



Solvency and Employee Efficiency of Listed Conglomerate Firms in Nigeria

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Received; 09 November 2016 Accepted; 15 December 2016; © The author(s) 2016. Published with open access at www.questjournals.org

ABSTRACT: The study investigates how long term solvency impacts employee efficiency of listed conglomerate firms in Nigeria for a 10-year period from 2004 to 2013. The study adopts an ex-post facto research design using a multiple regression model. Panel data collected from published financial reports from a sample of five listed conglomerate firms in Nigeria were analysed using descriptive statistics and generalised least square techniques. The study found that long-term debts to total assets and age has positive significant impact while shareholder's fund to tangible assets, total debts to total assets and size has negative and significant impact on employee efficiency. The study concludes that long term solvency impacted positively on employee efficiency. Consequently, it was recommended that the solvency of listed conglomerate could be improved by exploring the maximum benefits of debt and equity financing and less dependence on debts financing.

Keywords: Employee Efficiency, Long Term Solvency, Long-Term Debts, Revenue per Employee, Shareholder's Fund, Tangible Assets.

I. INTRODUCTION

Long term solvency of a company is an important component of financing decision that is concerned with a firms' ability to meet her debts obligations as at when due. It is capable of influencing both management and organizational efficiency of a company toward providing return to debt providers (interest) and return to equity providers (dividend) as at when due. The performances of firms are aimed at meeting the interest of various stakeholders through effective and efficient operating activities such as employee efficiency. The solvency of a firm can take many forms, but the most realistic is that which combines both a certain percentage of debt and equity in the financing structure. It has been argued that solvent firms were less likely to depend on debt in the financing decisions than insolvent ones and that firms with high growth potentials have high debt to equity ratios (Harris & Raviv, 1991; Krishnan & Moyer, 1997).

There are benefits in debts financing which have an influence in the long term solvency of a firm. The pivot among the benefits is the tax-deductibility of interest charges which results in lower cost of capital. With this, should a growth potentials firm go on increasing the debt proportion in its solvency decisions? If every increase in debt financing were going to increase the wealth of the shareholders, then every firm would have been 100% debt financed. However, there are certain costs associated with debt financing. So between the two extremes of whole equity financing and whole debt financing, a particular debt-equity mix is to be decided. Concerted efforts must be made by firms to achieve the best approximation to the optimal leverages to attain its long term solvency and stability.

Long term solvency decisions of conglomerate firms become paramount for meeting firm's obligations as at when due, supported by her employee's efficiency. This is because when employees are not efficient in meeting required output coupled with conglomerate firms' inability to meet their finance obligations; it may affect the company's supplies. Also, it may impact negatively on turnover, which affects income to cover interest and dividend payments. Hence, in order to avoid the risk of defaults and run into insolvency, firms need to be careful in there long term solvency decisions to insure against financial and business risks. It is in line with the above that this study tends to investigate the impact of long term solvency on the employees' efficiency of listed conglomerate companies in Nigeria.

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1.1 Statement of the Problem

The main objective of raising capital is to finance investment, which in turn crystallized into good operational efficiency. This capital is usually paid back by management and employee efficiency depends on the evaluation measures. High equity to debt decision may affect financial performance, as debt is cheaper than equity and high debt to equity may affect operating performance as a result of defaults in interest and dividend payments. Debt financing could affect company's performance because companies will usually agree to fixed repayments for a specific period. These repayments occur regardless of the company's performance. Thus, long term solvency is fundamentally a financing decision problem, which becomes even more difficult when firms operate in unstable economy like the case of Nigeria.

It could be argued that when employees of a company are not efficient, it would affect productivity coupled with creditors not satisfied by a company's solvency position. This would affect turnover negatively. Then, how would a manager record good financial performance when faced with this situation? These necessitate the choice of employees' efficiency as against financial performance by some studies such as Saeedi & Mahmoodi (2011) and Min (2009).

Previous studies such as Gurbachan and Sumesh (2014), Damijan (2013), Sandeep (2012) and Arti (2007) concentrated on solvency and operating performance of firms in India. While in Nigeria, there is paucity of study in this area as many literatures such as Muritala (2012) focused on firm's capital structure and financial performance in Nigeria. This study seeks to add to literature by studying the impact of long term solvency on employees' efficiency of conglomerate companies listed in Nigerian because of the nature of their business activities. The study on operating activities of firms is important because growth of a firm is as a result of employee's efficiency as well as efficacy of management in revenue generation. Similarly, when employees are not efficient, management would not be able to adequately utilise the firms' resources; and revenue of the firm may be unstable hence, may affect the going concern of the company.

1.2 Objectives of the Study

This paper assesses the impact of long term solvency on employees' efficiency of quoted conglomerate companies in Nigeria. Specific objectives include:

- i.** To investigate the impact of total debts to shareholders funds on employees' efficiency of quoted conglomerate companies in Nigeria;
- ii.** To determine the impact of long term debt to total asset on employees' efficiency of quoted conglomerate companies in Nigeria; and
- iii.** To assess the impact of shareholders' funds to tangible assets on employee's efficiency of quoted conglomerate companies in Nigeria.

1.3 Statement of Hypotheses

In line with the objectives of the study, the research seeks to test the null hypotheses that:

- i.** Total debt to shareholders' fund has no impact on employees' efficiency.
- ii.** Long term debt to total asset has no impact on employees' efficiency.
- iii.** Shareholders' fund to tangible assets has no impact on employees' efficiency.

II. LITERATURE REVIEW

This section presents the theoretical, conceptual framework and empirical reviews on the subject matter.

2.1 Theoretical Framework

This study is anchored on stakeholders' theory. In the traditional view of a company - the shareholder view, only the owners or shareholders (stockholders) of the company are important and the company has a binding fiduciary duty to put their needs first. Stakeholders' theory instead argues that other parties such as employees, customers, suppliers, financiers, governmental bodies, trade unions and competitors count as stakeholders – their status being derived from their capacity to affect the firm and its shareholders. Their interest should be considered paramount (Freeman, 1984).

The stakeholder theory is a theory of organizational management and business ethics that addresses morals and values in managing an organization. Asset management constituted the duty of management; as a result, management would be interested in meeting this to enhance its performance, while employee would be interested in increasing revenue generation of his employer to facilitate job satisfaction. Employees' efficiency would lead to increased turnover and meeting the interest of stakeholders. As a result, creditors, debts providers and equity providers would be interested in financing such a firm, which in turn make up components of a firm's long term solvency.

2.2 The Concept of Employee Efficiency

Employees' efficiency is deemed to be the fulfilment of employees' obligation, in a manner that releases the firm from all liabilities. Employees' efficiency measures show firms' employees are able to convert inputs into useful outputs within standard time (Damson & Maguire 2003). Employees' efficiency is measured by sales revenue per employee ratio. This ratio serves as a gauge of personnel productivity that simply measures the amount of revenue generated per employee (Lewis, 1972). Companies that operate on labour intensive could face the challenge of poor productivity when employee's earned wages or salaries are defaulted. As a result, financial decision would be made in order to be efficient in operating expenses, which is one of the key determinants of a firm's productivity (Sandeep, 2012).

2.3 The Concept of Long Term Solvency

According to Ranjit (2012), long term solvency implies the capacity of a firm to pay off the claims of debenture holders, preference shareholders and other long term creditors. Ranjit (2012) provides that solvency is a measure of a company's ability to service debts, expressed as a percentage of total debt to capital owned. A rule of thumb of high solvency ratio indicates a healthy company, while a low ratio indicates the opposite. A low solvency ratio further indicates the likelihood of default. Different industries have different standards as to what qualifies as an acceptable solvency ratio but in general, a ratio of 20% or higher is considered healthy. Potential lenders usually take the solvency ratio into account when considering granting further loans (Akinsulere, 2009).

2.4 Review of Empirical Studies

Arti (2007) evaluated firm level performance using factors typical to the Business Process Outsourcing (BPO) industry in India from 2003 to 2006. The study used Cross-sectional data and employs OLS estimation by using a two stage least square technique. The study found that funding from venture capitalist have a positive influence on revenue per employee and that self-financing have a negative influence on performance. This is in line with Arora and Asundi (1999) that believed firm's performance must be reflected in its economic outcomes and hence, they relate firm's performance to its revenue and employee strength. Riahi (1999) also suggested that performance of large scale enterprise in India is best indicated by the revenue per full-time employee (FTE). The period covered by the study is considered insufficient to establish relationship among variables of the study. Also, the OLS model result could be misleading as there was no robustness test conducted for data. Brindadevi and Muthumoni (2014) studied long term solvency of private sector banks in India from 2005-2007. The study opined that the long-term financial soundness of any business can be judged by its long-term creditors by testing its ability to pay interest charges regularly and its ability to repay the principal as per schedule. They found that long term solvency decision influences the operations of private banks in India. This could be argued that long term solvency can equally be used to correlate with operating efficiency of firms as poor motivation or payments of employee rewards coupled with delay or inconsistency in payment of principal and interest of creditors as per schedule would directly affect the performance of firms in term of their sale revenue per employee.

Damijan (2013) explored the linkages between indicators of firms' financial health and their performance in Slovenia for 2002-2012. The study opined for financial health variables, the period of crisis is shown to have a negative impact on all dependent variables (except on labour productivity where the coefficient is insignificant). The extent of financial leverage and ability to service the outstanding debt are shown to inhibit firms' productivity growth (employee turnover). The study was conducted in Slovenia that has distinct features different with Nigeria firms. This result may be different with conglomerate firms in Nigeria.

Gleason, Mathur and Mathur (2000) opined that the choice of capital structure affects corporate performance. The study analysed data using the Ordinary Least Square regression method for 198 European Community retailers from 14 countries for the year 1994. The study established a negative relationship between capital structure and sales per employee. The study considered the year 1994 which could not show real impact capital structure on sales per employee and failure to carry out robustness test to validate their results.

Min (2009) studied the relative effects of debt and equity financing on the operating performance firms in Taiwan from 1995 to 2004. The results of the study shown that debt and equity finance have significantly negative consequence on operating performance. Hence, these findings suggest that it is dangerous for firms to rely or depend entirely on either debt or equity for raising capital but it is much safer and better to raise finance by both methods. This supports the findings of Krishnan and Moyer (1997) that there exist negative association between debt to equity and performance. Hence, confirming prior research findings that companies with high debt to equity ratios are usually perceived as being risky investments and possibly affecting wealth transfer from debt holders to shareholders. It could be agreed that it is dangerous for firms to rely or depend entirely on either debt or equity for raising capital. It is much safer and better to raise finance by both methods with each working

together. Because raising finance using both methods simultaneously, the advantages of one method would be offsetting the difficulties of the other and vice versa.

Tatahi and Heshmati (2009) examined financial and operating performance of privatized firms in Sweden from 1989-2007. Efficiency is measured by sales and profit per employee. Their study concludes that Sales per employee decreased within the period before and after privatization. They opined that the increased costs of debt will result in the firms adjusting their capital structures via privatisation. The study finds out a positive and significant impact of privatization on sales per employee. The study period provide performance before global economic meltdown which could change after the crisis.

Sandeep (2012) examined the link between operational efficiency and solvency in Food Processing Industry in India from 2006 to 2010. The study used Total Debt/Equity and Interest Cover to proxy solvency and Asset Turnover, noncurrent assets to sales, Receivable days, Inventory Days and Payable days to proxy Operational Efficiency. The study adopts descriptive research design and convenient sampling technique to choose a sample of five companies. The study concluded that operational efficiency does not necessarily depend on long term solvency. From the above, the study focuses on operating cycle to measure operating efficiency. It could be harmonised that proxy for operational efficiency to include revenue per employee and total debt to shareholders funds as component of long term solvency.

The review of empirical studies worldwide in attempt to uncover the impact of solvency on corporate performance had shown a limited period of study, ignoring pre and post global economic meltdown effects of solvency of firms and its employees' efficiency. There is paucity of study in Nigeria that focused particularly on solvency and performance. Similarly, most of these studies have adopted a panel data methodology and correlation and regression analyses using OLS estimation in their models ignoring the fixed and temporary effects distinct in individual firms capable of influencing firms' performance.

III. METHODOLOGY

This study adopted correlation and ex-post facto research designs. The population of this study comprised of the six (6) conglomerate companies quoted on the floor of the Nigerian Stock Exchange as at 31st December, 2013. It is contained on Table 1.

Table I Listed Conglomerate Firms in Nigeria as at December 2013

S/N	Firms	Year Of Listing
1	A.G Leventis Nig. Plc	1978
2	Challerams Plc	1977
3	John Holt Plc	1974
4	Scoa Nig. Plc	1977
5	Uac Nig. Plc	1974
6	Transcorp Nig. Plc	2006

Source: Nigeria Stock Exchange Facts Book 2013.

The year of listing, complete financial reports for the period of study were used as filters on the population. TRANSCORP Nigeria PLC quoted in 2006 does not have complete data for the period under study was filtered resulting in a sample size of five conglomerates quoted on the Nigeria stock exchange.

3.1 Sources of Data Collection and Variable Definition

The source of data for this paper is the published annual reports of the conglomerates with the Nigeria Stock Exchange. The data that was generated from the conglomerate annual reports are the book values of total debt, shareholders fund, fixed interest capital, equity and reserves, total tangible assets to proxy long term solvency and the values of net revenue and number of employees for employees' efficiency. Table 2 contains the definition of the variables of the study.

Table II Variable Definition and Measurement

Dependent Variable	Description	Measurement
REVNOE(Revenue per Employee)	REVNOE measures sales revenue contributed by each employee of a firm as defined by Lewis 1972, Davison and Maguire 2003	Net Sales Revenue divided by total numbers of employee
Independent Variables:		
TDSHF= Total Debt to Shareholders Funds	TD/SHF ratio measures how geared a firm is as used by Saeedi and Mahmoodi (2011).	Total Debt divided by shareholders funds ie equity plus reserves.
LTDTA = Fixed Interest Capital To	LTD/TAMEasures the ratio of	Long terms debts divided by

Total Asset	long term debt on total assets of firm as used by Gurbachan and Sumesh (2014).	total assets
SHFTGA= Shareholders Funds to Tangible Asset	SHF/Total measures the portion of Tangible Assets secured by shareholders funds as used by Akinsulere (2009), Gurbachan and Sumesh (2014)	Shareholders' funds (equity plus reserves) divided by tangible assets (total assets less goodwill)
Control Variables		
SIZE	Size of a firm measure in terms of its total assets as used by Ahmad, Z.(2012).	Log of total asset
AGE	Age measure as Number of years from the date the firm was listed on the NSE as used by Rashmi and Uday (2003)	Number of years from the date the firm was listed on the NSE

3.2 Model Specification

The paper uses multiple correlation and regression technique for panel data gathered to analyse the separate and combine effects of long term solvency variables on employees' efficiency of listed conglomerate firms in Nigeria. The model was estimated using Generalized Least Squares (GLS) and control variables were introduced to control for both individual company's temporal effects which cannot be observed by pure cross sectional or pure time series data, adjust for fixed random effect of Hausmann test was used in deciding between fixed and random effect estimates of the coefficient.

The relationship between the dependent and independent variables were analysed using the below model:

$$Y_{it} = \alpha_0 + \beta_1 X_{it} + \beta_2 C_{it} + \varepsilon_{it} \text{----- (1)}$$

Where Y_{it} = Dependent Variable of firm i for time period t;

α_0 = Constant;

β_1 = Coefficient of explanatory variables;

X_{it} = Explanatory variables of firm i for time period t;

β_2 = Coefficient of control variables;

C_{it} = Control variables of firm i for time period t; and

ε_{it} = Error term of firm i for time period t.

From equation 1 above, the following models were developed:

$$Y_{it} = f(REVNOE) \text{----- (2)}$$

$$X_{it} = f(TDSHF + LTDTA + SHFTGA) \text{----- (3)}$$

$$C_{it} = f(SIZE + AGE) \text{----- (4)}$$

Substituting models 2, 3, and 4 into model 1, the following models are formulated.

$$REVNOE_{it} = \alpha_0 + \beta_1 TDSHF_{it} + \beta_2 LTDTA_{it} + \beta_3 SHFDTA_{it} + \beta_4 SIZE_{it} + \beta_5 AGE_{it} + \varepsilon_{it} \text{--- (5)}$$

For the results of the paper to be more reliable, STATA is used in carrying out normality and robustness tests like Heteroskedasticity, Hausmann specification test and multicollinearity test. Theoretically, there is an expectation of TDSHF, LTDTA, SHFTGA, SIZE and AGE should have significant impact on revenue per employee, i.e. $\beta_1 < 0$, $\beta_2 < 0$, $\beta_3 < 0$, $\beta_4 > 0$, $\beta_5 > 0$.

IV. DATA ANALYSIS AND FINDINGS

This section presents the results and discussion of correlation and regression analysis. It presents the result of robustness tests for the study.

4.1. Descriptive Statistics

Table III Summary of Descriptive Statistics

Variables	Mean	Std.	Min	Max	Skewness	Kurtosis	N
REVNOE	6.9122	6.2814	0.29	30.39	1.82734	6.367622	50
TDSHF	3.0684	9.1579	0.31	66.05	6.69865	46.58645	50
LTDTA	0.0846	0.0631	0.01	0.28	1.22306	4.246939	50
SHFTGA	0.8412	0.4970	0.28	3.45	3.07848	16.51858	50
SIZE	5.2898	1.4780	3.47	7.36	0.22622	1.303128	50
AGE	32.50	3.3579	26	39	0.32669	2.206855	50

Source: STATA Output.

Table 3 shows the detail account of the descriptive statistics for the dependent and independent variables respectively REVNOE= Revenue per Employee, TDSHF= Total Debt to Shareholders Funds, LTDTA= Long Term Debt to Total Assets, SHFTGA= Shareholders' Fund to Tangible Assets, SIZE = Firm Size, AGE= Number of Years. The most prominent among the results in the descriptive statistics are the higher standard deviations of total debt to shareholders funds (9.16), firm Size (1.48) and age (3.36) relative to the standard deviations of other independent variables used in the model which ranges from 0.06 to 0.50. The high standard deviation of the total debt to shareholders funds, firms' size and age indicate that our sample firms are of varying size and maturity. This is further substantiated by their average values of 3.07, 5.29 and 32.50 respectively. Hence, this justifies the inclusion of size, number of years and total debt in the model.

Table 3 shows that on average, during the period of the study, the total debt to shareholder's funds, fixed interest debt to total assets and shareholder's funds to tangible assets have a mean value of 3.07, 0.10 and 0.84 respectively. These indicate that the conglomerate firms depends on debt than equity and shareholders fund are secured by tangible assets of the firms with the mean of 0.84 which made the short term creditors to invest more in the conglomerate firms while the fixed interest debt to total assets is the least signifying that investment in the firm is less risky as the firm do not depend on long term creditor. Among the independent variables, age has the highest mean of 32.5 and a standard deviation of 3.36 signifying sourcing for debt in listed conglomerate firm in Nigeria has fewer barriers over time. Finally, the skewness and kurtosis statistics reveal that the data obtained for all the variables including dependent and independents are not abnormal.

4.2 Correlation Matrix

Table IV Correlation Matrix of the sample observations.

REVNOE	TDSHF	LTDTA	SHFTGA	SIZE	AGE
REVNOE	1.0000				
TDSHF	-0.1432	1.0000			
LTDTA	0.3365	-0.1669	1.0000		
SHFTGA	-0.3837	-0.1379	-0.3019	1.0000	
SIZE	-0.1146	-0.1888	0.2116	0.0257	1.0000
AGE	0.7739	-0.1599	0.3702	-0.3877	-0.19121.0000

Source: Stata Output.

Table 4 indicates that revenue per employee is 34% and 77% positively correlated with long term debt to total assets and number of years, only shareholders' fund to tangible asset is negatively correlated with revenue per employee at 38% while total debt to equity and firms size have fairly negative relationship with revenue per employee. This signifies that shareholders' fund to tangible asset negatively related to revenue per employee while long term debt to total assets is positive and fairly related to revenue per employee, number of years is positively and significantly related to revenue per employee.

4.3 Test for Multi-Co-Linearity

The study conducted tests to check for multi-co-linearity among the independent variables. The result of the Variance Inflation Factor test is contained on Table 5.

Table V Result of Variance Inflation Factor (VIF) for Multi-co-linearity

Variable	VIF	1 / VIF
AGE	1.48	0.677763
LTDTA	1.34	0.748443
SHFTGA	1.30	0.768632
SIZE	1.20	0.833879
TDSHF	1.16	0.863664
Mean VIF	1.29	

Source: Stata Output.

Table 5 shows that the VIF were consistently less than ten and the tolerance values (1/VIF) are less than one indicating absence of multicollinearity among independent variables of the study. This means that the model for this study is fit.

4.4 Test for Heteroscedasticity

The result of heteroscedasticity is presented on Table 6 also contains Hausman fixed-random specification test as well as the Breusch and Pagan lagrangian multiplier test for random effects.

Table VI: Result of Hetttest, Hausman Specification and Random Effect Test (Depandant Variable REVNOE)

TEST	Statistic	p- value
Hetttest: Chi2	15.81	0.0001
Hausman: Chi2	21.22	0.0007
RandomEffect:Chi2	0.66	0.4183

Source: Stata Output.

Table shows a hetttest Chi2 of 15.81 at a 0.0001 significance level for fitted values of REVNOE. Therefore, it is concluded that there is presence of heteroscedasticity for fitted values of REVNOE. To this effect, the conduct of fixed and random effects was necessary using the Hausman fixed random specification test. The result of the specification test shows a Chi2 of 21.22 with significance level of 0.0007, suggested that the robust fixed-effect GLS regression is suitable for fitted values of REVNOE. Consequently, the Breusch and Pagan lagrangian multiplier test for random effects was conducted, resulting to a Chi2 of 0.66 at an insignificance level of 0.4183. This implies that the OLS regression not suitable for fitted values of REVNOE. Fixed effect GLS regression is used in favour of the random effect GLS regression.

4.5 Result of fixed Effect GLS Regression

The summary of fixed effect GLS regression for fitted values of

$REVNOE_{it} = \alpha_0 + \beta_1 TDSHF_{it} + \beta_2 LTDTA_{it} + \beta_3 SHFDTA_{it} + \beta_4 SIZE_{it} + \beta_5 AGE_{it} + \varepsilon_{it}$ are presented in table and used to test hypothesis formulated in this paper.

Table VII: Summary Of Regression Result

Variables	Coefficient	t			
CONST.	-45.32274 0.002	-3.39			
TDSHF	-0.014439 0.835	-0.21			
LTDTA	-23.16228 0.079	-1.80			
SHFTGA	-1.31446 0.351	-0.94			
SIZE			2.910353 0.468	0.73	
AGE			1.229209 0.001	3.42	
R ² Within					0.5909
R ² Between					0.0108
R ² Overall					0.2376
F. Stat.					11.55
F.Sig.					0.000

Source: Stata Output.

The R square within of 0.5909 which is the multiple coefficients of determination gives the proportion of the total variation in the dependent variable explained by the independent variable jointly. Hence, it signifies 59% of the total variation in revenue per employee of listed conglomerate firms in Nigeria is caused by their long term solvency mix of Total Debt to Shareholders Funds, Long Term Debt to Total Assets, Shareholders' Fund to Tangible Assets, Firm Size and Age while the remaining 42% are caused by other factor not captured in the study. This implies that for any changes in long term solvency decision of listed conglomerate firms in Nigeria, their revenue per employee will be affected directly. The F. statistic of 11.55 which is greater than 2% as a rule of thumb which is statistically significant at a level of 0.0000 means that the revenue per employee and components of financial mix model are fit and there is a 99.9 percent probability that the relationship among the variables is not due to mere chance.

4.6 Test of Hypotheses

4.6.1 Hypothesis I

Hypothesis one states that: Total Debt to Shareholder's Funds has no significant impact on employees' efficiency of listed conglomerate firm in Nigeria.

Long term solvency measured by total debt to Shareholder's Funds is found to be insignificant and negatively associated with revenue per employee with significant level of 0.835 indicating that debt financing do not influence employees' efficiency of listed conglomerate firms in Nigeria. Therefore, total debt to equity

has insignificantly impacted revenue per employee. This provides an evidence of failure to reject the null hypothesis one of the study. Thus, for hypothesis 1, H_{01} is failed to be rejected.

4.6.2 Hypothesis II

Hypothesis two states that: Long Term Debts to Total Asset has no significant impact on employees' efficiency of listed conglomerate firm in Nigeria.

The component of a firm Long term solvency measured as the proportion of long term debts to total assets of firms was found to be negative and significant at 0.079 level which means that it is significantly associated with employees' efficiency of listed conglomerate firms in Nigeria. Therefore, long term debt to total assets has negative and significant impact on revenue per employee. This provides evidence to reject the null hypothesis two of the study. Thus, for hypothesis two, H_{02} is rejected.

4.6.3 Hypothesis III

Hypothesis three states that: Shareholder's Funds to Tangible Assets has no significant impact on employees' efficiency of listed conglomerate firm in Nigeria.

Long term solvency measured by the proportion of shareholders' funds to tangible assets is found to be negative and insignificant at 0.351 level which means that it is negatively associated with employees' efficiency of listed conglomerate firms in Nigeria. This therefore, provides an evidence of failure to reject the null hypothesis three of the study. Thus, for hypothesis three, H_{03} is failed to be rejected.

V. CONCLUSIONS AND RECOMMENDATIONS

From the result of the model, the result provides evidence that long term solvency variables of conglomerate firms listed in Nigeria has positive impact on their employee's efficiency. On the overall, the study concludes that long term solvency has significantly impacted on revenue per employee with R square of 0.59 with significant level of 0.000. It is recommended that the management of listed conglomerate firms in Nigeria should improve her level of long term solvency by exploring both the benefit of debt and equity finance to have an optimum solvency mix of 50% each of debt and equity finance.

REFERENCES

- [1]. Ahmad, Z. (2012). "Capital structure effect on firm performance: focus on consumers and industrial sectors on Malaysian Firms", *International Review of Business Research Papers*, 8(5), 137-155.
- [2]. Akinsulire, (2005). *Strategic Financial Management*, Ceemol Nigeria Limited publisher, Lagos, Nigeria.
- [3]. Amalendu B. & Somnath M. (2012). Financial Risk Measurement of Small and Medium sized Companies Listed in Bombay Stock Exchange, *International Journal of Advances in Management and Economics*, 1(3), 27-34 Available online at www.managementjournal.info ISSN: 2278-3369.
- [4]. Arora, A. and J. Asundi (1999). "Quality Certification and the Economics of Contract Software Development: A Study of the Indian Software Industry", NBER Working Paper 7260, 1999.
- [5]. Arti G. (2007). The Indian BPO Industry: An Evaluation of Firm-Level Performance, CESIFO economic studies conference on productivities and growth, 22-23 June 2007 CESifo conference centre, Munich, journal oxford university press, Delhi School of Economics, India. Available at arti@econdse.org, artigrover@gmail.com
- [6]. Brindadevi V. & Muthumoni A. (2014). A Study on Long Term Solvency Position of Private Sector Banks in India *International Journal of Business and Management Invention* 3(2), 54-63.
- [7]. Damijan J.P. (2013). Corporate financial soundness and its impact on firm performance: Implications for corporate debt restructuring in Slovenia.
- [8]. Davidson, R.A. and Maguire, M.G. (2003). Top common causes of construction contractor failures, *Journal of Construction Accounting and Taxation* 11, 234-235.
- [9]. Freeman, R. Edward (1984). *Strategic Management: A stakeholder approach*. Boston: Pitman. ISBN 0-273-01913-9.
- [10]. Gleason K.C., L.K. Mathur and I. Mathur (2000). "the Interrelationship between Culture, Capital Structure and Performance: Evidence from Europeans Retailers", *Journal of Business Research*, 50, 185 -191.
- [11]. Gurbachan K.B. Sumesh K. (2014). Financial Performance of Indian Automobile Companies after Liberalization: A Comparative Study Of Maruti Suzuki and Tata Motors, *International Journal of Advanced Research in Management and Social Sciences* 3(9) 189-192. ISSN: 2278-6236.
- [12]. Harris, M. and Raviv A. (1991). "The Theory of Capital Structure" *Journal of Finance*, 4(8), 297- 356.
- [13]. Kishore K. D (2012). Long-Term Debt: A Strategic Consideration in Indian Corporate Sector. *Journal of Business Management, Commerce & Research*, 1(1), 51-58.
- [14]. Krishnan V. S. & Moyer R. C (1997). "Performance, Capital Structure and Home Country: An Analysis of Asian Corporations", *Global Finance Journal* 8(1), 129 -143.
- [15]. Lewis, R. (1972). *An Enquiry into the Informational Needs of Stockholders and Potential Investors*, Dissertation, Arizona State University.
- [16]. Meyers, S.C. (1984). The Capital Structure Puzzle. *The Journal of Finance* 39(3), 575-592.
- [17]. Min-Tsung C. (2009). Relative effects of debt and equity on corporate operating performance, a quartile regression study in Taiwan, *International Journal of Management*, 26(1), 143-150.
- [18]. Muritala T. A. (2012). An Empirical Analysis of Capital Structure on Firms' Performance in Nigeria. *International Journal of Advances in Management and Economics* Available online at www.managementjournal.info ISSN: 2278-3369.
- [19]. Ranjit K. P. (2012). An Analysis of Solvency of Selected FMCG Companies in India, *Global Journal of Management and Business Studies* 3(4), 401-406.

- [20]. Rasa N. (2012). The Impact of Capital Structure on the Performance Efficiency of Baltic Listed Companies, *Inzinerine Ekonomika-Engineering Economics*, 23(5,) 505-516.
- [21]. Rashmi B. and Uday B.S. (2003). Does the structure of debt affect the output and investment strategies of the firm? *Economic Research Unit, Indian Statistical Institute Kolkata - 700 108, INDIA*.
- [22]. Riahi-Belkaonui A. (1999). *Capital Structure: Determination, Evaluation and Accounting*, Westport, Quorum Books Publisher, India.
- [23]. Saeedi A. & Mahmoodi I. (2011). Capital structure and firm performance: evidence from Iranian Companies, *International Research Journal of Finance and Economics*, 70(11), 20-29.
- [24]. Sandeep G. (2012). The link between operational efficiency and solvency: the case of foodprocessing industry in India, *Journal of Accountancy Business and the Public Interest* 3(3), 143-159.
- [25]. Tatahi M. & Heshmati A (2009). The financial and operating performance of privatized firms in Sweden. A Discussion Paper Series No. 3953, Institute for the Study of Labour, Sweden.