

THE EFFECT OF CAPITAL STRUCTURE AND AGENCY COST ON PROFITABILITY OF LISTED MANUFACTURING COMPANIES IN NIGERIA

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Abstract

The effect of capital structure and agency cost on the profitability of listed manufacturing companies was examined in this study. The study utilized casual research design, ten manufacturing companies in the consumer goods sector was purposively chosen for the study. The study covers period between 2015-2019. The analysis of the study data was analysed 3using descriptive statistics, correlation and panel regression analysis. The outcome of the first test study revealed that the t-statistics = -1.945, p-value (0.0018) which signifies that negative significant exist between long term debt and return on asset. Whereas, the second test shows that a positive significant connection exists between short term debt and return on asset with t-statistic =2.784, p-value (0.0054). The final hypothesis test conducted in the study revealed that asset liquidity ratio is significant and positively related to return on asset evidenced by t-statistic =0.686 and p-value (0.0059). The conclusion drawn from this study is that capital structure and agency cost has significant connection with profitability of the selected Nigeria listed manufacturing companies. This study however recommends that management of the sampled organizations should explore the benefits of using more of debt financing so as to take advantage of tax benefits, they are also advised to reduce their agency cost by improving the level of their asset liquidity ratio.

Keywords: agency theory, asset liquidity, capital structure, firm's profitability, Trade Off Theory.

1. Introduction

Capital structure is one of the utmost enigmatic matters in corporate finance literature (Jiraporn, 2009). Capital structure is referred to as a combination of variety of equity shares of an enterprise and long term sources of funds (Booth, Aivazian, Demirguc-Kunt, & Maksimovic, 2001). Capital structure is also the mishmash of equity and debt financing used by a firm to fund the procurements of its assets. However, the ability of organization to survive in a competitive environment, and the need to increase return on investment (ROI) of the organization investors are some of the reasons why capital structure financing decision is so popular among organizations.

Fang, Kosev, and Wakeling (2014) in their study of the ratio of debt-equity ratio of Australian corporate sector revealed that the leverage of the companies stayed unchanging after year 2012, whereas the amount of leverage falls in majority of other advanced nations which includes the

United State of America. More so, after the crisis the source of finance for private non-financial companies in Australia has been steady. The result of Fang, Kosev, and Wakeling (2014) study revealed that the proportion of debt to equity in euro region is greater than the ratio of debt-equity ratio in the United States and Australia ever since year 2000. This suggests that the non-financial firms in euro area prefer the use of debt finance over equity finance.

Also, an investigation carried out by Bank Negara (2015) shows that the aggregated ratio of debt-equity ratio of Malaysia is the second highest ranked countries among (Latin America, Emerging Asia, Emerging Europe and Malaysia). While emerging Asia ranked first on the list. The investigation also revealed that Malaysian companies prefer to finance their activities by utilizing more equity capital throughout the post monetary crisis era than they did before the monetary crisis occurred.

However, agency costs occur due to the clash of interest and disagreements between management and shareholders (Olagunju, Adebayo, Adenle, & Bamidele, 2021). Agency costs obstruct leverage and increase yield spread (Leland, 1998). Agency problem arises when the principal is unable to monitor the agent's performance. Numerous scholars have studied the connection between agency cost and profitability one of which is the study conducted by Wang (2010) which revealed that agency cost and profitability are negatively correlated. This indicates that high agency cost will result in to a low profitability (Berger & Hann, 2007). The study conducted by Emenyi (2013) also claimed that the agency cost is negatively related to profitability.

More so, an organization's profitability is the measure of shareholders' wealth, it is also regarded as the ability of the firm's to earn profit. According to Albert, Michael and Daniel (2013) Profitability is used interchangeably with the company value. They both create measures that describe wealth creation for shareholders. Lucrative companies are more valuable to investors and shareholders than company making losses. Likewise, change in organization value will leads to change in shareholders' value. Managers are expected to select the capital structure which they are certain of that it will lead in to highest firm value. Hence, the capital structure decisions of companies are vital because poor decisions can affect an organization profitability resulting in to reduction in shareholders' value and vice versa.

In addition, several studies have been conducted on the influence of either capital structure or agency cost on profitability such as the study conducted by Albert, Michael and Daniel (2013) on the effect of capital structure on profitability, Nuhu, Dandago, Muhammed, Ado and Abdulkasim (2020) and Olagunju, Adebayo, Adenle, and Bamidele (2021) also studied the impact of agency costs on financial performance of quoted consumer goods organizations, Awah, Ebiringa and Ugwu (2020) and Kuek, Lau, Lee, Lim and Tan (2017) also reviewed the influence of capital structure decisions on profitability but very few of the researchers has considered using both

agency cost and capital structure together on profitability. Predicated on above, the researchers formulated the hypothesis below to navigate their investigations thus:

H₀: There is no connection between capital long term debt, short term debt and asset liquidity ratio on return on asset (ROA) of the sampled listed Nigeria manufacturing companies.

The study is divided into five sections. Section I, introduced the study. Section II examined concepts on which this work is based and reviewed existing related literature while Section III focused on the methodology adopted in this research. Section IV presented and discussed the results obtained while Section V concludes the study and made necessary recommendations.

2.0 Review of Related Literature

2.1 Conceptual review

An organization capital structure includes equity and debt. The proportion of equity and debt varies in different organization. Capital structure decision plays a fundamental role in enhancing the total profitability of an organisation (Nimalathasan & Brabete, 2010). Capital structure decision can be used to finance firm's asset through the mixture of hybrid securities such as debt and equity. Several components of capital structure are categorized into preference capital, long-term capital and equity capital. Equity capital is the sum of money contributed by shareholders in exchange for retained earnings and shares from preceding years, it is also regarded as the profit used to enhance firms value and to keep the statement of financial position strong. Preference capital comprises of both debentures and equity shares. Debt capital is the long term finance whose payment is made with interest to the bondholders as at the time the liability is matured.

2.1.2 Long term debt, short term debt and profitability:

Awuah-Agyemen (2016) describe debt is a source of external finance which includes short term and long term debts. Short term debt is beneficial to companies facing uncertainty in their tax status when the tax rate is expensive. Short term loan will provide an advanced measure of company needs for finances, whereas long term loan will incur finance cost when the interest is accrued (Plesko, 2000). Several firms will prefer long term debt to finance investment that are long term in nature for example purchase of fixed assets because long term debt financing safeguards organizations from incurring credit supply shocks and the necessity to re-finance later. Further, several firms will choose to use short term loan to re-finance their debt regularly so as to get appropriate loan terms (Bruhn, 2015). Several researchers have used both long and short term debts as proxies for measuring capital structure. For instance, Abor (2005) revealed in his research work that short-term debt has a positive significant connection with profitability while long term debt is negatively significant to profitability. The result of Albert et. al. (2013) on the effect of capital structure on profitability of quoted Ghanaian firms also concur with the findings of Abor (2005). Firms seek to depend on short term debt than on long term debt.

2.1.3 Asset liquidity ratio and profitability

Agency costs includes the cost of choosing suitable agent, examining and gathering information to set performance standards, bonding expenditures by the agents, monitoring managers, and residual losses (Chen 2010). According to Emenyi (2013), agency costs could occur as a result of the decline in outputs, free cash flow inefficiencies and loss of firms' worth. Increase in Agency costs will always have effect on the performance and profitability of a company, if there is increase in agency costs (operating expenses ratio, administrative expenses ratio and asset utilization ratio) there will be reduction in the company returns (Olagunju *et. al.*, 2021).

Moreover, liquid asset ratio is the proportion of organization assets that can be easily exchanged for money to total asset or it can be expressed as the amount of a firm's current assets to its current liabilities, which is used as a measure of solvency (Olagunju *et. al.*, 2021). Asset liquidity ratio is measured as the ratio of current asset to current liabilities. The manager agrees on the ideal way of allocation cash in order to preclude higher risk, the company's manager will also want to borrow loans which are short term in nature, in this circumstances the manager could centre on using more of current liabilities instead of using long term liabilities to finance the firm. When the organization's ability to meet its short-term liabilities is not certain, this specifies that organization could encounter challenges in meeting their short-term monetary obligations. This in turn would affect the bulk of firm's operations and its financial performance negatively (Olagunju *et. al.*, 2021). Agency costs can manifest in countless forms such as unnecessary fringe benefits, greed on the part of managers, corporate fraud and non-optimal investment decision (Henry, 2004).

However, Amengor (2010) stated that there may be differences between the interest of senior managers and that of the middle managers, specifically in a situation where the senior managers are well compensated to attain higher profits than the middle level manager or the middle level managers are not compensated at all. Several scholars have studied the connection between liquidity ratios and pointers of financial performance such as the study of Lartey, Antwi & Boadi (2013) which examined the connection between liquidity and profitability of the banks quoted on the Ghana bursa during the year 2005-2010. While very few has utilized asset liquidity ratio as proxy for agency cost, one of the few study where asset liquidity ratio was used as proxy of agency cost is the study of Olagunju *et. al.* (2021).

2.1.4 Profitability

Return on Assets (ROA) is a gauge of how cost-effective a firm in relation to its total assets. Return on assets reveals how efficient management is at utilizing the organization assets to generate revenue. Return on asset is expressed as: Net Income (profit after tax) divided by Average Total Assets of the firm used by Daines (2001); Tifow and Savilir (2015); and Olagunju, Adebayo, Adenle, and Bamidele, (2021) to measure firms value.

2.1.5 Capital structure, Agency cost and Profitability

The influence of capital structure decisions influences firm value and profitability by maximizing value through the current value of tax savings from debt usage. This however denote that firms should utilize up to 100% debt in other to maximize their value. More so, the adverse effect of excessive use of debt is that it will result in to decrease in value which may arise due to the increase in the financial distress and fall in firm's credit rating. Further, capital structure policy effect on profitability is that it can increase both gains and losses of organization Ross, *et al.* (2009). Agency cost can be minimized by the use of debt, since debt can help to reduce free cash flow. The existence of debt makes manager to consider using fewer perquisites and become more efficient. (Ang et al., 2000).

However, in the commercial world, agency costs refer to as the expense of disagreement incurred by organizations as a result of the inability of the manager to act in the interest of the shareholders (Kuek et. al 2017). Increase in Agency costs will always have effect on the profitability of a firm, if there is increase in agency cost proxies such as (cash-flow ratio, operating expenses ratio, administrative expenses ratio and asset utilization ratio) there will be reduction in company returns.

2.2 Theoretical review

Several theories have been used in examining the link between capital structure, agency and financial performance in literature. This study was underpinned on 2 theories which provide justification for how capital structure and agency cost influence organization's profitability. These theories are trade off and agency theories.

2.2.1 Trade Off Theory

This theory was propounded by Modigliani and Miller in 1963. Trade off theory is used for choosing an optimal capital structure so as to stimulate firms value by reducing market operational cost Sheikh and Wang (2010). More so, an ideal capital structure is achieved under trade off theory when an offsetting conditions exist between the tax deductible benefits from debts and risk of bankruptcy. An optimal capital structure is usually attained when the costs and benefits of debt usage cancel out each other.

Further, agency cost and financial distress theories assume that financing the firm with higher amount of debts can leads to bankruptcy of the firm because the financial distress problems can force the company to be liquidated (Awan & Amin, 2014). While a company having a high financial distress cost would lessen the capacity of debt funding in capital structure.

The limitations of trade off theory are; it observed that debt capital does not definitely have to be recognized with optimal debt, this signifies that challenges faced by firms when amending their capital structure is ignored. Also, the other limitations of trade off theory is that static empirical analysis is incapable of explaining the dynamic nature of firms' equity (Millers 1977). According

to Titman & Tsyplakov, 2007 and Flannery & Rangan (2006), trade-off theory is still well supported by theoretical and empirical studies.

2.2.2 Agency Theory

Agency theory was propounded by Stephen Ross and Barry Mitnick in 1973 which is based on the assumption that principal and agents act rationally and engage in activities that will maximize their own wealth. Agency theory is grounded on the postulation that each of the parties pursue their own selfish interest and use information accessible to them to their own gain at the detriment of the other party which creates agency problems (Holtz & Sarlo Neto, 2014). Information asymmetry between the organization shareholders and managers is one of the causes of agency problem. Some other causes of agency conflict are earnings retention, moral hazard, low effort level, risk aversion and time horizon.

According to Jensen & Meckling (1986) agency conflicts can be reduced by creating remuneration packages for executive directors and senior manager, having board of executives that will monitor the decision taken by its managers and having a large proportion of debt on the long term capital structure of the company. However, various literatures show criticism on agency theory such as literature by (Perrow 1986 and Pepper & Gore 2012). In addition, one of the limitation of agency theory is that, managers are considered as opportunists and agency theory also ignores managers' competences (Sheilfer & Vishny 1977).

2.3 Empirical review

Many scholars have undertaken the influence of capital structure and agency costs on firm's profitability in developed and developing countries including Nigeria.

Relationship between capital structure and profitability

Gill, Biger, and Mathur (2011) in their study of the impact of capital structure on American service and industrialized companies' profitability which covers a period of 2005 – 2007. Their study revealed that short term debt ratio is significant and positively connected to profitability in both firms. They also revealed in their study that short term debts are cheaper and have low interest rate that will increase firm profitability. More so, a positive significant connection is said to be present between long term liability and profitability in manufacturing industry.

A similar study conducted by Tifow and Savilir (2015) on the association between capital structure and performance of Turkey manufacturing companies with the study period ranging from year 2008 to 2013 utilizing secondary data. Their study revealed that a significant negative connection between short term liability ratio and firm's profitability. Also, their study found that long term liability ratio and return on equity ratio has a significant negative connection. Their study

recommends that companies should choose to utilize long term liability than short term liability in order to increase profitability.

However, Kakanda, Bello, and Abba (2016) empirically reviewed the effects of capital structure on performance of companies listed in the Nigeria consumer goods sector. The study utilized ex-post facto research design. Hierarchical multiple regression analyses, Descriptive statistics, correlation were used to analysed data and test the hypotheses of this study. The result of the study revealed that a positive relationship exists between firm's capital structure and financial performance. The study established that a positive and significant relationship exist between long term liability and return on equity.

Relationship between Agency cost and profitability

Furthermore, Wang (2010), revealed in his study of the influence of free cash flows and agency costs on firm performance using five hundred and five public listed firms on the Taiwan stock exchange during a period ranging from 2002-2007 that agency cost has positive influence on firm performance.

Salim (2014) investigated the association between agency costs and firm performance of companies quoted on the Nairobi securities exchange. The study population comprises of all the quoted companies listed on Nairobi stock exchange while the sample size is 52 companies. The study period covers year 2008-2012. The study utilized secondary data. Correlation analysis and multiple regression were used to decide the link between agency costs and the sampled firms' financial performance. The study discover that agency cost is positively related to firm financial performance which shows that the rise in agency costs by one unit will leads to 0.02 increase in financial performance.

In addition, Nuhu, Dandago, Muhammed, Ado, and Abdulkasim (2020) examined the impact of agency costs on financial performance of consumer goods firms quoted on the Nigerian Stock Exchange. The study used documentary data gathered from financial reports of the selected firms for year 2007-2016. The study utilized panel data regression for analysis. The findings from their study revealed that there is an inverse association between agency costs and financial performance, signifying that agency costs will bring about a decline in financial performance, if not accurately managed.

Furthermore, Olagunju, Adebayo, Adenle, and Bamidele (2021) in their study of the influence of agency costs on Nigeria quoted consumer goods sectors financial performance opined that asset utilization ratio is positively significant to return on asset. The study draws conclusions from the analysis of the data of ten sampled consumer goods firms within a period of 2015 to 2019. The hypotheses of the study was analysed using both correlation and panel regression analysis.

3.0 Methodology

The study is a panel study which make use of expo-facto research design. The data used for the purpose of this study was gathered from secondary sources such as annual financial reports and account of the selected quoted firms in the Nigeria consumer goods manufacturing sector for a period of 5 years between 2015-2019.

However, the study population comprises of all the manufacturing companies listed on the Nigerian Stock Exchange. The study used purposive sampling which is a method of non-probability sample. Ten (10) manufacturing firms in the consumer goods sector were carefully chosen based on accessibility and convenience. The consumer goods sector was chosen because it one of the sector with the highest output and sales in Nigeria. More so, 2015 was chosen as the base year because it is three years post IFRS adoption by all firms in the preparation of their financial report in other to avoid mixing pre and post IFRS adoption in order to have consistent findings. Descriptive (mean, median, maximum, standard deviation, skewness and maximum) and inferential statistics (panel regression and correlation analysis) was utilized to achieve the stated objectives.

3.1 Model Specifications

The model of the study established the connection between the dependent variable firm's profitability proxy by return on Assets (ROA) and independent variables capital structure and agency costs. Capital structure is proxy by short term and long term debts while agency cost is proxy by asset liquidity ratio (ALR).

Table 1. Measurement of variables

	Narrative	Source	Apriori Expectation
Dependent variable			
Return on asset (ROA)	$\frac{\text{Net Income}}{\text{Total Average Assets}}$	Nuhu et.al (2020), Olagunju, Adebayo, Adenle, & Bamidele (2021)	
Independent variables			
Long term debt	$\text{LTDR} = \frac{\text{Total Long term debt}}{\text{Total Asset}}$	Habib, Khan & Wazir (2016)	-ve
Short term debt	$\text{STDR} = \frac{\text{Total Short Term Debt}}{\text{Total Asset}}$	Shubita & Alsawalhah, (2012).	+ve
Asset liquidity ratio (ALR)	$\frac{\text{Net Sales}}{\text{Average Total Asset}}$	Siddiqui, Rasaq, Malik and Gul (2013)	+ve
Control variable			
Firm size	It is expressed as natural log of total assets.	Khadimat et. al (2014)	+ve

Source: Author's computation (2022).

Model specification

ROA Model

$$\text{ROA} = f(\text{LTD}, \text{STD}, \text{ALR}, \text{FS}) \quad \text{-----} 3.1$$

$$\text{ROA}_{it} = \beta_0 + \beta_1 \text{LogLTD}_{1it} + \beta_2 \text{LogSTD}_{2it} + \beta_3 \text{LogALR}_{3it} + \beta_4 \text{LogFS}_{4it} + \mu_{it} \quad \text{-----} 3.2$$

Where:

ROA= Return on Asset

ALR = Asset Liquidation ratio

LTD = Long term loan

STD = Short term loan

FS = Firm size

Log = Natural logarithm of the variables

β_0 = Constant parameter

β_1 = Regression Coefficient of variables,

β_2 = Regression Coefficient of variables,

β_3 = Regression Coefficient of variables,

β_4 = Regression Coefficient of variables,

U_{it} = Error terms

4.0 Results and Discussion

Table 2: Descriptive Statist

	ROA	LTD	STD	ALR	FMSIZE
Mean	0.049043	0.1684719	0.352372	1.052265	10.47819
Median	0.037613	0.1396493	0.365457	0.894633	11.065
Maximum	0.264935	5	3	3.275757	11.58969
Minimum	-0.040439	0.0082527	6	0.401816	7.439775
Std. Dev.	0.064379	0.142111	0.179495	0.637219	1.230686
skewness	1.792536	1.815315	0.0791411	1.918648	-1.474884
Sum	2.452126	8.423596	17.6186	52.61327	523.9093
Observation	50	50	50	50	50

Source: Computed by the Researcher using STATA (2022)

Table 2 revealed that the mean, standard deviation and skewness values of ROA are 0.049, 0.064 and 1.793. While the mean, standard deviation and skewness value of LTD are 0.168, 0.142 and 1.815. Similarly, the mean, standard deviation and skewness values of STD are 0.352, 0.179 and 0.0791 respectively. Also, the agency cost proxy ALR has mean, standard deviation and skewness value of 1.052, 0.637 and 1.919 respectively. The control variables FMSIZE also has mean, standard deviation and skewness values as follows; 10.478, 1.231 and – 1.475.

Correlation and Multi-Collinearity Test

Correlation helps in deducing the degree or extent of the connection among variables as the excessive correlation among independent variables could lead to multi-collinearity, which could subsequently lead to misleading results.

Table 3: Correlation and Multi-Collinearity Test

	ROA	LTD	STD	ALR	FMS	VIF	1/VIF
ROA	1						
LTD	-0.1787	1				1.05	0.9513
STD	0.1708	0.3030	1			1.22	0.8177
ALR	0.0281	-0.3866	-0.4574	1		1.28	0.7806
FMS	0.2536	0.1406	-0.0925	-0.4415	1		

Source: Computed by the Researcher using STATA (2022)

The correlation table shows that ALR has a positive correlation coefficient of 0.028 with return on assets, while the correlation between ROA and LTD is weak and positive to the tune of -0.178. Also, STD has a correlation of 0.17 which signifies a positive but very low correlation with ROA. The multi-collinearity test results reveals that all the variables in this study met the criterion that tolerance level is >0.1 or $VIF < 10$. Therefore, the presence of multi-collinearity does not create any problem in this study.

4.1 Hypothesis Testing

H_0 : There is no connection between capital long term debt, short term debt and asset liquidity ratio on return on asset (ROA) of the sampled listed Nigeria manufacturing companies.

Method: Panel Regression Analysis

Table 4

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	0.0085	0.0287	0.298	0.7659
LTD	-0.1162	0.0597	-1.945	0.054
STD	0.1416	0.0509	2.784	0.0054
ALR	0.0097	0.0141	0.686	0.0059
R-squared	0.2432	Mean dependent vars		1.5668
F-statistics	3.6100	Prob (F-statistics)	0.0123	

Source: computed by the Researcher using STATA (2022)

The outcomes in **Table 4** indicate an R^2 of 0.2432 which suggests that long term debt, short term debt and asset liquidity ratios had high explanatory power of 24.3% on return on asset. The F-statistics value and its p-value of 3.61 and 0.0123 depicts that the model is fit. LTD has a t-statistics and p-value of -1.945 and 0.0018 respectively this infers that LTD is negatively significant to ROA of the sampled quoted companies in the consumer goods sector. More so, a percentage increase in LTD would lead to 11.6% decrease in ROA of the sampled firms. The result of the findings of Tifow and Savilir (2015) was consistent with the result of this findings, whereas the result of Kakanda, Bello, and Abba (2016), which shows a positive significant differs from the outcome of this findings.

Also, the result shows that STD has a positive significant connection with ROA with t-statistics of 2.784, p-value (0.0054) which is less than the p-value 0.05. However, this result infers the null hypothesis formulated for this study should be rejected. The findings of this study, therefore, specifies that a percentage rise in short term debt would lead to a significant 14.2% increase ROA of the sampled listed manufacturing firms in Nigeria. Furthermore, the findings of Gill, Biger, and Mathur (2011) is consistent with this result while the result of this study is inconsistent with the findings of Kakanda, Bello, and Abba (2016), Tifow and Savilir (2015) the former found a positive but no significant connection between short term liability and firms' profitability while the latter found out that short term liability has a negative significant connection with firms' profitability.

The result also indicates that there is a positive connection between ALR and ROA of the sampled firms supported by a t-statistics of 0.686 and p-value of 0.0059 which is less than 5% p-value. Further, the outcome of the study revealed that an increase in ALR percentage will lead to 68.6% increase in ROA of the sampled firms. Similarly, Olagunju, Adebayo, Adenle, and Bamidele (2021), Khadimat, Pakistan and Rehman (2014) and Priya and Nimalathan (2013) attested to this in their studies that there is a significant relationship between asset liquidity and return on assets.

4.2 Discussion of Findings

Relationship between Long term debt (LTD) and Return on Asset (ROA)

The test of hypothesis used for the purpose of this study reveals a significant relationship between capital structure, agency cost and firm's profitability of quoted manufacturing companies in Nigeria. The findings of this study, therefore, indicates that a percentage rise in long term debt would result to a significant 19.5% decrease in the return of asset of the sampled listed manufacturing companies in Nigeria. This signifies that the higher the long term debt the lower the firms' profitability, the lower the long term debt the higher the firm's profitability. In addition, the financial health of a company will be determined by the company's debt ratio, the ratio helps

the company's investor to identify the rate of risk and high debt ratio will have a negative effect on firms' value and performance.

However, the result of those study indicates that the increase in long-term debt was connected with reducing profitability for the quoted sampled consumer good manufacturing firms in Nigeria and the decrease in long-term debt was related with increasing profitability for quoted consumer good manufacturing firms in Nigeria. This also denotes that, for consumer goods manufacturing firms in Nigeria, long-term debt is quite costly because its usage is related with deteriorating profits. In Nigeria long-term debt is commonly interest bearing because they are typically always gotten from financial institutions and banks who always charge interest. Likewise, evaluating long-term capital is difficult and costly in Nigeria because of the negative economic conditions which has contributed to deteriorating profitability of Nigeria quoted manufacturing firms. The result of the findings of Tifow and Savilir (2015) was consistent with the result of this findings, whereas the result of Kakanda, Bello, and Abba (2016), which shows a positive significant differs from the outcome of this findings.

Relationship between Short term debt (STD) and Return on Asset (ROA)

The result shows that a percentage increase in short term debt would lead to a significant 27.8% increase in the sampled companies ROA. This however signifies that a higher short term debt will lead to higher firm's profitability vis a vis. This result is in line with the findings of Abor (2005). The outcome of this study also indicates that increase in short term debt is associated to decrease in profitability whereas decrease in short term debt would lead to decrease in profitability. The use of short term debt is cheaper for firms in the Nigeria consumer goods sector. In Nigeria majority of the short term debts are usually non-interest bearing or bears a very low interest for examples; trade creditors, accruals and non-bank loans. In addition, the findings of Gill, Biger, and Mathur (2011) is in accordance with the outcome of this study whereas the outcome of this study differs from the findings of Kakanda, Bello, and Abba (2016), Tifow and Savilir (2015) the former found a positive but no significant connection between short term debt and firms' profitability while the latter found out that short term debt has a negative significant connection with firms' profitability.

Relationship between Asset Liquidity Ratio (ALR) and Return on Asset (ROA)

The outcome of this study also shows that ALR is negatively significant to ROA of the sampled firms. ALR is an inverse measure of agency cost therefore the result infers that a higher ALR is as a result of low agency cost which in turn result into higher ROA. According to Amengor, (2010) the capability for organizations to meet their short term liabilities is as a result of their asset liquidity ratio. The weakness in ALR reveals that firms may face challenges in meeting their short terms obligations. Hence, a high asset liquidity ratio signifies that the company is able to meet its current liabilities as at when due. A low asset liquidity ratio may occur when the manager intends

to reduce risk by taking more of short term loan than long term debts to finance long term assets of the company.

Moreover, a low asset liquidity ratio specifies that companies may have troubles in meeting their current obligations. A not too high asset liquidity ratio is a good sign to the investors and shareholders, it may specify that the firm is efficiently using its current assets or its short term funding facilities. It is advisable for companies to maintain liquidity ratio at a safe limit of 2:1 (Riyanti & Darto 2019). Asset Liquidity ratio can be easily manipulated by the managers.

Howbeit, to buttressed the result of this study is in accordance with the results of a study of Olagunju, Adebayo, Adenle, & Bamidele (2021); Khidmat, Pakistan and Rehman (2014) and Ruziqa (2013) who all found that asset liquidity ratio has a positive significant relationship with return on asset. Whereas on the contrary the study conducted by Haroon, Waqas, Osama, Naeem and Kashif (2020) and Nobance, Ellili and Abraham (2017), revealed that that there is a negative connection between agency costs and financial performance.

5.0 Conclusion and Recommendations

The influence of agency cost and capital structure on profitability of quoted Nigeria consumer goods firms were examined in this study. The variables of the study are capital structure, agency cost and firm's profitability, while firm size is examined as control variables in the study. In order to attain the purpose of this study panel regression and correlation analysis were used to analyse the data gathered for this study. The study therefore concludes that capital structure and agency cost are significantly related to the profitability of quoted consumer goods firms in Nigeria. The findings show that there is a negative significant connection between long term debt and profitability and also there is a positive significant relationship between short term debt, asset liquidity and profitability.

More so, based on the outcome of the study managements of listed consumer sector are advised to take advantage debt to fund their activities. More so, firms making losses and firms with high tax credits may not find debt capital very useful and so they may use it with extreme care. Hence, the higher the tax rate, the more advantageous it will be to use debt funding but it is advisable for the firms to take caution because the use of too much debt increases risk. The study also recommends that companies management should ensure optimal allocation of fund and make sure that the capital structure improve firms' profitability. Further, the management of quoted firms in the consumer goods sector should motivate their mangers so as to ensure increase in the managers' effort level. Lastly, the organization managers are advised to improve the firm asset liquidity ratio without manipulating the ratio figures.

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