

**WEST AFRICAN JOURNAL OF BUSINESS AND MANAGEMENT SCIENCES  
FACULTY OF BUSINESS ADMINISTRATION  
IMO STATE UNIVERSITY, OVERRI  
NIGERIAN EDITION  
VOL. 10 NO. 1 MARCH 2021**

**CORPORATE CHARACTERISTICS AND MARKET VALUES OF QUOTED BANKING INSTITUTIONS: A  
GENERALIZED LEAST SQUARE APPROACH FROM NIGERIA AND KENYA**

**AKOBUNDU, CHARLES ECHEWODO**  
Department of Finance and Banking,  
University of Port Harcourt,  
Rivers State, Nigeria

**E. J. OKEREKE PhD.**  
Department of Finance and Banking,  
University of Port Harcourt,  
Rivers State, Nigeria

And

**P. C. NWAKANMA PhD.**  
Department of Finance and Banking,  
University of Port Harcourt,  
Rivers State, Nigeria

***Abstract***

*In a bid to further predict firms' values across various industries, the study examined corporate characteristics and their implication on the market values of quoted banking institutions in the Nigerian and Kenyan economies. The panel data were derived from the 2010-2019 financial statements of the banks of the two African countries. Banks' market values were modeled on debt-equity, company size, dividend policy, earnings per share, profitability. Panel data methodology was used while the fixed-effects model was used as the 5 percent meaning estimation technique. Fixed effects, random effects, and pooled estimates have been tested during the Hausman test. Roots of the panel unit and cointegration analysis of the panel were performed in the study. The study found from Nigeria that 81.5% of total changes in market values are due to the corporate characteristics as defined in the regression model. Corporate size, equity returns, earnings per share, and the payout ratio have a positive effect while Nigerian banks' quoted equity ratio harms the market values. Kenya accounts for 96.7% of the total changes in the market values, according to corporate characteristics as defined in the regression model. That corporate size and Return on equity have adverse consequences, while Kenyan banks' quoted dividend policy, debt-equity, and Earnings per share have a positive effect. The study concludes that corporate characteristics have a higher impact on Kenyan commercial banks' market values than Nigerian banks. We recommend that banks in Nigeria and Kenya adopt appropriate management of their debts and capital structures and that banks in Nigeria and Kenya take over a reasonable amount of asset to ensure the efficient and effective management of their banks which will increase corporate values.*

*Keywords: Corporate Characteristics, Market Value, Quoted Banking Institutions, Nigeria, Kenya.*

**AKOBUNDU, CHARLES ECHEWODO., E. J. OKEREKE PHD. AND P. C. NWAKANMA PHD.**  
**CORPORATE CHARACTERISTICS AND MARKET VALUES OF QUOTED BANKING INSTITUTIONS.....**

## **Introduction**

In a deregulated financial market, internal and external factors within the operating environment determine the market values of the traded stock. Corporate features serve as a predictor of stock market values because they highlight future returns. In the short and long term, the analysis of demand and supply of shares implies that the provision of shares is completely inelastic (fixed) in the long term. The perfectly inelastic provision of shares indicates that it is independent of the interest rates and hence the share price. But the demand for shares depends on interest rates and other demand determinants such as domestic output levels, price levels, currencies, commodities, bonds, etc. (Srinivasan, 2012). Only the demand for a stock determines stock prices from a demand and supply analysis in the long term.

Factors that determine the market values of quoted companies have long been a major starting point for finance scholars. Politicians, financial analysts, and practitioners must still find solutions to factors affecting stock price behavior. This is a remarkable aspect of the dividend policy argument pioneered by Gordon, Miller, and Modigliani. The fundamentalist views the value of corporate holdings as a function of future earnings expectations and the rate of profit reduction over time. The technical school of thought takes the monetary and macroeconomic variability of movements and stock price behavior. The Macroeconomic School considers stock price movements to be based on macroeconomic variables such as inflation, interest rate, money supply, and other macroeconomic variables (Jatoi, Shabir, Hamad, Iqbal, & Muhammad, 2014).

The hypotheses of Random Walk are based on the assumption that investors adjust prices quickly to reflect on the effects of new information. Believing in market efficiency, therefore, it claims that stock price is essentially random and that there is no chance of profitable bond speculation (Gupta and Basa, 2004). Additional theories such as the Pricing Model for Capital Assets (CAPM) and arbitrage pricing methods (APM) try to explain internal asset pricing determinants. From Jensen and Macklin's 1976 viewpoint of agency theory, managers might be unable to maximize the wealth of shareholders because of conflicts of interest. Retained profit can be invested in low-risk projects due to the management interest, which as a policy incentive does not affect positive share prices.

The validity of the Efficient Market Hypothesis (EMH), however, has been called into question, since several recent studies have shown significant abnormal trading returns based on public information. For instance, Kausar and Taffler (2006) have found that the stock of UK companies in distress has an audit report which tends to suffer significant negative price reactions between -24% and -31%. Using the event study method, Sponholtz (2005) examined the information content of the annual returns on the Danish stock market. In the period surrounding the announcement, Sponholtz found significant abnormal price reactions using the 1999 to 2001 data.

The above theories are well understood and appealing about factors that determine the market values of quoted companies, however, they sometimes fail to explain the event of the emerging African financial market. Modigliani and Miller's (1958) assumptions of the irrelevance of capital structure and dividends policy are long criticized and considered unachievable as the degree of market imperfection is nearly unitary in most African financial markets. Many studies on corporate characteristics determine the Market value of quoted

companies. However, a significant proportion of studies focused on dividend policy and capital structure with limited citable studies incorporating other considerations such as the size of companies (Lucky and Onyinyechi, 2019; Adelegan, 2009; Erik and Okafor, 2002). The study examined the corporate characteristics and market values of quoted banks in Nigeria and Kenya.

## **Literature Review**

### **Corporate Characteristics and Market Value**

#### **Earnings per share**

Earnings per share are considered the most commonly used value-related information used to examine its significant share relationship. The results found by Pathirawasam (2010) of Sri Lanka support most value-relevance studies of Earnings per share and share price results reported to be significant and positively related to share price. He pointed to the positive value of Earnings per share in the market share price of 129 companies from the main bursaries of the Colombo stock market. Similar results have also been reported in other studies carried out in Sri Lanka, Tharmila (2013) and Vijitha, Namalathan (2014), Egypt's Ragab (2006), Bangladesh's Miah (2012) and Thompson's Olugbenga and Oyerinde (2014), and Nigeria's Shamki and Rahman (2012). The key component of financial reports is the revenue statement (Kallunki, 1996) as it shows the results of the operation of the period.

#### **Return on equity**

Return on equity is defined as the profitability ratio that measures the company's profits from the money invested by its shareholders. Vijitha and Nimalathan (2014) examined the value relevance of equity returns, book value for share, share earnings, and the share price per share ratio of 20 CSE-listed production companies from 2008 to 2012. Other accounting data, such as share income and the book value per share, reported the same results, except that the price income ratio showed a weak and negative share price relationship. A sample of 129 companies selected as a sample from six main sectors listed in the CSE and examined the valuation relevance of equity returns, earnings per share, and book values per share. All three report positive and significant relationships with the share price of selected firms as a sample in the study. Malik and Ali also reported a Return on equity in Pakistan (2013) as having a positive and significant link to share prices of public fuel and energy companies listed on the Karachi stock exchange.

#### **Company Size**

Company size is one of the most important determinants of investment and market values. Larger companies have easier capital market access. This reduces their reliance on domestic revenues and thus attracts investors. Size is not the solution to business challenges, especially for banks, because it must be proportionate to profitability. The firm size was differently defined in the literature, referring, among others, to the total assets, operational scale, and a number of employees. Larger firms are expected to have more resources at their disposal and therefore to invest in various opportunities. Athanasoglou, Brissimis, and Delis (2005) have claimed that increasing the size of the company increases the bank's performance. Almajali, Alamro, and Al-Soub, (2012) maintained that the company's size could influence its financial performance and corporate value. However, the effect of size could be negative for

**AKOBUNDU, CHARLES ECHEWODO., E. J. OKEREKE PhD. AND P. C. NWAKANMA PhD.**  
**CORPORATE CHARACTERISTICS AND MARKET VALUES OF QUOTED BANKING INSTITUTIONS.....**

companies that become exceptionally large because of bureaucratic and other reasons (Yuqi, 2007).

### **Debt Equity Ratio**

Financial leverage measures the amount of equity and debt used by the company to finance its assets. As debt increases, there is growing financial leverage. Management tends to prefer equity funding over debt because it has less risk (Matt, 2000). Financial leverage is a loan or other borrowing or debt stock that is invested in order to earn a higher rate of return than capital cost. An unleveraged firm is an all-equity company, while a leveraged company consists of shareholding and debt (Andy, Chuck, & Alison, 2002). The leverage permits higher potential returns to the investor than otherwise would have been available, but the potential loss is also significant if the investment is worthless, the loan principal, and all accumulated loan interest have to be repaid (Andy et. al., 2002).

### **Dividend Payout Ratio**

The dividend payout decision tends to focus on the entire or partial distribution of corporate profits. Dividend payments are one of the biggest topics ever devoted to organizations, financial analysts, researchers, investors, and other stakeholders. Brealy et al. (2008) report that dividend policy controversy is one of the ten major unresolved corporate finance problems, which requires more research in order to increase understanding of the topic. There is a universal definition of the term dividend. It is the portion of a company that is distributed to shareholders after-tax profit. The dividend defined by Pandey (2005) is profit distributed to shareholders. It is a pro-rata distribution of the after-tax profit to the shareholders which the board of directors of the company has declared (King'wara, 2015). The dividend amount will be decided by the Board of Directors and will usually be paid quarterly, semi-annually, or annually, depending on the company's policy (Badu, 2013).

### **Theoretical Foundations**

#### **Efficient market Hypothesis**

The hypothesis of an efficient market (EMH) claims that the financial market is informatively efficient. The hypothesis has three main forms: "weak," "semi-fortified" and "strong." The weak market hypothesis claims that prices for traded assets (e.g. bonds or property) already reflect all past information publicly available. The semi-strong market efficiency hypothesis states that prices reflect all information made available to the public and that prices change immediately to reflect new public information. In addition, the strong market-efficiency hypothesis says that prices immediately reflect even hidden or "insider" information. Efficient market theory means that the market responds to new information quickly (Akani & Lucky, 2014). It is therefore important to know when the accounting report was first publicly published. The report is only informative if it contains data not previously known to the market.

#### **Fundamental analysis Theory of Equity Price**

Baker and Harlem (1973) argue that investors are primarily concerned with future expectations, given the high interest to investors in the projection of earnings and historical information. Financial practitioners use a range of tools and methods to achieve better investment decision-making results. There is an endless number of different investment

strategies, but almost all use the fundamental elements (McClure, 2010). The investment selection begins with essential analysis, and the unique nature of capital market instruments forces investors to rely on key factors in their investment decisions (Suresh, 2013). The cornerstone of investment is fundamental analysis. In fact, some people would say that you don't invest if you don't do basic analysis.

### **Empirical Review**

Jeroh (2020) investigated how corporate characteristics of listed companies predict the overall value of companies by drawing evidence from Nigeria. For the 9-year period (2010 – 2018), secondary data were thus obtained carefully from the finances of 32 companies in the financial services subsector. All panel data were analyzed using descriptive, diagnostic, and inferential statistics for all variables. The hypothesis was formulated and the multivariate regression technique was subsequently tested. Analyze and hypothesis test empirical evidence showed that the corporate attributes selected in this study (return, income growth, earnings, leverage, business dimension, and the tangibility of assets) had a significant effect on two measurements of corporate value (share price and Tobin's Q) (share price to book value). Specifically, while a positive relationship between the return on assets and revenues per share and all three measures of firm value is recorded, the same cannot be said for most explanatory variables. For example, revenue growth and leverage had a positive correlation with Tobins' Q but were adversely linked to share price and share price in relation to book value. However, the management of entities is recommended that they channel investments to acquire tangible properties and appliances that will enhance their respective entities' productive capacity since the size of the total assets has probably shown that they can improve share prices and Tobins' Q. Importantly

The effects of some firms' attributes, namely: market capitalization, debt-to-equity financing, and stock profit returns from listed food and beverage companies in Nigeria for the period 2007-2013, have been examined by Ibrahim and Hussaini (2015). All the 21 food and beverage companies listed on the Nigerian Stock Exchange (NSE) in December 2013 make up the population. Of which, nine (9) companies make up the study sample. The study included correlation as well as ex-facto research design. The data for the study were obtained from secondary sources purely from the sampled companies' annual reports and from the NSE fact sheet. Data were analyzed using multiple data regression panel options. However, the most robust of all is the regression from OLS, as suggested by the 'Breusch and Pagan Lagrangian Random Effect Test.' The findings show a significant negative impact in market capitalization on stock market returns for listed food and beverage firms in Nigeria, whereas the impact on stock market returns of debt-to-equity finance and equity income is positive and statistically significant. On the basis of these findings, the study recommends that government and policymakers (Security and Exchange Commission) develop and apply stricter rules in which companies are forced and monitored to report high-quality financial reports to report their earnings which reflect their actual performance. This would prevent investors from falling into the earnings handling trap (as it happened to shareholders of Cadbury Nigeria plc.). Moreover, prospective investors should be focusing not only on huge returns on investment in smaller capitalized and highly leveraged enterprises but also on further analysis to balance risk and returns.

**AKOBUNDU, CHARLES ECHEWODO., E. J. OKEREKE PhD. AND P. C. NWAKANMA PhD.**  
**CORPORATE CHARACTERISTICS AND MARKET VALUES OF QUOTED BANKING INSTITUTIONS.....**

Mohammed (2015) investigated the impact of corporate characteristics on the firm value of listed healthcare companies in Nigeria. For the period 2008 to 2015, the study utilized panel data regression to analyze secondary data extracted from the annual reports and the accounts of the 10 companies. The study found that the size of the company has a positive impact on Nigeria's firm value. The study also found that liquidity had a significant negative impact on the firm value of listed healthcare companies in Nigeria, indicating that the excess liquidity position would be counter-productive for companies as it reduces value. Leverage has been reported to have a negative and significant impact on firm value, implying that high leverage does not increase the firm's value. Alghusin (2015) examined the impact of corporate characteristics and profits in the Amman stock exchange for listed industrial companies. There were selected a sample of 25 Jordanian Industrial companies listed for ten years (from 1995 to 2005). The results of the study show that financial leverage and growth have a significant impact on the profitability of industrial companies. Industrial companies can thus increase their firms' profitability by reducing debt and increasing their financial assets compared to total assets.

The relationship between financial leverage and profitability in the Pakistani listed cement and service companies for the period 2006 to 2012 has been discussed by Ahmed and Ibrahim (2015). Results of the correlation show that the financial leverage (FL) in the cement industry has a negative relation to profitability (ROA), whereas company size (FS) and company growth (FG) have no impact on financial leverage. This means decreases in profitability as financial leverage increases. Financial leverage (FL) in the service industry has a positive relationship to the company's size (FS) and profitability (ROA) and company growth (FG) have no impact on financial leverage (FL). This means that the financial leverage increases as the size increases. Mule, Mukras, and Nzioka (2015) examine the profitability and market value of listed companies in Kenya of corporate size's impact. Data were used for companies active in the Nairobi Securities Exchange (NSE) between 2010 and 2014. Results show a positive and significant relationship between corporate size and profitability, i.e. equity returns. The results show that under random effects, corporate size has no statistically significant impact on company market value.

Ramadan (2015) investigated the impact of leverage of all listed companies in the Amman Stock Exchange (ASE) on the value of unbalanced pooled Ordinary Least Square (OLS). Duration of 2000-2013. The results show that the leverage level of companies has an impact on the value of companies for the listed Jordanian companies included in the sample test. Sweetey and Kaur (2014), for the financial year 1997/1998 to 2008/2009, have identified the impact of the company-specific characteristics on the shareholder value of 100 companies listed in India. To study the relationship, multiple regression analyses are used. The study reveals that investors tend to reward companies that have higher profits, lower market risks, efficient management of resources, high leverage, more liquidity, higher marketing expenses, and strong market capitalization.

The effect of the company characteristic on the firm value of property and real estate companies on the Indonesian stock exchange was investigated by Hidayah (2014). The study samples were determined using a purposeful sampling method consisting of 30 property and real estate companies between 2010 and 2012. The study shows that management ownership,

corporate size, and return on property affect the value of the firm while capital structures do not influence the firm value of listed property and real estate companies in Indonesia. The relationship between the company characteristics and financial performance of life insurance companies in Kenya has been determined by Kaguri (2013). Secondary data from the audited annual reports and accounts of 17 life insurance businesses for the period 2008-2012 were obtained. The results of the study show that the variables are statistically important to the financial performance of life insurance companies, as demonstrated by the strong and positive correlation coefficients of Pearson. This means that premium growth is based on the results made by life insurance companies' financial performance, as demonstrated by their strong and positive correlation coefficients.

Lucky et al (2015) reviewed Nigeria's prudential stock pricing determinant of fundamentalist application and macroeconomic perspective from 1980-2014. The study used the end-of-year aggregate value of commercial banks' stock prices as dependent variables. The micro cautionary variables are the ratio of the receivables, the payout ratio, profitability and capital of commercial banks to the aggregate assets, lender rates, and bank size, while the macro cautionary variables are monetary policy rate, inflation rate, all share prices indexes to gross national product, actual gross domestic product, exchange rate, and broad cash supply. The Ordinary Last Square Co-integration Method, Dickey-Fuller Root Test, and Granger Causality Test were used to investigate the nature of the interaction between the dependent and the independent variables in the regression model. The study found that all micro cautionary variables have a positive effect on commercial banks' stock prices with the exception of the borrowing rate. The Model Summary shows a strong relationship between R2 dependent and independent variables: 69.4 percent, 12.43051, mean and 0.00004 probability, from micro-prudential variables, whilst R2 of 52.0 percent, 8.788310 and significant and probability of 0.000004, macro-prudential variables have shown an explanation. The results confirm fundamentalist and macroeconomic perceptions.

The effects of capital structure on stock values of the companies listed on the Istanbul Stock Exchange were investigated in Chambers, Sezgin, and Karaaslan (2013). The study covered three periods: the entire 1994-2010 period, the 1994-2002 sub-period, and 2003-2010. The panel regression analysis was used to show the statistically significant impact of total debt to the market value (TD/MV) and beta ratios on both nominal and actual stock values over all three periods. The TD/MV ratio has also been shown to be statistically significant but has a negative effect on both nominal and real stock values in 1994 to 2002 subperiod but only on actual stock values from 1994 to 2010.

Ulil, Bambang, and Djumahir (2013) have examined the effect of corporate characteristics on governance quality represented by the Internet-Based on Corporate Governance (IBCG) rating and its impact on corporate value, by size, firm age, profitability, leverage, and firms growth. The research findings show that corporate size has an impact on the quality of governance and that corporate age, profitability, leverage, and firm growth have no influence on corporate governance quality. The relationship between firm size and performance of companies working in the Croatian manufacturing industry for the period 2002-2010 was investigated by Pervan and Visic (2012). Results show that corporate size has a significant (though weak) positive effect on corporate profitability.

**AKOBUNDU, CHARLES ECHEWODO., E. J. OKEREKE PhD. AND P. C. NWAKANMA PhD.**  
**CORPORATE CHARACTERISTICS AND MARKET VALUES OF QUOTED BANKING INSTITUTIONS.....**

Kisengo and Kisengo (2012) examined the impact on the performance of 48 microfinance institutions of firm characteristics (MFIs). The study adopted the design of correlation research. Using questionnaires, primary data were collected. This has been complemented by secondary data. A correlation and regression analysis was used for the 2012 period to examine the relationship between firm characteristics and performance of MFIs. Results showed that firm characteristics have an important positive effect on MFI performance. The structural features had the largest, while capital-related characteristics had the least effect on microfinance performance.

Ibanichuka and Alasin (2018) reviewed Nigeria commercial banks' audit reports and the value relevance of accounting information. Data were derived from the Commercial Banks financial statement. Two multiple regressions have been formulated to investigate the effects on commercial banks' stock prices of audit reports and audit properties. The data analysis technique is the multiple regression model based on the Social Science Statistical Package version (22.0). The statistics from Durbin Watson show multiple serial auto-correlations. The outcome shows collinearity which corresponds to the Eigen value condition index, while the Variance Inflation Factors indicate the absence of auto-correlation. Model, I showed that all the audit report variables have a good effect on value relevance, while Model II showed the positive effect on audit compensation, audit family membership, and corporate governance, and audit independence, joint audit and audit size, and stock price adversity. The study concludes that independent variables are relevant to the value of Nigeria's quoted commercial banks' accounts.

The study by Akhtar, Javed, Maryam, and Sadia (2012) examined the impact of shareholder returns to the fuel and energy sector of 20 listed public firms at the Karachi stock exchange (Pakistan), showing that the financial leverage had a positive relation to financial performance. Therefore, companies in the fuel and energy industries can increase their financial performance and play their role in economic growth and improve their optimal capital structures. Welch and Ivo (2004) investigated the link between the equity and stock values in their 1960-2000 study of US-listed firms and found that stock values were adversely linked to the debt/equity ratio when companies were inactive and did not reorient their debt ratios in times of stock prices rising or falling.

### **Methodology**

This study examined the corporate characteristics of quoted banks in Nigeria and Kenya to determine market value. For Ex-post facto research, the relevant data for testing hypotheses were obtained, analyzed, and interpreted. The survey population consists of 22 banks in Nigeria and 28 banking institutions in Kenya. The study adopted convenient sampling and accessibility techniques for 10 banks quoted in Nigeria and 10 banks quoted in Kenya. Annual financial statements by bank institutions and Central Bank Publications of selected African countries have collected panel data. The researcher used model regressions of the ordinary least square (OLS), fixed effects, and random effects to test the various hypotheses. Pooled OLS regression techniques are popular in financial studies due to their ease of use and predictive accuracy.



### Specification of Study Model

A literature review can affect the market value of a company by several generic factors. The company characteristics that affect market value must therefore be investigated. Regression models were developed to capture the internal market values determining the quoted banking institutions in Nigeria and Kenya.

$$MV = f(DER, EPS, ROE, FS, DP) \quad (1)$$

Transforming equation 1 to econometrics form, we have

$$MV = \alpha_0 + \alpha_1 DER + \alpha_2 EPS + \alpha_3 ROE + \alpha_4 FS + \alpha_5 DP + \mu \quad (2)$$

### Where

MV = Market value of the quoted consumer goods manufacturing firms proxy by end of years equity price

DER = Debt Equity Ratio

EPS = Earnings per share

ROE = Return on equity

FS = Firm size

DP = Dividend Payout Ratio

$\mu$

$\beta_1 - \beta_4$  = Error Term

= Coefficient of Independent Variables to the Dependent Variables

$\beta_0$  = Regression Intercept

### A-Priori Expectation of the Result

The prior expectancy of the variables suggests that an increase in the explicative variables will lead to an increase of the dependent variables. Therefore, the following can be specified mathematically: - a1,a2,a3 a4.>0. - a1.

### Hausman Test

The Hausman test serves to determine the correct choice between random effect regression and fixed effect regression (Brooks, 2014). Since the cardinal assumption of homogeneous deviation of the endogenous variables which underpins the application of the random effect model is invalidating heterogeneity, the test is essential to determine if a variable can be treated as a separate structural equation element or exogenous. Croissant & Millio (2019) briefly noted that the Hausman test in a regression model detects endogenous regressors.

### Model Fixed Effects

The model of fixed impacts is a class of statistical models in which endogenous variables are assumed to be constant at levels (i.e. values). Nevertheless, the slopes are constantly cross-sections and overtime for all endogenous variables. That's is presented as;

$$y_{it} = \alpha_j + x_{it}^1 \beta + \varepsilon_{it} \quad \varepsilon_{it} \approx HD(0, \sigma^2) \quad (3)$$

Expressing this in a regression framework, we have:

$$y_{it} = \sum_{j=1}^N \alpha_j d_{ij} + x_{ij} \beta + \varepsilon_{it} \quad \varepsilon_{it} \quad (4)$$

**AKOBUNDU, CHARLES ECHEWODO., E. J. OKEREKE PHD. AND P. C. NWAKANMA PHD.**  
**CORPORATE CHARACTERISTICS AND MARKET VALUES OF QUOTED BANKING INSTITUTIONS.....**

**Where**

$d_{ij} = 1$  if  $i=j$  and 0 elsewhere.

**Random Effects Model**

The stochastic term otherwise referred to as white noise or error term is usually added in regression models to account for endogenous variables excluded in the model. Thus we write the random-effects model as:

$$Y_{it} = \alpha + \beta x_{it} + \omega_{it}, \omega_{it} = \epsilon_i + u_{it} \quad (5)$$

**Where**

$x_{it}$  is still a  $1 \times k$  vector of explanatory variables, but unlike the fixed effects model, there are no dummy variables to capture the heterogeneity in the cross-sectional dimension.

**Panel Unit Root Test**

Often, the simultaneous use of time series data for a collection of entities leads to multiple heterogeneities given that each time series data could possess heterogeneous features. This is often referred to as a heterogeneous panel which by nature have a preponderance of biases that may culminate in misleading results. It is therefore pertinent to scrutinize the data for the existence of unit root and ensure that the data are stationary at

given level. To introduce panel data unit root tests, consider the autoregressive model:

$$y_{it} = \alpha_i + \gamma_i y_{it-1} + \epsilon_{it} \quad (6)$$

Which we can rewrite as

$$\Delta y_{it} = \alpha_i + \pi_i y_{it-1} + \epsilon_{it} \quad (7)$$

**Where**

$\pi_i = \gamma_i - 1$ . The null hypothesis that all series have a unit root then becomes  $H_0 : \pi_i = 0$ , for all  $i$ . a first choice for the alternative hypothesis is that all series are stationary with the same mean-reversion parameter.

**Panel Data Co-integration Tests**

Co-integration is used to test long-run relationship between the endogenous and exogenous variables. Pedroni's (1999, 2004) work is very general and accommodates separate intercepts for each group of potentially co-integrating variables and separate deterministic trends. For a set of variables  $y_{it}$  and  $x_{m, i, t}$ , that are individually co-integrated of order one and thought to be co-integrated:

$$y_{i, t} = \alpha_i + \delta_i t + \beta_{1i} x_{1i,t} + \beta_{2i} x_{2i,t} \dots + \beta_{Mi} x_{Mi,t} + u_{i,t} \quad (7)$$

**Where**

$m = 1, M$  are the explanatory variables in potentially co-integrating regression;  $t = 1, \dots, T$  and  $i = 1, \dots, N$ . The residuals from this regression,  $\hat{u}_{i, t}$  are these subjected to separate Dickey-Fuller or augmented Dickey-Fuller type regression for each group of variable to determine whether they are  $I(1)$ .

## Analysis and Discussion Of Results

## Corporate Characteristics and Market Values of Nigerian Banking Institutions

Table4. 1: Panel Unit Roots Tests

Method	Statistic	Prob.**	Remark	Statistics	Prob.**	Remark
<b>MV: at level</b>						
<b>MV: First Difference</b>						
Levin, Lin & Chu t*	-6.61250	0.0000	Stationary	-8.13127	0.0000	Stationarity
Im, Pesaran & Shin W-stat	-2.44908	0.0072	Stationary	-3.25293	0.0006	Stationarity
ADF - Fisher Chi-square	39.6523	0.0055	Stationary	50.4048	0.0002	Stationarity
PP - Fisher Chi-square	51.9654	0.0001	Stationary	125.485	0.0000	Stationarity
<b>ROE</b>						
Levin, Lin & Chu t*	-17.8215	0.0000	Stationary	-9.69726	0.0000	Stationarity
Im, Pesaran & Shin W-stat	-7.07553	0.0000	Stationary	-4.04824	0.0000	Stationarity
ADF - Fisher Chi-square	82.7762	0.0000	Stationary	56.1254	0.0000	Stationarity
PP - Fisher Chi-square	56.7490	0.0000	Stationary	133.583	0.0000	Stationarity
<b>FS</b>						
Levin, Lin & Chu t*	-0.67917	0.2485	Not Stationary	-17.8722	0.0000	Stationarity
Im, Pesaran & Shin W-stat	-3.38226	0.0004	Stationary	-5.69759	0.0000	Stationarity
ADF - Fisher Chi-square	55.9368	0.0000	Stationary	59.1984	0.0000	Stationarity
PP - Fisher Chi-square	74.1762	0.0000	Stationary	133.785	0.0000	Stationarity
<b>EPS</b>						
Levin, Lin & Chu t*	-2.49828	0.0062	Stationary	-9.98090	0.0000	Stationarity
Im, Pesaran & Shin W-stat	-1.34453	0.0894	not Stationary	-5.30785	0.0000	Stationarity
ADF - Fisher Chi-square	29.2138	0.0836	not Stationary	67.8778	0.0000	Stationarity
PP - Fisher Chi-sq	58.1639	0.0000	not Stationary	107.975	0.0000	Stationarity
<b>DP</b>						
Levin, Lin & Chu t*	-0.98640	0.1620	Stationary	-2.43870	0.0074	Stationarity
Im, Pesaran & Shin W-stat	-0.23383	0.4076	Stationary	-1.45073	0.0134	Stationarity
ADF - Fisher Chi-sq	19.4352	0.2467	Stationary	30.7845	0.0143	Stationarity
PP - Fisher Chi-sq	16.8302	0.3967	not Stationary	76.8690	0.0000	Stationarity
<b>DER</b>						
Levin, Lin & Chu t*	-0.78844	0.2152	Not Stationary	2.16421	0.0152	Stationarity
Im, Pesaran & Shin W-stat	-0.52101	0.3012	Not Stationary	-1.48150	0.0192	Stationarity
ADF - Fisher Chi-sq	26.8885	0.1384	Not Stationary	33.9448	0.0265	Stationarity
PP - Fisher Chi-sq	66.0278	0.0000	Stationary	133.629	0.0000	Stationarity

**Source:** Computed from E-view 9.0

The first step is to use/implement a series of root unit tests (the Levin, Lin and Chu 2002 test; the Im, Pesaran, & Shin, 2003 W-Stat; and two Fisher-type tests using ADF and PP tests from Maddala and Wu, 1999; and Choi, 2001). Table 1 shows the results for each of our five variables. As can be deduced from the table, the hypothesis of a non-stationary unit root is first used at 1, 5 and 10 per cent significance level. These results lead us to conclude that our series is defined as I(1). Thus, the essential determinants of market value of quoted banking institutions in Africa can be tested for panel cointegration.

**AKOBUNDU, CHARLES ECHEWODO., E. J. OKEREKE PHD. AND P. C. NWAKANMA PHD.  
CORPORATE CHARACTERISTICS AND MARKET VALUES OF QUOTED BANKING INSTITUTIONS.....**

**Table 2: Presentation of Regression Results**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FS	0.021876	0.043552	0.502310	0.6167
ROE	0.029523	0.073915	0.399415	0.6906
EPS	0.062860	0.076348	0.823338	0.4126
DP	0.078470	0.072399	1.083859	0.2815
DER	-0.114242	0.039539	-2.889328	0.0049
C	0.707070	0.315382	2.241944	0.0276
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.841952	Mean dependent var		0.828700
Adjusted R-squared	0.815920	S.D. dependent var		0.440598
S.E. of regression	0.189036	Akaike info criterion		-0.356274
Sum squared resid	3.037453	Schwarz criterion		0.034502
Log likelihood	32.81368	Hannan-Quinn criter.		-0.198120
F-statistic	32.34362	Durbin-Watson stat		1.442492
Prob(F-statistic)	0.000000			
<b>Correlated Random Effects - Hausman Test</b>				
Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		27.675224	5	0.0000

**Source:** Computed from E-view 9.0

### Analysis of Results

Following the different panel data analysis methods, the question arises as to which methods are most suitable or appropriate. Therefore, some ways to select the most appropriate method from the different approaches are needed, in particular from the FEM model to the REM model. If such a correlation exists, however, the Fixed Effect Model would be more appropriate as the random effect model is estimated inconsistently. From the table above, the Hausman test shows the likelihood of Chi-Sq. 0.0000 is lower than 0.05, so the study adopts a model of fixed effect.

### F-test:

The calculated F value is 32.34362 with the probability of 0.000000 taking into account P value; the selected meaning level  $\alpha = 0.05$  [5 percent] is lower than F-p-value. statistic's The conclusion is that the regression plane is statistically important. This means a statistically significant joint influence of corporate factors on market values.

Multiple Determination Coefficient (R<sup>2</sup>): The calculated multiple determination coefficient of 0.815920 of corporate variables from the model with a fixed effect implies that 81.5% of the total market value variations are accounted for by corporate properties as expressed in the model of regression.

**Statistics from Durbin Watson (DW):**

The calculated DW is 1,442480 from corporate characteristics and 1,607622 from macro variables from fixed effect results shows that the calculated DW for dL and du is 0,861 and 1,562 at five percent level of significance with four explanatory variables and 100 observations.

**T-test:**

This is used to measure the importance of the independent variables in the dependent variable, and the hypothesis was tested at 5% and 95% confidence. The t-tests and probability from the table above show that corporate size, equity revenues, income per share, and dividend payout ratio do not have a significant impact on Nigerian banking institutions' market values, while the debt equity ratio have a significant impact on market values.

**Regression:**

The study showed that corporate size, Return on equity, income per share and dividend payout ratio are positive while the debt equity ratio is negatively affected by the market values of quoted Nigerian banks.

**Table 3: Pedroni Residual Cointegration Test**

Series: MV FS ROE EPS DP DER

	<u>Statistic</u>	<u>Prob.</u>	<u>Weighted Statistic</u>	<u>Prob.</u>
Panel v-Statistic	-1.937822	0.0437	-2.466613	0.0332
Panel rho-Statistic	3.383534	0.0096	3.385510	0.0096
Panel PP-Statistic	-0.454926	0.3246	-3.716960	0.0001
Panel ADF-Statistic	4.831560	0.0072	-0.998455	0.1590
	<u>Statistic</u>	<u>Prob.</u>		
Group rho-Statistic	4.809492	0.0000		
Group PP-Statistic	-4.960986	0.0000		
Group ADF-Statistic	0.187377	0.5743		

**Source:** Computed from E-view 9.0

The recent literature has focused on tests of cointegration in a panel setting and we provide the results in Table 1 for two panel cointegration tests based on Pedroni (1999) (2004) and Kao (1999), where both are Engle-Granger based tests.

**Table 4: Pairwise Granger Causality Tests**

Null Hypothesis:	Obs	F-Statistic	Prob.
FS fails to Granger Cause MV	80	0.87818	0.4198
MV fails to Granger Cause FS		0.19393	0.8241
ROE fails to Granger Cause MV	80	2.00958	0.1412
MV fails to Granger Cause ROE		0.96077	0.3873
EPS fails to Granger Cause MV	80	1.22615	0.2992
MV fails to Granger Cause EPS		3.32712	**0.0413
DP fails to Granger Cause MV	80	2.21651	0.1161

**AKOBUNDU, CHARLES ECHEWODO., E. J. OKEREKE PHD. AND P. C. NWAKANMA PHD.**  
**CORPORATE CHARACTERISTICS AND MARKET VALUES OF QUOTED BANKING INSTITUTIONS.....**

MV fails to Granger Cause DP		0.74990	0.4759
DER fails to Granger Cause MV	80	0.37915	0.6857
MV fails to Granger Cause DER		0.04540	0.9556

To summarize, our Granger Causality test, results from the corporate characteristics proved that market values granger because earnings per share, this implies that there is uni-directional causality from market values to Earnings per share while other variables have no causal relationship among the variables.

**Table 5: Phillips-Peron Results (Non-Parametric)**

Cross ID	AR(1)	Variance	HAC	Bandwidth	Obs
Access Bank	0.106	0.010671	0.002242	8.00	9
FCMB Plc	Dropped from Test				
Fidelity Bank					
Plc	-0.541	0.001538	0.000246	8.00	9
First Bank plc	0.037	0.021302	0.012914	5.00	9
GTB Plc	-0.176	0.009283	0.001374	7.00	9
Stanbic IBTC					
Plc	-0.180	0.018430	0.019140	1.00	9
Sterling Bank					
Plc	-0.098	0.004008	0.001083	8.00	9
UBA Plc	-0.043	0.014676	0.004801	5.00	9
Union Bank Plc	Dropped from Test				
Zenith Bank Plc	-0.183	0.006691	0.000985	8.00	9

**Source:** computed from E-view 9.0

The results of the power for the entire test procedure based on the underlying time series model is stationary AR, all the procedures produced a reasonably high power over all the sample sizes and order considered except at order 2 where ADF (Augmented Dickey-Fuller) produced extremely low power. The power of the tests is extremely high over all the sample sizes and orders considered. From the coefficient of the sample size, most of the firms have linear relationship and also integrated in the order of 1(1).

**Corporate Characteristics and Market Values of Kenyan Banking Institutions**

**Table 6: Panel Unit Roots Tests**

Method	Statistic	Prob.**	Remark	Statistics	Prob.**	Remark
<b>MV: Level MV: First Difference</b>						
Levin, Lin & Chu t*	-6.60685	0.0000	Stationary	-4.13198	0.0000	Stationarity
Im, Pesaran and Shin			not			Stationarity
W-stat	-1.04768	0.1474	stationary	-3.32994	0.0004	Stationarity
			not			Stationarity
ADF - Fisher Chi-sq	30.6520	0.0600	Stationary	51.3854	0.0001	
PP - Fisher Chi-sq	53.3926	0.0001	Stationary	146.371	0.0000	Stationarity
<b>ROE</b>						
Levin, Lin & Chu t*	-10.0901	0.0000	Stationary	-9.32106	0.0000	Stationarity
Im, Pesaran and Shin			Stationary			Stationarity
W-stat	-3.33079	0.0004		-2.89641	0.0019	
ADF - Fisher Chi-sq	48.6982	0.0003	Stationary	44.6692	0.0012	Stationarity

PP - Fisher Chi-sq	48.8400	0.0003	Stationary	81.1509	0.0000	Stationarity
<b>FS</b>			<b>FS</b>			
Levin, Lin & Chu t*			Not			Stationarity
	-1.21424	0.1123	Stationary	-11.9856	0.0000	
Im, Pesaran and Shin			not			Stationarity
W-stat	-0.56989	0.2844	Stationary	-4.07383	0.0000	
			not			Stationarity
ADF - Fisher Chi-sq	27.9053	0.1117	Stationary	50.9666	0.0002	
PP - Fisher Chi-sq	48.0476	0.0004	Stationary	88.0947	0.0000	Stationarity
<b>EPS</b>			<b>EPS</b>			
Levin, Lin & Chu t*			not			Stationarity
	-0.25511	0.3993	Stationary	-7.45691	0.0000	
Im, Pesaran and Shin			not			Stationarity
W-stat	-1.47452	0.0702	Stationary	-4.36644	0.0000	
			not			Stationarity
ADF - Fisher Chi-sq	30.7126	0.0591	Stationary	61.1315	0.0000	
PP - Fisher Chi-sq	44.0833	0.0015	Stationary	112.556	0.0000	Stationarity
<b>DP</b>			<b>DP</b>			
Levin, Lin & Chu t*	-7.35704	0.0000	Stationary	-4.42667	0.0000	Stationarity
Im, Pesaran and Shin			Not			Stationarity
W-stat	-1.34370	0.0895	Stationary	-1.77189	0.0382	
ADF - Fisher Chi-sq	34.9015	0.0206	Stationary	35.4984	0.0082	Stationarity
PP - Fisher Chi-sq	37.7020	0.0096	Stationary	102.134	0.0000	Stationarity
<b>DER</b>			<b>DER</b>			
Levin, Lin & Chu t*			Not			Stationarity
	-0.49919	0.3088	Stationary	-12.0337	0.0000	
Im, Pesaran and Shin			Not			Stationarity
W-stat	0.07256	0.5289	Stationary	-4.51555	0.0000	
ADF - Fisher Chi-sq			Not			Stationarity
	18.5840	0.5490	Stationary	57.7839	0.0000	
PP - Fisher Chi-sq	66.7964	0.0000	Stationary	157.345	0.0000	Stationarity

**Source:** Computed from E-view 9.0

The first step is to use apply a range of panel unit root tests (the Levin, Lin and Chu 2002 test; the Im, Pesaran, and Shin, 2003 W-Stat; and two Fisher-type tests using ADF and PP tests from Maddala and Wu, 1999; and Choi, 2001). The results for each one of our five variables are reported in Table 6. As it can be inferred from the table, at first differences are used the hypothesis of unit root non-stationary is rejected at the 1, 5 and 10 percent level of significance. These results lead us to conclude that our series are characterized as I (1) process. Therefore, we can implement a test for panel cointegration for the essential determinants of market values of the quoted Kenya banking institutions.

**Table 7: Presentation of Regression Results**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FS	-0.006998	0.030178	-0.231900	0.8172
DP	0.051675	0.042321	1.221012	0.2255
DER	0.005493	0.030832	0.178148	0.8590
EPS	0.118719	0.038188	3.108843	0.0026

**AKOBUNDU, CHARLES ECHEWODO., E. J. OKEREKE PHD. AND P. C. NWAKANMA PHD.  
CORPORATE CHARACTERISTICS AND MARKET VALUES OF QUOTED BANKING INSTITUTIONS.....**

ROE	-0.058659	0.057943	-1.012354	0.3142
C	0.647175	0.178686	3.621846	0.0005
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.971919	Mean dependent var		0.537200
Adjusted R-squared	0.967294	S.D. dependent var		0.432398
S.E. of regression	0.078198	Akaike info criterion		-2.121655
Sum squared resid	0.519773	Schwarz criterion		-1.730880
Log likelihood	121.0828	Hannan-Quinn criter.		-1.963501
F-statistic	210.1401	Durbin-Watson stat		0.866101
Prob(F-statistic)	0.000000			
<b>Correlated Random Effects - Hausman Test</b>				
Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		38.084080	5	0.0000

**Source:** Computed from E-view 9.0

From the table above, the Hausman test show probability of the Chi-Sq. Statistical probability 0.0000 is less than 0.05, therefore, the study adopt the fixed effect model to analyse the effect of corporate characteristics and market value of the quoted commercial banks.

**F-Test:**

The F-calculated value is 210.1401, and probability of 0.000000 considering the P-value, the chosen level of significance  $\alpha = 0.05$  [5%] is less than the P-value of F-statistic. It is concluded that the regression plane is statistically significant. This means that the joint influence of the corporate characteristics on the market values is statistically significant.

**Coefficient of Multiple Determinations (Adj, R<sup>2</sup>):**

The computed coefficient of multiple determinations (Adjusted R<sup>2</sup>) of 0.967294 from the corporate characteristics from the fixed effect model, this implies that 96.7 percent of the total variations in the market values are accounted for, by the corporate characteristics as formulated in the regression model.

**Durbin Watson statistics (DW):**

The computed DW is 0.866101 from the corporate characteristics and 0.704972 from the corporate characteristics from the fixed effect results shows that at 5% level of significance with four explanatory variables and 100 observations.

**T-Test:**

This is used to measure the significance of the independent variables (essential factors) to the dependent variable (market values) and the hypothesis was tested at 5% level of significance and at 95% confidence interval. From the table above, the t-test and probability proved that Earnings per share have significant effect while firm size, debt equity ratio, Return on equity and dividend policy have no significant effect on market values of the quoted Kenyan banking institutions.



**Regression Coefficient:**

From the corporate characteristics the study found that firm size and Return on equity have negative effect while dividend policy, debt equity ratio and Earnings per share have positive effect on the quoted Kenyan banking institutions.

**Table 5: Pedroni Residual Cointegration Test**

Series: MV FS DP DER EPS ROE

	<u>Statistic</u>	<u>Prob.</u>	<u>Weighted Statistic</u>	<u>Prob.</u>
Panel v-Statistic	-1.090130	0.0422	-1.239366	0.0424
Panel rho-Statistic	3.003057	0.0087	2.977850	0.0085
Panel PP-Statistic	-7.832598	0.0000	-4.704228	0.0000
Panel ADF-Statistic	-2.779314	0.0027	-0.497200	0.3095
	<u>Statistic</u>	<u>Prob.</u>		
Group rho-Statistic	4.490709	0.0000		
Group PP-Statistic	-10.92868	0.0000		
Group ADF-Statistic	-2.596870	0.0047		

Pedroni Residual Cointegration Test

**Source:** Computed from E-view 9.0

The results of the cointegration test proved that the variables are cointegrated as the probability coefficient of the variables are less than 0.05, we accept the alternate hypotheses that there is presence of long run relationship between the dependent and the independent variables among the quoted Kenyan banking institutions.

**Table 6: Pairwise Granger Causality Tests**

Null Hypothesis:	Obs	F-Statistic	Prob.
FS fails to Granger Cause MV	80	1.05065	0.3548
MV fails to Granger Cause FS		0.18976	0.8276
DP fails to Granger Cause MV	80	0.34249	0.7111
MV fails to Granger Cause DP		1.28984	0.2814
DER fails to Granger Cause MV	80	0.06459	0.9375
MV fails to Granger Cause DER		0.96142	0.3870
EPS fails to Granger Cause MV	80	0.56607	0.5702
MV fails to Granger Cause EPS		0.81517	0.4464
ROE fails to Granger Cause MV	80	0.74351	0.4789
MV fails to Granger Cause ROE		0.62482	0.5381

**Source:** Computed from E-view 9.0

To summarize, our Granger Causality test, results from the corporate characteristics proved that there is no causal relationship between the variables in Kenya banking institutions.

**Table 4.30: Phillips-Peron Results (Non-Parametric)**

Cross ID	AR(1)	Variance	HAC Bandwidth	Obs
----------	-------	----------	---------------	-----

**AKOBUNDU, CHARLES ECHEWODO., E. J. OKEREKE PHD. AND P. C. NWAKANMA PHD.  
CORPORATE CHARACTERISTICS AND MARKET VALUES OF QUOTED BANKING INSTITUTIONS.....**

<b>Micro-Variables</b>					
Equity Bank Kenya	-0.691	0.000179	4.87E-05	4.00	9
Standard Chartered Bank Kenya	-0.050	0.000819	0.000477	3.00	9
Bacclays Bank Kenya	-0.296	0.000762	0.000228	8.00	9
Kenya Commercial Bank	-0.465	0.001051	0.000281	8.00	9
Co-operative Bank Kenya	-0.315	0.000309	0.000119	8.00	9
Diamond Trust Bank of Kenya	-0.221	0.000281	5.13E-05	6.00	9
National Bank of Kenya	-0.010	0.000127	0.000168	1.00	9
Absa Bank of Kenya	-0.509	0.000146	1.83E-05	8.00	9
Bank of Africa Kenya	0.140	3.63E-05	3.34E-05	2.00	9
Consolidated Bank of Kenya	-0.555	0.000220	0.000172	2.00	9

**Source:** computed from E-view 9.0

The results of the test procedure based on the underlying time series model are stationary AR, all processes produce a reasonably high power over all sample sizes and order, except in order 2, when ADF produces extremely low power. ADF (Augmented Dickey-Fuller) The power of the tests on all sample sizes and orders is extremely high. The sample size coefficient (Kenyan banking institutions) indicates that most of the companies have linear relations and are also integrated in order 1(1).

### **Findings Discussion**

Estimated regression results reveal that the relationship between debt-equity ratio and quoted banks' market values in Nigeria is negative and significant so that a unit increase in the debt-equity ratio could result in a 0.11 percent drop in the market values of quoted banks in Nigeria. The negative relationship between debt and market values between quoted banking institutions in Nigeria runs counter to the study's expectations and confirms Modigliani and Miller's view that the capital structure is not relevant. The finding contradicts both the basic and the technical points of view but confirms the random walk hypothesis. In addition, the estimated regression results reveal a positive but significant debt-equity ratio with the market values of banks in Kenya. The results of the model justify an increase in the debt-equity ratio of quoted banking institutions by 0.05 percent in Kenya's banks over the time periods covered by this study. The positive relationship between the Kenyan banking institutions' debt-equity ratio and market values confirms our priority expectations and Gordon views that capital structure is relevant. The positive effect of the debt-equity ratio on Kenya's market values confirms the key technical perspectives and the random working hypothesis. Empirically speaking, Olugbenga's and Atanda's findings (2014) confirm that book values, as well as equity share influence investment decisions, Oshodin and Mgbame (2014) that Earnings per share are the most important investors, consider in shares, Olugbenga and Atanda (2014) The positive balance between debt-equity and Market value for quoted bank institutions in Africa Lucky et al (2015) said that all micro-variables have positive effects on bank prices, except for lending rates. The variable's negative effect contradicts the above empirical findings.

The estimated results showed that the Market value of the quoted banking institutions is positive but not significant in terms of income by share and market values, which is that a unit increase will increase the Market value of Nigerian banking institutions by 0.06% over the period covered in this study. Nigerian banking institutions' positive relationship between share

income and market values confirms our a-priority expectations. The positive impact of income per share on Nigerian banking institutions' market values confirms the basic and technical views and confirms the random walk hypothesis.

In addition, the evidence shows that the estimated results have shown that the quoted banking institutions in Kenya have a positive and significant relationship between Earnings per share and the market values. The Earnings per share coefficient imply that an increase in income per share of the quoted banks will increase the Kenyan banking institutions' market values by 0.11% over the periods covered by this study. The positive relationship between the Kenyan banking institutions' Earnings per share and their market values confirms our prior expectations. The positive effect of Earnings per share on Kenya's market values contradicts the fundamental and the technical views and confirms the random walk hypothesis. Empirically, the positive effect of income per share on the quoted African banking institutions' market values confirms that Mgbame and Ikhatua (2013) found that releases of book value information, return by share and dividend per share were linked to stock volatility; Mgbame and Ohiorenuan (2013) reject the presuppositions of conditionality; Khan and Amanullah (2012) all factors selected have positive and significant share price relations except interest rates and B/M ratio, the Nirmala, Sanju and Ramachandran findings (2011) indicating that the dividends, EPS and leverage were significant determinants of the share return for all three areas and the Mahapatra and Biswasroy results (2011) that 87 percent of variation from I were significantly determining the share returns. However, contradicts the empirical findings above with the negative effect of Earnings per share on the market values of quoted African banking institutions.

The estimated results showed, of course, that the Return on equity and the market values of quoted banks in Nigeria are positive but not significantly related to them. The equity return coefficient means that an increase in units of equity return of quoted banking institutions will increase Nigerian banking institutions' market values by 0.029 percent within the periods covered in this study. The positive relationship between equity returns and market values of Nigerian banks confirms our prior expectation. The positive effect of income per share on the values of Nigeria's banks confirms both the fundamental and technical views and the random walking hypothesis.

The estimated results showed that the Return on equity and the market values of quoted banking institutions in Kenya are negative but without a significant relationship. The equity return coefficient implies that a unit increase in the equity return of quoted banking institutions would adversely affect the Kenya banking institutions' Market value by 0,05% within the periods covered by this study. The negative relationship between the Kenyan banking institutions' Return on equity and market values does not confirm our prior anticipation. The negative effects of income per share on Kenyan banking institutions' market values contradict the basic and technical views but confirm the random path.

The positive effect of the equity return on the African-coded banks contradicts Srinivasan's (2012) findings that the Pharma, Energy, and Infrastructure have a negative impact on dividend per share, but confirms Malhotra and Tandon's (2013) findings that the EPS, P/E ratio is positive with stock price dynamism, A

From the regression model formulated in the methodology section of this paper, the study showed that the company and the Market value of quoted Nigerian banking institutions

**AKOBUNDU, CHARLES ECHEWODO., E. J. OKEREKE PhD. AND P. C. NWAKANMA PhD.**  
**CORPORATE CHARACTERISTICS AND MARKET VALUES OF QUOTED BANKING INSTITUTIONS.....**

are not related positively, but not significantly. The conclusion is that when the value of the company size increases, the market values of quoted Nigerian banks increase by 0.02%. The estimated positive relationship between corporate size and market values in Nigerian banks is consistent with our previous expectations, as we expect positive relations between corporate size and market values. The positive relationship with the size of the company and the market values of banks confirms the accounting information theory and also conforms to basic and technological schools of thought.

The regression model formulated in the study methodology found that the relationship between the size of the company and the market values of quoted Kenyan banking institutions was negative but not significant. The conclusion means that if a unit value increase is achieved, the quoted Kenyan banking institutions' market values will be adversely impacted by 0.06 percent. The estimated negative link between the corporate size and the market values of Kenyan banking institutions does not match our previous expectations because we anticipated positive links between corporate size and market values. The negative relationship between the size of firms and the market values of banks is incompatible with the theory of accounting information and not with fundamental and technical thinking. Empirically, the good relationship between the company size and market values of quoted banks in Africa confirms Olugbenga and Atanda (2014) that the book values, Oshodin and Mgbame (2014) decide that investors are the most concerned in determining share income, the relationship between accounting information and stock prices of companies listed on the Nigerian stock exchange exists between Olugbenga and Atanda (2014). Lucky et al (2015) that all micro-prudential variables have a positive effect on bank stock prices except for the lending rate. The variable's negative effect contradicts the empirical findings above.

The estimated regression results found that there are good, but no major links between Nigerian dividend policy and quota banks' market values, so that a dividend unit increase could lead to a 0.07% growth in the quoted banks' market values in Nigeria. The positive connection between dividend policies and the market values of quoted banks in Nigeria confirms the prior expectations of the study and confirms Gordon's (1956) opinion that a policy on dividends is relevant. The findings are also contrary to the opinion of Modigliani and Miller (1958) but confirm both the fundamental and technical opinions and the random hypothesis of walks.

The estimated regression finds that the dividend-policy and the market values of quoted banking establishments in Kenya are positive, but not significant, so that the unit increase in dividend policy may increase the market values of quoted banks in Kenya by 0.05%. The positive relation between dividend policy and market values of quoted banks in Kenya confirms Gordons' a-priority expectations and confirms (1956) that dividend policy is relevant but in contradiction with Modigliani and Miller's hypothesis. The findings also confirmed the fundamental and technical points of view and the random hypothesis. Empirically, the positive dividend policy effect on quoted market values of African banking institutions conflict with what Hussainey, et al. (2010) found, however, that a substantial negative connection between a company's payout ratio and its stock price volatility confirms Nazir's findings, et. al. (2010). Khani, et al, (2011) said dividend income is related positively to stock prices and that investors want dividends as they signal the company's future prospects. Bougatef, (2011) that the cash

dividend has a positive effect on Tunisian corporate stock prices. Haddad et al., (2011) report on a stable cash dividend policy for the banking sector.

## **Conclusion and Recommendations**

### **Conclusion**

From Nigeria, the findings show that 81.5% of total changes in the market values of quoted banks in terms of the corporate characteristics of the regression model. Based on the Nigerian empirical findings, the study concludes that the debt ratio has a substantial relationship with market values; that income per share does not relate significantly to market values, and that returns on equity are not related substantially to market values. Company size has no significant relationship with banking institutions' market values in Nigeria. Furthermore, this dividend policy has no significant link with Nigerian banking institutions' market values.

Kenya's findings showed that 96.7 percent of the total Market value variations are due to corporate characteristics as defined in the regression model. Earnings per share have an important impact, while corporate size, debt-equity ratio, equity returns, and dividend policy have no significant effect on market values.

### **Recommendation**

1. The study recommended that banks in Nigeria and Kenya should adopt proper debt management and an appropriate capital structure to increase their market values, based on the findings of the study.
2. Nigerian and Kenyan banks should be provided with reasonable assets to ensure the effective and efficient operation of banks, leading to an increase in the values of their companies and an increase in the market value.
3. Governments and policymakers such as the Securities and Exchange Committee should develop and implement stricter rules to enforce and monitor the provision of high-quality financial reporting by banking institutions in order to report earnings that will reflect their actual market values.
4. Corporate features which affect the profitability of banks in a negative manner, and policies aimed at carefully eliminating those factors should be discouraged. Because the administration of banking institutions can control the factors of the corporate characteristics, market values of banking institutions in Africa can be improved by focusing on particular factors identified by the bank: firm size, share income, and capital structure respectively.
5. The results of the income per share of banks in Africa show that they have a very significant relationship. The regulatory authorities should revisit the capital markets and investment environments to improve banking institutions' market values in Africa.

### **References**

- Adelegan, O.J. (2009). *Price reactions to dividend announcements on the Nigerian stock market*. A ERC!Research! Paper!188,!African!Economic!Research!Consortium,Nairobi
- Ahmed, S.F & Ibrahim, M.(2015). Firm attributes and earnings quality of listed oil and gas companies in Nigeria. *Research Journal of Finance and Accounting*, 5(17), 23-31

**AKOBUNDU, CHARLES ECHEWODO., E. J. OKEREKE PHD. AND P. C. NWAKANMA PHD.**  
**CORPORATE CHARACTERISTICS AND MARKET VALUES OF QUOTED BANKING INSTITUTIONS.....**

- Akhtar, S., Javed, B., Maryam, A. & Sadia, H. (2012). Relationship between Financial Leverage and Financial Performance: Evidence from Fuel & Energy Sector of Pakistan, *European Journal of Business and Management*, 4, (11), 90-104.
- Alghusin, N., A., S. (2015). The impact of financial leverage, growth, and size on profitability of Jordanian industrial listed companies. *Research Journal of Finance and Accounting* 6, (16), 22-28
- Almajali, A. Y., A.S. Alamro, & Y.Z Al-Soub. (2012). Factors Affecting the Financial Performance of Jordanian Insurance Companies Listed at Amman Stock Exchange. *Journal of Management Research*, ISSN 1941-899X, Vol. 4, No. 2.
- Andy, C.W.C, Chuck, C.Y.K., & Alison, E.L. (2002). The Determination of Capital Structure: Is National Culture a Missing Piece of the Puzzle? *Journal of International Business Studies*, 33, 19- 32
- Athanasoglou, P.P., Brissimis, S. N. & Delis, M. D. (2005). Bank-specific, industry specific and macroeconomic determinants of bank profitability. Bank of Greece Working Paper No. 25
- Baker KBH, Haslem JA (1973). Information needs of individual investors, *J. Accountancy*, pp. 64-69
- Bartram, S.M. (2009). Agency conflicts and corporate payout policies. A Global Study.
- Brealey, R. A., Myers, S. C., & Allen, F. (2008). *Principles of Corporate Finance*. 9 ed New York: McGraw-Hill Education
- Chambers, N., Sezgin, F. H. & Karaaslan, B. (2013). An analysis of the effect of capital structure and the beta coefficient on stock values: a case study of the Istanbul stock exchange's manufacturing industry. *International Journal of Business and Social Science*, 4 (7), 90-103.
- Choi, I. (1995). Unit root tests for panel data. *Journal of International Money and Finance*, 5(20), 249- 272
- Elmi, M. A., & Muturi, W. M. (2016). Effects of profitability on dividend payout by commercial and services firms listed in the Nairobi securities exchange. *European Journal of Business and Social Sciences*, 5(2), 160-167
- Eriki, O. & Okafor, C. (2002). Dividend and stock prices on the Nigerian stock exchange. *Accounting: The Nigeria perspective* (Ed)
- Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The Journal of Finance*, 25(2), 383-417.
- Fama, E. F. (1981). Stock returns, real activity, inflation and money. *The American Economic Review*, 71(4), 45-565 Fama, E. F., & Schwert, G. W. (1977). Asset returns and inflation. *Journal of Financial Economics, Elsevier*, 5(2), 115-146.

- Grossman, S. J., & Stiglitz, J. E. (1980). On the impossibility of informationally Efficient Markets. *American Economic Review*, 70, 393-408.
- Gupta, R., & Basu, P. (2007). Weak Form Efficiency in Indian Stock Markets. *International Business and Economics Research Journal* 6:57-64.
- Hasan, M.S. (2017). Stock Returns, Inflation and Interest rates in the United Kingdom', *European Journal of Finance*, 14(8), 687-699.
- Hidayah, N. (2014). The effect of company characteristic toward firm value in the property and real estate Company in Indonesia. *International Journal of Business, Economics and Law*, 5(1), 80-95.
- Ibanichuka, E. A.L. & Alasin, C B.(2018). Audit reports and value relevance of accounting information: evidence from commercial banks in Nigeria. *Indian Journal of Finance and Banking*, 2(1), 45-65.
- Ibrahim, I., & Hussaini, B. (2015). Firms' specific characteristics and stock market returns (evidence from listed food and beverages firms in Nigeria. *Research Journal of Finance and Accounting*, 6(16), 114-128.
- Jatoi, M.Z., Shabir, G., Hamad, N., Iqbal N. & Muhammad, K. (2014). A Regression impact of earning per share on market value of share: A case study cement industry of Pakistan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(4), 221-227
- Jensen, M.C. & Meckling, W.H (1976). Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure. *Journal of Financial Economics* 3 (4), 305-360.
- Jeroh, E. (2020). Corporate financial attributes and the value of listed financial service firms: the Nigerian evidence. *Academy of Accounting and Financial Studies Journal* 24(2), 89-99.
- Kaguri, A. W. (2013). Relationship between firm characteristics and financial performance of life insurance companies in Kenya, Master's Thesis Submitted to University of Nairobi
- Kallunki, J. & Martikainen, T. (1997). The lead-lag structure of stock returns and accounting earnings. *International Review of Financial-Analysis*, 6 (1), 37-48.
- Kansaar, G. & Taffter, N. (1988). Estimation of bank stock price parameters and the variance components model. *Applied Economics*, 20(4): 497-507
- Kansaar, G. & Taffter, N. (1988). Estimation of bank stock price parameters and the variance components model. *Applied Economics*, 20(4): 497-507
- Kao, C. (1999). Spurious regression and residual based tests for cointegration in panel data. *Journal of Econometrics*, 90(1), 1-44.
- Kaźmierska-Jóźwiak, B. (2015). Determinants of dividend policy: evidence from polish listed companies. *Procedia economics and finance*, 23, 473-477

**AKOBUNDU, CHARLES ECHEWODO., E. J. OKEREKE PhD. AND P. C. NWAKANMA PhD.**  
**CORPORATE CHARACTERISTICS AND MARKET VALUES OF QUOTED BANKING INSTITUTIONS.....**

- Keerti, G. K., Gururaj. A, K. (2013). Fundamental analysis vs. technical analysis: a choice of sectoral analysis. *International Journal of Engineering and Management and Science*, 4(2), 234-246
- Kisengo Z., M., & Kisengo H, (2012). Effect of firm characteristics on performance of the microfinance sector in Nakuru, Kenya. *International Journal of Science and Research* , 2319-7064
- Lucky, A. L., & Onyinyechi, G. U. (2019). Dividend Policy and Value of Quoted firms in Nigeria: A Test of Miller and Modigliani Irrelevant Hypothesis. *Australian Finance & Banking Review*, 3(2), 16-29.
- Lucky, A. L., Akani, H. W., & Chukwuemeka, A. (2015). Prudential Determinants of Stock Prices of Commercial Banks in Nigeria: An Application of Fundamentalists and Macroeconomic View 1980 – 2014. *ILARD International Journal of Banking and Finance Research*, 1 (7), 1 – 37.
- Matt, H.E. (2000). Excellence in Financial Management. Course 1: Evaluating Financial Performance. Retrieved from [www.exinfin.com/Trainin](http://www.exinfin.com/Trainin)
- McKenzie, M. (2007). Technical trading rules in emerging markets the 1997 Asian currency crisis. *Emerging Markets Finance and Trade*, 43, 46-73.
- Miah, M. (2012). Value relevance of accounting information and stock market vulnerability - A Study on Listed Companies in Dhaka Stock Exchange. *International Journal of Research in Commerce and Management*, 3 (4), 24-26.
- Mohammed, G., T, (2015). Firm characteristics and firm value of listed healthcare companies in Nigeria. (unpublished published) M.Sc Dissertation Submitted to the Department of accounting, Faculty of Administration, Ahmadu Bello University, Zaria Nigeria
- Ngerebo-a, T.A (2007). *Corporate Financial Management 1: The Blueprint Limited*, Port Harcourt.
- Nirmala, P.S., Sanju, P. S. & Ramachandran, M. (2011). Determinants of share prices in India *Journal of Emerging Trends in Economics and Management Science (JETEMS)*, 2(2), 124-130.
- Olugbenga, A & Oyerinde, A. (2014). The relationship between financial accounting information and market values of quoted firms in Nigeria. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics (GJCRA)*, 1.
- Osei, K. A. (2012). Asset Pricing and Informational Efficiency of the Ghana Stock Market. *AERC Research paper 11(5), Nairobi Kenya*
- Pandey, I. M. (2005). *Financial Management*. Vikae Publishing House PVT LTD
- Pathirawasam, C. (2010). Value relevance of accounting information: Evidence from Sri Lanka. *International Journal of Research in Commerce & Management*, 8(1), 13-20.



- Pedroni, P. (1999). Critical values for cointegration tests in heterogeneous panels with multiple regressors. *Oxford Bulletin of Economics and Statistics, Special Issue, 6(1)*, 653-670.
- Pedroni, P. (2002). Fully modified OLS for heterogeneous cointegrated panels and the case of purchasing power parity. *Department of Economics, Indiana University, Mimeo*.
- Ramadan I., Z. (2015). Leverage and the Jordanian firms' value: Empirical Evidence. *International Journal of Economics and Finance; 7, (4)*, 56-79.
- Ranjani, R.P.C., & Karunarathne, W.V.A.D. (2006). *The impact of earnings and cash flows on the determination of stock returns*. PU Management Review
- Seetharaman, A., & Raj, J.R. (2011). An empirical study on the impact of Earnings per share on stock prices of a listed bank in Malaysia. *International Journal of Applied Economics and Finance. 5(2)* 20 –63.
- Shamki, D., & Raman, A. A. (2012). Value relevance of earnings and book value: Evidence from Jordan. *International Journal of Business and Management, 7(3)*, 133-141.
- Sharma, S., & Singh, B. (2006). Determinants of equity share prices in Indian corporate sector: An empirical study. *The ICFAI Journal of Applied Finance, 12(4)*, 21-38.
- Sponholtz, C. (2005). The information content of earnings announcements in Denmark. EAA Conference , Prague 2005: *European Accounting Association Conference*
- Srinivasan, P. (2012). Determinants of equity share prices in India: A panel data approach. *The Romanian Economic Journal; 46*: 205-228
- Suresh, A.S. (2013). A study on fundamental and technical analysis. *International Journal of Marketing, Financial Services and Management Research, 2(5)*, 44-59.
- Sweety N, & Kaur, M. (2014). Impact of firm-specific attributes on shareholder value creation of Indian companies: An Empirical Analysis. *Global Business Review 15(4)* 847–866
- Tharmila, K., & Nimalathasam, B. (2013). The value relevance of accounting information and its impact on market vulnerability: A study of listed manufacturing. *Research Journal of Finance and Accounting, 4(18)*, 102-109.
- Thompson, S., & Adah, A. (2012). Stock market crisis and value relevance of accounting information: Impact on quoted cement manufacturing firms in Nigeria. *International Journal of Research in Commerce & Management, 3*, 16–19.
- Ulil, H., Bambang, S. & Djumahir, G. I. (2013). Firm characteristics, corporate governance and firm value. *International Journal of Business and Behavioral Sciences. 3, 8; 9*
- Wang, Fu & Lou (2013). Accounting information and stock price reaction of listed companies: Empirical Evidence from 60 listed companies in Shanghai Stock Exchange. *Journal of Business & Management, 2(2)*, 11-21.
- Welch & Ivo, (2004). Capital structure and stock values. *Journal of Political Economy, 112*, 106-131.