# MACROECONOMIC EFFECTS ON FIRMS PERFORMANCE IN THE CONSUMER GOODS SECTOR IN NIGERIA

BY

# AJENIFUJA, Boluwatife Adewale

**Matric Number** 

15020101021

DEPARTMENT OF ACCOUNTING AND FINANCE MOUNTAIN TOP UNIVERSITY, MOWE, OGUN STATE.

JULY, 2019.

# MACROECONOMIC EFFECTS ON FIRMS PERFORMANCE IN THE CONSUMER GOODS SECTOR IN NIGERIA

BY

# AJENIFUJA, Boluwatife Adewale

**Matric Number** 

15020101021

DEPARTMENT OF ACCOUNTING AND FINANCE MOUNTAIN TOP UNIVERSITY, MOWE, OGUN STATE.

JULY, 2019.

					C	ERTIFI(	CATIO	N					
This	is	to	certify	that	this	research	project	was	carried	out	by	AJENI	FUJA,
BOL	UW	AT	IFE AD	EWA	LE at	t the Depa	artment c	of Acco	ounting 8	& Fina	ince,	and Mo	ountain
Тор	Univ	ersit	ty Ogun	State,	Niger	ia under m	ny supervi	sion.					
					_								
N	Vamo	e of	the Supe	ervisor					Sig	gnatur	re & 1	Date	

# **DEDICATION**

This project is dedicated to Almighty God for His infinite mercy, protection, and guidance throughout my stay at Mountain Top University. Also to my wonderful and lovely parents, my brother, my supervisor and friends for their unquantifiable support and encouragement.

# **Acknowledgment**

I am most grateful to GOD Almighty for his blessing in my life. My profound gratitude goes to my parents, Mr & Mrs. Ajenifuja and my sibling for their care and financial support.

My sincere gratitude to my project supervisor Dr. J.O. Omokehinde who gave out his time to ensure the success of this research work. Also to my humble and wonderful lecturers; Dr. O.J. Akinyomi, Dr. Onichabor Pius, Mr. Olurin Enitan for all their support and teachings.

My profound gratitude to my wonderful friends; Accounting class'19, colleagues my lovely class rep Ejemuta and so many of them who in one way or the other supported me in my project work and academic life. I pray that Almighty God will reward you and continue to bless you all, Amen.

# **ABSTRACT**

Macroeconomics role on firms performance has really attracted economists because of its complexity in formulating corporate policies in achieving success among many organizations. The performance of firms is highly considered as an important indicator for investors while making investment decisions due to it reflecting the firm's overall financial health. The aim of this study is to examine the relationship between macroeconomics and performance of firms listed on the Nigeria Stock Exchange (NSE). Return on Assets (ROA) was selected as proxy for firm performance while the independent variables included were key macroeconomic variables like inflation, exchange rate and interest rate using data running from 2013-2017. To analyse this, data was taking from ten (10) out of twenty-one consumer goods firms listed in the Nigerian Stock Exchange (NSE). It is necessary for a firm to maintain high performance. So this study is designed to investigate the effect of macroeconomics on firms performance in the consumer goods sector in Nigeria. The study used the descriptive and regression analyses to test the hypotheses developed in the study. The study found out that the relationship between return on asset and interest rate is positive and has no significant relationship, also the relationship between return on asset and inflationary rate is positive and there is no significant relationship, the relationship between return on asset and exchange rate is also positive but also no significant relationship between the two variables.

# **TABLE OF CONTENTS**

Page Page
itle Pagei
eclarationii
ertificationiii
edicationiv
cknowledgmentsv
bstractvi
able of Contentsvii
ist of tablesix
ist of figuresx

# **CHAPTER ONE: INTRODUCTION**

1.1	Introduction	1
1.2	Background to the study	1
1.3	Statement of the problem.	1
1.4	Objectives of the study	5
1.5	Research questions.	6
1.6	Statement of the hypotheses	6
1.7	Significance of the Study	6
1.8	Justification of the Study	7
1.9	Scope of the Study	8
1.10	Definitions of terms	8

# CHAPTER TWO: LITERATURE REVIEW

2.0	Introduction
2.1	Conceptual framework 10
2.2	Theoretical framework
2.3	Literature on subject matter
CH	APTER THREE: METHODOLOGY
3.0	Introduction
3.1	Research Design
3.2	Population of study
3.3	Sampling Technique
3.4	Sample Size Determination
3.5	Method of Data Collection
3.6	Method of Data Analysis

3.7	Model Specification.	33
3.8	Measurement of variables.	33
СН	APTER FOUR: DATA ANALYSIS FINDINGS AND DISCUSSION	
4.0	Introduction	34
4.1	Data presentation.	34
4.2	Data Analysis	36
4.3	Findings of the study	38
4.4	Discussion of the findings.	39
СН	APTER FIVE: CONCLUSION AND RECOMMENDATION	
5.0	Summary of findings	43
5.1	Conclusion	45
5.2	Recommendations	46

References	48
	<b></b>
Appendix	51

#### **CHAPTER ONE**

# INTRODUCTION

# 1.1 Background To The Study

The Nigerian Capital Market, the long-term capital formation market through debt and equity. Nearly 170 shares are presently listed on the NSE. These firms are categorized into separate industries on the basis of their common goods and services. There are currently 11 NSE-classified sectors. Consumer products is one of the industries. The consumer goods sector is a group of stock and companies that associates with or relate to items purchased by people or group of people rather than by manufacturers or industries. The consumer goods sector includes companies involved in production of food, clothing, electronics, packaged goods, automobiles (Investopedia 2017). The economic importance of consumer goods is that it helps to raise the manufacturing sector and exports, and it also helps to satisfy client requirements, thus improving the economy's Gross Domestic Product (GDP). There are macroeconomic variables outside the business and it is not under management control, they include: social, economic, political circumstances, vendors, rivals, policies and laws of government. The key economic factors include unemployment, gross domestic product (GDP), stock market index, interest rates, corporate tax rate, consumer price index (World Bank Group, 2015; Broadstock et al., 2011). These macroeconomic factors can pose to be a negative or positive threat to the performance of the firm. However, the performance of a firm is not affected by macroeconomic factors. According to the resource-based view (RBV), the internal attributes of an organization determine its position in the competitive Özdemir, environment 2006). (Denizel and

The consumer goods sector is made of 21 companies, for example, 7up bottling company, Cadbury Nigeria plc, Dangote sugar refinery plc, Guiness Nigeria plc, Nestle

Nigeria plc, Vono products plc and many more. Some of the companies have been delisted from the daily official activities of the exchange, such companies are 7up bottling company plc, Vono products plc, Rokana Industries plc and few others.

The companies in the sector were listed at different times and virtually experienced the economic factors ups and downs. Macroeconomic variables such as foreign exchange rate inflation, interest rate, global financial crisis have undoubtedly influenced the efficiency of businesses in Nigeria's consumer goods industry. The sector's performance as related to profitability, activity, leverage, etc. In Nigeria, consumer goods sector is in its growing phase and as well performing significantly in contributing to the economic growth of the country.

#### 1.2 Statement of Problem

It is a common and decent knowledge that the world's financial crisis has left a trauma on the world economy and the Nigerian economy is not an exception. For Nigeria to achieve a long-term economic growth, the country's faltering consumer goods sector must be fortified. Every firm makes operational and strategic decisions which are moderated by the macroeconomic environment, it includes investing decision, operational decision and financing decision (Owolabi 2017). In Nigeria, major macroeconomic indicators have shown significant fluctuations overtime, more especially as the country emerges from recession. Izeodonmi and Abdullahi (2011) have shown that the influence of macroeconomic factors varies from sector to sector. Therefore the effort of this study is to examine the effect of macroeconomics on firms performance in the consumer goods sector in Nigeria.

#### 1.3 Objectives of The Study

The main objective of this study is to examine the effect of macroeconomic variables like the Gross Domestic Product (GDP), interest rate and inflation on the consumer goods sector in Nigeria. This study intends to achieve the following specific objectives:

- To examine the effect of interest rate on the performance of consumer goods firms in Nigeria.
- To ascertain the effect of inflationary rate on the performance of consumer goods firms in Nigeria.
- To examine the effect of exchange rate on the performance of consumer goods firms Nigeria.

# 1.4 Research Questions

This research is aimed at providing adequate solutions to the following questions:

- 1. Does the interest rate affect the performance of consumer goods sector in Nigeria?
- 2. Does the inflationary rate have effect on the performance of consumer goods sector in Nigeria?
- 3. What is the effect of exchange rate on the performance of consumer goods sector in Nigeria?

# 1.5 Research Hypotheses

Hol: There exist no significant relationship between interest rate and performance of consumer goods sector.

H<sub>0</sub>2: There exist no significant relationship between the inflationary rate and performance of consumer goods sector.

H03: There exist no significant relationship between the exchange rate and performance of consumer goods sector.

#### 1.6 Significance of The Study

There has not been really much done, few or no study has been carried out on the study of macroeconomics and its effect on firms performance in the consumer goods sector in Nigeria. The significance of this study is to reveal or show the effect of macroeconomic variables on firms performance in the consumer goods sector.

# 1.7 Scope of The Study

The scope of this study covers the firms performance as related to ROA, interest rate, exchange rate and inflationary rate of companies listed in the consumer goods sector in Nigeria from the period of 2013-2017. A sample of 21 companies based on their existence and performance will be included in the study.

# 1.8 Limitations of The Study

This research study is limited to the period of 2013-2017 as well as a sample of companies. This study was carried out using a sample of 21 consumer goods companies that were listed on the Nigerian Stock Exchange because these companies data were easily assessed on the Nigerian Stock Exchange fact book.

# 1.9 Operational Definition of Terms

**Capital Market-** This is a market where buyers and sellers engage in trade of financial securities like bonds, stock and many more.

**Inflation-** This is the rate at which the general level of prices for goods and services is rising and, consequently, the purchasing power of currency is falling.

**Gross Domestic Product-** This is the monetary value of all the finished goods and services produced within a country's border in a specific time period.

**Return On Assets-** This is an indicator of how profitable a company is relative to its total assets.

**Exchange Rate-** This is the price of a nation's currency in terms of another currency.

**Leverage-** This is a technique that amplifies investor's profits or losses.

# **CHAPTER TWO**

# 2.0 Introduction

This chapter is split into three parts, the first is the conceptual review, the second is the theoretical review, the third section is the empirical review. The conceptual review discusses the link between the dependent variable and the independent variable. The theoretical review speaks about this study's concepts and models. The empirical analysis emphasizes the performance of companies and macroeconomic impacts.

#### 2.1 Conceptual Review

#### 2.1.1 Firms Performance

In recent times, the performance of organizations is the first to be assessed by investors and with the advent of globalization as one might say, trading can be done anywhere without various boundaries existing incorporate exchange and financial venture. As a result, organizations have a more extensive chance to develop.

In the same vein, with a noteworthy spread of innovations in technology, people determined to accomplish their goals anywhere in the world are motivated to seek after organizations in any parts of the earth that have evidence of performing highly for investment. Hence, the performance of an organization is extremely critical in attracting investors (Kaid and Hanim, 2014).

Financial performance indicates how great is the situation of a firm, and how effectively a firm is utilizing its resources to gain a bigger number of incomes than to acquire cost and grow its activities (Copisarow, 2000).

To (Rouf, 2011), what firms offer to investors is easily projected as the value of a firm and this carries with it a lot of advantages. So, this is why the performance of a firm can be identified from the organizations' detailed financial statements.

#### 2.1.1.1 Conceptual Framework of Firms Performance

Firm performance is the ability of a firm to support its long-term benefit. There exists, two viewpoints to such ability, general and intrinsic dimensions. The general dimension alludes first to auxiliary components that characterize the environment in which a firm operates (i.e., national level), for instance, the administrative system of a given nation and level of global exchange.

#### 2.1.1.2 Importance of Firms' Performance

According to (Demirbag, et al, 2006), Performance measurement is fundamental for effective firm management. Such a procedure cannot be conceived without measuring the expected results. Thus, firms need to utilize internal resources to improve their performance (Gadenne and Sharma, 2002).

Again, the success of a firm is fundamentally clarified by its performance over a given timeframe. Performance measurement empowers firms to compare their performance over different timeframes. Nevertheless, no peculiar accurate measurement of performance has been given until now due to the diverse dimension of the firm's performance. Studies have shown that firm performance is considerably affected by corporate governance. Thus, where capacities are properly settled for the corporate governance framework, it draws in investment and aides to improve the resources of firms, fortifying the pillars of the firm to elevate the performance of the firm. In effect, a proper corporate governance shield against plausible financial constraints and encourages striking development subsequently assuming a key role in growing firm performance prompting its review on the overall success of firms as argued by (Ehikioya, 2009).

#### 2.1.1.3 Measurement of Firm Performance

Having a yardstick to measure or determine the performance of a firm aids in gathering firm progress reports, improving motivation and communication as well as pinpointing problems in the firm. Principally, the idea of performance constitutes the backbone of strategic management and the utilization of business performance to review content on business management and this has been the focus of most strategy studies. Numerous research devoted to management University of Ghana http://ugspace.ug.edu.gh 27 structures and its connection with financial performance was exceptionally subject to accounting-based indicators. A significant number of methods have been presented to quantify financial performance and

among them are: Return on Assets (ROA), Return on Equity (ROE) Tobin-Q, Profit Margin (PM), Earnings Per Share (EPS), Dividend Yield (DY), Price-Earnings Ratio (PE), Return on Sales (ROS), Expense to Assets (ETA), Cash to Assets (CTA), Sales to Assets (STS), Expenses to Sale (ETS). Abnormal returns including Annual Stock Return, (RET), Operating Cash Flow (OCF), Return on Capital Employed (ROCE), Labor profitability (LP), Critical business Return on Asset (CROA), Cost of Capital (COC), Market Value Added (MVA), Operation Profit (OP), Return on Investment (ROI), Market-to-book esteem (MTBV), Log of market capitalization, LOSS Growth in Sales (GRO), Stock Repurchases, Sales Per Employee (SPE), Return on income (ROR), Output per staff (OPS), Cost Per Service Provided (CPSP) and Cost per Client Served (CCS), Cumulative Abnormal Returns (CARs), Profit per Employee (PPE) and Return on Fixed Assets (ROFA) among others.

# 2.1.1.4 Accounting Based Measurement

This type measures the organization's benefits as the business of the firms is contrasted with a benchmark rate of return equivalent to the risk involved. These measurements point to the profitability of firms in the preceding years, example is: (ROA), (ROE), (ROS), (PM), (ROI), (OCF), (EPS), (OP), (GRO), (ROCE), (ETA), (CTA), (STS) and others are in this manner expounded.

When it comes to profitability, its measure is criticized for being backward-looking and its incomplete measurement of future instances with regards to devaluation and amortization. Adding to it, profitability as the accountant measures are constrained by models set up by the calling and is henceforth affected by numerous unique techniques employed in the evaluation of well-defined and elusive resources by accountants as proposed by (Kapopoulos and Lazaretou, 2007). Likewise, Return on Assets (ROA), checks the working and financial performance of the firm according to (Klapper and Love, 2002). The measurement is with the

goal that a higher ROA shows effective utilization of resources for the upside of investors in the view of (Haniffa and Huduib, 2006) as well as mirrors the organization's utilization of its advantages in serving the fiscal interests of investors according to (Ibrahim and AbdulSamad, 2011).

Accounting based performance measures are preferred over market-based measures when the connection between firm performance and corporate management is examined as the former exhibit results of management activities as per (Hutchinson and Gul, 2004) and (Mashayekhi and Bazazb, 2008). Subsequently, a negative performance shows disappointment of the arranged elite which requires modification of plans to improve performance. The negative performance brings about investors' misfortune. The organization in this manner needs to refresh its goals to contend in the market, the opposite holds for a positive ROA as argued by (Nuryanah and Islam, 2011).

Also, Returns on Equity is another accounting-based measurement which considers the after-tax profit over total equity shares issued. Many studies including (Azam, et al, 2011; Khan, et al, 2011; Pandya, 2011; Najid and Abdul Rahman, 2011; Shahab-u-Din and Javid, 2011; Bozcuk, 2011; Lin, 2011; Chiang and Lin, 2011; Chahine and Safieddine, 2011) have employed this type of measurement.

#### 2.1.1.5 Market-Based Measurement

This second type is the market-based measurement and it is classified in a long-term case like Tobin's Q, (MVA), (MTBV), (RET), (DY) to mention but few. The market-based measurement is described by its forward-looking viewpoint and its impression of the desires for investors concerning the firm's future performance, which has its premise on past or current performance according to (Wahla, et al, 2012; Shan and McIver Ron, 2011; and Ganguli and Agrawal, 2009). (Sánchez-Ballesta and García-Meca, 2007) propose that

market-based desires for firm performance may bring about administration motivation to alter their holdings based on what they desire to achieve in the future as far as performance is concerned. Therefore, where the organization's market-based performance exceeds the aftereffects of Tobin's Q, this demonstrates that the organization is prevailing with regards to accomplishing its arranged superior (Nuryanah and Islam, 2011). Yet, if it is not as much as Tobin's Q, at that point the organization needs to amend its intends to improve its fleeting performance. The negative performance prompts financial specialist's misfortune (nearby and remote) and consequently, it is essential for University of Ghana http://ugspace.ug.edu.gh 30 the organization to refresh its targets occasionally if it is covetous of contending in the commercial center.

## 2.1.1.6 Factors Affecting Firm Performance

Admittedly, several factors work together to affect the performance of a firm but for this study, this section focuses on discussing the influence of macroeconomic, microeconomic, and financial factors on firm performance to investigate the key factors that affect the performance of firms.

#### 2.1.2 Concept of Macro-economics

Macroeconomics looks at the economy as a whole. Instead of trying to understand what determines the output of a single firm or industry or what the consumption patterns are of a single household or group of households, macroeconomics examines the factors that determine national output, or national product. Microeconomics is concerned with household income; macroeconomics deals with national income.

#### 2.1.2.1 Macro-economic variables

A variable is a measure that can change from time to time or from observation to observation.

Income is a variable—it has different values for different people and different values for the

same person at different times. The rental price of a movie on a DVD is a variable; it has different values at different stores and at different times.

Macro-economic variables refer to the factors that are pertinent to the broad economy at the regional or national level and affect a large population rather than a few individuals. Akers (2001) defines macroeconomics as a branch of economics dealing with the performance, structure, behaviour and decision making of an economy as a whole, rather than individual markets.

Macroeconomic variables are variables that control the whole economy (Olukayode and Akinwande, 2009). These variables include interest rates, economic output, employment, and unemployment, huge population, inflation, government budget, GDP growth, international trade balances, and productivity (Muchiri, 2012). Macroeconomic variables are simulated with aggregate indicators usually affecting the overall economic environment in which organizations operate.

#### 2.1.2.2 Macroeconomic Factors

Macro-economic factors such as economic output, unemployment, inflation, savings, and investment are key indicators of economic performance and are closely monitored by governments, businesses, and consumers (Khalid et al, 2012). The macro-economic factors are real GDP, the unemployment rate, the inflation rate, the interest rate, the level of the stock market, and the exchange rate (Khalid et al.,2012). Brinson et al. (1991) defined macro-economic variables as those that are pertinent to a broad economy at the regional or national level and affect a large population rather than a few selected individuals. Macroeconomic factors constitute the uncontrollable external factors that affect firm performance. Studies

have shown that exchange rate, interest rate, gross domestic product, and inflation are the key macroeconomic factors that affect firm performance.

#### 2.1.2.3 Systematic risk

Systematic risk is the risk inherent to the entire market or market segment. Systematic risk, also known as "volatility" or "market risk," affects the overall market, not just a particular stock or industry. This type of risk is both unpredictable and impossible to completely avoid. It cannot be mitigated through diversification, only through hedging or by using the correct asset allocation strategy.

#### 2.1.2.4 Exchange rate

According to O'Sullivan & Sheffrin (2003), the exchange rate is the value of one currency for conversion to another. It is the price of a nation's currency in terms of another currency. An exchange rate thus has two components, the domestic currency, and foreign currency, and can be quoted either directly or indirectly. In a direct quotation, the price of a unit of foreign currency is expressed in terms of the domestic currency (Mongeri, 2011). According to Jhigan (2005), the variables that influence the exchange rate includes the country's exports, imports, and structural influences.

#### **2.1.2.5** Inflation

Inflation is the scourge of the modern economy. It is one of the primary persistent threats that will undermine or even destroy decades of economic growth if unleashed and not curbed. It is feared by central bankers globally and forces the execution of monetary policies that are inherently unpopular. It makes some people unfairly rich and impoverishes others.

Inflation occurs when the prices of goods and services increase over time (Kimani & Mutuku, 2013). Inflation is the general increase in the overall level of prices of goods and services in the economy.

The effects of inflation on the economy are diverse and can be both positive and negative. The negative effects are however most pronounced and comprise a decrease in the real value of money as well as other monetary variables over time (Blanchard, 2000). Inflation refers to the persistent and appreciable rise in the general level of prices (Jhingan, 2005).

The changes in prices of goods and services directly and significantly affect the purchasing power of money as well as the cost of production in the manufacture of the same goods and services. The effects of inflation can be seen from two angles; the effect on the aggregate demand and the cost of production. When the inflation rate is high, consumers who have fixed incomes have a lower purchasing power as the value of money is reduced. This will ultimately lead to reduced demand for goods and services. On the other hand, inflation pushes up the cost of production hence affecting the bottom line of firms. The nominal interest rate is made up of real interest rate and the inflation rate and therefore change in line with changes in the inflation rate. This is referred to as the Fisher effect. (Pandey, 2009) on the other hand suggests that if capital markets operating within countries were perfect, then even in different markets, investments with equal risk should ideally offer an equal return. This is as per the arbitrage principle, proposing the development of assets starting with one market then onto the next consistently until the harmony is accomplished. If the genuine return rates are similar in two nations, then, according to the fisher impact, the ostensible rates of intrigue would alter precisely for the adjustment in the expansion rates. (Vong and Chan, 2009) contend that exact confirmation on what lies amongst expansion and productivity is uncertain therefore there is the need to investigate it.

2.1.2.6 **Return on equity (ROE)** 

The amount of net income returned as a percentage of shareholders equity. Return on equity

measures a corporation's profitability by revealing how much profit a company generates

with the money shareholders have invested.

ROE is expressed as a percentage and calculated as:

Return on Equity = Net Income/Shareholder's Equity

Net income is for the full fiscal year (before dividends paid to common stockholders but after

dividends to preferred stock.) Shareholder's equity does not include preferred shares.

The ROE is useful for comparing the profitability of a company to that of other firms in the

same industry.

ROE offers a useful signal of financial success since it might indicate whether the company is

growing profits without pouring new equity capital into the business. A steadily increasing

ROE is a hint that management is giving shareholders more for their money, which is

represented by shareholders' equity.

2.1.2.7 Return on assets (ROA)

Return on Assets (ROA) is an indicator of how profitable a company is relative to its total

assets. ROA gives an idea as to how efficient management is at using its assets to generate

earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is

displayed as a percentage. Sometimes it is referred to as "Return on Investment".

The formula for return on assets is: Net Income Total Assets

14

ROA tells you what earnings were generated from invested capital (assets). ROA for public companies can vary substantially and will be highly dependent on the industry. This is why when using ROA as a comparative measure, it is best to compare it against a company's previous ROA numbers or the ROA of a similar company. The assets of the company are comprised of both debt and equity. Both of these types of financing are used to fund the operations of the company. The ROA figure gives investors an idea of how effectively the company is converting the money it has to invest in net income. The higher the ROA number, the better, because the company is earning more money on less investment. The ROA is often referred to as ROI.

Return on assets indicates the capital intensity of the company, which will depend on the industry; companies that require large initial investments will generally have a lower return on assets. ROAs over 5% is generally considered good.

# 2.1.2.8 Taxes (Fiscal policy)

Fiscal policy is how a government adjusts its spending levels and tax rates to monitor and influence a nation's economy. It is the sister to monetary policy through which a central bank influences a nation's money supply. There are two types of fiscal policy. The most widely-used is expansionary. It stimulates economic growth. The second type of fiscal policy is contractionary fiscal policy. It's rarely used, its goal is to slow economic growth.

#### 2.1.2.9 Interest rates

Interest rate is the amount of interest due per period, as a proportion of the amount lent, deposited or borrowed (called the principal sum). The total interest on an amount lent or borrowed depends on the principal sum, the interest rate, the compounding frequency, and the length of time over which it is lent deposited or borrowed.

Liquidity theory takes the view that the interest rate is a coupon rewarded for the

inconvenience for having to part with an asset which is very liquid in this instance cash.

Since the interest rate is sometimes seen as an element of pay, its essential part is to aid in

mobilizing financial resources into a pool and create an environment of efficient utilization to

promote economic growth and development (Ngugi, 2001).

Interest can also be the rent paid for money. It assesses the rate of return that is anticipated by

the money lenders for having given out their assets. The interest rate should, therefore,

incorporate all the data concerning any future changes in the purchasing power and the risk

component.

As per (Crowley, 2007), the interest rate is the cost at which the borrower pays for the

utilization of cash borrowed from the intermediaries. In a way, it is the charge paid for the

utilization of obtained resources.

2.1.2.10 Gross profit margin

Gross profit margin is a profitability ratio that calculates the percentage of sales that exceed

the cost of goods sold. In other words, it measures how efficiently a company uses its

materials and labour to produce and sell products profitably.

The formula for Gross Profit Margin

Gross profit margin=

**GROSS PROFIT** 

x 100

SALES REVENUE

2.1.2.11 Net profit margin

16

Net profit margin is the ratio of net profits to revenues for a company or business segment.

The net profit margin is equal to how much net income or profit is generated as a percentage

of revenue.

The formula for Net Profit Margin

Net profit margin=

**NET PROFIT** 

x 100

SALES REVENUE

2.2 Theoretical Review

2.2.1 Arbitrage pricing theory

Arbitrage pricing theory (APT) is a multi-factor asset pricing model based on the idea that an

asset's returns can be predicted using the linear relationship between the asset's expected

return and several macroeconomic variables that capture systematic risk. It is a useful tool for

analysing portfolios from a value investing perspective, to identify securities that may be

temporarily mispriced. The arbitrage pricing theory was developed by the economist Stephen

Ross in 1976, as an alternative to the capital asset pricing model (CAPM). Unlike the CAPM,

which assume markets are perfectly efficient, APT assumes markets sometimes misprice

securities, before the market eventually corrects and securities move back to fair value. Using

APT, arbitrageurs hope to take advantage of any deviations from fair market value. However,

this is not a risk-free operation in the classic sense of arbitrage, because investors are

assuming that the model is correct and making directional trades rather than locking in risk-

free profits. The arbitrage pricing theory is an alternative theory to mean-variance theories, an

alternative which implies an approximately linear relation like (1.1). The main advantage of

Ross' arbitrage pricing theory is that its empirical testability does not hinge upon knowledge

of the market's portfolio. The arbitrage pricing theory (APT) is an asset pricing theory that

17

states that the expected return of an investment or a financial asset can be modelled as a linear relationship of various macro-economic variables or where a degree of correlation to changes in each variable is represented by a beta coefficient. The model-derived rate of return will then be used to obtain the price or value of the asset correctly. The asset value should equal the expected end of period asset value or future cash flows discounted at the rate implied by the model. If the asset value changes, arbitrage should bring it back to the line (Dybvig and Ross, 2003). The arbitrage pricing theory considers a sequence of economies with increasing sets of the risky asset.

A PE firm's manager has to continuously evaluate investment options in light of limited resources and the paramount need to maximize shareholders returns. This can be termed as the process of arbitrating between the opportunities available. Arbitrage is the practice of taking a positive expected return from overvalued or undervalued securities in the inefficient market without any incremental risk and zero additional investments.

In the APT context, arbitrage consists of trading in at least two assets, with at least one being not its true market value. The arbitrageur sells the asset which is relatively too expensive and uses the proceeds to buy one which is relatively too cheap. Under the APT, an asset is said to be under or overvalued if its current price deviates from the price predicted by the model.

# 2.2.2 The Capital Asset Pricing Model (CAPM)

The capital asset pricing model (CAPM) of William Sharpe (1964) and John Lintner (1965) marks the birth of asset pricing theory (resulting in a Nobel Prize for Sharpe in 1990). Four decades later, the CAPM is still widely used in applications, such as estimating the cost of capital for firms and evaluating the performance of managed portfolios. It is the centrepiece of MBA investment courses. Indeed, it is often the only asset pricing model taught in these

courses. The Capital Asset Pricing Model (CAPM) describes the relationship between systematic risk and expected return for assets, particularly stocks. CAPM is widely used throughout finance for pricing risky securities and generating expected returns for assets given the risk of those assets and cost of capital.

The attraction of the CAPM is that it offers powerful and intuitively pleasing predictions about how to measure risk and the relation between expected return and risk. Unfortunately, the empirical record of the model is poor—poor enough to invalidate the way it is used in applications. The CAPM's empirical problems may reflect theoretical failings, the result of many simplifying assumptions. But they may also be caused by difficulties in implementing valid tests of the model. For example, the CAPM says that the risk of a stock should be measured relative to a comprehensive "market portfolio" that in principle can include not just traded financial assets, but also consumer durables, real estate, and human capital.

The APT is a substitute for the Capital Asset Pricing Model (CAPM) in that both assert a linear relation between assets' expected returns and their covariance with other random variables. (In the CAPM, the covariance is with the market portfolio's return.) The covariance is interpreted as a measure of risk that investors cannot avoid by diversification. The slope coefficient in the linear relation between the expected returns and the covariance is interpreted as a risk premium.

The CAPM assumes homogeneous expectations and means expectations and mean-variance preferences.

The APT does not assume expectations or investor risk expectations or investor risk preferences.

#### **CAPM Formula:**

$$ri -rf = \beta i(rM -rf),$$

where:

$$\beta i = \sigma M, i \sigma 2 M$$

is called the beta of asset i. This beta value serves as an important measure of risk for individual assets (portfolios) that is different from  $\sigma 2$  i; it measures the non-diversifiable part of the risk.

# 2.2.3 Top-Down Approach

A top-down approach (also known as stepwise design and in some cases used as a synonym of decomposition) is essentially the breaking down of a system to gain insight into its compositional sub-systems in a reverse engineering fashion. In a top-down approach, an overview of the system is formulated, specifying, but not detailing, any first-level subsystems. Each subsystem is then refined in yet greater detail, sometimes in many additional subsystem levels, until the entire specification is reduced to base elements. A top-down model is often specified with the assistance of "black boxes", which makes it easier to manipulate. However, black boxes may fail to clarify elementary mechanisms or be detailed enough to realistically validate the model. The top-down approach starts with the big picture. It breaks down from there into smaller segments. It is a method of security selection that starts with asset allocation and works systematically through sector and industry allocation to individual security selection.

For evaluating the strengths and weaknesses of the top-down approach, we consider two aspects: a) To which degree and with which efficiency are product variants covered? b) To

which degree and with which efficiency is the system behaviour covered? For a, the coverage criteria applied to the feature model directly determine the coverage of the feature model. The answer to b additionally depends on the relative strength of the coverage criterion that is applied to each 100% model.

#### 2.3 Empirical Review

The study confirmed Real GDP, Adjusted Unemployment Rate, and Exchange Rate (Value of Foreign Currency Relative to US Dollar) as the major macroeconomic variables that significantly have the predictive ability in predicting firm performance.

As indicated by (Zulfiqar and Din, 2015) who inspected the relationship between macroeconomic pointers and firm performance among material ventures in Pakistan, findings recommend positive unimportant relationship between inflation rate and firm performance. The examination approach was regression analysis.

A standout amongst the most suitable investigates to this study was that of (Oleka, Sabina and Ebue, 2015). They researched the relationship between expansion and firm performance in Nigeria. They gathered Secondary information from yearly financial related reports for the period 2000 to 2014. Playing out the conventional slightest squares relapse examination, the result achieved demonstrated a positive yet not critical relationship between both returns on equity and income per share.

Eita (2011) examined the relationship between several macroeconomic variables among Namibia listed companies with significant influence on stock performance. The study inquired into the relationship between the rate of interest, inflation rate, money supply, and exchange rate and used VECM to analyse the data. The results showed the existence of a significant positive relationship between stock market prices, money supply, and economic

activity and an inverse relationship between stock prices and inflation rates; consequently, interest rate showing a positive significant relationship with stock performance.

In Namibia, (Eita, 2011) carried out a study on the influence of several macroeconomic variables on stock performance and between the variables themselves. The study tried to research the relationship between loan fee, inflation rate, cash supply, and trade rates.

Idris and Bala (2015) carried out a study on the effect of firm-specific characteristics on the profitability of listed foods and beverage companies in Nigeria. They studied 9 firms out of a population of 21 firms using OLS regression for 7 years from 2007-2013. Their finding revealed that firm-specific characteristics have both positive and negative significant effects on profitability measured by stock market returns. They, therefore, recommended that firms should pay more attention to those factors that are peculiar to their industry environment.

(Velnampy, 2013) considered corporate administration and firm performance in Sri Lanka. He inspected 28 producing organizations utilizing the information from 2007 – 2011 and discovered that determinants of corporate administration were not connected to the performance measures of the association. Also, relapse utilized demonstrated that corporate administration does not influence organizations' ROE and ROA and uncovered that corporate administration measures do not correspond with performance measures.

Dmitrios Tsoukalas (2003), studied the relationship between stock prices and macroeconomic factors in Cyprus using the Vector Autoregressive model. The variables examined include the exchange rate, industrial production, money supply, and consumer prices. The result of the study indicates a strong relationship between stock prices and all the macroeconomic factors.

Udegbunam and Eriki (2001), in their study on the Nigerian Stock Market, examining the relationship between stock prices and inflation found strong evidence to support the

proposition that inflation exerts a significant negative influence on the behaviour of stock prices. The study further revealed that stock prices are also strongly driven by the level of economic activity measured by Gross Domestic Product (GDP), interest rate, money stock, and financial deregulation.

Li (2006) states a high rate of inflation negatively affects the real economic growth and thus causes adverse consequences for economic performance at the aggregate level. However, the nature of the relationship between inflation and economic growth and the channels through which inflation affects real economic activities is still a debatable issue.

Gikungu (2012) in his study the impact of macroeconomic variables on the performance of Nairobi Securities Exchange (NSE) concluded that there was a general rise in share prices, money supply, exchange rate, inflation, and interest rate over the period under study.

Doumpos and Gaganis (2012) estimated the performance of non-life insurers and found that macroeconomic indicators such as gross domestic product (GDP) growth, inflation, and income inequality influence the over performance of firms.

According to Menike (2006) Research indicates that several macro-economic factors would affect the performance of a firm. Hence there is a need to narrow the list of possible factors considering their relevance to emerging stock markets. In light of the above considerations and balancing the theoretical propositions and prior evidence, four exchange rate, interest rate, inflation rate, and GDP fluctuation variables will be selected. These variables are the exchange rate, inflation rate, and interest rate and money supply. In some emerging market studies the above exchange rate, interest rate, inflation rate, and GDP fluctuation variables have been used to explain the variation in equity returns.

Bhutta and Hasan (2013) examined the impact of firm-specific and macroeconomic factors on the profitability of firms in Pakistan. The sample comprised firms listed on the food sector of Karachi Stock Market for the period 2002–2006. The firm-specific factors include debt to equity, tangibility, growth, and size, and the macroeconomic factor was food inflation. They found a significant negative relationship between size and profitability, and an insignificant positive relationship between tangibility, growth, food inflation and profitability. Similarly, an insignificant negative relationship is observed between the debt to equity ratio and firm profitability.

Zeitun et al. (2007) examined macro and microeconomic determinants of corporate performance and failure in Jordan. The sample comprised 167 Jordanian companies from 1989 to 2003. The key macroeconomic indicators studied were the nominal interest rate, changes in money supply, production manufacturing index, inflation, exports and availability of credit, including Islamic credit. They found that interest rate negatively and significantly affects firm performance measured by ROA. Both production manufacturing index and growth of Islamic credit facilities positively and significantly affected the firm's performance. The significant microeconomic variables were size, age and total debt to total assets.

# **CHAPTER THREE**

#### INTRODUCTION

#### 3.1 Research Design

This study used panel data research design which will involve cross-sectional time-series data from the period of 2013-2017. The study also used descriptive statistics to describe the performance of the firms. These include- mean, standard deviation and many more.

# 3.2 Population of Study

The study's population consists of the total number twenty-six (21) consumer goods firms listed in the Nigerian Stock Exchange as at the time of this study.

S/N	COMPANY
1.	Cadbury Nigeria
2.	Champion Breweries
3.	Dangote Flour Mills
4.	Dangote Sugar Refinery
5.	DN Tyre & Rubber
6.	Flour Mills of Nigeria
7.	Golden Guinea Breweries
8.	Guinness Nigeria
9.	Honeywell Flour Mill
10.	International Breweries
11.	McNichols
12.	Multi-Trex Integrated Foods
13.	Nascon Allied Industries
14.	Nestle Nigeria
15.	Nigerian Breweries
16.	Nigerian Enamelware
17.	Northern Nigeria Flour Mills

18.	PZ Cussons Nigeria
19.	Unilever Nigeria
20.	Union Dicon Salt
21.	Vitafoam Nigeria

## 3.3 Sampling Technique

The sampling technique employed for this study is the simple random technique. This technique is used to select the consumer goods firms in the Nigerian Stock Exchange with the required financial statement to make an inference to the total population.

## 3.4 Sample Size Determination

The sample size of this study will be ten (10) companies out of the twenty-one (21) listed consumer goods firms in the Nigerian Stock Exchange as at when this study was carried out.

## 3.5 Method of Data Collection

Data will be obtained from the annual reports of individual consumer goods companies in the Nigerian Stock Exchange.

### 3.6 Method of Data Analysis

The data will be analysed using the descriptive analysis, correlation and regression analysis on the Statistical Package for Social Sciences (SPSS) to answer the research questions.

### 3.7 Model Specification

The model that will be used in testing the hypotheses of the study is presented below:

$$FP = f(ME)$$

ME = f(INF, ER, MPR)

 $FP = \alpha 1 + \beta 1 INFt + \beta 2ERt + \epsilon t$ 

Where:

FP = Return on Total Assets

ME = Macro-Economics

INF = Inflation

ER = Exchange Rate

IR = Interest Rate

 $\varepsilon$  = error term signifying other variables not captured in the study

## 3.8 Measurement of variables

The measurement of the variables will be supported by the Statistical Package for Social Sciences (SPSS) to test the relationship between the dependent and independent variable.

### **CHAPTER FOUR**

# **Data Presentation, Analysis And Interpretation**

#### Introduction

This chapter analyses and interprets the results achieved from the study. This segment presents the descriptive statistics and also the regression results.

# **4.1 Data Analysis And Interpretation**

# 4.1.1 Descriptive Statistics

The summary of the descriptive statistics are presented below in table 4.1

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Return on Asset	50	19	.32	.0885	.09485
Interest Rate	50	.11	.14	.1280	.01178
Exchange Rate	50	157.30	305.80	213.5200	58.44402
Inflationary Rate	50	.08	.17	.1154	.03782
Valid N (listwise)	50				

Source: SPSS

This table shows the descriptive statistics for the dependent and independent variable. From the table, return on assets has minimum and maximum values of -0.19 and 0.32 respectively and the mean value of 0.0885 as well as the standard deviation value of 0.09485. The standard deviation 0.09485 indicates that the data deviate from the mean value from both sides by 0.09485 implying that there is a wide dispersion of the data from the mean because standard deviation is higher than the mean value.

The table also shows that the mean of the interest rate of the sampled firms is 0.1280 with the standard deviation of 0.01178, and also minimum and maximum values of 0.11 and 0.14 respectively. This implies that the performance of the firms in terms of interest rate is on average of 0.1280, and the standard deviation value indicates that the interest rate of the

sampled firms deviates from the mean value from both sides by 0.01178, implying that there

is no significant dispersion of the data from the mean because the standard deviation is lower.

The table also shows that the mean of the exchange rate of the firms is 213.5200 with

standard deviation of 58.44402. The minimum and maximum values are 157.30 and 305.80

respectively. This implies that exchange rate of the sampled firms is on average 213.5200,

and the standard deviation value indicates that the value deviates from the mean from both

sides by 58.44402, implying that there is no significant dispersion of the data from the mean

because standard deviation is lower.

Furthermore, the table shows that the mean of the inflationary rate of the firms is 0.1154 with

standard deviation of 0.03782. The minimum and maximum values are 0.08 and 0.17

respectively. This implies that inflationary rate of the firms is on average 0.1154. The

standard deviation indicates that the value of the firms' inflationary rate deviates from the

mean value from both sides by 0.03782. This implies that there is no significant dispersion of

the data from the mean because the standard deviation is lower.

4.2 Test of Hypotheses And Discussion

The hypotheses were tested using regression analysis.

4.2.1 Regression Result

**Objective 1:** To examine the effect of interest rate on the performance of consumer goods

firms in Nigeria

**Hypotheses 1:** 

H01: There exists no significant relationship between interest rate and performance of

consumer goods sector.

29

H<sub>1</sub>: There exist a significant relationship between interest rate and performance of consumer goods sector.

### **Model Summary**

Table 4.2.1

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.073ª	.005	015	.09558

a. Predictors: (Constant), Interest Rate

The model summary shows the predictive power of the model. R is the correlation coefficient between the dependent variable (observed) and the independent variable(s); the predictor(s). The significance of R indicates the direction of the relationship (positive or negative). The value of R range from -1 to 1. The absolute value of R indicates the strength, with larger absolute value indicating strong relationship.

In table 4.2.1, R= 0.073. This means that there is a positive relationship between the return on assets and interest rate.

The R square (coefficient of determination) shows the degree of linear-correlation of variables (goodness of fit) in regression analysis. This is the proportion of variation in the dependent variable explained by the regression model. It shows the extent to which the independent variable(s) can explain the variance in the dependent variable. The sample R square tends to be the optimistic estimate of how well the model fits the population.

Table 4.2.1 shows R square of 0.005

Adjusted R square only adjust for the number of variables in the regression model. Standard error of the estimate is the standard deviation of the residuals. It attempts to correct R squared to a more closely reflect of the goodness of fit of the model. It is also R squared value adjusted for the number of variables in the regression model. The value of the adjusted R is -0.015.

The standard error of estimates is the standard deviation of the residuals. As R squared increases, the standard error of the estimates decreases. In other words, a better fit leads to less estimate error. It is an important indicator of how precise an estimate of the population parameter of the sample statistic is.

4.2.2 ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.002	1	.002	.254	.616 <sup>b</sup>
	Residual	.439	48	.009		
	Total	.441	49			

a. Dependent Variable: Return on Asset

b. Predictors: (Constant), Interest Rate

The ANOVA table shows us the overall significance of the model. The F-statistics is the the Regression Mean Square (RMS) divided by the Residual Mean Square. F-Statistics determine whether the model is a good fit for the data based on its significance level. A significant value

of F-statistics shows that the model is better at predicting the outcome value of the dependent variable than its average. If the significance value of the F-statistics is smaller than 0.05 then the independent variable(s) is significant to explaining the variation in the dependent variable and the null hypothesis is accepted. Table 4.2.2 shows a value of 0.616 which is bigger than 0.05. It suggests that there is no significant relationship between the return on asset and interest rate.

#### **Coefficients**<sup>a</sup>

		Unstandardized Coefficients (		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.163	.149		1.096	.279
	Interest Rate	584	1.159	073	504	.616

a. Dependent Variable: Return on Asset

The standardized coefficients or beta is an attempt to make the regression coefficient more comparable. It provides a useful way of seeing what impact of changing the explanatory variable by one standard deviation it will have on the dependent variable. It is usually equal to the correlation coefficient between the variables.

**Objective 2:** To ascertain the effect of inflationary rate on the performance of consumer goods firms in Nigeria

### **Hypothesis 2:**

H02: There exist no significant relationship between the inflationary rate and performance of consumer goods sector.

H2: There exist a significant relationship between the inflationary rate and performance of consumer goods sector.

Table 4.3.1 Model Summary

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.063ª	.004	017	.09565

a. Predictors: (Constant), Inflationary Rate

In table 4.3.1, R value is 0.063. This means that the positive correlation between the return on asset and inflationary rate is 6.3%. The R square value is 0.004

**ANOVA**<sup>a</sup>

Mode	l	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.002	1	.002	.190	.665 <sup>b</sup>
	Residual	.439	48	.009		
	Total	.441	49			

a. Dependent Variable: Return on Asset

b. Predictors: (Constant), Inflationary Rate

Table 4.3.2 show an F-statistics value of 0.190 with a p-value of 0.665. This is higher than 0.05 (5%) the critical value. There is no significant relationship between return on asset and inflationary rate.

#### **Coefficients**<sup>a</sup>

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.107	.044		2.433	.019
	Inflationary Rate	158	.361	063	436	.665

a. Dependent Variable: Return on Asset

**Objective 3:** To examine the effect of exchange rate on the performance of consumer goods firms Nigeria.

# **Hypothesis 3:**

Ho3: There exist no significant relationship between the exchange rate and performance of consumer goods sector.

H3: There exist a significant relationship between the exchange rate and performance of consumer goods sector.

Table 4.4.1 Model Summary

Model	R			Std. Error of the Estimate
1	.029ª	.001	020	.09580

a. Predictors: (Constant), Exchange Rate

In table 4.4.1, R= 0.029. This means that there is a positive relationship between Return on asset and exchange rate. This positive relationship is weak (2.9%). The R square result will

show a value of -0.020. This means the exchange rate can only explain the variation to the return on by -2%.

Table 4.2.2 ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	.042	.839 <sup>b</sup>
	Residual	.440	48	.009		
	Total	.441	49			

a. Dependent Variable: Return on Asset

# b. Predictors: (Constant), Exchange Rate

Table 4.4.2 showed an F-Statistics value of 0.042 with a p-value of 0.839. This is more than the 0.05 or 5%. This suggest the adoption H03 of no significant relationship.

### **Coefficients**<sup>a</sup>

		Unstandardized .		Standardized		
		Coefficients		Coefficients		
Мо	del	В	Std. Error	Beta	t	Sig.
1	(Constant)	.099	.052		1.904	.063
	Exchange Rate	-4.773E-5	.000	029	204	.839

a. Dependent Variable: Return on Asset

**Table 4.6.1 Model Summary** 

			Adjusted R	Std. Error of
Model	R	R Square	Square	the Estimate
1	.132ª	.017	047	.09704

a. Predictors: (Constant), Inflationary Rate, Interest
 Rate, Exchange Rate

The overall result in Table 4.6.1 revealed R value of 0.132 (13.2%). This means that jointly, the independent variables have a positive correlation of this value. Though it is a

 $\P$ 

Table 4.6.2 ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.008	3	.003	.273	.845 <sup>b</sup>
	Residual	.433	46	.009		
	Total	.441	49			

a. Dependent Variable: Return on Asset

b. Predictors: (Constant), Inflationary Rate, Interest Rate, Exchange Rate

Table 4.6.2 shows F-Statistics value of 0.273 with a p-value of 0.845 which is higher than 0.05. This means that jointly the independent variables have no significant relationship with the dependent variable (return on asset) which is a measure of financial performance.

Table 4.6.3 Coefficients<sup>a</sup>

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.051	.240		.211	.834
	Interest Rate	.250	2.152	.031	.116	.908

Exchange Rate	.001	.001	.459	.754	.455
Inflationary Rate	-1.326	1.811	529	733	.468

a. Dependent Variable: Return on Asset

Table 4.6.3 revealed the overall contribution of each variable to the model. Interest rate, Exchange rate, Inflationary rate (p-values of 0.908, 0.455 and 0.468 respectively) are not significant.

Therefore:

$$ROA = 0.051 - 0.250(IR) - 0.001(ER) - 1.326(IR) + e_t$$

## **Findings**

This study found out that there is a relationship between interest rate and firms' performance. According to Eita (2011) a relationship was examined between several macroeconomic variables among Namibia listed companies with significant influence on stock performance. The study inquired into the relationship between the rate of interest, inflation rate, money supply, and exchange rate and used VECM to analyse the data. The results showed the existence of a significant positive relationship between stock market prices, money supply, and economic activity and an inverse relationship between stock prices and inflation rates; consequently, interest rate showing a positive significant relationship with stock performance.

The study also found out that there is a relationship between stock prices and macroeconomic factors. Dmitrios Tsoukalas (2003), studied the relationship between stock prices and macroeconomic factors in Cyprus using the Vector Autoregressive model. The variables

examined include the exchange rate, industrial production, money supply, and consumer prices. The result of the study indicates a strong relationship between stock prices and all the macroeconomic factors.

This study also found out that inflation also affects the firms performance in the consumer goods sector. Li (2006) states a high rate of inflation negatively affects the real economic growth and thus causes adverse consequences for economic performance at the aggregate level. However, the nature of the relationship between inflation and economic growth and the channels through which inflation affects real economic activities is still a debatable issue.

This study finds out there is general rise in exchange rate, inflation and also interest rate.

According to Gikungu (2012) in his study the impact of macroeconomic variables on the performance of Nairobi Securities Exchange (NSE) concluded that there was a general rise in share prices, money supply, exchange rate, inflation, and interest rate over the period under study.

#### **CHAPTER FIVE**

### **Summary, Conclusion And Recommendation**

### 5.1 Summary

This study investigated macroeconomics effects on firms performance in the consumer goods sector in Nigeria within the period of 2013-2017. Different ideas from several articles and authors who studied in this area before in order to make a comprehensive analysis of the study.

Chapter one was mainly about the introduction to the topic, to give knowledge of the topic, statement of the problems.

Chapter two was about the conceptual review, theoretical review and also empirical review which gives us knowledge on what other authors discovered.

Chapter three is about the methodology.

Chapter four was about the analysis of data which were extracted from the Nigerian Stock Exchange.

The regression model was used with the intention of explaining and predicting the empirical relationship between macroeconomics effects and performance of firms in the consumer goods sector in Nigeria. The study also employed secondary data obtained from the annual reports of 10 consumer goods companies, which was analysed. This study found out that there is a relationship between interest rate and firms' performance. According to Eita (2011) a relationship was examined between several macroeconomic variables among Namibia listed companies with significant influence on stock performance. The study inquired into the relationship between the rate of interest, inflation rate, money supply, and exchange rate and used to analyse the data. This study also found out that inflation also affects the firms performance in the consumer goods sector. Li (2006) states a high rate of inflation negatively affects the real economic growth and thus causes adverse consequences for economic performance at the aggregate level. However, the nature of the relationship between inflation and economic growth and the channels through which inflation affects real economic activities is still a debatable issue.

The results showed the existence of a significant positive relationship between stock market prices, money supply, and economic activity and an inverse relationship between stock prices

and inflation rates; consequently, interest rate showing a positive significant relationship with stock performance.

#### 5.2 Conclusion

This study analyses macroeconomics effect on firms performance in the consumer goods sector in Nigeria. The study used data collected from secondary sources and was analysed in line with the objectives of the study and the hypotheses were tested. The sample population of the study consist of 10 out of the 21 consumer goods companies listed in the Nigerian Stock Exchange because their data were fully obtained. Data was mainly collected from Nigeria Stock Exchange (NSE) for a period of 5 years from 2013 to 2017 using panel data. When the data was collected it was presented and analysed using regression analysis through SPSS version 22.

The regression result shows that the relationship between return on asset and interest rate is positive and has no significant relationship, also the relationship between return on asset and inflationary rate is positive and there is no significant relationship between the two variables which led to the acceptance of the alternative hypothesis and rejection of the null hypothesis. Lastly, the result states that the relationship between return on asset and exchange rate is also positive but also no significant relationship. Thereby accepting the hypothesis in a null form and rejecting alternative hypothesis

### **5.3** Recommendations

The recommendation for future researchers is to investigate other variables that are not used in this study. The other variables that can be used are return on equity, and the firm's size which can be investigated to find out the macroeconomic effects on firms performance of companies listed in the Nigerian Stock Exchange. Since this study focuses on the consumer goods sector in the Nigerian economy, it is suggested for future researchers to conduct their studies with data from multiple sectors and compare the results among the sectors.

## **Bibliography**

Abassi, B. and Taffler, R.J. (1982), Country risk: A model of economic performance related to debt servicing capacity, Working paper 36, City University Business School, London.

Ahluwalia, M.S., (1998). Infrastructure development in India's reforms, in I.J. Ahluwalia and I.M.D. Little (eds.), India's Economic Reforms and Development Essays for Manmohan Singh, New Delhi: Oxford University Press, 87-121. Alanazi, A. S. & Lui, B.

Ahmed, M. (2006), An empirical study to find out the relationship between macroeconomic variables, financial variables, bank-specific variables and bank profitability in context of Bangladesh. BBA Dissertation, Independent university, Bangladesh.

Akers, H. (2014), "Key macroeconomic variables", EHow Contributor

Akintoye, I.R. (2008), "Effect of capital structure on firms' performance", European Journal of Social Science, Vol. 4 No. 5, pp. 40-61.

Athanasoglou, P.P., Sophocles, N.B., & Matthaios, D.D. (2005) Bank-specific, industry-specific and exchange rate, interest rate, inflation rate and GDP fluctuation determinants of bank profitability. Working paper, Bank of Greece,3-4

Azam, M., Usmani, S. & Abassi, Z. (2011). The impact of corporate governance on firm's performance: Evidence from Oil and Gas Sector of Pakistan. Australian journal of basic and applied science, 5(12), 2978–2983.

Azhagaiah, R. & Priya, N. S., 2008. The Impact of Dividend pay-out on Shareholders' Wealth. International Research Journal of Finance and Economics, Volume 20, pp. 180-187.

Baker, M., 2007. Investor sentiments in the stock market. The national bureau of economic research, 21(2).

Barakat M. R., Elgazzar S. H. and Hanafy K. M. (2016), Impact of Macroeconomic Variables on Stock Markets: Evidence from Emerging Markets, International Journal of Economics and Finance, 8, 195-207.

Bernanke, B. S., & Kuttner, K. N. (2005). What explains the stock market's reaction to Federal Reserve policy? The Journal of Finance, 60(3), 1221-1257.

Bhattacharya, S., (1979). Imperfect information, dividend pay-out, and "the bird in the hand" fallacy, Bell Journal of Economics and Management Science, 10(1), 259-270.

Bhutta, N.T. and Hasan, A. (2013), "Impact of firm-specific factors on profitability of firms in the food sector", Open Journal of Accounting, Vol. 2 No. 2, pp. 19-25.

Black, Fischer, Michael C. Jensen and Myron Scholes. 1972. "The Capital Asset Pricing Model: Some Empirical Tests," in Studies in the Theory of Capital Markets. Michael C. Jensen, ed. New York: Praeger, pp. 79–121.

Blanehard, Olivier (2000). Macroeconomics, 2<sup>nd</sup> edition, Englewood Cliffs, N.J: Prentice hall

Broadstock, D. C., Shu, Y. & Xu, B., 2011. The Heterogeneous Impact of Macroeconomic Conditions on Firms' Earnings Forecast. Macao, Macao International Symposium on Accounting and Finance.

Brown, P. & Ball, R., 1967. Some preliminary findings on the association between the earnings of a firm. Its Industry, and the Economy. Journal of Accounting Research, pp. 55-77.

B. T. McCallum," Inflation: Theory and Evidence", New York, The American National Bureau of Economic Research, Working Paper No. 2312, 1987.

Chandrapala, P. & Knápková, A., 2013. Firm-Specific Factors and Financial Performance of Firms in the Czech Republic, s.l.: Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis.

Chiang, H. & Lin, M. (2011). Examining board composition and firm performance. The International Journal of Business and Finance Research, 5(3), 15–28.

Clare, A.D. and Stephen, H. T (1994), Macroeconomic Factors, the APT and the UK Stock Market, Journal of Business Finance and Accounting, 309-330.

Crowley, J. (2007). Interest Rate (2007). Interest Rate Spreads in English- Speaking Africa. IMF Working paper. April 2007.

Dybvig, P. H., & Ross, S. A. (2003). Arbitrage, state prices and portfolio theory.

Flannery, M. J. and Protopapadakis, A.A. (2002), Macroeconomic Factors do Influence Aggregate Stock Returns, Review of Financial Studies, 751-782.

Foong, S. S., Zakaria, N. B. & Tan, H. B., 2007. Firm Performance and Dividend-Related Factors: The Case of Malaysia. Labuan Bulletin of International Business & Finance, Volume 5, pp. 97-111.

G. CHAMBERLAIN AND M. ROTHCHILD, Arbitrage and mean-variance analysis of large asset markets, mimeo. University of Wisconsin-Madison, 1980.

Ganguli, S. K., & Agrawal, S. (2009). Ownership structure and firm performance: An empirical study on listed Mid-Cap Indian Companies.

Handbook of the Economics of Finance. Oxford: Butterworth-Heinemann.

Hansen, G. S. & Wernerfelt, B., 1989. Determinants of Firm Performance: The Relative Importance of Economic and Organizational Factors. Strategic Management Journal, 10(5), pp. 399-411.

Ibrahim, M. H. and Aziz, H. (2003), Macroeconomic Variables and the Malaysian Equity Market; A View Through Rolling Subsamples, Journal of Economic Studies, 6-27.

Idris, I., & Bala, H. (2015). Firms' specific characteristics and stock market returns:

Evidence form listed food and beverages firms in Nigeria. Research Journal of Finance and Accounting, 6(16), 188-200.

Ismail, N., Ishak, I., Manaf, N. A. & Husin, M. M., 2018. Macroeconomic Factors Affecting Performance of Insurance Companies in Malaysia. Academy of Accounting and Financial Studies Journal, 22(1), pp. 1-5.

Issah, M. & Antwi, S., 2017. Role of macroeconomic variables on firms' performance: Evidence from the UK. Cogent Economics & Finance, 5(1), pp. 1-18.

IPO financial and operating performance: Evidence from the six countries of the GCC., s.l.: s.n. (2013).

Investopedia. (2017). Definition of the consumer goods sector. Retrieved on 08/05/2017 from www.investopedia.com/terms/c/consumer-goods-sector.asp

Izedonmi, P.F. and Abdullahi, I.B. (2011), "The effects of macroeconomic factors on the Nigerian stock returns: a sectoral approach", Global Journal of Management and Business Research, Vol. 11 No. 7, pp. 25-29.

Jhingan, M.L, "Macroeconomics theory" 10<sup>th</sup> edition, Vrinda publication ltd, new-delhi,2005.

Kandir, S.Y. (2008), Macroeconomic Variables, Firm Characteristics and Stock Returns: Evidence from Turkey, International Research Journal of Finance and Economics, 35-45.

Khalid,2, Iqtidar, A.S., Muhammad, M.K, Mehboob, A, (2012) "Macroeconomic factors determining FDI impact on Pakistan's growth", South Asian Journal of Global Business Research,1(1),79-95.

Kimani, D.K & Mutuku, C.M (2013). Inflation dynamics on the overall stock market performance: The case of Nairobi securities exchange in Kenya. Economics and Finance review,2(II), 1-11.

Langfield-Smith, K. (1997). Management control systems and strategy: A critical review. Accounting, Organizations and Society, 22(2), 207–232.

Liargovas, P. and Skandalis, K. (2008), "Factors affecting firms' financial performance: the case of Greece", Working Papers No. 0012, Department of Economics, University of Peloponnese.

McNamara, R. and Duncan, K. (1995), Firm Performance and Macro-economic Variables, Discussion Paper 59., Bond University.

Mongeri, O. (2011). The impact of Foreign Exchange Rates and Foreign Exchange Reserves on the performance of Nairobi Stock Exchange share index. Nairobi: University of Nairobi.

NAI-FU CHEN, Empirical evidence of the arbitrage pricing theory, mimeo, UCLA. 1980.

NAI-FU CHEN. The arbitrage pricing theory: Estimation and applications, mimeo. UCLA, 1980.

Njoroge, K.A., (2013). The relationship between interest rate and firm performance among companies listed in NSE. MBA Thesis. University of Nairobi, Unpublished.

O'Sullivan, A & Sheffrin, S.M (2003). Economics: Principles in action. Upper Saddle River, N.J: Pearson Prentice Hall.

Oleka, C.D., Sabina, E.A., & Ebue, I. M. (2015). Relationship between Inflation and Firms' Performance- Evidence. World Applied Sciences Journal. 33 (5): 814-822,

Ongore, V.O. (2011) The relationship between ownership structure and firm performance: An empirical analysis of listed companies in Kenya. African Journal of Business Management, 5(6), 2120-2128.

Oppong, K. (2015). Dividend pay-out and firms 'performance: a case of listed (Doctoral Dissertation, Kwame Nkrumah University of Science and Technology)

Pandya, H. (2011). Corporate governance structures and financial performance of selected Indian Banks. Journal of Management and Public Policy, 2(2), 4-22.

Paul Ammann & Jeff Offutt (2008): Introduction to Software Testing. Cambridge University Press, New York, NY, USA, doi:10.1017/CBO9780511809163.

Prasad, S. C. J. Green and V. Murinde, (2001., Company financing, capital structure, and ownership: A survey, and implications for developing economies, SUERF Studies No. 12, Vienna: SUERF.

Robert V. Binder (1999): Testing Object-Oriented Systems: Models, Patterns, and Tools. Addison-Wesley Longman Publishing Co., Inc., Boston, MA, USA.

Ross, S.A. (1976). The Arbitrage Theory of Capital Asset Pricing. Journal of Economic Theory, Vol. 13, pp. 341-360.

Sharma, G. D., Singh, S., & Gurvinder Singh. (2011). Impact of Macroeconomic Variables on Economic Performance: An Empirical Study of India and Sri Lanka. Rochester, New York.

Udegbunam, Ralph and P. O. Eriki (2001), "Inflation and Stock Price Behavior: Evidence from Nigerian Stock Market," Journal of Financial Management & Analysis, XX (14) (1), 1-10.

Velnampy, T. (2013). Corporate governance and firm performance: a study of Sri Lankan manufacturing companies.

Velnampy, T., & Nimalathasan, B. (2009). Firm Size on Profitability: A Comparative Study of Bank of Ceylon and Commercial Bank of Ceylon Ltd in Sri Lanka. Global Journal of Management and Business Research, 10(2), 96–100

Wadhwani, S., 1986. Inflation, Bankruptcy, Default Premia and the Stock Market,. Economic Journal, 96(1), pp. 20-38.

Wahla, K.-U.-R., Shah, S. Z. A., & Hussain, Z. (2012). Impact of ownership structure on firm performance evidence from non-financial listed companies at Karachi Stock Exchange. International Research Journal of Finance and Economics, 84, 6–13.

World Bank Group, 2015; Broadstock et al., 2011).

Zeitun, R., Tian, G. and Keen, S. (2007), "Macroeconomic determinants of corporate performance and failure: evidence from an emerging market the case of Jordan", Corporate Ownership and Control, Vol. 5 No. 1, pp. 179-194.

Zulfiquar, Z. & Din, N. (2015). Inflation, interest rate and firms' performance: the evidence from textile industry of Pakistan. International Journal of Arts and Commerce. Vol 4(2).

# **Appendix**

		IR	ROA	PBT	Total Asset	ER	ROE	PAT	
	2012	12	0.405500	16 265 150	02.450.077	457.0	0.220006	10.045.000	
Dangote	2013	12	0.195589	16,265,159	83,159,877	157.3	0.229986	10,845,932	
Sugar Refinery									
Kennery	2014	13	0.164579	15273152	92801301	158.6	0.226317	11635799	
	2014	11	0.16125	16548299	102624834	192.4	0.220317	11535062	
	2015	14	0.10123	19614434	178381640	253.5	0.138372	14395938	
	2017	14	0.274753	53598868	195080449	305.8	0.429	39783605	
Flour Mills	2017	12	0.274733	10,876,848	280,137,993	157.3	0.091408	7,539,810	
of Nig	2013	12	0.038627	10,870,848	280,137,993	137.3	0.031408	7,339,810	
- <u>U</u>	2014	13	0.02768	8,227,923	297,249,445	158.6	0.064239	5,367,815	
	2015	11	0.022531	7724770	342,849,399	192.4	0.096949	8,474,342	
	2016	14	0.033269	11,489,278	345,348,326	253.5	0.150579	14,420,284	
	2017	14	0.021701	10,472,847	482,603,257	305.8	0.086172	8,836,452	
Champion	2013	12	-0.18937	-1,730,432	9,137,716	157.3	-0.25563	-1,178,025	
Breweries	2013		0.10307	1,730,132	3,137,710	137.13	0.23303	1,170,023	
	2014	13	-0.11173	-1,071,765	9,592,381	158.6	-0.12853	-754,523	
	2015	11	0.020348	210,179	10,329,160	192.4	0.010832	77,140	
	2016	14	0.063978	637,300	9,961,240	253.5	0.135485	530,389	
	2017	14	0.059786	603,173	10,088,861	305.8	0.132208	517,562	
Cadbury	2013	12	0.041175	1,675,878,000	40700977000	157.3	0.0539	1,141,504,000	
	2014	13	0.037429	1,151,154,000	30,755,894,000	158.6	0.06245	805,808,000	
	2015	11	-0.0106	-303,520,000	28,623,534,000	192.4	-0.02701	-303,520,000	
	2016	14	0.02443	693,631	28392951	253.5	0.060852	672,822	
	2017	14	0.003046	95,827	31458169	305.8	0.008161	92,952	
McNichols	2013	12	0.083579	26,834,566	321,068,591	157.3	0.123514	23,407,110	
	2014	13	0.120212	45,472,992	378,273,495	158.6	0.18265	40,538,746	
	2015	11	0.155364	65,276,330	420149791	192.4	0.231663	60,337,718	
	2016	14	0.147706	70,181,030	475140932	253.5	0.191849	57,848,754	
	2017	14	0.076999	41,520,583	539237536	305.8	0.117342	38,227,647	
Nestle	2013	12	0.240719	26,047,590	108,207,480	157.3	0.548304	22,258,279	
	2014	13	0.230487	24,445,978	106,062,067	158.6	0.618694	22,235,640	
	2015	11	0.245963	29,322,477	119215053	192.4	0.624536	23,736,777	
	2016	14	0.127065	21,548,408	169585932	253.5	0.256654	7,924,968	
	2017	14	0.318988	46,828,682	146804128	305.8	0.751451	33,723,730	
Guiness	2013	12	0.140499	17,008,875	121,060,621	157.3	0.257688	11,863,726	
	2014	13	0.088277	11,681,560	132,328,273	158.6	0.212453	9,573,480	
	2015	11	0.088306	10,795,102	122,246,632	192.4	0.198039	9,573,480	
	2016	14	-0.01713	-2,347,241	136,992,444	253.5	-0.04839	-2,015,886	
	2017	14	0.018229	2,662,081	146,038,216	305.8	0.044797	1,923,720	
Honeywell Flour	2013	12	0.068809	3,814,599	55,437,478	157.3	0.153264	2,843,520	
	2014	13	0.066386	4,237,432	63,830,439	158.6	0.162656	3,351,564	
	2015	11	0.021118	1,434,828	67,943,444	192.4	0.055143	1,120,267	
	2016	14	-0.03773	-2,869,342	76,046,576	253.5	-0.1848	-3,023,852	
	2017	14	0.048341	5,469,833	113,151,714	305.8	0.082258	4,304,955	
Nigerian Breweries	2013	12	0.246243	62,240,317	252,759,633	157.3	0.383416	43,080,349	
	2014	13	0.175993	61,461,821	349,229,163	158.6	0.247262	42,520,253	

	2015	11	0.153038	54,514,973	356,218,676	192.4	0.220844	38,056,123	
	2016	14	0.108062	39,674,518	367,146,468	253.5	0.171276	28,416,965	
	2017	14	0.121995	46,630,058	382,228,093	305.8	0.185355	33,048,559	
PZ	2013	12	0.105818	7,650,256	72,296,420	157.3	0.11459	5,321,187	
Cussons		1'			<u>'</u>	l'	<u> </u>		
	2014	13	0.097934	6,949,985	70,965,735	158.6	0.119486	5,082,747	
	2015	11	0.0973	6,556,814	67,387,914	192.4	0.104661	4,570,787	
	2016	14	0.042297	3,148,196	74,430,174	253.5	0.049068	2,129,689	
	2017	14	0.053405	4,811,169	90,087,525	305.8	0.081674	3,686,597	