



Determinants of Profitability in Listed Consumer Good Firms in Nigeria

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ABSTRACT

The study empirically investigates the determinants of long term and short term profitability in listed consumer goods firms in Nigeria. Expo facto research design was adopted for the study. Time series secondary data on firm size, leverage, market share and return on asset within the period of 2006 to 2015 were sourced from the publications of the consumer goods firms. Data collected were analyzed using Pearson correlation and ordinary least square regression. The findings of the study indicated that there is strong relationship among the variables considered in the study. 1% increase in firm size has a positive and significant effect of 9% of profitability in Nigeria as measure by ($t = 7.998154$, $p < 0.05$); an increase in leverage by 1% has positive and significant effect of 9% as measure by ($t = 7.306224$, $p < 0.05$) and market share has a positive and significant relationship with return on asset (ROA) as measure by ($t = 4.756224$, $p < 0.05$). Based on the findings, the study recommends that Management should concentrate on achieving a reasonable firm size, leveraging and fair market share since it leads to profitability.

Keywords: Determinants, Profitability, Consumer goods firms.

1 Introduction

In a business world, firms work to make profit and profitability is a key factor in the measurement, growth, and survival of a firm. It influences the reputation of the firm. Businesses that are not profitable cannot survive the competition in the market which could lead to its demise in no time, while firms that are profitable possess the capacity to reward investors with large return on their investments and at the same time serve the welfare of other segments of the society. Firms are created with the main objective of making profit. Therefore management as well as other stakeholders of the business are interested in the profitability of the firm. One of the most crucial task of a manager is to

improve profitability in the organization by looking for new ways to reduce cost and increase profitability. Profitability tends to be a variable used by shareholders and investors to project a firm's economic failure (Shaheen & Malik, 2012). Profitability however, refers to the earning capability of a firm or its ability to make profit to make profit by the use of resources available. In other words, it shows how efficient management achieve the goals of the organization with the resources available to it

Profitability is the index that shows the efficiency of an organization. In other words, it is the measure of efficiency and guides management to achieve

even greater efficiency. Awan (2014) posits that “The financial give back or even compensate of which business people commit to make any give back is known as profit and the particular profit earned with a company enable you to determine the particular achievements of these expenditure.” Profitable firms make higher returns than unprofitable firms, despite having significantly higher assessment ratios (Donald, 2002). Every industry works towards the achievement of profit for the growth and development of the firms within the industry and contribution to the economy as a whole. In determining the performance of a firm profitability performs an important and dynamic role.

Consumer goods are any tangible commodity which are produced and subsequently purchased to satisfy the needs of the buyer. These needs include the current need and the perceived needs of the individual buyer. These consumer goods happen to be of three categories which are the durable goods, non-durable goods, and services. The consumer goods firms are firms that deal in consumer goods. In other words, they are such firms that make consumer goods available for the buyers. These firms work in order to create goods that will meet the need of the buyer at any point in time.

Maja and Josipa (2012) posits that “Though there are certain number of theories that made efforts to explain the reasons why certain firms tend to be more profitable than others, plethora of variables were used to investigate its influence on firm performance, despite all these the issue of firms profitability continues to be a vast area that pulls the attention of many practitioners and researchers.” A firm's performance is affected by a number of variables which could be internal or external. These variables are the determinants of profitability.

To the best of the researcher's knowledge, this study is yet to see any studies that combine Firm size, market share and leverage to measure profitability using return on asset (ROA) of consumer goods firms in Nigeria and also majority of the studies conducted on determinants of profitability have been conducted outside Nigeria. Hence this study attempts to fill the presented gaps as stated by examining the determinants of profitability in consumer goods firms in Nigeria.

The major objective of this study is to examine the

determinants of profitability in listed consumer firms in Nigeria. The specific objectives are to:

- i. Examine the impact of firm size on profitability in listed consumer goods firms in Nigeria. Determine the influence of market size on profitability in listed consumer goods firms in Nigeria.
- ii. Investigate the impact of leverage on profitability in listed consumer goods firms in Nigeria.

Based on the above stated objectives, the hypotheses of the study is stated in null form;

H₀₁ Firm size does not have significant impact on profitability in listed consumer good Firms in Nigeria.

H₀₂ Market share does not have significant influence on profitability in listed consumer goods Firms in Nigeria.

H₀₃ Leverage does not have significant impact on profitability in listed consumer goods Firms in Nigeria.

This paper will be of help to management and other stake holders to understand what are the determinants of profitability. It will assist in academic by adding to the literatures.

This paper is divided into five sections with this section as the introduction. The second section as the literature review. The third section that presents the methodology of the research. Section four gives an insight into discussions and findings. Then section five as the conclusion and recommendations.

2.0 Literature Review

2.1 Concept of Profitability

Profitability is the ability to make profit from all the business activities of a firm, company, organization or an enterprise. Profitability provides a better way to measure management efficiency in the use of available resources in adding value to the firm (Myers, 1984). It is a relative term measured in terms of profit. Soumadi & Hayajneh (2012) posits that “Profitability is the ability of a given investment to earn a return from its use.” The main objective of firms is the maximization of profit. Due to market competition business managers would have to practice and learn to achieve a sustainable level of profitability.

The existence of every firm is dependent on the ability of the firm to generate profit. This profit

generated influences the reputation of the firm. The capital structure of a firm is determined by both debt and equity, this means that for a firm to access credit it must be profitable (Ramachandran & Raju, 2012). In other words the borrowing capacity of a firm is determined by profitability. It is the main factor which is used in determining the capital structure of firms. This concept is measured by profit margin, return on investment or return on asset. In terms of measuring the profitability of firms, return on asset is sufficient and essential for growing firms mostly in food industry (Ramachandran & Raju, 2012). The success of a firm can be measured solely by profitability in relation to the capital employed by the firm. This economic success achieved by the firm is determined by the net profit generated during the course of business. In order to achieve a high return that surmounts the risk in the business which will certainly be accepted by the owners of the business becomes the main priority of companies operating in capitalist economies (Majumdar, 1997).

2.1.1 Market share and profitability

Market share is the proportion of an industry or market's total sales earned by a particular company for a given period of time. Increase in market shares allows firms to achieve greater balance in its operations, which leads to increase in profitability (Lydia, 2015). Firms compete to increase their market share. This increase in market share is increase in profitability of the firm. Profitability is an important means for measuring the success of any business. It shows the efficiency and financial soundness of a commercial unit. Companies strive to achieve profitability during the course of business and one of the means for doing so is by gaining market shares (Alireza, 2010)

2.1.2 Firm Size and Profitability

Wherever there is profit there is always an interaction or relationship with size. Lydia (2015) posits that "Firms that are of large size are not too prone to bankruptcy because, they have more advantage of diversifying that smaller." This means that because larger firms have lower bankruptcy costs, they have the chance of taking more debts to boost their capital structure. This also gives them a possible advantage of reducing the irregularities in the market and gaining more finance with absolute ease. Firm size is key to determining a firm's capital structure and wherever there is profit there is

always an interaction or relationship with size. (Abor&Biekpe, 2009). The management of small firms are done by very few personnel with the motive of minimizing external intervention which leads to having internal financing as a priority in raising their capital structure. Where internal funds are not able to meet the financial needs of the firm, small firms prefer debt to new equity mainly because debt shows a low level of interference and lower risk of losing control. (Lydia, 2015.)

2.1.3 Leverage and Profitability

The concept of leverage is considered under financial strategy planning of a firm leverage gives the firm the opportunity to increase the rate of return. This is done by generating greater return on money that is borrowed than the cost of using that money. In cases where the firm's asset is greater than the interest before tax is paid on debt, then it implies that leverage is positive. There are also times where the asset of the firm could be or is less than interest before tax rate, this implies that leverage is negative. (Suhaila, 2014).Subaii (2012) posits that "Firms that use their earnings instead of considering capital from outside sources benefit more earnings (profit) because of less leverage as compared to other firms that only rely on capital from outside sources as such increase the level of their leverage." This means that whenever a firm's stock price is high, the firm then prefers to issue equity instead of taking outside capital that helps them to maintain their leverage.

2.2 Empirical review

Lydia (2015) conducted a study on the relationship between financial leverage and profitability of firms listed in the Nairobi securities exchange. The study used descriptive research design. The population of the study consisted of 64 listed firms and a period of 5 years. Descriptive statistics was used to show the relationship. The findings of the study shows that financial leverage does not have any correlation with profitability. However, the study made use of only financial leverage as a determinant of profitability. The use of other variables might give a different result.

Wainaina (2014), studied the relationship between leverage and financial performance of top 100 small and medium enterprises in Kenya. The study used descriptive research design. The target population of the study was 100 SMEs in Kenya.

The study found that there was a positive relationship between leverage and financial performance. This study also considered leverage as the only determinant of profitability leaving out other variables, hence the findings are questionable. Soumadi and Hayajneh (2012) examined the relationship between capital structure and corporate performance in Jordanian shareholdings firms. The study used multiple regression models by least squares (OLS). It considered a period of 5 years. The results show that capital structure was associated negatively and statistically with the performance of the firms in the sample. The study concluded that the relationship between capital structure and firm performance was negative for both high growth firms and low growth firms. However, the study considered a period of five years, the findings might be different if the period covered is increased to 10 years.

Pouraghajan and Bagheri (2012) studied the impact of capital structure on profitability of listed companies in Tehran stock exchange. The study was conducted using 40 firms. Secondary data was used and the findings suggest that there is a significant negative relationship between debt ratio and financial performance of companies. The findings also showed a positive relationship between asset turnover, firm size, asset tangibility ratio and growth opportunities with financial performance. However, if the study would have considered a higher population, the result might be different.

Abdussalam (2006) examined the relationship of firm structure and profitability in Jordanian industrial companies. The study employed two model specifications to test the hypothesis using Return on equity (ROE) and return on investment (ROI). The findings suggest that firm structure emerges as an important factor that influences profitability. The results show that there is a positive relationship between firm size and profitability. The researcher is in support with this study because it uses firm structure as a determinant though it didn't consider other determinants as leverage and market share. The researcher agrees with the empirical findings of Abdulsalam (2006) which shows that firm structure influences profitability.

2.3 Theoretical framework

The economic theories of profitability seek to create an explanation of what constitutes profit and how these profits are generated by firms. One of these theories are first propounded by Prof J. B. Clark in 1900. It is known as the dynamic theory of profitability.

i. Dynamic theory of profitability

According to this theory, profit in an organization is the difference between the price of a commodity and the cost invested in its production. This theory also views profitability as a result of dynamic change. Harrod (1939) opines that "In a stationary state having static economic conditions of demand and supply there can be no real or pure profit as surplus. In a stationary economy, the quantum of capital invested, methods of production, managerial organization, technological inventions, demand patterns remains constant." This theory explains that in a competitive condition or setting, prices tend to equal average costs; which leads the surplus to be zero. In other words, there is no pure profit. Profitability is a result of six(6) dynamic changes which are changes in population, changes in taste and preferences, multiplication of wants, capital formation (capital structure), technological advancement and changes in the size of the firms. This theory emphasizes the dynamic aspect of profitability.

ii. Modern theory of profit

This theory is also known as perfect competition or demand and supply theory of profitability of firms. This theory seeks to explain how profits are generated and maintained by businesses. This theory explains the position of the firm itself and profits as the net income of the enterprise. The theory views profit as the reward of the enterprise and these profits generated are governed by demand and supply of the firm. The demand as sited by this theory mostly depends on the level of industrial development, the elements of uncertainty in the industry the scale of production. If the scale of production is large and efficient in the firm then productivity will increase and profitability will be high. Similarly the supply of the firms depends upon various factors which are availability of capital, the existence of managerial and technical professionals, the number or size of the market and the general condition of the society. The more the availability of capital the larger the firm size and

which will depend largely on the managers and other technical personnel for organizing and running so as to attain profitability.

3.0 Methodology

The study adopted expo-facto research design. There are 25 listed consumer goods firms as at 2015. Out of the 25, the research was only conducted using 15 consumer goods firms as the data of the remaining 10 was not complete as at the time of the research. Therefore, the population of the study is 15 listed consumer goods firms in Nigeria. The paper employs the use of secondary data extracted from the consumer goods firm's annual reports and accounts from 2006-2015. The research covered 15 listed consumer firms for ten (10) years period. The data analysis was conducted using the multiple regression and correlation technique. The study is limited to Consumer goods firms in the Nigerian stock exchange as at 31st December, 2015.

3.1 Variable Measurement

3.1.1 Profitability measurement

This study employed the measurement of profit which is return on asset (ROA) was used

Where $ROA = \text{Earnings before interest and taxes} / \text{Total Asset}$

3.1.2 Explanatory Variable Measurement

Table 3.1.2 Explanatory variable

Variable	Proxy (ies)	Measurement
Determinant	Firm Size	Market Capitalization
Determinant	Market Share	Company sales/industrysales
Determinant	Leverage	Total debt /Total asse t

Source: Authors Compilation 2016.

3.2 Model Specification

The simple linear regression that shows the determinants of profitability. This relationship is therefore modelled as such:

$$ROA_t = \hat{\alpha}_0 + \hat{\alpha}_1 FIR_t + \hat{\alpha}_2 MRT_t + \hat{\alpha}_3 LEV_t + \hat{\alpha}_4$$

Where:

ROA_t = Return on Asset at time t

CON_t = Firm size at time t

$MrktShare_t$ = Market share at time t

Lev_t = Leverage at time t

$\hat{\alpha}_1 - \hat{\alpha}_5$ = Coefficient of the independent variables

$\hat{\alpha}_0$ = Intercept

$\hat{\alpha}_t$ = Random disturbance term or error term

4.1 Results And Discussion

This section deals with the presentation, analysis and interpretation of the data collected for the study. Findings were discussed as regards the data collected. The table below shows the correlational matrix. In the table, the entries on the main diagonal give the correlation of one variable with itself, which is 1 by definition, and the entries off the diagonal are the pair-wise correlations among variables. The other results also shows that both firm size and leverage has strong relationship with market share. Return on asset also has a strong relationship with other variables considered in the study.

Table 1: Correlation matrix

	Firm size	Leverage	Market share	ROA
Firm size	1.000000	0.941330	0.986906	0.788001
Leverage	-	1.000000	0.963568	0.655768
Market share	-	-	1.000000	0.642330
ROA	-	-	-	1.000000

Source: Authors computation (2016)

Table 2 shows the impact firm size had on profitability. The value show a positive effect, which means that 1% growth in the size of the firm will significantly increase profitability by 9% in Nigeria. This is supported by the findings of Abdussalam (2006) that firm size has a positive relationship with profitability.

Table 2: Summary of the impact of firm size on profitability in consumer goods firms in Nigeria

Variable(s)	Coefficients	t-statistics	Probability
Firm size	0.093709*	7.998154*	0.0000
C (intercept)	1.127649	0.553651	0.5949
R^2	0.886103		
Adj R^2	0.871866		
F-Statistics	62.23873		
Prob (F-statistics)	0.000048		

Source: Authors computation (2016)

Note: One, two, and three asterisk denotes significant at 1%, 5%, and 10% respectively.

The influence of leverage on profitability is shown in table 3 below which shows a positive and significant effect. The result show that 1% increase in the leverage of a firm will increase profitability significantly by 9%. This is supported by the study of wainaina 2014 that leverage has a positive impact on profitability.

Table 3: Summary of the influence of leverage on profitability of consumer goods firms in Nigeria

Variable(s)	Coefficients	t-statistics	Probability
Leverage	0.0935948*	7.306224*	0.0000
C (intercept)	2.999687*	3.234466	0.0120
R ²	0.970732		
Adj R ²	0.970541		
F-Statsitics	299.5054*		
Prob (F-statistics)	0.000000		

Source: Authors computation (2016)

Note: One, two, and three asterisk denotes significant at 1%, 5%, and 10% respectively.

Table 4 shows a positive and significant relationship between Market share and profitability of consumer goods firms. This result shows that 1% increase in market share will increase profitability insignificantly by 5%. This finding is in line with the finding of Pouraghajan and Bagheri (2012), which shows that market share has a positive relationship with profitability.

Table 4: Summary of the influence of market share on profitability of consumer goods firms in Nigeria

Variable(s)	Coefficients	t-statistics	Probability
Leverage	0.053648	4.756224	0.0000
C (intercept)	0.059715	0.032466	0.9121
R ²	0.070732		
Adj R ²	-0.096054		
F-Statsitics	62.235477*		
Prob (F-statistics)	0.000000		

Source: Authors computation (2016)

Note: One, two, and three asterisk denotes significant at 1%, 5%, and 10% respectively. t-statistics shows tolerance level of a model and from the coefficient 7.998154*, 7.30622*, 4.756224 in table 2 3 and 4 the value shows that the tolerance level is significant. Based on the presented result, below is the null hypotheses of the study tested.

H₀₁ Firm size does not have significant impact on profitability in listed consumer goods Firms in Nigeria.

H₀₂ Leverage does not have significant influence on profitability in listed consumer goods Firms in Nigeria.

H₀₃ Market share does not have significant impact on profitability in listed consumer goods Firms in Nigeria.

Therefore, the null hypothesis is failed to be accepted. The results of the hypothesis testing are given below;

H₀₁ There is a positive and significant relationship between firm size and profitability.

H₀₂ There is a positive and significant relationship between leverage and profitability.

H₀₃ There is a positive and significant relationship between market share and profitability.

5.0 Conclusion

This study examined the determinants of profitability and how they impact on profitability of consumer goods firms in Nigeria. Findings of the study suggest that these determinants (firm size, leverage, and market share) plays important role in promoting profitability. Based on the findings of the study, it was concluded that;

- Firm size positively impacts on profitability in consumer goods firms in Nigeria.
- Leverage positively impacts on profitability in consumer goods firms in Nigeria.
- Market share positively enhances profitability in consumer goods firms in Nigeria.

Recommendation

As a result of the findings, the following recommendations were made:

- Management should concentrate on increasing sales so as to attain a reasonable firm size since it leads to profitability. This could be done by the firms ability to create new products and pay attention to the market so as to respond to the needs of their customers their by increasing the level of sale.

- ii. The firm should have a fair measure of leverage as it leads to profitability. The firm should be able to achieve this by its ability to pay attention to its cash flow cycle, and rate of response of receivables.
- iii. Ways to increase market share should be addressed by management at all levels of the organization. The firm should be able to produce to meet the needs in the industry by doing so they maintain a position of having a larger market share in the industry.

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