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The Influence Of Debt Financing On Corporate Profitability Of Deposit Money Banks Quoted On The Nigerian Stock Exchange

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Abstract: It is of special significance to analyze the corporate financial performance of firms because of managers attempt to maintain company's stability and expansion. This study examines the possible association of debt financing as factor assumed to influence corporate profitability of deposit money banks quoted on the Nigerian stock exchange. This study employs a correlational research design using a cross-sectional panel data of ten years from 2005 to 2014 with the objective of examining the influence of independent variables such as financial leverage, proxied by debt to total equity and capital structure, proxied by long term debt to total asset on the dependent variable such as corporate profitability, proxied by ROE and ROA. Populations of the study are the fifteen deposit money banks quoted on the Nigerian stock exchange as at 2015. The study therefore utilised Yamane's sampling technique to arrive at five banks which are arbitrarily selected thereby giving a fair representation of the entire population. Multiple regression is used with the aid of statistical packages for social science (SPSS) to determine and analyze the influence of independent variables on the dependent variable and the nature of relationship that exist among the variables. The study finds positive but insignificant influence of debt financing (dte and ltdta) on corporate profitability (ROE) and insignificantly negative influence on corporate profitability (ROA). The study therefore recommends that profitable firms depends more on debt financing and so, more attention be paid to the source of finance particularly, when roe is used as a proxy.
Keywords: corporate, profitability, influence, financial leverage, capital structure, debt financing.

Introduction

One of the various sources of financing assets of a company is by increasing the creditor's claim through borrowing. Leverage is viewed as a result of events that determine a company's source of financing to run the business. Khalid, (2012). Financial leverage is the extent to which financial resources from borrowing (debt financing) is used to increase profit and is proxied by debt to equity and long term debt to total asset. Understanding the elements that can influence company financial performance is an important objective for the management of companies so that factors with negative influence can be removed and the robust variables can be strengthened. Corporate financial performance can be influenced by a number of variables among which is debt financing.

Several studies find that debt financing is one of the top most factors among others that can affect the firm's profitability. The theory of debt financing is one of the most important financial topics in corporate finance and various studies used this theory to highlight the significance of debt financing. Patel, (2014). Financing decision is considered as one of the most significant decision taken by managers of companies as it has impact on corporate financial performance.

A firm's capital structure is referred to as the combination of debts and equity used in financing company's assets. Jensen and Meckling,(1976) rightly pointed out that financial performance of the leveraged firms may decrease due to conflicts between shareholders and debt holders. Cheng,(2009) found a significant negative relationship between debt financing and performance while other studies support a positive relationship between the use of debt and firm's profit. If a firm can perform financially by obtaining high profit through debt,

obtaining debt to finance the operation of firm is desirable as this will result to higher return to shareholders. The use of high level of debt in the capital structure results to an increase or decrease in the return on shareholders capital. Return on shareholders capital implies the gain in return for the capital the shareholders would have offered to a firm. (Matarirano, 2007)

Elaborating and expounding on the role of debt financing in firm's performance is one of the primary objectives of contemporary researches for more than five decades. Modigliani and Miller, (1958). The introduction of debt financing changes the market for shares in a very fundamental way because firms may have different proportions of debt in their capital structure, shares of different companies even in the same class can give rise to different probability distribution of returns. Modigliani and Miller, (1958). Researchers analyse the debt ratios and try to determine whether there is an optimal debt ratio. Optimal debt ratio is referred to as the one that minimizes the cost of capital for the firm, while maximizing firm profitability (Kebewar, 2012).

Studies on the effect of debt financing on return have generated inconsistent result ranging from those supporting a positive relationship to those supporting a negative relationship. Muchugia, (2013). Some of the studies failed to show any effect of debt on returns. Their findings revealed that capital structure does not convey any relationship with the corporate profitability of firms.

Lack of adequate research work on debt financing and the inconsistencies in the findings of the previous researchers coupled with the fact that Nigerian commercial banks are expected to be involved in expansion program which may require a huge sum of capital that may be outsourced is a source of instigation to research in this field.

Objective of the Study

The main objective of the study is to investigative the level of influence of debt financing on corporate profitability of deposit money banks listed on Nigerian Stock Exchange.

The specific objectives of the study are to;

(a) Examine the extent of influence of debt financing on profitability (ROE) of listed deposit money banks in Nigeria.

(b) Examine the extent of influence of debt financing on profitability (ROA) of listed deposit money banks in Nigeria.

The study therefore formulated the following hypotheses;

H_{O1}; Debt Financing (DTE and LTDTA) insignificantly influences corporate profitability (ROE) of listed deposit money banks in Nigeria.

H_{O2}; Debt Financing (DTE and LTDTA) insignificantly influences corporate profitability (ROA) of listed deposit money banks in Nigeria.

Literature Review

Conceptual framework

According to (Khalil, 2014) in (Muchugia, 2013) Profitability is the potential of a venture to be financially successful which may be assessed before entering into a business and used to analyse a venture that is in operation presently.Companies are financed either by debt or by equity or the combination of the two and these are referred to as capital structure of the firm, the decision of which is the most important financial decision taken by firm as it impact on corporate profitability. Debt financing is the source of obtaining finance through borrowing for the operation of firm. Business runs its day to day operations either through debt or equity or both, thereby representing the capital structure of a firm. Equity is the investors cash paid into the firm thereby making the investors business owners.

Debt financing implies the cash borrowed from a lender on a fixed interest rate with predetermined maturity date. The inherent nature of debt financing is that the borrower must repay the money including all other charges and interest fee due on the transaction. If the borrower fails to pay back as at when due, the lender can collect proceedings while as the process can be very uncomfortable for the company which, in consequence, may loose its nature as a going concern.

According to Tilore, (2006) in Muchugia, (2013) debt financing assumes different forms. The nature of debt is that the borrower must repay the loan together with interest and other charges. Long- term loan has a payback period usually between one to five years, normally secured by collateral and guaranteed by the borrower. Depending on lending institutions policies and financial status, the rate and terms of this loan differ

greatly. According to Muchugia, (2013) leverage is a financing strategy designed to increase the rate of return on owners investment by generating a greater return on borrowed funds than the cost of using the funds.

Theoretical framework

According to Muchugia, (2013) there are three essential theories highlighting the influence of debt on corporate profitability. These are; trade-off theory, Pecking order theory and Market timing theory.

Trade-off theory is an idea that a company chooses how much debt finance and equity finance to use by balancing the cost and benefits. According to Charles and Peter, (2015) firms balance the tax benefit of debt against the deadweight cost of bankruptcy. Trade-off theory state that it is advantageous financing with debt and enjoy the tax benefit of debt and that there is a cost of financing with debt which is the bankruptcy cost of debt. The agency perspective, according to Charles and Peter (2015), is that, debt disciplines managers and mitigates agency problems of free cash flow since debt must be repaid to avoid bankruptcy.

Pecking order theory; This theory states that management prefers to firstly finance from retained earnings then from debt follows by convertible loans and lastly by using externally issued equity with bankruptcy cost, agency costs and information asymmetries playing little role in affecting the capital structure policy (Charles and Peter, 2015). In other words, the theory states that companies prioritise their sources of financing ranging from internal financing to equity. This is in accordance with the law of least effort, for a company to prefer raising equity as a financing means of last resort.

Market Timing Theory; This theory stipulates that managers issue securities depending on the change of cost over time with respect to equity and debt and the decision to issue securities have a long term effect on capital structure because the observed capital structure at any particular date is the outcome of prior decision to issue and so companies prefer to issue equity when the equity cost is low and prefer to issue debt when equity cost is high (Kwast and Rose, 1982)

Agency Theory; According to (Charles and peter, 2015) there is an agency theory in this issue of debt financing which postulates that the day to day operations of the firms is carried out by managers as agents who have been engaged by the owners of firms (principals) who are also known as shareholders. The managers should be morally guided and provide the right information about the operation or financial position of the firm as lack of transparency leads to liquidation of firms. Agents failure to uphold morals and divert finances for personal benefit without consideration of the survival of the firm will leads to liquidation. The owner should therefore estimate the financial position of the business with certainty to ensure that the company grows.

The theory of capital structure by Modigliani and Miller, 1963 according to Matarirano, (2007), the capital structure that a firm chooses does not affect its value whether the firm uses more of debt than equity or more of equity than debt except for the deductibility of interest payments when calculating taxable income.

Effect of Debt Financing on Corporate Profitability

Empirical Literature Review

There are series of theoretical and empirical studies carried out to explore the impact of debt financing on the corporate financial performance. These studies were conducted on debt financing that indicate either positive or negative relationship on profitability of companies. Cheng, (2009) found significantly negative relationship between debt financing and operating performance of listed companies in Taiwan. Fama and French (1998) found that debt financing does not have a positive impact on the financial performance because there is no tax benefit of debt due to agency problems after controlling for earning, investment, research and development, and dividend. Abor, (2005) conducted research on the effect of debt on firms in Ghana which indicated a significantly positive relationship between total debt and total assets and return on equity. The result showed a positive leverage. According to Berkivitch and Israel, (1996) in Matarirano, (2007), a firms debt level and its value will be positively related especially when shareholders have absolute control over the business of the firm and it will be negatively related when debt holders have the power to influence the course of the business. Gleason et al, (2000) in their research carried out on interrelationship between culture, capital structure, and performance examine the relationship between performance and leverage by using return on asset. The finding indicates that total debt has a significantly negative influence on performance. Mahakud and Mishra, (2009) in their studies conducted in India found that corporate debt has a negative impact on the firms financial performance because of high interest burden and agency costs. Hammes, (2003) examine the relationship between capital structure and performance by comparing polish and Hungerian firms to a large sample of firms in industrialized countries using panel data analysis to investigate the relationship between total

debt and performance as well as between different sources of debt and firm's performance measured by profitability and finds significant negative effect for most countries. According to Baker, (1973), the large amount of leverage implies greater risk and tends to raise industry profit rates. Damodaran, (1999) also examined the impact of debt financing on the profitability of 50 SMEs in South Africa for a period ranging from 1999 to 2006 using regression model and panel data inputted in SPSS package and finds empirical result that debt financing have a significant positive impact on profitability.

Methodology

The study employs correlational research design using cross-sectional panel data of ten years (2005-2014) to explore the effect of independent variables on the dependent variable, and the nature of the relationship that exist among the variables. The population of the study is made up of 15 deposit money banks quoted on the Nigerian stock exchange. The sampled banks consist of five namely, Eco Bank Plc, FBN Holding Plc, UBA Plc, Union Bank Plc and Zenith Bank Nig. Plc using Yamane's sampling technique of ***$n = N/3+N(e)^2$ at 5% margin of error***. The study utilizes the secondary data from annual reports and accounts of the sampled banks for analysis. The multiple regression models are used with the aid of statistical package for social sciences (SPSS) to determine and analyze the influence of debt financing as an independent variables proxied by debt to total equity and long-term debt to total asset on corporate profitability as dependent variable proxied by ROA and ROE.

Thus, the models for the regression are:

ROE=f(dte, & ltdta)

ROA=f(dte, & ltdta)

Mathematically,

$ROE= b_0+ \beta_{1dte} + \beta_{2ltdta} + \mu$

$ROA= b_0+ \beta_{1dte} + \beta_{2ltdta} + \mu$

Results and Discussions

Ho_1; Debt to Equity and Long-term Debt to total Asset insignificantly influences corporate profitability (ROE) of deposit money banks quoted on the Nigerian stock exchange.

TABLE A1 SUMMARY OF REGRESSION RESULT AND OTHER STATISTICS .

Model Summary

Mode	R	R Square	Adjusted R square	Std error of The estimate	Durbin-Watson
1	.805	.647	.547	.09276	1.40

a. Predictors; (Constant) DTE, LTDTA
b. Dependent Variable; ROE

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	.111	2	.055	6.427	.026
Residual	.060	7	.009		
Total	.171	9			

a. Predictors; (Constant) DTE, LTDTA
b. Dependent Variable; ROE

Coefficients

Mode	Unstandardised Coefficients		Standardised Coefficients	T	sig
	B	Std error	□ eta		
1. (Constant)	.101	.030		3.317	.013
DTE	.136	.049	.989	2.774	.028

LTDTA	-.227	.312	-.259	-.726	.491

Dependent Variable; ROE **SOURCE; SPSS VERSION 16.0**

The regression line for bank profitability (ROE) = (.101+ $.136_{dte}$ -$.227_{ltdta)}$ indicates that profitability (ROE) will increase by .136% for every 1% increase in dte and decrease by -.227% for every 1% increase in ltdta. The significant values or P-values of .028 are less than than the t-value of .05. We therefore accept the alternative hypothesis and reject the null hypothesis that debt to equity significantly positively influences corporate profitability. On the other hand,the p- value of .491 is greater than the t- value of 0.05. We, therefore, accept Null Hypothesis and reject Alternative hypothesis that Long-term Debt to total Asset insignificantly negatively influences corporate profitability (ROE) of deposit money banks quoted on the Nigerian stock exchange.

The correlation coefficient (r) of .805 shows a strong relationship and the coefficient of determination (r^2) of .647 indicates that about 65% of variation in corporate profitability(ROE) can be explained by debt financing(dte and ltdta) and the remaining 35% can be explained by other variables not captured in the model.

H_{O2}; Debt Financing (dte and ltdta) insignificantly influences profitability (ROA) of deposit money banks listed on the Nigerian Stock Exchange.

TABLE A2 SUMMARY OF REGRESSION RESULT AND OTHER STATISTICS .

Model Summary

Mode	R	R Square	Adjusted R square	Std error of The estimate	Durbin-Watson
1	.873	.763	.695	.08686	2.569

a. Predictors; (Constant) DTE, LTDTA
b. Dependent Variable; ROA

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	.170	2	.085	11.250	.007
Residual	.053	7	.008		
Total	.223	9			

a. Predictors; (Constant) DTE, LTDTA
b. Dependent Variable; ROA

Coefficients

Mode	Unstandardised Coefficients		Standardised Coefficients	T	sig
	B	Std error	□ eta		
1. (Constant)	-.024	.164		-.144	.889
DTE	-.024	.011	-.668	-2.271	.057
LTDTA	.374	.448	.245	.834	.432

Dependent Variable; ROA **SOURCE; SPSS VERSION 16.0**

The regression line for bank profitability (ROA) = (-.024 - $.024_{dte}$ $_{+}$ $.374_{ltdta)}$ indicates that profitability (ROA) will decrease by -.024% for every 1% increase in dte and increase by .374% for every 1% increase in ltdta, . The significant values or P-values of .057 and .432 in the two respective variables are greater than the t-value of 0.05. We, therefore, accept Null Hypothesis and reject Alternative hypothesis that debt financing (Debt to Equity) insignificantly negatively influences corporate profitability (ROA) and (Long-term Debt to total Asset) insignificantly positively influences corporate profitability (ROA) of deposit money banks quoted on the Nigerian stock exchange.

The correlation coefficient (r) of .873 shows a strong relationship and the coefficient of determination (r^2) of .763 indicates that about 76% of variation in corporate profitability(ROA) can be explained by debt financing (dte and ltdta) and the remaining 24% can be explained by other variables not captured in the model.

Conclusions

Conclusions were made from the findings of the study that debt financing insignificantly positively influences profitability proxied by ROE. This implies that profitability ROE increases with an increase in debt financing and decreases with decreases in debt financing. The finding is consistent with that of Abor, 2005, Berkovitch and Israel, 1996, Damodaran, 1999 and others. On the other hand, the reverse is the case when profitability is proxied by ROA which is insignificantly negatively influenced by debt financing. This is consistent with the findings of Cheng, 2009, Fama and French, 1998, gleason et al, 2000, Mahakud and Mishra, 2009, Hammes, 2003 and others.

Recommendations

Based on the findings of the study it is recommended that attention should be paid to debt financing as it has positive impact on profitability proxied by ROE. Considering the less cost incurred in obtaining short term loans than long term loans, Nigerian commercial banks should opt for short term loans resulting in increase performance as increasing short term debt with relatively low interest rate will lead to an increase in profitability which is better in performance than taking long term debt.

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