



Board Members' Age Diversity And Corporate Earnings Quality In Nigeria

Odinakachukwu I. Ogaluzor¹ & Gospel J. Chukwu²

¹Department of Accountancy, Rivers State University, Port Harcourt, Nigeria

²Department of Accountancy, Ken Saro Wiwa Polytechnic, Bori, Rivers State, Nigeria

ABSTRACT

The purpose of this study was to investigate the relationship between age diversity and earnings quality of quoted insurance companies in Nigeria. The population of the study was twenty-six insurance firms listed on the Nigerian Stock Exchange (NSE) as at 31st December 2017. The study used a sample of 21 selected due to availability of data within the study period. The study exclusively utilized secondary data which were obtained through published annual reports of the sampled firms. The study with a positivism philosophy employed panel data methodology covering the period 2008-2017, quantitative study approach was adopted since quantifiable observations were collected and analyzed statistically with a view to obtaining empirical evidence on the basis of which inferences were drawn. The analytical technique employed in the study was parametric statistics. Findings showed a significant relationship between age diversity of the board and the accrual quality of listed insurance companies in Nigeria. Also, age diversity of the board has a significant relationship with earning persistence of listed insurance companies in Nigeria. The study concluded that age diversity significantly affects firm reported earnings quality. Accordingly, it was recommended that firms should consider the inclusion of a wide age range in the composition of the board to enable the board draw from both the old and young. While the younger members will show much ambition, the older members will serve as a check on them to moderate the seemingly rash decision that may be taken in pursuit of young and wild ambition. Age diversification favours earning persistence and accrual quality; therefore, firms should consider a broad-based age diversified board.

Keywords: Age diversity, Resource dependency theory, Earnings quality, Accrual quality, Persistence of Earnings

INTRODUCTION

Age is the duration of time that an individual or thing has existed; it comes with very distinct features and experiences. An active board is one which has diverse personnel in terms of age; each contributing knowledge in line with their exposure, in order to solve complex issues of the organization and provide quality services to current and prospective investors. One of such issue is the ability to monitor and ensure that proper accounting records are kept thereby leading to the preparation and presentation of quality financial statement by the management.

If the board is well endowed with diverse personality, it will perfectly carry out their duty of assisting management in running a profitable business. When a business is healthy, it is expected that the earnings they report will be of good quality because it will be representative of reality. Such earnings will be free of abnormal accruals which are used to resent the earnings of the business in such a manner that will attract investors' favourable perception, even when the underlying circumstances would suggest otherwise.

Earnings constitute one of the basic information obtained from financial statements, and its quality affects the overall quality of financial statements. Having members who are financially literate will assist the board to carry out this function effectively as earnings are susceptible to manipulations. While this is important, this is just the output of results of operations. The operation itself must not be

financial one only. This may differ according to the specialization of the business. The quality of contributions and opinions of each individual member which is based on their distinct nature defines the issues that could be discussed; determining to a large extent what decision is taken.

In this paper, investigation centred on how age diversity affects corporate earnings quality; with age diversity as an independent variable, and earnings quality measured by accruals quality and earnings persistence.

Statement of the Problem

The 1st paragraph of principle 1 of the Nigerian Code of Corporate governance (2018) states that; “a successful Company is headed by an effective Board which is responsible for providing entrepreneurial and strategic leadership as well as promoting ethical culture and responsible corporate citizenship....” A well cultured and responsible board can only be found where there are people of different age brackets and values; occupying decision-making positions.

Formal information about a firm often comes from the management which is appointed and controlled by the board of directors of the firm. Looking at the financial statement of a given company, are the earnings reported of high quality? Are they persistent? Can the reported earnings be relied upon to predict future earnings? In recent times, the insurance industry in Nigeria is reported to be losing premium, the major source of earnings in the industry (Popoola, 2020). This may affect the quality of earnings reported by insurance firms. Many variables have been studied in relation to earnings quality in the insurance industry in Nigeria, including audit quality (Nwoye et al. 2021), IFRS adoption (Chukwu & Aloy-Ezirim, 2020), and corporate governance mechanisms (Fodio et al., 2013). In other countries there are also a number of studies on corporate governance relationships (Ahern & Dittmar, 2012; Ali et al., 2014; Bonn et al., 2004; Mahadeo et al., 2012). There is scanty literature on how age diversity of the board is associated with the reported earnings quality in the insurance industry. This gap, together with the problem of earnings quality stated earlier, justify this study.

Objectives

The main objective of this paper is to investigate the relationship between age diversity and corporate earnings quality of insurance companies in the Nigerian Stock Exchange. The specific objectives are to:

1. ascertain the relationship between age diversity of the board and the accrual quality of listed insurance companies in Nigeria.
2. investigate the effect of age diversity of the board members on earnings persistence of listed insurance companies in Nigeria.

Research questions

In order to write a complete paper, the following research questions have been formulated. To what extent does:

1. Age Diversity relate to the accrual quality of listed insurance companies in Nigeria.
2. Age Diversity affect the earnings persistence of listed insurance companies in Nigeria.

Research Hypotheses

The following null hypotheses have been postulated to be able to test the relationship between Age Diversity and Corporate Earnings Quality.

1. There is no significant relationship between diversity in age of the board and the accrual quality of listed insurance companies in Nigeria.
2. There is no significant relationship between age diversity and the persistence nature of reported earnings of listed insurance companies in Nigeria.

Significance of the study

Having read articles on different age class and the importance of committing tasks into the hands of those experienced in age in their various area of specialization, it is of great necessity to research on how age diversity affects corporate earnings quality of quoted insurance companies in Nigeria.

The paper has enlarged the available literature on the concept investigated. Earnings quality is one of the emerging issues researched upon by scholars. This work will contribute a reasonable quota in that aspect. Company management will ensure that their board is diversified in terms of age to help them in their business decisions.

Armed with this paper work, shareholders can comfortably determine earnings manipulations and raise issues in shareholders' meeting to correct such. It will be used as a point of reference to scholars as well as researchers who would love to conduct a research on related topics.

Scope of the study (Delimitation)

This work focused on relationship between age diversity and corporate earnings quality. Age diversity is studied as an independent variable. The result should be strictly applied as such. Corporate earnings quality being the dependent variable is divided into dimensions such as accrual quality and earnings persistence. This work investigated only quoted insurance companies in the NSE. Insurance companies play important role in the economy in providing protection against business losses. Thus every serious business has one or two insurance policies. Since insurance business affects other businesses, it is considered that the result of this study would be generalizable to other sectors of the economy.

Literature Review

Conceptual Review

Diversity means generally that component agents of a large system are heterogeneous so that they exhibit different traits and perform different functions. The functional role of heterogeneity in complex systems has remained poorly understood. General lines of argument for explaining diversity can be roughly divided into two classes those that emphasize its protective role in uncertain environments and those that invoke direct gains in productivity as a result of functional heterogeneity (Bettencourt et al., 2014).

Most empirical works on board diversity has been channeled towards classifying it into executive and non-executive board members; with few researching the gender and experience aspect, while age diversity is poorly analyzed. The paper is set to investigate the relationship between age diversity of the board and corporate earnings quality of insurance companies quoted on the Nigerian stock exchange.

Age Diversity

Age diversity is having varying ages on the board of a company. Age diversity is an often overlooked element in the boardroom. Board members tend to be older, as many boards equate age with experience. The 2014 Board Practices Report found marginal evidence of generational diversity in boardrooms, with so-called younger directors being in their fifties. While older directors do provide a wealth of knowledge, having younger directors introduces a fresh perspective into the boardroom which should not be underestimated (Deloitte, 2015). Board composition changed dramatically in terms of age representation and also gender, education, and experience following the implementation of mandated female representation in Norway (Ahern & Dittmar, 2012).

According to Ali et al. (2014), the business case for board age diversity has not attracted much attention by researchers, but this small body of research also found mixed results. On the positive side, high board age diversity is associated with large donations for not-for-profit organizations and high return on assets for for-profit organizations. Similarly, low average age of directors (which suggests high age diversity as most board members are over 50) is linked to high market value of an organization compared to its book value. On the negative side, board age diversity is related to low corporate social performance. However, other research indicates that board age diversity does not have a significant relationship with earnings per share, return on assets, or return on equity. The small body of research, with mixed findings, makes it unclear whether age-diverse boards improve organizational performance (Bonn et al., 2004; Hafsi & Turgut, 2013; Mahadeo et al., 2012).

Diversity in the corporate boardroom continues to be the topic of many conversations, conference panels and studies. Presumably the benefits of having a board which includes people from different age groups would be similar to benefits of other types of board diversity. People from different age groups bring different life experiences and perspectives to the important work done by corporate boards (Barrett, 2017).

One of the concerns sometimes raised when a board considers the addition of a younger director is that it will lead to a situation where that director could serve on the board for a long time. With institutional investors increasingly voicing concern about the independence of long-tenured directors, boards are sometimes hesitant to nominate a younger director if he or she may serve on the board for several decades (Barrett, 2017).

The theoretical arguments for promoting age diversity at top management team are mixed. Murray (1989) highlighted that a homogenous board (minimum level of diversity) is made up of individuals who shared similar values, which leads to ensure better goal congruence and communication.

However, Houle (1990) argued that a heterogeneous board can ensure that a more efficient division of labor operates at board level with the older group providing the experience, the network, and the financial resources; the middle-aged group in charge of the main executive responsibilities; and a younger group learning and developing its knowledge of the business. In this vein, Mahadeo et al. (2012) remarked that homogenous board may encourage complacency, cronyism, lack of interest in new strategies and decisions based on compromises.

What can board do to improve age diversity?

Age diversity should be part of broader selection criteria, supported by the board as a whole. This position can help the company have a conversation with the board about how it can become more strategic with its recruitment and start to build diversity into its ethos.

The board should be intentional about seeking diverse candidates. Diversity doesn't just happen; you probably won't find diverse candidates via traditional board recruitment methods (i.e. you can't expect them to find you; you have to go and find them). The Board ought to start thinking outside the box when it comes to finding new and diverse candidates. These posts (here and here) give you some ideas and techniques to finding non-traditional board members (Cook, 2019).

Corporate Earnings Quality

Earnings

Earnings are the profit derived from an investment or trade; the payment for a work or labor rendered. It is the anchor of any business operation, in that it is used to determine the profitability of the business on which concrete decisions as to whether to continue operation or not, is made. Every business has the sole aim of profit maximization or shareholders' wealth maximization and this aim can only be achieved when revenue is earned; deducting the expenses incurred in course of carrying on the business, gives birth to earnings. This is to say that earnings is simply the residue of revenue after deducting cost of goods sold and other expenses incurred in the business operation.

Earnings are also used to determine returns on investment (ROI), which makes it more interesting and useful to both current and potential investors. Some companies intentionally manipulate earnings recognized in their financial statements to hide deficiencies in their accounting practices or to cover for unanticipated drops in sales. These companies are said to have a poor or weak quality of earnings.

Earnings Quality

A high-quality earnings number is one that accurately reflects the company's current operating performance, is a good indicator of future operating performance, and is a useful summary measure for assessing firm value. The manager most times, adjusts the earnings to suit different needs. Due to the numerous users and their divergent interest in the company, the manager is faced with the challenge of reporting to meet the information needs of all. In the preparation of the financial reports, the managers of companies, who serve as the agents of stakeholders, may prepare the reports in a way that best suit them due to some reasons such as boosting profits to increase their bonuses or commission, apply for a loan from a bank and so on, and their decision-making process, which may not necessarily be to the advantage of the other stakeholders who on the other hand might be expecting higher rate of return on investment.

Dechow, (2004) refers to high-quality earnings as permanent earnings in the accounting literature. These earnings are not imagined, but are obtained in accordance with set guidelines and principles such as the Generally Accepted Accounting Principles (GAAP), established by the relevant authorities. Effective adherence to these principles produces quality earnings and also brings about uniformity in the financial statements of companies in the same industry.

Precepts of Earnings Quality

This simply means the constructions of earnings quality. It comprises of many vital points but in this paper, only three of the constructs are considered which includes

Timeliness

This is an important attribute of earnings quality because timely information is considered useful to users such as managers, investors, creditors. In the timeliness literature, there is an increasing trend to reflect financial effects of bad news more quickly in earnings than good news. Earnings quality is a function of both the ability of the accounting system to measure the firm's fundamental performance and how the accounting system is implemented, both of which are unobservable. The task of disentangling these is therefore challenging to say the least. De-Fond (2010) in consequence

suggested that the inability to directly observe the two constructs of interest is unlikely to be solved by the literature (Herly, 2012).

Decision Usefulness and Faithful Representation

The notion of decision usefulness as an indicator of high earnings quality is widely accepted and has been used by a number of researchers, e.g., Abdelghany (2005), Ball and Shivakumar (2005), and Dechow et al. (2009). The latter define earnings quality broadly as decision usefulness, but they also stress the notion of faithful representation for accounting quality (Herly, 2012).

Predictive Value

The persistence nature of earnings can lead to earnings predictability. When earnings are persistent you can easily predict future earnings based on past earnings. Predictive value (PV) of earnings is considered as the ability of past earnings to predict future earnings (Barua, 2006). Earnings are considered to be of higher quality when they have high predictability. Earnings predictability can affect decision making by constructing anticipations about future earnings that are correlated with future cash flows.

Factors that Affect Earnings Quality

Accruals Quality

This is one of the dependent variables tested in this paper, because of the critical role it plays in determining the reliability of earnings information to users. Thus, several researchers use accruals quality to assess quality of earnings, and they explain earnings quality as an increasing function of accruals quality and view earnings to be of higher quality if quality of accrual items is high. (Balsam et al., 2003; Biddle et al., 2008; Francis et al., 2003; Myers et al., 2003). It can provide more relevant information to investors on the one hand, but it can also introduce error and bias, resulting in less reliable information on the other. Sloan (1996) suggested that accruals may be less informative than cash flows because they are less reliable and thus more susceptible to estimation error and managerial manipulation.

Persistence

Persistent earnings have been associated with larger investor responses to earnings, which support the hypothesis that persistent earnings are more useful for users, in particular for valuation purposes (Dechow & Schrand, 2004). The accruals quality measure proposed by Dechow & Dichev (2002) is related to earnings persistence, since firms with low accrual quality have a larger amount of accruals that are unrelated to cash flows, which induces noise and less persistency in earnings. This is natural, since more accrual estimation errors will lead to less persistent earnings. However, it has been documented several times (e.g. Sloan, 1996)) that accruals are less persistent than cash flows. According to Herly (2012) it is noted by the authors that it is difficult to distinguish empirically between the effects of accruals quality and the level of accruals on earnings persistence. Generally, earnings persistence has been used to measure the quality of earnings in Nigeria and in other climes (Chukwu et al., 2020; Dechow & Schrand, 2009).

Theoretical Review

This section will review the theory on which this paper is based. The Resource Dependency Theory is reviewed in this paper.

Resource Dependency Theory

Resource dependency is a valuable theory to anchor board diversity. The diversity of the directors brings in different kinds of resource to the organization which ranges from human resources to tangible and intangible resources; supplied easily by the directors of the organization to boost its operations. Since its publication, resource dependence theory (RDT) has become one of the most influential theories in organizational theory and strategic management. It characterizes the corporation as an open system, dependent on contingencies in the external environment (Pfeffer & Salancik, 1978).

RDT recognizes the influence of external factors on organizational behavior and, although constrained by their context, managers can act to reduce environmental uncertainty and dependence. Central to these actions is the concept of power, which is the control over vital resources (Ulrich & Barney, 1984). Organizations attempt to reduce others' power over them, often attempting to increase their

own power over others. Pfeffer (1978) provides the basic argument of the resource dependence perspective and inter-organizational relations as

- 1) The fundamental units for understanding inter-corporate relations and society are organizations;
- 2) These organizations are not autonomous, but rather are constrained by a network of interdependencies with other organizations;
- 3) Organizations take actions to manage external interdependencies, although such actions are inevitably never completely successful and produce new patterns of dependence and interdependence; and
- 4) These patterns of dependence produce inter-organizational as well as intra-organizational power, where such power has some effect on organizational behavior.

Empirical Review

Ali et al. (2013) looked at the inconsistent findings of past board diversity research and determined that it demanded a test of competing linear and curvilinear diversity-performance predictions. This research focused on board age and gender diversity, and presented a positive linear prediction based on resource dependence theory, a negative linear prediction based on social identity theory, and an inverted U-shaped curvilinear prediction based on the integration of resource dependence theory with social identity theory. The predictions were tested using archival data on 288 large organizations listed on the Australian Securities Exchange, with a one-year time lag between diversity (age and gender) and performance (employee productivity and return on assets). The results indicate a positive linear relationship between gender diversity and employee productivity, a negative linear relationship between age diversity and return on assets, and an inverted U-shaped curvilinear relationship between age diversity and return on assets. The findings provided additional evidence on the business case for board gender diversity and emphasized the case for board age diversity. This research used board diversity to relate to performance while our work relates to earnings quality.

Alqatan (2019) examined the consequences of board diversity by measuring the effect of gender, age, national diversity on earnings management (EM). This research study raised the following questions Does board diversity affect earnings management and firm performance? Has the 2013 Kuwait Corporate Governance Code impacted on board diversity on earnings management, beside firm performance? The research used data from 103 non-financial Kuwaiti listed companies in the period from 2010 to 2017. The data was collected from the companies' data from secondary sources such as their annual reports. The data analysis methods were correlation, multi-regression and robust regression. Earnings management was measured using the model modified by Jones (1995) and Kothari et al. (2010). Firm performance measured by ROA, ROE, Tobin's Q and total shareholder return. The independent variables were gender diversity, age diversity, nationality diversity, board size, board independent and role duality. Control variables were firm size, industry type, total debt, total revenue, oil price, percentage change oil price, gold price, and the percentage change of gold price.

METHODOLOGY

Research Design

This paper employed panel data methodology covering the period 2009-2017, as it allows for the collection of past and multi-dimensional data which provide basis for the full establishment of the relationship between age diversity and corporate earnings quality of quoted insurance firms in Nigeria. Also, a quantitative study approach was adopted since quantifiable observations were collected and analyzed statistically with a view to obtaining empirical evidence on the basis of which inferences were drawn. The study exclusively utilized secondary data which were obtained through published annual reports of the sampled firms.

Population of the Study

The population of the study is all the listed insurance firms whose stocks are quoted on the floor of the NSE at 31st December 2017. Our choice of 2017 as the terminal year of the study is predicated on the need to overcome data availability limitations due to long reporting lag associated with the industry of study, the delay in the publication of 2018 annual report due to difficulties with the implementing

IFRS 9. As at 31st December, 2017, NSE had 26 listed insurance firms according to the 2017/2018 fact book.

Sampling Procedure and Sample Size

Sampling technique of choice for the study is judgmental sampling rather than probabilistic sampling technique. Data accessibility is a major consideration of the researcher in adopting judgmental sampling technique for the current study. The sample size was purposively determined to be twenty-one (21), consisting of those as presented in the table below. This sample list was compiled using data accessibility from the database of the Nigerian Stock Exchange or their respective official websites as a criterion. Five (5) companies were screened out because their records were not complete. Accordingly, a total of 189 data points was extracted for analyses covering the period from 2009 to 2017, with both years inclusive.

Data Collection Method and Sources

Secondary data were obtained from the published annual reports, databases of the Nigerian Stock Exchange (NSE). The researcher’s choice of secondary data for the study was predicated on the premise that secondary sources of information tend to be more reliable in comparison with primary data. This is because secondary data are mostly free from subjectivity and are easily verifiable. In addition, the secondary data methodology is more in conformity with quantitative research than its primary data counterpart.

The collection method was mostly electronic retrieval means from the archive of Nigerian Stock Exchange and respective official websites of the sampled firms.

Variable Description and Measurement

There are two basic variables used in this study. They are earnings quality (dependent) and age diversity (independent).

Data analysis techniques

The analytical technique employed in this study is parametric statistics. This technique involves the use of quantitative models that seek to explain correlation, using sample based parameters as yardsticks to infer about the population of study. The analytical procedure is carried out in two distinct phases, namely univariate (or descriptive) analysis and bivariate analysis.

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

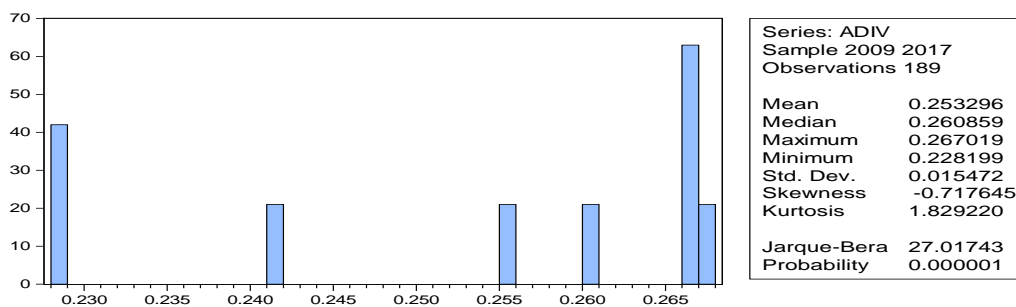
The results of analyses are presented in two phases. The first phase is univariate or descriptive analysis of the variable, followed by the second phase which is a bivariate analysis and then a discussion of findings.

Univariate Analysis

In line with the conceptual framework developed in chapter 1 which includes three variables, the descriptive statistics are limited to highlight the related three set of data accordingly. These include age diversity (*XDIV*) as the independent variable; accrual quality, (*ACQ*) and earnings persistence (*PER*) which are the two measures of corporate earnings quality.

Members’ Age Diversity of Boards of Insurance Companies in Nigeria

According to the available statistics, age diversity (measured in terms of coefficient of variation of board members’ ages) of boards of insurance companies in Nigeria is fairly the same across the industry. This is indicated by the short range of the obtained data. The minimum estimated age diversity is 22.82% while the maximum is 26.70%. In between these two extreme points, the average in terms of mean is 25.33% while the average in terms of median is 26.09%.



Members’ Age Diversity of Boards of Insurance Companies in Nigeria

The histogram shows a distribution that is fairly skewed to the left, suggesting that a good majority of boards of insurance companies are composed of members with majority belonging to the same age bracket. However, this distribution is far from normal, as indicated by the JB-stat (27.02) and associated probability value (0.000). Thus the foregoing statistics presents an industry where majority of the companies' boards are composed of members of fairly the same age brackets, thereby affirming prevalence of low age diversity.

Accrual Quality of Insurance Companies in Nigeria

For each of the sampled firms, time series data was used to regress total accruals on the firm's underlying fundamentals (represented by revenue and PPEs) in order to estimate the parameters of the non-discretionary accruals, using modified Jones (1991) model. The resulting coefficient of determination (i.e. R^2) measures the extent to which the firm's underlying fundamental explains the non-discretionary accruals of the firm, hence the quality of the firm's accrual. The table below presents the range of R^2 and number of firms falling within such range. The reported descriptive statistics indicates that over the period of study, level of accrual quality is generally low.

Total Accruals Explanatory Capacity (R^2) of Firms' Fundamentals

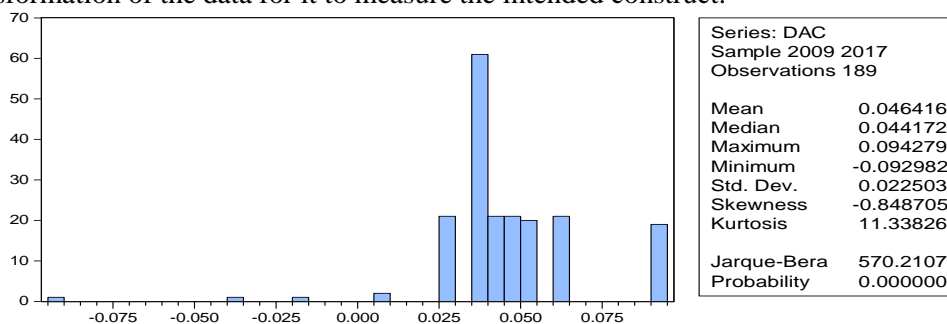
Range of R^2	Frequency	Accrual Quality Remark
$R^2 > 90\%$	3	Very High
$60\% < R^2 < 90\%$	3	High
$30\% < R^2 < 60\%$	4	Average
$10\% < R^2 < 30\%$	6	Low
$R^2 < 10\%$	5	Very low
21		

The same facts are represented pictorially below. Number of insurance firms whose accruals explanatory capacity is 50% and above are only eight out of the twenty-one sampled firms.



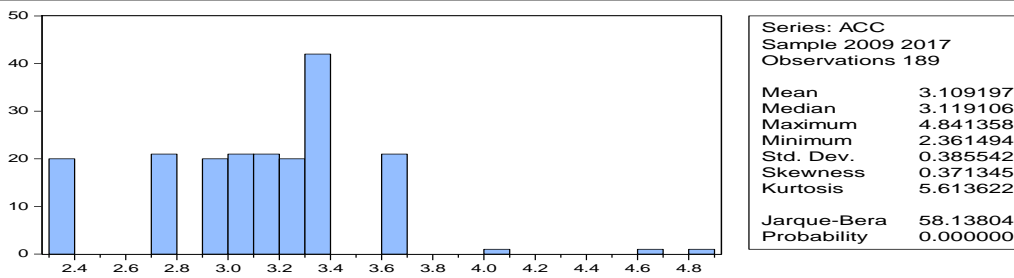
Accruals Explanatory Capacity of Firms' Fundamentals

Since the objective is to measure accrual quality, rather than discretionary accrual, we need to carry out a transformation of the data for it to measure the intended construct.



Accrual Quality of Insurance Companies in Nigeria (Untransformed Data)

Accordingly, since in theory the discretionary accrual is inversely related to accrual quality, we transformed the data by inverting the absolute values of the data to obtain the outcome as presented below



Accrual Quality of Insurance Companies in Nigeria (Transformed Data)

According to the figure, the JB-statistic (58.138) and associated probability value indicate that the data is still not normally distributed but the distribution is now positively skewed (0.3713) and shorter kurtosis of 5.614.

Earnings Persistence of Insurance Companies in Nigeria

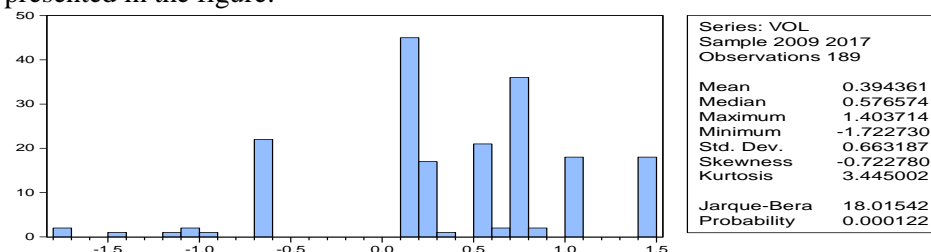
A coefficient of variation of profit-after-tax was computed as measure of earnings volatility for each of the sampled firms, using ten years data from 2008 to 2017. In estimating this earnings volatility, it is our hope that their persistence was assessed indirectly through their predictive quality. The interpretation of the resulting statistics is predicated on the premise that higher variability means low predictive quality, hence low persistence. The descriptive statistic results of the estimated earnings volatility are presented in the figure below:



Earnings Volatility of Insurance Companies in Nigeria

According to the figure, thirteen firms out of the twenty-one sampled firms’ earnings exhibited considerable degree of variability as indicated by the coefficient of variation. This is as a result of the fact that the absolute values of their respective computed coefficient of variation are greater than 1.0, meaning that their actual earnings deviate several points away from their expected earnings. Thus once again a widespread indication of poor earnings quality is observed in the Nigerian insurance industry as this characterization is consistent with the earlier observation from the perspective of accrual quality.

It is important to reiterate however, that a dynamic analytical framework rather than a static one, was used in testing the study hypotheses as this static analysis is only used to gain insight on the overall quality of the respective sampled firm’s earnings quality. A two-years-moving coefficient of variation of profit-after-tax was computed as measure of earnings volatility for each of the sampled firms. The results are presented in the figure:

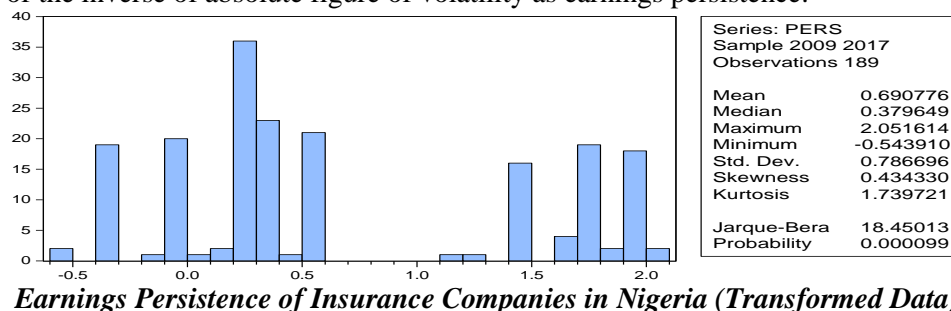


Earnings Volatility of Insurance Companies in Nigeria (Untransformed Data)

Earnings volatility of insurance companies in Nigeria, as measured by two-years-moving coefficient of variation of profit-after-tax, shows a highly dispersed distribution. The average coefficient of variation is approximately 0.3943, out of a wide range of -1.723 and 1.404. The negative skewness of -0.723 indicates that there are more coefficient of variation greater than the average point, meaning

insurance firms with high earnings volatility (i.e., low earnings persistence) are more in numbers than those with low earnings volatility (i.e. high earnings persistence).

The presented data series on earnings volatility requires undergoing certain transformation that is expected to make it suitable as a measure of earnings persistence variable. Since the construct of interest is capacity to resist volatility, the direction of such capacity is not much of relevance. Besides, volatility resistance attribute reflects opposite of volatility. Hence, the series is transformed to natural logarithm of the inverse of absolute figure of volatility as earnings persistence.



Bivariate Analysis

The objective of this analysis is to establish the magnitude and degree of relationships between pairs of variables, using Pearson Product Moment Correlation (r^2).

Age Diversity and Earnings Quality

According to the table presented below, the correlation coefficient between earnings volatility and age diversity is 0.4148. This means that there is a chance of about 17.21% that variability in earnings persistence of quoted insurance companies in Nigeria can be attributable to variability of their boards' age diversity. Statistically speaking, one can conclude based on this evidence that age diversity in boards of insurance companies in Nigeria exert significant degree of influence on the firms' earnings volatility (therefore by extension, on their earnings persistence).

According to the direction of relationship, the implication of this result is that, greater degree of age diversity is likely to give rise to greater degree of earnings persistence. The puzzling observation here is the seeming contradiction between intuition and the result obtained. A committee of very old and young are expected to be characterised by operational frictions occasionally. However, the results obtained points in the direction that contradicts this standpoint.

Table 4.2C: Correlation Matrix of Age Diversity and Earnings Quality

Covariance Analysis: Ordinary

Date: 10/27/19 Time: 17:40

Sample: 2009 2017

Included observations: 189

Correlation		PERS	ACC	ADIV
Probability				
	PERS	1.000000 -----		
	ACC	0.552838 0.0000	1.000000 -----	
	ADIV	0.414835 0.0000	0.240277 0.0009	1.000000 -----

Source: EViews Output (Version Seven)

As reported in the table above, the correlation coefficient obtained is 0.2403 ($PV = 0.0009 < 5\%$). The direction of the relationship, according to the result is positive, meaning that greater age diversity is likely to bring about higher accruals quality, and vice versa. With a correlation coefficient such as the obtained result, we can interpret it to mean that 5.8% of observable variability in accruals quality is attributable to variability in age diversity of the board members. Again, this also represents a significant relationship as the probability value is less than 5%. Therefore regarding hypothesis H_{02} , which states: *age diversity does not significantly influence earnings persistence of quoted insurance companies in Nigeria*, there is statistically justifiable reason to reject the hypothesis at 5% level of significance (i.e. H_{02} is rejected). In the same vein, we reject hypothesis H_{01} which states: *age diversity does not significantly influence accruals quality of quoted insurance companies in Nigeria*.

Earnings Persistence

As regards the relationship that exists between age diversity and corporate earnings quality, the results are the same for both accrual quality and earnings persistence such that; the results on age diversity show that it is positively related to earnings persistence of insurance companies. A 1% increase in age diversity of the insurance companies will increase their earnings persistence by 16.63%.

DISCUSSION OF FINDINGS

Statistically speaking, one can conclude based on this research evidence that age diversity in boards of insurance companies in Nigeria exert significant degree of influence on the firms' earnings volatility (therefore by extension, on their earnings persistence). The correlation coefficient obtained is 0.414835 ($PV = 0.0000 < 5\%$). The direction of the relationship, according to the result is positive, meaning that greater age diversity is likely to bring about higher earnings persistence, and vice versa. Representing earnings quality in terms of accruals quality the correlation coefficient obtained is 0.2403 ($PV = 0.0009 < 5\%$). The direction of the relationship, according to the result is positive, meaning that greater age diversity is likely to bring about higher accruals quality, and vice versa. With a correlation coefficient such as the obtained result, we can interpret it to mean that 5.8% of observable variability in accruals quality is attributable to variability in age diversity of the board members. This again can be attributable to the resource dependency theory where members of different ages can bring in their vast resources to the board.

SUMMARY

This paper investigated the relationship between age diversity and the earnings quality of insurance companies quoted on the floor of the NSE. The study measured age diversity as an independent variable, while corporate earnings quality was measured with accruals quality and earnings persistence. The main objective of the study was to investigate the relationship between age diversity and earnings quality of listed insurance companies in Nigeria. In order to study the relationship between age diversity of the board and the accrual quality of listed insurance companies in Nigeria, two research questions and two hypotheses were raised.

Relevant literature was reviewed conceptually, theoretically and empirically to find out what other authors and researchers did about related topics. We discovered from the literature that there were varied opinions about the topic. While some works established relationships, others did not.

This paper employed panel data methodology covering the period 2009-2017. Quantitative study approach was adopted; quantifiable observations were collected and analyzed statistically with a view to obtaining empirical evidence on the basis of which inferences were drawn. The paper exclusively utilized secondary data which were obtained through published annual reports of the sampled firms. The population of the study is all the listed insurance firms whose stocks were quoted on the floor of the Nigerian Stock Exchange as at 31st December 2017. According to 2017/2018 fact book of the Nigerian Stock exchange, there are 26 insurance companies quoted but due to availability of data, only 21 companies whose data was up to date were used. Parametric statistics was used to analyze the data collected.

Analyses conducted revealed that there is a significant relationship between age diversity and the accrual quality of listed insurance companies in Nigeria; also, there is a significant relationship between age diversity and the persistent nature of reported earnings of listed insurance companies in Nigeria.

CONCLUSION

Age diversity in the Board is recommended by corporate governance as it ensures quality representation in the boardroom. The activities of the management are both controlled and boosted by the activities of the board of directors. A well-diversified board provides different caliber of members with diverse quality. Though some times this might lead to conflict in the board according to social identity theory, yet the advantages outweighs the disadvantages and therefore serves a good purpose in the running of a corporate body.

This paper established significant relationship between age diversity and earnings quality of quoted insurance companies in Nigeria. It therefore concludes that age diversity significantly affects firm reported earnings quality.

RECOMMENDATIONS

Based on the hypotheses tested and the findings of this study, it is recommended that:

1. Age is of importance; there should be inclusion of wide range of age in the board to enable the board draw from both old and young. While the younger members will show much ambition, the older members will serve as a check on them to moderate the seemingly rash decision that may be taken in pursuit of young and wild ambitions.
2. Earning persistence favors diversifications as they are directly related. Therefore to achieve persistence in earnings, the firm should consider good diversification of their board.

REFERENCES

- Abdelghany, K. E. (2005). Measuring the quality of earnings. *Managerial Auditing Journal* 20(8-9), 1001-1015.
- Ahern, K. R. & Amy K. D. (2012). The changing of the boards: The impact on firm valuation of mandated female board representation, *Quarterly Journal of Economics* 127, 137-197.
- Ali, M., Ng, Y. L. & Kulik, C. (2014). Board age and gender diversity: a test of competing linear and curvilinear predictions. *Journal of Business Ethics*, 125(3), 497-512.
- Alqatan, A. (2019). The association between board diversity, earnings management and firm performance in Kuwait: A research agenda. *Corporate Governance: Search for the Advanced Practices*, 254-274. <https://doi.org/10.22495/cpr19p14>
- Ball, R. & L. Shivakumar (2006). The role of accruals in asymmetrically timely gain and loss recognition. *Journal of Accounting Research*, 44(2): 207-242.
- Balsam, S., Chen, H. & Sankaraguruswamy, S. (2003). Earnings management prior to stock option grants. *Working paper, Temple University, Arizona State University, and National University of Singapore.*
- Barrett, A.(2017).Age diversity within boards of directors of the s&p 500 companies. <https://static1.squarespace.com/static/56e8489162cd944a6424f542/t/590c0d253a04111a3cb80dc7/1493962024451/Age+Diversity+Study+March+2017.pdf>
- Barua, A. (2006) *Using the FASB's qualitative characteristics in earnings quality measures.* Louisiana State University.
- Bettencourt L.M. A., Samaniego, H. & Youn, H. (2014) Professional Diversity and the productivity of cities. <http://arxiv.org/abs/1210.7335>.
- Biddle, G. C., Hilary, G. & Verdi, R. S. (2009). How does financial reporting quality relate to investment efficiency? *Journal of Accounting and Economics*, 48(2-3): 112-131.
- Bonn, I., Toru, Y. & Phillip, H. P. (2004). Effects of board structure on firm performance: A comparison between Japan and Australia. *Asian Business and Management*, 3(1), 105-125.
- Chukwu, G.J. & Aloy-Ezirim, H.N. (2020). IFRS adoption and timeliness of financial reporting of insurance firms in Nigeria. *International Journal of Managerial Studies and Research*, 8(5), 1-9
- Chukwu, G.J., Idamoyibo, H.R., & Akunna, M. M. (2020). Environmental liability estimates and earnings persistence of oil firms in Nigeria. *Asian Journal of Economics, Business and Accounting*, 16(1), 29-40. <https://doi:10.9734/ajeba/2020/v16i130229>
- Dechow, P. M. & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors, *The Accounting Review* 77, 35-59

- Dechow, P. M. & Schrand, C. M. (2004). Earnings quality. *The Research Foundation of CFA Institute*.
- Dechow, P. M., Ge, W. Larson, C. R. & Sloan, R. G. (2009). Predicting material accounting misstatements. *SSRN e-Library*.
- DeFond, M. L. (2010). Earnings quality research: Advances, challenges and future research. *Journal of Accounting and Economics* 50(2-3), 402-409.
- Deloitte (2015). Diversity in the Boardroom. *Deloitte Africa Centre for Corporate Governance*. <http://www.corpgov.deloitte.co.za/>
- Fodio, M. I., Ibikunle, J., & Oba, V.C. (2013). Corporate governance mechanisms and reported earnings quality in listed Nigerian insurance firms. *International Journal of Finance and Accounting*, 2(5), 279-286
- Francis, J., LaFond, P. Olsson, & Schipper, K. (2005). The market pricing of accruals quality. *Journal of Accounting and Economics* 39, 295–327.
- Hafsi, T. & Turgut, G. (2013). Boardroom diversity and its effect on social performance: Conceptualization and empirical evidence. *Journal of Business Ethics* 112(3): 461-479
- Herly, M. (2012). *Earnings quality in restating firms: empirical evidence*. (Master thesis) Aarhus University.
- Houle, C. O. 1990. Who should be on your board? *Nonprofit World*, 8: 33–35
- Kothari, S., Ramanna, K., & Skinner, D. J. (2010). Implications for GAAP from an analysis of positive research in accounting. *Journal of Accounting and Economics*, 50, 246-286.
- Mahadeo, J., Soobaroyen, T., & Hanuman, V. (2012). Board composition and financial performance: Uncovering the effects of diversity in an emerging economy. *Journal of Business Ethics*, 105: 375–388.
- Murray, A. I. 1989. Top management group heterogeneity and firm performance. *Strategic Management Journal*, 10: 125–141.
- Myers, J. N., Myers, L. A. & Omar, T. C. (2003). Exploring the term of the auditor-client relationship and the quality of earnings: A case for mandatory auditor rotation? *Accounting Review* 78(3):779-799
- Nwoye, C.M., Anichebe, A.S., Osegbue, I.F. (2021). Effect of audit quality on earnings management in insurance firms in Nigeria. *Athens Journal of Business and Economics*, 7(2), 173-202
- Pfeffer, J. & Salancik, G. R. (1978). *The External Control of Organizations: A Resource Dependence Perspective*. University of Illinois
- Popoola, N. (2020). Insurers still losing fortunes to rate cutting. <https://www.proshare.com>
- Sloan, R. (1996). Do stock prices fully reflect information in accruals and cash flows about future earnings? *The Accounting Review* 71(3), 289–315.
- Ulrich, D. & Barney, J. B. (1984). Perspectives in organizations: Resource dependence, efficiency, and population. *Academy of Management Review*, 9: 471-481.