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Effect of Firm Characteristics on Corporate Cash Holding of Quoted Consumer Goods Firms in Nigeria

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ABSTRACT

This study was carried out to examine the effect of firm characteristics on corporate cash holding of quoted consumer goods firms in Nigeria. The study had four (4) objectives which are in line with the research questions and hypothesis. The population of the study was twenty (20) consumer goods firms listed on the Nigerian Stock Exchange. Five (5) consumer goods firms were judgmentally selected based on the availability of data pertaining to the variables for the period under study (2007 to 2017). The firm characteristics considered for the purpose of this study are; profitability, capital expenditure, firm size and leverage. Data were sourced from the annual reports of the sampled firms and the 2017 Industry Report of Lagos Business School. The study used panel data regression analysis to test the effect of the selected firm characteristics on cash holding. The result of the study revealed that profitability, capital expenditure and firm size has effect on cash holding of quoted consumer goods firms on the Nigerian Stock Exchange while leverage had no effect on cash holding of quoted consumer goods firms on the Nigerian Stock Exchange. The implication of this is that cash holdings of firm increases when the firms are profitable, capital expenditure are higher and the firm size is bigger. This study recommends consumer goods firms in Nigeria to adopt changes in response to consumer taste and wants in order to attract a large market share and remain profitable. The study further recommends increase the firm's capital base which can be achieved through capital expenditure. Meaningful mergers and acquisition in order to increase the firm size should be towed while leverage should be moderate and within the firm's level of cash holding as a high level of such will only increase default risk and likelihood of financial distress.

Keywords: Effect, firm, cooperate, cash, holding, quoted, goods, Nigeria.

INTRODUCTION

The issue of how much cash a firm should keep is a timeless one. Empirical studies on the effect of firm characteristics on corporate cash holdings occupy a central place in accounting and corporate finance literature. Researchers have also been trying to further explain the effect of firm characteristics on corporate cash holdings. [1] defined cash holding as cash in hand or readily available for investment in physical assets and for distribution to investors. Cash holding is therefore viewed as cash or cash equivalent that can easily be converted into cash [2].

There has been a notable increase in corporate cash holdings levels. For example, reports once showed that Apple and GM Motors were each holding more cash than the United States Treasury. Just how much cash is too much and what firm characteristics inform the decision on how much cash a firm should have in hand. According to [3], smaller firms and others with good growth opportunities and unstable cash flows have higher cash holdings. Although these studies were focused on western countries and few targeted countries in Asia. Cash holdings sensation is not limited States, as little research has also been carried out in

African countries with a few of these studies in Nigeria. Therefore, this study examines the effect of firm characteristics on corporate cash holdings of consumer goods firms in Nigeria.

Throughout history, managers have been concerned with finding an optimal level of liquid assets to hold on their firm's statement of financial position. On one hand, there are costs associated with holding cash and its equivalents, such as tax costs and lower rate of return. On the other, cash often constitute a vital ingredient in a firm's business strategy as it represents the most liquid asset that firms can easily dispose of. As such, cash lends itself to quickly being able to finance new business ideas and investments.

In times of crises, cash is usually the emergency plan that enables companies to pay their outstanding obligations [4]. This phenomenon is especially evident in the aftermath of the burst of the American housing bubble as the need for liquidity showed that the credit markets can be very costly and restrictive when demand for funding peaks [5].

Cash reserves give firms much needed financial independence, thereby enabling them to follow their strategic trajectory with limited external interference [6]. Furthermore, internally generated funds are cheaper than externally sourced ones. As such, firms with sufficient cash in hand can invest in viable investment opportunities at a low cost of financing. Stock piling cash reserves however, might unintentionally fuel inefficiencies involving the use of corporate resources. [7] argues that sufficient liquid assets afford managers the flexibility to use these resources even in negative net present value (NPV) projects. Cash holdings, therefore, have both an upside and a downside, firms need to maximize the former while minimizing the latter.

In perfect markets with no information asymmetry, taxes, agency and transaction costs, companies have no need to hold cash as there are no benefits. When the firms' internal cash is not sufficient to meet the needs, the company can easily obtain external financing at fair prices that do not compromise growth and investment [8]. In such a frictionless world, cash holding would have no effect on the firm value [9]. Markets are, however, imperfect, and these imperfections cause external financing to be more expensive compared to internal resources. Therefore, in the real world of imperfect markets, corporate cash holding is a strategic component of the firms' capital structure.

The effect of firm characteristics on corporate cash holding have since been a subject of explanation in the framework of three theories, namely: Trade-off Model, Pecking Order Theory and Free Cash Flow Theory. According to trade-off theory, they set their optimal level of cash holding by weighing the marginal costs and marginal benefits of holding cash [10]. According to [11] the benefits of cash holding are:

- Reduction in the likelihood of financial distress,
- Allowing the pursuance of investment policy when financial constraint saremet.
- Minimizing the costs of raising external funds or liquidating existing assets. While marginal cost of holding cash is associated with the opportunity cost of the capital due to the low return on liquid assets.

The fall out of his submission has for enclosed the necessity of maintaining optimum cash holding. [12] emphasizes that firms should maintain optimum cash holding .Efforts have been on to identify the effect of cashholding bearing in mind the firm's characteristics such as size, growth opportunities, leverages, cashflow, dividend payout, account receivable and payable among others. Hence, this study examines effect of firm characteristics on cash holding. Cash is

being held as the dependent variable and firm characteristic (profitability, capital expenditure, firm size and leverage) as independent variables.

Statement of the Problem

The consumer good company is the classification of companies that relate to items purchased by individuals. This includes companies involved with food production, packaged goods, clothing, beverages, automobile and electronics. For the purpose of this study, emphasis will be on brewery and food & beverages sectors of Consumer Goods Company. Performance in consumer goods firms in Nigeria depends heavily on consumer behavior [13]. Hence, the need to utilize cash holding for smooth operations. Future plans for consumer goods firms in Nigeria cannot be over emphasized.

The consumer goods firms face a tough hurdle that range from uncertain demands of products, shifting tastes, operating at a profitable rate, changing standards and regulations and relying on global supplier network. This is mainly because of long, steady shifts in consumer preferences. In order to survive, there is need to have plans for adequate cash holding hence the need to ascertain the effect of firm characteristics on cash holding of consumer goods firms in Nigeria [14].

Consumer goods firms in Nigeria look to identify trends and capitalize on growth in emerging markets. They are also always keeping an eye out for opportunity to acquire or partner with companies to enable access to more consumers, leverage market solutions and in some cases access sources of raw material. These can only be achieved with significant cash holding.

Consumer goods firms in Nigeria need to strike a very delicate balance between cost, quality, product innovation and market growth while maintaining margins [15]. Juggling all these and keeping the customer at the heart of its operations will always be a challenge. Finding the right balance between addressing short term business needs and opportunities and setting a long term direction for the future is like having a microscope for the daily business and a periscope for future direction setting [16].

In order to survive these challenges and justify the need to hold cash by consumer goods firms, this study intend to examine the effect of firm characteristics on corporate cash holding of consumer goods firms in Nigeria.

Objectives of the Study

The general objective of the study is to examine the effect of firm's characteristics on corporate cash holding of consumer goods firms in Nigeria.

The specific objectives of the study are;

i. To determine the effect of profitability on corporate cash holding.
ii. To ascertain the effect of capital expenditure on corporate cash holding.
iii. To investigate the effect of firm size on corporate cash holding.
iv. To examine the effect of leverage on corporate cash holding.

Research Questions

To achieve the objective of this study, the answers to the following questions is sought;

i. To what extent does profitability affect corporate cash holding?
ii. How does capital expenditure affect corporate cash holding?
iii. How does firm size affect corporate cash holding?
iv. What is the effect of leverage on corporate cash holding?

Statement of Hypotheses

The following null hypotheses were formulated for the study:

i. Profitability does not have significant effect on cash holding of consumer goods firms in Nigeria.
ii. Capital expenditure does not have significant effect on cash holding of consumer goods firms in Nigeria.
iii. Firm size does not have significant effect on cash holding of consumer goods firms in Nigeria.
iv. Leverage does not have significant effect on cash holding of consumer goods firms in Nigeria.

Significance of the Study

This study focuses on the effect of firm's characteristics on corporate cash holdings of consumer goods firms in Nigeria [17]. This study is expected to expand upon the knowledge gained in prior research and contribute to the existing literature by focusing entirely on the Nigerian market with specific concentration to the consumer goods sector. This sector has had little or no attention paid on its corporate cash holdings. This study will serve as a reference for further research, by critically looking at the empirical findings and discussing its implication as it relates to Nigeria [18].

The study has the potential to inform the company's board and managers of the consumer goods industry in understanding the effect of the firm's characteristics as it relates to corporate cash holdings. It will also help students who seek information on corporate cash holdings understand the concept better. The study is also a partial fulfillment of the requirement for the award of Master of Science degree in Accountancy.

Scope of the Study

Nigeria is the geographical scope of the study. The study covers the period of eleven (11) years from 2007 to 2017. The 2017 industry report of Lagos Business School named twenty (20) companies (public and limited liability companies) as key players in Nigerian consumer goods sector. The dependent variable will be proxy by cash while independent variables to be proxy by profitability, capital expenditure, firm size and leverage [19]. The data for the proxy were derived purely from secondary sources extracted from the annual reports and accounts of five (5) consumer goods companies listed on the Nigerian Stock Exchange. These five companies were judgmentally selected based on premise that there is availability of data for the period under study.

METHODOLOGY

Research Design

Ex-postfacto research design was adopted due to the fact that the study solely relied on secondary sources of data collection in determining the effect of firm characteristics on corporate cash holding of consumer goods firms in Nigeria. *Ex-post facto* implies after the event. This means that the events investigated had already taken place and thus data already exist. The adoption of this research design hinges on the following reasons; the study relied on historic accounting data and data were obtained from the financial statements and accounts of consumer goods firms in Nigeria.

Area of Study

The research was conducted in Nigeria and within the consumer goods firms quoted on the Nigerian Stock Exchange.

Population

The population is made up of consumer goods firms in Nigeria for the period 2007-2017. The study considered a total of twenty (20) consumer goods firms that were quoted on Nigerian Stock Exchange (NSE) as at December 2017.

Sample Selection and Size Determination

The sample size of the study consists of five (5) selected consumer goods firms from two (2) sub-sectors, namely the brewery and food and beverages, the firms sampled are;

Cadbury Nigeria Plc,
Unilever Nigeria Plc
Nestle Nigeria Plc
Nigeria Breweries Plc, and
Guinness Nigeria Plc

These firms were judgmentally selected based on the availability of data pertaining to the variables of study for the duration of the sample period.

Sources of Data

This study adopted secondary sources of data collection. Data was obtained from the 2007-2017 annual reports and accounts of the companies sampled and 2017 Industry Report of Lagos Business School. The adoption of the secondary source was prompted by the requirement of the model and tool of analysis adopted.

Model Specification

The analytical model considered in this study encapsulated elements of firm

characteristics (profitability, capital expenditure, firm size and leverage) and corporate cash holding as criterion variable as follows:

In writing our equation the following symbols were used to denote the respective variables.

Where:

CACE = Cash and Cash Equivalents
PRT = Profitability
CE = Capital Expenditure
FS = Firm Size
LEV = Leverage

βo = Constant Term
β_1 = Coefficient of Return on Asset
β_2 = Coefficient of Capital Expenditure
β_3 = Coefficient of Firm Size
β_4 = Coefficient of Leverage
μ = Error Term

The regression models for the test of hypotheses are represented as follows:

Thus for hypothesis one which states that profitability does not have significant effect on cash and cash equivalents of consumer goods firms in Nigeria.

The test hypothesis is modeled thus:

$CACE_t = \beta o + \beta_1 PRT_t + \mu$ ..... (1)

For hypothesis two which states that capital expenditure does not have significant effect on cash and cash equivalents of consumer goods firms in Nigeria.

The test hypothesis is modeled thus:

$CACE_t = \beta o + \beta_2 CE_t + \mu$..... (2)

For hypothesis three which states that firm size does not have significant effect on cash and cash equivalents of consumer goods firms in Nigeria.

The test hypothesis is modeled thus:

$CACE_t = \beta o + \beta_3 FS_t + \mu$..... (3)

For hypothesis four which states that leverage does not have significant effect on cash and cash equivalents of consumer goods firms in Nigeria.

The test hypothesis is modeled thus:

$CACE_t = \beta o + \beta_4 LEV_t + \mu$.....(4)

However, we will test our hypotheses using random panel regression analysis. it follows that we can re-write equation (1,2,3 and 4) in a multiple regression equation as follows:

$CACE_t = \beta o + \beta_1 PRT_t + \beta_2 CE_t + \beta_3 FS_t + \beta_3 LEV_t + \mu$ ..... (5)

Description of Variables in the Model

(a) Dependent variable

i. Corporate cash holding: This is the cash and cash equivalent figure for each of the year under study.

(b)Independent variables

i. Profitability: This is the Profit for the year on each of the years under study. This will be applied and will represent profitability for this study.
ii. Capital expenditure: The capital expenditure figure for each of the years will be lifted and used for this study.
iii. Firm size: This is the total asset of the each of the company. This total asset will represent firm size figure which will be used for this study.
iv. Leverage: This is the long term debt plus debt in current liability.

Method of Data Analysis

Panel data regression was used for the test of the hypothesis.

DATA PRESENTATION AND ANALYSIS

Table 1: Raw Data for UNILEVER Nigeria PLC

YEAR	CASH AND CASH EQUIVALENT (N'000)	PROFIT FOR THE YEAR(N'000)	CAPITAL EXPENDITURE (N'000)	TOTAL ASSET (N'000)	TOTAL EQUITY (N'000)	TOTAL LIABILITY (N'000)
2007	1,561,548.00	1,077,496.00	2,139,846.00	20,352,932.00	5,030,844.00	15,322,088.00
2008	2,706,411.00	2,596,533.00	1,187,740.00	23,492,656.00	6,681,553.00	16,811,103.00
2009	1,980,736.00	4,093,822.00	2,003,215.00	23,681,724.00	8,202,734.00	15,478,990.00
2010	2,677,715.00	4,181,409.00	3,035,918.00	25,906,063.00	8,305,949.00	17,600,114.00
2011	2,942,372.00	5,515,213.00	4,203,296.00	32,249,928.00	9,634,650.00	22,615,278.00
2012	1,857,693.00	5,597,613.00	5,853,353.00	36,497,624.00	10,043,523.00	26,454,101.00
2013	3,183,958.00	4,724,429.00	6,025,488.00	43,754,114.00	9,347,922.00	34,406,192.00
2014	1,334,916.00	2,412,343.00	4,023,867.00	45,736,255.00	7,478,808.00	38,257,447.00
2015	4,435,244.00	1,192,366.00	5,068,498.00	50,172,484.00	8,003,253.00	42,169,231.00
2016	12,474,141.00	3,071,885.00	4,228,146.00	72,491,309.00	11,689,943.00	60,801,366.00
2017	50,493,595.00	7,450,085.00	4,559,238.00	121,084,365.00	75,908,375.00	45,175,990.00

Source: Company's Annual Reports and Accounts

The data variables under study from Unilever Nigeria Plc show cash and cash equivalent which represents corporate cash holding at its lowest in year 2014 at ₦1.334 billion and highest in 2017 at ₦50.493 billion. Profit for the year is at its lowest of ₦1.077 billion in 2007 and reached a high of ₦7.450 billion in 2017. Capital expenditure posted its lowest figure of ₦1.187 billion in 2008 and highest of ₦6.025 billion in 2013 [20] [21]. The lowest value of the company's total asset under study was ₦20.352 billion in 2007 and highest value of ₦121.084 billion in 2017. The lowest total equity of the company under study was in 2007 at a value of ₦5.030 billion while it attained its highest value of ₦75.908 billion in 2017. Finally, the total liability of the company was at its lowest in 2007 at the value of ₦15.322 billion and the highest liability figure was in 2016 at ₦60.801 billion.

Table 2: Raw Data for Nigerian Breweries Nigeria PLC

YEAR	CASH AND CASH EQUIVALENT (N'000)	PROFIT FOR THE YEAR(N'000)	CAPITAL EXPENDITURE (N'000)	TOTAL ASSET (N'000)	TOTAL EQUITY (N'000)	TOTAL LIABILITY (N'000)
2007	15,795,757.00	18,942,856.00	11,509,254.00	90,548,282.00	43,183,042.00	47,365,240.00
2008	15,613,324.00	25,700,593.00	20,140,509.00	104,412,640.00	32,229,181.00	72,183,459.00
2009	11,812,326.00	27,910,091.00	12,379,982.00	106,987,883.00	46,570,094.00	60,417,789.00
2010	12,607,725.00	30,332,118.00	11,878,065.00	130,882,206.00	49,279,276.00	81,602,930.00
2011	20,832,522.00	38,434,033.00	17,166,583.00	215,447,123.00	78,304,741.00	137,142,382.00
2012	9,514,205.00	38,042,714.00	37,896,759.00	253,633,629.00	93,447,892.00	160,185,737.00
2013	9,528,848.00	43,080,349.00	32,997,540.00	252,759,633.00	112,359,185.00	140,400,448.00
2014	5,699,079.00	42,520,253.00	31,861,779.00	349,229,784.00	171,882,830.00	177,793,954.00
2015	5,105,713.00	38,049,518.00	28,627,525.00	356,707,123.00	172,233,465.00	184,473,658.00
2016	12,155,254.00	28,396,777.00	19,213,242.00	367,639,915.00	165,805,542.00	201,834,373.00
2017	12,156,432.00	28,416,965.00	32,121,578.00	367,146,468.00	165,829,468.00	201,232,700.00

Source: Company's Annual Reports and Accounts

The data variables under study from Nigerian Breweries Plc show cash and cash equivalent which represents corporate cash holding at its lowest in year 2015 at ₦5.105 billion and highest in 2011 at ₦20.832 billion. Profit for the year is at its lowest of ₦18.942 billion in 2007 and reached a high of ₦43.080 billion in 2013. Capital expenditure posted its lowest figure of ₦11.509 billion in 2007 and highest of ₦37.896 billion in 2012. The lowest value of the company's total asset under study was ₦90.548 billion in 2007 and highest value of ₦367.639 billion in 2016 [22]. The lowest total equity of the company under study was in 2008 at a value of ₦32.229 billion while it attained its highest value of ₦172.233 billion in 2015. Finally, the total liability of the company was at its lowest in 2007 at the value of ₦47.365 billion and the highest liability figure was in 2016 at ₦201.834 billion.

Table 3: Raw Data for Nestle Nigeria PLC

YEAR	CASH AND CASH EQUIVALENT (N'000)	PROFIT FOR THE YEAR(N'000)	CAPITAL EXPENDITURE (N'000)	TOTAL ASSET (N'000)	TOTAL EQUITY (N'000)	TOTAL LIABILITY (N'000)
2007	2,335,693.00	5,441,899.00	4,343,306.00	31,688,272.00	6,236,521.00	15,015,799.00
2008	3,643,133.00	8,331,599.00	4,677,329.00	29,159,552.00	9,031,240.00	20,128,312.00
2009	1,763,942.00	9,783,578.00	13,182,037.00	44,250,372.00	10,543,935.00	33,706,437.00
2010	3,092,702.00	12,602,109.00	17,167,307.00	60,828,397.00	14,897,115.00	45,931,282.00
2011	1,069,888.00	16,496,453.00	18,062,137.00	77,728,293.00	23,209,984.00	54,518,309.00
2012	3,814,065.00	21,137,275.00	11,364,834.00	88,963,218.00	34,185,562.00	54,777,656.00
2013	13,716,503.00	22,258,279.00	8,387,618.00	108,207,480.00	40,594,801.00	67,612,679.00
2014	3,704,505.00	22,235,640.00	7,815,132.00	106,062,067.00	35,939,643.00	70,122,424.00
2015	12,929,526.00	23,736,777.00	7,726,431.00	119,215,053.00	38,007,074.00	81,207,979.00
2016	51,351,155.00	7,924,968.00	7,067,737.00	169,585,932.00	30,878,075.00	138,707,857.00
2017	15,138,854.00	33,723,730.00	8,715,641.00	146,804,128.00	44,878,177.00	101,925,951.00

Source: Company's Annual Reports and Accounts

The data variables under study from Nestle Nigeria Plc show cash and cash equivalent which represents corporate cash holding at its lowest in year 2011 at ₦1.069 billion and highest in 2016 at ₦51.351 billion. Profit for the year is at its lowest of ₦5.441 billion in 2007 and reached a high of ₦33.723 billion in 2017. Capital expenditure posted its lowest figure of ₦4.343 billion in 2007 and highest of ₦18.062 billion in 2011. The lowest value of the company's total asset under study was ₦29.159 billion in 2008 and highest value of ₦169.585 billion in 2016 [23]. The lowest total equity of the company under study was in 2007 at a value of ₦6.236 billion while it attained its highest value of ₦44.878 billion in 2017. Finally, the total liability of the company was at its lowest in 2007 at the value of ₦15.105 billion and the highest liability figure was in 2016 at ₦138.707 billion.

Table 4: Raw Data for Guinness Nigeria PLC

YEAR	CASH AND CASH EQUIVALENT (N'000)	PROFIT FOR THE YEAR(N'000)	CAPITAL EXPENDITURE (N'000)	TOTAL ASSET (N'000)	TOTAL EQUITY (N'000)	TOTAL LIABILITY (N'000)
2007	22,007,151.00	10,691,060.00	3,428,453.00	71,809,417.00	31,638,842.00	40,170,585.00
2008	15,107,980.00	11,860,880.00	11,482,653.00	74,655,667.00	36,862,557.00	37,793,110.00
2009	5,820,994.00	13,541,189.00	3,378,378.00	73,868,737.00	31,524,701.00	42,344,036.00
2010	12,705,186.00	13,736,359.00	3,314,448.00	78,396,876.00	34,199,119.00	44,197,757.00
2011	8,080,590.00	17,927,934.00	9,730,410.00	92,175,032.00	40,283,492.00	59,891,540.00
2012	4,772,154.00	14,671,195.00	16,121,952.00	102,534,172.00	40,352,504.00	62,181,668.00
2013	3,189,239.00	11,863,726.00	14,330,438.00	121,060,621.00	46,039,111.00	75,021,510.00
2014	6,290,582.00	9,573,480.00	13,843,305.00	132,328,273.00	45,061,717.00	87,266,556.00
2015	5,804,623.00	7,794,899.00	9,192,991.00	122,246,632.00	48,341,376.00	73,905,256.00
2016	5,844,524.00	(2,015,886.00)	8,503,641.00	136,992,444.00	41,660,605.00	95,331,839.00
2017	9,932,965.00	1,923,720.00	8,438,204.00	146,038,216.00	42,943,015.00	103,095,201.00

Source: Company's Annual Reports and Accounts

The data variables under study from Guinness Nigeria Plc show cash and cash equivalent which represents corporate cash holding at its lowest in year 2013 at ₦3.189 billion and highest in 2007 at ₦22.007 billion. The company recorded a loss of ₦2.015 billion in 2016 and reached the highest profit for the year in 2011 at ₦17.927 billion. Capital expenditure posted its lowest figure of ₦3.314 billion in 2010 and highest of ₦16.121 billion in 2012. The lowest value of the company's total asset under study was ₦71.809 billion in 2007 and highest value of ₦146.038 billion in 2017. The lowest total equity of the company under study was in 2009 at a value of ₦31.524 billion while it attained its highest value of ₦48.341 billion in 2015. Finally, the total liability of the company was at its lowest in 2008 at the value of ₦37.793 billion and the highest liability figure was in 2017 at ₦103.095 billion [24].

Table 5: Raw Data for Cadbury Nigeria PLC

YEAR	CASH AND CASH EQUIVALENT (N'000)	PROFIT FOR THE YEAR (N'000)	CAPITAL EXPENDITURE (N'000)	TOTAL ASSET (N'000)	TOTAL EQUITY (N'000)	TOTAL LIABILITY (N'000)
2007	2,056,110.00	(464,231.00)	703,387.00	23,957,621.00	513,569.00	23,444,052.00
2008	1,554,444.00	(2,952,772.00)	597,565.00	23,130,129.00	(2,743,527.00)	25,864,656.00
2009	6,548,027.00	(2,752,663.00)	963,431.00	25,246,623.00	12,665,321.00	12,582,914.00
2010	6,118,050.00	1,143,652.00	1,035,667.00	28,673,972.00	13,574,885.00	15,099,087.00
2011	11,808,574.00	3,783,211.00	2,094,647.00	32,642,612.00	17,376,786.00	15,625,826.00
2012	17,106,930.00	4,401,907.00	3,277,297.00	39,811,415.00	21,773,887.00	18,037,528.00
2013	17,749,157.00	6,023,219.00	4,821,483.00	43,172,624.00	23,994,931.00	19,177,693.00
2014	3,685,105.00	1,512,687.00	1,438,959.00	28,820,107.00	11,542,026.00	17,278,081.00
2015	5,408,217.00	1,153,295.00	962,270.00	28,417,005.00	12,285,297.00	16,131,708.00
2016	3,011,314.00	(296,402.00)	283,298.00	28,392,951.00	11,056,734.00	17,336,217.00
2017	2,598,022.00	299,998.00	1,225,806.00	28,423,122.00	11,742,791.00	16,680,331.00

Source: Company's Annual Reports and Accounts

The data variables under study from Cadbury Nigeria Plc show cash and cash equivalent which represents corporate cash holding at its lowest in year 2008 at ₦1.554 billion and highest in 2013 at ₦17.749 billion. The company recorded its highest loss of ₦2.952 billion in 2008 and highest profit of ₦6.023 billion in 2013 under this study. Capital expenditure posted its lowest figure of ₦283 million in 2016 and highest of ₦4.821 billion in 2013. The lowest value of the company's total asset under study was ₦23.130 billion in 2008 and highest value of ₦43.172 billion in 2013. Negative equity value for the company was recorded in 2008 at a value of ₦2.743 billion while it attained its highest value of ₦21.773 billion in 2012. Finally, the total liability of the company was at its lowest in 2009 at the value of ₦12.582 billion and the highest liability figure was in 2008 at ₦25.864 billion [25].

DATA ANALYSIS

Data analysis depicts how the data collected for each of the company are analyzed with diverse analytical tools.

Descriptive Analysis (Normality Test)

Table 6: Description of the Characteristics of the Variables under Study for the sampled Companies

	Skewness	Kurtosis	Jarque-Bera Stat.	Probability	Observation
LCACE	0.171643	2.427317	1.021653	0.599999	55
LPRT	-0.629653	2.719460	3.814601	0.148481	55
LCE	-0.552698	2.678777	3.036652	0.219078	55
FS	0.416996	2.373370	2.493806	0.287393	55
LEV	5.518693	33.39730	2396.670	0.000000	55

Source: Computation from Eviews 9.0

Table 6 contains the measures of normality test which comprise of skewness, kurtosis, Jarque-Bera Statistics and probability value. It was shown that the log of cash and cash equivalent, firm size and leverage are positively skewed relative to normal while the logs of profit for the year and capital expenditure are negatively skewed relative to normal [26]. The table also showed that the logs of cash and cash equivalent, profit after tax, capital expenditure and firm size are platykurtic as their kurtosis values are less than three (3) while leverage is leptokurtic as its kurtosis value is greater than three.

The table also showed that leverage is normally distributed as its probability value is less than 0.05 while the logs of capital expenditure, cash and cash equivalent, profit for the year and firm size are not normally distributed as their probability values are greater than 0.05. The fact that logs of capital expenditure, cash and cash equivalent, profit for the year and firm size were not normally distributed does not discredit the variables as they will be further subjected to other advanced analytical techniques [27].

Unit Root Test

This test tries to examine the property of the variables. It is used to check for the presence of a unit root i.e. whether the variables are stationary. This test is carried out using the Augmented Dickey Fuller (ADF) test. The ADF is carried out using E-views software package and the results from the test are tabulated below:

Table 7: Pooled Unit Root Test for the selected companies

Variable	LLC		IPS		ADF – FISHER		PP – FISHER	
	Test Stat.	Order of integration	Test Stat.	Order of integration	Test Stat.	Order of integration	Test Stat.	Order of integration
LCACE	-4.96 (0.0000 < 0.05)	I(I)	-	-	34.30 (0.0002 < 0.05)	I(I)	56.66 (0.0000<0.05)	I(I)
LPRT	-3.32 (0.0004<0.05)	I(I)	-	-	19.97 (0.00295< 0.05)	I(I)	47.82 (0.0000<0.05)	I(I)
LCE	-5.55 (0.0005 < 0.05)	I(I)	-	-	36.20 (0.0001< 0.05)	I(I)	56.89 (0.0000 < 0.05)	I(I)
FS	-2.41 (0.0081< 0.05)	I(I)	-	-	-	-	36.91 (0.0001< 0.05)	I(I)
LEV	-4.73 (0.0000 < 0.05)	I(0)	-	-	21.62 (0.0172< 0.05)	I(0)	52.44 (0.0000 < 0.05)	I (0)

Source: Author's Compilation from Eviews 9

LLC = Levin, Lin and Chu Test
IPS = Im, Pesaran and Shin W – Stat
ADF FISHER = Augmented Dickey Fuller Fisher Chi – Square Test
PP FISHER = Philip Peron Fisher Chi – Square Test

Table 7 shows that the logs of cash and cash equivalent and capital expenditure as well as firm size and return on assets were integrated at order one or stationary at first difference while leverage is integrated at order zero or stationary at level.

Table 8: Regression Analysis

Dependent Variable: LCCE
Method: Panel Least Squares
Date: 10/25/18 Time: 06:49
Sample: 2007 2017
Periods included: 11
Cross-sections included: 5
Total panel (balanced) observations: 55

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.272968	2.207202	2.388983	0.0207
LCE	0.115649	0.160797	2.719229	0.0453
LEV	-0.002152	0.008985	-0.239455	0.8117
LTA	0.618094	0.178309	3.466414	0.0011
LPAT	0.061346	0.150452	3.407741	0.0052

R-squared	0.832766	Mean dependent var	15.62696
Adjusted R-squared	0.679387	S.D. dependent var	0.903305
S.E. of regression	0.766806	Akaike info criterion	2.393342
Sum squared resid	29.39958	Schwarz criterion	2.575827
Log likelihood	-60.81692	Hannan-Quinn criter.	2.463911
F-statistic	6.234049	Durbin-Watson stat	1.640331
Prob(F-statistic)	0.000377		

Source: Eviews 9.0 Software

Table 9: Regression Analysis Table

R-squared	**0.832766**
Adjusted R-squared	0.679387
F-statistic	6.234049
Prob(F-statistic)	0.000377
Durbin-Watson stat	1.640331

Source: Researcher's Computation from Eviews 9.0

From the above regression analysis, the R^2 is 0.832766 which is about 83%. The R^2 is used to explain the goodness of fit [28]. Therefore, since it is about 83%, it implies that about 83% change in the log of cash and cash equivalents is explained by the independent variables and the higher the R^2 the better fit the independent variables. Since the F – statistics is 6.234049 which is greater than 2.0 and the probability value is 0.000377 is less than 0.05. This shows that the model is significant and has a high goodness of fit. The Durbin – Watson statistics is 1.640331 implying that it is approximately equal to 2. This shows there is no sign of autocorrelation in the regression model.

Test of Hypothesis

Table 10: Regression results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.272968	2.207202	2.388983	0.0207
LCE	0.115649	0.160797	2.719229	0.0453
FS	-0.002152	0.008985	-0.239455	0.8117
LEV	0.618094	0.178309	3.466414	0.0011
PRT	0.061346	0.150452	3.407741	0.0052

Source: Researcher's Computation from Eviews 9.0

Hypothesis One

1. Profitability does not have significant effect on cash and cash equivalents of consumer goods firms in Nigeria.

Table 11: Test of Hypothesis One

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.272968	2.207202	2.388983	0.0207
PRT	0.061346	0.150452	3.407741	0.0052

Source: Author's E-View 9.0 Output

Step 1:Decision Rule

Reject the null hypothesis if the t – statistics is greater than 2.0 and the P-value is less than 5%.

Step 2:Decision

Given that the t-statistics of profit being 3.407741 is greater than 2.0 and the P-value being 0.0052 is less than 5%, we reject the null hypothesis.

Step 3: Conclusion

We therefore conclude that profitability has significant effect on cash and cash equivalents of consumer goods firms in Nigeria.

Hypothesis Two

1. Capital expenditure does not have significant effect on cash and cash equivalents of consumer goods firms in Nigeria.

Table 12: Test of Hypothesis Two

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.272968	2.207202	2.388983	0.0207
LCE	0.115649	0.160797	2.719229	0.0453

Source: Author's E-View 9.0 Output

Step 1: Decision Rule

Reject the null hypothesis if the t – statistics is greater than 2 and the P-value is less than 5%.

Step 2: Decision

Given that the t-statistics of capital expenditure being 2.719229 is greater than 2 and the P- value being 0.0453 is less than 5%, we reject the null hypothesis.

Step 3: Conclusion

We therefore conclude thatcapital expenditure has significant effect on cash and cash equivalents of consumer goods firms in Nigeria.

Hypothesis Three

1. Firm size does not have significant effect on cash and cash equivalents of consumer goods firms in Nigeria.

Table 13: Test of Hypothesis Three

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.272968	2.207202	2.388983	0.0207
FS	0.618094	0.178309	3.466414	0.0011

Source: Author's E-View 9.0 Output

Step 1: Decision Rule

Reject the null hypothesis if the t – statistics is greater than 2 and the P-value is less than 5%.

Step 2: Decision

Given that the t-statistics of firm size being 3.466414 is greater than 2 and the P- value being 0.0011 is less than 5%, we reject the null hypothesis.

Step 3: Conclusion

We therefore conclude thatfirm size does have significant effect on cash and cash equivalents of consumer goods firms in Nigeria.

Hypothesis Four

1. Leverage does not have significant effect on cash and cash equivalents of consumer goods firms in Nigeria.

Table 14: Test of Hypothesis Four

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.272968	2.207202	2.388983	0.0207
LEV	-0.002152	0.008985	-0.239455	0.8117

Source: Author's E-View 9.0 Output

Step 1: Decision Rule

Reject the null hypothesis if the t – statistics is greater than 2 and the P-value is less than 5%.

Step 2: Decision

Given that the t-statistics of leverage being 0.239455 is less than 2 and the P-value being 0.8117 is greater than 5%, we accept the null hypothesis.

Step 3: Conclusion

We therefore conclude thatleverage does not have significant effect on cash and cash equivalents of consumer goods firms in Nigeria.

DISCUSSION OF FINDINGS

The finding of this study shows that profitability is positive and has significant effect on the cash holdings of consumer goods firms in Nigeria. The result of the panel data regression analysis on table 4.3.2 reveals that the t-statistics of return on asset is3.270013 which is greater than 2 and the P- value is 0.0084 which is less than 5%. This result leads to the rejection of the first hypothesis of this study. The implication of this is that more profitable the firm, the more the cash holdings. It furthers reveals that being profitable has an impact on the cash holdings. This finding also support the pecking order theory, as firms remains profitable, the more it will finance investments with its retained earnings. The result of this study is also in line with the findings of [28], [29], [30], [31], [32], [33], [34], [35], [36], [37], [38] [39]. Their studies on cash holdings revealed that profitability was positive and had significant effect on cash holdings of firms that they studied.

The finding of this study shows that capital expenditure is positive and has significant effect on the cash holdings of consumer goods firms in Nigeria. The results of the panel dataregression analysis on table 4.3.3 reveals that the t-statistics of capital expenditure being 3.728463 is greater than 2 while the P-value being 0.0005 is less than 5%. This also led to the rejection of the second hypothesis of this study. The implication of this finding is that an increase in capital expenditure will lead to an increase in cash holding. The finding of this study is also in line with the findings of [40], [41], [42], [43], [44] [45]. Their studies on firm's cash holdings reveal that capital expenditure was positive and had significant effect on corporate cash holdings.

On firm size, the finding of this study reveal that firm size is has significant effect on cash holdings. The result of the panel data regression analysis on table 4.3.4 show that the t-statistics of firm size being 3.466414 is greater than 2 and the P- value being 0.0011 is less than 5%. This led to the rejection of the third null hypothesis in the study. This implies that

the bigger the firm, the bigger the cash held. This finding is in line with the findings of [46], [47], [48], [49], [50], [51], [52], [53], [54], [55], [56] [57].

The finding of this study shows that leverage is positive and has no significant effect on the cash holdings of consumer goods firms in Nigeria. The results of the panel data regression analysis on table 4.3.5 show that the t-statistics of leverage being 1.538006 is less than 2 while the P-value being 0.1310 is greater than 5%, this result led to the acceptance of the fourth null hypothesis of the study. This implies that an increase in leverage leads to an increase in cash holding and such does not have significant effect on cash holdings. The finding of this study is in line with the findings of [8].

SUMMARY OF FINDINGS

1. Profitability has positive and significant effect on the cash holding of consumer goods firms in Nigeria. This implies that the more profitable the firm, the more the cash holdings. It furthers reveals that being profitable has an impact on the cash holdings.
2. Capital expenditure has positive and significant effect on the cash holding of consumer goods firms in Nigeria. The shows that an increase in capital expenditure will lead to an increase in cash holding. The more the capital expenditure as embarked on by the firm, the more the need to hold more cash.
3. Firm size has positive and significant effect on the cash holding of consumer goods firms in Nigeria. This implies that the bigger the firm's size the bigger the cash holdings. Italso reveals that the size of a firm has an influence on its cash holdings.
4. Leverage is positive and does not have significant effect on the cash holding of consumer goods firms in Nigeria. An increase in leverage leads to an increase in cash holdings despite this leverage does not have an influence on cash holding.

CONCLUSION

The purpose of this study is to examine the effect of firm characteristics on corporate cash holding of consumer goods firms in Nigeria from 2007 to 2016. The study concludes that return on asset and capital expenditure has effect on corporate cash holding of consumer goods firms in Nigeria.On profitability, the finding of the study is in line with the pecking order theory. The results of the study show that an increase in profitability will have an effect on cash holding. The more profitable the firm, the more the firm tend to use cash to better its position. Capital expenditure has a positive and significant effect on cash holding. This implies that capital expenditure improves the firm's capital asset base that will eventually be used as collateral to boost the firms borrowing capacity. Firm size is positive and has significance effect on cash holding. This implies that the lager the firmhaving the more the effect on its cash holding. Leverage has no significant effect on corporate cash holding. The implication is that whatever the levels of debt financing is available, it will have minimal or no impact on corporate cash holdings.

RECOMMENDATIONS

1. Given that profitability has significant effect on corporate cash holding, firms should adopt changes in response to customer taste and wants in order to attract a large market share and remain profitable in the market for long term.
2. Given that capital expenditure has significant effect on cash holding, firms are encouraged to draw from this in order to increase their capital base.
3. Given that firm size has significant effect on cash holdings, firms are encouraged to seek meaningful

mergers and acquisition that brings positive impact to the firm.

4. Given that leverage has no significant effect on corporate cash holding, firms should ensure that the level of leverage should be moderate and within the firm's level of cash holding. As a high leverage will increase default risk and the likelihood of financial distress. This can scare away potential and worry existing investors.

Contribution to Knowledge

The study adds to the existing reservoir of knowledge by examining the effect of firm characteristics on corporate cash holding of consumer goods firms in Nigeria. Furthermore, by the findings of this research, players in the consumer goods sector will have better insights on firm characteristics that have effect on corporate cash holdings. Finally, the study used the random panel regression in other to validate findings, as return on asset and capital expenditure increases cash holdingin consumer goods firms in Nigeria.

Areas for Further Research

Future further research should explore the determinant of corporate cash holdings and its effect on firm's performance. The impact of audit committee, independent non-executive directors and the institutional shareholders on corporate cash holding can also be studied.

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Appendix

Pooled panel data of the selected companies under study

Year	CACE. N'000	ROA	CE N'000	FS	L
Unilever 2007	1,561,548.00	0.1713	198,763.00	16.1109	1.0577
Unilever 2008	2,706,411.00	0.1650	203,114.00	16.2292	1.3305
Unilever 2009	1,980,736.00	0.1163	229,678.00	16.1961	0.9253
Unilever 2010	2,677,715.00	0.1489	1,380,672.00	17.5333	1.7306
Unilever 2011	2,942,372.00	0.1314	4,203,297.00	17.6765	2.1842
Unilever 2012	1,857,693.00	0.1534	5,853,353.00	17.4127	0.3797
Unilever 2013	3,183,958.00	0.1099	6,025,488.00	17.5941	3.5390
Unilever 2014	1,334,916.00	0.0527	4,023,867.00	17.6384	5.1154
Unilever 2015	4,435,244.00	0.0238	5,068,498.00	17.7310	5.2690
Unilever 2016	12,474,141.00	0.0424	4,228,146.00	18.0990	5.2012
Nig. Brew 2007	15,795,757.00	0.4744	11,509,254.00	17.5027	1.4157
Nig. Brew 2008	15,613,324.00	0.6326	6,554,261.00	17.5199	1.5401
Nig. Brew 2009	11,812,326.00	0.7417	1,272,437.00	17.4433	0.9087
Nig. Brew 2010	12,607,725.00	0.7530	1,869,212.00	17.5115	0.8945
Nig. Brew 2011	20,832,522.00	0.1784	8,779,619.00	19.1882	2.0168
Nig. Brew 2012	9,514,205.00	0.1500	7,224,349.00	19.3514	1.7142
Nig. Brew 2013	9,528,848.00	0.1704	11,234,584.00	19.3480	1.2496
Nig. Brew 2014	5,699,079.00	0.2160	11,991,780.00	19.6725	1.0344
Nig. Brew 2015	5,105,713.00	0.1067	12,853,291.00	19.6924	1.0711
Nig. Brew 2016	12,155,254.00	0.0772	11,987,949.00	19.7226	1.2173
Nestle 2007	2,335,693.00	0.0987	6,147,422.00	11.6558	1.1061
Nestle 2008	3,643,133.00	0.1794	12,837,304.00	11.5732	0.9341
Nestle 2009	1,763,942.00	0.2071	19,246,274.00	17.6710	0.0047
Nestle 2010	3,092,702.00	0.2088	13,545,641.00	17.9156	0.0282
Nestle 2011	1,069,888.00	0.1222	13,973,367.00	18.1687	2.3489
Nestle 2012	3,814,065.00	0.2376	11,354,707.00	18.3037	1.6024
Nestle 2013	13,716,503.00	0.2057	8,725,180.00	18.4996	1.6656
Nestle 2014	3,704,505.00	0.2096	10,172,428.00	18.4795	1.9511
Nestle 2015	12,929,526.00	0.1991	5,598,181.00	18.5964	2.1367
Nestle 2016	51,351,155.00	0.0467	11,827,706.00	18.9489	4.4921
Guinness 2007	22,007,151.00	0.3379	5,417,000.00	17.2699	1.9065
Guinness 2008	15,107,980.00	0.3218	9,481,000.00	17.4227	0.1595
Guinness 2009	5,820,994.00	0.4254	1,732,785.00	17.2663	2.1224
Guinness 2010	12,705,186.00	0.4017	7,049,181.00	17.3477	1.2924

Guinness 2011	8,080,590.00	0.4450	10,597,994.00	17.5115	1.2882
Guinness 2012	4,772,154.00	0.3635	25,374,211.00	17.5132	1.5410

Pooled panel data of the selected companies under study (continues)

Year	CCE. N'000	PRT	CapEx N'000	FS	L
Guinness 2013	3,189,239.00	0.0980	14,832,348.00	18.6118	1.6295
Guinness 2014	6,290,582.00	0.0723	15,848,903.00	18.7008	1.9366
Guinness 2015	5,804,623.00	0.0638	10,997,016.00	18.6216	1.5288
Guinness 2016	5,844,524.00	0.0147	13,933,044.00	18.7354	2.2883
Cadbury 2007	2,056,110.00	0.0095	823,772.00	12.2953	83.9795
Cadbury 2008	1,554,444.00	0.0266	543,192.00	12.7535	0.7784
Cadbury 2009	6,548,027.00	0.0189	423,864.00	12.7123	0.7728
Cadbury 2010	6,118,050.00	0.0032	2,736,485.00	12.7987	46.0062
Cadbury 2011	11,808,574.00	0.0279	3,704,986.00	17.2693	0.1652
Cadbury 2012	17,106,930.00	0.0177	8,950,290.00	17.4997	0.8284
Cadbury 2013	17,749,157.00	0.1395	1,193,116.00	17.5807	0.7992
Cadbury 2014	3,685,105.00	0.0525	628,940.00	17.1766	1.4970
Cadbury 2015	5,408,217.00	0.0751	356,537.00	17.1625	1.3131
Cadbury 2016	3,011,314.00	0.0009	1,012,603.00	17.1617	1.5679

Panel Data: Logs of Cash and Cash Equivalent,Capital Expenditure, Profitability and normal values of Firms Size.

Company/Year	LCCE	PRT	LCE	FS	L
Unilever 2007	7.0012	0.1713	15.6535	16.1109	1.0577
Unilever 2008	7.8482	0.1650	15.6001	16.2292	1.3305
Unilever 2009	7.8793	0.1163	15.7092	16.1961	0.9253
Unilever 2010	7.7476	0.1489	15.8766	17.5333	1.7306
Unilever 2011	8.1559	0.1314	15.9873	17.6765	2.1842
Unilever 2012	14.7322	0.1534	16.7738	17.4127	0.3797
Unilever 2013	13.3265	0.1099	16.9607	17.5941	3.5390
Unilever 2014	16.4701	0.0527	17.0276	17.6384	5.1154
Unilever 2015	15.3051	0.0238	17.1249	17.7310	5.2690
Unilever 2016	16.3392	0.0424	17.1922	18.0990	5.2012
Nig. Brew 2007	16.5753	0.4744	18.0454	17.5027	1.4157
Nig. Brew 2008	16.5636	0.6326	18.2028	17.5199	1.5401
Nig. Brew 2009	16.2412	0.7417	18.1556	17.4433	0.9087
Nig. Brew 2010	16.3422	0.7530	18.3121	17.5115	0.8945
Nig. Brew 2011	16.8520	0.1784	18.3863	19.1882	2.0168
Nig. Brew 2012	16.0683	0.1500	18.7738	19.3514	1.7142
Nig. Brew 2013	16.0698	0.1704	18.8483	19.3480	1.2496
Nig. Brew 2014	15.5558	0.2160	19.0812	19.6725	1.0344
Nig. Brew 2015	16.4623	0.1067	19.0993	19.6924	1.0711
Nig. Brew 2016	16.2390	0.0772	19.0678	19.7226	1.2173
Nestle 2007	15.7017	0.0987	16.9095	11.6558	1.1061
Nestle 2008	15.5794	0.1794	16.8647	11.5732	0.9341
Nestle 2009	15.4753	0.2071	17.0336	17.6710	0.0047
Nestle 2010	15.1143	0.2088	17.4430	17.9156	0.0282
Nestle 2011	13.8831	0.1222	17.8232	18.1687	2.3489
Nestle 2012	15.1542	0.2376	17.9452	18.3037	1.6024
Nestle 2013	16.4341	0.2057	18.0033	18.4996	1.6656
Nestle 2014	15.1251	0.2096	18.0279	18.4795	1.9511
Nestle 2015	16.3750	0.1991	18.0518	18.5964	2.1367
Nestle 2016	17.7542	0.0467	18.0665	18.9489	4.4921
Guinness 2007	14.6076	0.3379	17.2209	17.2699	1.9065
Guinness 2010	16.3575	0.4017	17.4595	17.3477	1.2924
Guinness 2011	15.9050	0.4450	17.6463	17.5115	1.2882
Guinness 2012	15.3783	0.3635	20.2724	17.5132	1.5410
Guinness 2013	14.9753	0.0980	18.2941	18.6118	1.6295
Guinness 2014	15.6546	0.0723	18.3229	18.7008	1.9366

Source: Researcher's Computation from E-views 9.0

Pooled panel data of the selected companies continues

Company/Year	LCCE	PRT	LCE	FS	L
Guinness 2015	15.5742	0.0638	18.2901	18.6216	1.5288
Guinness 2016	15.5810	0.0147	18.2841	18.7354	2.2883
Cadbury 2007	16.2117	0.0095	16.3727	12.2953	83.9795
Cadbury 2008	9.3450	0.0266	16.5172	12.7535	0.7784
Cadbury 2009	8.9578	0.0189	17.0838	12.7123	0.7728
Cadbury 2010	14.6694	0.0032	17.2416	12.7987	46.0062
Cadbury 2011	12.8464	0.0279	17.1376	17.2693	0.1652
Cadbury 2012	16.6550	0.0177	16.3777	17.4997	0.8284
Cadbury 2013	16.6919	0.1395	16.6446	17.5807	0.7992
Cadbury 2014	15.1198	0.0525	16.5964	17.1766	1.4970
Cadbury 2015	15.5034	0.0751	16.5477	17.1625	1.3131
Cadbury 2016	14.9179	0.0009	16.4679	17.1617	1.5679

Source: Researcher's Computation from E-views 9.0

Note;
CACE: Cash and Cash Equivalents
PRT: Profit for the Year
CE: Capital Expenditure
FS: Firm Size
L: Leverage

The tables show the logged data of cash and cash equivalent and capital expenditure as well as the normal values of profit for the year, firm size and leverage. Cash and cash equivalent and capital expenditure were logged in order to compress or minimize their values in order to arrive at an improved regression result.

Data Variable for UNILEVER Nigeria PLC

YEAR	CASH AND CASH EQUIVALENT (N'000)	PROFIT FOR THE YEAR(N'000)	CAPITAL EXPENDITURE (N'000)	TOTAL ASSET (N'000)	TOTAL EQUITY (N'000)	TOTAL LIABILITY (N'000)
2007	1,561,548.00	1,077,496.00	2,139,846.00	20,352,932.00	5,030,844.00	15,322,088.00
2008	2,706,411.00	2,596,533.00	1,187,740.00	23,492,656.00	6,681,553.00	16,811,103.00
2009	1,980,736.00	4,093,822.00	2,003,215.00	23,681,724.00	8,202,734.00	15,478,990.00
2010	2,677,715.00	4,181,409.00	3,035,918.00	25,906,063.00	8,305,949.00	17,600,114.00
2011	2,942,372.00	5,515,213.00	4,203,296.00	32,249,928.00	9,634,650.00	22,615,278.00
2012	1,857,693.00	5,597,613.00	5,853,353.00	36,497,624.00	10,043,523.00	26,454,101.00
2013	3,183,958.00	4,724,429.00	6,025,488.00	43,754,114.00	9,347,922.00	34,406,192.00
2014	1,334,916.00	2,412,343.00	4,023,867.00	45,736,255.00	7,478,808.00	38,257,447.00
2015	4,435,244.00	1,192,366.00	5,068,498.00	50,172,484.00	8,003,253.00	42,169,231.00
2016	12,474,141.00	3,071,885.00	4,228,146.00	72,491,309.00	11,689,943.00	60,801,366.00
2017	50,493,595.00	7,450,085.00	4,559,238.00	121,084,365.00	75,908,375.00	45,175,990.00

Data Variable for Nigerian Breweries Nigeria PLC

YEAR	CASH AND CASH EQUIVALENT (N'000)	PROFIT FOR THE YEAR (N'000)	CAPITAL EXPENDITURE (N'000)	TOTAL ASSET (N'000)	TOTAL EQUITY (N'000)	TOTAL LIABILITY (N'000)
2007	15,795,757.00	18,942,856.00	11,509,254.00	90,548,282.00	43,183,042.00	47,365,240.00
2008	15,613,324.00	25,700,593.00	20,140,509.00	104,412,640.00	32,229,181.00	72,183,459.00
2009	11,812,326.00	27,910,091.00	12,379,982.00	106,987,883.00	46,570,094.00	60,417,789.00
2010	12,607,725.00	30,332,118.00	11,878,065.00	130,882,206.00	49,279,276.00	81,602,930.00
2011	20,832,522.00	38,434,033.00	17,166,583.00	215,447,123.00	78,304,741.00	137,142,382.00
2012	9,514,205.00	38,042,714.00	37,896,759.00	253,633,629.00	93,447,892.00	160,185,737.00
2013	9,528,848.00	43,080,349.00	32,997,540.00	252,759,633.00	112,359,185.00	140,400,448.00
2014	5,699,079.00	42,520,253.00	31,861,779.00	349,229,784.00	171,882,830.00	177,793,954.00
2015	5,105,713.00	38,049,518.00	28,627,525.00	356,707,123.00	172,233,465.00	184,473,658.00
2016	12,155,254.00	28,396,777.00	19,213,242.00	367,639,915.00	165,805,542.00	201,834,373.00
2017	12,156,432.00	28,416,965.00	32,121,578.00	367,146,468.00	165,829,468.00	201,232,700.00

Data Variable for Nestle Nigeria PLC

YEAR	CASH AND CASH EQUIVALENT (N'000)	PROFIT FOR THE YEAR (N'000)	CAPITAL EXPENDITURE (N'000)	TOTAL ASSET (N'000)	TOTAL EQUITY (N'000)	TOTAL LIABILITY (N'000)
2007	2,335,693.00	5,441,899.00	4,343,306.00	31,688,272.00	6,236,521.00	15,015,799.00
2008	3,643,133.00	8,331,599.00	4,677,329.00	29,159,552.00	9,031,240.00	20,128,312.00
2009	1,763,942.00	9,783,578.00	13,182,037.00	44,250,372.00	10,543,935.00	33,706,437.00
2010	3,092,702.00	12,602,109.00	17,167,307.00	60,828,397.00	14,897,115.00	45,931,282.00
2011	1,069,888.00	16,496,453.00	18,062,137.00	77,728,293.00	23,209,984.00	54,518,309.00
2012	3,814,065.00	21,137,275.00	11,364,834.00	88,963,218.00	34,185,562.00	54,777,656.00
2013	13,716,503.00	22,258,279.00	8,387,618.00	108,207,480.00	40,594,801.00	67,612,679.00
2014	3,704,505.00	22,235,640.00	7,815,132.00	106,062,067.00	35,939,643.00	70,122,424.00
2015	12,929,526.00	23,736,777.00	7,726,431.00	119,215,053.00	38,007,074.00	81,207,979.00
2016	51,351,155.00	7,924,968.00	7,067,737.00	169,585,932.00	30,878,075.00	138,707,857.00
2017	15,138,854.00	33,723,730.00	8,715,641.00	146,804,128.00	44,878,177.00	101,925,951.00

Data Variable for Guinness Nigeria PLC

YEAR	CASH AND CASH EQUIVALENT (N'000)	PROFIT FOR THE YEAR (N'000)	CAPITAL EXPENDITURE (N'000)	TOTAL ASSET (N'000)	TOTAL EQUITY (N'000)	TOTAL LIABILITY (N'000)
2007	22,007,151.00	10,691,060.00	3,428,453.00	71,809,417.00	31,638,842.00	40,170,585.00
2008	15,107,980.00	11,860,880.00	11,482,653.00	74,655,667.00	36,862,557.00	37,793,110.00
2009	5,820,994.00	13,541,189.00	3,378,378.00	73,868,737.00	31,524,701.00	42,344,036.00
2010	12,705,186.00	13,736,359.00	3,314,448.00	78,396,876.00	34,199,119.00	44,197,757.00
2011	8,080,590.00	17,927,934.00	9,730,410.00	92,175,032.00	40,283,492.00	59,891,540.00
2012	4,772,154.00	14,671,195.00	16,121,952.00	102,534,172.00	40,352,504.00	62,181,668.00
2013	3,189,239.00	11,863,726.00	14,330,438.00	121,060,621.00	46,039,111.00	75,021,510.00
2014	6,290,582.00	9,573,480.00	13,843,305.00	132,328,273.00	45,061,717.00	87,266,556.00
2015	5,804,623.00	7,794,899.00	9,192,991.00	122,246,632.00	48,341,376.00	73,905,256.00
2016	5,844,524.00	(2,015,886.00)	8,503,641.00	136,992,444.00	41,660,605.00	95,331,839.00
2017	9,932,965.00	1,923,720.00	8,438,204.00	146,038,216.00	42,943,015.00	103,095,201.00

Data Variable for Cadbury Nigeria PLC

YEAR	CASH AND CASH EQUIVALENT (N'000)	PROFIT FOR THE YEAR (N'000)	CAPITAL EXPENDITURE (N'000)	TOTAL ASSET (N'000)	TOTAL EQUITY (N'000)	TOTAL LIABILITY (N'000)
2007	2,056,110.00	(464,231.00)	703,387.00	23,957,621.00	513,569.00	23,444,052.00
2008	1,554,444.00	(2,952,772.00)	597,565.00	23,130,129.00	(2,743,527.00)	25,864,656.00
2009	6,548,027.00	(2,752,663.00)	963,431.00	25,246,623.00	12,665,321.00	12,582,914.00
2010	6,118,050.00	1,143,652.00	1,035,667.00	28,673,972.00	13,574,885.00	15,099,087.00
2011	11,808,574.00	3,783,211.00	2,094,647.00	32,642,612.00	17,376,786.00	15,625,826.00
2012	17,106,930.00	4,401,907.00	3,277,297.00	39,811,415.00	21,773,887.00	18,037,528.00
2013	17,749,157.00	6,023,219.00	4,821,483.00	43,172,624.00	23,994,931.00	19,177,693.00
2014	3,685,105.00	1,512,687.00	1,438,959.00	28,820,107.00	11,542,026.00	17,278,081.00
2015	5,408,217.00	1,153,295.00	962,270.00	28,417,005.00	12,285,297.00	16,131,708.00
2016	3,011,314.00	(296,402.00)	283,298.00	28,392,951.00	11,056,734.00	17,336,217.00
2017	2,598,022.00	299,998.00	1,225,806.00	28,423,122.00	11,742,791.00	16,680,331.00