The Nexus Of Growth Opportunities, Profitability and Share Valuation of Food And Beverage Firms in Nigeria

[1]Alabaraba Bele-Egberi & [2]Dr. Asian A. Umobong, FCA

**[1]Department of Accounting, Faculty of Management Sciences,
University of Port Harcourt, Port Harcourt – Nigeria**

**[2]Department of Accounting, Faculty of Management Science
University of Port Harcourt, Port Harcourt, Nigeria**

ABSTRACT
The study objective was to determine the nature of relationship between growth opportunities, profitability and value of food and beverage firms listed on Nigeria stock exchange between 2013 and 2017 based on secondary panel data using ex-post factor and cross-sectional design, Census sampling technique was adopted and regression and Hausman test conducted on the data set. Result indicated a positive significant relationship of profitability with tobin Q implying and increase in profitability increases firm value measured by Tobin Q. conversely, profitability reported an insignificant negative relation of enterprise value. Thus, requires further analysis as debt covenants arising from high leverage may dampen investors interest which debt portfolio is considered in enterprise value method. Also, growth opportunities correlate positively insignificantly with enterprise value indicating a weak positive association and negatively significantly with enterprise value indicating increased growth opportunities reduces enterprise value. We interpret that relation to signify that growth is associated with risk and the market prices down the shares because of the debt portfolio and increase risk associated with calculation of enterprise value. In sum we recommend firms should increase profitability through cost reduction, savings, increased capacity utilization, , maintain the growth rate as this is also a factor to increase the value of the business. Additionally, firms should increase sales and make good management of receivables and improve operational efficiency. Proper management of cash flow to prevent over trading and insolvency. Regulators should sustain the monitoring function and prevent misreporting aimed at producing positive outlook of the firm through over bloated earning with the aim of improving investors perception and increasing share price.
Keywords: Growth Opportunities, Profitability, Enterprise Value, Tobin Q

1.1 INTRODUCTION
The proposition that the motive for setting up businesses is to maximize profit gained ground centuries ago and is supported by the Classical economic theory that emphasizes wealth maximization as the central goal of any profit-oriented business. Although this proprietary view of the firm contrast with the latter stakeholder's view that recognizes other stakeholders as having interest on the activities of the firm; the profit motive was not obliterated. However, it is debatable if profit maximization dovetail into firm value which ultimately is the wealth maximization goal of the owners of the business. In Nigeria, many highly profitable firms have had lower valuation at the exchange igniting the debate on what determines the intrinsic and true value of shares which is the wealth maximization goal of the entrepreneur. Many scholars have advanced theories in a bid to resolve the lacuna in ascertaining the determinants of firm value. The debate is exacerbated by the emerging scenario that if profit pursuit is the only goal of a business entity it will raise several issues. First profit can be managed by either increasing sales revenue or through reduction in costs. However, increasing sales may lead to credit sales with associated credit risk of default when it is not paid on time capital is tied down which limits the ability to increase sales and further expand. Inability to pay also constrains cash flow into the business for a long period while waiting for payment. The second challenge is how do firms reduce cost. This can be achieved through reduction in training costs, maintenance of equipment's and reduction in travelling costs. These are short term measures which may not endure and sustain profit for a long time. In the long run, the firm operations will be constrained, and growth may be stunted leading to loss of profit. These two scenarios have the long run effect of not maximizing equity to shareholders. If the firm is only interested in short term profitability the long-term growth of the firm will be constrained and investment opportunities lost. Viable business opportunities may exist which require the firm to reduce its profit earning ability

at the early years and enjoy a boom later. So, taking short term profit goal may limit achievement of wealth maximization goal of equity holders. In addition, retaining profits for reinvestment without dividend payments to investors ultimately decreases the value of equity Profits may not accurately show the cash inflows or outflows from the firm resulting in firms having surplus profit in the books without sufficient cash to meet maturing obligations thus resulting in over trading and insolvency. so, the goal of profit maximization may not ultimately yield increased shareholder value. The problem is further compounded that many scholars believe that firm valuation is not only determined by internal factors peculiar to the firm but a mix of both internal and external factors including market forces and availability of information. The macro economic factors such as inflation and government regulation may also play a role in influencing firm valuation

Studies have been conducted to x-ray the determinant of firm value. Many of the studies are of foreign origin and cannot be generalized to Nigeria because of specific internal economic factors. Secondly prior empirical studies produce mixed result as to the relationship between profitability and growth opportunities with firm value. Furthermore, many theoretical propositions are conflicting with little consensus. The debate is further exacerbated by the differences in method of valuation of firm value which impact results and produces mixed outcome. Profit is assessed through varied parameters and this lack of consensus of what constitute profit further undermines the result of studies and continues to fuel the debate. Profitability is based on past data and there is the objection that it does not reflect future potentials of the firm and trying to rely on past data to determine its relationship with the present valuation of an entity is an anomaly. Differences in strategy in terms of long term profit orientation or short-term profit orientation by the firm cannot be easily determined from financial statements and thus clearly measuring the relationship between profitability and firm value may be constrained because short term profit goals may not eventually result in wealth maximization goal of the firm even as investment options and growth opportunities may constrain profits in earlier years but enhance firm value in the long run. Profits in the books differ from actual cash flow and highly profitable firms may be illiquid and faces the risk of bankruptcy because of overtrading making reliance on profit and its use to determine firm value debatable, Based, on the challenges above and the paucity of research in Nigeria on the subject, this study aims to contribute to the debate on the subject by assessing the nexus between profitability, growth opportunities and firm value using enterprise value and Tobin Q

2.0 Literature
2.1 Theoretical Framework
2..1.1 Agency Theory
One of the fundamental problem facing ownership and shareholding in a firm is the issue of control and sustainability of the investment. The problem of control occurred immediately management was delegated to Managers who are distinct from owners. The manager is perceived as the agent who acts on behalf of the principal to execute the activities of the firm. Agency theory postulated by Jensen and Mecklings (1973) perceives agency relationship as a contract which require the employee (the manager) to pursue the goals of the entity to fulfill the aspirations of the shareholders. In return the agent is vested with rights and privileges to make decisions, put in strategies for the smooth running of the entity. Under an ethical situation the manager is expected to act in the best interest of the principal (shareholder) to maximize value and ensure compliance to debt covenants. However, in violations of this requirement the manager sometimes promotes personal goals which may not be in congruence with the goals of the owners of the business. This is the agency conflict. The agency problem is further exacerbated by the deliberate misinformation of the shareholders by the agent who have more information about the firm and its prospects thus creating information asymmetry which places Managers at advantage over shareholders and creditors. This lacuna further impacts negatively on the decision-making ability of the principal and creditors. This creates unethical issues and cause adverse selection of investments and improper decision with the consequence that investors are not certain whether managers execute their responsibilities in sync with principal's interest. Agency cost therefore emanates from the presumption by the duo of managers and shareholders that a conflict of interest between the parties occurs which attracts monitoring with the attendant costs. Monitoring costs are paid by the principal to ensure actions and activities of the Manager does not harm the business and interest of the principal. Additionally, conflict of interest creates losses when benefits from welfare costs are not maximized. Similarly, when there is absence of conflict of interest the cost of bonding between the parties (agent and principal) also occur. Thus, the sum of the cost associated with agency problem includes monitoring costs, bonding costs and cost of welfare benefits not maximized.

2.1.2 Theory of Information Asymmetry
Asymmetric information can be explained as the possession of superior information by one party over the other in a contractual relationship. Akerlof (1970) explained further that possession of less information by a counter party or deliberate misinformation of a counterparty by the other party creates information asymmetry and cause the party

misinformed to take harmful decision when executing transactions while the party with superior information also perform activities harmful to the party with less information with dire consequences of adverse selection and negative psychological impact. It is explained further that adverse selection implies that actions prior to signing a contract between parties consummating a business agreement or legal relationship may be deliberately skewed by a party with superior information to be harmful to parties with less information. These hazards could be aptly captured by examples from the stock market and insurance. Investors are desirous of profit. This is achieved in buying shares at low prices and disposing at higher prices. During disposal of the shares the seller possess superior information about the worth of the shares while the buyer sometimes is less informed thus the cost of adverse selection is usually borne by the buyer. It therefore implies that if the buyer does not accurately determine the future benefits (dividend) it will incorrectly make an offer price which may not enable successful recoup of investment. Moral hazard occurs when the party with superior information seeks to harm the less informed party after the signing of the agreement. This could occur in many forms. For instance, Initial public offer firms usually indicate in the prospectus investments to be made from capital raised and if they act contrary to the content of the prospectus the buyer of such shares are short changed. Also, borrowers from banks usually have purpose for which loans are granted. Moral hazards are created when such loans are diverted to purposes outside the terms which the loan was granted. Also, financial statements are relied on by investors to make decisions. Deliberate manipulation of earnings and financial position may mislead investors who rely on the financial statements to make decision. Such wrong decision may lead to loss of invested capital. The moral hazard is that investors who rely on the financial statement to make investment decision are less informed compared to the management and preparers of the financial report.

2.1.3 Signaling Theory

The signaling theory posits that information asymmetry can be mitigated through signaling or deliberate provision of truthful and reliable information amongst parties. Ross (1977) argued that firms can deliberately provide positive information about the firm to produce a positive outlook to parties while it can also hide bad news or delay report of bad news so that it does not deliberately impact on the public perception of the firm or its share prices.

Managers provide signals through provision of information in financial statements to investors with the intent to attract investors and enhance the firm's reputation

2.1.4 Asset-based perspective

There is another view point which suggests that the value of a firm is measured by its asset value provided by the statement of financial position. This is denoted by various definition provided by literature on the subject. Modigliani and Johnson (1980) argued that the value of a firm is the total of long term debt and equity thus supporting the debate that capital structure determines the worth of a firm. It was further opined that the value of the firm is synonymous with the value of investors, to indicate that they are superior to other firms in the market for attracting investment. Contrary to this, in its controversial no arbitrage condition and irrelevance of capital structure proposition Modigliani and Miller (1976) argued that the value of a firm is by its asset structure. Teland & Toft (1996) on the other hand posits that firm value is total asset plus the value of the tax shield's net benefit from the debt minus debt related bankruptcy costs.

2.1.5 Random Walk Theory

Random walk theory postulated by Fama (1970), proposes that current share prices is determined by the quality of information available about the firm. The efficient market hypothesis simply supports this by predicating its argument that share prices is determined accurately by and promptly reflect information at the disposal of investors allowing no abnormal benefits. Time for information is considered a critical requirement. The adjustment if executed promptly and accurately imply the market is classified efficient. Dyckman & Morse (2006) argued that efficient market is a situation that prices of shares sold in the market is perceived to reflect all available information resulting in immediate and instantaneous price adjustments, or approximately instantaneous price changes devoid of bias to addition of new information. Market efficiency does not imply that no investor will participate in the market at a specific period or that that share prices cannot be altered from its real value neither does it imply that no group of interested investors will be able to out-wit the market in the long run. However, market efficiency simply denote that no investor will constantly beat the market, but it can take place intermittently out of luck and not out of sound investment strategy. According to Mlambo (2003) the theory recommends that share price movement is not out of whims and caprices of investors neither is it a product of chaos. This suggests that price variations from one period to the other should be unbiased, independent and not forecasted, reflecting rationally available information and not according to possible trends. The theory further states that in an efficient market the price of shares consistently reflect its intrinsic value, suggesting price movement in a random manner deterring the possible prediction of future prices. The fluctuation in prices occur as product of information availability and as investors do not predict quality of new information hence cannot predict future price changes making previous price changes irrelevant to future

price change. These theoretical postulations bring a conflict of interest suggesting the work of an analyst is irrelevant in predicting future prices of shares

2.1.6 Modern Portfolio Theory of Investment

Portfolio theory suggests that investors try to mitigate risk and enhance earnings by balancing risks against expected returns for the entire portfolio. Portfolio is a collection of alternative investment options with the intent to effectively maximize earnings and mitigate risk. The modern portfolio theory deploys approximation mean variance analysis to simplify the selection process and enhance ability to derive value through maximizing returns. The 'risk' of a portfolio is quantified as a standard deviation of return from period to period, and the portfolio selection problem is reduced to computing an 'efficient' portfolio, that is, one that minimizes the risk for a fixed level of return in a single period. Portfolio theory suggests that higher the returns expected the better the investment and the smaller the deviation of returns the more appealing. The theory also suggests reduction of risk through reduction of standard deviation of returns or risk through a combination of anti-covariant securities. However, each asset category possesses varied level of return and associated risk and displays unique characteristics implying that while an asset may be increasing in value another may be decreasing in value.

2.2 Conceptual Framework

2.2.1 Firm Value

Firm value is the perception of investor in success rate of a firm which is often affiliated with the stock price. A high stock price creates a high firm value.

A high firm value shows the credibility of the firm performance and firm prospect in the future. Maximizing shareholders' wealth is one of the corporate goals that cannot be ignored. Firm's valuation is essential for deriving stock prices, an item of significance in many models (keys & Briggs, 1990). In determining a firm's Value according to Biggs (1978), stock price sometimes, is the sole measure of performance considered by the interested party. More commonly it is a major component of a weighted average that includes other measure. There are many alternative measures of firm value. Firm value is taken as accounting net worth or book value. This measure is however problematic, because accounting rule in a model may be at variance (in divergence) with generally accepted principles of financial accounting. This is because adherence to some generally accepted principles such as historical cost and conservatism can lead to values that are far from what is reasonable. The second measure is market value of its outstanding shares. This is a well-known technique of valuation of quoted firms. However, the adoption of the technique requires an efficient market for shares. This condition is not met in models that do not allow participants to trade shares, and even when such trading is allowed, the trades are generally too few and too infrequent for reliable valuation. The third measure capitalizes value of projected future performance.

Modigliani & Miller (1961) pointed out that though four distinct method of capitalization can be applied to value a firm, all four-give rise to precisely the same valuation when the markets are perfect. The next method involve deductive application of human judgment and psychometric scale Results are converted using formula to monetary values. The problem of this measure is that it requires subjective judgment. Lastly, net worth is adjusted for intangibles and idiosyncrasies of accounting rules used in the simulation though general principle could be laid out for the adjustment, the specific principle must depend upon the model. Though, the adjusted net worth measure avoids both problems; it does not require arbitrary parameter and can be completely objective. Its problem however, is that it requires detailed knowledge of imitation used in any model. However, the market value measure of determining firms' value is reliable and straightforward way of determining a firm's value, is known as market capitalization i.e. total value of all shares outstanding. This method only works for publicly traded companies, were shares value can be easily determined. The market capitalization (market value) of a firm can be determined by multiplying the number of outstanding shares by the current stock price. Market capitalization does not properly represent a firm's value because it leaves important factors out, such as a company's debt on the one hand and its cash reserves on the other. To circumvent this anomaly enterprise value method is adopted.

2.2.2 Enterprise Value

The Enterprise Value, or EV measures a firm's total value and is used as alternative to equity market capitalization. EV is computed as market capitalization plus debt, minority interest and preferred shares, minus total cash) .EV is theoretical takeover price during purchase of a firm. EV differs significantly from simple market capitalization. Firm's debt, would be paid off by the buyer when taking over another firm, thus, enterprise value provides accurate takeover valuation by including debt in its value calculation. A firm acquiring another obtains the cash in the purchased firm and is deducted from the bid price. Enterprise multiples that contain enterprise value relate the total value of firm indicated by market value of its capital from all sources to a measure of operating earnings achieved, such as earnings before interest, taxes, depreciation and amortization (EBITDA). EBITDA = recurring earnings from continuing operations + interest + taxes + depreciation + amortization The Enterprise Value/EBITDA multiple

is positively related to the growth rate in free cash flow to the firm (FCFF) and negatively related to the firm's overall risk level and weighted average cost of capital (WACC). EV/EBITDA is useful in several situations: The ratio may be more useful than the P/E ratio when comparing firms with different degrees of financial leverage (DFL). EBITDA is useful valuing capital-intensive businesses with high levels of depreciation and amortization. EBITDA is usually positive even when earnings per share (EPS) is not. EV/EBITDA also has many drawbacks, however: If working capital is growing, EBITDA will overstate cash flows from operations (Cash Flow from Operations -CFO or Operating cash flow -OCF). Further, this measure ignores how different revenue recognition policies can affect a company's Operating Cash Flow. Enterprise value is basically a modification of market cap, as it incorporates debt and cash for determining firm value.

2.2.3 Profitability
Weston & Copelan (1995) define profitability as firm's capacity to produce profit. Increased profitability is believed to increase share price. It is also believed that high profits provide the signal of a good future prospects for the business with prospects of positive response by investors thereby increasing firm value in the market. According to Allayannis & Weston (2001) highly profitable firms are frequently traded at a better price and attract investment improving the ease of raising capital. Firms generating high earnings are classified as successful or have a good financial performance. Profit is a basis of payment of dividend.

2.2.4 Growth Opportunities
An investment or project that has the potential to grow significantly, leading to a profit for the investor. New investments are often presented to potential investors as growth opportunities. Some common growth strategies in business include market penetration, market expansion, product expansion, diversification and acquisition. Market penetration strategy, market **expansion** or development, market **expansion** or development, product expansion Strategy,growth through diversification.

2.2.5 **Tobin Q**
Tobin's q (also known as **q** ratio and Kaldor's v) is the ratio between a physical asset's market value and its replacement value. It was first introduced by Nicholas Kaldor in 1966 in his article "Marginal Productivity and the Macro-Economic Theories of Distribution and later popularized by James **Tobin.** The **Tobin's Q** ratio equals the market value of a company divided by its assets' replacement cost. Thus, equilibrium is when market value equals replacement cost.

Conceptual Figure
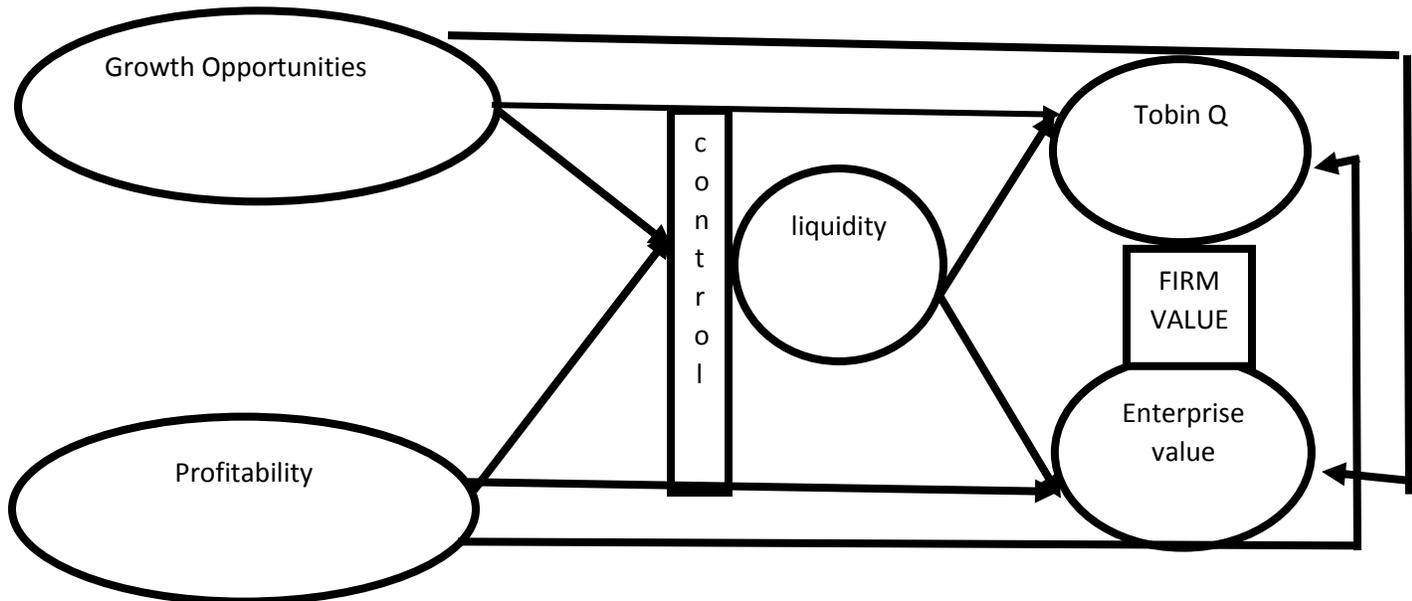
Conceptualized framework of Profitability, Growth Opportunities and Firm Value

2.3 EMPIRICAL REVIEW
Many studies have been conducted to determine the determinants of firm value. One of such research is conducted by Dang, Vu, Ngo and Hoang (2019). The study tried to determine the effect of growth size, capital structure, and profitability on enterprise value (EV) in Vietnam firms using panel of 1.070 observations at 214 companies listed on Vietnamese stock market for the period of 2012–2016. Using generalized least squares and structural pathways analysis, the results detected size and profitability positively correlated with enterprise value, but growth have no impact on enterprise value. ucuahi & Cambarihan (2016) tried to ascertain the effect of profitability on firm value on 86 Philippines firms using Tobin's Q on 2014 financial statements. The outcome of the study revealed profitability positively and significantly relate to Tobin Q. Varaiya et al. (1987) examined the relationship among growth, profitability, and enterprise value. The outcome indicated that profit and growth affect shareholder's value. THE study also confirmed a positive association of the variables with Tobin Q. Chen & Chen (2011) conducted a research on impact of profit and leverage on enterprise value. The result revealed high profit firms have high enterprise value compared to low profit firms indicating higher profitability influences firm value. Liow (2010) in a study of real estate firms for the period 2000-2006 examined growth, profitability, and financial leverage. Outcome of study indicate profitable firms contribute to higher sustainable growth rates as well as long-term profit growth and firm value. Hermuningsih (2014) examined the effects of profit, growth opportunity, and capital structure on enterprise value using 150 indonesian firms for the period 2006 to 2010. Outcome of study indicate profitability, growth opportunities, relate significantly and positively with firm value implying that the variables serve as enhancer of firm value. Manurung (2014) showed profitability is positively correlated with enterprise value. Kodongo et al. (2015) confirmed profitability positively relate to firm value of Kenyan firms. Elsewhere, Sabrin, Sarita, Takdir abd Sujono (2016) study on indonesian firms between 2009 to 2014 revealed that profitability impact firm value. Yang et al. (2010) showed evidence that higher profitable firms have higher firm value. The study by Mule, Mukras, & Nzioka (2015) explored the effect profitability and market value of listed companies in Kenya. In this 2010 and 2014 and found profitability has a significant positive impact on firm value. Purwohandoko (2017) studied firm size, growth, and profit to determine its effect on enterprise using 14 agricultural firms on Indonesian Stock Exchange (ISE) between 2011 and 2014. Study confirmed negative relation of profitability to firm value. Further Andawasatya, Indrawati & Aisjah (2017) investigated profitability and firm value of manufacturing firms in Indonesia using 67 companies were selected for analysis. profitability positively relates to firm value while growth negatively impact firm value

3.3 METHODOLOGY
3.3.1 **Data**
This study is based on secondary data obtained from financial statements of food and beverage firms listed on Nigeria Stock Exchange (NSE) for the period 2013-2017. Data is analyzed using E-VIEWS software.
3.3.2 Variables
Independent variables
The independent variables for the study are growth opportunities and Profitability. The variable measurements are as stated below:
GRW i, t = Change in Price-to-book ratio of firm i in year t as a proxy of change in growth
opportunities of the firm.
.PRF I,t = Net profit margin divided by sales as a proxy for profitability.
Dependent variable
The dependent variables for this study are:
Tobin Q
Tobin Q (TOBQ) = ratio expresses the relationship between market value of a firm and the cost of replacing the asset.
We adopt Chung and Pruitt's approximating formulation of Tobin's Q = MVE + PS +DEBT/TA
Where:
MVE   = Firm's stock price multiplied by number of outstanding equity shares.
 PS   = Value of a firm's outstanding preferred stock on liquidation
 Debt   = Sum of short term liabilities minus short term assets plus the book value of long term-debt;
 TA   = Total book value of all assets.

Enterprise value

ENVA =   Enterprise value

                    /SALES

Moderating variables
Liquidity is the moderating variable for this study. With high liquidity firms can finance short term investments with ease and meet maturing obligations. Dependent upon the industry characteristics, various empirical studies have given mixed results on the impact of liquidity on firm value. We expect a significant relation between liquidity and firm value. We have used current ratio (CR) as a proxy for liquidity in the study. We proxy liquidity using current asset ratio:

Current Ratio =   Current Asset
                    Current Liabilities

3.3 Test and selection of model
The study deploys panel data which combines time and cross-sectional series data obtained from a cross section of individual data observed at varied times. The two-paneling method used by Generalized Least square (GLS) to choose the most suitable model for testing is Fixed Effect Model (FEM) and Random Effect Model (REM). Hausmann test is deployed to ascertain the most appropriate model

3.4 Model Specification
$$TOBQ = \alpha_0 + \alpha_1 GRW + \alpha_{82} PRF + \alpha_3 LIQ + U_1, t \quad \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (i)$$
$$ENVA = w_0 + w_1 GRW + w_2 LPRF + w_3 LIQ + U_2, t \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (ii)$$

4.2 RESULTS

Table 4.2. Descriptive Analysis

	Mean	Median	Max	Min	Std. Dev.	Jarque-Bera	Prob	Obs
ENVA	1.327519	1.033682	6.077683	-0.37589	0.908881	277.9778	0	103
TOBIN	66564.33	680.3367	2576213	0.624091	379552.2	4718.986	0	103
GRW	-8.25558	0.064436	0.803789	-855.792	84.32998	42938.02	0	103
PROF	0.074479	0.064754	0.718681	-0.52749	0.16985	76.08196	0	103
LIQ	1.737611	1.076953	56.56938	0.073989	5.513325	39425.01	0	103

Source: Researcher's compilation (2019).

Table 4.2 shows the descriptive statistics for the variables and as observed, the mean for ENVA is 1.3275 with maximum and minimum values of 6.0776 and -0.375. The mean value for TOBIN is 66564.33 which is high and indicates that the firms tend to have high market valuation with maximum and minimum values of 2576213 and 0.624091 respectively. The mean for GRW is negative at -8.256 with maximum and minimum values of 0.803789 and -855.792 respectively. PROF has a mean value of 0.07448 with maximum and minimum values of 0.7187 and -0. 5275. respectively. LIQ has a mean value of 1.7376 with maximum and minimum values of 56.57 and 0.074 respectively.

Table 4.3 Pearson Correlation Results

	ENVA	TOBIN	GRW	PROF	LIQ
ENVA	1				
TOBIN	0.3242	1			
Prob	0.0008				
GRW	-0.165	-0.6578	1		
Prob	0.0951	0.000			

PROF	0.1192	0.5067	-0.28	1	
Prob	0.2305	0.000	0.005		
LIQ	-0.036	0.0487	-0.1	0.0148	1
Prob	0.7171	0.625	0.322	0.8821	

Source: Researcher's compilation (2019).

Table 4.3. shows the Pearson product moment correlation and the significant p-values for the variables. The result as presented in table 4.2 and it shows that ENVA is positively correlated with PROF (r=0.1192, p= 0.2305),) but negatively correlated GRW (r=-0.165, p= 0.0951) In addition, the table shows the correlations between TOBIN Q and the other independent variables and as observed TOBINQ is positively correlated with PROF (r=0.5128, p= 0.5067), but negatively correlated with GRW (r=-0.165, p= 0.0951). However, corrections are not best suited for functional dependence causality and hence the study proceeds to perform the panel regression analysis.

Table 4.4. Variance Inflation Factors

Variable	Variance	VIF
GRW	1.12E-07	1.262212
PROF	0.053477	2.449202
LIQ	2.19E-05	1.056286

Source: Researcher's compilation (2019).

Multicollinearity among the independent variables implies that they are perfectly correlated. If there exists perfect correlation between the independent variables, the parameter coefficients will be indeterminate. In the presence of multicollinearity, there will be large standard errors of the estimated coefficients. In this study, the variance inflation factor test is constructed to test for multicollinearity. The rule for the VIF is that the values less than 10 indicates the absence of serious collinearity. As shown, the VIF values of all the variables are all less than 10 and hence there is no threat of multicollinearity amongst the variables.

Table 4.5. ENVA and Growth and Profitability

Variable	Aprori Sign	FE Model	RE Model
C	+	0.9820 (0.4590) [0.0358]	1.2202 (0.2746) {0.000}
GRW	+	0.00027 (0.0002) {0.1575}	0.0003 (0.8117) {0.4191}
PROF		-0.10778 (0.2098) {0.6089}	-0.1789 (0.21994) {0.4180}
LIQ	+	-0.00571* (0.0018) {0.0025}	0.00251 (0.0045) {0.5753}
Model Parameters			
R^2		0.9834	0.9290
Adjusted R^2		0.9766	09214
F-statistic		144.582	121.775
Prob(F-stat)		0.000	0.00
Durbin-Watson		1.99	0.9349
Model Diagnostics			
Hausman	0.000		
Ramsey Reset test		0.410	
Period Hetero.Test		0.112	
Cross-section Hetero.Test		0.709	
Pesaran CD for serial correlation		0.483	

Source: Researcher's compilation (2019)

Table 4.5 show the regression results and white adjusted standard errors was employed to control for potential heteroskedasticity in the estimation and hence the estimation results are free from heteroskedasticity while the Cochrane Orcutt autoregressive (AR) procedure was employed to correct for serial correlations where it is detected. The Hausman test statistic with p-value = 0.00, indicates that the FE is the preferred model to the random effects indicating the presence of correlations between the errors and the explanatory variables which is the key assumption of the fixed effects (Hausman, 1998). Both panel period heteroskedasticity and cross-sectional heteroskedasticity test confirm that the estimations were found to be free from such. The Peseran cross-dependence test was employed to confirm the threat of the serial correlation in the errors and the statistic reveals the absence of cross-section dependence in the residuals. The Ramsey reset test confirms that the model is correctly specified. The R^2 is 98.34% with and adjusted value of 97.66%. The F-stat of 144.582 (p-value = 0.00) and significant at 5%. The Durbin Watson value of 1.99 suggest that the presence of serial correlation between the errors is unlikely in the model. The analysis of coefficients reveals that the effect of GRW is positive (0.00027) though not statistically significant (p=0.1575) at 5%. The effect of PROF is negative (-0.10778) though not statistically significant (p=0.6089) at 5%. The effect of LIQ is negative (-0.00571) and statistically significant (p=0.0025) at 5%.

Table 4.6. TOBIN Q and with Growth Opportunities and Profitability

Variable	Aprori Sign	FE Model	RE Model
C	+	3979154. (177449.9) [0.000]	961664.2 (79261.09) {0.000}
GRW	+	-855.9310 (160.167) {0.000}	-1742.947 (91.87764) {0.000}
PROF		247391.6 (71315.65) {0.000}	492117.4 (63471.5) {0.0000}
LIQ	+	-1114.805* (383.351) {0.0048}	-3205.25 (1285.63) {0.0144}
Model Parameters			
R^2		0.9418	0.7785
Adjusted R^2		0.9179	0.753
F-statistic		39.3933	32.695
Prob(F-stat)		0.000	0.000
Durbin-Watson		1.7	0.5529
Model Diagnostics			
Hausman	0.000		
Ramsey Reset test		0.291	
Period Hetero.Test		0.893	
Cross-section Hetero.Test		0.1194	
Pesaran CD for serial correlation		0.110	

Source: Researcher's compilation (2019)

Table 4.6 show the regression results for TOBIN Q and identified corporate determinants. The Hausman test statistic with p-value = 0.038, indicates that the FE is the preferred model to the random effects indicating the presence of correlations between the errors and the explanatory variables which is the key assumption of the fixed effects (Hausman, 1998). The R^2 is 94.18% with and adjusted value of 91.79%. The F-stat of 39.393 (p-value = 0.00) and significant at 5%. The Durbin Watson value of 1.7 suggest that the presence of serial correlation between the errors is unlikely in the model. The analysis of coefficients reveals). GRW has a negative beta (-855.93) which is statistically significant (p=0.000) at 5% on Tobin Q The effect of PROF is positive (247391.6) and statistically significant (p=0.000) at 5%. LIQ has a negative beta (-1114.805) and statistically significant (p=0.0048) at 5%. Both panel period heteroskedasticity and cross-sectional heteroskedasticity test confirm that the estimations were found to be free from such. The Peseran cross-dependence test was employed to confirm the threat of the serial correlation in the errors and the statistic reveals the absence of cross-section dependence in the residuals. The Ramsey reset test confirms that the model is correctly specified.

Table 4.6: Result Summary

Variable	ENVR MODEL	TOBIN Q Model
C	0.9820*	3979154*
	(0.4590)	(177449.9)
	[0.0358]	[0.000]
GRW	0.00027	-855.9310*
	(0.0002)	(160.167)
	{0.1575}	{0.000}
PROF	-0.10778	247391.6
	(0.2098)	(71315.65)
	{0.6089}	{0.000}
LIQ	-0.00571*	-1114.805*
	(0.0018)	(383.351)
	{0.0025}	{0.0048}

Source: Researcher's compilation (2019)

The summary of the results reveals that looking at the proxies for market value; ENVR and TOBIN Q, the estimation shows that GRW shows up as a significant predictor of TOBIN Q at both 5% significant level. PROF is statistically significant in explaining TOBINQ at 5%. LIQ is observed to be a significant determinant of ENVR and TOBIN Q all at 5% significant level.

Hypotheses

H01: There is no significant relationship between, growth and Tobin Q.
Based on table 4.4 with negative co-efficient of --855.9310 and P-value of 0.0000<0.05 Indicating a negative significant relationship of firm growth with tobin q. Based on result we reject the hypothesis that there is no significant relationship between Firm growth and Tobin Q.

H02: There is no significant relationship between profitability and Tobin Q.
Based on table 4.4 with positive co-efficient of 247391.6 and P-value of 0.0000< 0.05 Indicating a positive significant relationship of profitability with tobin q. Based on result we reject the hypothesis that there is no significant relationship between profitability and Tobin q

H03: There is no significant relationship between growth and Enterprise Value.
Based on table 4.5 with positive co-efficient of 0.00027 and P-value of 0.1575>0.05 Indicating a positive insignificant relationship of firm growth with Enterprise Value. Based on result we accept the hypothesis that there is no significant relationship between Firm growth and Enterprise.

H04: There is no significant relationship between profitability and Enterprise Value.
Based on table 4.5 with negative co-efficient -0.10778 p-value of 0.6089> 0.05 Indicating a negative insignificant relationship of profitability with Enterprise Value. Based on result we accept the hypothesis that there is no significant relationship between profitability and Enterprise Value

DISCUSSION OF FINDINGS
The objective of the study was to ascertain the nature of relationship between growth profitability and firm value measured by Tobin Q and Enterprise value multiple. The study found a positive significant relationship of profitability with Tobin q implying that increases in profitability increases firm value. Oluoch, & Ndambiri, (2018) study revealed positive and significant relationship between profitability, investment decision, financing decision and firm size on firm value. Dang, Ngo and Hoang (2019) found that profitability are positively correlated with the enterprise value with firm value. Liow (2010 observed profitability positively impact firm value. Chen & Chen (2011) reported that high-profit firms have higher enterprise value. Hence, profit has a significant impact on business value. Mule, Mukras, & Nzioka (2015) significant positive correlation between firm profitability, have a statistically significant impact on the market value of the firm. Sucuahi & Cambarihan (2016) profitability have a significant positive impact on the enterprise value. Dalbor et. al. (2007 observed that return on assets is negatively related to firm value implying that increase in profit decreases firm value. Our study found a positive significant association of profit to Tobin Q implying that increase in profit increases firm value

5.2 CONCLUSION

The study looked at the effects of growth and profitability on enterprise value and Tobin Q. The results of the research have found that profitability has positive significant impacts on tobin q as a measure of firm value and an insignificant negative relationship with enterprise value. Growth factor on the other hand has a significant negative relation with Tobin Q indicating that as firm growth opportunities increases Tobin Q as a measure of value decreases. Also, growth opportunities return an insignificant positive relation with enterprise value enterprise value. We conclude from the study that profitability is a determinant of firm value and its increase increases the firm value and returns to investors. We can also conclude that increases in growth opportunities of the firm increases risk and result in investors discounting the value of the firm to factor in risk in the valuation. It is observed that when using Enterprise value and Tobin Q measurements for firm value the result is not consistent. Theoretically enterprise value as a measure of firm value is adjudged a better yardstick of measurement of firm value because …….

5.3 RECOMMENDATION

Based on the results of the study, the authors found a positive correlation between profitability and market value of firms. Thus, firms should increase profitability through cost reduction, savings effective utilization of fixed assets, increased capacity utilization, maintain the growth rate as this is also a factor to increase the value of the business. Additionally, firms should increase sales and make good management of receivables and improve operational efficiency. Proper management of cash flow to prevent over trading and insolvency. Last, for investors, the results of research on the relationship of profitability and growth opportunities, and enterprise value of listed companies on the Nigeria stock investors will have the basis to predict the profitability and value of the enterprise to make appropriate investment decisions.

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APPENDIX

Dependent Variable: TOBIN
Method: Panel EGLS (Cross-section random effects)
Date: 10/23/19   Time: 10:39
Sample: 2013 2017
Periods included: 5
Cross-sections included: 21
Total panel (unbalanced) observations: 104
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	961664.2	79261.09	12.13287	0.0000
GRW	-1742.947	91.87764	-18.97031	0.0000
PROF	492117.4	63471.50	7.753360	0.0000
LIQ	-3205.251	1285.627	-2.493142	0.0144

Effects Specification			S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			69654.01	1.0000

Weighted Statistics				
R-squared	0.778545	Mean dependent var		65925.32
Adjusted R-squared	0.754732	S.D. dependent var		377761.4
S.E. of regression	187084.5	Sum squared resid		3.26E+12
F-statistic	32.69493	Durbin-Watson stat		0.552972
Prob(F-statistic)	0.000000			

Unweighted Statistics				
R-squared	0.778545	Mean dependent var		65925.32
Sum squared resid	3.26E+12	Durbin-Watson stat		0.552972

Dependent Variable: TOBIN
Method: Panel EGLS (Cross-section weights)
Date: 10/22/19   Time: 21:58
Sample: 2013 2017
Periods included: 5
Cross-sections included: 21
Total panel (unbalanced) observations: 104
Linear estimation after one-step weighting matrix

White cross-section standard errors & covariance (d.f. corrected)

WARNING: estimated coefficient covariance matrix is of reduced rank

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3979154.	177449.9	22.42410	0.0000
GRW	-855.9310	160.1666	-5.344004	0.0000
PROF	247391.6	71315.65	3.468966	0.0009
LIQ	-1114.805	383.3514	-2.908049	0.0048

Effects Specification

Cross-section fixed (dummy variables)

Weighted Statistics			
R-squared	0.941823	Mean dependent var	39376.00
Adjusted R-squared	0.917915	S.D. dependent var	214487.6
S.E. of regression	62341.36	Sum squared resid	2.84E+11
F-statistic	39.39331	Durbin-Watson stat	1.600539
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.970385	Mean dependent var	65925.32
Sum squared resid	4.35E+11	Durbin-Watson stat	1.295939

Dependent Variable: ENVA

Method: Panel EGLS (Cross-section random effects)

Date: 10/23/19   Time: 09:44

Sample: 2013 2017

Periods included: 5

Cross-sections included: 21

Total panel (unbalanced) observations: 104

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.220158	0.274658	4.442460	0.0000
LEV	0.038753	0.166171	0.233214	0.8161
MCP	4.16E-14	4.74E-14	0.877056	0.3827
GRW	0.000258	0.000318	0.811668	0.4191
EFFI	1.166438	0.034342	33.96487	0.0000
ATANG	-1.012504	0.052266	-19.37205	0.0000
PROF	-0.178915	0.219944	-0.813457	0.4180
DIVPAY	-0.001024	0.001313	-0.780181	0.4373
LIQ	0.002505	0.004455	0.562314	0.5753
INFL	-0.006173	0.006469	-0.954189	0.3425
FSIZE	-0.045404	0.034748	-1.306645	0.1946

Effects Specification			
		S.D.	Rho
Cross-section random		0.000000	0.0000
Idiosyncratic random		0.241367	1.0000

Weighted Statistics			
R-squared	0.929048	Mean dependent var	1.323686
Adjusted R-squared	0.921419	S.D. dependent var	0.905302
S.E. of regression	0.253777	Sum squared resid	5.989457
F-statistic	121.7750	Durbin-Watson stat	0.934914

Prob(F-statistic)	0.000000			

Unweighted Statistics			
R-squared	0.929048	Mean dependent var	1.323686
Sum squared resid	5.989457	Durbin-Watson stat	0.934914

Dependent Variable: ENVA
Method: Panel EGLS (Cross-section weights)
Date: 10/22/19   Time: 21:57
Sample: 2013 2017
Periods included: 5
Cross-sections included: 21
Total panel (unbalanced) observations: 104
Linear estimation after one-step weighting matrix
White cross-section standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.982089	0.459060	2.139349	0.0358
GRW	0.000267	0.000187	1.428350	0.1575
PROF	-0.107778	0.209758	-0.513821	0.6089
LIQ	-0.005713	0.001822	-3.135527	0.0025

Effects Specification			

Cross-section fixed (dummy variables)

Weighted Statistics			
R-squared	0.983448	Mean dependent var	2.894291
Adjusted R-squared	0.976646	S.D. dependent var	2.050531
S.E. of regression	0.234001	Sum squared resid	3.997220
F-statistic	144.5818	Durbin-Watson stat	1.933914
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.949185	Mean dependent var	1.323686
Sum squared resid	4.289556	Durbin-Watson stat	1.292387

Dependent Variable: ENVA
Method: Panel EGLS (Cross-section random effects)
Date: 10/23/19   Time: 09:44
Sample: 2013 2017
Periods included: 5
Cross-sections included: 21
Total panel (unbalanced) observations: 104
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.220158	0.274658	4.442460	0.0000
GRW	0.000258	0.000318	0.811668	0.4191
PROF	-0.178915	0.219944	-0.813457	0.4180
LIQ	0.002505	0.004455	0.562314	0.5753

	Effects Specification	
	S.D.	Rho
Cross-section random	0.000000	0.0000
Idiosyncratic random	0.241367	1.0000

Weighted Statistics

R-squared	0.929048	Mean dependent var	1.323686
Adjusted R-squared	0.921419	S.D. dependent var	0.905302
S.E. of regression	0.253777	Sum squared resid	5.989457
F-statistic	121.7750	Durbin-Watson stat	0.934914
Prob(F-statistic)	0.000000		

Unweighted Statistics

R-squared	0.929048	Mean dependent var	1.323686
Sum squared resid	5.989457	Durbin-Watson stat	0.934914

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	19.889209	10	0.0303

** WARNING: estimated cross-section random effects variance is zero.

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
GRW	0.000271	0.000258	0.000000	0.9506
PROF	-0.111042	-0.178915	0.041952	0.7404
LIQ	-0.005047	0.002505	0.000006	0.0020

Cross-section random effects test equation:
Dependent Variable: ENVA
Method: Panel Least Squares
Date: 10/23/19   Time: 09:42
Sample: 2013 2017
Periods included: 5
Cross-sections included: 21
Total panel (unbalanced) observations: 104

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.081882	0.657656	1.645058	0.1043
GRW	0.000271	0.000374	0.723934	0.4714
PROF	-0.111042	0.300545	-0.369468	0.7128
LIQ	-0.005047	0.005080	-0.993511	0.3237

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.949620	Mean dependent var	1.323686
Adjusted R-squared	0.928916	S.D. dependent var	0.905302
S.E. of regression	0.241367	Akaike info criterion	0.237230
Sum squared resid	4.252852	Schwarz criterion	1.025462
Log likelihood	18.66404	Hannan-Quinn criter.	0.556566
F-statistic	45.86651	Durbin-Watson stat	1.299015
Prob(F-statistic)	0.000000		

Dependent Variable: TOBIN
Method: Panel EGLS (Cross-section weights)
Date: 10/22/19   Time: 21:58
Sample: 2013 2017
Periods included: 5
Cross-sections included: 21
Total panel (unbalanced) observations: 104
Linear estimation after one-step weighting matrix
White cross-section standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3979154.	177449.9	22.42410	0.0000
GRW	-855.9310	160.1666	-5.344004	0.0000
PROF	247391.6	71315.65	3.468966	0.0009
LIQ	-1114.805	383.3514	-2.908049	0.0048

Effects Specification

Cross-section fixed (dummy variables)

Weighted Statistics

R-squared	0.941823	Mean dependent var	39376.00
Adjusted R-squared	0.917915	S.D. dependent var	214487.6
S.E. of regression	62341.36	Sum squared resid	2.84E+11
F-statistic	39.39331	Durbin-Watson stat	1.600539
Prob(F-statistic)	0.000000		

Unweighted Statistics

R-squared	0.970385	Mean dependent var	65925.32
Sum squared resid	4.35E+11	Durbin-Watson stat	1.295939

Cross-section random effects test equation:
Dependent Variable: TOBIN
Method: Panel Least Squares
Date: 10/23/19   Time: 10:37
Sample: 2013 2017
Periods included: 5
Cross-sections included: 21
Total panel (unbalanced) observations: 104

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4577454.	189786.8	24.11893	0.0000

GRW	-743.7009	107.8410	-6.896270	0.0000
PROF	263088.7	86731.47	3.033371	0.0033
LIQ	-1649.437	1465.924	-1.125186	0.2642

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.975904	Mean dependent var	65925.32
Adjusted R-squared	0.966002	S.D. dependent var	377761.4
S.E. of regression	69654.01	Akaike info criterion	25.38269
Sum squared resid	3.54E+11	Schwarz criterion	26.17092
Log likelihood	-1288.900	Hannan-Quinn criter.	25.70203
F-statistic	98.55214	Durbin-Watson stat	1.729995
Prob(F-statistic)	0.000000		

Dependent Variable: TOBIN
Method: Panel EGLS (Cross-section random effects)
Date: 10/23/19   Time: 10:39
Sample: 2013 2017
Periods included: 5
Cross-sections included: 21
Total panel (unbalanced) observations: 104
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	961664.2	79261.09	12.13287	0.0000
GRW	-1742.947	91.87764	-18.97031	0.0000
PROF	492117.4	63471.50	7.753360	0.0000
LIQ	-3205.251	1285.627	-2.493142	0.0144

Effects Specification

		S.D.	Rho
Cross-section random		0.000000	0.0000
Idiosyncratic random		69654.01	1.0000

Weighted Statistics

R-squared	0.778545	Mean dependent var	65925.32
Adjusted R-squared	0.754732	S.D. dependent var	377761.4
S.E. of regression	187084.5	Sum squared resid	3.26E+12
F-statistic	32.69493	Durbin-Watson stat	0.552972
Prob(F-statistic)	0.000000		

Unweighted Statistics

R-squared	0.778545	Mean dependent var	65925.32
Sum squared resid	3.26E+12	Durbin-Watson stat	0.552972