
Firm attributes and share price fluctuation of deposit money banks listed in Nigeria

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Abstract

This paper examined firms' attributes impact on the fluctuation of share prices of listed deposit money banks in Nigeria. Ex-post facto research design was employed, and 13 deposit money banks firms were selected out of 15 from 2006-2016. Descriptive statistics were presented, and correlation analysis was conducted to understand the degree of relationship among the variables. Ordinary least Squares regression was used to ascertain the combined impact of the explanatory variables on the share prices. The study finds four firms' attributes (dividend ratios, book value, growth and liquidity) to have statistically significant effect on share prices. Companies with high dividends and asset growth as well as low liquidity and book values are more likely to experience higher share prices; hence, the need for investors to be aware of these attributes in making investment decisions. The findings contribute to the existing literature by extending the study to the banking industry.

Keywords: Deposit Money Banks; Firm Attributes; Firm; Nigeria

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Introduction

Firm attributes are features that define the firm as an entity, are peculiar to different firms and could be financial or non-financial, internal or external to the firm in nature Hassan & Ahmed (2012). Despite the recognition of the relationship between firm attributes and the overall achievement of organisational objectives by scholars such as Reber & Fong (2006) and Okpara (2010), there is less attention given to it both in practice and in academic research. This is due in part to the rise in corporate governance issues exemplified in the highly publicised cases of Enron, WorldCom, Adelphia among others. Corporate governance issues, however, focus only on ownership and management attributes. Firm attributes, on the other hand, are broader in nature and should encompass both corporate governance and other financial performance attributes. There are certain firm attributes that are financial in nature; these are called performance attributes. They differ by time and allow for identifying a firm's performance (Naser et al., 2002). These performance attributes (which include growth, liquidity, dividend ratios, book-to-market ratios, among others) serve as indicators of the success of a company because they are used as signals by investors for investment decisions. A high-performance attribute can therefore cause an increase in the share prices and consequently, lead to an increase in firm value (Kartika et al., 2012).

Share prices are the highest or lowest buying or selling (cost plus margin) prices of units of companies' stock, financial asset, or derivatives, as well as a measure of firm value (A. W. Lo & MacKinlay, 1988). Due to frequent information flow, management decisions are often made available to major stakeholders. These decisions have direct influence on their performance, most especially on market value. With this, it is imperative to evaluate the extent to which

firms' attributes, which are frequently influenced by management decisions, affect its market share price fluctuation. It could be argued that firm attributes such as asset growth could influence market value, in that growth in asset is as a result of higher investment in equity capital used for expansion. This will aid productivity of the firm hence, return on investment, which over time translates to growth in share price of such a firm. It is uncertain if the effect of asset growth in year one on market performance of succeeding years of the firm is significant in the same industry without divestment. Firms that are poorly monitored pose a risk to themselves as well as others, and can as well compromise the stock market because if actions are taken that adversely affect share prices across board, the total share price index suffers in the international market as a result. Since finance plays a major role in the survival of a corporate entity, it is important to understand the performance of its main actors (especially listed financial intermediaries). Financial intermediaries play a dominant role in financial systems of developing economies by directing surplus funds to deficit units, thus serving as stimulants of economic growth (King & Levine, 1993). They are represented mostly by the banking sector. The banking sector of any economy is involved in the borrowing and lending of money for the purpose of earning profit. The banking industry in Nigeria plays an important role in facilitating and stimulating economic development (Agundu & Agbahiwe, 2014) and comprises 15 Deposit Money Banks as at 2016. In order to be able to meet up with the minimum requirements, some banks merged with others while those with financial challenges were acquired by the stronger ones (Akpanung & Gidigbi, 2014). Observing the financial statements of the banks after this event shows that virtually most of them embarked on issuing debt securities progressively. The share prices of most of these banks

increased significantly in some years, and fluctuated in others. What is not clear is whether this increase in the market price, which is a reflection of firm value, has relation to the changes in the financial indicators which make up a significant number of firm attributes. Thus, from the explanations made above, since stock prices do not just happen, certain features of the firm may influence them. For example, the greater the firm growth opportunities, the greater the possibility for a better firm value, most specifically as a firm with high potentials can expand its growth opportunities to perform well.

There have been several calls by previous researchers including Adedoyin (2011), Banderlipe (2013), Abdullah et al. (2015) and Adekunle et al. (2015) for a comprehensive theoretical and empirical investigation into the factors which determine firm attributes and share prices. One question that has received considerable attention is whether firm attributes contain information used by the market in assessing the share value of firms in the Nigerian banking sector. There have been several studies in the both developed and developing countries on share price behavior and their determinants (of which firm attributes are generally included). Most of these studies are well documented in accounting and finance literature, like the studies of Sunde & Sanderson (2009), Haque et al. (2013), Srinivasan (2012), Arslan & Zaman (2014), Abdullah et al. (2015), Adedoyin (2011), Ogundipe et al. (2012), and Agyei-mensah (2012). All the studies mentioned focused on various measure of the share price. For instance, first day share price, Adedoyin (2011), Stock return Ayuba et al. (2018), share price volatility Okafor & Chijoke-Mgbame (2011); Hussainey et al. (2011); Gunaratne et al. (2015) and Jahfer & Mulafara (2016). However, this study employs simple average as a measure of share price because it is easy to operate and provides accurate results. Further, the measure is in line with De

Cesari et al. (2012). The aim of this paper is to examine the influence of firm attributes on the share prices of Deposit Money Banks. The study finds four firms' attributes (dividend ratios, book value, growth and liquidity) to have statistically significant effect on share prices. This paper is organized as follows: the introduction is situated in section one. Section two presents the literature review and theoretical framework. Section three presents the methodology and variables definitions, while Section four consists of results discussion and section five concludes.

Firm Dividend Per Share and Share Price

Dividend payment is one of the expectations of return on investment by shareholders, and the payment of this return signals the investors how the company adheres to effective corporate governance (Lashgari & Ahmadi, 2014). In studies conducted by Rashid & Rahman (2008), Nazir et al. (2010) and Baskin (1989), a significant negative relationship was found between share price volatility and payout ratio while the studies of (Camilleri et al., 2019) and Gunaratne et al. (2015) and Jahfer & Mulafara (2016) found a positive relationship between dividend yield and share price volatility. The results is also in line with the earlier studies of Hussainey et al. (2011) and Orfanos & Evripiotis (2009) that reported positive and significant relationship between share price and dividend policy. Moreover, researchers such as Nazir et al. (2010), Mokaya et al. (2013), Salih (2010) and Baker et al. (1985) discovered a positive effect of dividend payout ratio on share price volatility. In a nutshell, these findings imply that dividends can significantly influence share prices irrespective of the company's nature. It can be argued that dividend payout can be used as a predicting tool for firm growth opportunities as firms that pay

dividend frequently have stable growth in their share prices.

H₀₁: Firms' dividend pay-out ratio does not have significant effect on Share Prices of Nigerian DMBs

Firm Book Value and Share Price

The relationship between share price and book value of stock has been investigated in prior studies. Nguyen (2016) investigated the relationship between book value and stock price of 147 listed firms on Ho Chi Minh City Stock Exchange (HOSE) and 179 firms on Hanoi Stock Exchange (HNX) for the period from 2008 to 2014. The study showed that book value positively influenced share price of the sample firms. Dang et al. (2018) also examined how book value of firms relate to share price of Vietnam Stock Exchange. The data were retrieved from 273 large listed firms between 2006 to 2016. The results showed that positive relationship prevails between book value and share prices of the sampled firms. Hence, consistent with prior evidence of Hand & Landsman (2005); Lo & Lys (2000); Adamu, (2010) and Sharma et al. (2012) that book value positively affects share prices of firms. The results therefore, suggested that book value of firms is an important determinant of share price in listed firms.

H₀₂: Firms' book value does not have significant effects on Share Prices of Nigerian DMBs

Firm Growth and Share Price

According to Duffee (1995), the negative relationship between changes in stock return variances and stock returns stems from the fact that the relationship between volatility today and returns today is actually strongly positive, but that between volatility tomorrow and returns today is negative. He found this regularity for large and small capitalization firms and similar for firms with low and high financial leverage. Growth opportunities are real options on

future cash flows from assets in place and firms with greater volatility would have more valuable growth opportunities and higher equity value. Furthermore, Hartono et al. (2013) examined the impact of firm growth rate of on firm value of listed Indonesian firms by taking a sample of 110 firms from 2001 to 2010. Firm growth was found to have no significant relationship with firm value. The study is in line with the findings of Adedoyin (2011) that firm growth, among other firm characteristics, has no impact on the share prices on the NSE market. However, Okafor & Chijoke-Mgbame (2011) studied the effect of firms growth on share price of listed Nigerian firms from 1998 to 2005. The results found growth to be negative and statistically significant on share price volatility. The result suggested that as firm exhaust their growth opportunities, they will distribute more earnings as dividends, leaving their shares less risky. In a recent study from Nigeria, Ekundayo (2018) showed that firm growth and share price are negatively related suggesting that when share prices increases, growth decreases. These findings are in contrast with the evidence documented by Adedoyin (2011) that firm growth, among other firm characteristics, has no impact on the share prices on the NSE market. contrarily, Ayuba et al. (2018) found firms' growth to have a significant positive influence on stock returns.

H₀₃: Firms' growth does not have significant effects on Share Prices of Nigerian DMBs

Firm Liquidity and Share Price

Liquidity is an important risk factor, which has motivated many authors to conduct research into it. Asness et al. (2000) tried to predict stock returns using industry-relative firm characteristics of U.S. listed firms from July 1963 (1973 for NASDAQ firms) through December 1998. Firm characteristics adopted included market equity, log of book-to-market ratio, cash flow-to-price ratio, percentage change in

employees and past returns. They found that within-industry and across-industry variables are better able to explain the cross-section of expected stock returns than risk proxies in the more common market-wide form; across-industry variation in a variable unrelated to expected returns like that induced by accounting differences across industries may partly drive the success of the within-industry measure. Chan & Faff (2003) examined the role of liquidity in asset pricing, while Amihud et al. (2005) reviewed the literature that studies the relationship between liquidity and asset prices. They showed empirically that liquidity had wide ranging effects on financial markets. Kogan & Papanikolaou (2012) endeavored to come up with a theory of firm characteristics and stock returns by examining the role of investment-specific shocks. Firm characteristics employed included Tobin's Q, past investment, earnings-price ratios, market betas and idiosyncratic volatility of stock returns. It was found out that Tobin's Q, investment rate, earnings-to-price ratio, market beta, and idiosyncratic volatility to the firm's growth opportunities are correlated with the firm's exposures to the aggregate investment-specific technology shocks, which helps explain stock return co-movement among firms with similar characteristics, and cross-sectional correlations between the characteristics and average stock returns. An important gap which exists is that understanding the economic sources of stock return co-movement is important for further progress in the analysis of stock market behavior. From the perspective of asset pricing, this helps better interpret the properties of the empirical factor-based pricing models. From the perspective of macroeconomics, additional progress on this front should promote a more fruitful use of asset pricing data in studies concerned with the sources of aggregate fluctuations. Chai et al. (2013) examined liquidity impact on stock returns, in the context of Fama-French cross-sectional

framework for the Australian equities market. They found a significant illiquidity premium and they showed that liquidity explained a portion of the common variation in stock returns even after controlling for size, book-to-market, and momentum. Minović & Živković (2013) showed that, for the Serbian market, illiquidity and liquidity risks significantly affect price formation. They showed that illiquidity is persistent on the Serbian stock market. Furthermore, illiquidity moves symmetrically with contemporary returns. In conclusion, it was noted that some studies did not consider asset-pricing models in a timeseries framework; their argument was that the risk/return trade-off is consistently superior for strategies based on within-industry variables to those based on variables measured market wide. Other findings suggested that the liquidity factor only added marginal explanatory power to contemporary asset pricing models. Mohammed (2017) examined the effect of firm characteristics on firm value of listed healthcare firms in Nigeria. The study used secondary data for ten listed healthcare firms for the period 2008 to 2015. The study revealed that liquidity negatively affect the firm value suggesting that excess liquidity position will be counter-productive to the firms because it decreases their value.

H₀₄: Firms' liquidity does not have significant effects on Share Prices of Nigerian DMBs

Firm Leverage and share price

According to Myers & Majluf (1984), there exists a negative relationship between share prices and leverage which could be due to the market's pricing of the firm's ability to raise funds if needed. Higher leverage increases the probability of a firm forgoing positive NPV (net present value) projects in the future because in some instances the pay-off from these investments to shareholders after fulfilling debt obligations is lower than the initial

investment shareholders have to outlay. This under investment reduces the growth option value of a firm. Chowdhury & Chowdhury (2010) attempted to test the influence of debt-equity structure on the value of shares given different sizes, industries and growth opportunities with the companies incorporated in Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE) of Bangladesh. A strong positively correlated association is evident from the empirical findings when stratified by industry. The findings suggest that maximizing the wealth of shareholders requires a perfect combination of debt and equity, whereas cost of capital has a negative correlation in this decision and it has to be as minimal as possible. Cheng and Tzeng (2011) conducted research by collecting data from 645 companies listed on the Taiwan Securities Exchange (TSE) from 2000-2009 and found a positive relationship between leverage and firm value. Ogbulu & Emeni (2012) aimed to provide evidence on the impact of capital structure on a firm's value. The analysis was implemented on a sample of 124 companies quoted on the Nigerian Stock Exchange. The result reveals that in an emerging economy like Nigeria, equity capital is irrelevant to the value of a firm, while long-term-debt was found to be the major determinant of a firm's value.

Abdullah et al. (2015) examined the impact of financial leverage (proxied by debt-equity ratio) and market size (proxied by market capitalization) on share prices (monthly average of daily closing share prices) on the Dhaka Stock Exchange. The scope covered manufacturing firms for the period 2008-2012. They found out that while leverage had a significant and negative relation to share prices, the impact of market size on share price was significant and positive. Thus, from all the studies reviewed, an increase in the leverage ratio can result in a lower share price, all other factors being equal, and that by changing the capital structure composition, a firm can increase its value in the market. This could

be a significant policy implication for finance managers, because they can utilize debt to form optimal capital structure to maximize the wealth of shareholders. It can be safely concluded that financial managers employ more of long-term-debt than equity capital in financing their operations since it results in a positive firm value.

H₀₅: Firms' leverage does not have significant effects on Share Prices of Nigerian DMBs

Firm Size and Share Price

From literature, there have been divergent findings on the impact of firm size on share price. Studies such as Zeitun and Tian (2007) and Onaolapo and Kajola (2010) found that firm size has significant impact on firms' performance drastically. It is justified by the fact that larger firms perform better from diversification of investment and benefits from economies of scale as compared to small-size firms. In other literature, Cheng, Shamsher, and Annuar (2008) argued that the impact of size on a firm's share price is usually reflected by the Earnings Response Coefficient (ERC). This was illustrated by testing the effect of daily closing share price and firm's size (using earnings information as a proxy) for ten years (1988-1997) of the Kuala Lumpur stock exchange (KLSE). The studies of Munasinghe and Fernando (2011) with Shafana, Rimziya and Jariya (2013) examined the effects of firm characteristics on share price with evidence from the Colombo Stock Exchange in Sri Lanka. They found that firm size and ownership characteristics are significant in explaining the variation in share prices; however, the joint effect explains only 43% of variation in share prices. In summary, these studies seem to indicate that the bigger the size of a firm the lower the return and vice versa. However, this result is debatable. Theoretically, smaller firms seem to be more sensitive to risk and could strategize

to achieve excess returns for compensation for bearing risk than the bigger ones.

Recently, Ayuba et al. (2018) investigated the effects of firm size on stock return from selected quoted firms in Nigeria from 2007 to 2016. The study revealed insignificant negative effect between firm size and stock returns in Nigeria. The findings may be as a result of the sample selection as the study only focuses on the most capitalized firms on the market.

Although, firm attributes may have impact on share prices, it can be depicted from the foregoing that the findings of the studies were mixed and inconsistent: all attributes under consideration were found to have both positive/negative and significant/insignificant effects due to various methodologies being adopted among the studies.

Firm Age and Share Price

Studies have shown that younger firms are more vulnerable to high risk of failure or incur losses in their early years of operations compared to older firms as such prices of their shares might be underpriced. For example, Reber & Fong (2006) discovered that underpriced shares result in heavy trading in the secondary market. Similarly, Lowry et al. (2010) discovered that information asymmetry affect both the level of the offer price and the precision of the price-setting process reporting that shares of younger companies are mostly underpriced. Adedoyin (2011) examined the fact whether corporate firm characteristics determine share prices on the Nigerian Stock Exchange. She sampled 72 firms from all the sectors over a 6-year period (2004-2009). The size of the firm was discovered to have the most significant effect on share price determination in the two models adapted for the study.

In brief, the sample size and time span employed by these studies can be increased, sectoral analysis can be carried out in other to give room for sectoral comparison

amongst companies listed on the Nigerian Stock Exchange, and the determinants of share price can be looked at from a macroeconomic perspective as this has a strong influence on share price determination.

Method

Ex-post facto exploratory research design was adopted in this study. The population for this paper is 15 listed Nigerian Deposit Money Banks. Two banks were excluded from the sample because they were listed in 2010 and 2009 respectively. Hence, the final sample becomes 13 banks. The data were extracted from the published financial reports of these sampled banks and covers a period eleven (11) years from 2006 to 2016.

Variables

Dependent variables of the study

The dependent variable for this study is Share price (SP) which is proxied by the simple average of share price obtained by dividing the sum of the opening and closing share prices of the year by 2. This was adopted from De Cesari, Espenlaub, Khurshed, Simkovic (2012).

Independent variables of the study

Dividend per Share (DPS) is measured as total ordinary dividend paid divided by the number of ordinary shares outstanding. Firm Book Value (FBV) is computed by dividing the book value of equity with the market value of equity. Growth (GRW) is measured as percentage change in total assets (Adedoyin, 2011) and adopted by Pearce & Roley (1988). Liquidity (LQD) is measured as total loans and advances divided by total deposits. This was used by Agyei-Mensah (2012) and Li et al. (2013). Leverage (CAP) is computed by dividing the total equity of the bank with its total assets.

Control variables of the study

Firm Size (FSZ) is defined as the logarithm of total assets for the regression models

(Macey & O'Hara, 2003). Firm Age (FGE) is proxied by the number of years from date of incorporation to the end of the study period (Adedoyin, 2011).

Model Specification

From the discussions above, the econometric model adapted from Adedoyin (2011) to include share price fluctuation and firms' attributes is denoted as:

$$SVG = f(DPS, FBV, GRW, LQD, CAP, FSZ, FGE)$$

Thus, the regression model is expressed as follows:

$$SVG_{it} = \beta_0 + \beta_1DPS_{it} + \beta_2FBV_{it} + \beta_3GRW_{it} + \beta_4LQD_{it} + \beta_5CAP_{it} + \beta_6FSZ_{it} + \beta_7FGE_{it} + \epsilon_{it}$$

Where:

SVG_{it} = Simple average share price of bank i for period t

DPS_{it} = Dividend per share of bank i for period t

FBV_{it} = Firm book value for bank i for period t

GRW_{it} = % change in total assets of bank i for period t

LQD_{it} = Loans and advances to Total deposits for bank i for period t

LEV_{it} = Equity capital to Assets for bank i, for period t

FSZ_{it} = Logarithm of total assets of bank i for period t

FGE_{it} = Logarithm of the age of the bank i for period t

Results and Discussion

Normality test was conducted to check for distribution patterns of the research data and skewness and kurtosis were used for the purpose; however, the data are not normally distributed overall; therefore, robust tests were repeated for each model to accommodate the autocorrelation effects of the regressions. From the results of the robustness tests performed to determine the accuracy and reliability of research data used in testing the study hypotheses, it showed that the data was free of regression errors capable of invalidating the regression assumptions of the research work. In other words, the data is suitable and the regression estimates obtained are reliable. The Table1 below shows the summary statistics for the share price (dependent variable) and dividend policy, value, growth, liquidity, leverage, size and age (explanatory variables).

The results from Table 1 show that the share prices of the Nigerian DMBs have a total mean score of 4.3353. This indicates that on average listed DMBs value their shares at N4.34. The standard deviation of 4.5318 discloses a significant variation of simple average share price with minimum value of N0.07 and maximum value of N26.47.

Table 1. Descriptive Statistics

Variable(s)	Mean	Min.	Max.	Std.Dev	Skew (Pr.)	Kurt (Pr.)	Obs
SVG (N)	4.3353	0.0700	26.4700	4.5318	0.0000*	0.0000*	143
DPS (ratio)	0.3635	0.0000	2.0000	0.4467	0.0000*	0.0003*	143
FBV (ratio)	1.1452	-4.7404	7.8981	1.4645	0.0000*	0.0000*	143
GRW (%)	0.4351	-0.3724	4.4295	0.6198	0.0000*	0.0000*	143
LQD (ratio)	1.3495	0.2645	84.4240	6.9994	0.0000*	0.0000*	143
LEV (ratio)	0.1585	-0.3187	0.6349	0.0981	0.0605	0.0000*	143
FSZ (log)	8.9304	8.0278	9.9809	0.4135	0.7862	0.9212	143

SVG = Simple average share price, DPS_{it} = Dividend per share, FBV = Firm book value, GRW = % change in total assets, LQD = Loans and advances to Total deposits, LEV = Debt to Assets, FSZ = Logarithm of total assets, FGE = Logarithm of the age of the bank since date of incorporation. * indicate 5% significant levels.

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Dividend per share has a mean score of 36.35%. This shows the average value of dividend per share of the banks has a minimum and maximum values of 0 and 2 respectively. The 0.4467 value of standard deviation implies that dividend per share among the banks is diverse. Firm book value shows a mean value of 1.1452 and 1.4645 standard deviation. The minimum score is -4.7404 with a maximum of 7.8981. This shows that most banks are undervalued on the stock exchange since a lot of them operate with their book values being more than their market values. Growth has a mean score of 0.4351. This implies that the DMBs have an average of 44% which shows high level of investment opportunities with a minimum of -0.3724 and maximum of 4.4295. The 0.6198 standard deviation signifies a substantial level of dispersal of growth opportunities of the banks during the period of the study.

Table 1 also discloses that liquidity displays a total mean score of 1.3495 along side 0.2645 of 84.4240 minimum and maximum values. The 6.9994 standard deviation signifies that banks hold very high liquidity positions, i.e. at a diverse range. On average, leverage has a mean ratio of 0.1585. This indicates that the average value of 15.85% represents the leverage used by the banks. The standard deviation of 0.0981 signifies the level of dispersion on leverage

among the banks with the minimum value being -0.3187 and the maximum value being 0.6349. In the same vein, firm size shows a mean value of 8.9304 and 0.4135 standard deviation indicates a significant level of dispersion among the DMBs in Nigeria. This is also confirmed by the minimum score of 8.0278 and maximum score of 9.9809. Finally, firm age with mean score of 1.4782, and 0.3642 standard deviation suggested a moderate level of distribution in age within the study period.

The correlation matrix of the study variables is presented in Table 2. The table shows the relationship between all explanatory variables individually and the relationship between all the independent variables themselves. This gives an insight into the magnitude of the pairs of the independent variables.

Furthermore, Table 2 indicates Dividend per share has a relatively weak positive relationship with share price because as the former increases, share price also increases. The correlation coefficients between firm book value and share price indicate a weak negative relationship. Firm growth and share price have weak negative relationship because when the latter increases, growth decreases for each of the three proxies. Regarding the liquidity of the firms, there is indication that a decrease in liquidity leads to the same percentage

Table 2. The Correlation Matrix

Variables	SVG	DPS	FBV	GRW	LQD	LEV	FSZ	FGE
SVG	1.0000							
DPS	0.3217	1.0000						
FBV	-0.3448	-0.0274	1.0000					
GRW	-0.0923	-0.0961	-0.1401	1.0000				
LQD	-0.0628	-0.0455	0.0349	-0.4751	1.0000			
LEV	0.0525	0.2127	0.2010	-0.4744	-0.0586	1.0000		
FSZ	0.0648	0.5118	0.4463	-0.0262	-0.0311	0.1264	1.0000	
FGE	0.1444	0.0061	-0.0208	0.0898	-0.0485	-0.0560	0.2141	1.0000

SVG=Simple average share price; DPS_{it} = Dividend per share, FBV = Firm book value, GRW = % change in total assets, LQD = Loans and advances to Total deposits, LEV = Debt to Assets, FSZ = Logarithm of total assets, FGE = Logarithm of the age of the bank since date of incorporation. * indicate 5% significant levels.

decrease in share price proxies respectively. Going by this, as leverage increases, share price will increase due to a weak positive relationship. In the same vein, there exists a relatively weak positive relationship between firm age and share price. Finally, the control variable, firm age has a weak positive relationship with share price. The relationships between explanatory variables are more diverse. Dividend per share has weak negative relationships with book value, growth and liquidity while depicting a positive relationship with leverage, size and age. The other positive relationships shown in Table 2 include book value to liquidity, leverage and size; growth to age; leverage to size; size to age. The other negative relationships include book value to growth, growth to liquidity, leverage and size; leverage, size and age; and leverage to age of the firm.

Table 3 shows the random effects robust regression results. The coefficients and the significance for each of the explanatory variables are also presented.

Table 3 reveals a significant positive relationship between dividend per share and share price. This means that a higher proportion of dividend per share leads to higher share price. This corroborates the findings of Uwuigbe (2011), Khan (2012), Ngunjiri (2010) and Pradhan (2003). This is attributed to the signalling effect of dividend, which explains payment of dividend frequently will enhance investors' confidence in the company. This, however contradicts the works of Adaramola (2012), Adesola & Okwong (2009) and Adefila et al. (2004) who found no correlation between dividend payment and share price. In the same vein, firm book value is negative, and statistically significant with share price. This shows that the lower the book values of shares of a bank, the higher the market prices of its shares.

Table 3 also discloses the positive effect of growth on share price and statistically significant. This means that an increase in growth will result in an upward change in share price. This can be seen in

Table 3. Regression Results: Random Effects Robust

Variable	Coefficient	p> t
DPS	2.8222	0.017*
FBV	-1.1129	0.000*
GRW	1.4219	0.007*
LQD	-0.0721	0.012*
LEV	-3.0922	0.388
FSZ	1.0839	0.382
FGE	2.2452	0.051
Constant	-2.9876	0.766
Prob > F	0.0000*	
R-Squared: Within	0.1318	
Between	0.7584	
Overall	0.2858	

SVG = Simple average share price, DPS_{it} = Dividend per share, FBV = Firm book value, GRW = % change in total assets, LQD = Loans and advances to Total deposits, LEV = Debt to Assets, FSZ = Logarithm of total assets, FGE = Logarithm of the age of the bank since date of incorporation. * indicate 5% significant levels

the light that growth opportunities affect the share price as a positive change in total assets results in a positive change in turnover which thereby leads to share price increase. This result mirrors that of Duffee (1995). Firm liquidity was found to have a negative and significant effect on share prices. This means that an increase in liquidity ratio will bring about decrease of units in share price. As shown theoretically and empirically by Amihud et al. (2005), liquidity has wide-ranging effects on financial markets. The more liquid the assets of a firm are, the lower its ability to improve the bottom-line, which impacts its market value in no small measure (Asness et al., 2000; Mohammed, 2017).

On the other hand, leverage shows negative and insignificant relationship with the dependent variable while the regression result of firm size shows the first and third models with a negative relationship with share price. Firm size was proxied by natural logarithm of total assets; as such it can be inferred from the result firm size is positive and insignificant. Finally, the age of the firm has a positive insignificant relationship with share price. It is vivid from the result that as a firm grows older, its share price will increase. Thus, it is evident among Nigerian deposit money banks that the older the firm, the higher its share price.

The regression model possesses an overall R-squared value of 0.2858 at 5% level of significance as shown in table 3. This implies that the variables used account for 28.6% variations in the share price of listed DMBs in Nigeria. The remaining 71.4% change in share price is caused by other variables not included in the model. This indicates that the model is fit and the variables used are adequate. In other words, the findings of this study can be relied upon.

Results arrived at from this research work provide important insight to stakeholders in Nigeria.

Given that higher dividends increase shareholders' wealth, investors should seek out such companies since both asset risk and market value tend to increase in the case of such firms.

Since the mean value of the book-to-market ratios of deposit money banks is greater than 1 (one), this shows that firms in this sector are mostly valued adequately. This could explain why there is a negative relationship between this variable and share price, or vice versa. Thus, the public should make wise investment decisions while pursuing wealth maximisation.

Since deposit money banks were seen to have a mean liquidity ratio higher than 1, making total deposits more than adequate in covering total loans, and with the regression results showing that a rise in asset liquidity makes market value to increase, management should maintain a healthy ratio at all times.

Increasing firm growth through asset expansion is quite crucial. Bank management, through consolidation and acquisition exercises, have ensured that the increase in their asset-base has coincided with market value escalation. Therefore, this enabling practice should be continued.

The mean leverage ratio of 15.9% calculated in this study does not comply adequately with the prudential guidelines by the Central Bank of Nigeria. It is thus recommended that a more incisive study should be carried out by firms to investigate the compliance of each to the provisions.

As pertaining to the age of the firm, it can be deduced that older banks tend to have higher stock market values due to the stabilising nature of consolidation and corporate restructuring activities peculiar to the sector. Thus, emphasis should be on consolidation of both internal and external

operations with such banks in order to maximize shareholder's wealth.

Management of smaller-sized banks should be aware of the fact that since larger-sized banks have a higher propensity of commanding higher share prices, they should focus on how to consolidate their operations in order to maximize shareholders' wealth.

Conclusion

This study was embarked on to investigate the impact of firm attributes (particularly firm dividend policy, book value, growth, liquidity, leverage, age and firm size) on share prices of listed Deposit Money Banks in Nigeria. The study employed ex post facto research design. The population of the study is 15 listed DMBs out of which 13 were sampled over an eleven-year period (2006 – 2016) resulting in 143 total observations. Ordinary Least Squares were used to test all the hypotheses of the study, using STATA software version 14. The study finds four firms' attributes (dividend ratios, book value, growth and liquidity) to have statistically significant effect on share prices. Finally, the study is limited to Deposit Money Banks in Nigeria and the ratios used are based on historical data.

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