouk, 2018)
„	Board Experience	Average years spend by directors in a particular year (Oba, 2014 and Abdelsalam & Street, 2007)
„	Board Reputation	Number of board members with any of the following national honours GCFR, GCON, CFR, OFR, OON, MFR and MON
„	Board Age	Average age of directors in a particular year (e.g., Letting et al., 2012; Sartawi et al., 2014)
„	Women Board Members	Number of women on board divided by the total number of board members (Bathula, 2008, Farouk, 2018)
„	Audit Committee Gender	Number of women on audit committee divided by the total number of audit committee members (Salleh, Hashim & Mohamad, 2012 and Farouk, 2018).
Return on Assets	Return on Assets	Ratio of profit after tax to total assets (Kilic, 2015 and Rajula, 2016)
Leverage	Leverage	Long term financial liabilities plus debt included in the current liabilities (Wasimullah, Toor & Abbas, 2010, Shehu & Yero, 2012)

4. Results and Discussion

4.1 Descriptive Analysis

The descriptive statistics is presented in Table 2 showing the minimum, maximum, mean, standard deviation and normality test showcased through skewness and kurtosis. Table 2 shows that the minimum value for earnings management is 0.0002 implying that

the quality of earnings was high within the banks. When compared with the highest level of discretionary accrual from the residuals of the model, it depicts that earnings management was low due to the value recorded for maximum implying high financial reporting quality. The mean value further substantiates the fact that earnings management was low within the study period. Board ownership had a minimum value of 0.002 and a maximum value of 0.55, implying that the lowest percentage of shares held by the directors was less than 1%, while the highest percentage of shares held also by the directors was at 55%. Board nationality had a minimum value of 0 and a maximum value of 0.40 implying that there was a board in the banking sector within the study period that do not have foreign nationals as members of the board. The mean value of about 0.04 implies that, on the average, there were, at least, 4% of foreign nationals represented on the board of the banks. The lowest numbers of years spent by a board member in the banks within the study period was two years; while the maximum number of years was seven. The lowest number of board members with national honours on the board of directors of the banks is zero. The highest number of members with national honours on board of banks in Nigeria stood at five within the study period. The average age of directors for all the banks covering the study period is about 49 years old. The mean value of women board members implies that, on the average, the banks had 15% of women represented on board of directors for all banks. Audit committee gender on the average, had at least 13% of women present on their audit committees within the study period. This further substantiates the fact that there are few numbers of women appointed by banks.

Table 2: Descriptive Statistics

Variables	Min	Max	Mean	Std.	Skew	Kurt
FRQ	0.00024	0.01455	0.0020	0.0024	2.5533	10.236
BOW	0.002	0.55	0.09	0.10	1.8456	6.5910
BNA	0	0.40	0.04	0.10	2.245	6.4007
BRE	9.25	15.74	12.71	1.28	-0.3373	2.8424
BEX	2	7	4.27	1.05	0.0458	2.3993
BRP	0	5	1.33	1.33	0.7044	2.7351
BAG	41	64	49	5.59	0.6581	2.1737
WBM	0	0.60	0.15	0.11	1.0347	5.3054
ACG	0	0.50	0.13	0.13	0.7242	2.9017
ROA	-29.64	9.54	1.14	3.63	-4.9820	39.294
LEV	68.91	99.47	85.43	5.94	-0.4983	3.2501

4.2 Correlation Analysis

Table 3 shows the Spearman correlation values between the dependent and the independent variables. It also shows the relationship amongst the independent variables.

Table 3: Correlation Matrix

	FRQ	BOW	BNA	BRE	BEX	BRP	BAG	BWM	ACG	ROA	LEV
FRQ	1										
BOW	.1986*	1									
BNA	.2062*	-.0996	1								
BRE	-.5363*	-.2198*	.0634	1							

BEX	-.0587	.0218	-.0505	.0218	1						
BRP	-.3272*	.0714	-.1567*	.1758*	-.0994	1					
BAG	.2080*	.0044	.0276	-.0081	-.0208	-.1467	1				
BWM	-.4121*	.0133	-.0907	.2136*	-.0661	.2312*	.0888	1			
ACG	-.2865*	.3372*	-.2855	.0913	.0714	.1410	.0053	.4595*	1		
ROA	-.1498	-.0989	.1087	.1279	.1661*	-.0553	-.1004	.1862*	.0643	1	
LEV	-.0724	.0542	-.1393	-.3021*	-.0635	.1969*	-.0558	.1498	.0640	-.2478*	1

*. Correlation is significant at 0.01 and 0.05 level (2-tailed)

Table 3 shows that financial reporting quality is positively correlated with board ownership. This implies that the variables move in same direction but at different magnitude. Board nationality is found to have positive relationship with financial reporting quality. Financial reporting quality recorded negative relationship with board remuneration. This implies that financial reporting quality has an inverse correlation with board remuneration. Board experience was also found to have negative correlation with financial reporting quality of banks in Nigeria thus implying an inverse but weak relationship. Board reputation has negative but not perfect correlation with financial reporting quality which implies an inverse relationship between board reputation and financial reporting quality. Financial reporting quality was found to have positive relationship with age of the banks' board members. Finally, the association between other independent variables was mostly insignificant. The mean (VIF) value of 1.18 further substantiate that multicollinearity is not a problem.

4.3 Regression Results

The multiple regression results are presented in Table 4. Cumulatively, the model records an R^2 of 0.4471 (44%) which shows the extent to which the financial reporting quality is explained by the combination of board ownership, board nationality, board remuneration, board experience, board reputation, board age, women board members and audit committee gender. In addition, the Fisher exact test value of 9.78 indicates that the model of the study is well fitted, as such, the variables selection, combination is adequate. It further implies that the relationship between the dependent and independent variables is not due to mere chance as their 99% level of confidence ($P\text{-value} < .001$).

The findings of the study provides evidence of rejecting the hypotheses in respect of board nationality, board experience, board reputation and board age formulated earlier due to non-significance of the variables, while hypotheses in relation to board ownership, board remuneration, women board members and audit committee gender were all significant and hence failed to be rejected.

Table 4: Summary of Regression Results (Robust OLS)

Variables	Coeff	T-Stat	Prob
Constant	0.0193	4.43	0.000
BOW	0.0035	2.03	0.044
BNA	0.0006	0.40	0.686
BRE	-0.0007	-4.58	0.000
BEX	-0.0002	-1.35	0.179
BRP	-0.0001	-1.33	0.185
BAG	0.00002	0.67	0.503
WBM	-0.0029	-2.24	0.026
ACG	-0.0033	-3.54	0.001

ROA	-0.0002	-3.31	0.001
LEV	-0.0001	-2.48	0.014
R^2			0.4471
<i>F-Statistics</i>			9.78
<i>P-Value</i>			0.0000

Source: Result output from Stata 13

*Coeff = Coefficient, Stat = Statistics, Prob = Probability, Cum. R = Cumulative Result

The regression results revealed that board ownership has positive and significant effect on earnings management of banks. This implies that for any point increase in shares held by board members, their financial reporting quality decreases significantly. This may be as a result of the argument put forward by the advocate of the entrenchment hypothesis that high levels of insider ownership can become ineffective in aligning insiders to take value maximizing decisions, which may lead to decrease in quality of financial reporting. The finding is in line with those of Parveen, Malik, Mahmood and Ali Jan (2016) and Swai and Mbogela (2016).

The board nationality has a positive t-statistics and coefficient which is not significant at 5% level. This shows that foreign nationals on banks' board have an insignificant but positive effect on their earnings management. This connotes that a point increase in the number of foreign nationals on board decreases the quality of financial reporting insignificantly. This result may be due to the location of foreign directors, their distance and cost of travelling to attend meetings in order to monitor the activities of the management by curtailing their tendencies to engage in earnings manipulation. This finding is in line with the studies of Van der Zwet (2015) and Van der Berg (2015) in U.S and U.K respectively that do not support the hypothesis that firms with more nationality diverse boards of directors have lower levels of earnings management.

Board remuneration based on its coefficient value of -0.0007 which is significant at 1% level negatively and significantly affected the earnings management of the listed deposit money banks in Nigeria. This implies that when the amount paid to directors' as remuneration is increased; the level of financial reporting quality of banks is enhanced significantly. This may be as a result of the fact that when directors pay is not tied to performance, they will not be motivated to engage in earnings manipulation in order to attract higher pay thereby ensuring quality financial reporting. This finding is in line with those of Hassen (2014) who found that total compensation negatively related to the earnings management.

For board experience, it indicates negative but insignificant effects on earnings management of banks. This however implies that for every point increase in the number of years spent by members of banks' board, it enhances the level of quality of financial reporting insignificantly. This may be as a result of the fact that experienced board members will have varieties of ideas and suggestions which enable them function more effectively in monitoring the management. This finding is in line with the studies of Abdelsalam and Street (2007) and Ebimobowei and Yadirichukwu (2013) who found that long serving directors effectively monitor management by ensuring quality financial reporting.

Board reputation has negative but insignificant effect on earnings management banks. This implies that any point increase in the number of board members with national

honour, the financial reporting quality of the listed deposit money banks increase insignificantly. This finding is not surprising as the board members may want to protect their integrity, name and reputation in the society, thereby ensuring compliance and serving as monitor to mitigate the opportunistic behaviour of management. This finding is in line with the assertion by Segal (2015) that board members with reputation have stronger incentives to ensure high quality monitoring thereby ensuring high reporting quality.

Board age shows that it has positive influence on banks' earnings management. This implies that an increase in the age of the directors reduces the financial reporting quality insignificantly. This could be as a result of the fact that aged board members may not be energetic and as such lose the ability to serve as better monitors over the managers unlike their younger counterparts do. This finding is in contrast to Huse and Rindova (2001) where they asserted that having board of directors with heterogeneous ages help ensure different views and alignment of directors with different stakeholders in society.

The result for women board members signifies that they have a significant but negative effect on earnings management of banks. This implies that for every increase in the number of women on the board of directors of banks, their financial reporting quality improve significantly. This can be as a result of the fact that increasing the number of female directors may increase the board's monitoring since women are more inquisitive than male directors. The finding is in line with those of Hillma, Shropshire and Cannella (2007) and Huse and Solberg (2007) as advocated by proponents of organization theory that female involvement ease deliberation of resilient issues and hence stimulates communications of the board.

Audit committee gender has negative and significant effect on earnings management of banks in Nigeria. This means that when there is a point increase in the number of women in audit committee, the financial reporting quality of banks is enhanced. This result can be attributed to the assertion that the diluted audit committee through women is often considered as an essential characteristic in influencing the committee's effectiveness by overseeing the financial reporting process. This finding tallies with those of Peni and Vahamaa (2010) which found higher number of female on audit committee to influence quality of financial reporting positively.

Return on assets has negative and significant effects on earnings management of banks. This suggests that for every upward movement in banks' return on assets, their quality of financial reporting in greatly enhanced. This finding may have suggested that, banks may have no need for manipulating accounting earnings when they have their return on assets improved except where the management wants to avoid heavy taxation. In other words, where the accounting numbers are not too impressive, this may influence managers' opportunistic behavioural tendencies in reporting favourable earnings.

Leverage has negative but significant effect on earnings management banks. This connote that a percentage increase in the level of banks' leverage, their financial reporting quality is increased significantly. This finding may not be surprising, as it goes in line with the findings of Wasimullah et al. (2010) who found that highly leverage firms have low free cash flow as large portion of the cash flow are used in form of interest expenses and as such the manager avoid investing in non-value maximizing projects.

5 Summary and Conclusion

The study investigates the effects of board diversity on financial reporting quality of listed Deposit Money Banks in Nigeria. The variables of board diversity examined were board ownership, board nationality, board remuneration, board experience, board age, board reputation, women board members and audit committee gender, while the control variables include return on assets and leverage. In addition, residuals from Chang, Shen and Fang (2008) model were used to proxy financial reporting quality. The study has made significant contributions through introduction of new variables such as reputation and remuneration. The study revealed that board ownership, board remuneration, women board members and audit committee gender were significant in explaining financial reporting quality of listed DMBs in Nigeria, while board nationality, board experience, board reputation and board age were found to have insignificant contribution to banks' financial reporting quality. The policy implication of the study is for the Central Bank of Nigeria (CBN) to formulate policy to decrease the interest (shares) held by concentrated owners in order to encourage alignment of their interest with other minority shareholders and also discourage ownership domination and control.

The results should be interpreted in the light of the following limitations. For example, the study only covers the listed Deposit Money Banks in Nigeria because it is a sector that is under close surveillance, highly regulated and monitored. Therefore, the findings and recommendation are only applicable to the banking sector as the diversity variables varies significantly in other sectors. Therefore, the study suggests that interested researchers in this area should consider other sectors to make the findings flexible for generalization. Further, only eight variables were covered in this study; therefore, future researchers should consider the inclusion of board qualification, board region and board religion. Also, Chang, Shen and Fang (2008) model was used to proxy financial reporting quality. Interested researchers should consider more recent and sophisticated models for measuring financial reporting quality such as Yoon, Kim and Woodruff (2012).

References

- Abdelsalam, O. H., & Street, D. L. (2007). Corporate governance and the timeliness of corporate internet reporting by UK listed companies. *Journal of International Accounting, Auditing and Taxation*, 16(2), 111-130
- Abdul Rauf, F. H., Johari, N.H., Buniamin, S., & Abd Rahman, N.R. (2012). The impact of company and board characteristics on earnings management: Evidence from Malaysia. *Global Review of Accounting and Finance*, 3(2), 114 –127
- Adams, R.B., Ferreira, D., (2009). Women in the boardroom and their impact on governance and performance. *Journal of Finance and Economics*, 94(2), 291–309
- Adams, R., Gray, S., Nowland, J., (2010). Is there a business case for female directors? Evidence from the market reaction to all new director appointments. Working paper. The City University of Hong Kong
- Adebiyi, W.K., & Olowookere, J.K. (2016). Ownership structure and the quality of financial reporting: Evidence from Nigerian deposit money banks. *International Journal of Economics, Commerce and Management*, 4(1), 541-552.
- Affan, M.W., Rosidi, SE., Ak, MM., Purwanti, L., CA, CSRS (2017). The effect of ownership structure on the quality of financial reporting of manufacturing companies listed

- in the IDX during the period of 2013-2015. *Imperial Journal of Interdisciplinary Research*, 3(7), 165-174
- Arun, T. G., Almahrog, Y. E., & Aribi, Z. A. (2015). Female directors and earnings management: Evidence from U.K companies. *International Review of Financial Analysis*, 39(C), 137-146.
- Amit, R. & Schoemaker, P. (1993). Strategic assets and organizational rents. *Strategic Management Journal*, 14(1), 33 – 46
- Bathula, H. (2008). Board characteristics and firm performance: Evidence from New Zealand. An Unpublished thesis submitted to Auckland University of Technology in fulfilment of the requirements for the degree of Doctor of Philosophy
- Bello, M. S. (2002). How ethical is Accounting Income smoothening? An empirical investigation. An unpublished seminar paper presented at the department of Accounting, Ahmadu Bello University, Zaria
- Casey, K. M., & Anderson, D. C. (1999). Examining the impact of the tax reform act on corporate dividend policy: A new methodology, *Journal of Financial Review*, 34(3), 17– 28
- Chang, R. D., Shen, W. H. A., & Fang, C. J. (2008). Discretionary loan loss provisions and earnings management for the banking industry. *International Business and Economics Research Journal*, 7(3), 9-20
- Chi-Chi, O.A., & Friday, I.O. (2016). Corporate governance and financial reporting quality in selected Nigerian company. *International Journal of Management Science and Business Administration*, 2(3), 7-16
- Ebimobowei, A., & Yadirichukwu, E. (2013). Corporate governance structure and timeliness of financial reports of quoted firms in Nigeria. *European Journal of Business and Management*, 5(32), 34-45
- Farouk, M.A. (2018). Board diversity, audit committee and earnings management of listed deposit money banks in Nigeria. (PhD thesis), Bayero University, Kano-Nigeria
- Farouk M. A. & Shehu, U. H. (2014). Board of director's characteristics and performance of listed deposit money banks in Nigeria, *Journal of Finance and Bank Management*, 2(1), 89-105
- Gao & Shrieves (2002). Earnings management and executive compensation: A case of overdose of option and underdose of salary? Retrieved from SSRN, 1-46
- Gelfand, M. J., Nishii, L. H., Raver, J. L., & Schneider, B. (2004). Discrimination in organizations: An organizational-level systems perspective. In R.L. Dipboye and A. Colella (Eds.), *Discrimination at Work: The Psychological and Organizational Bases*, 89-116. Jossey- Bass Frontiers Series
- Gilpatrick, K. (2000). Invite Youthful Insight, *Credit Union Management*, 23, 28–29
- Gul, F.A., Srinidhi, B., Ng, A.C., (2011). Does board gender diversity improve the informativeness of stock prices? *Journal of Accounting and Economics*, 51 (3), 314–338
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193-106
- Hassen, R. B. (2014). Executive compensation and earning management. *International Journal of Accounting and Financial Reporting*, 4(1), 84-105

- Hillman, A.J., Shropshire, C., Cannella Jr., A.A., (2007). Organizational predictors of women on corporate boards. *Academic Management Journal*, 50(4), 941–952
- Huse, M., Solberg, A., (2007). Gender related boardroom dynamics: how women make and can make contributions on corporate boards. *Women Management Review*, 21 (2), 113–130
- Huse, M., & Rindova, V. P. (2001). Stakeholders' expectations of board roles: the case of subsidiary boards. *Journal of Management and Governance*, 5, 153–178
- Ibrahim, A. H., & Hanefah, M. M. (2016). Board diversity and corporate social responsibility in Jordan. *Journal of Financial Reporting and Accounting*, 14(2), 279-298.
- Ioualalen, L., Khemakhem, H., & Fontaine, R. (2015). The impact of audit committee characteristics on earnings management: A Canadian case study. *Case Studies in Business and Management*, 2(1), 78-96
- Isa, M.A., & Farouk, M.A. (2018). A study of the effect of diversity in the board and the audit committee composition on earnings management for low and high leveraged banks in Nigeria. *Journal of Accounting, Finance and Auditing Studies*, 4 (1), 14-39
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 4(3), 305-360
- Joy, L., (2008). Women board directors in the United States: an eleven year retrospective. In: Vinnicombe, S., Singh, V., Burke, R.J., Bilimoria, D., Huse, M. (Eds.), *Women on Corporate Boards of Directors*. Edward Elgar, Northampton, MA, 15–23
- Kilic, M. (2015). The effect of board diversity on the performance of banks: Evidence from Turkey. *International Journal of Business and Management*, 10(9), 182-192.
- Klai, N., & Omri, A. (2011). Corporate governance and financial reporting quality: The case of Tunisian firms. *International Business Research*, 4(1) 158-166
- Letting, N., Aosa, E., & Machuki, V. (2012). Board diversity and performance of companies listed in Nairobi Stock Exchange. *International Journal of Humanities and Social Science*, 2(11), 172-182.
- Luo, J., Xiang, Y., & Huang, Z. (2017). Female directors and real activities manipulation: Evidence from China. *China Journal of Accounting Research*, 10, 141–166
- Mahboub, R. (2017). Main determinants of financial reporting quality in the Lebanese banking sector. *European Research Studies Journal*, 0(4B), 706-726
- Makhlouf, M.H., Al-Sufy, F.J., & Almubaideen, H. (2018). Board diversity and accounting conservatism: Evidence from Jordan. *International Business Research*, 11(7), 130-141
- Marimuthu, T. (2008). The role of private sector in higher education in Malaysia. in D. Johnson & Maclean, R. (Eds.), *Teaching: Professionalization, Development and Leadership*, 271-282
- Mason, W. S., & Mudrack, P. E. (1996). Gender and ethical orientation: A test of gender and occupational socialization theories. *Journal of Business Ethics*, 15, 599-604
- Mustafa, S., Mehmet, A., & Suleyman, I. C. (2014). The impact of corporate ownership structure and board size on earnings management for a sample of Turkish firms. *International Journal of Business and Management*, 9(12), 123-138

- Oba, V.C. (2014). Board dynamics and financial reporting quality in Nigeria. *Review of International Comparative Management*, 15 (2), 226-236
- Ogbonnaya, A. K., Ekwe, M. C., & Ihendinihu, J. U. (2016). Effect of corporate governance and ownership structure on earnings management of Brewery Industry. *European Journal of Accounting, Auditing and Finance Research*, 4(7), 35-45
- Parveen, S., Malik, N., Mahmood, Y., & Ali Jan, F. (2016). Impact of ownership structure on earnings management: Evidence from Pakistani Banking Sector. *Journal of Poverty, Investment and Development*, 23, 24-34
- Peni, E., & Vahamaa, S. (2010). Female Executives and Earnings Management. *Managerial Finance*, 36(7), 629-645
- Rajula, V.A. (2016). Effects of board diversity on financial performance of commercial banks in Kenya. A Research Project Submitted in Partial Fulfilment of the requirements for the award of the degree of Master of Business Administration, School of Business, University of Nairobi. Available @<http://erepository.uonbi.ac.ke/bitstream/handle>
- Roodposhti, R. F., Haybati, F., Talebnia, G. H., & Chasmi, N. S. A. (2012). The impact assessment pattern of corporate governance mechanisms on earnings management in Tehran Stock Exchange. *Journal of Management Accounting*, 5(12), 79-100.
- Salleh, Z., Hashim, H.A., Mohamad, N.R. (2012). Accrual quality: The presence of women directors on audit committee boards. *Corporate Ownership & Control*, 10(1), 675-680.
- Sartawi, I. I. M., Hindawi, R. M., Bsoul, R., & Ali, A. e. J. (2014). Board composition, firm characteristics, and voluntary disclosure: The case of Jordanian firms listed on the Amman Stock Exchange. *International Business Research*, 7(6), 67-82.
- Segal, D. (2015). Board reputation and financial reporting quality. Research collection school of Accountancy. Available at: http://ink.library.smu.edu.sg/soa_research/1060
- Sengupta, P. (2004). Disclosure timing: Determinants of quarterly earnings release dates. *Journal of Accounting and Public Policy*, 23(6), 457-482
- Shehu, U. H. (2012). Firm Characteristics and Financial Reporting Quality of Quoted Manufacturing Firms in Nigeria. An unpublished dissertation submitted to the school of postgraduate studies, Ahmadu Bello University, Zaria.
- Shehu, U.H., & Yero, J.I. (2012). Ownership concentration and earnings management practice of Nigerian listed conglomerates. *American International Journal of Contemporary Research*, 2(7), 157-171.
- Srinidhi, B., Gul, F.A., Tsui, J. (2011). Female directors and earnings quality. *Contemporary Accounting Research*, 28 (5), 1610-1644
- Swai, J. P., & Mbogela, C. S. (2016). Accrual-based versus real earnings management: The effect of ownership structure: evidence from East Africa. *ACRN Oxford Journal of Finance and Risk Perspectives*, 5(2), 121-140
- Van den Berg, S. (2015). Nationality diversity of the board of directors and the level of earnings management. Being a Thesis of Master of Accountancy & Control, variant Accountancy, Faculty of Economics and Business, University of Amsterdam

- Van der Zwet, S. (2015). Board diversity and earnings management. Being a Master Thesis submitted to Faculty of Economics & Business, Amsterdam Business School for the Award of MSc Accountancy & Control – Accountancy track, University of Amsterdam
- Wangaruro, E. M. (2014). The effect of corporate governance practices on earnings management for the listed commercial banks in Kenya. Being a research thesis submitted to the Department of Finance and Accounting, School of Business, University of Nairobi for the award of Master of Business Administration
- Wasimullah, Toor, I. K., & Abbas, Z. (2010). Can high leverage control the opportunistic behavior of managers: Case analysis of Textile sector of Pakistan. *International Research Journal of Finance and Economics*, 37, 134-142.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.
- Xi'an, B. Q., & Xi'an, G. T. (2012). The Impact of Audit Committees Personal Characteristics on Earnings Management. *The Journal of Applied Business Research*, 28(6), 1331-1343
- Xingqiang, D., Wei, J., & Shaojuan, L. (2017). Do Foreign Directors Mitigate Earnings Management? Evidence from China. *The International Journal of Accounting, Elsevier*, 52(2), 142-177.
- Yoon, S.S., Kim, H.J., & Woodruff, G. (2012). On the Models and estimation of Discretionary Accruals. <http://ifas.xmu.edu.cn/uploads/soft/pdf>
- Yusoff, W. F. W. (2010). Characteristics of Boards of Directors and Board Effectiveness: A Study of Malaysian Public Listed Companies. (PhD thesis), Victoria University.

International Public-Sector Accounting Standards adoption and implementation issues in Africa.

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Abstract

Purpose: The study aims to establish the reasons as to why several African Governments have not adopted and implemented International Standards – IPSAS Accrual and what are the challenges they face when applying them while deliberating on likely benefits countries would enjoy upon full IPSAS adoption and implementation.

Methodology: The Research used desktop reviews of existing Public Information such as Governments' Financial Statements, presentations by African Accountant Generals; PFM experts and other public sector IPSAS adopters. Also, an interview was conducted to obtain some primary information on accrual-based IPSAS in the Rwandan case.

Findings: The results indicate that most African countries wish to adopt and are eager to implement the IPSAS accrual, but several challenges prevalent in such economies appear to be retarding the zeal. Particularly in Africa, fraud and corruption are still rampant despite enormous efforts and initiatives put in place to fight the vice. Analyzed data indicated that most African countries lacked enough funds to implement IPSAS, most rely on donor funds to do so; inadequate stakeholder engagement and buy-in is another challenge; along with a lack of competent staff with the knowledge and competencies needed; poor infrastructure with old fashion technology. External support from professional bodies is required to raise awareness of the need for transparent financial reporting in the public sector.

Practical implications: The study recommends that adopting and implementing accrual-based accounting can be beneficial for African governments. And this can be achieved through enhanced stakeholder engagements; effective transformation and change management; building capacity in the public sector by collaborating with Public Accountancy Organizations (PAO's) and other tuition providers; well thought through implementation approach, and enhanced stakeholder engagement as well as better decision making.

Originality: The findings are significant to governments that wish to adopt and implement accrual-based IPSAS. And to ensure that African governments enjoy the benefits, they need to adequately address the challenges which include, lack of skilled staff, inadequate IT infrastructure, insufficient political will, and implementation costs.

Key words: Africa, accrual-based accounting, IPSAS, public sector, adoption, implementation, challenges.

Paper type: Research paper

1.0 Introduction

The adoption and implementation of accrual basis International Public Sector Accounting Standards (IPSASs) across the world are gaining momentum especially in this twenty-first century (ACCA, 2017). Governments worldwide, including African

governments have decided to move towards accrual based adoption and implementation due to several benefits expected to accrue upon successful execution, while others are considering whether to do so. High-quality and effective accrual-based financial reporting systems, such as those based on IPSASs, are essential as they facilitate national governments' efforts to enhance accountability, transparency, comparability and follow international best practices in government financial reporting, whilst facilitating the reduction of constant social conflicts, loss of democratic control, and the failure by governments to meet commitments to their citizens (IFAC, 2014).

The International Public Sector Accounting Standards Board (IPSASB) is the international body committed to developing accounting standards for public sector entities (IPSASs) and guidance for its use by governments and other public sector entities (IPSASB, 2018). The African Union (AU) is pioneering accrual-based IPSAS implementation across the continent after it adopted accrual-based accounting in 2014, supported by a World Bank grant, which resulted in improved performance and credibility towards its stakeholders (African Union Conference, 2018). This favorable decision appeared impressive, especially for governments using a cash-based system of accounting – which is often considered to be incomplete and inefficient as it allows liabilities and costs to be concealed. An accrual-based system is more transparent and comprehensive in indicating the accuracy of the government's financial resources (IPSASB, 2018). For this transition to effectively succeed and to avoid the risk of such initiatives remaining mere notions, governments must not see accrual based IPSAS as an end in itself, but should consider the four dimensions of policies, people, systems and processes, as each will have a direct impact on effective implementation (MINECOFIN, 2018).

Several authors and proponents have contributed a lot towards what appears beneficial by adopting and implementing IPSAS. ACCA conducted a global research in 2017, which included six countries in Africa (Ghana, Nigeria, South Africa, Tanzania, Zambia, and Zimbabwe) regarding the stage of IPSAS adoption. They concluded that IPSAS provided numerous benefits such as harmonization of financial reporting practices, enhanced transparency, stimulated efficiency, and facilitating the comparability of financial statements. However, several challenges were equally cited for hampering the effective adoption and implementation of IPSAS, and these included: inadequate stakeholder engagement, legal transformation, change management, skills capacity, cost, technology, and infrastructure, among others (ACCA, 2017). Similarly, Chan (2006) paper on IPSAS and Government Accounting Reform in Developing Countries highlighted a strong relationship between government accounting reforms such as adoption and implementation of accrual-based IPSAS and socio-economic development, however, he argued that adopting such international standards may not necessarily address the issue of poverty, but rather contributes to enhanced transparency and accountability though, usually costly to implement. Studies from various other authors, such as Mhaka (2014), Erin et al. (2014), Whitefield and Savvas (2016), and Adamu and Ahmed (2014), have been conducted in line with accrual – based IPSAS, nonetheless with differing challenges for non-adoption and effective implementation of IPSAS by some African governments. Most of the difficulties underscored appeared similar but on a different scale to establish the most significant of all the challenges to which African governments should direct efforts towards transition and what should be done to adopt and implement accrual based IPSAS effectively.

This study, therefore, aims to chronologically: i) substantiate the reasons behind ineffective adoption and implementation of accrual-based IPSAS, and ii) what

is required to be done by African governments to effectively transit to accrual-based IPSAS. The findings show that many African governments have embraced IPSAS due to its perceived benefits. Nonetheless, several challenges persist, and if the transition is done systematically, implementation can be realized successfully, thereby governments and other related entities being able to tackle these challenges which included: lack of skilled staff, inadequate IT infrastructure, insufficient political will, and implementation costs, among others.

The remainder of the paper is organized as follows. Section two reviews the literature review on the benefits and challenges of adopting and implementing IPSAS; section three discusses the methodology used; section four reviews the findings, while chapter five makes the conclusions and recommendations.

2.0 Literature review

Several authors and proponents have highlighted the benefits of adopting and implementing accrual-based IPSAS. The pressure for adoption has escalated following the sovereign debt crisis resulting from the global financial crisis of 2008. (IFAC, 2014). Numerous studies have equally underscored on what appears to be the challenges towards effective adoption and implementation of IPSAS. Although the literature covers a wide range of such theories, this study intends to focus on only a few of the repeated benefits and the challenges that hinder progress towards effective transition.

2.1 Benefits and challenges of adopting and implementing accrual-based IPSAS

2.1.1 Risk of missed deadlines

Erin et al. (2016) study which was based on primary data obtained from a well-structured questionnaire that was administered on a selected sample to all staff in the accounts department of all the public sector ministries in Nigeria concluded that adoption and implementation of accrual-based IPSAS improved accountability and transparency. They also argued that in financial reporting which appeared to enhance public confidence in public sector financial reports positively and consequently contributing to the increase in the inflow of foreign direct investments. However, African governments such as Nigeria appeared to be unable to benefit on the spot due to the missed deadline as a challenge.

Most governments that have successfully adopted or in the process of choosing and implementing accrual-based IPSAS have scheduled timelines and the related tasks required to prepare themselves, to transfer all the transactions into new systems that can accommodate such changes. Strict adherence to the expected plan as laid out by the project manager may contribute to the success of the project. However, the lack of collaboration by mainly implementing institutions often leads to missed deadlines (Deloitte, 2015). Project managers, therefore, should carry out timely monitoring and evaluations to ensure that performing institutions adhere to the structured implementation program with adequate commitment.

Consequently, governments can decide which approach to use in adopting and implementing accrual-based IPSAS by either utilizing the 'big bang' – or the phased approach (Patrick, 2018). Sometimes governments spend a lot of time discussing and selecting the first-time implementation options and accounting policies, which results in some of them adopting an approach unsuitable for their current situation.

2.1.2 *Inappropriate or poor quality of deliverables*

ACCA (2014) equally argues that adoption and implementation of accrual-based IPSAS provide governments with greater accountability and transparency important in tackling fraud and corruption, Improve the quality of decision making by planning for the future, improve efficiency and effectiveness through the use of standard reporting processes and reduce the risk of material misstatements. ACCA study revealed that adopting and implementing IPSAS was beneficial though indicated some challenges encountered by several governments and advised that states should, therefore, have a strategy towards an effective transition to avoid inappropriate deliverables. Poor deliverables usually result from incompetent implementation and are often associated with a trial and fail method characterized by the use of inexperienced individuals or experts to spearhead the project implementation (ACCA, 2017).

ACCA study also recommended that to effectively deal with current challenges such as inappropriate deliverables, inadequate record keeping, and unwillingness to change, among others, governments should work together with various stakeholders including professional accountancy organizations to support either in terms of awareness, change management and capacity building. The change process and financial awareness campaigns provide an opportunity to intensify the influence of the finance organization while helping other stakeholders, mainly the staff concerned, to increase their knowledge and to behave in a more professional manner (MINECOFIN, 2018).

2.1.3 *Lack of proper IT infrastructure*

Other authors such as Whitefield and Savvas argue that governments across the world have progressively adopted accrual based IPSAS due to many benefits which include improved efficiency, better decision making, and government stability. Other governments are in the process as they believe that the success stories shared so far are indeed enough for them to follow suit; however, the challenges that come along with the effective adoption and implementation, especially in developing countries, cannot be underestimated. Whitefield & Savvas (2016) in their study on the adoption and Implementation of the International Public Sector Accounting Standards: The challenges faced by the United Nations in producing UN - IPSAS compliant financial reports in Kenya concluded that the main difficulties lie with lack of proper IT infrastructure and lack of enough competent staff with the required knowledge and skills to effectively take up the problem and back up the needed smooth transition.

2.1.4 *Lack of readily available gathered data and information*

Adamu et al. (2014) contend that adopting and implementing IPSAS offers almost similar benefits like those cited by ACCA, IFAC, World Bank, IMF and those of other proponents. Though it appears challenging to transit especially to the first adopters as it requires a systematic identification and valuation of the fixed assets together with the liabilities which can prove challenging at the onset. While also demanding that staff get well trained so that they obtain the competencies necessary to be able to use the international best practices such as accrual based IPSAS.

For a project to succeed, it usually needs easily accessible new data and information. Project managers should ensure that such information is available, with high quality, accurate, reliable and complete. Data and information not fit for purpose impede the production of useful financial statements. For example, the Auditor General of Zambia attributed their IPSAS implementation challenges to a lack of

complete and accurate information on revenue, assets and some liabilities (Auditor General, 2015).

IFAC (2014) similarly emphasizes that high-quality financial reporting standards as those based on IPSASs enhance accountability and transparency, and improve the level of decision making. However, IFAC continues to condemn that adopting and applying IPSASs alone cannot guarantee to confront the challenges similar to what was encountered as a result of the sovereign debt crisis. It therefore requires governments to enact legislation, formulate and implement policy such that in situations where a government does not have sufficient resources to cater for citizens' needs and goes for debt financing, then a public interest obligation arises which requires provision of timely, reliable, and detailed information of their financial performance and position, similar to what listed companies do.

2.1.5 Lack of buy-in and support from senior government officials

While Caseware Africa (2017) emphasizes of adopting and implementing accrual-based IPSAS, improve the quality of financial reporting, enhances accountability and transparency, improves governance and the efficient management of assets – a move that is believed to provide less scope for corruption, it needs high level organizational buy-in as well as competent staff to facilitate in the transformation process. Contrary to these findings however, Mhaka (2014) believes that adopting and implementing accrual-based IPSAS by a government should not be looked at as an end in itself and therefore claims that, without a supportive regulatory framework and other institutional structures in place, the perceived improved quality of government financial reports may remain a mere notion.

EY (2015) appears to believe the same, by claiming that adopting accrual based IPSAS should improve the use of resources and government spending, instead of a few individuals enriching themselves, and hence curbing corruption among other benefits. Such benefits include enhanced transparency and accountability – since users will get access to information regarding cash flows, financial position and performance; improve decision making by allocating resources effectively among various governments divisions in citizens' best interests. The challenges to transition may emanate from different boundaries such as the time it takes to develop the required system; untrained and incompetent personnel; mindset, among others. To effectively implement accrual based IPSAS would, therefore, need to address the challenges thereof while preparing an implementation plan promptly.

PWC (2018) suggests that adopting and implementing accrual-based IPSAS requires governments to look at the entire Public Financial Management (PFM) framework, bearing in mind the four dimensions of policies, people, systems and processes together, as each will directly impact IPSAS implementation. This approach requires consideration of the requirements for effectively implementing accrual-based IPSAS such as updating the system, the data, and information necessary for integration, especially if governments are using an Integrated Financial Management System (IFMIS) that may be amended and interfaced with other systems. Enhancing current processes to ensure accurate and timely flow of information required while implementing IPSAS; regulation and Public Financial Management (PFM) manuals amendments; and finally helping people to undergo a significant cultural shift as this will also require considerable time and effort. The process will involve incorporation of change management processes to be put in place that works, which entails good communication, training, project management, awareness campaigns among other initiatives.

Therefore, to adopt and effectively implement IPSAS by any government; it is crucial that senior management and other government politicians support and buy-into the idea. This strategy requires a clear communication strategy to facilitate the transition of the entire process – including changing the mindset of many government officials (Alexander& Meshack, 2017); and delineated channels of authority from the project manager empowered through sufficient power to drive the initiative. Most governments lack this kind of approach and thus fail to implement such initiatives.

2.1.6 Lack of enough competent staff

The World Bank group (2017) equally argues that adopting and implementing accrual-based IPSAS enhances economic growth and development. This argument appears to be valid in a sense that financial statements prepared under accrual-based IPSAS are uniform worldwide; it, therefore, reduces the need to keep developing them for comparability purposes. Since most donors to many African governments already use IPSAS, it becomes easier for them to compare governments' financial statements with those of other international players, which may provide confidence for potential foreign investors that can contribute to economic growth. However, implementing accrual-based IPSAS is perceived as an expensive initiative as it sometimes requires to recruit new competent staff, invest in training and often upgrading of Information Systems (Rozaidy et al., 2014).

Similarly, some governments may not realize that while implementing IPSAS, many staff not necessarily directly working with the Finance department, also require training (Alexander& Meshack, 2017). Ideally, all individuals involved in the implementation should be trained. This can be effectively implemented after conducting a clear gap analysis that identifies the deficiencies in all government entities and the required support to enhance the knowledge and competencies of compassionate staff. Again, this requires a clear communication plan tailored to team concisely and pragmatically that facilitates the ease of collecting information needed for the project's success. Often, IPSAS projects fail to achieve the intended objectives due to miscommunications among various stakeholders. Sometimes the manuals developed to assist employees are not very useful because they are not sufficiently simplified to facilitate lower level staff to understand the necessary processes easily.

Chan (2006) stresses that adoption and effective implementation of accrual-based IPSAS is linked to the Millennium Development Goals (MDGs) which aims at eradicating extreme poverty and hunger, among other initiatives. He equally argues that, to assist in ensuring that adequate strategies are deployed to identify and measure governments assets and liabilities, requires enhancing the integrity and credibility of governments financial information. This assurance will, therefore, facilitate to fight the corruption vice which tends to result in the overstatement and understatement of governments liabilities and assets respectively. However, Chan appears to condemn the contribution of the accounting system concerning poverty reduction. This narrative, therefore, seems to imply that even if a government adopts and implements accrual based IPSAS, poverty may persist, though the contribution to a country's socio-economic development through the effects of transparency and accountability appear to stand still.

2.1.7 Cost of implementation

Mhaka (2014) study on IPSAS, a guaranteed way of quality government financial reporting; a comparative analysis of the existing cash accounting and IPSAS based accounting reporting that was aimed at analyzing IPSAS adoption in Zimbabwe concluded that adoption of IPSAS enhances donor confidence and also improves the

quality of governments financial reporting. In his study, however, he argued that, for a government to effectively transit to accrual accounting would require a clear strategy where all stakeholders should be involved and informed about the necessary changes to avoid the anticipated resistance to change while preparing to improve the legal frameworks. He also added that the cost of implementation could be a significant challenge to effectively transit. , Apart from the required hardware, a considerable amount of money can also be spent on consultancies, training, and the needed software.

The purpose of this review was to help understand the benefits and challenges of adopting and implementing accrual-based IPSAS as various proponents have continued to argue that accountability and transparency, improved decision making, enhanced economic growth, and development, among others, will be enjoyed upon successful adoption and implementation of IPSAS. However, the research found that several challenges such as poor IT infrastructure; resistance to change; lack of complete information; incompetent staff, etc. prevalent in most African governments hamper the initiative.

3.0 Methodology

The objective of the study was to identify the challenges faced by African governments to adopt and effectively implement accrual based IPSAS and on whether IPSAS would be beneficial to them. This study used a variety of data sources, namely publicly available information in reports and other publications of African countries namely Botswana, Ghana, Mauritius, Nigeria, Rwanda, South Africa, Kenya, Tanzania, Morocco, and Cameroon. Other institutional websites such as International Federation of Accountants (IFAC); World Bank; and an interview to Rwanda's Accountant General - CPA Marcel Mukeshimana, to provide insights about accrual-based IPSAS issues in Rwanda.

Reports, published academic papers and publications of the sampled countries above were examined by establishing the challenges as laid out in each country and put into an excel sheet with subthemes of each country's challenges. The challenges that were looked for were identified by inserting a "Yes" on each country to substantiate whether the problems as per the five subtheme categories existed or not. Specifically, in the Rwandan case, The Accountant General provided more information concerning the difficulties that Rwanda face towards effective implementation, and these were validated with the already reviewed reports and publications. This approach was used due to the constraints in reaching all the Accountants - General around Africa, yet more useful information could easily be obtained from the already available information such as government financial statements, presentations on IPSAS, PFM reforms, and other public sectors IPSAS adoption and implementation presentations more authoritatively and cost-effectively.

We used a purposive sampling of the above mentioned ten countries as they appeared to have adopted or had intentions of adopting and implementing accrual-based IPSAS. The selected countries cover all the five regions of Africa notably; North; East; South; Central and West so that the sample turns out to be a representative of the entire Continent.

The sampled countries provided a balanced view of the geographical coverage and revealed the challenges encountered over the effective adoption and implementation of accrual-based IPSAS via both primary and secondary data obtained. The sample size appears to be a small figure; nevertheless, it's a representative of entire Africa.

4.0 Findings

The research was aimed at establishing the reasons for ineffective adoption and implementation of accrual-based IPSAS in Africa and from this study, as can be seen from Table 1, inadequate skill set was found to be the primary challenge by all the nine sampled countries apart from South Africa. Unlike Ghana and Cameroon, the rest of the sampled countries showed a lack of information to account for property, plant properly, and equipment (PPE), and this was the second challenge with eight states having shown a similar problem. Cost of implementation is yet another challenge as can be seen from Table 1 below, among the ten countries surveyed, it was only South Africa, Tanzania, and Mauritius, without a cost issue. Since the frequency of the challenges were seven, with uncertain implementation times which was yet another challenge to the rest of the other countries other than South Africa, Tanzania, and Cameroon. Lack of political will and poor IT infrastructure scored a frequency of six with the exception being South Africa; Kenya; Tanzania; Morocco and Ghana; South Africa; Botswana; Morocco respectively. Last but not least is the others, which included challenges such as poor communication plan, resistance to change and inadequate collaboration with the primary stakeholders such as PAO's. This was the last challenge with the least responses, and it's only Kenya, Tanzania, Rwanda and Cameroon that were affected by such problems. The same findings on the Rwandan side, were validated by the Rwandan Accountant General who stressed that the primary challenge for Rwanda's adoption and effective implementation of accrual-based IPSAS lies with an inadequate skill set, unstable implementation timelines, lack of enough data and information to adequately prepare for the opening balance sheet and high implementation cost.

5.0 Discussion

Our results confirm that a lack of skilled personnel with the required knowledge and competencies to suitably transit to accrual based IPSAS is the primary challenge for African governments. Other problems respectively include lack of adequate information to account for PPE properly; unstable timelines and cost of implementation; inadequate infrastructure and lack of political will and others. Others, in this case, mean poor communication plan, resistance to change and inadequate collaboration with the primary stakeholders such as PAO's.

Murthy and Khan (2017) stress that, while the level of staff skills and competencies required to cope with cash accounting in Mauritius is high; the level of staff turnover needs serious attention. The survey ranked this challenge as number one in Africa. To solve this problem, it requires governments to develop a strategy to recruit sufficient qualified individuals who can effectively contribute to the initiative. A gap analysis can help determine the number of relevant employees needed by their respective departments and requiring training and recruitment.

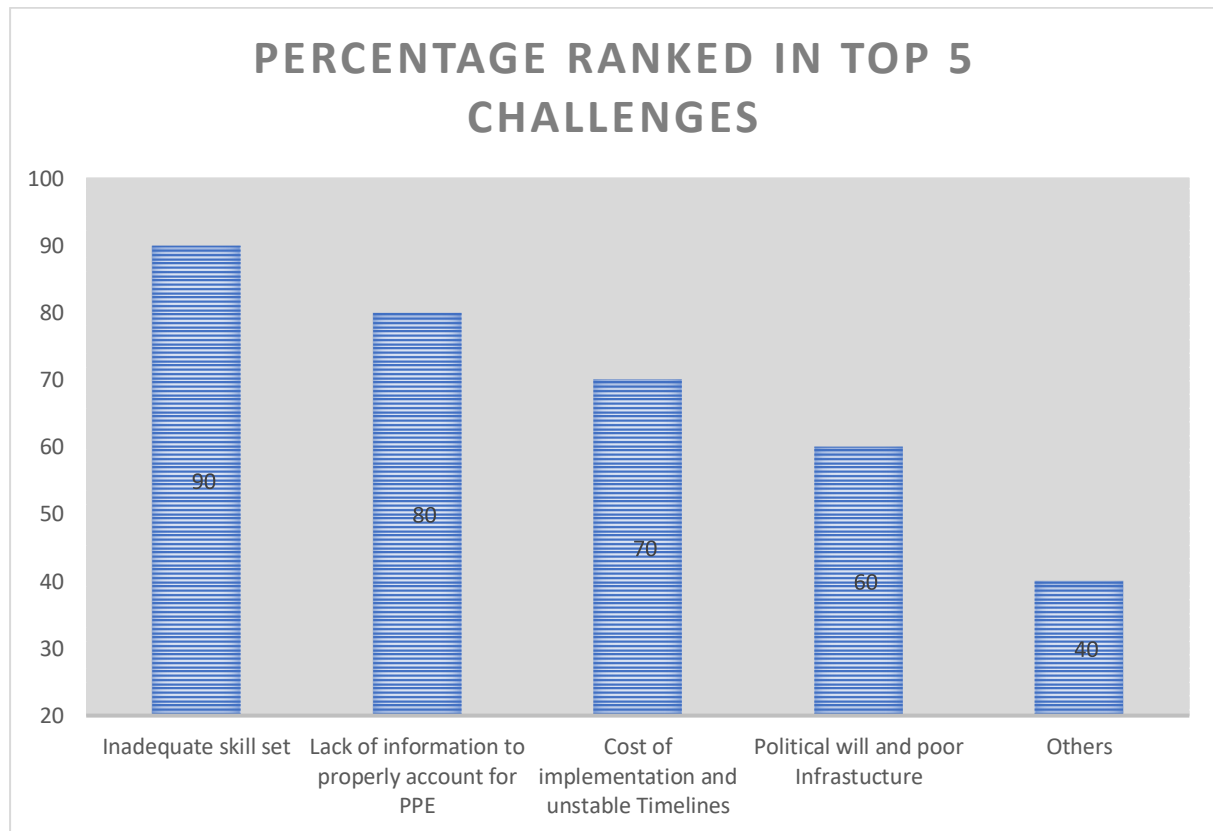
Lack of information to accurately identify and recognize PPE is usually hampered by governments not being able to access historical data. According to Klimenko (2017), efficient and effective management of fixed assets has been a significant challenge for most governments that have adopted or are in the process of implementing accrual-based IPSAS, especially in determining the opening balance of property, plant, and equipment (PPE). This requires governments to therefore adopt a holistic approach to transitioning, so that all the governments' assets which include: infrastructure assets; heritage assets; military assets to be well defined, recognized, measured and disclosed to enhance accountability of governments use of assets and hence better decision making, which contributes to a country's economic growth.

Table 1: Responses on challenges in regard to adoption and effective implementation of IPSAS among the selected African countries.

NO.	CHALLENGE/ COUNTRY	Nigeria	Ghana	S.Africa	Botswana	Kenya	Tanzania	Rwanda	Cameroon	Morocco	Mauritius	f	%e
1	Inadequate skill set Lack of information to properly account for PPE	YES	YES		YES	YES	YES	YES	YES	YES	YES	9	90
2	Cost of implementation	YES		YES	YES	YES	YES	YES		YES	YES	8	80
3	Unstable implementation timelines	YES	YES		YES	YES		YES	YES	YES		7	70
3	Political will	YES	YES		YES	YES		YES		YES	YES	7	70
4	Poor Infrastructure	YES	YES		YES			YES	YES		YES	6	60
4	Others					YES	YES	YES	YES		YES	6	60
5						YES	YES	YES	YES			4	40

Table 1: State of the challenges of adopting and implementing accrual based IPSAS by sampled countries in Africa.

Figure 1. Challenges in adopting and implementing accrual based IPSAS in Africa



Referring to Figure 1. Above, 90% of the responses indicated inadequate skill set as the main challenge affecting African governments to adopt and effectively implement accrual based IPSAS. This was followed by lack of information to properly account for PPE which scored 80%, and cost of implementation and unstable timelines scoring 70%. Political will and poor IT infrastructure was second last with a score of 60% while others which represented poor communication plan, resistance to change and inadequate collaboration with the primary stakeholders such as PAO's, only showed 40%.

Cost and unstable timelines are yet another challenge, resulting from the required amounts to modernize accounting manuals, needed awareness campaigns and training of IPSAS implementers (Samuel and Bernadette, 2018). Since the implementation cost is perceived to be high; a sound strategy and useful gap analysis can help mitigate this challenge, while ensuring that the funds, whether donated or budgeted, are promptly used for what it was intended. The lack of a realistic project implementation timeline sometimes accelerates individuals' resistance to change - for example by sticking to manual systems despite clear instructions on the new ways of doing things.

According to Abubaker, Omale, and Egbuka (2015), Nigeria began the transition from cash-based IPSAS to accrual accounting for all the three tiers of the government in 2016 with guidance from the Financial Reporting Council (FRC), but this had been anticipated to be achieved in 2013. The remedy to this challenge requires governments to have a clear roadmap, to implement policy and legislative reforms

early enough, secure the necessary resources, to train and recruit competent staff, and to develop a gap analysis with realistic timelines and ensure that they are well followed.

Similarly, to effectively implement accrual-based IPSAS requires political will and support by all stakeholders including parliamentarians and other politicians. Babatunde (2017) cites political buy-in as a significant factor in impending IPSAS implementation in Nigeria. To manage this challenge, it requires proper planning and engagement of all the relevant stakeholders including politicians and senior management for adequate buy-in and support.

Regarding the challenge of poor IT infrastructure, it usually emanates from outdated or systems that require updating. To effectively tackle this challenge, African governments and their respective agencies need to invest in a financial management system and its accompanying infrastructure to facilitate proper bookkeeping and reporting.

For the other challenges which include: resistance to change - it requires proper communication plan to all stakeholders using awareness tools such as educational fliers, awareness videos, personal engagements of critical stakeholders, recognizing staff who attain a professional qualification through the governments' website, identifying institutions that have fully adopted accrual based IPSAS regular newsletters, media coverage and the like. For lack of enough information and support from PAOs - requires that government acknowledge the role PAOs can play and work together in the development of accounting manuals that help guide and facilitate the effective and efficient booking of new transactions to reduce errors and mistakes, which may take time to rectify.

These findings are significant for governments that wish to adopt and effectively implement accrual based IPSAS in Africa as they will be able to focus on which areas are most likely to hinder the implementation agenda. Similar research conducted by Deloitte, ACCA and other proponents such as Mhaka, Chan, Babatunde, among others also stressed on the challenges for adoption and effective implementation of accrual-based IPSAS in Africa to include: appropriate planning and realistic timelines, political buy-in, lack of enough capacity from Finance and Technical department, and difficulty in identifying and recognizing Property, Plant and Equipment (PPE).

6.0 Conclusion and recommendations

Adopting and implementing accrual-based IPSAS by African governments appears to be a good initiative, and several proponents have continued to indicate benefits that governments would enjoy upon successful implementation. The benefits include greater transparency and accountability; improved efficiency in resource allocation; enhanced sound financial management; professionalization in executing roles and responsibilities; improved decision making that accelerates growth and development, among other benefits. Nonetheless, the challenges to adopt and effectively implement accrual-based IPAS in Africa still prevail.

Governments should, therefore, transit to accrual based IPSAS at will but most importantly examine the likely challenges so that they prepare themselves thoroughly to overcome them, starting from the most significant moving down to the least. The problems were: inadequate skill set; lack of adequate data and information; cost and unstable timelines; political will and reduced IT infrastructure; and others – poor communication plan, resistance to change and inadequate collaboration since without a clear implementation strategy, such an initiative can only remain a mere notion.

Even with the perceived benefits above, future research should investigate the relationship between the adoption and effective implementation of IPSAS and poverty reduction, which still appears to be a significant problem in most African countries.

References

- Abubaker, A.Omale, A. and Egbuka, U. (2015) 'the adoption of international public sector accounting standards in Nigeria: Expectations, Benefits and Challenges,' [Online]. Available at: [http:// www.academia.edu/](http://www.academia.edu/) (Accessed: 25 August 2018).
- African Union Conference (2018). *Joint Meeting of African Union and International Public Sector Accounting Standards Board on IPSAS*, Ethiopia, 3-4 May. Ethiopia: AU.
- ACCA (2017). 'IPSAS implementation: Current status and challenges, 'Think Ahead, (10), pp.4, [Online]. Available at: <http://www.accaglobal.com/> (Accessed: 20 August 2018).
- Alexander, O, D. & Meshack, A. (2017), 'Adoption of International Public Sector Accounting by Government Ministries and Agencies in Nigeria,' *International Journal of Marketing & Financial Management*, 5, (5), pp. 53-54.
- Auditor-General of Zambia (2015). Report of the Auditor-General on the Accounts for the Financial Year Ended 31 December 2015, [Online]. Available at: <http://www.ago.gov.zm/reports/Main/AGO%20Main%20Report%202015.pdf> (Accessed: 10 August 2018).
- Babatunde, S, A. (2017). 'Implementing International Public Sector Accounting Standards in Nigeria: Issues and Challenges,' *International Journal of Business, Economics and Law*, Vol. 12, 1 (4).
- Case Ware Africa (2014). The benefits and challenges of IPSAS Financial Statements, '(09) [Online]. Available at: <https://www.casewarefrica.com/interesting-reads/articles/the-benefits-and-challenges-of-ipsas-financial-statements/> (Accessed: 10 August 2018).
- Chan, J, L. (2006). IPSAS and Government Accounting Reform in Developing Countries. *Accounting reform in the public sector: mimicry, fad or necessity*, pp.31-42.
- EY (2015). 'Public finance management reform and IPSAS in developing economies' [Online]. Available at: <http://www.essag.co.za/> (Accessed: 15 August 2018).
- IFAC, (2014). 'The Importance of Accrual-based Financial Reporting in the Public Sector,' (4) [Online]. Available at: [http:// www.ifac.org/](http://www.ifac.org/) (Accessed: 10 July 2018).
- IPSASB, (2018). 'Adoption and Implementation,' [Online]. Available at: <https://www.ipsasb.org/adoption-and-implementation/> (Accessed: 10 July 2018).
- Klimenko, S. (2017). 'Accrual Accounting and Management of Public Investment Program', *Transparency and Beyond: Harnessing the Power of Accrual in Managing Public Finances* (3) [Online]. Available at: [http:// www.imf.org/](http://www.imf.org/) (Accessed: 10 August 2018).
- Mhaka, C. (2014). IPSAS, a guaranteed way of quality government financial reporting? A comparative analysis of the existing cash accounting and IPSAS based accounting reporting. *International Journal of Financial Economics*, 3(3), 134-141.
- MINECOFIN, (2018). IPSAS Implementation Blueprint Government of Rwanda

- Murphy, P. and Khan, A. M. (2017). 'Technical assistance report—towards accrual accounting and the adoption of International standards', *International Monetary fund: Technical Assistance Report* 326/17(3).
- Patrick, A. (2018). Presentation on IPSAS implementation in Africa [Online]. Available at: <https://www.icpak.com/> (Accessed: 10 July 2018).
- PWC (2018). 'IPSAS: An enabler for better public financial management,' *IPSAS Stakeholder Seminar* [Online]. Available at: <http://www.pwc.com/> (Accessed: 10 October 2018).
- Rozaidy, M. Raman, N., Rasid, M. and Kaziemah, S. (2014). 'Accrual Accounting in Malaysia: What We Should Learn from Others', *Malaysian Journal of Business and Economics*, 1, (2), (12), pp.71-72.
- Samuel, K. and Bernadette, W. (2018) 'Keeping you on the know', *Implementation of International Public Sector Accounting Standards (IPSAS) in Kenya* (4) [Online]. Available at: <http://www.deloitte.com/> (Accessed: 28 August 2018)
- World Bank Group (2017). 'Regional study on the management, control, and recording of fixed assets, 'Governance Global Practice: Latin America and the Caribbean Region, (10), [Online]. Available at: <http://www.worldbank.org/> (Accessed: 10 October 2018).

