MACROECONOMIC POLICIES AND ECONOMIC DIVERSIFICATION IN NIGERIA

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DECLARATION

I, **ARASOMWAN, Onaiwu Kenneth** with registration number **ECS/Ph.D/15/001** hereby declare that this thesis on **Macroeconomic Policies and Economic Diversification in Nigeria** is original and has been written by me. It is a record of my research work and has not been presented before in any previous publication.

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ABSTRACT

This study examines the effect of macroeconomic policies on economic diversification in Nigeria. More precisely, the study examined empirically, the impact of monetary, fiscal and trade policies on economic diversification in Nigeria. Macroeconomic policies were disaggregated into monetary, fiscal and trade policies. While money supply and real effective exchange rate represented monetary policy variables, tax, domestic debt and government expenditure represented fiscal policy variables and trade policy variables were represented by trade openness and foreign direct investment. The study made use of annual time series data covering the period from 1983 to 2018. The Auto regressive Distributed Lag (ARDL) bounds testing approach was employed in this study. The results of the cointegration test showed the existence of long-run relationships among the variables in all the specifications. The result showed that real effective exchange rate (monetary policy variable) had a negative and significant impact on economic diversification while money supply (monetary policy variable) had a positive impact but insignificant effect on economic diversification. The impacts of tax and government expenditure (fiscal policy variables) on economic diversification were positive and significant. Trade openness and foreign direct investment (trade policy variables) similarly showed positive impacts on economic diversification. The results therefore showed that the macroeconomic variables in our study displayed joint significant impact on economic diversification within the period of study. The study concluded that macroeconomic policies have significant effect on economic diversification in Nigeria. Based on the results obtained, the study recommended that government should ensure that its macroeconomic policies are tailored towards strengthening a realistic exchange rate that will promote non-oil exports and help to revive productivity in other sectors of the economy. Furthermore, government capital expenditure pattern should focus more on projects that will create the enabling environment for the growth of the manufacturing, technology, power, education, agriculture, service, mining and other non-oil sectors of the economy as sustainable economic growth and development rest with these sectors.

(Word count: 317)

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ADF	Augmented Dickey-Fuller
ARDL	Autoregressive Distributed Lag
BLUE	Best Linear Unbiased Estimator
CBN	Central Bank of Nigeria
DIVX	Diversification Index
ECM	Error Correction Model
ECOWAS	Economic Community of West African States
ERGP	Economic Recovery and Growth Plan
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GEXP	Government Expenditure
GFCF	Gross Fixed Capital Formation
IMF	International Monetary Fund
ISI	Import-Substituting Industrialization
LF	Labour Force
M2	Money Supply
NBS	National Bureau of Statistics
NPC	National Planning Commission
NEEDS	National Economic Empowerment and Development Strategy
OLS	Ordinary Least Squares
OPEN	Trade Openness
REER	Real Effective Exchange Rate
SAP	Structural Adjustment Programme
SFEM	Second-tier Foreign Exchange Market
SITC	Standard International trade Classification

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

An economic policy is a course of action that is intended to influence, manipulate or control the behaviour of the economy. The government typically formulates economic policies. Examples of economic policies include decisions made about government spending and taxation, redistribution of income, and the supply of money. Policy makers undertake three main types of economic policy. These are fiscal policy which refers to the use of government revenue collection (taxation) and expenditure (spending) to influence the economy, trade policy which comprises of government activities towards regulating and promoting trade in an attempt to increase the productive capacity of the economy, and monetary policy which involves changes in the supply of money and credit. (Mankiw, 2003.)

The overall aim of macroeconomic policy is to attain and maintain a stable price level, full employment, balance of payments and economic growth in addition to other macroeconomic policy goals. Government policies have always targeted the management and improvement of the economy as a primary objective. Governments over time have embarked on various macroeconomic policy options to transform the economy in terms of growth and development and the policy option employed is that of fiscal and monetary policy (Peter & Simeon, 2011).

One of the key objectives of the government's economic policy is the prosperity and stability of the economy. It intends to achieve this by increasing the economy's competitiveness in the global economic arena. However, besides the macroeconomic policies identified above, another key determinant of an economy's competitiveness is the extent of its diversification, understood in this context to mean the degree to which the economy moves away from a dominant income-earning sector or product to other ones.

United Nations Framework Convention on Climate Change (2019) defined Economic diversification as "the process of shifting an economy away from a single income source toward multiple sources from a growing range of sectors and markets." A diversified economy is an economy that has a number of different revenue streams and provides nations with the ability for sustainable growth because it does not rely on one particular type of revenue. Thus, diversification provides a nation with the security and reliability that it need so that if one economic revenue stream fails, the nation knows that it has several other options for revenue (Ogbonna, 2017). Diversification can take place through either horizontal diversification (new opportunities are sought for new products within the same sector, e.g. mining, energy or agriculture) or vertical diversification, which entails adding more stages of processing of domestic or imported inputs. Thus, vertical diversification encourages forward and backward linkages in the economy, as the output of one activity becomes the input of another, thus upgrading the value-added produced locally. This then makes the process of economic development to be a change in the social and economic structure as countries move from producing "poor-country goods" to "rich-country goods." (Hesse, 2006.)

The role of macroeconomic policy in the process of diversification in Nigeria has been a growing concern. It is apparent that the government had embarked on several policies aimed at improving the growth of the Nigerian economy through diversification over time since the country's independence (Adebayo, 2010, Peter & Simeon, 2011, Loto, 2011), yet the economy has remained tied to the apron strings of one sector in spite of many decades of diversification experimentation. In most developing countries including Nigeria, export of primary products remain one of the few channels, which significantly sustain and contribute to higher income per capita growth rates of the country. This is as a result of high dependence on a product or a narrow export basket. This has inevitably subjected the economy to precarious global demand trends. A

large and vibrant export basket mix is thus becoming the only way to escape from these particular constraints.

At the national level, economic diversification takes place by reducing a country's overdependence on a narrow economic base. In resource-dependent countries, the process entails moving the productive base away from the extractive sector by supporting manufacturing and other non-resource sectors. This process can be defined as industrialization. Although governments possess powerful policy instruments in their policy toolbox to stimulate structural change and the diversification process, choosing the right instruments determines the level of success in the long run.

Herrick and Kindleburger (1983) opined that economic diversification is part of, but distinguished from, economic development, as the latter implies not only difference of output, but also changes in the technical and institutional arrangements by which output is produced and distributed. Nigeria's export diversification drive and experience has been reactive and peripheral. They were not inspired by a genuine resolve to address the structural imbalances in the Nigerian economy. From the late 1960s till date, only one commodity still account for over 70% of Nigeria's annual export. According to Ogege and Mojekwu (2012), Nigeria is endowed with various kinds of resources needed to place her amongst the top emerging economies of the world. Nigeria is the 26th largest economy in the world and the biggest in Africa where it is the leading oil exporter with the largest natural gas reserves. (NPC, 2016) According to World Trade Organization (2017), as a result of its 2014 rebasing exercise, Nigeria's GDP almost doubled from US$270 billion in 2013 to US$510 billion in 2014, and its economy has become more services driven (about 61% of GDP in 2016). This GDP increase of about 90% resulted from, inter alia, re-estimation of the contributions of certain sectors of the economy such as telecommunications, entertainment, and retail, which were previously not captured or underreported, the informal sector was re-estimated to account for about 44% of GDP. (NBS, 2016)

While there is no blueprint for successful diversification, careful application of economic theory and macroeconomic policy and available empirical evidence can help policy-makers to avoid mistakes and learn from successful experiences. This study therefore provides the empirical evidence of the impact of macroeconomic policies on economic diversification in Nigeria.

1.2 Statement of the problem

Despite abundant natural and human resources, Nigeria remains a poor country (Olowa, 2012). Up to the end of the 1960s, the country was self-sufficient in food production and even a net exporter of agricultural produce. Since the early 1970s however, crude oil rapidly became a major foreign exchange earner and contributor to GDP. Other sectors of the economy, especially agriculture and manufacturing, rapidly got relegated to the background in terms of economic relevance. The result is that the non-oil sector of the economy has stagnated, while crude oil revenues have not been managed effectively to stimulate desired growth levels and sustainable economic development.

The economy is skewed towards consumption rather than investment, with gross domestic investment (GDI) to GDP ratio hovering at 13 to 14 per cent. Nigeria's economy is highly dependent on the oil and gas sector. Although the sector accounts for just 10 per cent of GDP, it represented 94 per cent of export earnings and 62 per cent of Government revenues (Federal and State) between 2011 and 2015. As a result of the undue dependence of the economy on oil, the crash in oil prices resulted in foreign exchange reserve's decline from USD32 billion in January 2015 to USD25 billion in November 2016 – from a high of USD53 billion in 2008 (World Bank 2016). As a result, the naira depreciated sharply, losing almost half of its value against the dollar. The Central Bank of Nigeria (2017) annual report states that foreign direct investment (FDI) declined sharply from a peak of USD8.9 billion in 2011 to USD3.1 billion in 2015 and did not recover as at 2016.

Falling oil revenues widened the Federal Government deficit from N1.2 trillion in 2013 to N1.4 trillion in 2015, and an estimated N2.2 trillion in 2016. Fiscal sustainability became therefore a critical challenge for Nigeria. (CBN, 2017). Iniodu (1995) reiterated that the near total dependence on a mono product (oil), which operates on a quota system, has rendered the Nigerian economy vulnerable to fluctuations in world prices of petroleum and its products. The di

Falling oil revenues widened the Federal Government deficit from N1.2 trillion in 2013 to N1.4 trillion in 2015, and an estimated N2.2 trillion in 2016. Fiscal sustainability became therefore a critical challenge for Nigeria. (CBN, 2017). Iniodu (1995) reiterated that the near total dependence on a mono product (oil), which operates on a quota system, has rendered the Nigerian economy vulnerable to fluctuations in world prices of petroleum and its products. The diversion of attention from agriculture, which was once the mainstay of the economy occurred because of the favourable oil revenue windfalls of the 1970s.

The performance of the non-oil export sector such as agricultural sector, manufacturing sector and solid minerals sector in the past three decades leaves little or nothing to be desired in spite of the efforts to promote non-oil exports in Nigeria. Abogan, Akinola and Baruwa (2014) noted that an assessment of the trend and patterns of activities in the non-oil sector of Nigeria revealed that despite the various policies, strategies and reform programmes, the contributions of the sub-sectors of this sector have been dismal, disheartening and below its full potential. According to CBN (2018), the share of non-oil export in the country's total export earnings was as low as 0.3 billion Naira in 1981, accounting for just 2.7% of total export earnings. In 1986, non-oil export earnings stood at 0.6 billion Naira, accounting for 6.7% of export earnings that year. Ten years on in 1997, the same sector netted 29.2 billion Naira, which is only 2.35% of total export earnings. The oil sector therefore accounts for the larger 97.65% of export earnings. This dismal trend however improved marginally in recent years as the non-oil sector accounted for 7.35% (913.5 billion Naira), 7.4% (656.8 billion Naira) and 7.6% (1,074.9 billion Naira) in 2011, 2016 and 2017 respectively.

The continued unimpressive performance of the non-oil sector and the vulnerability of the oil sector thus dictate the urgency for a reappraisal of the thrust and contents of Nigeria's development policies and the depth of commitments to their implementation. Indeed, the need for

a change in the macroeconomic policy focus and diversification is imperative if the Nigerian economy is to return to the path of sustainable growth and external viability.

All governments in post-independent Nigeria had indicated diversification of the economy away from oil as the solution to Nigeria's economic challenges. There have therefore, been countless macroeconomic policies, plans and actions over the years to ensure the diversification of the economy ranging from the First National Development Plan (1962-1968), the Rolling Plans, the Structural Adjustment Plan (1986), Vision 20:2020 and the most recent Economic Recovery and Growth Plan (ERGP 2017-2020). In spite of these many and varied plans and policies, spanning several decades and gulping dizzying resources, the country still remains heavily dependent on crude oil for its economic sustenance, foreign exchange earnings and fiscal revenue. Statistics on the impacts of monetary, fiscal and trade policies on the economy leave a lot to be desired. Inflation rate was 7.7 percent in 1982. By 1996, it was 29.3 percent and 17 percent in 2001. This fell to 8.0 percent in 2014 but rose to 16.5 percent in 2017 (World Data Atlas, 2019). Similarly macroeconomic variables like money supply, tax revenue, government expenditure, foreign direct investment and capital formation have seen astronomical rise in their values over time without a commensurate positive impact on the diversification and growth of the economy. It is depressing to observe that after more than five decades of efforts at diversifying the Nigerian economy, by several governments in Nigeria even with serious efforts both in policy and implementation, diversification of the Nigerian economy away from oil has remained elusive.

This impotence in policy and actions aimed at the diversification of the Nigerian economy motivated this research.

The study therefore seeks to answer the following research questions:

1. What is the impact of monetary policy on economic diversification in Nigeria?

2. What impact has fiscal policy created on economic diversification in Nigeria?

3. What impact has trade policy created on economic diversification in Nigeria?

4. What is the joint impact of monetary, fiscal and trade policies on economic diversification in Nigeria?

1.3 Objectives of the study

The broad objective of the study is to ascertain the impact of macroeconomic policy on diversification of Nigeria economy. The study has the following specific objectives:

1. Examine the impact of monetary policy on economic diversification in Nigeria.
2. Investigate the impact of fiscal policy on the diversification of the Nigeria economy.
3. Ascertain the impact of trade policy on economic diversification in Nigeria.
4. Determine the joint impact of macroeconomic policies - monetary, fiscal and trade policies - on economic diversification in Nigeria.

1.4 Research hypotheses

H0: Monetary policy has no significant impact on economic diversification in Nigeria.

H0: Fiscal policy has no significant impact on economic diversification in Nigeria.

H0: Trade policy has no significant impact on economic diversification in Nigerian.

H0: Macroeconomic policies - Monetary, fiscal and trade - have no significant impact on economic diversification in Nigeria.

1.5 Scope of the study

This study focuses on the role of macroeconomic policies in the diversification of the productive and resource bases of the Nigerian economy. Specifically, the role that major components of fiscal, monetary and trade policies play in engineering and sustaining the

diversification drive of the Nigerian economy was examined. These components include money supply, real effective exchange rate, government expenditure, domestic debts, foreign direct investment and a host of others. For the purposes of empirical analysis, a time frame of 35 years (1983-2018) was used. This time frame was chosen as a result of data constraints.

1.6 Significance of the study

For many reasons, including regular and unpredictable shocks from the international markets, no country today would like to tie its economic destiny to a product or a narrow collection of products. While developed countries are investing heavily in breaking new frontiers in the quantity and quality of their product baskets, developing countries, many of which are shackled by the phenomenon of mono-product economy, must diversify their economies if they must enjoy the benefits of sustainable development and break away from the curse of epileptic growth. This unfortunately, is most true of the Nigerian economy. The study will, therefore, be of immense use to the government at all levels, policy makers, economic planners, researchers, the academia and the public in general.

This study will provide insights and understanding to the government on the consequences of operating and relying on a mono-product economy as well as showcase the attractive benefits of an economy that is well diversified. Also, it will provide a guide in formulating relevant macroeconomic policies that will influence the scope and direction of economic diversification, growth and ultimately, development in Nigeria.

To the academia, the findings of the study will contribute to the available literature on the current state of diversification in Nigeria and its contribution to the GDP. Based on our empirical findings and analysis, the result of the study will be of immense benefit to researchers who will rely on its contributions to existing knowledge for further research.

To policy makers and economic planners like the monetary authorities, this research work will be very useful in formulating and implementing appropriate policy measures that will help in accelerating economic growth through diversification. It will also assist in assessing the performance of the macroeconomic policy in Nigeria particularly in terms of their impact on diversification. To the private sector the study will help to throw light on the enabling business environment that will encourage economic integration, industrialization and promote diversification of the economy.

Finally, the study will also throw some light into the peculiar challenges associated with transforming the Nigerian economy from a mono-product economy to a diversified economy and how these challenges can be addressed.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 CONCEPTUAL LITERATURE

2.1.1 Macroeconomic policies

Macroeconomic policies refer to all the deliberate and well thought out actions of the government meant to achieve specific objectives which affect the economy of the whole country [or region]. It is concerned with monetary, fiscal, and trade policies as well as with economic growth, inflation and employment levels. It is distinct from microeconomic policies which only affects particular sectors, districts, neighbourhoods or groups. Macroeconomic policies also refer to the setting of broad objectives by the government for the economy as a whole and using of policy instruments to achieve those objectives. These policies are critical in shaping the landscape within which factor markets (such as labour and capital) and product markets (such as shoes, cars, or bread) operate. They have a critical influence on decisions by business organizations to produce, to hire or fire workers, or to export and import goods, for example. They also determine household decisions to consume, save, and borrow, and government decisions to invest in infrastructure, education and many other aspects of development. (World Bank, 2014)

Macroeconomic policies include taxes, government spending and borrowing, exchange rate determinants, and monetary and credit rules. The primary goal of effective macroeconomic policy is to reduce uncertainty and risk in economic decision-making. A stable macroeconomic environment enhances prospects for growth and improved living standards. Macroeconomic policy as used in this study denotes the application of monetary, trade and fiscal policies by the respective policy authorities (e.g. the executive arm of government and the central bank of Nigeria) to influence aggregate economic outcomes of output, income and employment. The concept of dynamism describes the various forms, phases, and evolution of fiscal and monetary

policies over time in the Nigerian economic space, their applications to address the various challenges in the Nigeria economy and the evaluation of their effects, especially as it affects their impact on the productivity of the non-oil sector of the economy and more generally on the objective of diversification of the economy away from the narrow enclaves of oil.

Nigeria has experimented with different macroeconomic policies in line with the pursuit of its various macroeconomic goals like stable and sustainable, non-inflationary economic growth and development, to keep the level of inflation as low as possible, to attain and maintain full employment level, to achieve balance of payments equilibrium and to ensure a fair distribution of income. Sanusi (2002) noted that in the specific economic environment of the 1970s, the emphasis of monetary policy was the maintenance of domestic price stability and a healthy balance of payments position, as well as accelerating the pace of economic development. The conduct of monetary policy in Nigeria relied mainly on direct control measures, involving the imposition of aggregate credit ceilings and selective sectoral control, interest rate controls, cash reserve requirements, exchange rate control and call for special deposits. The use of market-based instruments such as open market operations was not feasible because of the under-developed structure of the financial market, characterized by limited menu of money market instruments, fixed and inflexible interest rates, and restricted participation in the market.

Although the impact of monetary policy on the overall economic performance is not easy to isolate, empirical evidence shows that there are links between the two. In the period under review, the objectives of monetary policy were, in general, not fully realized. Real output (GDP) and employment growth remained sluggish, averaging 0.9 per cent annually between 1980 and 1985 and 2.99 per cent between 1986 and 2001. The strong growth performances observed in 1985 and from 1988 to 1990 were not sustained. The inflationary pressures, which were building up in the second half of the 1970s intensified, averaging 17.8 per cent annually in the period 1980–1985 and 27.44 per cent in 1986–2001 and reached an all time high of 72.8 per cent in 1995. (Sanusi,

2001). Also, the external sector came under severe pressure, resulting in the depletion of external reserves to a level less than the three months of imports conventionally accepted as the minimum.

2.1.2 Fiscal policy

Fiscal policy involves the use of parameters such as taxation, budget and quotas to influence government revenue and expenditure with a view to achieving macroeconomic objectives which monetary policy also stands to achieve. (Kareem, Afolabi, Raheem, & Bashir, 2013). It refers to changes in government expenditure and taxation. Government expenditure, also called public expenditure, and taxation occur at two main levels – national and local. Governments spend money on a variety of items including benefits (for the retired, unemployed and disabled), education, health care, transport, defence and interest on national debt.

Fiscal policy refers to the government's plan for spending and taxation in the relevant period. It involves the use of public finance or expenditure, taxes, borrowings and financial administration to further our national economic objectives. One of its primary objectives is to smooth out the fluctuations in economic activity that often cause unemployment and/or inflation. In other words, fiscal policy is intended to help the government to manage aggregate demand in a way that ensures continuing prosperity for the society (Akpakpan 1999).

However, as a tool of macroeconomic policy, the goals of fiscal policy are likely to vary in different countries and in the same country in different situations. For instance, in an economy operating at full and near full employment level, the goal of fiscal policy should be the maintenance of full employment while in a developing economy, the goals of fiscal policy should focus on economic growth with stability and reduction in economic inequalities. With widespread inflation, the concept of economic stabilisation was refined to include the elimination of inflationary pressures in the economy. Consequently, the achievement of full employment and price stability should be attempted through the instrument of fiscal policy.

2.1.3 Monetary policy:

Monetary policy has to do with the management of the money supply, the rate of interest and the exchange rate, although some economists treat changes in the exchange rate as a separate policy. The main monetary policy measure, currently used in most countries, is changes in the rate of interest.

Monetary policy includes all monetary and non-monetary decisions and measures aimed at affecting the monetary system. It is a "policy" employing the central banks control of the supply of money as an instrument for achieving the objectives of general economic policy (Vaish, 2010, Jhingan, 2004). Shaw defines monetary policy as "any conscious action undertaken by the monetary authorities to change the quantity, availability and or cost of money or credit" (cited in Jhingan, 2004:220). Since the common objectives of economic policy are attainment of full employment, price, stability, balance of payments equilibrium and rapid economic growth, the effectiveness of monetary policy will depend upon the degree of success in achieving these objectives. In other words, these are equally the objectives of monetary policy (Lipsey and Steiner, 1981). Full employment means, the absence of involuntary unemployment. A situation in which everybody who wants to work gets work. Aggregate employment is inelastic in response to an increase in the effective demand for its output in this situation. It is also seen as a situation where there are more vacant jobs than unemployed people so that the normal lag between losing one job and finding another will be very short.

Price stability is another policy objective of monetary policy. When prices are unstable, these means that there are fluctuations in prices and this leads to uncertainty and instability. So a policy of price stability keeps the value of money stable, eliminates cyclical fluctuations, reduces inequalities of income and wealth, enhances economic stability, secures social justice and promotes economic welfare (Byrns & Stone, 1992).

Monetary policy promotes a sustained economic growth by maintaining equilibrium between total money demand and economy's total production capacity, encouraging savings and investments by minimizing fluctuations in prices and business activities.

Another objective of monetary policy is the maintenance of an equilibrium balance of payments position. Balance of payments is a statistical record of all the economic transactions between residents of the reporting country and the residents of the rest of the world during a given time period (Pilbeam, 1998). A balance of payments disequilibrium occurs when we have a deficit or surplus balance of payments.

2.1.4 Trade policy

Trade policies are policies designed to increase aggregate supply and hence increase productive potential. Such policies seek to increase the quantity and quality of resources and raise the efficiency of markets. These include market-oriented reforms, abolition of restrictive trade barriers, tariff reforms, streamlining import / export procedures and such other policies that will generally affect domestic and foreign Trade.

According to Jamali and Anka (2011), the overall objectives of Nigeria's trade policy is the encouragement of production and distribution of goods and services to satisfy both the domestic and international markets for the purpose of achieving accelerated economic growth and development. They identified other broad objectives to include: the promotion and development of domestic trade, including intra-trade trade and inter-trade commerce, the development and promotion of oil and non-oil exports, deregulation and liberalization of trade and promotion of Nigeria's bilateral and multilateral trade interests.

2.1.5 Economic diversification

Le-Yin Zhang (2003) saw economic diversification as the process in which a growing range of economic outputs is produced. It can also refer to the diversification of markets for exports or the diversification of income sources away from domestic economic activities (that is, income

from overseas investment). Diversification according to Ayeni (1987) and Iniodu (1995) implies "movement into new fields and stimulation and expansion of existing traditional products." Diversification is not necessarily opposed to specialisation, but requires that resources be channelled into the best alternative uses. United Nations Framework Convention on Climate Change (2019) defined Economic diversification as "the process of shifting an economy away from a single income source toward multiple sources from a growing range of sectors and markets. Traditionally, it has been applied as a strategy to encourage positive economic growth and development."

Economic diversification has been used as a strategy to transform the economy from using a single source to multiple sources of income spread over primary, secondary and tertiary sectors, involving large sections of the population. The objective has always been to improve economic performance for achieving sustainable growth. For example, building resilience against fluctuations in extra-regional economic activity, reducing vulnerability to income loss due to volatility of product price on the international market, creating job opportunities, alleviating poverty and actually breaking away from the vicious cycle of poverty in which most African countries are presently languishing.

Diversification in the present Nigerian economic context simply means creating new avenues for economic growth. It involves using the right strategy to boost revenue generated from other sectors of the economy. This means, facilitating growth of other sectors of the economy and through this, reversing the effects of the economic crisis and returning the economy to a sustainable growth path. It, however, will not necessitate a neglect of the oil and gas sector but entails a maximization of the revenue potentials of all the sectors.

Economic diversification, either in terms of the diversity of economic activities or markets, is a significant issue for many developing countries, as their economies are generally characterized

by a chronic deficiency of diversification. They have traditionally relied heavily on the production of primary commodities that are predominantly vulnerable to climate variability and change.

The key advantages of diversification include minimising risk of loss – if one investment performs poorly over a certain period, other investments may perform better over that same period. It reduces the potential losses of your investment portfolio from concentrating all your capital under one type of investment. It also aims to maximize return by investing in different areas that would each react differently to the same event. Most investment professionals agree that, although it does not guarantee against loss, diversification is the most important component of reaching long-range financial goals while minimizing risk.

Several measures of diversification exist in the literature. These measurement methods can be classified by the theoretical concept that they apply to measure diversification. These include the share of sectors in GDP, the share of sectors in exports (export concentration), the dependence of a country on the export of a good or commodity, and the employment share of sectors. Most of the theories used to measure the level of economic diversification link it to levels of employment, exports or income.

Indices that measure absolute specialization indicate the level of specialization in a country (for example, when a small number of industries exhibit high shares of the overall employment of the country or the income of the country). In general, the indices can be classified into two groups: one group that measures a country's absolute specialization (e.g. ogive index, entropy index, Herfindahl-Hirschmann index, Gini index, diversification index), and a second group that measures a country's economic structure from a reference group of industries (e.g. Theil index, relative Gini index, inequality in productive sectors) (United Nations 2016).

This study adopts diversification index as a reliable measure of economic diversification. This is because it is the highest benchmark of diversification and represents equal distribution of employment across sectors.

2.2 Theoretical Framework

2.2.1 Theories of economic diversification

It is widely held that a diversified economy is less sensitive to the vagaries or vicissitudes associated with any particular industry because risk is spread more evenly across a number of industries. With diversification, even if some industries are suffering, other stronger industries will help the economy maintain healthy growth. The presence of many industries would be expected to offer opportunities for employment in growing sectors to compensate for employment losses in declining sectors and strengthen linkages.

Some regional economists and policy makers regard diversification as employment insurance, with more diversified economies experiencing lower unemployment during cyclical downturns. It is also argued that the more diversified the economy becomes, the more resilient it becomes to external events and developments.

While diversity has often been promoted as a means to achieve the twin goals of economic stability and growth, United Nations (2016) noted that other aspects of a region's economic structure, such as regional comparative advantage and natural resources are equally important. It is argued that indiscriminate diversification (i.e., diversity for the sake of diversity) will not necessarily bring about economic growth and stability (Smith a& Gibson, 1998). Akpadock (1996) also notes the concern of community development practitioners that the economy diversification does not always promote stability, economic growth and low employment. It therefore becomes necessary for an economy to ensure that not only is it adhering to a pre-determined diversification plan, but it is also able to measure the rate and intensity of diversification. Several theories on economic diversification are reviewed below.

2.2.1.1 Industrial Organization Theory

In 1980, Scherer came up with the Industrial Organization theory. The Industrial Organization (IO) theory is about, how the structure of a market has an influence on the strategy

and decision making of an economy. Under this theory, a more diversified sector (that is, less concentrated) is assumed to be more competitive. A region with a greater number of sectors and/or a more even distribution of economic activity is associated with higher diversity.

2.2.1.2 Economic Base Theory

The economic base concept emerged in the 1920s. This theory was developed by Robert Murray Haig in his work on the Regional Plan of New York in 1928. In a nutshell, it posits that activities in an area divide into two categories: basic and non-basic. Basic industries are those exporting from the region and bringing wealth from outside, while non-basic (or service) industries support basic industries.

Economic base theory (also called export base theory) views regional economic growth as being driven by exogenous final demands, primarily exports. Industries contributing to exogenous (or external) final demand are termed *basic* industries and those serving primarily endogenous (or internal) demand are termed *non-basic* industries. The distinction between a region's basic and non-basic sectors is often illuminated by calculating a location quotient (LQ) as follows:

$$LQ = \frac{Si^{Reg}}{S_i^{US}} \qquad LQ = \frac{e_i/_e}{E_i/_E} \qquad 2.5$$

Where:

e_i = Local employment in industry i

e = Total local employment

E_i = Reference area employment in industry i

E = Total reference area employment.

The base year is assumed identical in all of the variables above.

It would be noted that economic base theory depends on changes in manufacturing and trade activities, as causing growth or decline, but its criticism lies in the fact that today, export

activities involve many services, and the comparative advantage of an area may well lie in the services it produces.

Furthermore, the concept of economic base theory is that of a trading region, but in practice, economic base concepts are often applied to areas that fit the concept. One can speak of the economic base of different states in Nigeria, but to go on and compare such areas or states using economic base techniques is not very meaningful.

2.2.1.3 The location quotient theory

The Location Quotient theory quantifies the concentration of a particular industry, cluster or occupation in a region compared with its concentration in the country. In more exact terms, Location Quotient (LQ) is a ratio that compares a region with a larger reference region according to some economic activity (Sentz, 2011). LQ can also be used by a country to determine the composition of a particular region. The sectors with LQ greater than one are considered as export (basic) sectors and part of their output is assumed to be exported outside the region. Sectors with LQ less than one are known as non-basic (indigenous) sectors and their outputs are assumed to be sold within the local economy.

Thus, the *LQ* compares the regional share of economic activity to the corresponding share found at the national level. An *LQ* of one indicates that the share of an industry in the regional economy and the national economy are the same, a value of the *LQ* greater (or smaller) than one means that regional economy has a greater (or smaller) share of that industry in its economy than nationally.

LQ greater than 1 is one of the most widely used measures of specialization in a given sector and industrial concentration of a regional economy. The summation of sectoral *LQ*s, also referred to as the coefficient of specialization, is used as a measure of regional specialization

(Hoover and Giarratani, 1985). Similarly, the reciprocal of the sum of location quotients (LQs) weighted by industry shares gives the Hachman index of economic diversity as follows:

$$Hachman\ Index = \frac{1}{\sum_{i=1}^{n}[\left(S_i^{Reg} / S_i^{US}\right) x S_i^{Reg}]} = \frac{1}{\sum_{i=1}^{n}\left[LQ_i x S_i^{Reg}\right]} \qquad 2.6$$

where S_i^{Reg} is a region's share of income in the ith industry, S_i^{US} is the share of employment in the ith industry, and N is the number of industries. The Hachman index is an indicator that measures how closely the region's industry employment distribution compares to that of the U.S. This measure is bounded between 0 and 1, where 1 means the region has exactly the same industrial structure as the U.S., and 0 means it has a totally different industrial structure.

2.2.1.4 Regional Business Cycle Theory

As in economic base theory, the regional economic instability in regional business cycle theory is also assumed to result from fluctuations in the demand for exports, especially those with high income elasticity of demand (such as luxury goods). It has been hypothesized that economic instability can be explained in terms of differences in the mix of stable and unstable sectors. To test this relationship, a region's share of stable or unstable sectors has been used as a measure of economic diversity.

Durable goods generally tend to have high short-run income elasticity of demand and hence it is assumed that a region will experience more cyclical fluctuations the higher the share of durable goods in its export mix or the higher the share of employment or income in durable goods sectors (Malizia and Ke, 1993). Thus, the region's employment or income share in the durable goods sectors has also been widely used as a measure of economic diversity, with a smaller share of durable goods in total economic activity indicating higher diversity or vice versa (Domazlicky, 1980).

Another hypothesis under the regional business cycle theory is that the more similar a region's sectoral composition is to that of the nation's, the higher will be the economic stability. This hypothesis is tested using the national averages index (*NAI*), calculated as follows:

$$\text{NAI} = \sum_{i=1}^{N} \frac{\left(S_i^{Reg} - S_i^{NIG}\right)^2}{S_i^{NIG}} \qquad 2.7$$

Where S_i^{Reg} is the *i*th sector's share of economic activity in the region, S_i^{NIG} is Nigeria's average of share of economic activity in the *i*th sector, and *N* is the number of sectors. As the region's share of economic activity approaches the Nigeria share for all sectors, the *NAI* approaches zero. As the region's shares diverge from Nigerian economy, the *NAI* becomes increasingly larger. The *NAI* can be considered a relative measure of economic diversity because it measures the amount of disparity between the Nigeria and the region's industry distributions. The NAI is accepted as a more reasonable standard with which to gauge a region's industry structure than other alternatives (Sherwood-Call, 1990)

2.2.1.5 Economic Development Theory

According to economic development theory, economic diversification is viewed as driven by simultaneous changes in production and consumption patterns. It has been argued that diversification may be expedited by forces of unbalanced growth, especially the faster growth of sectors with high-income elasticity of demand.

To evaluate growth and instability impacts, the knowledge of the types of sectors and inter-sectoral linkages is needed. According United Nations (2016), the process of diversification can be viewed in terms of changes in an input-output (I-O) matrix. Similarly, Wagner and Deller (1993) suggest a measure of economic diversity based on inter-sectoral linkages detailed in an I-O matrix.

2.2.1.6 Portfolio theory

Although portfolio theory was originally applied to financial assets, Conroy (1974, 1975) extended its usage to the analysis of economic diversification. Following the portfolio concept of investments, if every sector is considered an individual investment in a region, the bundle of

sectors represents a portfolio of investments in the region studied. Similar to financial investments, an economic portfolio of sectors has a relationship with expected returns and associated risk, where expected returns may include income, employment, products, exports, industries, etc., and risk includes economic instability (United Nations 2016).

2.2.1.7 Location theory

Location theory was propounded by Hoover and Giarratani, in the year 1985. It is concerned with the spatial distribution of economic activity, including the development of spatial clusters. The theory holds that the cost of production is lower in industrial clusters, and this is an important reason for specialization and regional competitive advantage. Economic clusters also benefit from linkages between a region's firms and sectors. However, a diverse economy with unlinked firms and sectors may also benefit from economic clusters.

2.2.1.8 Structural change theory

Structural change, as defined by (Matsuyama 2008), entails complementary changes in various aspects of the economy, such as the sector compositions of output and employment, organization of the industry, financial system, income and wealth distribution, demography, political institutions, and even the society's value system. Structural change development theories became dominant in the 1960s led by the monumental work of Arthur Lewis, Simon Kuznets and Hollis Chenery.

The theory of dual economy by Sir Arthur Lewis in 1954 described the basic model of two sector economy, presenting the classical dichotomy between traditional (agriculture in the rural areas) and modern (industry in the urban areas) sector. It stated that excess labour in agriculture presents unlimited pool, which can be transferred to the industrial sector. Marginal Product of Labour (MPL) in agriculture approaches zero and thus the agricultural output will not decrease with the fall in agricultural employment. The wage (w) differential continues to attract the labour to industrial sector until all surplus labour is absorbed, resulting in labour migration. Industry is

concentrated in the cities and thus urbanization takes place. The additional labour in the modern sector increases the total output and pushes the economy forward.

The Lewis theory was criticized by Theodor Schultz, who argued against the close-to-zero MPL. Schultz (1964) demonstrated on the example of Indian in influenza pandemic in 1918-1919 that when labour is withdrawn (nearly 8 percent of rural labour force died) from agriculture, the output of the traditional sector falls. Krugman (1994) argued that Lewis's ideas were not innovative at all, but rather by leaving out economies of scale, his concept could be modelled using available tools and thus received such enormous publicity in economic literature. Even if these short comings are not negligible, Lewis model still represents a key starting point for every structural change theory.

2.3 Measures of Economic Diversification

In measuring economic diversification, several scholars have used different methods for underdeveloped, developing and developed economies. The Input–output model, which is an economic analysis was developed and applied by the 20th-century Russian-born United States economist Wassily W. Leontief, in which the interdependence of an economy's various productive sectors is observed by viewing the product of each industry both as a commodity demanded for final consumption and as a factor in the production of itself and other goods. A positive relationship existed in the study carried out by the author between the dependent and the independent variables.

However, Wagner and Deller (1998), in their study to examine the impact of economic growth on export diversification on sub-Sahara African, argue that the intent of this type of analysis is to address the association between a given level of diversity with growth and stability, or how a given level of diversity at time t affects growth and stability in time $t + i$. The empirical application is however, quite limited mainly due to lack of consistent I-O data over time.

Entropy measures, as used by Saibu and Loto (2017) within the regional economic diversity literature, explicitly structures diversity as a level of distribution of economic activity across a range of sectors. Within this framework, therefore, an ideally diversified economy would have equal levels of activity across industries. The greater the concentration of activity in a few industries, the less diversified, or more specialized, the economy. This measure compares the existing economic activity distribution among industries in a country with an equi-proportional distribution and is calculated as the negative sum of employment shares multiplied by the natural logarithm of employment shares of each single industry, as follows:

$$\text{Entropy index} = \sum_{i=1}^{n} S_i \text{In}\left(\frac{1}{si}\right) = -\sum_{i=1}^{n} S_i ln(S_i) \qquad 2.8$$

where n is the number of sectors, S_i is the share of economic activity in the i^{th} industry and ln is the natural logarithm. Considering that equally distributed economic activity is considered more diverse, higher entropy index values indicate greater relative diversification, while lower values indicate greater relative specialization. If employment is used as an indicator of economic activity, the equal distribution of employment among all industries will result in a higher entropy index. The minimum value of zero would occur if employment were concentrated in one industry (i.e. maximum specialization). Higher Entropy index values indicate greater relative diversification, while lower values indicate relatively more specialization.

The ogive index of economic diversity measures the distribution of economic activity among sectors in a country. Following McLaughlin (1930) and Tress (1938), the Ogive index of economic diversity can be constructed as follows:

$$\text{Ogive Index} = \sum_{i=1}^{I} \left(bi - \frac{1}{I}\right)^2 \qquad 2.9$$

where I is the number of sectors in a country and b_i is the sectoral share of economic activity for the i^{th} sector. An even distribution of economic activity among sectors represents higher economic diversity. With

N sectors, an equal distribution implies that S_i is equal to $1/N$, the ideal share for each sector, and the ogive index equals zero, meaning perfect diversity. The ogive index can also be explained as a linear transformation of Hrischman-Herfindahl Index (HHI) Palan, (2010).

In 1945, Albert Hirschman observed that in measuring diversification, it is important to take into account, not only equality of market shares, but also the number of total competitors. Therefore, he argued that any index purporting to measure industrial concentration should increase as the dispersion in market shares increase and decrease as the number of firms increase. The Hirschman diversification index as a measure of diversification is calculated as:

$$\text{H1} = \sqrt{\sum_{i=1}^{N} \left[\frac{xi}{X}\right]^2} \qquad 2.10$$

Where: H1 is Hirschman diversification index, xi is the export value of specific commodity i. X is the country's total export and N is the total number of export sectors. A higher H1 indicates greater concentration of exports on a few commodities and a lower H1 indicates more diversity.

Five years later, Orris Herfindahl, based on his Ph.D dissertation, independently reached very similar conclusions. Their independent works are now collectively known as the Herfindahl-Hirschman Index. This study however intends to use the Herfindal Index of diversification as a measure of diversification. It is thus calculated as:

$$\text{Herfindal Index (HI)} = \sum_{i=1}^{N} S_i^2 \qquad 2.11$$

Where $S_i^2 = \left[\frac{xi}{\text{X}}\right]^2$

Where, HI is Herfindal Concentration Index. N = total number of categorized income sources in the economy. , xi is the export value of specific commodity i. X is the country's total export and N is the total number of export sectors. It is the most widely used measure of trade and commodity concentration (Samen, S. 2010).

Herfindahl index, is a widely-used measure of market concentration in the industrial organization literature (Scherer, 1980). It has also been used as a measure of economic diversity

(Tauer, 1992). The Herfindahl index indicates the extent to which a particular regional economy is dominated by a few firms. Herfindahl index is also known as concentration index. The Herfindahl index varies from 0 (when the economy has a large number of industries, with small and equal employment shares – i.e. high diversity) to 1 (when one sector accounts for all economy's employment – i.e. full specialization). Thus, a decline in the index signifies less concentration in the dominant industry or greater diversification. An increase indicates more concentration in the dominant sector or greater specialization. The Herfindahl concentration index was transformed to measure diversification index as shown in Equation 2.12:

$$HD1 = 1 - (HI) \qquad 2.12$$

The Herfindahl Diversification Index (HDI) has direct relationship with diversification, it, in this case, takes the value of zero in case of complete specialization or concentration while a unity index indicates perfect diversification.

Thus, according to Ogive, Entropy and Herfindahl measures, a fairly equal distribution of employment among a large number of industries mean higher level of economic diversity. One limitation of these indexes is that they do not tell whether total regional employment is increasing or decreasing. For example, increased diversification may come with a decrease in total employment, which may not be a desired outcome. Ideal would be to have increased diversity with employment gains. Following McLaughlin (1930) and Tress (1938), it has been hypothesized that the more diverse the economic activity of a region, the more stable is its economic performance.

These equi-proportional diversity measures has been questioned both theoretically and empirically. On the theoretical front, Conroy (1972, 1974 and 1975), pointed out that the selection of an equal distribution of activities across sectors as the reference point for diversity is not based on any *a priori* rationale and is indeed, quite arbitrary. Two additional theoretical concerns include the fact that these measures do not account for any form of inter-industry linkages, and the number

of industry sectors is usually fixed and not allowed to vary by region. They suggested that perhaps equality in the distribution of activities is not the key, but rather the specialization in specific industries that tend to be "inherently" stable.

As noted by Brown and Pheasant (1985), the choice of an equal distribution of activities across sectors as a reference point in calculating the entropy measure and the use of national economy as a reference point in calculating the Hirschman index are quite arbitrary. This makes both indexes sensitive to the level of industry aggregation and the choice of reference economy. Wagner and Deller (1993) assert these diversity measures are narrowly defined usually focusing on the employment distributions across industries and failing to account for inter industry linkages and the relative size of the economy.

Most conventional measures of economic diversity, such as entropy and Hachman indexes, only provide an aggregate picture of industrial structure, with little or no information on the underlying economic issues that have caused the values and changes in the indexes. The indexes also do not shed light on what industries should be targeted for recruitment, retention and expansion for promoting economic growth and stability, as opposed to promoting diversity for the sake of diversity.

Similarly, regions defined as highly specialized by the entropy approach, were, in fact, characterized by relative economic stability. Making reference to Kort (1981), Wagner and Deller found that policy results were positive and sensitive to the specific entropy measure used. Regions that are more specialized experienced greater economic growth and there was little relationship between levels of diversity and unemployment. They suggest that part of the empirical shortfall may be due to factors, other than diversity, that influence stability, which tended to be ignored in empirical estimation.

In response to these concerns with the traditional measures of diversity, regional economists currently rely on other analytical tools that focus on specific industries or industry clusters, including location quotients, shift-share analysis, and I-O models.

2.4 Empirical Literature

Economic diversification has been described as an act of investing in a variety of assets with the major benefit of reducing risks especially in times of recession, inflation, deflation etc. Economic diversification strives to smooth out unsystematic risk events in a portfolio so that the positive performance of some investments will neutralize the negative performance of others.

The pioneering work on economic diversification was undertaken by MacLaughlin (1930) in an attempt to explain the economic crises that engulfed American cities in the late 1920s and early 1930s. Using the degree of concentration of economic activities to explain economic cycles in America, he found that cities with higher level of concentration suffered the crises more than the rest. These debates on the relationship between cumulative drive and the catalytic role of industries remained a major topic for debate up to the 1970s. These raging debates equally highlighted the role of diversification in mitigating economic vicissitudes, especially movements in raw material prices in developing economies (Massel, 1970).

Kuznets (1955) and Rostow (1960) independently analysed the relevance of structural transformation and diversification in the process of economic development and growth. They presented a series of elements necessary to transform and strengthen the productive system of any traditional economy. Firstly, massive capital accumulation (investment) was considered an essential element in the diversification and transformation of developing economies. Their literature largely concurred with the discussions on sectoral priorities, which formed important discussion on diversification by the first generational writers. So, if the idea of balanced growth matter in some quarters, greater emphasis is placed on the idea that structural transformation of sectors even matter more for a cumulative role for the rest of the economy.

Equally important like massive capital accumulation and sectoral policies is the role of industry as suggested by earlier works on diversification. Indeed, earlier works on diversification had hypothesized that industrial development will transform traditional economies and modernize the productive structures of developing economies. Indeed, earlier works on economic development strategies emphasized diversification – series of choices to be implemented – and analytical tools such as input-output matrices to measure progress towards diversification.

Furthermore, these generations of first works identifed the main drivers of diversification process and concluded that investment and industrial development (sectoral policy) are the main drivers. Eventually, discussion on diversification was marginalized as a result of the economic crises at the end of the 1970 and the failure of import substitution strategies to improve the economic fortunes of developing countries. This led to the replacement of diversification debate with reflections on macroeconomic stabilization and international specialization.

Recent studies acknowledge many determinants of diversification process, especially in Africa. The first is related to the level of output in an economy. Imbs and Waciag (2003) in a study that emphasized macroeconomic aspects show that diversification has an inverted "U" shaped link with level of development. Accordingly, diversification increases with economic development, measured by per capita revenue, then decreases with a turning point. Another important determinant of diversification is investment, which is a positive factor of productive growth and rise in productivity of novel economic sectors. From this viewpoint, the historical backgrounds of developing nations reveal that an increase in investment usually leads to a rise in the diversification of volume of output. Recent literature also emphasize the role of sectoral policy in the diversification struggle where industrial development constitute the main restoration of industrial policy discuss.

Some authors also argue in favour of diversification as promoter of economic growth through the stabilization of export proceeds. They argue that depending on only one product which

result from specialization is a major source of volatility and instability and suggest different diversification strategies so as to reduce investors' risks. Most of these works show the link between diversification and stable export revenue and how this can lead to the sustenance of positive change in growth and development.

Todaro and Smith (2006) and Juan Felipe Mejía, (2011) in their studies stated that most of the less developed countries (LDCs) specialize in the production of primary products, instead of secondary and tertiary activities. Consequently, foreign exchange earnings from exports of these primary products play a very prominent role in countries, and also it represents a significant share of their gross national product. Their result shows that empirical studies confirmed that primary-products exports have been characterized by relatively low income elasticity of demand and inelastic price elasticity, being fuels, certain raw materials, and manufactured goods, some exceptions that exhibit relatively high income elasticity.

It is as a result of this fact that most economies, especially developing countries, have moved towards diversifying exports, either vertical or horizontal, and this trend gain support as a result of the "export instability argument". Consequently, export diversification has been proposed and considered as a policy framework in which aimed at stabilizing export earnings and reduce the shock resulting of world-commodity market price volatility. This effort will be most needed by developing economies where the share of a commodity in its export basket is particularly pronounced.

In their work, Prebisch and Singer as cited by Juan Felipe Mejía, (2011), noted that the prices of primary products tends to have a secular or cyclical trend. Thus, export diversification entails changing the composition of a country's export mix, which includes the number of commodities in the export basket mix as well as the distribution of individual commodity share of the total export of the country. This paradigm shift is becoming more interesting as diversifying export is popularly seen as a way towards achieving stability and growth oriented policy objectives, this

means indirectly advocating that there is a relationship between economic growth and export diversification.

Many empirical studies and evidences have also confirmed the validity of the link between export diversification and economic growth in many economies. A study of 91 countries was conducted by Al Marhubi (2000) using data between 1961-1988 to examine the possible link between export diversification and growth. The study found out that countries with greater export diversification and lower export concentration have faster rate of growth, and also that export diversification is a positive stimulus for capital accumulation.

Agosin (2007) investigates the explanatory power of export diversification in empirical model of growth. Cross-sectional data in the 1980–2003 period was used which is mainly of Asian and Latin American countries. The result of the study shows that export growth is not enough to propel economic growth, but its growth together with the impact of diversification appears to be significant. This argument is backed by the fact that the diversification and export growth has the expected sign and were significant with a strong explanatory power. He therefore concluded that Export diversification will rapidly enhance economic growth through two different means: the change in exports composition and expanded comparative advantages.

Amin Gutie´rrez de Pin˜eres and Ferrantino (1997) using the Chilean economic performance between the periods of 1962-1991 examined the possible influence of export diversification on economic growth. Their study shows that there exist a link between the domestic economic performance and diversification, and also, concluded that the export diversification has boosted Chilean growth performance which can be sustained in the long run.

On the need to assess the viability of diversification as a policy framework in developmental strategies. Ben Hammouda et al. (2006) conducted a statistical and econometric estimation, with the aim of examining the viability of diversification as a strategy framework in Africa. Using a panel data sample of 18 African countries, the result shows that investments should be the main

core to determine diversification and by extension, the income level shows a positive and has a significant link with diversification: as income per capita increases, countries tend to become more diversified. This result is in line with empirical estimates of Imbs and Wacziarg (2003).

Also, some reports done by economic institutions have confirmed the presence of positive relationship between diversification and growth and also stated that diversification is also a significant factor/determinant of growth. An investigation conducted by the ESCAP (2004). which is aimed at empirical estimation of the relationship between GDP growth rates and exports and export diversification and also to test the validity of "export-led growth hypothesis" in three Asian. Bangladesh, Nepal and Myanmar. The results affirmed the hypothesis that export growth accelerate the development process in the three stated countries. (ESCAP 2004).

On the contrast, there are studies that reject the assumption of any beneficial effects that export diversification could have on economic growth. Studies conducted by Love (1983) shows that some manufactured goods actually experience more volatility and price variations than some "traditional" exports. According to her assertion, policies/strategies leading to export diversification would not necessarily propel growth in some developing countries.

Also on same line of argument is Al-Marhubi (2000) who provided empirical evidence that contradict the assertion that export diversification leads to stable export earnings and growth. They used statistical estimations for three African countries (Malawi, Tanzania and Zimbabwe) over the period 1961–1987. They reported that there was no established relationship between the degree of export diversification and export performance and suggested that, for the particular case of these countries, moves should be geared towards augmenting and stabilizing some of their most important commodities. This, they concluded, would ensure export earnings growth and/or stability as posited by.

Hammouda, Karingi, Njuguma and Jallab (2010) in a study titled "diversification: towards a new paradigm for Africa's development" sought to model the determinants of economic

diversification in Africa. Using both physical, policy, institutional, and macroeconomic variables, the results show that most of the important variables were not statistically significant. Apart from this, the coefficients of physical variables such as investment and per capita income, and policy variables such as openness and industrial production appeared with wrong signs. In addition to these worrisome results, the study used only four countries to represent the entire African continent. Serious policy implications and generalizations could not be drawn from the study. The study also found that deepening diversification raises total factor productivity (TFP) in Africa. Accordingly, they argue that African countries can scale up the growth of their economies by raising TFP via promoting diversification-enhancing policies.

Ekpo and Umoh (2014) discussed the series of determinants of diversification and grouped them into five different categories of variables. The first is physical factors such as investment growth and human capital. The second category is linked to policy decisions, that is, impact of industrial policies in securing industrial structure and hence diversification. The third relates with the macroeconomic variables, namely, exchange rates, inflation rates and major macroeconomic maladjustments. The fourth set is related with institutional variables like conflicts, governance issues, and investment environment. Lastly, the category here is linked to market access which has implications for diversification related policies, particularly through the removal of high and escalating tariffs for developing countries' exports to developed countries.

Ekpo and Umoh (2014) attempt to fully model private sector development and economic diversification – evidence from 15 West African (WA) states – using panel data analysis with data drawn from West African countries over the period 1980 to 2012 obtained a particularly worrisome result. Even though the coefficient of the physical variable such as economic growth appears with correct sign, it was negative and statistically insignificant. Again, the institutional variable such as quality of governance was also negative and insignificant. Apart from these, data for the main explanatory variable – the private sector development proxied by private investment – was not

available for all the years except for 2011. This is a strong limitation that could affect the result of the analysis and hence policy implications drawn from the study.

The growth witnessed in international relations and routes between countries in the global commodity market in most part of the 21st century saw a paradigm shift from those predicted by classical theories which were built around absolute advantage, comparative advantage and constant returns to scale. Based on the early classical economists such as Adam Smith's concept of division of labour and specialization for economic growth and development, David Ricardo Comparative Cost Advantage and Heckscher- Ohlin Samuelson's (HOS) model of international , they postulated that countries should specialize in producing those commodities in which they have absolute or comparative advantage, even where both is obtainable. These theories served as the major policy framework for most African countries, especially those blessed with natural resources abundance. Most of them either concentrate on producing and exporting those natural resources in their primary form or mainly produce cash crops for export. Agriculture/Primary-product exports dependency/dominated has been frequently mentioned as one of the main features of developing nations.

Three stylized facts have been associated with economic diversification. First, empirical evidence shows that more diversified economies tend to be associated with higher levels of GDP. Lei and Zhang (2014) particularly observed that Product diversity, which is very important in economic systems, has been highlighted by recent studies on international trade. This is also corroborated in various publications in ESCAP (2011, 2014 AND 2015).

The second fact is that as economies diversify, they tend to export products that are slightly less ubiquitous than their existing exports. (Hausmann and Hidalgo, 2011; ESCAP 2011 and 2015.) ubiquity is here defined in terms of the number of countries that export a particular product. The third empirical regularity is that the existing product-mix of a country affects the potential new products that could emerge in the economy. Diversification therefore is path-dependent.

Hidalgo, Klinger, Barabasi and Hausemann (2007) noted that Economies grow by upgrading the type of products they produce and export. The technology, capital, institutions and skills needed to make such new products are more easily adapted from some products than others. We study the network of relatedness between products, or product space, finding that most upscale products are located in a densely connected core while lower income products occupy a less connected periphery. We show that countries tend to move to goods close to those they are currently specialized in, allowing nations located in more connected parts of the product space to upgrade their exports basket more quickly. Most countries can reach the core only if they jump over empirically infrequent distances in the product space. This may help explain why poor countries have trouble developing more competitive exports, failing to converge to the income levels of rich countries. A result of the path-dependency is that it seems difficult for countries to leap-frog, moving directly from the production of one product to another that is far away in terms of productive capacities.

These and other empirical results and observations related to economic diversification have drawn attention to the need to put forward new hypotheses to explain and understand the engineering of economic diversification. New hypotheses are needed because have not particularly focused on economic diversification. Those theories that focus on the optimum allocation of scarce goods have no place for economic diversification. The trade literature is an example of that exchange paradigm. Even the new trade theory which assumes that products come in different varieties that are imperfect substitutes, does not predict which country will specialise in which product because it assumes a continuum of symmentric products.(Clovis Freire, (2017).

Economic theories that focus on technological progress may be able to study the process of diversification. For example, the literature on growth theory has emphasised the key role of technological change. Within that strand of literature, aggregated models (eg, Solow, 1956, 1957) by design in general, do not deal with diversification. Some endogenous growth models have

considered expanding variety as the driver of growth (example Romer, 1990; Grossman and Helpman, 1991). However, they formulate a continuum of goods that have no intrinsic difference from each other, and therefore do not address the characteristic path-dependence in the diversification process.

Structuralist growth models, on the other hand, disagreggate the analysis into sectors, which provide a framework to study diversification but diversification is not a central element (see for example, the compilation of models in Gibson, 2010 and in Setterfield, 2010). In some cases, the importance of diversification is emphasised but no formal treatment for it is given in the model (eg Pasinetti's 1993), or the model concentrates on countries in autarky and there is no path-dependence in the process of diversification (eg Saviotti and Pyka, 2004a, 2004b, 2004c).

Therefore, new hypotheses are needed to explain those stylized facts regarding economic diversification. For example, the model presented in Hausemann and Hidalgo (2011), called binomial model, provides an explanation for stylised fact 2 (negative association between diversification of countries and the average ubiquity of their exports). The model is based on the assumption that products require the combination of capabilities to be produced, countries only produce the goods for which they have the capabilities to produce, and they produce all the products for which they have the required capabilities. However, the model was not designed to address the stylised fact 1 and it is also not suitable to address the stylised fact 3 because it is static in nature.

Lei and Zhang (2014) proposed a revision to Hausmann and Hidalgo (2011) model to replicate an empirical regularity related to stylised fact 1 of the relationship between total GDP and diversification. However, their model is also static and not able to replicate stylised fact 3.

Klimek, Hausmann and Thurner (2012) explore the dynamics of the diversification process and assume that products require capabilities to be produced and new products emerge through the combination of existing capabilities in a given economy. This model also accounts for the fact that

new products may replace existing products, setting a model of Shumpeterian creative-destruction. The model does not replicate stylized fact 1 and 2 but it could be used to replicate the stylized fact 3 related to path-dependency, which is ruled by the combination of existing capabilities.

Saracco, Di Clemente, Gabrielli and Pietronero (2015) also proposed a dynamic model in which new products emerge as the combination of previous products. The model assumes that countries compete to obtain the ability to produce and export new products and that the potential new products that a country can produce are part of the "adjacent possible" as per Kauffman (2008). The authors found that the model replicates the negative association between diversification and ubiquity of production (stylized fact 2). The model also assumes the path-dependency observed in the data (stylized fact 3).

2.4.1 Monetary policy and economic diversification

Extensive work has been done in an attempt to establish the impact of monetary policy on economic diversification, yet with little consensus to date. Some studies have confirmed limited or no impact of monetary policy on economic diversification. Mutuku and Koech (2014) applying the recursive VAR methodology on time series data from 1997-2010 estimated the impact of monetary and fiscal policy shocks on economic growth in Kenya and discovered that monetary policy (both money supply and short-term interest rates) has insignificant influence on real output growth and diversification. They argue that the weak nexus is attributed to weak structural, institutional and regulatory framework.

Using the vector auto regressive (VAR) model to measure the effect of monetary policy on economic diversification and growth in Kenya, Kamaan (2014) also found that monetary policy does not have a significant impact on economic diversification. The results are corroborated by Montiel, Adam and O'Conell (2012) who estimated the Monetary Transmission Mechanisms (MTMs) in Tanzania covering the period 2002–2010 using both recursive and structural VAR. they found that monetary policy had no output effects.

Using the econometric regression model analysis on a monetarists' approach, Lashkary and Kashani (2011) studied the impact of monetary variables on economic growth in Iran during the period 1959 to 2008 and found no significant relationship between the money volume and real economic variables, economic growth, employment and diversification.

It is however, worth noting that a number of empirical studies confirm that monetary policy is crucial for economic diversification. Havi and Enu (2014) examine the relative importance of monetary policy and fiscal policy on economic diversification in Ghana over the period of 1980 to 2012. The Ordinary Least Squares (OLS) estimation results revealed that money supply as a measure of monetary policy had a positive significant impact on the Ghanaian economy.

Vinayagathasan (2013) estimates the impact of monetary policy on the real economy using a seven-variable structural VAR model by utilizing monthly time series data from Sri Lanka covering the period from January 1978 to December 2011. The study found that interest rate shocks had a significant impact on diversification in accordance with the economic theory. It also finds that positive money shock provides significant but inconsistent results on output. Output declines rather than increase.

With the use of OLS method and correlation matrix, Kareem, Afolabi, Raheemand and Kashir. (2013) examined the impact of fiscal and monetary policies on the growth and diversification of the Nigerian economy, with particular reference to the period between 1998 and 2008. They found that monetary variables of narrow money and broad money are significant policy variables that positively affect real GDP growth rate and diversification in Nigeria.

Davoodi, Dixit and Pinter (2013) used three variants of Structural VARs on monthly data sets from 2000 to 2010 to determine MTMs in the East African Community. The study found that MTM tends to be generally weak when using standard statistical inferences, but somewhat stronger when using non-standard inference methods. An expansionary monetary policy (a positive shock to reserve money) increases output significantly in Burundi, Rwanda and Uganda. However, they

also found that an expansionary monetary policy (a negative shock to policy rate) increases output and encourages diversification in Burundi, Kenya and Rwanda.

The result obtained by Fasanya, Onakoya and Agboluaje (2013) are similar to that of Kareem et al (2013). They examined the impact of monetary policy on growth and economic diversification in Nigeria using the Error Correction Model (ECM) on time-series data covering 1975 to 2010. They revealed that a long-run relationship exists among the variables and that inflation rate, exchange rate and external reserve are significant monetary policy instruments that drive diversification in Nigeria in accordance with theoretical expectations. Money supply was found to be insignificant.

Milani and Treadwell (2012) used a small-scale DSGE model to disentangle unanticipated and anticipated monetary policy shocks and study their effects. The estimation used likelihood-based Bayesian methods on US data from 1960 to 2009 on the output gap, inflation, and the federal funds rate as observable variables. They showed that the unanticipated monetary shocks have a smaller and more short-lived impact on output and a large, delayed, and persistent effect due to anticipated policy shocks. The overall fraction of economic fluctuations that could be attributed to monetary policy remained limited.

Chaudhry, Oamber and Farook (2012) investigated long-run and short-run relationships of monetary policy, inflation and economic diversification in Pakistan using co-integration technique and the ECM for the period from 1972 to 2010. They found that monetary policy variable of call money was insignificant in the short run but positively significant in the long run.

Jawaid, Quadri and Ali (2011) probed the effect of monetary, fiscal and trade policy on economic diversification in Pakistan, using the annual time series data from 1981 to 2009. They employed the co-integration and ECM revealing the existence of positive significant long-run and short-run relationship between monetary policy (money supply) and economic diversification. Senbet (2011) also investigated the relative impact of fiscal versus monetary action on

diversification in the USA using the VAR approach and revealed a positive significant impact of money supply on economic growth. Their findings are congruous with Adefeso and Mobolaji (2010) that also studied the relative effectiveness of fiscal and monetary policy on economic diversification in Nigeria using the co-integration technique and error correction mechanism, based on annual data from 1970-2007.

Employing the OLS approach, Nouri and Samimi (2011) examined the relationship between money supply and economic growth for the period during 1974 to 2008 in Iran. They found a positive significant relationship between money supply and economic growth and diversification. Ogunmuyiwa and Ekone (2010) investigated the relationship between money supply and economic growth in Nigeria between 1980 and 2006. The OLS and ECM revealed a positive impact of money supply on economic growth both in short run and long run.

Moursi and El Mossallamy (2010) analysed monetary policy in Egypt and its effect on growth and diversification by using the Bayesian approach to estimate a dynamic stochastic general equilibrium (DSGE) model for a small closed economy. Monthly time series data for the sample period 2002 to 2008 was utilised. They found that the impact of monetary policy negative shock is significant on output, indicating that expansionary monetary policy is capable of stimulating economic growth and diversification without imposing too much pressure on prices.

Amarasekara (2009) utilised both recursive VAR and semi-structural VAR methodology on monthly data for the period from 1978 to 2005 to assess the effects of monetary policy on economic growth and diversification in the small open developing economy of Sri Lanka. The results from recursive VAR were consistent with results from the semi-structural VAR and they revealed a negative significant impact of interest rate on growth. Positive innovations decreased GDP growth. However, when money growth and exchange rate are used as policy indicators, the impact on GDP growth contrasts the established findings/theory.

Suleiman, Wasti, Lal and Hussain (2009) employed the Johnson co-integration test to investigate the long run relationship between money supply (M2), public expenditure, and economic diversification in Pakistan using annual data for the period 1977-2007. They found a positive relationship between money supply (M2) and economic diversification in the long-run.

Khabo and Harmse (2005) estimated the impact of monetary policy on South Africa, using OLS on the annual data series from 1960 to 1997 and found that money supply (M3) and inflation significantly related to economic diversification and growth in accordance with economic theory.

Agosin, Alvarez and Bravo-Ortega (2011) examined the determinants of export diversification around the World for a group of 79 countries covering the period 1962 to 2000. The study employed generalised methods of moments (GMM) technique. The results suggest the existence of robust evidence across specifications and indicators that trade openness induces higher specialisation. In contrast, financial development was insignificant to diversifying exports. The result also showed a positive effect of real exchange rate volatility on concentration while exchange rate overvaluation had insignificant effect on concentration. The study also showed that human capital accumulation contributes positively to diversify exports. Further, the findings of the study also revealed that improvements in the terms of trade tend to concentrate exports. This effect is lessened for countries with higher levels of human capital; suggesting that countries with higher education could take advantage of positive terms of trade shocks to increase export diversification.

2.4.2 Fiscal policy and economic diversification

The impact of fiscal policy on economic diversification has opened a lot of thoughts and debates dating back to the works of John Maynard Keynes. While some literature has found it a major and vital policy tool in expanding and diversifying the economy, other works have mixed results about the role of fiscal policy in the transformation of an economy. Adefeso and Mobalaji (2010) wrote on the fiscal-monetary policy and economic diversification in Nigeria. Their major objective was to re-estimate and re-examine the relative effectiveness of fiscal and monetary

policies on economic diversification in Nigeria using annual data from 1970-2007. The Error correction mechanism and co-integration technique were employed to analyze the data and draw policy inferences. Their result showed that the effect of monetary policy is much stronger than fiscal policy on economic diversification. They suggested that there should be more emphasis and reliance on monetary policy for the purpose of economic stabilization in Nigeria.

Olawunmi and Ayinla (2007) examined the contribution of fiscal policy in the achievement of sustainable economic diversification in Nigeria using Solow growth model estimated with the use of ordinary least square method. It was found that fiscal policy has not been effective in the area of promoting economic diversification in Nigeria. They however, stated that factors such as wasteful spending, poor policy implementation and lack of feedback mechanism for implemented policy are very pronounced in Nigeria and these are indeed capable of hampering the effectiveness of fiscal policy in Nigeria.

Ogbole, Amadi and Essi (2011) wrote on fiscal policy: its impact on economic growth and diversification in Nigeria (1970-2006). The study involves comparative analysis of the impact of fiscal policy on economic growth and diversification in Nigeria during regulation and deregulation periods. Econometric analysis of time series data from Central Bank of Nigeria was conducted. Results showed that there is difference in the effectiveness of fiscal policy in stimulating economic diversification during and after regulation period. Appropriate policy mix, prudent public spending, setting of achievable fiscal policy targets and diversification of the nation's economic base, among others, were recommended.

In the same vein but covering a shorter period Adeoye (2006) analyzed the impact of fiscal policy on economic diversification in Nigeria in 1970-2002. The finding shows that public investment negatively affects output growth implying that public expenditure has a crowding out effect on private investment. Similarly Amin (1999) analyzed the relationship between public and private investment stressing the crowding in or crowding out of private investment by public

expenditures in Cameroon. Based on secondary data from the public sector, the results of a growth model show that the relevant factors have positive effects on diversification and growth while those of the investment model show the crowding in of infrastructures and social sector. The study concluded by recommending the relocation of more resources to productive sectors and increasing and sustaining of spending on those productive sectors or those components of public expenditures that crowd in the private sector.

Chuku (2010) uses quarterly data to explore the monetary and fiscal policy interactions in Nigeria between 1970-2008. The paper examines the nature of fiscal policies in Nigeria using vector auto-regression (VAR) model. The evidence indicates that fiscal policies in Nigeria have interacted in a counteractive manner for most of the sample period (1980-1994) while at other periods no symmetric pattern of interaction between the two policy variables was observed. The author therefore concluded that there is evidence of the existence of fiscal dominance in the interactions between monetary and fiscal policies in Nigeria,

Using Solow growth model, Omitogun and Ayinla (2007) examined empirically the contribution of fiscal policy in the achievement of sustainable economic growth in Nigeria viz-a-viz diversification. They estimated with the use of ordinary least square method and found out that fiscal policy has not been effective in the area of promoting diversification in Nigeria. They suggested that Nigerian government should put a stop to the incessant unproductive foreign borrowing, wasteful spending and uncontrolled money supply and embark on specific policies aimed at achieving increased and sustainable productivity in all sectors of the economy and if it is serious with diversifying the economy.

2.4.3 Trade policy and economic diversification

The relationship between trade policy and economic diversification has received a great deal of attention both in theoretical and empirical literature during the last three decades. On the empirical front, a growing literature has examined the relationship between trade policy and

economic diversification. The evidence from this literature is mixed and conflicting across methodologies and countries.

In their study titled does Trade Liberalisation Spur Economic Diversification? Evidence from Nigeria, Olarinde and Iyoboyi (2016) investigates the relationship between trade liberalisation and economic diversification and through that, assessed whether trade liberalisation spurs economic diversification. Emphasis was on Nigeria, for the period 1970 to 2014. Using a battery of econometric techniques, including the Dynamic and Fully Modified Ordinary Least Squares, and the Autoregressive distributed lag framework for robustness, cointegration was found between economic diversification and trade liberalisation. Trade liberalization was found to exert a statistically significant positive impact on diversification. Trade liberalization and economic diversification were found to have bidirectional causality. The authors concluded that trade liberalization spurs economic diversification. Thus, there is need to liberalize trade, engineer reforms and provide infrastructure if the goal of diversifying Nigeria's economy is to be achieved.

On the empirical front, a growing literature has examined the relationship between trade policy and economic diversification. The evidence from this literature is mixed and conflicting across methodologies and countries.

Unlike previous research that investigated the relation between exports and diversification, the study by Bahmani-Oskooee and Niroomand (1999) assess the long-run relation between the degree of openness and economic diversification. By employing cointegration technique and error correction for the many countries considered, the authors found a positive long-run relation between openness and economic diversification.

Frankel and Romer (1999), examining the correlation between trade and income cannot identify the direction of causation between the two. Countries' geographic characteristics, however, have important effects on trade and diversification, and are plausibly uncorrelated with other determinants of income. The paper therefore constructs measures of the geographic

component of countries' trade, and uses those measures to obtain instrumental variables estimates of the effect of trade on income. The results provide no evidence that ordinary least-squares estimates overstate the effects of trade. Further, they suggest that trade has a quantitatively large and robust, though only moderately statistically significant, positive effect on income

In the study by Karras (2003), the author stated that while various theoretical models predict that openness to international trade accelerates productivity and promotes economic growth and diversification, the empirical evidence has been mixed or imprecise. The study investigates the issue using two panel data sets: one of 56 countries covering the period 1951-1998, and another of 105 countries over 1960-1997. The results show that the effect of trade openness on economic growth and diversification is positive, permanent, statistically significant, and economically sizable. This effect is robust across the two data sets used and a number of different estimation methods and lag lengths. Specifically, it is shown that increasing trade (exports plus imports) as a fraction of GDP by 10 percentage points, permanently increases the real growth rate of GDP per capita by 0.25 to 0.3 percent.

The work carried out by Yanikkaya (2003) demonstrates that trade liberalization does not have a simple and straightforward relationship with diversification and growth using a large number of openness measures for a cross section of countries over the last three decades. The author use two groups of trade openness measures. The regression results for numerous trade intensity ratios are mostly consistent with the existing literature. However, contrary to the conventional view on the growth effects of trade barriers, the estimation results show that trade barriers are positively and, in most specifications, significantly associated with growth, especially for developing countries and they are consistent with the findings of theoretical growth and development literature.

Wang, Liu, and Wei (2004), carried out an empirical study on impact of openness on growth in different country groups. Using a panel of 79 countries over the period 1970-98. The

study distinguishes itself from many existing studies in three aspects: Firstly, both trade and FDI are included as measures of openness. Secondly, countries are classified into high-, middle- and low-income groups to compare the roles of trade and FDI in these groups. Thirdly, the possible problems of endogeneity and multicollinearity of trade and FDI are carefully dealt with in a panel data setting. The main findings are as follows. Total trade has a general positive impact on growth in all country groups, although the impact from imports is not significant in high-income countries. FDI has a positive impact on growth in high- and middle-income countries, but not in low-income countries. With the existing absorptive capabilities, low-income countries can benefit from both exports and imports, but not from FDI. These findings suggest that trade and FDI affect growth through different channels and under different conditions

Freund and Bolaky (2008), examine the relationship between openness and per-capita income using cross-country data from 126 countries. The study found that trade leads to an increase in diversification and a higher standard of living in flexible economies, but not in rigid economies. Business regulation, especially on firm entry, is more important than financial development, higher education, or rule of law as a complementary policy to trade liberalization. Specifically, after controlling for the standard determinants of per-capita income, their results imply that a 1% increase in trade is associated with more than a one-half percent rise in per-capita income in economies that facilitate firm entry, but has no positive income effects in more rigid economies. The findings are consistent with Schumpeterian "creative destruction", which highlights the importance of new business entry in economic performance, and with previous firm-level studies showing that the beneficial effects of trade liberalization come largely from an intra-sectoral reallocation of resources.

In their study titled Openness and growth in emerging Asian economies: Evidence from GMM estimations of a dynamic panel, Das and Paul (2011) stated that, with the progress of globalization, the openness-output nexus has drawn more attention than ever before. Results in

this aspect, however, are inconclusive. Based on the average growth rate for the last two decades, the authors selected 12 top performed Asian countries: Bangladesh, China, India, Indonesia, Korea Republic, Malaysia, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, and Thailand. Working with these 12 emerging Asian economies over the 1971 to 2009 period, the study find a positive and significant impact of openness on economic growth. The system GMM technique is used to overcome the shortcomings of endogeneity as found in most previous studies. While growth in labor force has insignificant effect on output growth, growth in capital stock exhibits a positive and significant impact on output growth. These findings have policy implications for other emerging economies of the world.

Using the extreme bounds analysis approach Zarra-Nezhad, Hosseinpour, and Arman (2014) confirmed the positive impact of trade policy on economic growth and diversification. In their study, the authors investigated the relationship between foreign trade and economic diversification in the developing and developed countries. They used unbalanced panel data of 103 variables of 94 countries (74 developing countries and 20 developed countries) spanning a period from 1990 to 2010. The estimation results of more than 1.6 million regressions show that more foreign trade indices are robust determinants of economic growth and have robustly positive effect on the economic growth of each country regardless of level of development. In other words, results of the study support the views of free trade advocates. In contrast, Vamvakidis (2002) Using a long data set on openness and productivity, examine the influence of openness on total factor productivity (TFP) growth, diversification and per capita growth since 1870 for 16 industrialized countries. It was shown, using simple regressions, that diversification and growth are, by and large, independent on openness. However, once the interaction between openness and foreign knowledge is allowed for, productivity is positively affected by openness.

Applying the instrument-variable threshold regression approach to 61 countries, Kim and Lin (2009) found an income threshold level above which greater trade enhances diversification

and growth. Below the threshold level, however, trade openness has detrimental effects on growth. Afzal and Hussain (2010) find no causal relationship between exports and economic diversification as well as between imports and economic growth in Pakistan examining data from1990Q1 to 2008Q1 has been examined. They suggested that Economic diversification and exports are not cointegrated suggesting the absence of long-run relationship. Causality in Granger's sense is absent between economic diversification and exports as well as between imports and economic growth. Impulse response functions show that income, exports, and imports have negative impact on each other. Variance decomposition analysis demonstrates that imports appear to have a stronger impact on exports relative to income. The effect of exports on economic diversification and growth is modest. Their paper finds no support for export-led growth hypothesis in Pakistan. they recommended strong development of agriculture on modern scientific lines.

This finding has been challenged by Klasra (2011) in their study title foreign direct investment, trade openness and economic growth in Pakistan and Turkey: an investigation using bounds test. In the literature empirical evidences regarding export-led growth and diversification, FDI-led exports, and growth-driven exports (GDE) hypotheses have been mixed and inconclusive. The study applied the autoregressive distributed lags (ARDL) model and tests the existence of long run equilibrium relationship between the determinants of economic diversification and growth during the period 1975–2004 for Pakistan and Turkey. The results indicate that in the short run there is bi-directional causal relationship between trade openness and exports diversification for Pakistan and FDI and exports relationship for Turkey. The long run relationship results support the growth-driven exports hypothesis for Turkey and openness-growth nexus in Pakistan.

Shahbaz (2012) confirm the trade-led growth hypothesis for Pakistan. The study investigates the impact of trade openness on economic growth and diversification in the long run. The auto apply the ARDL bounds testing approach to test for a long run relationship and the

augmented production function by incorporating financial development as an additional determinant of economic growth using the framework of Mankiw et al. (1992). The results confirm cointegration among the series. In the long run, trade openness promotes economic growth. The growth-led-trade hypothesis is vindicated by VECM Granger causality test. The causality is also checked by using the innovative accounting approach (IAA)

Dufrenot, Mignon, and Tsangarides (2010) apply the quantile regression approach to explore the trade-growth nexus for 75 developing countries. Using formal robustness analyses, the authors first identify robust variables affecting economic growth (investment, government balance, terms of trade, inflation, and population growth) which they then use as controls in the quantile regression estimations Their results indicate that the effect of openness on economic diversification is higher in low-growth countries relative to high-growth countries. The low-growth economies include countries from all the continents, but a majority is in Africa (Benin, Cote d'Ivoire, Madagascar, and Zambia) and Latin America.

Kim, Lin, and Suen (2011) use instrumental variable threshold regressions to examine whether the trade-income relationship varies with the level of economic development and to reassess the trade-development link. It finds evidence that trade openness contributes to uneven development. Greater trade openness tends to have beneficial effects on real development of high-income countries. For low-income ones, however, trade openness appears to influence real income in a significant and negative way. The data also reveal that greater trade openness has a positive effect on capital accumulation, productivity growth, and financial development in high-income countries, but a negative impact in low-income ones. Furthermore, their results show that trade openness has positive effects on financial development, capital accumulation, and economic development in high-income countries. In low-income countries, however, the effect is negative and significant.

Kim (2011) shows that openness to trade has positive effects on economic diversification and real income in developed countries but negative effects in developing countries. The paper uses the instrumental variable threshold regressions approach of Caner and Hansen (2004) to investigate whether the trade's contribution to the standard of living and long-run economic growth varies according to the level of economic development. The empirical evidence shows that greater trade openness has strongly beneficial effects on growth, diversification and real income for the developed countries but significantly negative effects for the developing countries. The heterogeneity in the relationships suggests that greater international trade and integration may foster uneven development and hence contribute to more diverging economies. In addition, the link of trade to economic performance is found to work through both capital accumulation and productivity growth channels. Finally, the evidence shows that real effects of trade also depend on the level of financial development, inflation and trade openness. Furthermore, the real effect of trade also depends on the level of financial development and inflation. Openness to trade has negative effect on growth in countries with low financial development, but has insignificant impact in countries with high financial development. Trade openness is conducive to economic growth and diversification in low-inflation countries but has insignificant impact on growth in high-inflation countries.

Kim, Lin, and Suen (2012) provide evidence that trade promotes economic growth in high-income, low-inflation, and non-agricultural countries but has a negative impact in countries with the opposite attributes. The study empirically investigates the interactions among economic growth, financial development, and trade openness through simultaneous equation systems. The identification and estimation of the systems rely on the methodology of identification through heteroskedasticity. The empirical results show that each of the three variables interacts in important ways. The data also reveal coexistence of a positive effect of financial development on trade and a negative effect of trade on financial development

in poorer countries. In richer countries, financial development stimulates trade openness whereas trade has an ambiguous impact on financial development.

For a panel of 46 countries, using both linear and nonlinear econometric models from 1983 to 2007, Huang and Chang (2014) find that the growth effect of trade depends on the extent of stock market development. Trade enhances economic diversification, growth and development only when the country reaches a threshold level of stock market development. The study empirically investigates whether financial development is associated with a stronger or weaker trade openness–growth relationship. While the new growth theory holds that international trade may spur economic growth by facilitating the adoption of new technology and specialization, the evidence of the study suggests that, to take full advantage of the technology transfer induced by international trade, countries need to develop their financial systems, especially their stock markets. The empirical results indicated that in countries with higher stock market development more trade openness enhances economic growth, while in countries with less stock market development the ability of trade to facilitate growth is feeble.

Sakyi, Villaverde, and Maza (2015) provide evidence of positive bi-directional causal relationship between trade and economic growth. The study aimed at investigating the extent to which trade openness has had an impact on the levels of income and rates of growth in a sample of 115 developing countries for the period 1970–2009. Additionally, the study assess whether there is an income level threshold for a country to benefit from international trade, the sample is broken down into three mutually exclusive groups of countries: low-income, lower middle-income, and upper middle-income countries. The main novelty of the paper lies on the use, on the one hand, of a new and better trade openness measure and,

on the other hand, of non-stationary heterogeneous panel cointegration techniques to cope with the problem of cross-sectional dependence. The results show a positive bi-directional relationship between trade openness and income level in the long run, thus suggesting that trade openness is both a cause and a consequence of the level of income. The results for the short run, that is, the link between openness growth and economic growth, go in the same direction.

Were (2015) finds that trade exerts a positive and significant effect on the rate of economic diversification developed and developing countries, but its effect is not significant for least developed countries which largely include African countries. In general, the results are largely consistent with the positive impact of trade on economic growth as found in the literature. However, the empirical results based on different categories of countries show that whereas trade has positively impacted economic growth in developed and developing countries, its effect is insignificant for least developed countries (LDCs), which largely include African countries. Nonetheless, additional results suggest that trade is a key determinant of foreign direct investment (FDI) across all country groups including LDCs, as well as domestic investment in both developing countries and the LDCs. Consequently, first, the structure and pattern of trade in LDCs and African countries in particular should be transformed in order to obtain larger growth benefits as in the case of the other country groups. Second, trade, particularly via the investment channel, is an avenue through which LDCs, including African countries, can adopt new technologies and attract FDI to unlock their potential, e.g., by active integration into regional and global value chains.

In a study of Hye, Wizarat, and Lau (2016) show that trade openness is positively related to economic diversification in the long and short run.

The study uses an endogenous economic growth model to determine the long run relationship between trade openness and economic growth in China by using the data 1975-2009.It

contributes to the literature by developing trade openness index. An autoregressive distributed lag approach to cointegration and rolling regression method are employed. This study tests the link between trade openness and economic growth in the case of China by using the framework of endogenous economic growth model. This study also employs the rolling window regression method in order to examine the stability of coefficients throughout the sample span. The autoregressive distributed lag (ARDL) cointegration technique and rolling regression method are used. The empirical findings indicate that trade openness (i.e. Both individual trade indicator and composite trade openness index) are positively related to economic growth in the long run and short run. Our results indicate that trade openness as measured by individual trade indicator and composite trade openness index are positively related to economic growth in the long run and short run. However, results from the study suggest that trade openness is negatively linked to economic growth only for a number of years.

Regarding the Sub-Saharan African countries the evidence is also mixed. Deme (2002) validates the trade-led growth and diversification hypothesis for Nigeria. The export-led and the import-led growth hypotheses of the study were tested using quarterly data from 1970 to 1997. The authors apply the Johansen's co-integration techniques to examine the long run relationships among the variables and test their casual links in a vector autoregressive (VAR) framework. The results of the impulse response analysis indicate that variables show that a causal link to economic growth have optimal impact during the third quarter, their impact decays after the third quarter

Chang and ying (2008) confirm the positive growth effects of trade and air freight for a sample of Economic Commission for Africa (ECA) countries. In their study title the generative power of air freight in the trade openness-economic growth nexus in African countries, the authors shed light on the precise role of air cargo, seen as an important motor of growth. Their study provides an empirical model to examine the relationships among trade openness, air freight volume and GDP *per capita* using panel cointegration techniques for a sample of Economic Commission

for Africa (ECA) countries during the 1970-2002 period. The analysis substantiates that there are cointegrated relationships among the three variables and that they are bound together in a long-run equilibrium. Furthermore, evidence from fully modified Ordinary Least Squares panel estimations also indicates that positive trade and air freight shocks contribute to real GDP per capita. In addition, improvements in air cargo services are accompanied by an increase in trade openness in ECA countries and vice versa. Their results underscore the important role of air freight and demonstrate that it should not have been overlooked in earlier studies.

Gries, Kraft, and Meierrieks (2009) investigate the case of 16 Sub-Saharan African countries and find no significant long-run relationships among the variables for most of the sample. They also provide evidence that economic diversification causes trade openness in Ethiopia, Gabon, Kenya, Mauritius, Senegal, Sierra Leone, and Togo, whereas a feedback causal relationship exists for Cameroon, Cote d'Ivoire, Nigeria and Rwanda. On the contrary, no causal relationship between trade and diversification was found for Burundi, Ghana, Madagascar, South Africa, and Gambia.

For a sample of 34 African countries, Vlastou (2010) investigates the relationship between openness and growth for a sample of 34 African countries over the period 1960-2003. Unlike previous research on the subject, the author used novel time series techniques concentrated around panel unit root, panel cointegration and panel causality tests, which are more powerful for inference. In addition, the structural relationship is estimated by dynamic OLS. In contrast to previous analyses, the empirical findings reveal a negative and significant impact of openness on output growth and economic diversification. The author also reports a causal relationship running from openness to diversification.

In a study of 27 African least developed countries, Tekin (2012) finds no significant causality between foreign aid, trade openness and real per capita GDP. The study attempted to examine causal relations among development aid, openness to trade and economic growth in the

Least Developed Countries (LDC), for the period between 1970 and 2010. The study made use of a new Granger causality testing approach properly taking into account cross-sectional dependence and heterogeneity issues. The result show that there was no significant causality relation among foreign aid, openness to trade, diversification and economic growth in a panel of African LDCs.

Asfaw (2014) analyses the impact of trade liberalization on economic diversification in a sample of 47 Sub-Saharan African countries. The paper used a multivariate framework including capital stock, labor and trade openness as regressors. It uses the Autoregressive Distributed Lag bounds test to cointegration and the Toda and Yamamoto Granger causality tests. The results show that openness to trade stimulates both economic diversification, growth and investment. Besides, trade policies such as average weighted tariff rate and real effective exchange rate affect economic performance through trade.

In a more recent work, Brueckner and Lederman (2015) employ the instrumental variable approach to a panel of 41 Sub-Saharan African countries. They find that trade openness increases economic diversification both in the short and long run.

Polat, Shahbaz & Rehman (2015) find that trade openness impedes economic diversification and growth in South Africa. The study revisited the impact of financial development on economic growth in South Africa by incorporating trade openness in the production function. The paper covers the period of 1970-2011. The authors apply the Bayer-Hanck combined cointegration approach to examine the long run relationship between the variables. The results of the study indicate that financial development stimulates economic diversification. The paper recommends that government should redirect trade policies to reap optimal fruits of financial development for long run economic diversification and growth.

2.4.4 Relative effectiveness of monetary, fiscal and trade policy on economic diversification in Nigeria

An overview of the relative effectiveness of monetary, fiscal and trade policies on economic diversification will be examined here. This will be followed by an analysis of the individual relationships each of them exert on economic diversification in Nigeria within the context of interest rate, exchange rate, government expenditure and trade openness.

Literature abounds on the relative effectiveness of monetary, fiscal and trade policy in developed and developing countries of the world. However, there has been contrasting opinions on which of the three policies exert the greatest influence on economic activity as stated in the work carried out by Ajisafe and Folorunsho (2002) titled, "The Relative Effectiveness of Fiscal and Monetary Policy in Macroeconomic Management in Nigeria". This study considers the comparative efficacy of the two policies on expansion by applying the Structural Vector Autoregression (SVAR) model to the quarterly data for Turkey over the period 2001:Q1-2014:Q2. Interest rate a monetary policy variable and budget deficit as fiscal policy variable were used. Their result shows a positive and significant relationship between the effectiveness of fiscal and monetary policy on macroeconomic management in Nigeria. They added that fiscal policy is thought to stifle economic growth by distorting the effect of tax and inefficient government spending. Therefore, in the light of the above, the question begging for attention is, what has been the effect of fiscal policy on economic diversification in Nigeria.

Fiscal policy consists of the manipulation of government finances by raising or lowering taxes or levels of spending to promote economic stability and growth. This role of government sector in economic management is performed through the formulation and implementation of economic policy generally and fiscal policy in particular. Its target objective include price stability, growth, balance of payments equilibrium, full employment, mobilization of resources and

investment. These objectives have influenced government's economic policy design and development efforts in Nigeria since independence in 1960.

Different opinions have indeed continued to emerge on how fiscal and monetary policies can affect economic activities. The genesis of these controversies has been traced to the theoretical exposition of the different schools of thought namely: the Classical, the Keynesian, and the Neo-classical schools of thought. To the Classical school of thought, fiscal deficits incessantly financed by debt, crowds out private investment and by extension lowering the level of economic growth.

With the aid of the St. Louis equation, Adeniji and Evans (2013) applied panel data technique to real variables of some selected African countries with extended data from 1970 – 2012. The outcomes support both Keynesian and monetarist positive policy assertions. The monetary base and government expenditure are viable instruments to stabilize output. The study, as well, finds that utilizing the monetary base, as a policy tool is more potent than using government expenditure. This is in line with the predictions of Milton Friedman and Schwartz (1963) and other advocates of the St. Louis equation.

One recent study on Bangladesh by Hasan (2001) based on the modified version of St. Louis equation predicts that both monetary as well as fiscal policies are important for economic growth. This study uses various econometric techniques based on nominal data during 1974-1996. The prediction of this paper, however, alters if real variable for income is used instead.

In Nigeria, the result of government role in economic activities and the achievements in economic performance in Nigeria have been mixed. The economy experienced growth in real output in some years and declines in others. But the overall picture is low scoring for the country's development efforts. The economic crisis from the 1980s and early 1990s brought out vividly the distinction between growth and development. The objectives of monetary, fiscal and trade policies in Nigeria are wide-ranging. These include increase in Gross Domestic Product (GDP) growth rate, reduction in the rates of inflation and unemployment, improvement in the balance of

payments, accumulation of financial savings and external reserves as well as stability in Naira exchange rate.

Ajayi, and Aluko (2017) in their study evaluates the relative impact of monetary and fiscal policy on diversification in Nigeria from 1986 to 2014 using a modified St. Louis equation. Employing the Ordinary Least Squares estimation method, this study reveals that growth in money supply and export have a positive and significant effect on growth in output of the economy while growth in government expenditure has a negative and insignificant effect. This study provides evidence that monetary policy has a greater growth-stimulating effect on the economy than fiscal policy.

The study "fiscal policy and Nigerian economic growth" by Omitogun and Ayinla (2007) examined empirically the contribution of fiscal policy in the achievement of sustainable economic growth in Nigeria. Using the Solow growth model estimated with the use of Ordinary Least Square method, it was found that fiscal policy has not been effective in the area of promoting sustainable economic diversification and growth in Nigeria. Although, the finding seems to invalidate the Keynesian postulation of the need for an active policy to stimulate economic activities. However, factors such as policy inconsistencies, high level of corruption, wasteful spending, poor policy implementation and lack of feedback mechanism for implemented policies evident in Nigeria which are indeed capable of hampering the effectiveness of fiscal policy have made it impossible to come up with such a conclusion.

As observed by the authors Omitogun and Ayinla (2007), examined empirically the contribution of fiscal policy in the achievement of sustainable economic growth in Nigeria. They used Solow growth model estimated with the use of OLS method and found out that fiscal policy has not been effective in the area of promoting sustainable economic growth in Nigeria. They suggested that Nigerian government should put a stop to the incessant unproductive foreign borrowing, wasteful spending and uncontrolled money supply, and embark on specific policies

aimed at achieving increased and sustainable productivity in all sectors of the economy. Their result according to the Keynesian school of thought postulates a positive relationship between deficit financing and investment and consequently on economic growth. This school of thought sees fiscal policy as a tool of overcoming fluctuations in the economy. As put by Tchokote (2001) this school regards deficit financing as an important tool to achieve a level of aggregate demand consistent with full employment. When debt is used to finance government expenditures, consumers' income will be increased. Given that resources are not fully utilized, crowding-out of private investment by high interest rates would not occur. The position of the Keynesian school of thought on the possible effects of fiscal deficits on economic activities has been challenged by the Neo-classical school of thought on the premise that the former school ignores the significance of how fiscal deficits are financed on the effect of this policy variable on macroeconomic performance. The Neoclassical school postulates that the manner in which deficits are financed is capable of influencing the level of consumption and investment and by extension affect economic growth.

Fiscal policy is considered an important variable, which may determine changes in national income in developing countries like Nigeria. In order to stimulate economic growth by means of fiscal policy, the country has employed several instruments. According to Ebimobowei (2010) whose study evaluated the effects of fiscal policy on the economic growth in Nigeria for the period 1991 to 2005. The study examined the contributions of tax revenue, government debts, government recurrent expenditure, government capital expenditure, government recurrent budget, and government capital budget to the gross domestic product. Using data both from the Central Bank of Nigeria Annual Reports and Accounts and Statistical Bulletin, the authors utilized the multiple regressions for the analysis of data. The result indicated that a significant relationship exists between the explanatory variables taken together and gross domestic product, and no significant

relationship between the specific explanatory variables contributing to gross domestic product except government recurrent and capital expenditures.

On the average 99% of the variations in GDP is explained by variables in the model. The paper concluded that the achievement of economic growth through fiscal policy in Nigeria is a mirage because of inconsistencies in government policies, wasteful spending, corruption and poor policy implementation. include, the financing of direct investments which the private sector would not provide inadequate quantities, the efficient supply of certain public services which are necessary to ensure the basic conditions for viable economic activity and long term investments, and the financing of public activities. This is to minimize the distortions to come up with the decisions to spend and invest proper in the private sector.

As noted by Ajisafe and Folorunso (2002), monetary rather than fiscal and trade policy exerts a great impact on economic activity in Nigeria and that the emphasis on fiscal action of the government has led to greater distortion in the economy. Fiscal policy in Nigeria has been heavily influenced by oil driven volatility influencing both revenue and expenditure. Since 1970, both revenue and expenditure have been very volatile while increasing over time.

In periods with high oil prices, such as in 1979- 82, 1991-92, and in 2000-02, revenue and expenditure have increased sharply. The scaling back of expenditure as oil prices subsequently decline, though at times with a lag, has typically followed this. The implications of such boom-bust fiscal policies include the transmission of oil volatility to the rest of the economy as well as disruptions to the stable provision of government services. This has added to the failure over the years of public spending. Neither facilitating the diversification and growth of the non-oil sector nor reducing Poverty (Baunsgaard, 2003). Given the above scenario, especially the dominance of fiscal policies, it is not surprising that enormous confusion has reigned over the conduct of monetary policies in the country all in the attempt to engender economic growth.

According to Olaniyan, (1997) under ideal and perfectly competitive situations, the economic policies for growth or stabilization should be employed in such a way as to equate the marginal productivity of government investment to that of private investment. This has to be so because the equilibrium situation in national income determination implies that resources employed in government investment activities should be as productive as in any alternative employment. The implication of government investment should be equal to the gross rate of interest at which the private investment is undertaken.

In the study carried out by Kwakwa (2003), fiscal policy in Nigeria has been extremely pro-cyclical with expenditures spiralling out of control on the upswing of the oil price cycle. This has contributed to the observed deficit bias in the conduct of fiscal policy. The study use the ARDL method of estimation and found fiscal policy variables such as tax, export tax to be positively related to economic growth. One option as suggested by the author in controlling the deficit bias is to put in place a fiscal policy rule.

A fiscal policy rule makes sense in Nigeria, given the complete absence of a tradition of fiscal discipline. This is so because a fiscal rule commits government to a certain level of conduct in fiscal and budgetary management, it will help begin to build government credibility in fiscal management and over time, promote strong fiscal discipline across all tiers of government. A rule, based on oil prices, will also help address the issue of the vulnerability of all tiers of government to oil price swings and reduce the pro-cyclicality in the budget. This will allow savings to build up financial assets in periods with high oil prices that can be used to finance the desired expenditure programmes when oil prices are low

As noted by Ogbole (2010), in the study on fiscal policy and macroeconomic performance in Nigeria for the period of 1970 to 2007 investigated the causal relationship between govemment expenditure (GE) representing our independent variable and Gross Domestic Product (GDP), Inflation Rate (/FR), Private Investment (Pl) and Capital Inflow (CIF) are proxies for our

dependent variables. The author applied the augmented dickey fuller test (ADF), stationarity test, Johnanen's co-integration test, ordinary least squares (OLS) multiple regression analysis and granger causality test. The time serves data were found to be stationary in the short run and a number of co-integrating equations were found to establish long run relationship among the variables under study. In addition, the lack of fiscal discipline is the bane of our economy.

In spite of realized revenues being above budgetary estimates, extra budgetary expenditure has been rising so fast and resulting in ever bigger deficit. To say the least, this is a sobering revelation and we must all ensure that the deficit is not only minimized but eventually eliminated. The practice of financing the fiscal deficit through the banking system, especially the Central Bank's "Ways and Means facility", results in rapid growth of domestic liquidity, which in turn, exerts immense pressures on prices, interest rates and exchange rate of the Naira. As an illustration, between 1988 and 1991, an average of 77 percent of the overall deficit was financed by the CBN while in 1992 the deficit had been largely financed by the CBN. As a direct consequence, the monetary and credit aggregates have been exceeding prescribed targets in recent years.

Anyalechi, Uchechukwu and Boloupremo (2017) in thier study examined fiscal policy regulations as a tool for enhancing economic growth and poverty reduction in Nigeria. They use data covering the period 1981-2014 obtained from Central bank of Nigeria and World Development Indicators. The study employed econometric methods of Ordinary Least Square (OLS), Augmented Dickey-Fuller (ADF) Unit Root test, Johansen Co-integration test and Vector auto-regression (VAR) to analyze data empirically. Results from data analyzed suggest that tax revenue, external borrowings, government domestic debt and government capital expenditure have not contributed significantly to economic growth and poverty reduction in Nigeria. However, government recurrent expenditure was found to be statistically significant and impacted on the gross domestic product per capita during the study period

Ezeoha and Uche, (2010) in their study titled "rethinking monetary and fiscal policies in Nigeria" using the ARDL model found a negative relationship between monetary and fiscal policy, and economic growth. Affirming to the above stated, they added that there is no doubt that the failure of government fiscal policies, rather than the failure of monetary policies, is the main reason why most of the past developmental programmes undertaken by the Government has come to naught. Despite the lofty place of fiscal policy in the management of the economy, the Nigerian economy is yet to come on the path of sound growth and development.

Phillips (1997) critically analyses the Nigerian fiscal policy between 1960 and 1997 with a view to suggesting workable ways for the effective implementation of Vision 2010. He observes that budget deficits have been an abiding feature in Nigeria for decades. He notes that except for the period 1971 to 1974, and 1979, there has been an overall deficit in the federal Government budgets each year since 1960 to date. The chronic budget deficits and their financing largely by borrowing, he asserts, have resulted in excessive money supply, worsened inflationary pressures, and complicated macroeconomic instability, resulting in negative impact on external balance, investment, employment and growth. He, however, contends that fiscal policy will be an effective tool for moving Nigeria towards the desired state in 2020 only if it is substantially cured of the chronic budget deficit syndrome it has suffered for decades.

According to Baunsgard (2003), experience in Nigeria illustrates the difficulties of implementing fiscal policy in an environment with highly volatile revenue flows. The paper discusses the role an appropriately designed fiscal rule, nested within the long-run sustainable use of oil revenue, could have in providing a more stable framework for fiscal policy formulation. It also highlights practical implementation and transitional issues. The paper uses a simple analytical framework to devise fiscal rules that merge concerns about long-term sustainability with the shorter-term goal of reducing budget volatility.

Over the years, there has been a strong deficit bias in fiscal policy, driven largely by oil prices 1991-1992 and 2000-2002, revenue and expenditure have increased sharply. This as typically seen followed the scaling back of expenditures as oil prices substantially decline, though at times with a lag. The implications of such boom-burst fiscal policies include transmission of oil-price volatility to the stable provision of government services. This has added to the failure over the years of public spending, facilitating the diversification nor growth of the economy.

The Nigerian government, like many other developing countries, considers trade as the main engine of its development strategies, because of the implicit belief that trade can create jobs, expand markets, raise incomes, facilitate competition and disseminate knowledge. The main thrust of trade policy is therefore the enhancement of competitiveness of domestic industries, with a view to, inter alia, stimulating local value-added and promoting a diversified export base.

Trade policy also seeks (through gradual liberalization of the trade regime) to create an environment that is conducive to increased capital inflows, and transfers and adoption of appropriate technologies. The government pursues the liberalization of its trade regime in a very measured manner, which would ensure that the resultant domestic costs of adjustment do not outweigh the benefits. The reforms which accompany this policy direction are also aimed at reforming attitudes and practices towards modern ways of doing business. . (WTO 2005: 15).

While this is the main trade policy framework to guide economic development, the trade expansion, employment generation and poverty alleviation dimensions are now subsumed in a new overarching economic development policy blueprint adopted in 2003, the National Economic Empowerment and Development Strategy (NEEDS).

According to Murray Gibbs (2007), trade policy can constitute a key tool for the achievement of the Millenuim Development Goals (MDGs). Using trade policy as an instrument of industrial diversification and the creation of value added remains key. Moreover, exports of goods and services can provide increased incomes for poor people, government revenue,

opportunities for employment, including high paid jobs abroad, particularly for women and young job-seekers. Exports can thus contribute to the achievement of MDGs, by lifting people out of poverty and empowering women, while supporting a system in which developing countries can extract greater benefit from the international trading system.

In order to give a detailed analysis of the effects of macroeconomic policy on diversification, this study further disaggregated the different strands of monetary, fiscal and trade policies and discussed their relationship and effects on diversification.

2.5 Summary of Empirical literature and research gap

Despite the fact that the results of earlier works were conflicting, findings on the positive and significant impact of macroeconomic policy on economic diversification can be seen in studies like Akingunnola, Adekunle and Ojodu (2012), Ayodele and Babatunde (2017), Obamuyi and Olorunfemi (2011), Goya (2014) and Shabana and Zafar (2014). In the same vein, studies with contrary results include Torlagh (2013), Eze and Ogiji (2013), Obamuyi (2009), Auboin and Ruta (2011), Baldwin and Taglioni (2004), Lin (2007), Berthou and Fontagne (2008), Ekpo and Umoh (2014) and Chukwu (2010).

Several studies have been conducted in developed countries and African countries including Nigeria, on the impact of specific macroeconomic policy variables (such as interest rate or exchange rate or government expenditure) on economic diversification. This researcher has observed that little or no study in Nigeria has been carried out putting together the combined or joint effects of these macroeconomic policies (monetary, fiscal and trade) as they affects diversification.

Also, the Standard International Trade Classification (SITC) used in categorizing export sectors in this study has, to the best of the researcher's knowledge, not been used in previous works. The attraction in the SITC method is that it breaks down sectors into sub-units. This helped in the disaggregation of sectors to the lowest levels.

Most of the studies mentioned above used ogive (ODIV), national average (NDIV), the percent durable (PDIV) and the log share (LDIV) as a measure of diversification and either employed the fully modified ordinary least square, pooled data regression or co-integration and error correction model. This study however, used the Herfindal index as a measure of diversification as used by Bebczuk and Berretoni (2006), in order to adequately capture and focus on macroeconomic policy and economic diversification. The choice of Herfindal index is based on the fact that it exhaustively analyses all the sectors in an economy in order to determine whether the economy provides a healthy competition or is veering close to being dominated by one or very few sectors of the economy. This choice is further justified by the fact that it is very compatible with sectoral diversification analysis using data structured after the SITC stratification.

This study also extended the scope to 2018 as against 2014 which is the terminal data for most previous studies. The summary of literature reviewed is found in table 2.1

TABLE 2.1

Summary of literature review

s/n	Authors	Title of work/study	Scope	Methodology	Objectives	Empirical result
1.	Akingunnola, Adekunle, Ojodu (2012)	Impact of interest rate on capital market growth (a case of Nigeria)	1970-2002	Pooled data regression method and multiple regression analysis	Analyzed the impact of interest rate on capital market growth in Nigeria,	Interest rate has a positive adverse effect on capital market growth.
2	Ayodele and Babatunde (2017)	Impact of Interest Rate on Portfolio Management in Nigeria	1985-2014	Co-integration and error correction model	Examine the impact of interest rate on both long term and short term portfolio investments in Nigeria	In the long run interest rate specifically prime lending rate significantly influenced portfolio management both on long and short term basis and that total savings exert significant positive impact on the portfolio investment both on long and short term basis.
3	Obamuyi and Olorunfemi (2011)	Financial reforms, interest rate behavior and economic growth in Nigeria	1970-2006	Error correction analysis	Investigate the relationship between interest rate, diversification and economic growth in Nigeria	Lending rate exerts a significant negative impact on diversification while deposit rate shows a significant positive effect on

						growth. The result also shows a significant negative impact of inflation on growth.
4	Goya (2014)	The Multiple Impacts of the Exchange Rate on Export Diversification.	1970-2012	An econometric methodology that allows for heterogeneity of coefficients across countries and simple growth modeling framework	Distinguish between the variety and concentration dimensions of diversification	The result of the study shows that the variety dimension of diversification is positively related to a weaker exchange rate and negatively related to exchange rate volatility.
5	Shabana and Zafar (2014)	Explaining trends and factors affecting export diversification in ASEAN and SAARC regions: an empirical analysis	1986-2012	Fully modified ordinary least squares co-integration model for panel data-set of selected ASEAN and SAARC member countries	Assessing the role played by the country-specific factors in the determination of exports diversification process	The study found that foreign direc investment, domestic investment competitiveness, financial secto development and institutiona strength are significantly an positively related to expor diversification in both regions. Thes findings have important polic

						implications for ASEAN an SAARC regions.
6	Torlagh (2013)	Effects of high lending rates on the manufacturing sector of the Nigerian economy	1970-2010	Cross country regressions	Examine the impact of high bank lending rates on manufacturing output in Nigeria	The study finds that inadequate banl funding impairs the capacity of th sector to produce as banks are ofte reluctant to provide long-tern finance required for manufacturin operations. The finding shows tha high lending rate to investmen negatively affects output o diversification
7	Eze and Ogiji (2013)	Impact of fiscal policy on the manufacturing sector output in Nigeria: An error correction analysis	1975-2012	Econometric analysis of time series	Assessing the impact and significance of fiscal policy on the manufacturing sector output in Nigeria	Interest rate and government defici spending hamper the actualization o diversifying the country. Fiscal policy has not been effective in the area of promoting sustainable economic growth in Nigeria
8	Obamuyi (2009)	An investigation of the relationship between interest rates and	1970-2006	Error correction mechanism and co-integration technique	Examine the implication of financial reforms and interest rate at attaining diversification policy in Nigeria	Lending rate exerts a significant negative impact on diversification while deposit rate shows a significant positive effect on

		economic growth in Nigeria, 1970-2006				growth. The result also shows a significant negative impact of inflation on growth.
9	Auboin and Ruta (2011)	The relationship between exchange rates and international trade: A review of economic literature	1980-2010	Ordinary least square method	Examine the relationship between the level of the exchange rate and diversification	Empirical results confirm that short run effects can exist, but their size and persistence over time are no consistent across different studies.
10	Baldwin and Taglioni (2004)	Positive criteria: Micro foundations	1970-2000	Vector error correction model	To analyse the difference in the effectiveness of fiscal policy in stimulating economic diversification.	There is difference in the effectiveness of fiscal policy in stimulating economic diversification during and after regulation period
11	Lin (2007)	Exchange rate uncertainty and the extensive margin of exports.	1970-2005	Panel data analysis with data drawn from West African countries	To formulate a model of exchange rate uncertainty and diversification	The result of the study shows a negative relationship which proves that exchange rate affects diversification
12	Berthou and Fontagne (2008)	The euro and the intensive and extensive margins of trade:	1998-2003		Examine the study of the effects of a Currency Union on trade	Estimation results indicate tha nominal exchange rate volatility ha a negative effect, which translate

		Evidence from French level data.				into the intensive and extensive margins. The study also provide some evidence that the euro had an additional positive effect on the extensive margin, this effect is no related to the reduced nomina exchange rate volatility.
13	Ekpo and Umoh (2014)	An Overview of The Nigerian Economic Growth and Development,	1980-2012	panel data sample of 18 African countries	Attempt to fully model private sector development and economic diversification	Though the coefficient of the physical variable such as economic growth appears with correct sign, it was negative and statistically insignificant
14	Chukwu (2010)	Monetary and Fiscal Policy Interactions in Nigeria: An Application of a state-space Model with Markov Switching	1970-2008	vector auto-regression (VAR) model		The evidence indicates that monetary and fiscal policies in Nigeria have interacted in a counteractive manne for most of the sample period. While at other periods no symmetric pattern of interaction between the two policy variables was observed

15	Adefeso and Mobalaji (2010)	The Fiscal-Monetary Policy and Economic Growth in Nigeria: Further Empirical Evidence	1970-2007	Error correction mechanism and co-integration technique	To re-estimate and re-examine the relative effectiveness of fiscal and monetary policies on economic diversification in Nigeria	Their result showed that the effect o monetary policy is much stronge than fiscal policy on economi diversification.
16	Olawunmi and Ayinka (2007)	Policy and Nigerian Economic Growth	1970-2005	slow growth model estimated with the use of ordinary least square method	To examine the contribution of fiscal policy in the achievement of diversification towards sustainable economic growth in Nigeria	The result of the study found tha fiscal policy has not been effective i the area of promoting diversificatio and sustainable economic growth i Nigeria.

Source: Author's compilation (2019)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research design

The study employed both descriptive and analytical methods in its research design. The descriptive method used descriptive tools such as simple tables in analysing trends in macroeconomic policy dynamics and diversification in Nigeria. The analytical method used various econometric methods in estimating the relevant equations under the framework of multiple regression modelling. This design was used to establish the fundamental relationship between the dependent variable and the independent variables.

The study tested for the unit root and co-integration relationship among the variables. The unit root was tested using the Augmented Dickey-Fuller (ADF). In estimating the long run equilibrium and short run dynamics among the variables, the Error Correction Model (ECM) was employed.

3.2 Model specification

To examine the relationship between macroeconomic policy and economic diversification in Nigeria between the period of 1983 and 2018, the study utilized the Herfindal index of diversification (DIVX) as well as the neoclassical growth theory. The choice of Herfindal index is based on the fact that it exhaustively analyses all the sectors in an economy in order to determine whether the economy provides a healthy competition or is veering close to being dominated by one or very few sectors of the economy.

The Herfindal index of diversification is:

$$\text{Herfindal Index} = \sum_{i=1}^{N} S_i^2 \qquad (3.1)$$

$$i = 1....N$$

Where, N is total number of categorized export commodities in the economy (excluding oil export) and S_i is the export share of commodity i in the total export basket (excluding oil export) of the economy in a given period. S_i can therefore be represented as

$$S_i = \left[\frac{xi}{\mathrm{X}}\right] \tag{3.2}$$

Where:

x_i = the share of commodity X in total export (excluding oil export) in a particular period

X = the total export in the same period.

A higher Herfindal Index value indicates a lower level of diversification (and a high level of concentration) in the economy. In other words, economic activities are concentrated on a few sectors of the economy. A lower value of Herfindal Index indicates a greater level of diversification in the economy. The Herfindal Index is expressed in percentage. The World Bank (2019) gave a modified version of the Herfinal index. It states that, "Diversification index is computed by measuring absolute deviation of the country share from world structure. Diversification index that ranges from 0 to 1 reveals the extent of the differences between the structure of trade of the country or country group and the world average. The index value closer to 1 indicates a bigger difference from the world average. It is constructed as the inverse of a Herfindahl index."

Thus, the Herfindal index of diversification is modified as:

$$\mathrm{DIVX} = 1 - \sum_{i=1}^{N} S_i^2 \tag{3.3}$$

Where DIVX is Diversification index.

It must be emphasised that the whole essence of diversifying the economy is to stimulate economic growth and make the economy less vulnerable and more resilient to external shocks arising from dependence on one source of export revenue. Therefore, the theoretical foundation

upon which this study is based is the neoclassical growth theory which emphasizes the role of labour and capital in the growth process. Since the neoclassical model is essentially of the same structural form with the Cobb-Douglas production function, our baseline neoclassical model is of the form:

$$Y_t = A_t K_t^{\alpha} L_t^{\beta} \quad (3.4)$$

Where;

Y = Output

A = Total factor productivity or efficiency parameter

K = Stock of capital

L = Labour force

α = output elasticity of capital

β = output elasticity of labour

We endogenizing the Solo residual or total factor productivity in line with the postulations of the endogenous growth theory by augmenting the entire framework to incorporate other variables relevant to the present study. Specifically A is expanded to include a hybrid of other monetary (M), fiscal (F), and trade (T) variables influencing economic growth and diversification in Nigeria. Thus,

$$A = f(M, F, T) \quad (3.5)$$

Where M, F, T represent monetary policy variables, fiscal policy variables and trade policy variables respectively. The Mundell-Fleming framework is further strengthened by the emergence of endogenous growth theories and models (e.g., Romer, 1986; Barro, 1991) which suggest that other endogenous factors like macroeconomic policies (inflation, interest rate, GDP, government spending and tax, trade policies etc.), political stability, market distortions, human capital and education, etc., can also affect economic diversification and growth. Renelt (1991) for example

has attempted to integrate exogenous forces with endogenous factors in explaining economic diversification across countries. In this study, the augmented Solow neoclassical model is used.

Incorporating equation (3.5) into (3.4), transforms (3.4) into:

$$Y_t = M, F, T\ K_t^{\alpha} L_t^{\beta} \quad (3.6)$$

Equation 3.6 is the augmented version of the neoclassical model. However, since the study is not on economy-wide output, but on the effect of monetary, fiscal and trade policies on diversification in Nigeria, we modify equation 3.6 to include the diversification index as our dependent variable represented as:

$$DIVX = f(M, F, T\ K_t^{\alpha} L_t^{\beta}) \quad (3.7)$$

Macroeconomic Policy Equation

Equation 3.7 above is the functional form of the macroeconomic policy – diversification model. The model is expanded in equation (3.8) to accommodate key variables of monetary, fiscal and trade policies.

It should be noted that

$$M = f(M2, REER) \quad (3.7.1)$$

$$F = f(TAX, GEXP, DMD) \quad (3.7.2)$$

$$T = f(OPEN, FDI) \quad (3.7.3)$$

Substituting the above sub-equations into equation 3.7 to account for the general macroeconomic policies we have:

$$DIVX = f(M2, REER, TAX, GEXP, DMD, OPEN, FDI, GFCF, LF) \quad (3.8)$$

Equation 3.8 says that Nigeria's diversification can be explained by the key monetary, fiscal and trade policy variables on the right hand side of the equation. The econometric specification of equation (3.8) is of the form:

$$DIVX = \lambda_0 + \lambda_1 M2 + \lambda_2 REER + \lambda_3 TAX + \lambda_4 GEXP + \lambda_5 DMD + \lambda_6 FDI + \lambda_7 OPEN + \lambda_8 GFCF + \lambda_9 LF + \varepsilon t \quad (3.9)$$

Presenting equation 3.9 in its log linear form:

$$DIVX = \lambda_0 + \lambda_1 ln\text{M2} + \lambda_2\text{REER} + \lambda_3 ln\text{TAX} + \lambda_4 ln\text{GEXP} + \lambda_5 ln\text{DMD} + \lambda_6 ln\text{FDI} + \lambda_7 ln\text{OPEN} + \lambda_8 ln\text{GFCF} + \lambda_9 ln\text{LF} + \varepsilon t \quad (3.10)$$

$\lambda_2, \lambda_3, \lambda_5 < 0; \ \lambda_1, \lambda_4, \lambda_6, \lambda_7, \lambda_8, \lambda_9 > 0$

εt = error term

To account for the specific objectives of the study, the monetary fiscal and trade policy variables are isolated from equation (3.8) into their respective models:

Monetary policy equation

Recall that:

$$DIVX = f(M, F, T\ K_t^{\alpha} L_t^{\beta})$$

Where M represents monetary policy.

Putting fiscal and trade policies on hold, the specific form of the functional relationship between monetary policy and diversification becomes:

$$DIVX = f(M2, REER, K_t^{\alpha} L_t^{\beta}) \quad (3.11)$$

Equation 3.11 can be further expressed econometrically as:

$$DIVX = \beta_0 + \beta_1 M2 + \beta_2 REER + \beta_3 GFCF + \beta_4 LF + \varepsilon t \quad (3.12)$$

Presenting equation 3.12 in its log linear form:

$$DIVX = \beta_0 + \beta_1 ln\text{M2} + \beta_2\text{REER} + \beta_3 ln\text{GFCF} + \beta_4 ln\text{LF} + \varepsilon t \quad (3.13)$$

$\beta_1, \beta_3, \beta_4 > 0; \beta_2 < 0$

Fiscal policy equation

Recall that:

$$DIVX = f(M, F, T\ K_t^{\alpha} L_t^{\beta})$$

Where F represents fiscal policy.

Now holding monetary policy and trade policy constant, the specific form of the functional relationship between fiscal policy and diversification can be expressed as:

$$DIVX = f(TAX, GEXP, DMD, K_t^{\alpha} L_t^{\beta}) \quad (3.14)$$

Equation 3.14 can be further expressed econometrically as:

$$DIVX = \pi_0 + \pi_1 TAX + \pi_2 GEXP + +\pi_3 DMD + \pi_4 GFCF + \pi_5 LF + \varepsilon t \quad (3.15)$$

Presenting equation 3.15 in its log linear form:

$$DIVX = \pi_0 + \pi_1 TAX + \pi_2 ln GEXP + +\pi_3 ln DMD + \pi_4 ln GFCF + \pi_5 ln LF + \varepsilon t \quad (3.16)$$

$\pi_3 < 0; \pi_1, \pi_2, \pi_4, \pi_5 > 0.$

Trade policy equation

Recall that:

$$DIVX = f(M, F, T, K_t^{\alpha} L_t^{\beta})$$

Where T represents trade policy.

Holding monetary policy (M) and fiscal policy (F) constant, the specific form of the functional relationship between trade policy and diversification can be expressed as:

$$DIVX = f(OPEN, FDI, K_t^{\alpha} L_t^{\beta}) \quad (3.16)$$

Equation 3.16 can be further expressed econometrically as:

$$DIVX = \eta_0 + \eta_1 OPEN + \eta_2 FDI + \eta_4 GFCF + \eta_5 LF + \varepsilon t \quad (3.17)$$

Presenting equation 3.14 in its log linear form:

$$DIVX = \eta_0 + \eta_1 OPEN + \eta_2 ln FDI + \eta_4 ln GFCF + \eta_5 ln LF + \varepsilon t$$

$\eta_1, \eta_2, \eta_4, \eta_5 > 0$

Where:

DIVX = Diversification index in percentage (%)

M2 = Money supply measured in billions of naira

REER = Real Effective Exchange Rate measured in percentage (%)

TAX = tax revenue measured in billions of naira

GEXP = government expenditure measured in billions of naira

OPEN = Trade Openness measured as the ratio of trade to GDP

DMD = Domestic Debt measured in billion Naira

FDI = Foreign Direct Investment measured in billion Naira

GFCF = Gross Fixed Capital Formation measured in billion naira

LF = Labour Force

$\lambda, \beta, \pi, \eta$ are the parameters to be estimated.

εt = error correction term

3.3 *A priori* Theoretical Expectations and Description of Variables

The regressand, DIVX, is the diversification index and the regressors are Money supply, Real Effective Exchange Rate, credit to private sector, tax, government expenditure, domestic debt, foreign direct investment, gross capital formation, labour force and trade openness.

Diversification index (DIVX): It signals whether the structure of exports by product of a given country or group of countries differ from the structure of imports by product of the world. It is computed by measuring absolute deviation of the country share from world structure. It ranges from 0 to 1 and reveals the extent of the differences between the structure of trade of the country or country group and the world average. The index value closer to 1 indicates a bigger difference from the world average. It is constructed as the inverse of a Herfindahl index. This study will make use of Herfindal diversification index.

Money Supply (M2): This refers to the total stock of money circulating in an economy at a particular time. An increase in the money supply leads to higher prices. Thus it is the total value

of monetary asset available in an economy at a specific time. It is expected that its coefficient which will be positive.

Real Effective Exchange Rate (REER): REER is a measure of the value of a currency against a weighted average of several foreign currencies divided by a price deflator or index of costs. An increase (appreciation) in REER implies a slower growth of real GDP because of a fall in net exports (reduced injection) and a rise in the demand for imports (increased leakage). Thus a higher exchange rate can have a negative multiplier effect on the economy. An increase thus, indicates a loss in trade competitiveness. Therefore, its coefficient is expected to be negative.

Tax Revenue (TAX): Taxes are involuntary fees levied on individuals or corporations and enforced by a government entity, whether local, regional or national in order to finance government activities. In economics, taxes fall on whomever pays the burden of the tax, whether this is the entity being taxed, like a business, or the end consumers of the goods or services. The coefficient of Tax, apriori, expected to be positive.

Government expenditure (GEXP): This refers to all government consumption, investment and transfer payments consisting of income transfers (pensions, social benefits) and capital transfers. It is a macroeconomic fiscal policy. Apriori, GEXP is expected to have positive impact on diversification.

Domestic debt (DMD): Domestic debt is defined as domestic currency debt owed to domestic citizens. It is also defined as commercial bank's gross claims on the central government plus central bank liquidity paper. Theoretically, the coefficient of DMD is expected to be negative.

Trade Openness (OPEN): Trade openness refers to the outward or inward orientation of a given country's economy. Outward orientation refers to economies that take significant advantage of the opportunities to trade with other countries. Inward orientation refers to economies that overlook taking, or are unable to take advantage of the opportunities to trade with other countries. Openness

index is a common measure of trade openness. The index adds imports and exports in goods and services and divides this sum by GDP. The larger the ratio, the more the country is exposed to international trade. Theoretically, the coefficient of OPEN is expected to be positive.

Labour Force (LF): Labour force consists of all the people who are able and willing to work within a particular geographical definition. In other words, it refers to the total number of people who are currently employed or seeking for employment. For most countries, the age bracket is between 16 and 65 years. Apriori, it is expected to have a positive correlation with diversification.

Foreign direct investment (FDI): This is an investment made by a firm or individual in one country into business interests located in another country. They are however distinguished from portfolio investments in which an investor merely purchases equities of foreign-based companies. The *apriori* expectation of the coefficient of foreign direct investment (FDI) is expected to correlate positively with economic diversification as higher ratios imply higher volume of credit to the domestic economy and hence enhanced capacity to produce and diversify.

Gross Fixed Capital Formation (GFCF): Gross fixed capital formation is essentially net investment. It is a component of the Expenditure method of calculating GDP. To be more precise Gross fixed capital formation measures the net increase in fixed capital. Gross fixed capital formation includes spending on land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; the construction of roads, railways, private residential dwellings, and commercial and industrial buildings. Disposal of fixed assets is taken away from the total. It is expected that, apriori, GCF will be positively correlated with DIVX.

3.4 Sources of data

The relevant data for this study were obtained from secondary sources, mainly Central Bank of Nigeria (CBN) Statistical bulletin (Various years), National Bureau of Statistics (NBS) various years, The Federal Ministry of Finance (FMF), National Planning Commission (NPC),

publications of the International Monetary Fund (IMF) and the World Bank (IBRD), and other relevant journals and publications. These are the recognized and reliable sources of published data that are valid for information.

3.5 Model Estimation technique

The estimation technique/method that was used in the above model is both descriptive and analytical. The analytical technique is the multiple regression analysis of the ordinary least squares methodology. However, the precise empirical model for estimation is the ARDL model.

As is standard in the literature, the OLS method was chosen because of its properties of being best linear unbiased estimator (BLUE). Another reason for the choice of this technique is that first, it is generally argued that most economic series are non-stationary. By non-stationary, we mean that the variables do not have a mean which is constant over time or has a strong trend over time and as such direct application of least squares technique could give spurious results. This causes the results of most OLS regressions to be statistically invalid and difficult to interpret in a theoretical context. It also requires less data points, which make it easy to use.

3.5.1 Test for stationary residuals and determining the order of co-integration

In order to avoid the misleading characteristics of time series macroeconomic variables which, in most cases, are non-stationary in regression analysis, we examined the time series properties of all the variables under investigation using the Augmented Dickey-Fuller (ADF) and Phillip-Perron unit root tests. This is thus the first step that was carried out to determine the order of integration of the variables. The most popular approach that is commonly used in testing for residuals and determining the order of co-integration is the Augmented Dickey-Fuller, or ADF, tests as well as the Phillips-Peron (PP) test as stated above.

Though these are not the only tests for stationarity, but they are used in this study because they represent widely used approach as earlier mentioned. The justification for this procedure is

due to volatility or non-stationarity of macroeconomic time series data which produce spurious or nonsense regression results.

Basically, this step helped to establish whether a particular time series is stationary. This was done to establish the order of integration of the variables specified in the model by performing a unit root test. It was used to determine the stationarity of variables. Primarily, a time series is said to be stationary if its mean, variance and covariance are all invariant with respect to time. Such a series is denoted by I(0), that is, integrated of order zero. A time series requiring first-order differencing to achieve stationarity is said to be I(1), that is integrated of order one. The calculated values of these statistics tests were compared with critical values.

Accepting H0 would mean that the data are non-stationary, and thus using them for estimation would leads to misleading results. Therefore, we have to examine if their first difference is stationary or not. However, if H0 is rejected for the series, it implies that there is a possibility that the variables in levels might have a cointegrated or equilibrium (long-run) relationship (Adebiyi, 2005).

Due to the likelihood of structural changes that might occur in the period under investigation, the ADF test might be biased in identifying integrated data. This shortcoming, as Akpan (2011) asserted, is overcome by the PP test developed by Perron (1997). According to Herzer, and Nowak-Lehmann (2006) as cited in Akpan (2011), this test will evaluate the time series properties in the presence of structural changes at unknown points in time and thus, endogenizes this structural break.

3.5.2 Differencing Stationarity

A series of stationarity tests were carried out on all the variables. This is because of the non-stationary of most annual time series data. However, in differencing stationarity, the coefficient of Y_t was utilized to determine the level of non-stationarity. If the total estimation of

the absolute value of the test statistics is higher than the absolute value of the critical T value at either 1, 5 or 10 percent, then the model will be said to be stationary. At this point, we will then reject the null hypothesis. However, it should be noted that if the null hypothesis is not rejected then Y_t will be said to be non-stationary. This reason is as a result of order one, two or a higher order which will be shown by differencing Y_t until the level of stationarity is achieved.

The Phillips and Peron test was carried out on the variables that were based on the use of non-parametric statistical methods. The reason for this is to take care of serial correlation in the error terms without the lagged difference terms.

We also made use of the Pesaran, Hashem and Smith (2001) Autoregressive Distributed Lag (ARDL) bounds method. Here, we re-write the equation as an ARDL model which is as shown below in equation 3.21.

The post cointegration stability test such as the cumulative sum (CUSUM) and cumulative sum of squares (CUSUMSQ) recursive residuals tests is applied.

$$\Delta(Y)t = a0 + \sum_{i=1} \alpha_i \Delta(a_1)_{t-1} + \sum_{i=1} \beta_i \Delta(a_2)_{t-1} + \sum_{i=1} \gamma_i \Delta(a_3)_{t-1} + \sum_{i=1} \theta_i \Delta(a_4)_{t-1} + \sum_{i=1} \acute{\omega}_i \Delta(a_5)_{t-1} + \sum_{i=1} \lambda_i \Delta(a_6)_{t-1} + \ldots\ldots + \sum_{i=1} \varphi_i \Delta(a_n)_{t-1} + \varepsilon \quad (3.21)$$

Where a_1, a_2, a_3, a_4, a_5, a_6,.....a_n represents the variables, Δ represents the first differences while ε represents the error term.

$$(a_0)_{t-1} + \beta_1(a_1)_{t-1} + \beta_2(a_2)_{t-1} + \beta_3(a_3)_{t-1} + \beta_4(a_4)_{t-1} + \beta_5(a_5)_{t-1} + \beta_6(a_6)_{t-1} + \ldots\ldots + \beta_n(an)_{t-1} + \varepsilon_t \quad (3.22)$$

Specifying the ARDL model, the explicit form of the equations are given as:

$$\Delta DIVX_t = \delta_0 + \delta_1 DIVX_{t-1} + \delta_2 lnMS_{t-1} + \delta_3 REER_{t-1} + \delta_4 lnTAX_{t-1} + \delta_5 lnGEXP_{t-1} + \delta_6 OPEN_{t-1} + \delta_7 lnFDI_{t-1} + \delta_8 lnGCF_{t-1} + ln\delta_9 LF_{t-1} + \sum_{i=0}^{k} \lambda_1 \Delta DIVX_{t-1} + \sum_{i=0}^{k} \lambda_2 \Delta lnMS_{t-1} + \sum_{i=0}^{k} \lambda_3 \Delta REER_{t-1} + \sum_{i=0}^{k} \lambda_4 \Delta lnTAX_{t-1} + \sum_{i=0}^{k} \lambda_5 \Delta lnGEXP_{t-1} + \sum_{i=0}^{k} \lambda_6 \Delta OPEN_{t-1} + \sum_{i=0}^{k} \lambda_7 \Delta lnFDI_{t-1} + \sum_{i=0}^{k} \lambda_8 \Delta lnGCF_{t-1} + \sum_{i=0}^{k} \lambda_9 \Delta lnLF_{t-1} + U_t \quad (3.23)$$

$$\Delta DIVX_t = \beta_o + \beta_1 DIVX_{t-1} + \beta_2 lnMS_{t-1} + \beta_3 REER_{t-1} + \beta_4 lnCPS_{t-1} + \beta_5 lnGCF_{t-1} + \beta_6 lnLF_{t-1} + \sum_{i=0}^{k} \lambda_1 \Delta DIVX_{t-1} + \sum_{i=0}^{k} \lambda_2 \Delta lnMS_{t-1} + \sum_{i=0}^{k} \lambda_3 \Delta REER_{t-1} + \sum_{i=0}^{k} \lambda_4 \Delta lnCPS_{t-1} + \sum_{i=0}^{k} \lambda_5 \Delta lnGCF_{t-1} + \sum_{i=0}^{k} \lambda_6 \Delta LF_{t-1} + U_t \quad (3.24)$$

$$\Delta DIVX_t = \mathcal{C}_0 + \mathcal{C}_1 lnDIVX_{t-1} + \mathcal{C}_2 lnTAX_{t-1} + \mathcal{C}_3 lnGEXP_{t-1} + \mathcal{C}_4 lnDMD_{t-1} + \mathcal{C}_5 lnGCF_{t-1} + \mathcal{C}_6 lnLF_{t-1} + \sum_{i=0}^{k} \lambda_1 \Delta DIVX_{t-1} + \sum_{i=0}^{k} \lambda_2 \Delta lnTAX_{t-1} + \sum_{i=0}^{k} \lambda_3 \Delta GEXP_{t-1} + \sum_{i=0}^{k} \lambda_4 \Delta lnDMD_{t-1} + \sum_{i=0}^{k} \lambda_5 \Delta lnGCF_{t-1} + \sum_{i=0}^{k} \lambda_6 \Delta LF_{t-1} + U_t \quad (3.25)$$

$$\Delta DIVX_t = \delta o + \delta_1 lnDIVX_{t-1} + \delta_2 lnOPEN_{t-1} + \delta_3 lnFDI_{t-1} + \delta_4 lnGCF_{t-1} + \delta_5 lnLF_{t-1} + \sum_{i=0}^{k} \lambda_1 \Delta DIVX_{t-1} + \sum_{i=0}^{k} \lambda_2 \Delta lnOPEN_{t-1} + \sum_{i=0}^{k} \lambda_3 \Delta FDI_{t-1} + \sum_{i=0}^{k} \lambda_4 \Delta lnGCF_{t-1} + \sum_{i=0}^{k} \lambda_5 \Delta LF_{t-1} + U_t \quad (3.26)$$

However, the cointegration test was carried out to determine if there is a long run relationship between the variables in the model specified. The cointegration test that was used in this study is the ARDL as stated above and is also known as the bound test. Two critical values known as the upper critical bound and the lower critical bound are computed at a given level of significance. The bounds test is used to determine the presence of cointegration regardless of whether the regressors are I(0) or I(1) against the alternative hypothesis based on the F-statistics is as follows:

$:\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = ...\beta_n = 0$

$:\beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq \beta_6 \neq .....\beta_n \neq 0$

This test used the F-statistic (Bounds test). If the computed F-statistics is greater than the upper bound critical value, the null hypothesis of no cointegration is rejected. Similarly, if the lower critical bound value is greater than the F-statistics, then the null hypothesis will be accepted. If this is discovered then our variables will be said to be co-integrated in the long run.

3.5.3 The Error-correction Models (ECM)

This stage involved obtaining the co-integration in the model using the OLS. An error correction model (ECM) is in the category of multiple time series models that is mostly used for data where the core variables are cointegrated or has a long-run stochastic trend. It shows the rate or speed at which the dependent variable is being affected and brought back to equilibrium especially when there are changes in other variables. Moreso, data consistency is achieved given that the model variables would be of the same order of integration. Information are however greatly enhanced in this method since both the short-run changes in variables and long-run relationships in levels would be included in the ECM.

Komolafe (1996), as quoted in Adebayo (2005), stated that although two different time series may not themselves be stationary, some linear combination may indeed be stationary with the generalization to more than two series. The guiding rule is that variables of different orders cannot be cointegrated, otherwise, their linear combinations will be stationary. The theory of cointegration arises out of the need to integrate short-run dynamics with long-run equilibrium. The traditional approach to the modelling of short run disequilibrium is the partial adjustment model. However, an extension of the cointegration technique is the error correction mechanism, ECM (Granger and Newbold 1977, Engle and Granger 1987).

Here the first difference of the variables in the cointegrating equation will be regressed. This implies the regression of the error term from the cointegration equation. The concept of cointegration has been especially developed to overcome the problems of spurious correlation often associated with non-stationary time series data. It creates a link between integrated processes and the concept of steady state equilibrium.

ECMs are useful for estimating both short-term and long-term effects of one time series on another. ECM determines the speed at which a dependent variable returns to equilibrium after a

change in other variables. It also shows the speed of adjustment from short run to long run equilibrium.

The short run results which has the error correction term relates to the fact that last-periods deviation from a long-run equilibrium, the error, influences its short-run dynamics and the level at which the instability in the short run period is removed. Thus, the speed of adjustment will be determined by the co-efficient of the parameter, from the short run to the long run. Basically, the purpose of the ECM is to shift to the short run model.

The ECM reveals that changes in Y not only depend on the lagged changes in X, but also its own lagged changes. It is appealing because of its ability to induce flexibility by combining the short-run and long-run dynamics in a unified system. Its coefficient should be negative and statistically significant to support the existence of cointegration. The ECM usually begins with a static model of the form:

$$Y_t = \beta X_t + \varepsilon_t \qquad (3.27)$$

From the above an equilibrium long-run relationship will be estimated directly. In the short-run, however there is a high probability of disequilibrium occurring, hence the need to specify a simple dynamic model of short-run adjustment:

$$Y_t = a_0 + \beta_0 X_t + \beta_1 X_{t-1} + a_1 Y_{t-1} + \varepsilon_t \qquad (3.28)$$

After rearranging, the parameters will give us the error correction formulation

$$\Delta Y_t = \alpha_0 \Delta\beta X_t - (1 - a_1)\,[Y_{t-1} - b_0 - b_1 X_{t-1}] + \varepsilon_t \qquad (3.29)$$

Where b_0 and b_1 are coefficient that had been estimated earlier. The ECM incorporates both short-run and long-run effects. When equilibrium holds, $[\, Y_{t-1} - b_0 - b_1 X_{t-1} \,] = 0$.

Thus $(1 - a_1)$ provides an estimate of the speed of adjustment of the variable Y_t. For instance, if $[Y_{t-1} - b_0 - b_1X_{t-1}] < 0$,that is Y_{t-1} has moved below its equilibrium level, since $-(1 - a_1)$ is negative, it will boost Yt, thereby forcing it back to its long-run path.

3.5.4 Granger Causality test

The Granger causality test was carried out so as to examine if there is any causal relationship between the variables. The analysis for granger causality is used to test the hypothesis of prediction of future values of certain economic variables while introducing or incorporating past/previous lags of other economic variables in the model. Also, a time series known as X_t will be said to granger cause another time series variable Y_t if only the former contains important information that can affect or predict further values of the later. Therefore, in this framework, if the F-test of the lagged values included in the model is statistically significantly different from zero, it therefore means that there is causality, which is said to be either uni-directional or bi-directional. In addition, the possibility of causality according to Enders and Granger (1998) is more likely when there is cointegration among variables. The test was also carried out to investigate if there is any direction of causality between macroeconomic policies and economic diversification in Nigeria.

3.6 Limitations of the study

Due to the paucity of data, it became difficult and almost impossible to obtain data for most of the specified variables to cover the period under review. This posed limitations to the choice of data as well as the scope of work which had to be limited to 35 years.

CHAPTER FOUR

4.0 MACROECONOMIC POLICIES AND ECONOMIC DIVERSIFICATION IN NIGERIA

4.1 Overview of Various Efforts Aimed at Diversifying the Nigerian Economy

Since the mid-2000s, Nigeria has maintained a growth rate of more than 6 per cent signalling hope of economic recovery and the possibility of sustainable growth and structural change. Historically, the performance of the Nigerian economy has been unimpressive in terms of growth and other macroeconomic indicators. In a recent review of Nigeria's macroeconomic policies by Rahji and Adeoti (2010), the trend in the macroeconomic performance of the economy is divided into five distinct periods characterized by significant shifts in economic policy management. These periods are: (1) Immediate post-independence period starting from independence in 1960 to the advent of the first military regime in 1966; (2) Post-civil war oil economy starting from the end of the 30-month civil war in 1970 to the handover of government by the military to civilians in 1979; (3) Transition to an austere economy that emerged in the second republic and the subsequent adoption of the World Bank/IMF-led economic SAP in 1986; (4) The era of SAP and guided economic liberalization starting from 1986 to the advent of the new democratic dispensation in1999; and (5) The regime of further economic liberalization starting from 1999 and resulting in emergent macroeconomic stability in recent years.

At independence in 1960 and for much of that decade, agriculture was the mainstay of the Nigerian economy providing food and employment for the populace, raw materials for the nascent industrial sector, and generating the bulk of government revenue and foreign exchange earnings. Following the discovery of oil and its exploration and exportation in commercial quantities, the fortunes of agriculture gradually diminished while crude petroleum replaced it as the dominant source of revenue and export earnings. This is despite a drive for industrial development in Nigeria dating back to the early 1960s with the first National Development

Plan for the period 1962-68. Under the First Plan the country embraced Import-Substituting Industrialization (ISI) with the objective of mobilizing national economic resources and deploying them on a cost/benefit basis among contending projects as a systematic attempt at industrial development. The ISI was characterized by a high degree of technological dependence on foreign know-how to the extent that the domestic factor endowments of the country were grossly neglected. The focus on an ISI strategy as the cornerstone of industrial development efforts during the period of the First Plan therefore seemed to have neglected many of the factors required for managing the emergent industrial sector and in particular, the management of technologies transferred or acquired.

The Second National Development Plan (1970-74), attempted to address the limitations of the ISI strategy, and placed emphasis on 'the upgrading of local production of intermediate and capital goods for sale to other industries'. This was the first systematic effort to create an industrial structure linked to agriculture, transport, mining, and quarrying. As the economy benefited heavily from enormous foreign exchange inflows, the government embraced ambitious and costly industrial projects in sectors such as iron and steel, cement, salt, sugar, fertilizer, pulp and paper, among others. The shallow nature of Nigeria's technological capacity, however, prevented the economy from moving beyond the elementary phases of these projects, and indeed, virtually all of these projects have today either been shut down or operate at very low capacity. The period of the 1970-74 Plan also witnessed a dramatic shift in policy from private to public sector-led industrialization. Industrial planning took place in the public sector which also executed most of the industrial projects as the government invested directly in productive activities. Project preparation, feasibility studies, engineering drawings and designs including construction, erection, and commissioning, relied greatly on foreign technical skills and services. The 1972 Act on Indigenization of Enterprises Operating in Nigeria resulted in an indigenization policy which was subsequently amended, repealed, and replaced by the Nigerian Enterprises Promotion Act of 1977.

The Third National Development Plan (1975-80) was launched at the height of the oil boom. Despite a lack of executive capacity in the country, the plan envisaged an investment outlay of 42 billion NGN (up from 3.2 billion NGN of the Second Plan). Policy emphasis remained on public sector investment in industry, especially heavy industries. Third National Development Plan failed to advance the course of industrial development in Nigeria in a significantly positive way.

The Fourth National Development Plan (1981-85) coincided with the inception of a global economic recession which sparked declining foreign exchange earnings, balance of payment disequilibrium and unemployment in the Nigerian economy. The advent of the second republic in 1979 was accompanied by rising oil revenues, which further accentuated the tendency of macroeconomic policy to support an over-valued naira and consequently imports. The build-up of surpluses in the external and internal accounts instigated the expansion of state expenditures and the liberalization of imports. However, by the end of 1981 oil revenue had sharply declined and the result was a policy of very high deficit financing which drained the external reserve and resulted in an unprecedented increase in the foreign debt profile. The loss of reserves and accelerating inflation prompted emergency stabilization measures in 1982. These measures included advance deposits for imports; increases in import duties; review of import licenses; a 40 per cent across the board cut in public expenditures without any priority; and an upward review of excise duties, interest rates, and prices of petroleum products. These policies brought a lot of stress on the productive sector of the economy. In the agricultural sector, produce exports became highly constrained by the over-valued naira and production declined. The production of labour- intensive export crops (e.g. cocoa, palm oil, palm kernels, rubber, groundnuts, and cotton) which had earlier been limited by high labour costs and high opportunity costs of non-farm employment was constrained by increasingly unfavourable export prices.

The decline in output was probably more apparent in the manufacturing sector with dramatic losses of production capacity resulting in gross losses in output and employment. This demonstrated the high vulnerability of the high cost, import-dependent industrialization that had been encouraged by the pattern of incentives prevailing in the 1970s. The decline in the aggregate index of manufacturing was observed to have begun in 1982. Plant closures were apparent in consumer goods sectors especially in the textiles sector where protection proved inadequate to address the challenges of smuggling. It was reported that the aggregate index of manufacturing fell by 26 per cent in 1983, with declines ranging from 13 per cent in paints to 54 per cent in the electronics assembly sectors (Forrest 1993). The economic outlook presented by Fashoyin,Matanmi and Tawose (1994) showed that average capacity utilization in industry declined from 73.3 per cent in 1981 to 38.2 per cent in 1986. The stabilization measures achieved some reduction in the volume of imports, however, the inability to effectively control the allocation of import licenses and foreign exchange were perceived to have largely aggravated the pace of industrial decline between 1979 and 1986.

The introduction of the World Bank/IMF packaged economic Structural Adjustment Programme (SAP) in July 1986 was widely acknowledged as a profound economic reform aimed at addressing the inherent weaknesses of the economy. SAP was a medium-term strategic policy programme with the twin objective of revamping an economy under persistent recession and setting it on the path of sustainable growth. It consists of the stabilization policies of the IMF and the structural adjustment policies of the World Bank; Ihonvbere (1993). The salient features of SAP included: Major currency devaluations; Liberalization of the import regime; Reduced price controls; Increased competition and flexibility in agricultural marketing; and Privatization of government-owned assets and concentrated efforts to raise efficiency in remaining government institutions among others.

The implementation of SAP had controversial economic and social consequences. With the introduction of the Second-tier Foreign Exchange Market (SFEM) in September 1986, the devaluation of the naira was put on course, and demand management became an important feature of the monetary and fiscal policy. The impact of SAP on the productive sectors of the economy was mixed. Industry had to devise strategies to cope with the various aspects of the new regime as well as a slump in effective demand. Tariff reduction cut duties on finished goods more than on intermediate inputs and raw materials thereby reducing effective rates of protection and increasing competition with foreign producers. However, industries that were less dependent on imports and had a steady demand (e.g. textiles) were less adversely affected. Besides, there were indications of new investments in industries that relied on local raw materials like palm kernel, cotton seed, and maize milling; rubber and vegetable oil processing; tanning of hides and skins; sorghum malting; and soy milk processing. There was also evidence of a deliberate shift to local raw material sourcing by industry. It was reported by Ogun (1995) that an increase in the cost of imports and pressure by government had resulted in the rise of local raw material sourcing by industry from 38 per cent in 1985 to 50 per cent in 1988.

As the pains of SAP deepened and with no evidence of a reversal of the economic recession, the government adopted a policy of guided deregulation in the mid-1990s. Under this programme, attempts were made to curtail the extent of liberalization under SAP. A dual exchange rate emerged (one official, which was used for government essential transactions; the other, which served as the inter -market exchange rate); and privatization and commercialization of public sector companies which was intensely debated under SAP proceeded with a measured pace.

By 2003, the macroeconomic policy regime had shown a clear pattern of an accentuation of the economic liberalization and ardent commitment to private enterprise-led development. The economic development policy was packaged as National Economic Empowerment and Development Strategy (NEEDS). The key features of the macroeconomic policy encapsulated by

NEEDS are: Sustain a rapid, broad-based GDP growth rate outside the oil sector that is consistent with poverty reduction, employment generation, and a sustainable environment; Diversify the production structure away from oil and mineral resources; Make the productive sector internationally competitive; Systematically reduce the role of the government in the direct production of goods, and strengthen its facilitating and regulatory functions; Adopt policies that are consistent with raising domestic savings and increasing private investments; Promote exports and diversify exports away from oil; Gradually liberalize imports, harmonize tariffs with the Economic Community of West African States' (ECOWAS) common external tariffs, and use import levies and import prohibitions to protect local industries; Maintain a competitive but stable exchange rate regime by establishing a market-determined nominal exchange rate regime, and avoid overvaluation of the real exchange rate; Maintain low real lending interest rates.

From 2003 to date these policies have been pursued and implemented. The outcome is an emerging economy with a relatively stable exchange rate, a fairly predictable macroeconomic environment, and good prospects for growth. A review of the performance of NEEDS showed that the GDP growth rate which was 3.3 per cent in 1999 was an average of 6.0 per cent in the period 2004-07 with oil and non-oil sectors having GDP growth rates of 0 per cent and 8.3 per cent, respectively; the external reserve rose from US$4 billion in 1999 to US$43 billion in 2007 with existing external debt amounting to US$34 billion; and an average inflation rate of 9.5 per cent. Furthermore, noticeable achievements were recorded in the consolidation of banks and the liberalization of the telecommunication industry. The Nigerian telecommunication industry became one of the fasted growing in the world. The privatization of publicly owned enterprises also progressed appreciably with about 110 privatization transactions effected between 2000 and 2006 (NPC 2007). However, in spite of this seemingly good performance, there is a strong concern that the micro impacts of the macroeconomic reform measures are very limited.

It is also noteworthy that the efforts under NEEDS have been complemented by the Seven Point Agenda (SPA) introduced by the government in 2007. The SPA builds on the progress made by NEEDS. The emphasis of economic reform under the SPA focuses on the implementation of policies that are aimed at achieving Nigeria Vision 20: 2020 through accelerated economic growth with visible improvements in the well-being of the ordinary people (NPC 2009).

The NV20:2020 which was launched in 2009, has been elaborately debated and organized into a coherent national development vision and guide for development plans and policies. As presented in NPC (2009: 22-23), the macroeconomic strategies and policy thrusts of the Nigeria Vision 20: 2020 are enunciated as follows: Achieving double-digit growth rates and maintaining strong economic fundamentals, including inflation, exchange rate, interest rates, and other monetary aggregates; Achieving significant progress in economic diversification, such as to achieve an economic structure that is robust and consistent with the goals of the NV20:2020; Stimulating the manufacturing sector and strengthening its linkage to the agricultural and oil and gas sectors, in order to realize its growth potential and serve effectively as a strong driver of growth; Raising the relative competitiveness of the real sector, to increase the demand for Nigeria's non-oil products and services; Deepening the financial sector and sustaining its stability to enable it finance the real sector; Encouraging massive investments in infrastructure and human capital and creating an enabling environment for domestic and private investment; and Adopting pragmatic fiscal management and implementing appropriate monetary, trade, and debt management policies to support domestic economic activities.

The economic recession experienced by Nigeria between 2013 and 2017 constrained government's effort at generating revenue and implementing national development plans. In order to remedy the situation the Economic Recovery and Growth Plan (ERGP) was introduced in 2017 as a policy option. The ERGP is designed to diversify the economy, restore economic growth, create jobs, empower the youths, develop the human capital and infrastructure, improved business

environment and bring about technological growth. But the success of the ERGP is hinged on the ability of the government to muster the political will and implement the ERGP in the midst of corruption, predatory and alienated political culture and the symbolic approach to implementing development policies and programmes in Nigeria.

Economic diversification is an inevitable policy framework for long-term growth. Most countries with high degree of diversification fare better off or are least affected by global economic downturns, as diversifying their structure across products have reduced the impact on the sector productivity of their economies. The Muhammadu Buhari administration has repeatedly indicated interest in diversifying the economy since its inception. The economy has recovered from recession and. Nigeria's real gross domestic product growth stood at 1.81 percent in the third quarter of 2018 compared to 1.17 percent in the third quarter of 2017. Foreign exchange reserves grew from $28.57 billion in May 2015 to $42.92 billion by mid-December 2018. This contributed to exchange rate stability and provided a buffer against unanticipated external shocks. Inflation has also declined from a peak of 18.72 percent in January 2017 to 11.28 percent in November 2018. Nigeria has moved from a deficit to a surplus of 681.27 billion Nigerian naira in our trade balance as at the third quarter of 2018, representing a significant improvement from the deficit of 290.1 billion naira in 2016. This reflects an increase in non-oil exports and a reduction in the importation of food and items that can be produced locally (Osinbajo, 2019).

Generally, it would be observed that the problem of the Nigerian economy is that macroeconomic policies have been inconsistent over the long-run as periods of internal and external imbalances were more pronounced than periods of strong underlying macroeconomic fundamentals. The result is that most of the policies pursued resulted in poor macroeconomic outcomes, as actual performances have generally fallen below specified targets. Movements of key macroeconomic indicators, such as GDP growth rate, overall fiscal balance, capacity utilization and the balance of payments position were generally unstable. It is particularly noteworthy that the generally excessive growth of monetary aggregates was often reflected in high

and unstable domestic price level, thus lending support to Milton Friedman's proposition that, inflation is always and everywhere, a monetary phenomenon

4.2 Foreign Trade

The Nigerian government like many other developing countries, considers trade as the main engine of its development strategies, because of the implicit belief that trade can create jobs, expand markets, raise incomes, facilitate competition and disseminate knowledge. (WTO 2005: 15). The main thrust of trade policy is therefore the enhancement of competitiveness of domestic industries, with a view to, inter alia, stimulating local value-added and promoting a diversified economy with entrenched export base. The thrust also include the integration of the economy into the global market system. This entails progressive liberalization to enhance competitiveness of domestic industries, effective participation in trade negotiations to harness the benefits of the multilateral trading milieu, promotion of transfer, acquisition and adoption of appropriate technologies, and support for regional integration and co-operation.

It is perhaps safe to argue that economic diversification has always been recognized as a key strategy for economic growth since the early 1960s, even when trade policy was geared towards import substitution industrialization. However, it became more visible as a trade policy tool under the Structural Adjustment Programme (SAP) introduced in 1986 and has since then assumed a growing dimension in trade policy. Nigeria's current export drive is underpinned by a strong desire to make the country a major player in the global market. It also draws on a deep-seated desire to move away from dependence on oil as a dominant source of revenue generation. Accordingly, there has been a determined effort at diversifying the export base from the traditional oil exports towards giving impetus to the non-oil export sector and bolstering value-added.

The current policy framework – Economic Recovery and Growth Plan 2017-2020 – of the Buhari Government is part and parcel of the overall trade policy, whose objective is to encourage the production and distribution of goods and services, in order to satisfy both domestic and

international markets, essentially for the purpose of accelerating economic growth. The aspiration here is to integrate the Nigerian economy into the global market through the establishment of a liberal market, promote and diversify exports in both traditional and non-traditional markets, and stimulate the transfer, acquisition and adoption of appropriate and sustainable technologies to nurture competitive export-oriented industries.

In most countries, foreign trade represents a significant share of gross domestic product. While international trade has existed throughout history, its economic, social and political importance has been on the rise in different countries. In Nigeria, the petroleum sector has had a consistent dominance of the external trade beginning from the early 1970s. Due to the erratic nature of this sector, governments and policy makers advanced from paying lip-service attention to export diversification and import substitution to making stronger commitments and efforts at diversifying the external sector.

4.2.1 Oil and Non-Oil Exports

An appraisal of foreign trade between 1983 and 2017 shows that the oil sector still dominate exports while imports are dominated by the non-oil sector, a trend which is not consistent with Nigeria's diversification drive (See fig 1). A more detailed look however shows a positive development trend in the oil and non-oil sectors a s it affects imports and exports. Fig. 1 and Appendix 1 show that though the non-oil sector dominated imports all through the period of this study, its dominance fell progressively from 98.07 percent in 1983 to 68.63 percent in 2012 ending at 75.79 percent in 2017. This indicates that the diversification and import substitution policies have had a slow but positive impact on the non-oil import sector of the Nigerian economy.

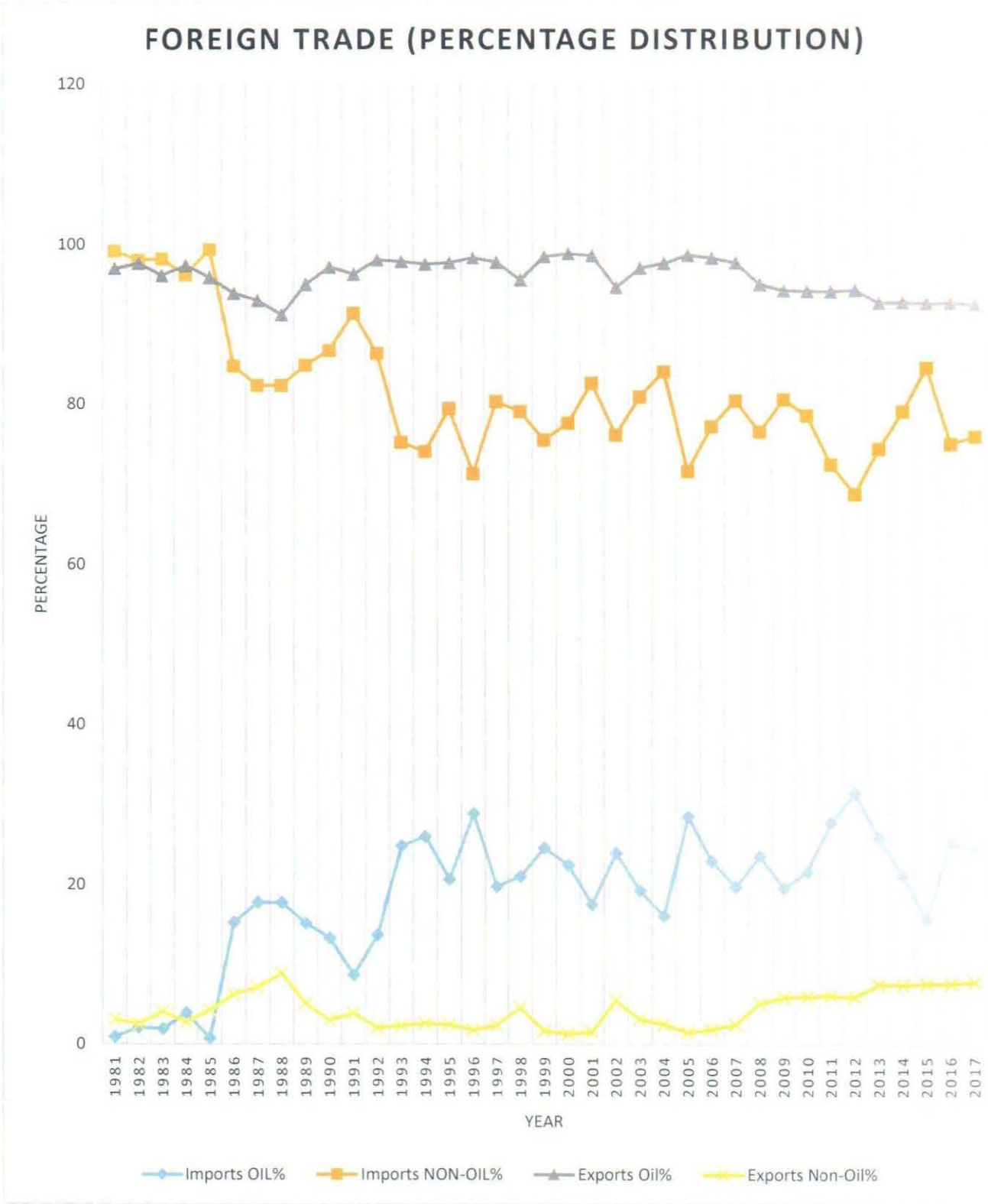
In 1983, the non-oil sector export accounted for 0.3 billion Naira which is about 4.02 percent, while that of oil sector accounted for 7.2 billion Naira which is about 95.98 percent. There was a slight increase in both non-oil and oil sectors exports in the year 1984 to about 0.2 billion Naira and 8.8 billion Naira respectively. In 1986, the Structural Adjustment Programme (SAP)

was launched with the objective, among others, of restructuring the economy by reducing the dependence of the economy on oil. The effect was seen in the year 1987 when the export of non-oil sector rose to 2.2 billion Naira as compared to 0.55 billion Naira in 1986 and that of oil sector 28.2 billion Naira as compared to 8.4 billion in 1986. There was however a slow but steady increase in non-oil exports until 1995 when it increase suddenly to 23.1 billion from 5.3 billion in the previous year. The slow but steady increase continued till the year 1999 when it fell to 19.5 billion Naira while that of oil export maintained an increase of 1,169 billion Naira as against a drop in the previous year with a value of 717.8 billion Naira. This can be said to be as result of the change in government and policy shift. By the year 2000, it picked up to 24.8 billion Naira. Though there was a weaker momentum in the non-oil sector of the economy and a deterioration of the all-important energy sector which contracted and led to the slowdown but continuous increase in the non-oil sector. The oil sector on the other hand continued to increase.

The completion of the free trade zone in 1999 which was commission and started officially between the year 2000 and 2001 and further ban on importation of some products to pave way for locally manufactured ones, aided in the steady growth of non-oil export product till the year 2008 when it had a significant increase of 525.9 billion Naira as against 199.3 billion Naira in 2007 due to complete paralysis following a catalogue of problems caused largely by infrastructural deficiencies in the country, an unfavourable import duty regime and governments lack of interest in the industry's plight over the years irrespective of the global financial meltdown of 2008. This growth can be seen and tied towards diversification of the economy as the country strives to export its produce and depart from depending on oil. There was however a sharp fall in both oil and non-oil export in 2014 up until 2016 when the heat of recession began to blow as the country relied on borrowing to finance the economy coupled with the electioneering period.

Fig. 1

Foreign Trade. Oil and Non-Oil Percentage (%) Distribution.



Sources: Author's chart based on data from National Bureau of Statistics and Central Bank of Nigeria - Includes CBN estimates for informal cross border trade.

4.2.2 Non-Oil Exports Diversification

In computing the diversification index for Nigeria, commodity exports covering a period of 1983 to 2018 were applied to the Herfindal index of diversification. These products were classified in line with Standard International Trade Classification (SITC). Since the study concentrates on economic diversification away from oil, petroleum exports were excluded from the export data used. This classification is broken into nine export categories together with their sub-categories. These are: Food and Live Animals which is further decomposed into Live animals other than animals; Meat and meat preparations; Dairy products and birds' eggs; Fish, crustaceans, molluscs and preparations thereof; Cereals and cereal preparations; Vegetables and fruits; Sugar, sugar preparations and honey; Coffee, tea, cocoa, spices, and manufactures thereof; Feedstuff for animals (excluding unmilled cereals); Miscellaneous edible products and preparations. The second category is Beverages and Tobacco and has the following sub components: Beverages and Tobacco and tobacco manufactures. The third is Crude materials, inedible, except fuel. This comprises Hides, skins and furskins, raw; Oil seeds and oleaginous fruits; Crude rubber (including synthetic and reclaimed); Cork and wood; Pulp and waste paper; Textiles fibres and their wastes; Crude fertilizers other than crude minerals; Metalliferous ores and metal scrap and Crude animal and vegetable materials. The fourth category is Animal and vegetable oils, fats and waxes and is composed of Animal oils and fats; Fixed vegetable oils and fats, crude, refined or fractionated and Processed Animal and vegetable oils and fats. Fifth is Chemicals and related products and is made of Processed Animal and vegetable oils and fats; Inorganic chemicals; Dyeing, tanning and colouring materials; Medicinal and pharmaceutical products; Essential oils for perfume materials and cleaning preparations; Fertilizers other than group 272; Plastics in primary forms; Plastics in non-primary forms and Chemical materials and products.

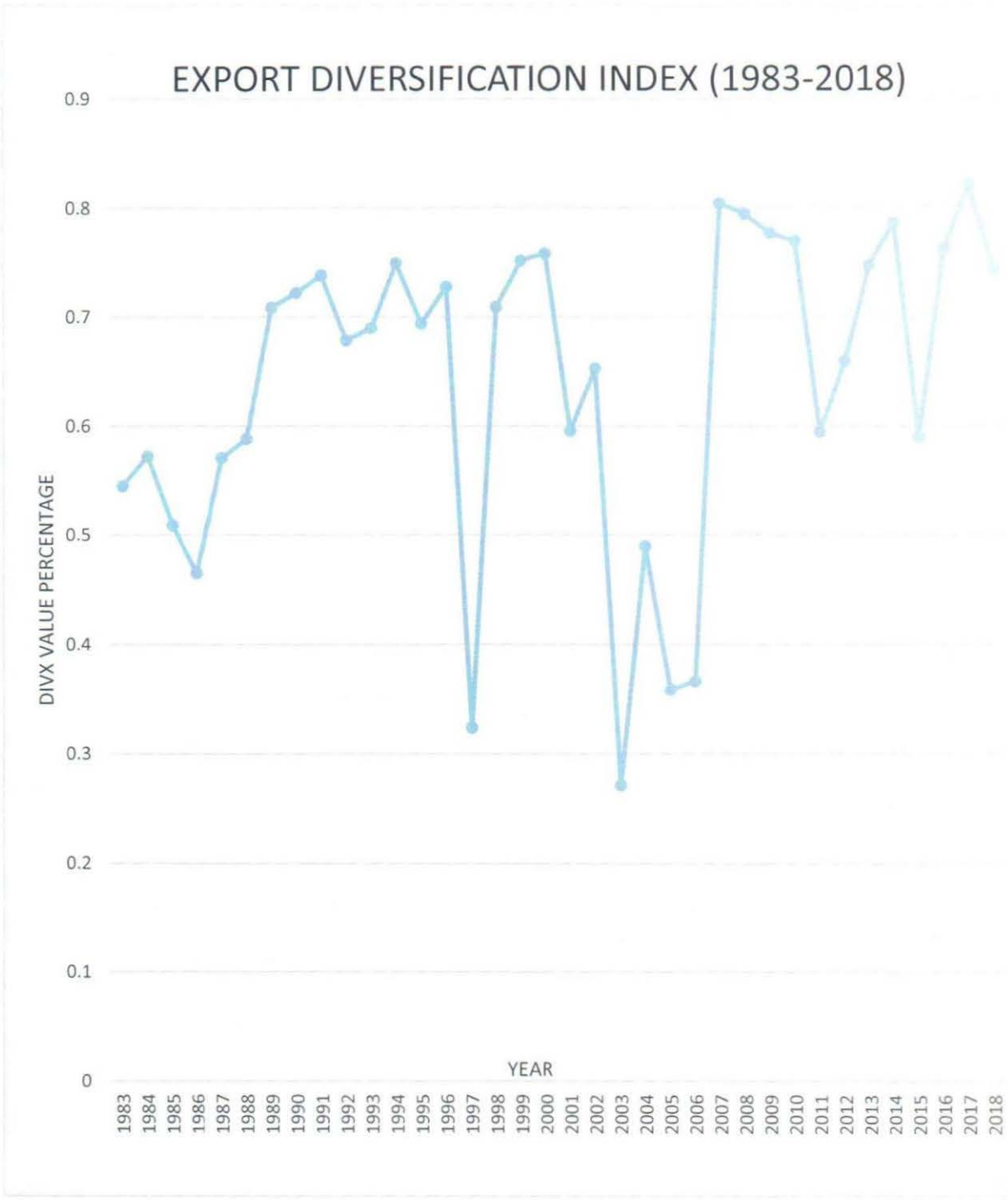
Next is manufactured products. These are divided into Leather, leather manufactures and dressed furskins; Rubber manufactures; Cork and wood manufactures (excluding furniture); Paper

and paper manufactures; Textile yarn and related products; Non metallic mineral manufactures; Iron and steel; Non-ferrous metals and Manufactures of metal. The seventh group is machinery and transport equipment. The following belong to this group: Power generating machinery and equipment; Specialised machinery; Metal working machinery; Other industrial machinery and parts; Office machines and automatic data processing machines; Telecommunication and sound recording apparatus; Electrical machinery, apparatus and appliances and Road vehicles; Other transport equipment. The eight group is miscellaneous manufactured articles. The following belong to this group: Prefabricated buildings, sanitary, heating and lighting fixtures; Furniture and parts thereof; Travel goods, handbags, etc; Articles of apparel & clothing accessories; Footwear; Professional and scientific instruments; Photo apparatus, optical goods, watches and clocks and Miscellaneous manufactured articles. The ninth and final category is called Commodities and transactions and is made of Coin (other than gold coin), not being legal tender and Gold, non-monetary (excluding gold ores and concentrates). Petroleum, products and related materials will deliberately be excluded from the analysis on economic diversification as the focus is on the non-oil sectors of the economy.

A careful appraisal of Fig 2 shows that diversification efforts did not yield much fruits in the 1980s with 1986 recording the lowest index for that period. This gives justification to the introduction of the Structural Adjustment Programme (SAP) in 1986. The SAP had, among its major objectives, the diversification of the productive and export bases of the economy away from crude oil. The nation also reformed its foreign exchange policy, trade and other macroeconomic policies in line with the dictates of SAP. Apart from 1997 and 2003 to 2006, macroeconomic policies aimed at encouraging economic diversification seemed to have had positive impacts on the export sector of the Nigerian economy. The global recession in the early 2000s evidently account for the poor performance between 2003 and 2006. Though epileptic, the figure, on the whole, shows a rising diversification trend within the scope of our study.

Fig. 2

Export Diversification Index (1983-2018)



Sources: Author's chart based on data from National Bureau of Statistics.

4.3 Money Supply

From figures 2 and 3, changes in money supply does not seem to have had any correlation with changes in economic diversification. While money supply rose systematically from ₦ 17.69 Billion in 1983 to ₦ 878.46 Billion in 2000 and accelerating rapidly to ₦ 24889.61 Billion in 2018, diversification index showed a rather fluctuating pattern beginning with a rate of 0.55% in 1983, rising slightly before dropping to a 0.46% in 1986. It staggered to a height of 0.75% in 1994 before descending sharply to 0.32% in 1997. It rose briefly before coming to an all-time low of 0.27% in 2007. It however rose to 0.82% in 2017. The graphic picture paints very minimal impact of money supply on economic diversification in Nigeria. According to Keynesian macroeconomic theory, an increase in the supply of money should lower the interest rates in the economy, leading to more consumption and lending/borrowing. This should positively influence economic diversification and expansion. The Classicals see the influence of a rise in money supply to be that of raising price and therefore raising inflation. The latter seem to be more appropriate to the Nigerian economic circumstance. It is worth noting that tables 4.2 and 4.3 could not be merged into one because of the differences in value indices. While diversification data is based on percentages, money supply is measured in billions.

The relationship between money supply and economic growth has a theoretical backing. According to Keynesian Theory of Growth the supply of money tend to influence the equilibrium value of output and employment because an expansion in money supply will raise the price of bonds and reduce the rate of interest, increase the level of investment and output. It should be remembered that in classical theory of inflation the quantity theory of money explain the influence of money supply to be that of raising price or lowering it depending on whether the supply of money is increased or decreased. This shows that if money growth is equal to increases in real GDP, and then there will be no inflation (William, 2016). Other scholars have also pulled out their views concerning how money supply is related to economic growth.

Laidler (1993) is in the view that lowering money stock by increasing interest rate would lower Gross Domestic Product (GDP). Handler (1997) argued that variations in the quantity of money supply is the most important determinant of economic growth and nations that sacrificed more time in studying the behavior of aggregate money supply rarely experience poor economic performance and claimed that this is also the views of some economists. Steve (1997) and Domingo (2001) contended that there may not be positive economic growth without an appropriate financial condition. Uduakobong (2014) is in the view that money supply more or less influences Economic growth.

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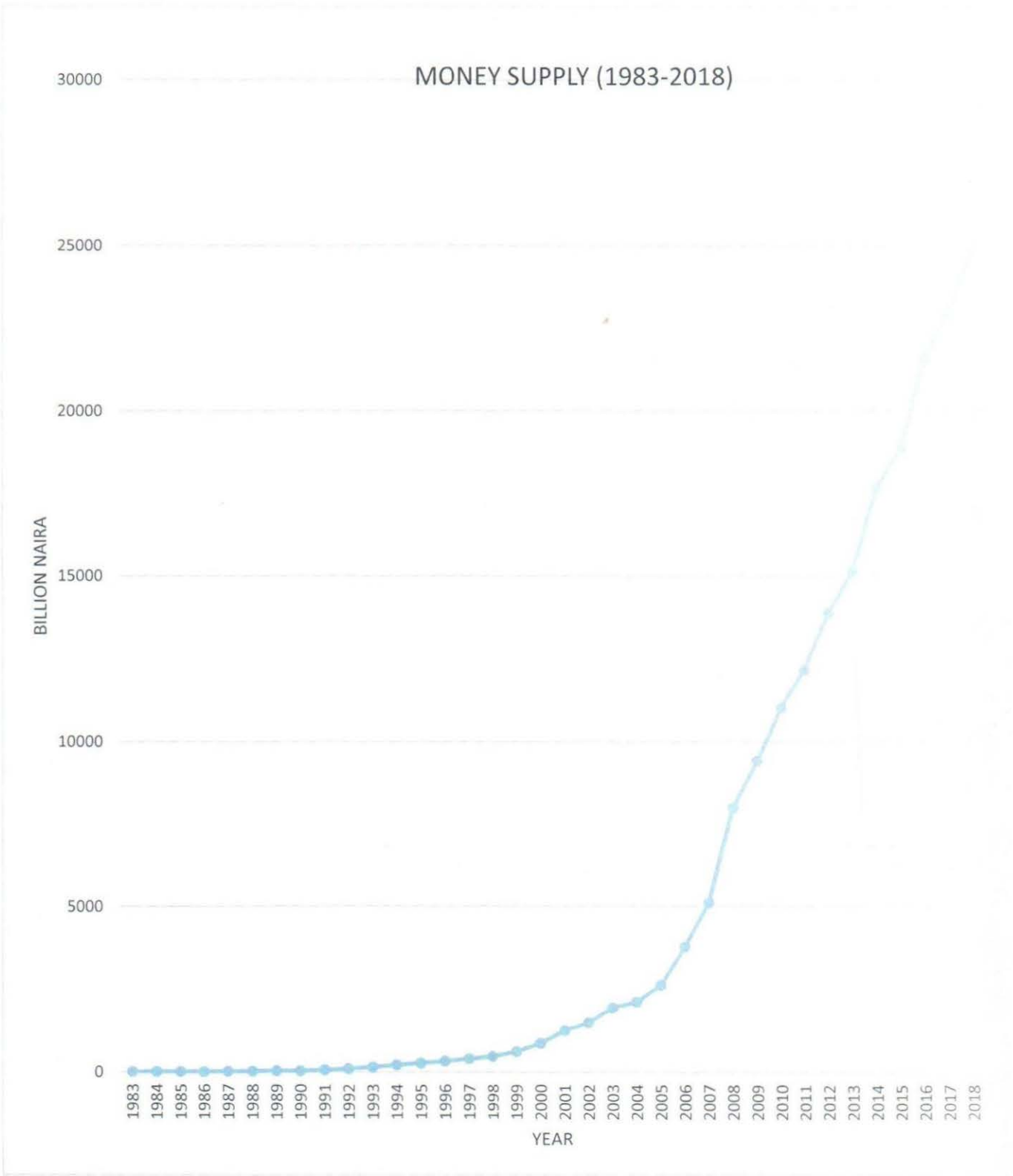
Fig. 3

Money Supply (₦ Billion) (1983-2018)



Sources: Author's chart based on data from National Bureau of Statistics.

4.4 Real Effective Exchange Rate

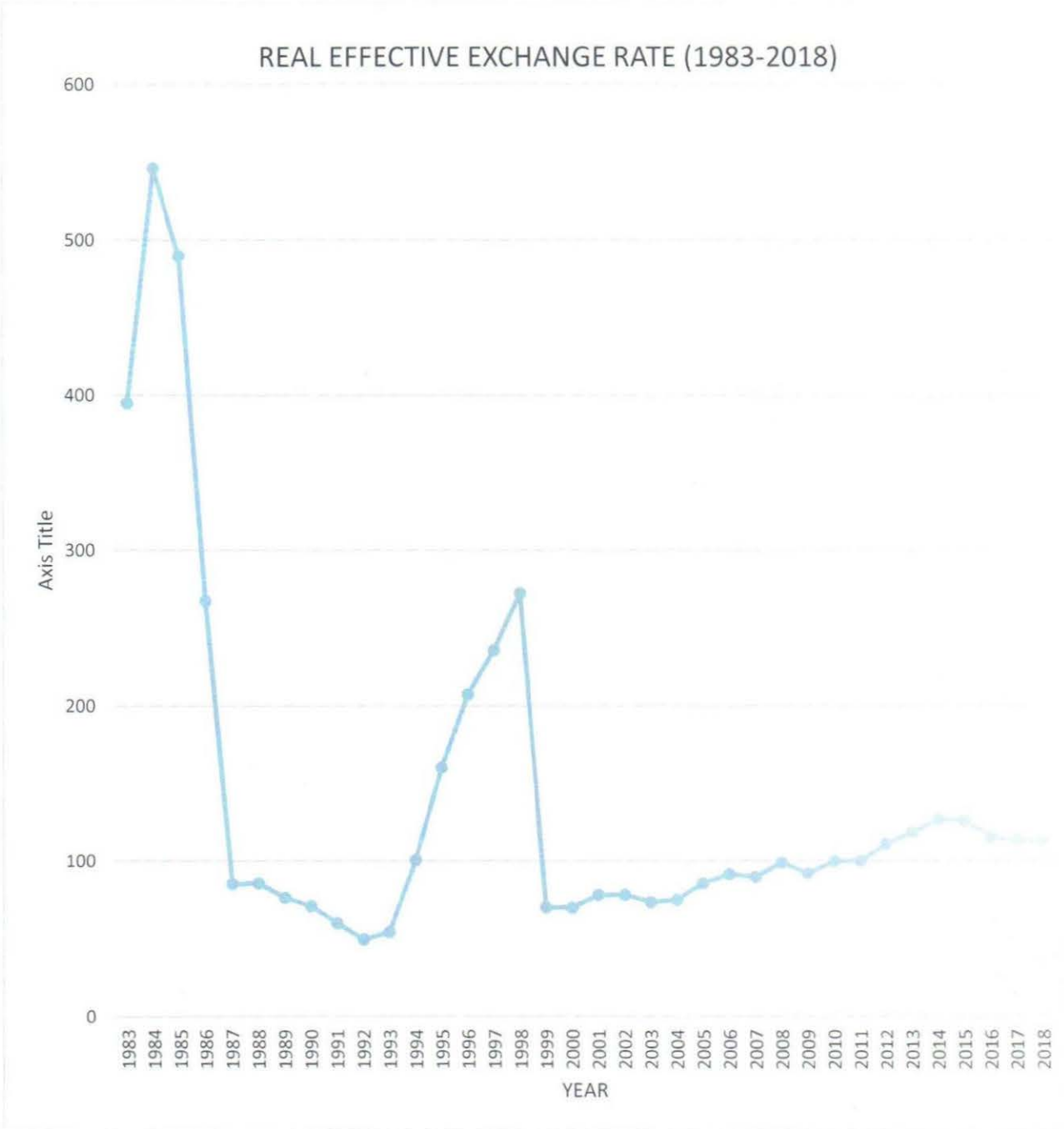
The Exchange rate reflects the ratio at which one currency can be exchanged with another currency or simply put, the ratio of currency prices. It specifies how much one currency is worth in terms of the other. A correct or appropriate exchange rate has been one of the most important factors for economic growth whereas, regular fluctuations or inappropriate exchange rate will inevitably become a major obstacle to economic growth and development. Real exchange rate depreciation tends to engender faster economic growth and export diversification. As espoused by structuralist development economics, exchange rate is the key variable of economic development but it tends to be cyclically overvalued in developing countries, because of both the Dutch disease and excessive or unnecessary capital inflows, and, for that reason it is chronically or in the long run overvalued. An overvalued exchange rate prevents modern and efficient enterprises in a developing country from having access to the international market. However, if the developing country is able to neutralize this tendency and the exchange rate remains at a competitive level, its efficient enterprises will have access to the entire external demand. In this case we have an export-led growth strategy supported by the country's ability to rely on a reasonable number of enterprises using the most modern technology, and by the government's ability to keep the exchange rate "competitive" or at the "industrial equilibrium" level - which is defined as the exchange rate that favors enterprises using worldwide state-of-the-art technology.

A close look at tables 4.2 and 4.4 shows that the REER was at a high of 546.4 in 1984 making export less attractive. This fell steadily to 49.78 in 1992. The fall induced a rise in exports and diversification, with intermittent fluctuation, from 0.47 in 1986 to 0.75 in 1994 after which diversification index fluctuated up to 2003 with a record low of 0.27. This was apparently influenced by the steady rise in REER from 1993 to 1998. While REER maintained a very slow rise from 1999 to 2018, diversification index showed more radical changes from year to year

within the same period. As previously remarked, tables 4.2 and 4.4 could not be merged into one because of the differences in value indices.

Fig. 4

Real Effective Exchange Rate (percentage) (1983-2018)



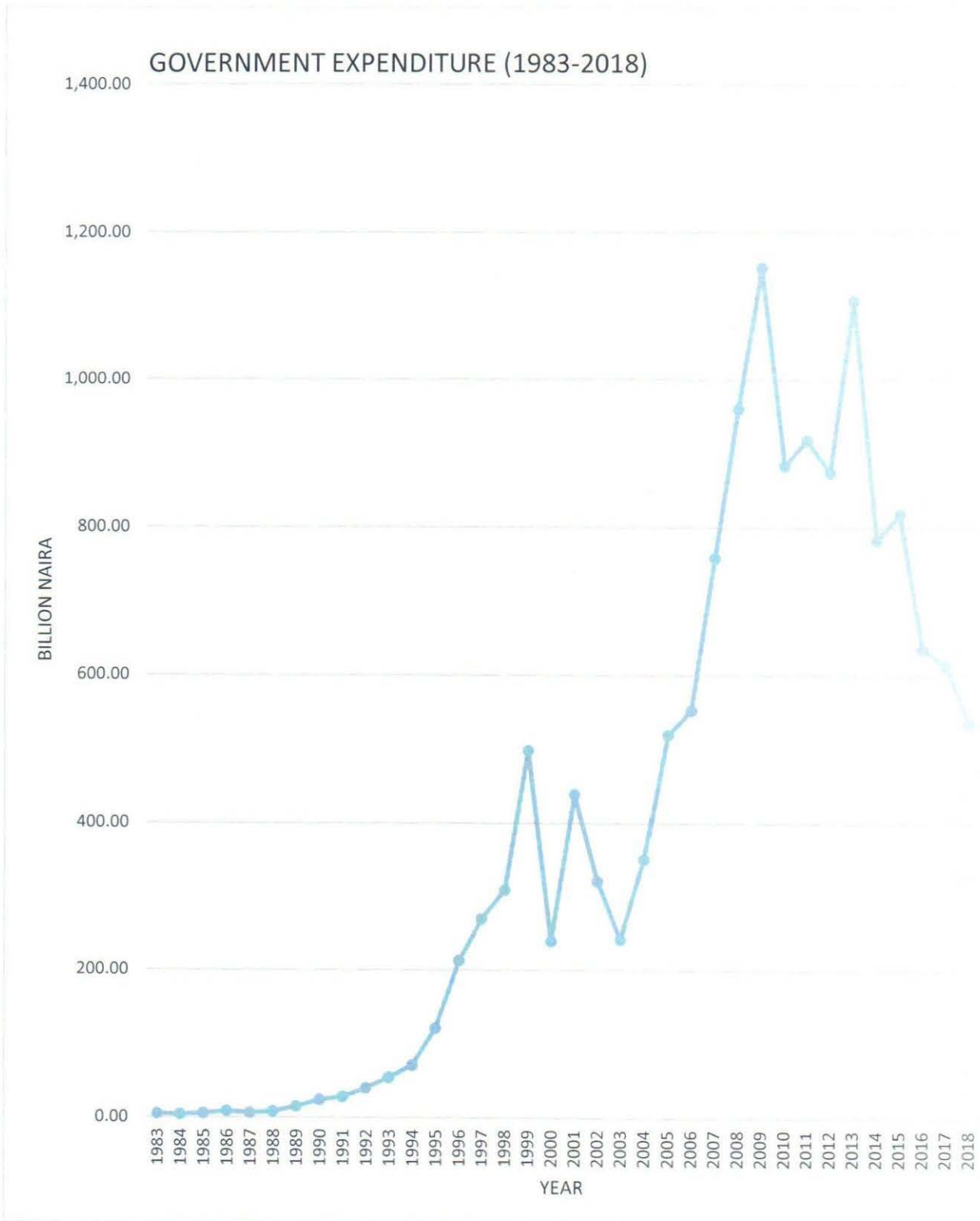
Sources: Author's chart based on data from National Bureau of Statistics.

4.5 Government Expenditure

Government expenditure (See table 4.5) did not show any significant correlation with export diversification in Nigeria until the late 1990s when diversification index began to rise in line with similar rise in government expenditure. Government expenditure rose to 498.03 billion naira in 1999 before dropping slightly in 2000 and 2003 after which it rose to an all-high of 1,152.8 billion naira in 2009. Export diversification (table 4.2) followed a similar pattern rising to 0.76 percent in 2000, falling to its lowest level 0.27 percent in 2003 before reaching its peak of 0.82 percent in 2017. It is obvious therefore, that government expenditure showed some measure of positive correlation with economic diversification in Nigeria within the context of the scope of this study. Please note that tables 4.2 and 4.5 could not be merged into one because of the differences in value indices.

Fig. 5

Government Expenditure in Billion Naira (1983-2018)



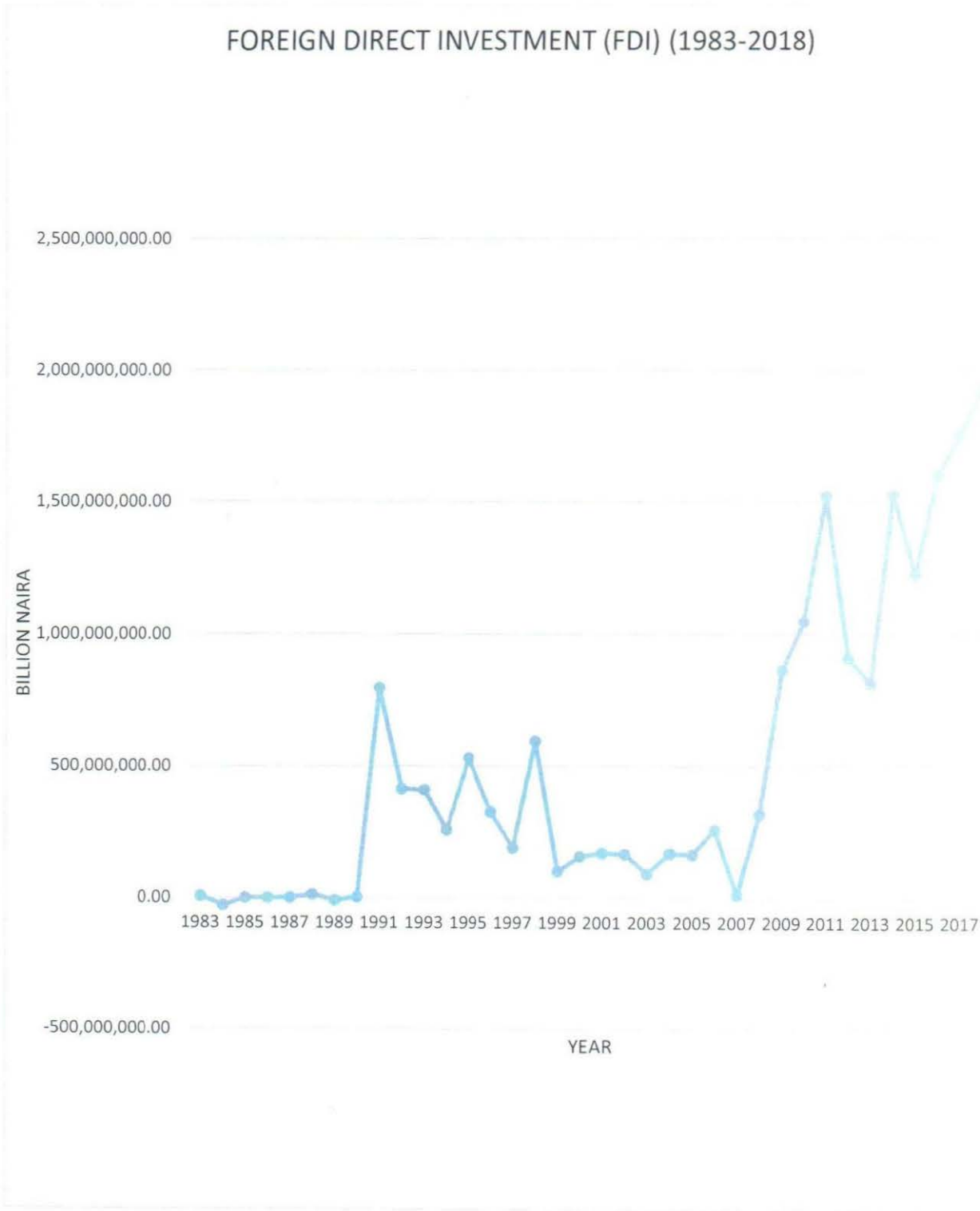
Sources: Author's chart based on data from National Bureau of Statistics.

4.6 Foreign Direct Investment

Foreign direct investment (Table 4.6) in Nigeria did not rise beyond 14,411,000.00 milliion naira until 1991 when it rose to 797,748,186.29 million naira. The figure declined steadily until 2008 when it rose sharply, reaching its peak of 1,933,338,181.85 billion naira in 2018. In comparism, it is worth noting that export diversification witnessed a boom during the periods of 1991 to 1996 and a second period of boom between 2007 and 2018. These periods corresponded approximately with periods of high level of foreign direct investment. (As previously remarked, tables 4.2 and 4.6 could not be merged into one because of the differences in value indices.)

Fig. 6

Foreign Direct Investment in Billion Naira (1983-2018)

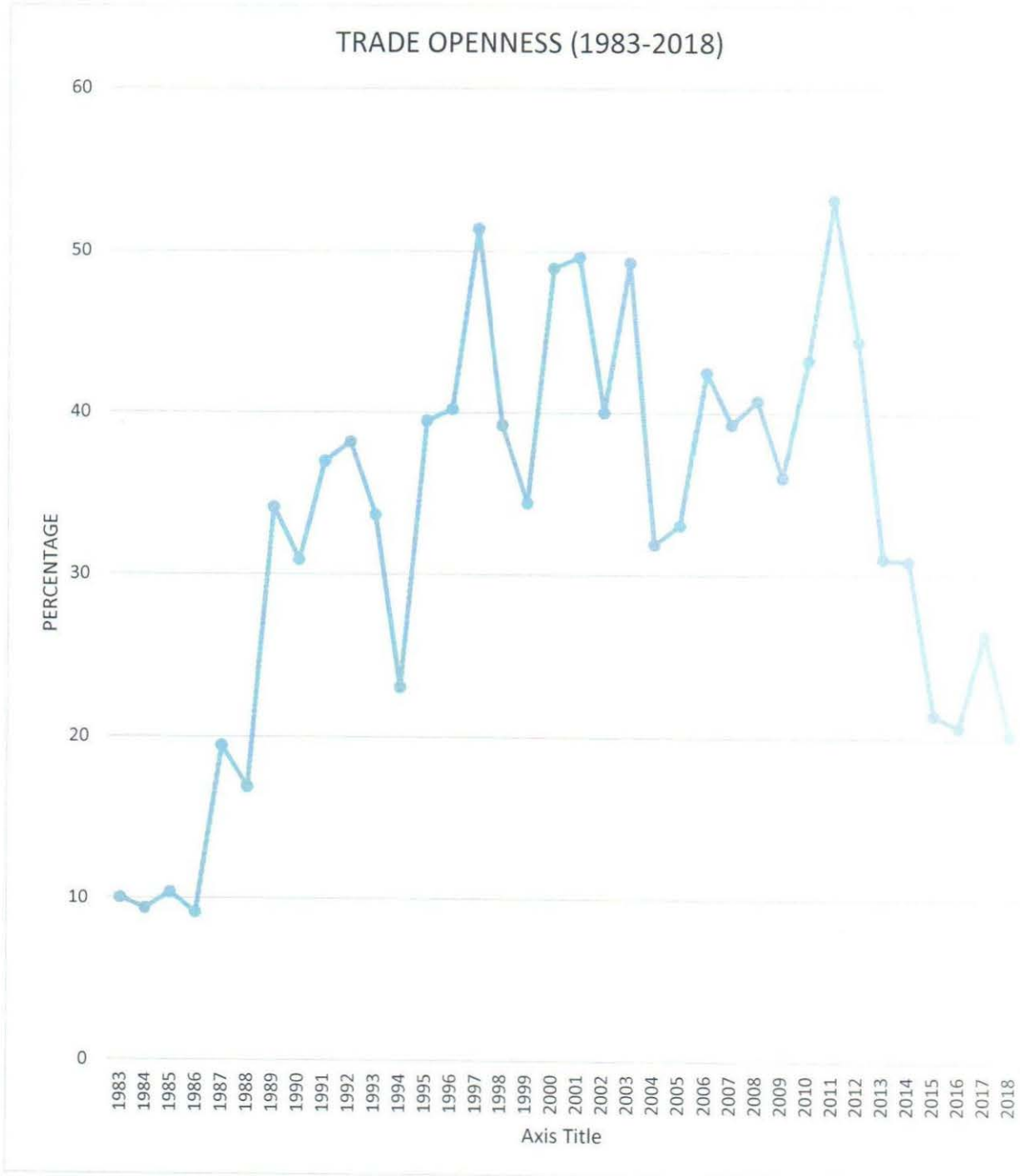


Sources: Author's chart based on data from National Bureau of Statistics.

began to rise and rose up to 0.75 in 1995. This followed years of epileptic growth until 2017 when the highest growth level stood at 0.82. It is clear, however, that export diversification has shown some positive growth in line with expansions in trade openness. (As previously remarked, tables 4.2 and 4.7 could not be merged into one because of the differences in value indices.)

Fig. 7

Trade Openness Billion Naira (1983-2018)



Sources: Author's chart based on data from National Bureau of Statistics.

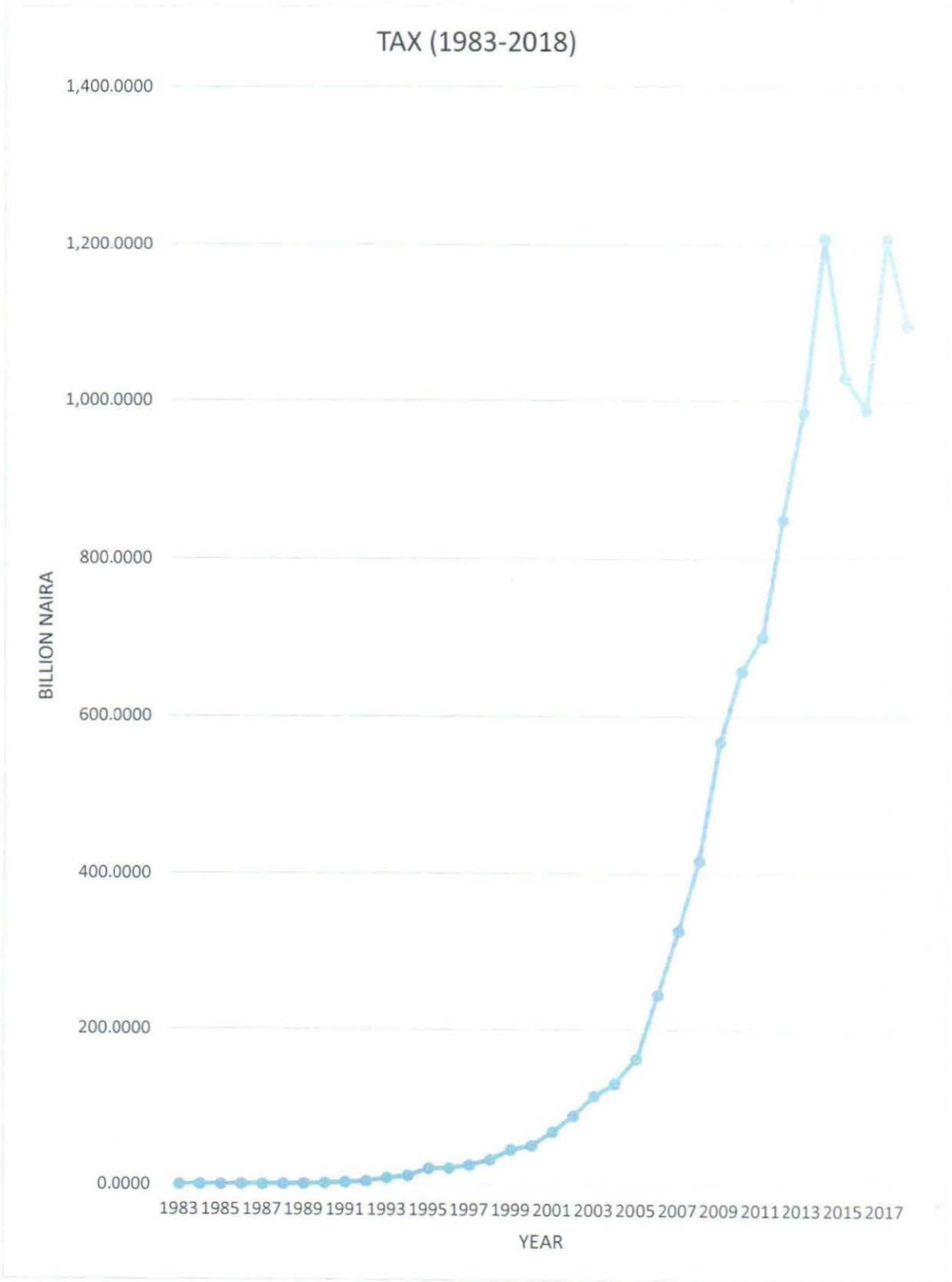
4.8 Tax

Taxation is an important fiscal policy instrument at the disposal of governments to mobilise revenue and promote economic growth and development. Governments use tax revenue to carry out their traditional functions such as the provision of public goods and services; maintenance of law and order; defence against external aggression; and regulation of trade and business to ensure social and economic maintenance. Effective tax revenue mobilisation reduces an economy's dependence on external flows such as foreign direct investments, portfolio investments, remittances and official development assistance which have been found to be highly volatile. Taxation also allow governments greater flexibility in designing and controlling their development agenda, conditions states to improve their domestic economic policy environment and thus, creating a conducive environment for the much-needed foreign direct investments.

In relation to Nigeria's diversification trend (table 4.2 and table 4.8), tax revenue management did not seem to show any meaningful correlation with diversification until 2006 when corresponding rises in both indices became visible. This was sustained until 2018.

Fig. 8

Tax Billion Naira (1983-2018)



Sources: Author's chart based on data from National Bureau of Statistics.

4.8 Resource diversification

Resource diversification denotes the creation of many productive avenues such as in agriculture and industry, by the introduction of a greater variety of agricultural and industrial produce, or in terms of creation of entirely new productive sectors. Quoting Osakwe (1983), Bassey (2012) concurred that, "A country whose goods and markets are not diversified is highly vulnerable to the vicissitudes of the few goods and services in the world market, as well as to the fluctuations in the economies of its trading partners."

According to Akpuru (2000), diversification of proceeds from non-renewable resources such as crude oil (natural capital stock) relates to both export goods and "export markets". In the sphere of export market, diversification entails development of non-markets and strengthening a country's position in existing markets. Diversification is predicated on a number of factors. Firstly, there is need to give priority to the development of industrial raw-materials locally. In this way, the industrial capability of the country in producing exportables will be greatly enhanced. Secondly, policies must be deliberately shifted away from inward-looking industrialization around the home market towards systematic efforts to export industrial products. Third is the factor of marketing and export promotion strategy. (Bassey, 2012).

Developing countries that are successful exporters of manufactured products have based their success in part, on learning special skills involved in marketing and producing customer specifications. Thus, in the sphere of export goods, resource diversification requires "policies that encourage and permit a fast growth of processing and manufacturing through a balanced strategy aimed at accomplishing both import-substitution and export expansion objectives by offsetting the bias of import substitution policies and exports" Osakwe (1983).

A "genuine" basis for the diversification of the Nigerian economy exists, given her rich endowment of human and physical resources. What is, however, problematic is how to mobilize and harness this "rich endowment of human and physical resources" for lateral and structural

diversification of the Nigerian economy. The issue, reside in uncoordinated planning that is, government's inability to conceptualize a scheme or strategy for overall exploitation of the country's resources. It is well known that Nigeria produces tin, columbite, and petroleum, not because of its industrial demand for these minerals, (as would be the case in an inward looking economy) but rather out of compulsion to extract these minerals to earn foreign exchange. In the same way, it might be argued that production agriculture is far from being streamlined, as farmers are more affected in their decision making not only by constraints of subsistence agriculture, but also by the production in traditional crops, rather than by concerted efforts to produce to meet requirements of existing markets. Undoubtedly, this lack of response to forces of demand by farmers is an important stumbling block in the path of diversification.

The challenge of resource diversification in Nigeria, therefore, involves lateral and structural processes of economic transformation. Lateral diversification entails the exploitation of alternative revenue sources to crude oil such as solid minerals and agriculture (CBN, Contemporary Economic Policy Issues, 2003). For solid minerals, these include Bentonite, Byrite, Bauxite, Limestone, Bitumen, Gypsum, quart, Tantalite, phosphate, mica, granite stones, kaolin etc both for domestic and industries and export markets. (Sanusi quoted in Collins Nweze (2013)). These critical strategic minerals provide necessary raw materials for whole range of import substitution industries thus sustaining the production capabilities (capacity utilization) of these industries in a declining condition of foreign exchange reserve. Similarly, at will, the amplified weapon behind these is a desperate need for agricultural sector transformation through massive allocation of investment resources from the petroleum sector. This is for exporters of agro-allied industries to generate critical industrial raw materials and massively reduce the alarming rates of food import despite being the largest employer of labour and yet receives one per cent of lending. (Sanusi quoted in Collins Nweze (2013)).

Structural diversification addresses the imperative need for massive deployment of resources for economic development through industrial enterprises. Rapid economic development

involves rapid technological transformation. Rapid technological transformation implies rapid industrialization. In general terms, successful lateral and structural diversification in a country like Nigeria depends critically on how surpluses from natural capital stock such as crude oil is "efficiently allocated to renewable man-made capital that can transcend time and spill on to future generations" (Lecraw, 1984). This entails that significant proportion of earnings from "non-renewable resources should be channeled into investments". An economy should tap the non-renewable resources and use the proceeds in building up other capital that can aid in production of resources in the future when the exhaustible resources stock must have been exhausted.

Engendering a sustainable economy requires deliberate and efficient intergenerational investment by working out a production and proceeds utilization plan that is suitable for posterity. This is so because sustainable development involves maximizing and optimally distributing the net benefits of economic development. It requires application of conservation rules to maintain the regenerative capacity of resources and guide technological change so as to switch from non-renewable to renewable resources wherever physically possible, and to develop a phasing policy for the necessary use of non-renewable resources.

Nigeria is divided into six geopolitical zones, which are North Central, North West, North East, South South, South East and South West. The northern zones are famed for economic activities likecattle herding, agriculture, commerce, oil production, tin, semi-precious stones and coal among others. The south zones are engaged in oil and gas activities, farming, granite, palm wine, herbal medicine, crude oil, natural gas, ceramics, iron ore, tin and rock etcetera etcetera.

4.10 Benefits of Economic Diversification

Nigeria has been enjoying a high level of relative political stability for about two decades. As it continues along the path of economic progress, it is imperative that the country finds ways to diversify its economy by developing non-traditional sectors, consciously breaking away from

the shackles of the misleading "oil wealth" mentality, expanding its range of products for exports and engaging new economic and trade partners.

As a matter of priority, Nigerian government must actively and faithfully encourage the diversification of Nigeria's economy. The reasons are many and varied. Diversification presents the most competitive and strategic option for Nigeria in the light of her developmental challenges and given her background.

Diversification has a lot of benefits for Nigeria to maximally utilize her abundant resource–base to rebuild the economy and enjoy the benefits of all the linkages, synergy, economies of scale, grow national technology and foreign investment profile, build human capital, exploit new opportunities, lessen averagely operational costs, increase national competitiveness and grow the standard of living and confidence of the citizens for national renaissance. Interest in diversification for now can therefore mostly arise from the dependence of our economy on one major commodity, namely oil, and the need to broaden our revenue base.

With a highly entrepreneurial, hard-working, largely youthful population of over 200 million people, over 32 million Micro Small Medium Enterprises and a labor force of about 76 million, Nigeria is Africa's most populous country and its largest market and economy with a household consumption expenditure of over N63 trillion. Nigeria also contributes over 70 percent of the West African sub-regions' Gross Domestic Product (GDP). Nigeria is favourably-positioned geographically and not susceptible to the natural disasters many other countries are prone to. She is rich in intellectual capacity, with many Nigerians at home and abroad distinguishing themselves among the best in the world, in various areas of endeavour.

Furthermore, Nigeria is abundant in natural resources. The country is the 8th largest producer of petroleum, with oil reserves estimated at about 36 billion barrels. Nigeria also has the 6th largest deposits of gas with her natural gas reserves estimated at a minimum of 100 trillion cubic feet. Nigeria has over 34 known solid minerals, including significant uranium deposits,

abundant arable land and over 44 exportable commodities. With such an abundance in human and natural resources, Nigeria really should be one of the most diversified and competitive countries in the world. However, Nigeria has historically been heavily dependent on a narrow range of traditional primary products and relatively few export markets for the bulk of its export earnings. Diversification in exports and in domestic production will accordingly be conducive to faster economic growth.

Increased diversification is also associated with lower output volatility and greater macroeconomic stability. There is therefore both a growth payoff and a stability payoff to diversification, underscoring the case for paying close attention to policies that facilitate diversification and structural transformation. Cross-country empirical evidence points to a range of general policy and reform measures that have proven effective in promoting diversification and structural transformation. These include: improving infrastructure and trade networks, investing in human capital, encouraging financial deepening, and reducing barriers to entry for new products.

With over 32 million MSMEs in Nigeria, the opportunities are tremendous. It is also worth mentioning that there is a lot of merit in the observation that unlocking rapid and sustained growth is a function of technological and infrastructural improvement. Yet, it seems that not enough attention has been paid to the maintenance, acquisition, adaptation and utilization of existing technology and infrastructure in Nigeria over the years which has contributed to making her growth and development so fragile and so epileptic. Other reason(s) for the diversification are as follows:

The concept of economic stability simply means economic growth plus low inflation rate. Achieving economic stability is not possible in an oil-based mono-cultural economy such as Nigeria, owing to the vagaries of the international oil market. The link between the international oil market and Nigeria's economy is such that whenever the oil market sneezes, Nigeria's economy

catches cold. For instance, before the fall of oil price that started in 2014, Nigerian economy experienced robust economic growth of about 7% per year. However, in the wake of the oil shock, growth slowed sharply in 2015 and the economy experienced an outright contraction in 2016. This would not have been the case in a diversified economy given the fact that non-oil sectors would have been performing in their various spheres.

Economic diversification efforts such as the revitalization of the moribund Agricultural Sector of the Nigerian economy will create more jobs for the teeming unemployed Nigerian youths. New data published by the National Bureau of Statistics (NBS) shows that the unemployment situation in Nigeria worsened having increased up to 14.2% in the last quarter of 2016, from 13.9% in the preceding quarter. This development according to the report made it the ninth consecutive quarter that the unemployment rate in Nigeria has increased. A diversified economy will absorb the majority of the unemployed Nigerians, reducing the unemployment situation in Nigeria to the barest minimum called the natural rate of unemployment.

It is worthy of mention that fossil fuels are non-renewable, if at all possible, it takes several millions of years. There are concerns that Nigeria's oil reserves are fast depleting due to continued exploitation without further exploration, or luck in new discoveries.

The relevance of oil is winding down due to technological advancement. Cars are the largest users of oil and today, technology has achieved the invention of electric cars which needs no oil. It follows therefore that the demand for oil will soon crash especially as electric cars grew by 60% in Japan, a country in Asia, which is the largest consumer of Nigerian oil. Japan has today more electric charge points than petrol stations. Diversification is therefore imperative against the technological trends of our jet age which continuously search for alternative sources of energy.

Diversification of Nigerian economy will among other things bring about job creation and economic stability. These factors are germane in the improvement of the standard of living of

Nigerians given that both will reduce poverty and starvation, and increase the per capita income of Nigerian citizens respectively.

4.11 Major constraints and Challenges of Economic Diversification in Nigeria

Nigerian government has made some efforts in the diversification of the economy. But government policies in this area have not been effective due to a number of challenges which include: macroeconomic orientation, poor infrastructure, weak economic institutions, poor corporate governance, poor educational orientation, endemic corruption and insecurity.

The nation's economy does not emphasis productivity. It emphasises sharing of wealth and who gets what. This orientation is deepened in the nation's psyche by the easy revenues gotten from extraction of natural resources, especially petroleum. There is a dearth in investment of resources on long term productive ventures. Loans from both government and private sectors operate on high interest rate and can only be economically used for only short term projects. Hence, most of the loaned funds are used for trading (especially importation) which involves high turnover. This affects investing on the industrialisation of the economy. Again, most of the nation's revenue revolves around the political class who wastes it on luxurious life style and patronage of foreign goods. This accounts for the government's waste of resources on bogus white elephant projects that are never finished and when finished cannot be maintained. The main stream of the economy, the business and working class, is deprived of the necessary resources to encourage skill acquisition, industrialisation and productivity.

Nigerian political office holders are among the highest paid while her workers are among the list paid in the world. Hence, her professionals and other elites abandon their areas of specialisation and either juggle for political positions or leave the country for a better condition of service. There is urgent need for the nation to re -channel her resources towards productivity and not bureaucracy. The national resources should be channelled towards creating productive jobs

and industrialisation. The importation of foreign goods should be restricted to what is necessary to give indigenous industries the opportunity to strive.

In addition, development and diversification of Nigerian economy face the challenge of poor economic and social infrastructure. Bad road network, erratic power supply, scarce potable water, poor healthcare facilities, poor transportation and communication network, scarcity of investible fund, and poor and unstable educational system are among the main constraints to economic development and diversification of the economy. The nation needs to invest its resources wisely on technological development, skill acquisition and human development, and provision of economic and social infrastructure for her to be on the path of sustainable development. Improved infrastructure will create ample opportunity for her population to be innovative and productive which will boast production of goods and service for both local consumption and export.

To kick-start the economy, the government needs to be seriously committed to the course. There is poor state of corporate governance and institutions in the country due to poor ethical standards in both public and private organisations, which frustrate the achievement of the goals of different economic and social policies. Nigerian government has repeatedly resolved to embark on economic development and diversification but most of the policies yielded marginal effect as they were truncated along the course due to weak institutions and political in-stability occasioned by personal and sectional interests.

The endemic nature of corruption in Nigeria makes it very difficult to effectively manage the nation's economy and sustain any policy that will transform the economy. The economy and its policies are corruptibly sabotaged to satisfy individual or sectional interests. The huge earnings of the nation end in private hands. They do not make significant impact on the living standard of the people or on the economic fortune of the nation. Nigeria is a place where there are millionaires and billionaires who have no line of business but are only friends to the government. They employ

no body and produce nothing to justify their wealth. It is the endemic corruption that denies the nation the most needed revenue for infrastructural and economic development.

The Nigerian educational system is tailored to bureaucracy and not to productivity. Nigerian educational system produces educated graduates without skills. Certificate acquisition is treasured above skill and productivity. It is unfortunate that the nation is playing down skill acquisition and technological institutions for universities. This has led to massive pool of unemployed graduates which continue to strain the economy. The educational system needs to be restructured to produce the right graduates with requisite skills for the economy. Again, the educational system has to be well funded to create the enabling environment for academic exercise and put an end to incessant disruptions of academic activities.

CHAPTER FIVE

PRESENTATION OF DATA, ANALYSIS AND DISCUSSION OF FINDINGS

In the light of the methodology previously discussed in chapter three, this chapter presents data used for analysis (see appendix). It also interprets and discusses the results, which forms the basis of the findings and recommendations in chapter six.

5.1 Data Presentation

Table 5.1 presents the descriptive statistics on the macro-economic variables captured in this study. The main aim was to examine the underlying characteristics of the dataset used for empirical analysis. The descriptive statistics as depicted in table 5.1 showed mean values for DIVX, DMD, FDI, GEXP, GFCF, LF, MS, REER and TAX to be 0.64, 2682.50, 511000000.00, 399.69, 4010000000000.00, 39647683.00, 5502.74, 141.31 and 307.90 respectively. The maximum values of the variables are 0.820898, 12594.89, 1.93E+09, 1152.800, 2.14E+13, 60698492, 24889.61, 546.4000, 1207.300 for DIVX, DMD, FDI, GEXP, GFCF, LF, MS, REER and TAX respectively while their corresponding minimum values are 0.270922, 22.22000, -27000000, 4.100000, 7.99E+09, 23651428, 17.69000, 49.78000, 0.561500.

The analysis was also fortified by the values of the skewness and kurtosis of all the variables involved in the models. The skewness is a measure of the symmetry of the histogram while the kurtosis is a measure of the tail shape of the histogram. The bench mark for symmetrical distribution i.e. for the skewness is how close the variable is to zero. An analysis of skewedness of the distribution shows that DMD, FDI, GEXP, GFCF, LF, MS, REER, and TAX are all positively skewed while DIVX is negatively skewed.

Table 5.1
Descriptive statistics result

	DIVX	DMD	FDI	GEXP	GFCF	LF	MS	REER	TAX
Mean	0.641131	2682.571	5.11E+08	399.6936	4.01E+12	39647683	5502.743	141.3114	307.8962
Median	0.692082	957.6100	2.60E+08	315.2000	3.52E+11	38460722	1073.890	99.56000	59.90370
Maximum	0.820898	12594.89	1.93E+09	1152.800	2.14E+13	60698492	24889.61	546.4000	1207.300
Minimum	0.270922	22.22000	-27000000	4.100000	7.99E+09	23651428	17.69000	49.78000	0.561500
Std. Dev	0.145884	3685.974	5.78E+08	364.2029	6.51E+12	10811298	7753.968	117.5712	417.2460
Skewness	-0.998220	1.462509	1.093889	0.502898	1.464535	0.316705	1.253891	2.227868	1.085718
Kurtosis	3.085058	3.855308	2.954164	1.975922	3.678886	1.974786	3.165512	7.215541	2.582894
Jarque-Bera	5.989514	13.93092	7.182714	3.090544	13.56051	2.178409	9.474545	56.43655	7.333663
Probability	0.050049	0.000944	0.027561	0.213254	0.001136	0.336484	0.008763	0.000000	0.025557
Sum	23.08073	96572.55	1.84E+10	14388.97	1.45E+14	1.43E+09	198098.7	5087.210	11084.26
Sum Sq.Dev.	0.744874	4.76E+08	1.17E+19	4642532.	1.49E+27	4.09E+15	2.10E+09	483804.5	6093298.
Observations	36	36	36	36	36	36	36	36	36

Source: Author's computation using E-views10.

5.2 Unit Root Test

The unit root test was conducted with the aim of establishing the stationarity conditions of the variables. The test was based on the Augmented Dickey-fuller (ADF) test as well as the Phillips-Perron test. The result of the stationary test below (table 5.2) shows that all the variables except diversification index (DIVX), real effective exchange rate (REER) and labour force (LF)) were non-stationary at levels as none of them exhibited trend stationarity i.e. I (0). This is because both their ADF and PP statistic values are less than the critical table values at either 1 or 5 percent level of significance. Thus we could not accept the alternative hypothesis of stationarity, implying that the tests strongly support the hypothesis that all the variables are non-stationary, and that they are particularly of a random walk. Stationarity was achieved after the first differencing of the series. A non-stationary series manifest a random walk and therefore any dynamic specification of the model in the levels of series would be inappropriate and may lead to nonsensical or spurious regression and wrong inferences.

With first differencing of the series using the ADF, all the variables attained stationarity. The PP test also produced similar results. In all, stationarity was achieved for all variables at first difference. The existence of stationarity of the variables at first difference or the same order then provides a justification for co-integration test using the autoregressive distributed lag (ARDL) model variant of ordinary least squares regression technique.

Table 5.2

Unit root test result using Augmented Dickey-Fuller (ADF) and Phillips-Perron tests

Variables	ADF			Phillips-Perron		
	Level	1st Difference	Order of Integration	Level	1st Difference	Order of Integration
DIVX	-3.962863	-	I(0)	-3.962863	-	I(0)
MS	-0.101523	-4.034051	I(1)	1.269310	-4.916125	I(1)
REER	-5.718197	-	I(0)	-2.238741	-5.129558	I(1)
TAX	-1.853973	-4.459253	I(1)	-1.315266	-5.862989	I(1)
GEXP	-1.809441	-7.379776	I(1)	-1.898378	-7.227267	I(1)
DMD	2.073422	-4.748670	I(1)	-	-4.773639	I(1)
OPEN	-2.106254	-4.493879	I(1)	-1.898378	-8.818148	I(1)
FDI	-2.179164	-8.107011	I(1)	-2.032438	-9.215822	I(1)
GFCF	0.506705	-5.725037	I(1)	0.852770	-5.739721	I(1)
LF	10.77889	-	I(0)	9.719026	-11.21455	I(1)

ADF test critical test values.

Level:
At 5% = -3.552973.
10% = -3.212361.

1st Difference:
5% = -3.574244
10% = -3.233456

Phillip-Peron test critical values.

Level:
At 5% = -3.544284.
10% = -3.204699.

1st Difference:
5% = -3.548490
10% = -3.207094

Source: Author's computation using Eviews 10.

5.3 Granger causality test

The granger causality test was done so as to determine the causal relationship and the nature of causality between macroeconomic policies and economic diversification. The result obtained as presented in table 5.3 shows that there is unidirectional causality between macroeconomic policies and economic diversification. Thus, the null hypothesis that macroeconomic policies (FDI, M2, REER, TAX, GEXP, OPEN and LF which represent monetary, fiscal and trade policies) do not granger cause diversification was rejected while the alternative hypothesis that diversification does not granger macroeconomic policies was accepted. This implies that macroeconomic policies granger cause economic diversification in Nigeria.

Table 5.3:

Granger causality test

Null Hypothesis:	Obs	F-Statistic	Prob.	Decision
FDI does not Granger Cause DIVX	34	4.68570	0.0117	Accept
DIVX does not Granger Cause FDI		1.91181	0.1660	Reject
M2 does not Granger Cause DIVX	34	3.01990	0.0232	Accept
DIVX does not Granger Cause M2		1.20356	0.3147	Reject
REER does not Granger Cause DIVX	34	5.44988	0.0021	Accept
DIVX does not Granger Cause REER		1.93594	0.1625	Reject
TAX does not Granger Cause DIVX	34	3.76123	0.0262	Accept
DIVX does not Granger Cause TAX		0.55218	0.5816	Reject
GEXP does not Granger Cause DIVX	34	3.37265	0.0294	Accept
DIVX does not Granger Cause GEXP		1.98325	0.2296	Reject
OPEN does not Granger Cause DIVX	34	2.20593	0.0151	Accept
DIVX does not Granger Cause OPEN		0.89534	0.4195	Reject
GFCF does not Granger Cause DIVX	34	3.86855	0.0302	Accept
DIVX does not Granger Cause GFCF		0.74910	0.4817	Reject
LF does not Granger Cause DIVX	34	4.21712	0.0247	Accept
DIVX does not Granger Cause LF		1.34839	0.1755	Reject

Source: author's computation using E-views 10.

5.4 Analysis of Monetary Policy Equation

5.4.1 Co-integration Test for Monetary Policy Equation

The results of the co-integration test based on the ARDL bounds testing approach is presented in table 5.4. The outcome of the bounds test shows that the F-statistic value of 6.49 is greater than the upper bound critical value of 3.67 at five percent level of significance. Since it is established from the bounds testing procedure that the calculated F-statistic value has exceeded the upper critical bound value at five percent significance level, the study therefore rejected the hypothesis which says that there is no co-integration and hence, no long-run association among the variables captured in the monetary policy equation. Thus, the alternative hypothesis that there exists a long run co-integrating relationship among the variables of the study is accepted. Based on this result, the study concludes that the variables are co-integrated and hence, there is a long run relationship among them.

Table 5.4

ARDL Bounds Test for Co-integration

Test Statistic		Value	K
F-statistic		6.493966	2
Critical Value Bounds:		I0 Bound	I1 Bound
Significance level:			
	10%	2.37	3.20
	5%	2.79	3.67
Decision: There is co-integration			

Source: Author's computation using Eviews 10.

5.4.2 ARDL Long Run Estimates of Monetary Policy Model

Since it was established in the preceding section that there exists co-integration and hence long run equilibrium relationship among the variables in the monetary policy equation, the study proceeded to estimate the long run equation for the model. The result of the long run ARDL estimate is presented in table 5.5

The result shows that the coefficient of money supply (M2) is 0.218. It thus has a long run positive relationship with economic diversification. It follows therefore that a one percent increase in M2 will lead to a 0.218 percent increase in diversification in the long run. This result is consistent with *apriori* expectation. With a p-value of 0.106, the variable is not statistically significant since its p-value is more than 0.05

The coefficient of real effective exchange rate (REER) is -0.142. This shows a long run negative relationship with economic diversification, consistent with *apriori* expectation. A one percent increase in REER will lead to a decrease of 0.142 percent in diversification in the long run. With a p-value of 0.033, the variable is statistically significant since its p-value is less than 0.05

Table 5.5

ARDL Long-run Estimation

Variable	Coefficient	Std. Error	T-statistic	Prob.
LOG(M2)	0.218066	0.129369	1.685614	0.1060
REER	-0.141737	0.078103	-1.814748	0.0332
C	-49.36757	20.46798	2.411941	0.0247

Source: Author's computation using Eviews 10.

5.4.3 Short Run ARDL Estimates of Monetary Policy Equation

The parsimonious error correction results of the monetary policy model based on the Autoregressive distributed lag (ARDL) approach is presented in table 5.6. The result of the short-run dynamics showed that the error correction variable is fractional, has the expected negative coefficient and is statistically significant in line with theoretical expectation as its p-value is 0.000. Its coefficient of -0.984 indicates that 98 percent of the systemic disequilibrium in monetary policy variables was corrected each year. This represents a fast speed of adjustment from short run disequilibrium to long run equilibrium.

The value of R-squared is 0.57 and that of the adjusted R-squared is 0.53. The adjusted R-squared shows a fairly good fit on the data. It specifically implies that about 53 percent of total variation in the dependent variable (DIVX) was accounted for by variations in the independent variables (money supply, real effective exchange rate, gross fixed capital formation and labour force). This implies that the estimated model has a fairly good explanatory power.

The Durbin-Watson test statistic is 2.090. This is approximately 2 and this shows that the residuals are not correlated. Therefore, there is no serial correlation. The estimated model is thus well specified and well-behaved.

Evaluation of the short run coefficients shows that money supply (M2) has a positive relationship with economic diversification. With a coefficient of 0.02, this is consistent with theoretical *apriori* expectation as it demonstrates that a one percent increase in money supply will attract a 0.02 percent rise in diversification, *ceteris paribus*. The variable is however not statistically significant at its probability value is 0.993 which is greater than 0.05.

The result also showed that the first lag of money supply has a positive relationship with economic diversification in Nigeria. This is again consistent with *apriori* expectations as its coefficient is 1.055. This implies that a one percent increase in the first lag of money supply will lead to a rise of 1.055 percent in diversification in the present period, *ceteris paribus*. Statistical

test conducted on the variable shows that first lag of money supply is significant in influencing diversification as its p-value of 0.0012 is lower than 0.05.

Real effective exchange rate (REER) has a negative relationship with economic diversification. This is in line with theoretical postulation as its coefficient of -0.044 shows that a one percent increase in REER will lead to a fall in diversification by 0.04 percent, *ceteris paribus*. REER however is not statistically significant as its p-value of 0.545 is higher than 0.05. The first lag of REER however shows greater significance. It has a negative relationship with economic diversification as expected, *apriori*. Given its coefficient of -0.138, it shows that a one percent rise in one period lag of REER will attract a 0.138 percent fall in diversification in Nigeria *ceteris paribus*. REER is however, not statistically significant as its p-value of 0.080 is higher than 0.05.

Further evaluation of the results shows that gross fixed capital formation (GFCF) plays a positive role in influencing diversification in Nigeria given the value of its coefficient in the current period. The coefficient is 0.192. This result is consistent with theoretical expectations indicating that a one percent rise in GFCF in the current period will lead to a 0.192 percent increase in diversification. GCFC is also statistically significant in influencing diversification. This is shown by its p-value of 0.0001 which is lower than 0.05.

Labour force (LF) also showed a positive relationship with the dependent variable, diversification. This, in real terms, means that a one percent rise in labour force attracts 2.27 percent increase in diversification and this is consistent with *apriori* expectation. The p-value of LF is 0.000 which is statistically significant as it is lower than 0.05.

Table 5.6
Error Correction Result of the Monetary Sector Equation.

Dependent Variable: D(DIVX)

Method: ARDL

ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	T-statistic	Prob.
DLOG(M2)	0.023975	0.259109	0.092528	0.9271
DLOG(M2(-1))	1.054929	0.283466	3.721532	0.0012
DLOG(M2(-2))	0.427999	0.305393	1.401471	0.1750
D(REER)	-0.044377	0.072207	-0.614573	0.5451
D(REER(-1))	-0.138382	0.075501	-1.832851	0.0804
LOG(GFCF)	0.192203	0.039625	4.850560	0.0001
LOG(LF)	2.273792	0.440937	5.156725	0.0000
CointEq(-1)	-0.984386	0.190705	-5.161816	0.0000
R-squared	0.566462	Durbin Watson stat		2.090282
Adjusted R-squared	0.525071	F-statistic		6.493966
Prob. (F-statistic)	0.0002			

Source: Author's computation using E-views 10.

5.5 Diagnostic Test for Monetary Equation

5.5.1 Heteroscedasticity Test, LM Test and Q Test

To ascertain the adequacy of the estimated equation, several diagnostic tests were conducted. Normality tests such as the Breusch-Godfrey serial correlation Lagrange Multiplier (LM) test, and the Q-statistics were employed to check the existence of the normality or adequacy of the estimated model.

The results of the tests are summarized in Table 5.7. The Breusch-Godfrey serial LM test statistic of 0.786629 with its high probability value of 0.4690 showed that there is no problem of autocorrelation in the model. This is confirmed by the fact that the Chi-square probability value of 0.300 is higher than the 5 percent significance level. This indicates that the residuals terms are independent and hence there is no autocorrelation in the estimated equation. Meanwhile, the Breusch-Pagan-Godfrey heteroskedasticity test statistic of 1.573990 with its probability value of 0.1757 showed that the residuals have constant variance and hence there is no problem of heteroskedasticity in the model. This is confirmed by the fact that the probability value of the observed Chi-squared is 0.1837 which is greater than the 5 percent significance level.

Similarly, the Q-statistics as shown in table 5.8 showed that the series is white noise, and hence there is no auto-correlation among the residual terms in the model as the probability values are all higher than 5 percent significance level. This also means that the value of the residual in one particular period was independent or unrelated to the value of the residual terms in another period. That also implied that the co-variation between the residuals was zero. The conclusion from the various test conducted showed that the estimated equation is adequate and well-behaved.

Table 5.7:

Diagnostic test

Test Statistic			Value (prob.)
Breusch-Godfrey Serial Correlation LM Test			
F-statistic	0.786629.	Prob. F (2,20)	0.4690
Obs. R-squared	2.406568	Prob. Chi-Square(2)	0.3002
Breusch-Pagan-Godfrey Heteroskedasticity Test			
F-statistic	1.573990	Prob. F(11,22)	0.1757
Obs. R-squared	14.97365	Prob. Chi-Square(11)	0.1837

Source: Author's computation using E-views 10.

Table 5.8

Q-Statistic Test for Monetary Equation

	AC	PAC	Q-Stat	Prob*
1	-0.057	-0.057	0.1189	0.730
2	-0.169	-0.173	1.1881	0.552
3	0.062	0.042	1.3351	0.721
4	-0.018	-0.043	1.3486	0.853
5	-0.079	-0.068	1.6072	0.900
6	0.064	0.044	1.7803	0.939
7	-0.187	-0.211	3.3304	0.853
8	-0.112	-0.119	3.9064	0.865
9	0.109	0.019	4.4786	0.877
10	-0.099	-0.135	4.9749	0.893
11	-0.061	-0.056	5.1681	0.923
12	-0.008	-0.114	5.1713	0.952
13	-0.016	-0.052	5.1852	0.971
14	0.055	0.004	5.3719	0.980
15	-0.113	-0.227	6.1842	0.976
16	-0.089	-0.126	6.7202	0.978

Source: Author's computation using E-views 10.

5.5.2 Stability Test for Monetary Policy Equation

The Cumulative Sum (CUMSUM) and Cumulative Sum of Squares (CUMSUMSQ) tests were applied in order to examine the stability of the parameter after the ECM models were estimated. Figures 9a and 9b show that both the CUMSUM and CUMSUMSQ statistics fall within the critical bounds of ± five percent level of significance. This plots indicate that the coefficients of the results being estimated are stable in the long run and that there exists a long-run relationship between monetary policies and economic diversification in Nigeria. This therefore implies that the coefficients are changing gradually.

Figure 9a

CUSUM for Monetary Policy Equation

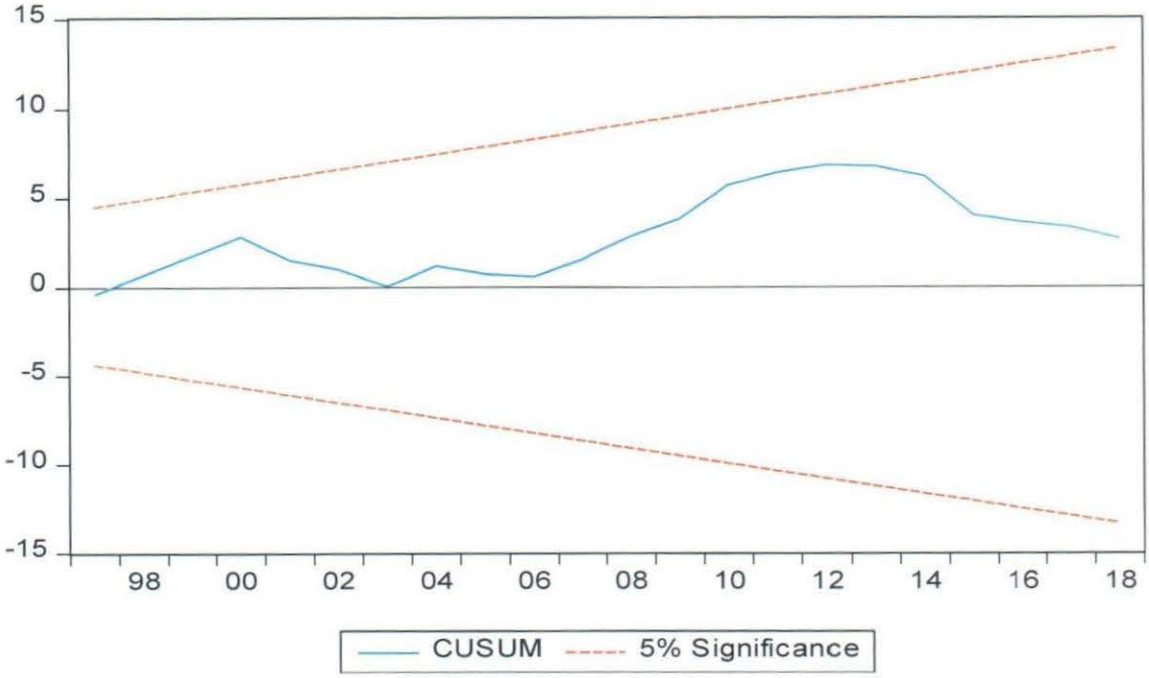
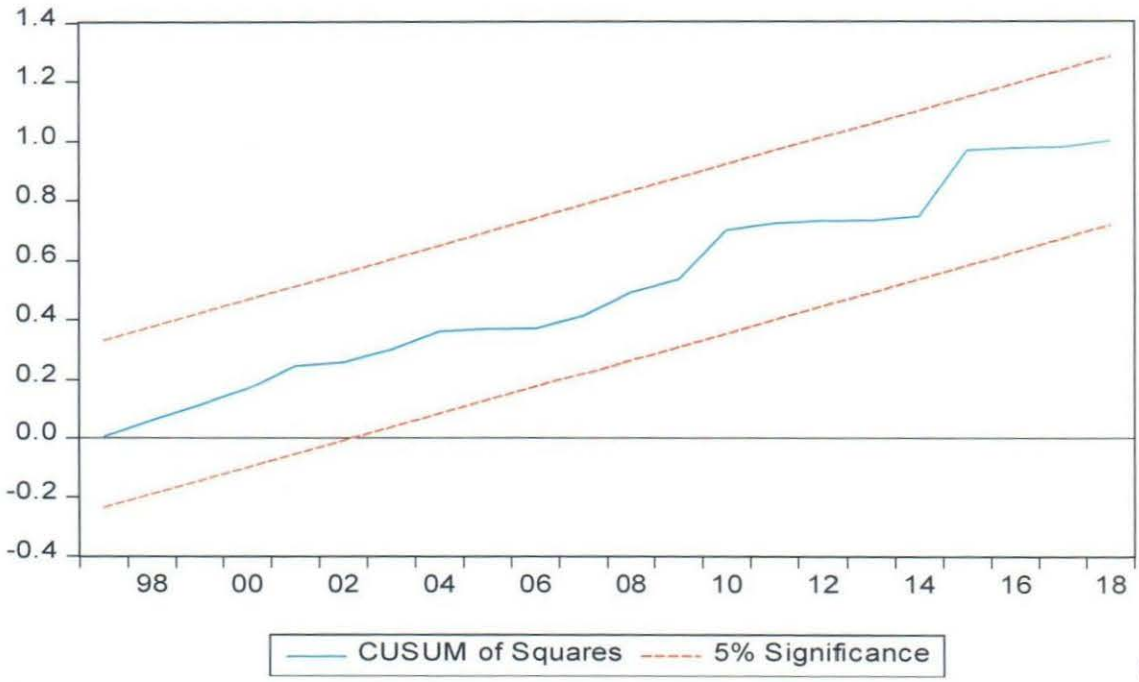


Figure 9b

CUSUM Square for Monetary Policy Equation



Source: Author's computation using E-views 10.

5.6 Analysis of Fiscal Policy Equation

5.6.1 Co-integration Test for Fiscal Policy Equation

The results of the co-integration test based on the ARDL bounds testing approach is presented in table 5.9. The outcome of the bounds test shows that the F-statistic value of 3.98 is greater than the upper bound critical value of 3.67 at five percent level of significance. Since it is also established from the bounds testing procedure that the calculated F-statistic value has exceeded the upper critical bound value at five percent significance level, the study therefore rejects the null version of the hypothesis which says that there is no co-integration and hence, no long-run association among the variables captured in the fiscal policy equation and accept the alternative hypothesis that there exists a long-run co-integrating relationship among the variables of the study. Based on this result, the study concludes that the variables are co-integrated and hence, there is a long run relationship among them.

Table 5.9

ARDL Bounds Test for Co-integration

Test Statistic		Value	K
F-statistic		3.981482	3
Critical Value Bounds:		I0 Bound	I1 Bound
Significance level:			
	10%	2.37	3.20
	5%	2.79	3.67
Decision: There is co-integration			

Source: Author's computation using Eviews 10.

5.6.2 ARDL Long Run Estimates of the Fiscal Policy Model

The empirical result of the long run estimation of the fiscal policy model using ARDL estimation procedures as presented in table 5.10 shows that tax has a positive relationship with diversification given its coefficient of 0.076. In absolute terms, a one percent increase in tax will lead to an increase in diversification in the long run by 0.076 percent. This result is not consistent with *Apriori* expectation. However, with a p-value of 0.022, the variable is statistically significant since its p-value is more than 0.05.

Government expenditure (GEXP), with a coefficient of 0.131, has a positive long run relationship with diversification as a one percent increase in GEXP will lead to an increase of 0.131 percent in economic diversification in Nigeria, *ceteris paribus*. This is consistent with *Apriori* expectations. The variable is however, not significant at five percent level of significance since its p-value of 0.251 is greater than 0.05.

The result further shows that domestic debt (DMD) has a negative long run relationship with economic diversification. The coefficient of DMD is -0.268. A one percent increase in DMD will therefore attract a 0.208 percent fall in diversification. This is consistent with *apriori* expectation. Its p-value of 0.04 is lower than 0.05 and this makes DMD statistically insignificant.

Table 5.10

ARDL Long-run Estimation

Variable	Coefficient	Std. Error	T-statistic	Prob.
LOG(TAX)	0.075786	0.078870	6.592947	0.0222
LOG(GEXP)	0.130858	0.109494	1.195114	0.2506
LOG(DMD)	-0.268942	0.128500	-2.092923	0.0438
C	33.77336	25.70823	1.313718	0.2087

Source: Author's computation using Eviews 10.

5.6.3 Short Run ARDL Estimates of Fiscal Policy Equation

The parsimonious error correction results of the fiscal sector model based on the Autoregressive distributed lag (ARDL) approach is presented in table 5.11. The result of the short-run dynamics showed that the error correction variable has the expected negative coefficient and is statistically significant in line with theoretical expectation. Its coefficient is -0.617 and this indicates that 62 percent of the systemic disequilibrium in fiscal policy variables was corrected each year. This represents a fast speed of adjustment from short run disequilibrium to long run equilibrium. its p-value is 0.011 and this shows that it is statistically significant as its p-value is lower that 0.05

The value of R-squared is 0.79 and that of the adjusted R-squared is 0.66. The adjusted R-squared shows a good fit on the data. It specifically implies that about 66 percent of total variation in the dependent variable (DIVX) was accounted for by variations in the independent variables (domestic demand, gross fixed capital formation and labour force). This implies that the estimated model has an good explanatory power.

The Durbin-Watson statistic is 2.162. This is approximately 2 and this shows that the residuals are not correlated. Therefore, there is no serial correlation. The estimated model is thus well specified and well-behaved.

Evaluation of the short run coefficients shows that the first, second and third lags of diversification index (DIVX) impacted positively on the current value of diversification in line with theoretical *Apriori* expectation. Numerically, the result shows that a one percent increase in the first, second and third lags of DIVX led to an increase in current DIVX by 0.76 percent, 0.60 percent and 0.407 percent respectively *ceteris paribus*. The variables were also statistically significant at five percent level of significance given their low probability levels of 0.0101, 0.0104 and 0.0191 for the first, second and third lag of DIVX respectively.

Tax has a positive and insignificant relationship with DIVX, contrary to *Apriori* expectation. Its coefficient is 0.038 which implies that a one percent increase in tax will lead to a

0.038 percent rise in DIVX. Its p-value of 0.786 is also not significant at five percent level of significance. However, the first and second lags of tax have coefficients of -0.065 and -0.692 consistent with *apriori* expectation. This shows that a one percent rise in the first and second lags of tax leads to a 0.065 percent and 0.692 percent fall in DIVX in the present period, *ceteris paribus*. While the p-value of the first lag of tax is 0.649 and therefore not significant at five percent significance level, the p-value of the second lag of tax is however significant at five percent level of significance given its value of 0.0002

Government expenditure (GEXP) and its first, second and third lags have positive relationship with DIVX, consistent with *Apriori* expectation. Their coefficients of 0.070, 0.159, 0.040 and 0.272 respectively implies that a one percent increase in GEXP and its first, second and third lags, lead to 0.070 percent, 0.159 percent, 0.040 percent and 0.272 percent rise respectively in DIVX in the present time. The p-values of GEXP and its first and third lags are 0.036, 0.043 and 0.001 respectively and are all significant at five percent significance level. However, the second lag of GEXP is not significant as its p-value of 0.571 is higher than 0.05.

With a coefficient value of 0.045, gross fixed capital formation (GFCF) has a positive relationship with economic diversification. This is in line with theoretical postulation as it shows that a one percent increase in GFCF will lead to a 0.045 percent rise in diversification. GFCF is also statistically significant as its p-value of 0.009 is lower than 0.05

Further evaluation of the result shows that Labour force (LF) has a negative relationship with the dependent variable, diversification given LF's coefficient of -2.662. This, in real terms, means that a one percent rise in labour force attracts -2.662 percent fall in diversification and this is not consistent with *apriori* expectation. The p-value of LF is 0.0003 which is statistically significant at five percent significance level.

Table 5.11

Error Correction Result of the Fiscal Sector Equation.

Dependent Variable: D(DIVX)
Method: ARDL

ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(DIVX(-1))	0.755303	0.256686	2.942515	0.0101
D(DIVX(-2))	0.602927	0.205854	2.928903	0.0104
D(DIVX(-3))	0.406767	0.154920	2.625649	0.0191
DLOG(TAX)	0.038134	0.138086	0.276164	0.7862
DLOG(TAX(-1))	-0.065290	0.140483	-0.464757	0.6488
DLOG(TAX(-2))	-0.692285	0.137996	-5.016714	0.0002
DLOG(GEXP)	0.070194	0.075044	0.935374	0.0364
DLOG(GEXP(-1))	0.158892	0.071886	2.210333	0.0430
DLOG(GEXP(-2))	0.040597	0.070213	0.578192	0.5717
DLOG(GEXP(-3))	0.272945	0.067072	4.069456	0.0010
LOG(GFCF)	0.044692	0.014987	2.982056	0.0093
LOG(LF)	-2.662637	0.573263	-4.644708	0.0003
CointEq(-1)	-0.616667	0.066179	-9.318214	0.0113

R-squared	0.792681	Durbin-Watson stat	2.162748
Adjusted R-squared	0.661743	F-statistic	3.981482
Prob(F-statistic)	0.00232		

Source: Author's computation using E-views 10.

5.7 Diagnostic Test for Fiscal Policy Equation

5.7.1 Heteroscedasticity Test, LM Test and Q Test

To ascertain the adequacy of the estimated equation, several diagnostic tests were conducted. Normality tests such as the Breusch-Godfrey serial correlation Lagrange Multiplier (LM) test, and the Q-statistics were employed to check the existence of the normality or adequacy of the estimated model.

The results of the tests are summarized in Table 5.12. The Breusch-Godfrey serial LM test statistic of 0.426013 with its probability value of 0.4342 showed that there is no problem of autocorrelation in the model. This is confirmed by the fact that the Chi-square probability value of 0.7315 is higher than the 5 percent significance level. This indicates that the residuals terms are independent and hence there is no autocorrelation in the estimated equation.

The Breusch-Pagan-Godfrey heteroskedasticity test statistic 0.723564 with its probability value of 0.7362 showed that the residuals have constant variance and hence there is no problem of heteroskedasticity in the model. This is confirmed by the fact that the probability value of the observed Chi-squared is 0.6032 which is greater than the 5 percent significance level.

Similarly, the Q-statistics as shown in table 5.13 showed that the series is white noise, and hence there is no auto-correlation among the residual terms in the model as the probability values are all higher than 5 percent significance level. This also means that the value of the residual in one particular period was independent or unrelated to the value of the residual terms in another period. That also implied that the co-variation between the residuals was zero. The conclusion from the various test conducted showed that the estimated equation is adequate and well-behaved.

Table 5.12:

Diagnostic test

Breusch-Godfrey Serial Correlation LM Test			
F-statistic	0.426013	Prob. F (2,13)	0.4342
Obs. R-squared	0.196286	Prob. Chi-Square(2)	0.7315
Breusch-Pagan-Godfrey Heteroskedasticity Test			
F-statistic	0.723564	Prob. F(16,15)	0.7362
Obs. R-squared	13.93928	Prob. Chi-Square(16)	0.6032

Source: Author's computation using E-views 10.

Table 5.13

Q-Statistic Test for Fiscal Equation

	AC	PAC	Q-Stat	Prob
1	-0.114	-0.114	0.4593	0.498
2	-0.373	-0.391	0.5107	0.564
3	-0.057	-0.193	0.6336	0.131
4	0.185	-0.010	0.9696	0.138
5	0.158	0.129	0.9817	0.157
6	-0.099	0.034	0.3920	0.211
7	-0.337	-0.272	0.8335	0.464
8	-0.027	-0.221	0.7369	0.100
9	0.359	0.090	0.5482	0.221
10	-0.189	-0.287	0.7243	0.619
11	-0.223	-0.176	0.2815	0.214
12	-0.015	-0.196	0.1828	0.721
13	0.360	0.211	0.3261	0.863
14	0.013	-0.067	0.4272	0.235
15	-0.129	0.046	0.2330	0.276
16	-0.137	-0.053	0.4607	0.736

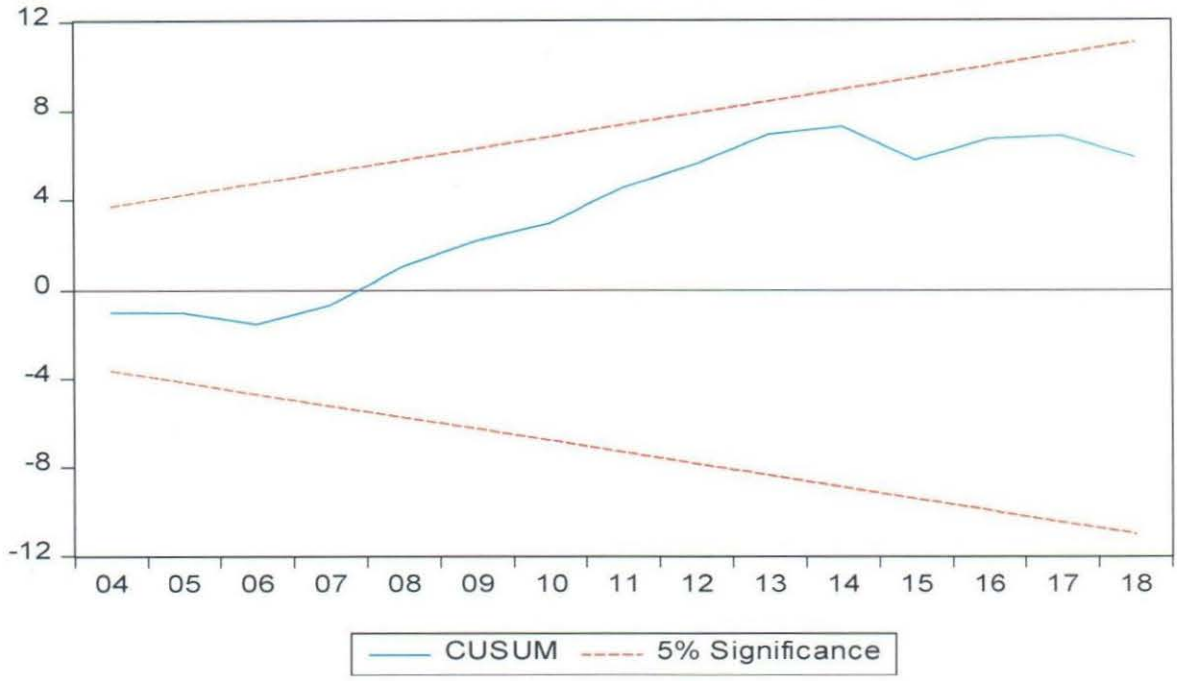
Source: Author's computation using E-views 10.

5.7.2 Stability Test for Fiscal Policy Equation

The Cumulative Sum (CUMSUM) and Cumulative Sum of Squares (CUMSUMSQ) tests were applied so as to examine the stability of the parameter after the ECM models were estimated. Figures 10a and 10b show that both the CUMSUM and CUMSUMSQ statistics fall within the critical bounds of ± five percent level of significance. This plots indicate that the coefficients of the results being estimated are stable in the long run and that there exists a long-run relationship between fiscal policies and economic diversification in Nigeria. This therefore implies that the coefficients are changing gradually.

Figure 10a

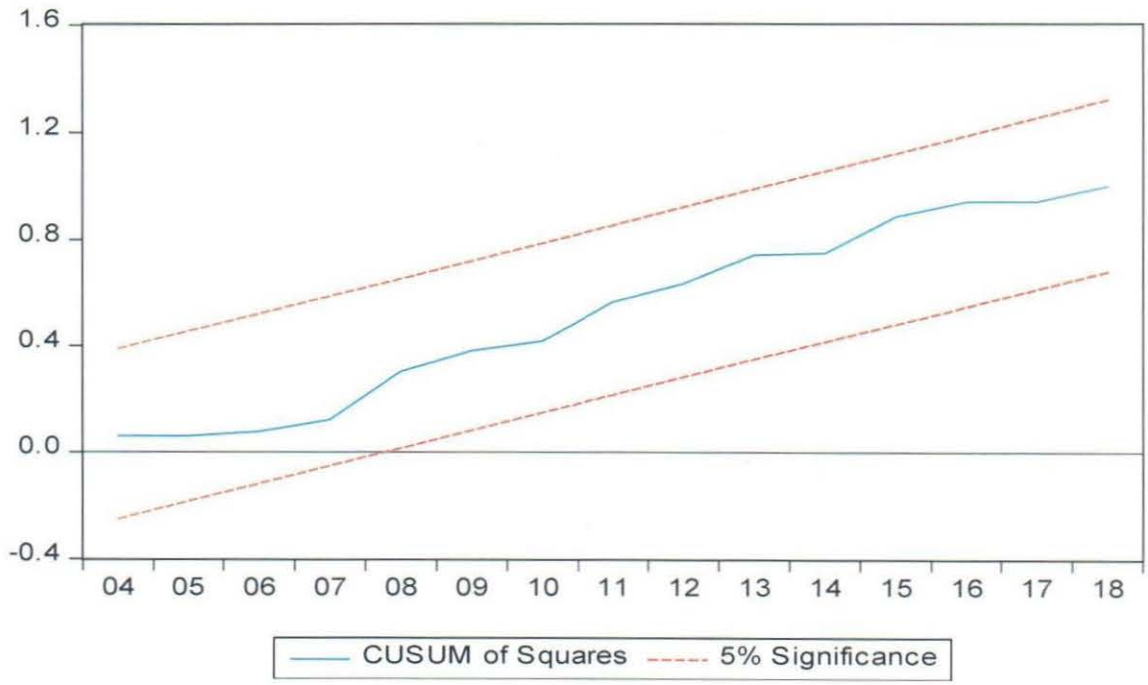
CUSUM for Fiscal Policy Equation



Source: Author's computation using E-views 10.

Figure 10b

CUSUMSQ for Fiscal Policy Equation



Source: Author's computation using E-views 10.

5.8 Analysis of Trade Policy Equation

5.8.1 Co-integration Test for Trade Policy Equation

The results of the co-integration test based on the ARDL bounds testing approach is presented in table 5.14. The outcome of the bounds test shows that the F-statistic value of 4.478 is greater than the upper bound critical value of 3.49 at five percent level of significance. Since it is established from the bounds testing procedure that the calculated F-statistic value has exceeded the upper critical bound value at five percent significance level, the study therefore rejected the null hypothesis which says that there is no co-integration and hence, no long-run association among the variables captured in the monetary policy equation and accept the alternative hypothesis that there exists a long run co-integrating relationship among the variables of the study. Based on this result, the study concludes that the variables are co-integrated and hence, there is a long run relationship among them.

Table 5.14:

ARDL Bounds Test for Co-integration

Test Statistic		Value	K
F-statistic		4.478246	4
Critical Value Bounds:		I0 Bound	I1 Bound
Significance level:			
	10%	2.20	3.09
	5%	2.56	3.49
Decision: There is co-integration			

Source: Author's computation using Eviews 10.

5.8.2 ARDL Long Run Estimates of the Trade Policy Model

The empirical result of the long run estimation of the trade policy model using ARDL estimation procedures is presented in table 5.15 below. It shows that the coefficient of trade openness (OPEN) is 0.005. This implies that, in line with *apriori* expectations, OPEN has a positive relationship with economic diversification. A one percent rise in OPEN, for instance will activate a 0.005 percent increase in economic diversification, *ceteris paribus*. Its p-value is 0.012. This is significant as it is less than 0.05

The coefficient of foreign direct investment (FDI) is 0.0839 and this shows a positive relationship between FDI and economic diversification in Nigeria. This is also consistent with *apriori* expectations as a one percent rise in FDI will lead to a 0.0839 percent rise in diversification. The p-value of 0.000 shows that FDI is significant in explaining variations in diversification as its p-value is less than 0.005.

Gross fixed capital formation (GFCF) coefficient is 0.152 which shows the existence of a positive relationship between GFCF and diversification. This is consistent with *apriori* expectation. A one percent rise in GFCF for instance, will result in a 0.152 percent increase in diversification. The p-value of 0.016 shows that GFCF is significant in explaining variations in diversification as it is less than 0.005.

The coefficient of Labour force (LF) is -1.167 and this shows a negative relationship between LF and economic diversification in Nigeria. This is not consistent with *apriori* expectations as a one percent rise in LF will lead to a 1.167 percent fall in diversification. The p-value of 0.035 shows that LF is significant in explaining variations in diversification as its p-value is less than 0.005.

Table 5.15:

ARDL Long-run Estimation

Variable	Coefficient	Std. Error	T-statistic	Prob.
OPEN	0.004765	0.001661	2.868680	0.0124
LOG(FDI)	0.083860	0.010937	7.667824	0.0000
LOG(GFCF)	0.151946	0.055285	2.748416	0.0157
LOG(LF)	-1.167249	0.498833	-2.339958	0.0346
C	-19.09728	7.509041	-2.543239	0.0234

Source: Author's computation using Eviews 10.

5.8.3 Short Run Estimates of Trade Policy Equation

The parsimonious error correction results of the trade sector model based on the Autoregressive distributed lag (ARDL) approach is presented in table 5.16. The result of the short-run dynamics showed that the error correction variable has the expected negative coefficient and is statistically significant in line with theoretical expectation. Its coefficient is -0.882 and this indicates that 88 percent of the systemic disequilibrium in trade policy variables was corrected each year. This represents a fast speed of adjustment from short run disequilibrium to long run equilibrium.

The value of R-squared is 0.75 and that of the adjusted R-squared is 0.58. The adjusted R-squared shows the model has a fairly good fit. It specifically implies that about 58 percent of total variation in the dependent variable (DIVX) was accounted for by variations in the independent variables. This implies that the estimated model has a good explanatory power.

The Durbin-Watson statistic is 2.064 and falls within the critical region of non-autocorrelation. This shows that the residuals are not correlated. The estimated model is thus well specified and well-behaved. The Durbin-Watson test statistic value is greater than that of the R-square, indicating that the result is not spurious. It is well-behaved and can be used for policy decision in Nigeria.

Evaluation of the short run coefficients shows that the first lag of diversification index (DIVX) has a positive relationship with economic diversification with a coefficient of 1.720. This is consistent with theoretical *apriori* expectation as it demonstrates that a one percent increase in first lag of DIVX will attract a 1.720 percent rise in diversification, *ceteris paribus*. The variable is also statistically significant as its p-value of 0.0004 indicates that the first lag of DIVX is significant in explaining variations in diversification as it is less than 0.005. The result also showed that the second lag of DIVX equally has a positive relationship with economic diversification in Nigeria. This is again consistent with *apriori* expectations as the coefficient of the second lag of DIVX is 0.882. This implies that a one percent increase in the previous two period of DIVX will

lead to a rise in diversification by 0.882 percent in the present period, *ceteris paribus*. The variable has a p-value of 0.0027. This shows that the variable is statistically significant in influencing economic diversification in the current period as it is less than 0.05.

With a coefficient value of -0.008, trade openness (OPEN) has a negative relationship with economic diversification. This is however, not in line with theoretical postulation as it shows that a one percent increase in OPEN will lead to a fall in diversification by 0.008 percent. OPEN is however, statistically significant as its p-value of 0.016 is less than 0.05. Similarly, the first lag of OPEN has a negative relationship with the dependent variable, diversification given its coefficient of -0.0089. This, in real terms, means that a one percent rise in one period lag of OPEN attracts 0.0089 percent decrease in diversification and this is not consistent with *apriori* expectation. The p-value of one period lag of OPEN is 0.031 which is statistically significant as it is less than 0.05.

Forign direct investment (FDI) has a positive relationship with the dependent variable, diversification given FDI's coefficient of 0.116. This means that a one percent rise in FDI will attract a 0.116 percent increase in diversification and this is consistent with *apriori* expectation. Its p-value value of 0.001 is statistically significant since it is less than 0.05.

The first lag of FDI has a negative relationship with economic diversification with a coefficient of -0.074. This is inconsistent with theoretical *apriori* expectation as it demonstrates that a one percent increase in one period lag of FDI will attract a 0.074 percent fall in diversification, *ceteris paribus*. The variable is nevertheless, statistically significant as its p-value of 0.006 indicates that the first lag of FDI is significant in explaining variations in diversification as it is less than 0.05. The second lag of FDI equally has a negative relationship with economic diversification in Nigeria. This is not consistent with *apriori* expectations as the coefficient of the second lag of FDI is -0.043. This implies that a one percent increase in the previous two period of FDI will lead to a fall in diversification by -0.043 percent in the present period, *ceteris paribus*. The variable has a p-value of 0.035. This shows that the variable is statistically significant in influencing economic diversification in the current period as it is less than 0.05.

Gross fixed capital formation (GFCF) has a positive relationship with the dependent variable, diversification given GFCF's coefficient of 0.337. This implies that a one percent rise in GFCF will attract a 0.337 percent increase in diversification and this is consistent with *apriori* expectation. Its p-value value of 0.031 is statistically significant at five percent significance level.

The first lag of GFCF has a positive relationship with economic diversification with a coefficient of 0.531. This is consistent with theoretical *apriori* expectation as it demonstrates that a one percent increase in one period lag of GFCF will attract a 0.531 percent rise in diversification, *ceteris paribus*. The variable is also statistically significant as its p-value of 0.002 indicates that the first lag of GFCF is significant in explaining variations in diversification since it is less than 0.05. The second lag of GFCF equally has a positive relationship with economic diversification in Nigeria. This is consistent with *apriori* expectations as the coefficient of the second lag of GFCF is 0.196. This implies that a one percent increase in the previous two period of GFCF will lead to a rise in diversification by 0.196 percent in the present period, *ceteris paribus*. The variable has a p-value of 0.066. This shows that the variable is not statistically significant in influencing economic diversification in the current period as its p-value is higher than 0.05.

Labour force (LF) has a positive relationship with the dependent variable, diversification as its coefficient is 50.283. This implies that a one percent rise in LF will attract a 50.283 percent increase in diversification and this is consistent with *apriori* expectation. Its p-value value of 0.019 is statistically significant since it is less than 0.05.

The first lag of LF has a positive relationship with economic diversification with a coefficient of 50.240. This is consistent with theoretical *apriori* expectation as it demonstrates that a one percent increase in one period lag of LF will attract a 50.240 percent rise in diversification, *ceteris paribus*. The variable is also statistically significant as its p-value of 0.019 indicates that the first lag of LF is significant in explaining variations in diversification since it is less than 0.005. The second lag of LF equally has a positive relationship with economic diversification in Nigeria and this equally consistent with *apriori* expectations as the coefficient of the second lag of LF is

81.826. This implies that a one percent increase in the previous two period of LF will lead to a rise in diversification by 81.826 percent in the present period, *ceteris paribus*. The variable has a p-value of 0.002. This shows that the variable is statistically significant in influencing economic diversification in the current period as its p-value is less than 0.05.

Table 5.16:

Error Correction Result of the Trade Sector Equation.

Dependent Variable: D(DIVX)

Method: ARDL

ECM Regression				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(DIVX(-1))	1.719719	0.370888	4.636762	0.0004
D(DIVX(-2))	0.882306	0.242519	3.638090	0.0027
D(OPEN)	-0.008056	0.002932	-2.747819	0.0157
D(OPEN(-1))	-0.008886	0.003700	-2.401388	0.0308
DLOG(FDI)	0.115837	0.028642	4.044272	0.0012
DLOG(FDI(-1))	-0.073636	0.022671	-3.248005	0.0058
DLOG(FDI(-2))	-0.043449	0.018632	-2.331983	0.0351
DLOG(GFCF)	0.336620	0.139915	2.405896	0.0305
DLOG(GFCF(-1))	0.531473	0.135438	3.924108	0.0015
DLOG(GFCF(-2))	0.195571	0.097931	1.997019	0.0656
DLOG(LF)	50.28281	19.01549	2.644307	0.0192
DLOG(LF(-1))	50.24024	19.04886	2.637440	0.0195
DLOG(LF(-2))	81.82569	22.17652	3.689745	0.0024
CointEq(-1)*	-0.882306	0.292795	-3.013395	0.0093
R-squared	0.750169	Durbin Watson stat		2.064550
Adjusted R-squared	0.579231	F-statistic		4.478246
Prob(F-statistic)	0.000720			

Source: Author's computation using E-views 10.

5.9 Diagnostic Test for Trade Policy Equation

5.9.1 Heteroscedasticity Test, LM Test and Q Test

The results of the tests are summarized in Table 5.17. The Breusch-Godfrey serial LM test statistic of 8.624222 with its probability value of 0.1134 showed that there is no problem of autocorrelation in the model. This is confirmed by the fact that the Chi-square probability value of 0.7315 is greater than the 5 percent significance level. This indicates that the residuals terms are independent and hence there is no autocorrelation in the estimated equation. The Breusch-Pagan-Godfrey heteroskedasticity test statistic 0.401303 with its probability value of 0.9619 showed that the residuals have constant variance and hence there is no problem of heteroskedasticity in the model. This is confirmed by the fact that the probability value of the observed Chi-squared is 0.8821 which is greater than the 5 percent significance level.

Similarly, the Q-statistics as shown in table 5.18 showed that the series is white noise, and hence there is no auto-correlation among the residual terms in the model as the probability values are all higher than 5 percent significance level. This also means that the value of the residual in one particular period was independent or unrelated to the value of the residual terms in another period. That also implied that the co-variation between the residuals was zero. The conclusion from the various test conducted showed that the estimated equation is adequate and well-behaved.

Table 5.17:

Diagnostic test

Breusch-Godfrey Serial Correlation LM Test			
F-statistic	8.624222	Prob. F (2,12)	0.1134
Obs. R-squared	10.04141	Prob. Chi-Square(2)	0.3366
Breusch-Pagan-Godfrey Heteroskedasticity Test			
F-statistic	0.401303	Prob. F(17,14)	0.9619
Obs. R-squared	10.48445	Prob. Chi-Square(17)	0.8821

Source: Author's computation using E-views 10.

Table 5.18

Q-Statistic Test for Trade Equation

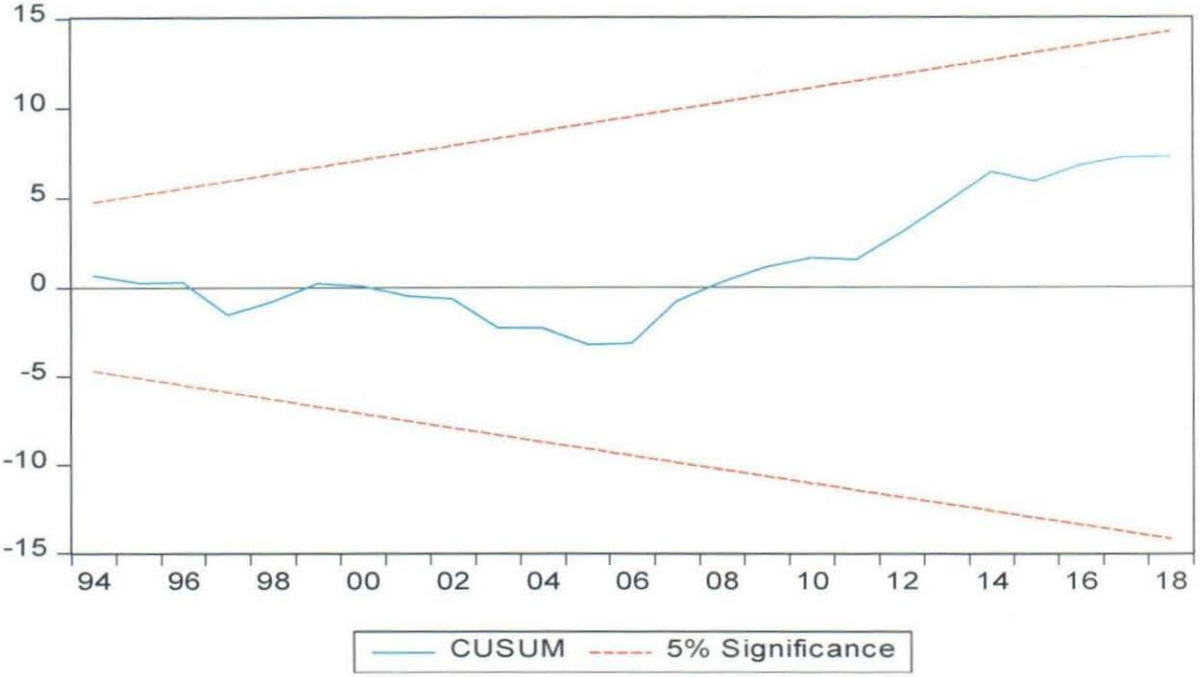
	AC	PAC	Q-Stat	Prob
1	-0.144	-0.144	0.7440	0.388
2	-0.262	-0.289	3.3079	0.191
3	0.051	-0.043	3.4080	0.333
4	-0.253	-0.365	5.9565	0.202
5	-0.025	-0.182	5.9830	0.308
6	0.335	0.130	0.2787	0.495
7	-0.065	-0.043	10.975	0.140
8	-0.056	-0.008	11.119	0.195
9	0.125	0.105	11.866	0.221
10	-0.405	-0.332	0.1099	0.328
11	-0.023	-0.143	0.2128	0.344
12	0.306	0.001	2.2294	0.413
13	-0.089	-0.103	5.7148	0.218
14	-0.041	-0.199	5.2848	0.427
15	0.128	-0.049	6.2904	0.530
16	-0.188	-0.049	2.3305	0.322

Source: Author's computation using E-views 10.

5.9.2 Stability Test for Trade Policy Equation

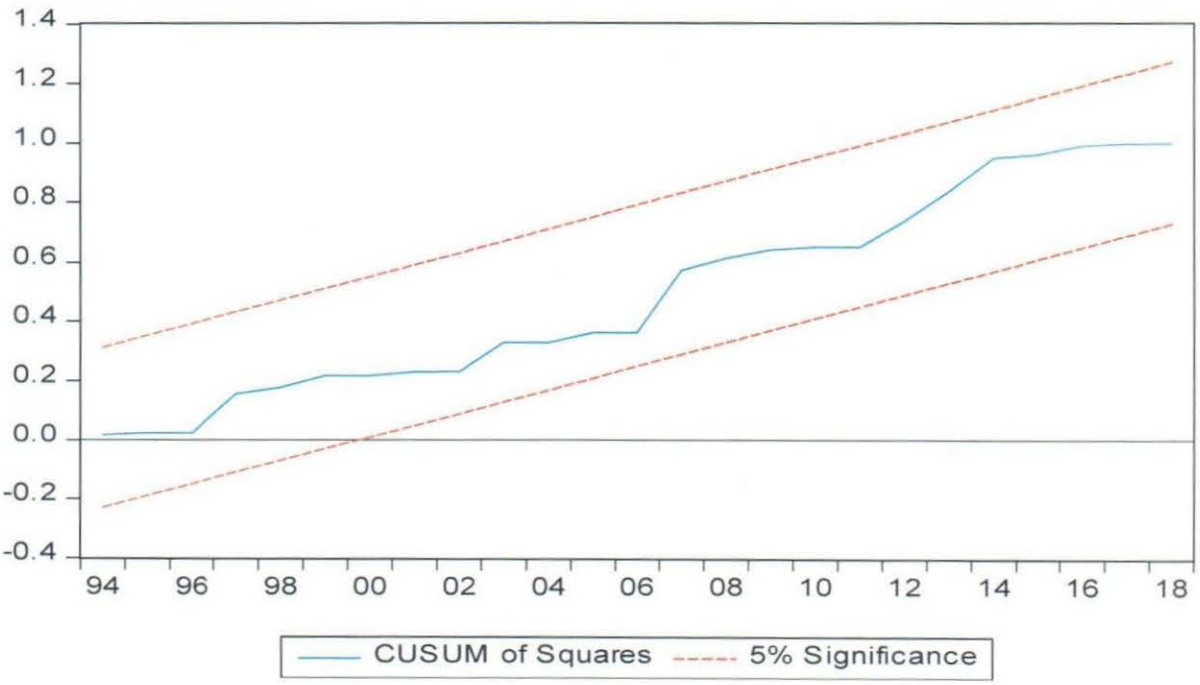
The Cumulative Sum (CUMSUM) and Cumulative Sum of Squares (CUMSUMSQ) tests were applied so as to examine the stability of the parameter after the ECM models were estimated. Figures 11a and 11b show that both the CUMSUM and CUMSUMSQ statistics fall within the critical bounds of ± five percent level of significance. This plots indicate that the coefficients of the results being estimated are stable in the long run and that there exists a long-run relationship between trade policies and economic diversification in Nigeria. This therefore implies that the coefficients are changing gradually.

Figure 11a CUMSUM for Trade Policy Equation



Source: Author's computation using E-views 10.

Figure 11b CUMSUMSQ for Trade Policy Equation



Source: Author's computation using E-views 10.

5.10 Analysis of Macroeconomic Policy Equation

Having appraised the effects of monetary, fiscal and trade policies on economic diversification in Nigeria, we proceed, in this section, to evaluate the combined influence of all these macroeconomic policies on economic diversification in Nigeria.

5.10.1 Co-integration Test for Macroeconomic Policy Equation

The results of the co-integration test based on the ARDL bounds testing approach is presented in table 5.20. The outcome of the bounds test shows that the F-statistic value of 4.19 is greater than the upper bound critical value of 3.28 at five percent level of significance. Since it is also established from the bounds testing procedure that the calculated F-statistic value has exceeded the upper critical bound value at five percent significance level, the study therefore rejected the null version of the hypothesis which says that there is no co-integration and hence, no long-run association among the variables captured in the monetary policy equation and accept the alternative hypothesis that there exists long run co-integrating relationship among the variables of the study. Based on this result, the study concludes that the variables are co-integrated and hence, there is long run relationship among them.

Table 5.19:

ARDL Bounds Test for Co-integration

Test Statistic		Value	K
F-statistic		4.190839	6
Critical Value Bounds:		I0 Bound	I1 Bound
Significance level:			
	10%	1.99	2.94
	5%	2.27	3.28
Decision: There is co-integration			

Source: Author's computation using Eviews 10.

5.10.2 ARDL Long Run Estimates of the Macroeconomic Policy Model

The empirical result of the long run estimation of the macroeconomic policy model using ARDL estimation procedures is presented in table 5.20. It shows that the coefficient of real effective exchange rate (REER) is -0.310. This shows that REER has a negative relationship with economic diversification. This is in line with theoretical postulation as it shows that a one percent increase in REER will lead to a 0.310 percent fall in diversification, *ceteris paribus*. REER however is statistically significant as its probability value is 0.021 and this is lower than 0.05.

The coefficient of money supply (M2) is 1.02 and this shows a positive relationship between M2 and economic diversification. This relationship is in line with *apriori* expectations as a one percent rise in M2 will lead to a 1.02 percent rise in diversification. Its p-value of 0.1395 is however not significant at five percent significance level.

Tax has a coefficient of 0.626. This shows the existence of a positive relationship between tax and diversification. This is not consistent with *apriori* expectation. A one percent rise in tax for instance, will result in a 0.626 percent increase in diversification. The p-value of tax is 0.021 which is higher than 0.05. Thus, it is not statistically significant.

The coefficient of government expenditure (GEXP) is 0.593. This shows the existence of a positive relationship between GEXP and diversification and this is consistent with *apriori* expectation. A one percent rise in GEXP for instance, will result in a 0.593 percent increase in diversification. Its p-value of 0.0062 is significant as it is lower than 0.05.

Trade openness (OPEN) has a coefficient of 0.018. This shows the existence of a positive relationship between OPEN and diversification which is consistent with *apriori* expectation. It follows therefore that a one percent rise in OPEN will result in a 0.018 percent increase in diversification. Its p-value of 0.176 is not significant as it is higher than 0.05.

Foreign direct investment (FDI) has a coefficient of 0.455. This shows the existence of a positive relationship between FDI and diversification and this is consistent with *apriori*

expectation. A one percent rise in FDI for instance, will result in a 0.455 percent increase in diversification. Its p-value of 0.012 is significant at five percent significance level.

Table 5.20:

ARDL Long Run Estimation

Variable	Coefficient	Std. Error	T-statistic	Prob.
REER	-0.309992	0.045092	-6.874683	0.0205
LOG(M2)	1.019593	0.510126	1.998706	0.1395
LOG(TAX)	0.626467	0.076260	8.214883	0.0213
LOG(GEXP)	0.593274	0.041814	14.188405	0.0062
OPEN	0.018343	0.010404	1.763062	0.1761
LOG(FDI)	0.454966	0.049978	9.103318	0.0119
C	-1.076277	27.84806	-0.038648	0.9716

Source: Author's computation using Eviews 10.

5.10.3 Short Run ARDL Estimates of Macroeconomic Policy Equation

The parsimonious error correction results of the macroeconomic sector model based on the Autoregressive distributed lag (ARDL) approach is presented in table 5.22. The result of the short-run dynamics showed that the error correction variable has the expected negative coefficient and is statistically significant in line with theoretical expectation. Its coefficient is -0.574 and this indicates that 57 percent of the systemic disequilibrium in macroeconomic policy variables was corrected each year. This represents a fast speed of adjustment from short run disequilibrium to long run equilibrium.

The value of R-squared is 0.973 and that of the adjusted R-squared is 0.912. The adjusted R-squared shows the model has a good fit. It specifically implies that about 91 percent of total variation in the dependent variable (DIVX) was accounted for by variations in the independent variables. This implies that the estimated model has a good explanatory power. The remaining 9 percent that is unexplained by the model is accounted for by other factors influencing economic diversification in Nigeria but are not included in our specified model.

The Durbin-Watson statistic is 2.171 and falls within the critical region of non-autocorrelation. This shows that the residuals are not correlated. The estimated model is thus well specified and well-behaved. The Durbin-Watson test statistic value is greater than that of the R-square, indicating that the result is not spurious. It is well-behaved and can be used for policy decisions in Nigeria.

Evaluation of the short run coefficients shows that the first and second lag values of diversification index (DIVX) have positive relationships with economic diversification with coefficients of 0.954 and 0.513 respectively. These are consistent with theoretical *apriori* expectation as they demonstrate that a one percent increase in one period and two period lags of diversification index will attract a 0.954 and 0.513 percent rises respectively in diversification, *ceteris paribus*. The variables are also statistically significant as their p-values are 0.012 and 0.036 for one-period and two-period lags respectively and these are lower than 0.05.

The result also showed that real effective exchange rate (REER) equally has a positive relationship with economic diversification in Nigeria. This is not consistent with *apriori* expectations as its coefficient of 0.001 is positive. This implies that a one percent increase in the REER will lead to a rise in diversification by 0.001 percent in the present period, *ceteris paribus*. The variable has a p-value of 0.038. This shows that the variable is statistically significant in influencing economic diversification in the current period as its p-value is less than 0.05.

The first lag of REER shows a negative relationship with economic diversification given its coefficient of -0.001 and this indicates that a one percent increase in two-period lag of REER will attract a 0.001 percent fall in diversification, *ceteris paribus*. This is consistent with *Apriori* expectation. The p-value is 0.023 is statistically significant as it is lower than 0.05. A positive relationship is however observed with the second lag of REER as its coefficient is 0.001 and this is inconsistent with *apriori* expectation. What this imples is that a one percent increase in the one-period lag of REER will lead to a rise in diversification by 0.001 percent, *ceteris paribus*. Its p-value of 0.035 is however significant as it is lower than 0.05.

With a coefficient value of -0.189, money supply (M2) shows a negative relationship with economic diversification. This is however, not in line with theoretical postulation as it shows that a one percent increase in M2 will lead to a fall in diversification by 0.189 percent. M2 is also not statistically significant as its p-value of 0.310 is not significant at five percent level of significance. A positive relationship is however observed between the first lag of M2 and economic diversification as its coefficient is 1.088 and this is consistent with *apriori* expectation. What this implies is that a one percent increase in the first lag of M2 will lead to a rise in diversification by 1.088 percent, *ceteris paribus*. Its p-value of 0.011 is also significant as it is lower than 0.05. The same analysis also goes for the second lag of M2 as its coefficient of 0.797 shows a positive relationship with economic diversification, indicating a 0.797 percent rise in diversification, in the present time, when there is a one percent rise in the second lag of M2. Its p-value of 0.019 is also lower than 0.05 indicating that M2 is statistically significant.

Tax has a positive relationship with the dependent variable, diversification, given its coefficient of 0.591. This, in real terms, means that a one percent rise in tax attracts 0.591 percent increase in diversification and this is not consistent with *apriori* expectation. The p-value of tax is 0.013 which is statistically significant since it is higher than 0.05. A negative relationship is however observed between the one-period lag of tax and economic diversification as its coefficient is -0.004 and this is consistent with *apriori* expectation. What this implies is that a one percent increase in the one-period lag of tax will lead to a fall in diversification by 0.004 percent, *ceteris paribus*. Its p-value 0.970 is however not significant as it is higher than 0.05. Similarly, a negative relationship is also observed between the second lag of tax and economic diversification as its coefficient is -0.418 and this is consistent with *apriori* expectation. It follows therefore, that a one percent increase in the second lag of tax will lead to a fall in diversification by 0.418 percent, *ceteris paribus*. Its p-value of 0.0283 is also significant at five percent significance level.

Government expenditure (GEXP) has a positive relationship with the dependent variable, diversification given its coefficient of 0.255. This, in real terms, means that a one percent rise in GEXP attracts 0.255 percent increase in diversification and this is consistent with *apriori* expectation. The p-value of GEXP is 0.035 which is statistically significant since it is higher than 0.05. A negative relationship is however observed between the first lag of GEXP and economic diversification as its coefficient is -0.694 and this is not consistent with *apriori* expectation. What this implies is that a one percent increase in the first lag of GEXP will lead to a 0.694 percent fall in diversification in the present time, *ceteris paribus*. Its p-value 0.009 is however significant as it is lower than 0.05. Similarly, a negative relationship is also observed between the second lag of GEXP and economic diversification as its coefficient is -0.574 and this is consistent with *apriori* expectation. It follows therefore, that a one percent increase in the second lag of GEXP will lead to a fall in diversification by 0.574 percent, *ceteris paribus*. Its p-value of 0.004 is also significant since it is lower than 0.05.

Trade openness (OPEN) shows a negative relationship with the dependent variable, diversification given its coefficient of 0.014. This means that a one percent rise in OPEN attracts 0.014 percent fall in diversification and this is not consistent with *apriori* expectation. The p-value of OPEN is 0.005 which shows that OPEN is statistically significant at five percent significance level. The first lag of OPEN shows a positive relationship between it and economic diversification given that its coefficient is 0.014 and this is consistent with *apriori* expectation. What this implies is that a one percent increase in the first lag of OPEN will lead to an increase in diversification by 0.014 percent, *ceteris paribus*. Its p-value 0.007 is significant as it is higher than 0.05. Again, a positive relationship is observed between the second lag of OPEN and economic diversification as its coefficient is 0.012 and this is consistent with *apriori* expectation. It follows therefore, that a one percent increase in the the second lag of OPEN will lead to a rise in diversification by 0.012 percent, *ceteris paribus*. Its p-value of 0.0096 is also significant as it is higher than 0.05

Foreign direct investment (FDI) shows a positive relationship with economic diversification given its coefficient of 0.022. This means that a one percent rise in FDI attracts 0.022 percent increase in diversification and this is consistent with *apriori* expectation. The p-value of FDI is 0.137 and this is not statistically significant as it is higher than 0.05. The first lag of FDI also shows a positive relationship between it and economic diversification as its coefficient is 0.024 and this is consistent with *apriori* expectation. What this implies is that a one percent increase in the first lag of FDI will lead to an increase in diversification by 0.024 percent, *ceteris paribus*. Its p-value of 0.085 is not statistically significant as it is higher than 0.05. A negative relationship is however, observed between the second lag of FDI and economic diversification as its coefficient is -0.083 and this is not consistent with *apriori* expectation. It follows therefore, that a one percent increase in the second lag of FDI will lead to a rise in diversification by 0.083 percent in the present time, *ceteris paribus*. Its p-value of 0.004 is however, significant as it is lower than 0.05.

The result also shows that gross fixed capital formation (GFCF), has a positive association with economic diversification in Nigeria. Its coefficient is 1.143. This is in conformity with *Apriori* theoretical expectation. The results implies that a one percent increase in GFCF leads to an increase in diversification of the economy by 1.143 percent *ceteris paribus.* In terms of statistical significance, the variable is statistically significant at five percent level of significance as its p-value is 0.0015.

With a coefficient of -1.078, labour force (LF) shows a negative association with economic diversification in Nigeria. This is not in conformity with *Apriori* theoretical expectation. The result implies that a one percent increase in LF leads to a decrease in diversification of the economy by 1.078 percent, *ceteris paribus.* Its p-value of 0.033 is however significant at five percent level of significance as it is lower than 0.05.

Table 5.21:

Error Correction Result of the Macroeconomic Sector Equation.

Dependent Variable: D(DIVX)

Method: ARDL

ECM Regression				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(DIVX(-1))	0.954223	0.175479	5.437817	0.0122
D(DIVX(-2))	0.512554	0.141621	3.619193	0.0363
D(REER)	0.001054	0.000297	3.552620	0.0380
D(REER(-1))	-0.001448	0.000334	-4.334328	0.0227
D(REER(-2))	0.001295	0.000351	3.685958	0.0346
DLOG(M2)	-0.188954	0.154907	-1.219786	0.3097
DLOG(M2(-1))	1.087961	0.193839	5.612694	0.0112
DLOG(M2(-2))	0.797034	0.172825	4.611802	0.0192
DLOG(TAX)	0.591112	0.112089	5.273587	0.0133
DLOG(TAX(-1))	-0.004151	0.103382	-0.040154	0.9705
DLOG(TAX(-2))	-0.418017	0.104855	-3.986635	0.0283
DLOG(GEXP)	0.254700	0.069555	3.661854	0.0352
DLOG(GEXP(-1))	-0.694186	0.114358	-6.070286	0.0090
DLOG(GEXP(-2))	-0.573910	0.071773	-7.996217	0.0041
D(OPEN)	-0.014443	0.001974	-7.318090	0.0053
D(OPEN(-1))	0.013835	0.002039	6.783886	0.0065
D(OPEN(-2))	0.012316	0.002080	5.921242	0.0096
DLOG(FDI)	0.022056	0.010946	2.014991	0.1373
DLOG(FDI(-1))	0.024132	0.009514	2.536420	0.0849
DLOG(FDI(-2))	-0.083453	0.010063	-8.293083	0.0037
LOG(GFCF)	1.142587	0.101436	11.26413	0.0015
LOG(LF)	-1.077966	0.091829	-11.73880	0.0013
CointEq(-1)*	-0.573910	0.152869	-3.754269	0.0330
R-squared	0.972647	Durbin Watson stat		2.171299
Adjusted R-squared	0.912470	F-statistic		4.190839

Source: Author's computation using E-views 10.

5.11 Diagnostic Test for Macroeconomic Policy Equation

5.11.1 Heteroscedasticity Test, LM Test and Q Test

The results of the tests are summarized in Table 5.22. The Breusch-Godfrey serial LM test statistic of 17.77486 with its probability value of 0.1654 showed that there is no problem of autocorrelation in the model. This is confirmed by the fact that the Chi-square probability value of 0.2356 is higher than the 5 percent significance level. This indicates that the residuals terms are independent and hence there is no autocorrelation in the estimated equation. Meanwhile, the Breusch-Pagan-Godfrey heteroskedasticity test statistic 0.772637 with its probability value of 0.7049 showed that the residuals have constant variance and hence there is no problem of heteroskedasticity in the model. This is confirmed by the fact that the probability value of the observed Chi-squared is 0.4597 which is greater than the 5 percent significance level

Similarly, the Q-statistics as shown in table 5.23 showed that the series is white noise, and hence there is no auto-correlation among the residual terms in the model as the probability values are all higher than 5 percent significance level. This also means that the value of the residual in one particular period was independent or unrelated to the value of the residual terms in another period. That also implied that the co-variation between the residuals was zero. The conclusion from the various test conducted showed that the estimated equation is adequate and well-behaved.

Table 5.22:
Diagnostic test

Breusch-Godfrey Serial Correlation LM Test			
F-statistic	17.77486	Prob. F (2,1)	0.1654
Obs. R-squared	32.09712	Prob. Chi-Square(2)	0.2356
Breusch-Pagan-Godfrey Heteroskedasticity Test			
F-statistic	0.772637	Prob. F(29,3)	0.7049
Obs. R-squared	29.10335	Prob. Chi-Square(29)	0.4597

Source: Author's computation using E-views 10.

Table 5.23

Q-Statistic Test for Macroeconomic Policy Equation

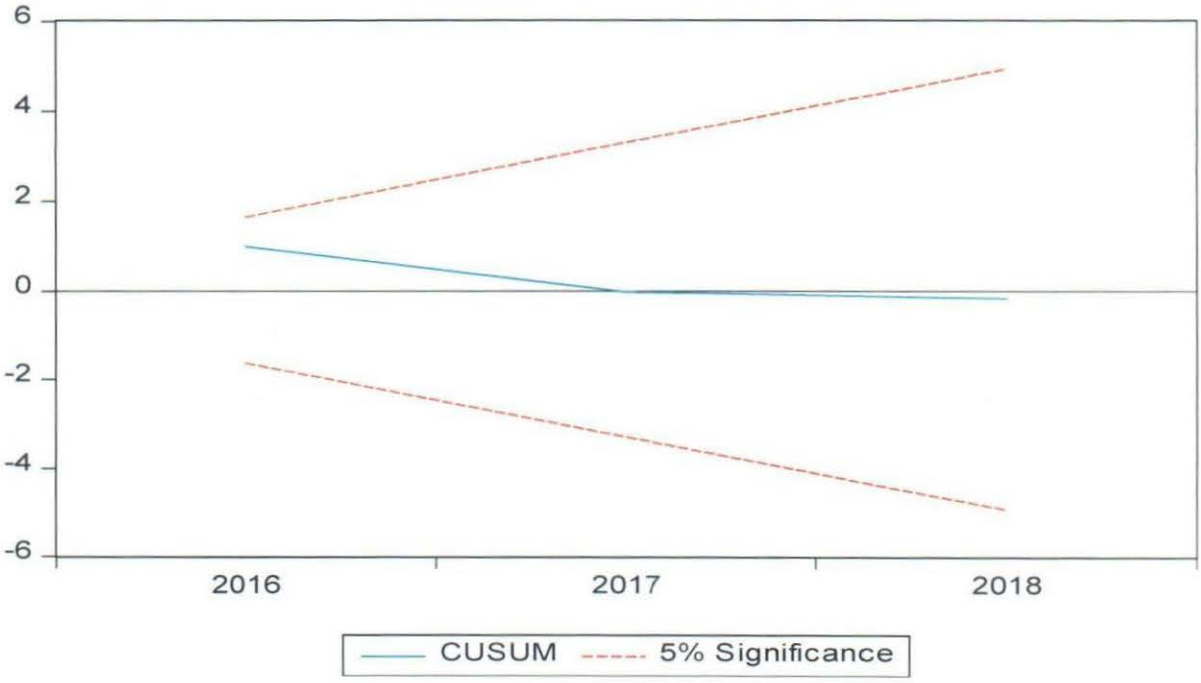
	AC	PAC	Q-Stat	Prob
1	-0.786	-0.786	0.3285	0.343
2	0.406	-0.552	0.4535	0.762
3	-0.065	-0.011	0.5597	0.345
4	-0.118	0.090	0.2147	0.519
5	0.160	0.050	0.2400	0.231
6	-0.148	-0.103	0.1342	0.264
7	0.116	-0.046	0.2744	0.461
8	-0.149	-0.269	0.2773	0.376
9	0.206	-0.017	0.4813	0.488
10	-0.238	-0.014	0.3654	0.648
11	0.203	-0.005	0.4807	0.113
12	-0.150	-0.174	0.5050	0.642
13	0.121	0.024	0.3895	0.441
14	-0.133	-0.155	0.3965	0.701
15	0.108	-0.210	0.6713	0.248
16	-0.020	-0.002	0.4740	0.214

Source: Author's computation using E-views 10.

5.11.2 Stability Test for Macroeconomic Policy Equation

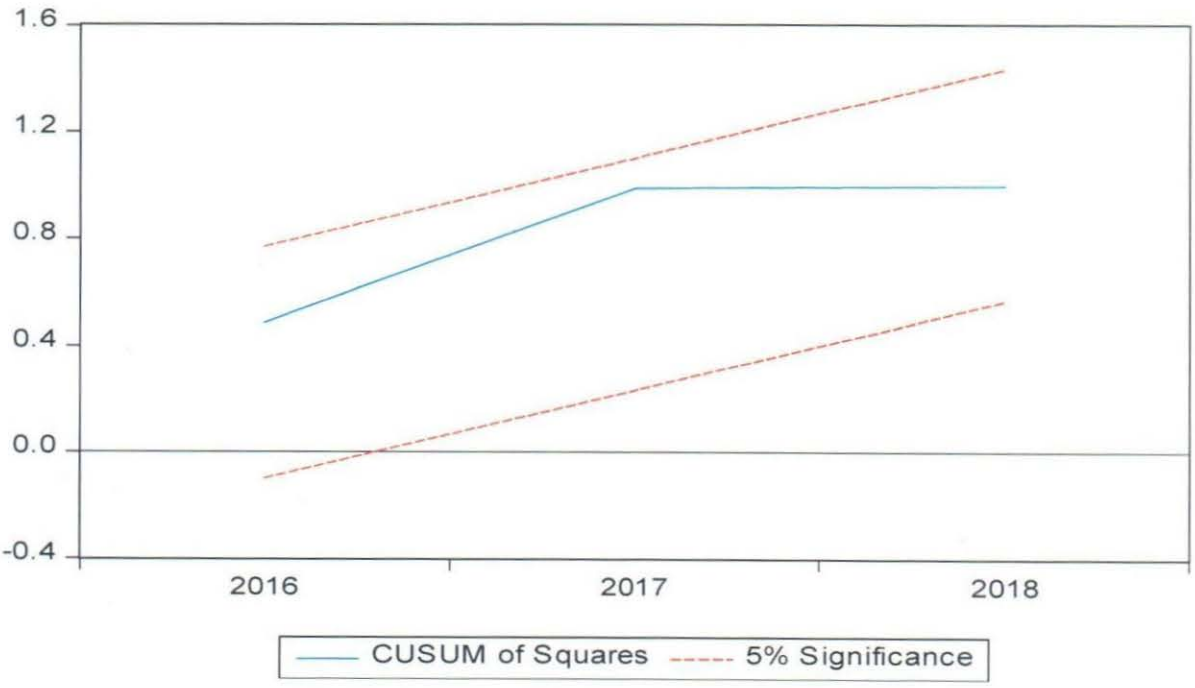
The Cumulative Sum (CUMSUM) and Cumulative Sum of Squares (CUMSUMSQ) tests were applied so as to examine the stability of the parameter after the ECM models were estimated. Figures 12a and 12b show that both the CUMSUM and CUMSUMSQ statistics fall within the critical bounds of ± five percent level of significance. This plots indicate that the coefficients of the results being estimated are stable in the long run and that there exists a long-run relationship between macroeconomic policies and economic diversification in Nigeria. This therefore implies that the coefficients are changing gradually.

Figure 12a CUMSUM for Macroeconomic Policy Equation



Source: Author's computation using E-views 10.

Figure 12b CUMSUM for Macroeconomic Policy Equation



Source: Author's computation using E-views 10.

5.12 Tabular Summary of Regression Result

Table 5.24 presents a tabulated summary of the regression results of our long-run analysis. The table shows that money supply (M2), tax, government expenditure (GEXP), trade openness (OPEN) and foreign direct investment (FDI) all have positive impact on economic diversification (DIVX), real effective exchange rate (REER) and domestic debt showed negative impact on economic diversification. The summary of the joint impact of these variables on economic diversification also show very similar results.

The short run results summary shows that M2, TAX, GEXP, and FDI also have positive effect on DIVX while the impact of REER and OPEN are negative. The short run joint effect of macroeconomic variables on diversification shows a similar result except that the impact of M2 on DIVX is now negative.

Table 5.24

Summary of the Regression Results

REGRESSAND/REGRESSOR	M2	REER	TAX	GEXP	DMD	OPEN	FDI
LONG-RUN RESULTS							
DIVX	+	-	+	+	-	+	+
JOINT EFFECT OF MACROECONOMIC VARIABLES ON ECONOMIC DIVERSIFICATION (LONG-RUN RESULTS)							
DIVX	+	-	+	+		+	+
SHORT-RUN RESULTS							
DIVX	+	-	+	+		-	+
JOINT EFFECT OF MACROECONOMIC VARIABLES ON ECONOMIC DIVERSIFICATION (SHORT-RUN RESULTS)							
DIVX	-	+	+	+		-	+

Source: Compiled by Author from E-views 10.

Note: (i) "+" depicts variables with positive signs, and (ii) "–" depicts variables with negative signs.

5.13 Discussion of Results

From the analysis of the result of this study, it can be seen that macroeconomic (monetary, fiscal and trade) policies have positive and significant impact on economic diversification in Nigeria. The long run result for monetary policies showed for instance, that money supply has a positive impact on economic diversification in Nigeria. This is because, an increase in money supply reduces market interest rate resulting in an increase in planned investment and a consequent increase in aggregate demand and by extension, encourage diversification in the country. (Of course, this is based on the assumption that investment is sensitive to interest rate which is in turn, sensitive to money supply.) This means that the various measures which the monetary authorities put in place to increase the supply of money yielded positive but not significant influence on diversification in Nigeria within the period of study. The positive impact of money supply is consistent with the study carried out by Omoke and Ugwuanyi (2010) which revealed that there is a positive relationship between money supply and output. This also corroborates the earlier work of Nwaobi (1999) which examined the interaction between money and output in Nigeria between periods 1960-1995. The result indicated that unanticipated growth in money supply would have positive effect on diversification.

The result also shows that real effective exchange rate is negative and significant and affects diversification inversely. Consistent with *apriori* expectation, the negative estimate is expected because, an increase (appreciation) in exchange rate encourages a rise in imports and a fall in exports since imports becomes cheaper than exports. This implies that exchange rate depreciation could be good for diversification especially in the long run. This result is consistent with the study carried out by Ayodele (2014), who examined the impact of exchange rate on the Nigeria economy. The author stated that exchange rate has a negative impact because as it increases, economic growth is inversely affected. This result was also in line with the study carried out by Obi and Oniore (2016) and Lawal, Atunde, Ahmed and Abiola (2016) who found out that

exchange rate has no effect on economic growth in the long run though a short run relationship exists between the two.

The long-run result for fiscal policies shows that domestic debt is significantly negative. The empirical results supported previous studies in line with the assertions of most debt/borrowing theories postulating that external and public debts have the same implications for economic diversification and growth. In other words, the relationship demonstrates how the result negatively affects economic diversification in Nigeria. This is in line with the findings of the study conducted by Ayuba and Mohd Khan (2019). Their results revealed that although domestic debt has a positive effect on the total aggregate government revenue, the adverse negative domestic debt hurts the economy.

According to the fiscal policy result, tax has a positive and significant effect on diversification during the period of study. This is also consistent with the macroeconomic policy results. This means that an increase in tax revenue will have a positive and significant effect on diversification. This finding is supported by the study conducted by Okwara and Amori (2017). The study revealed that tax revenue, in spite of leakages, is a major contributor to economic diversification and growth. This study is also consistent with that of Adebiyi and Dauda (2004) which confirmed that trade policy via trade openness and real export including tax were significant determinants of industrial production in Nigeria.

While the fiscal policy result shows that government expenditure has a positive but not significant effect on diversification, the joint macroeconomic long-run result shows it to be both positive and significant. This indicates that government expenditure had a positive and significant effect on diversification during the period of this study. An increase in government expenditure will lead to increase in economic diversification in Nigeria. This is because an increase in government expenditure on basic infrastructure such as electricity, transports, communication, education and health has the potential to reduce production cost in industrial sector, which in turn lead to an increase in diversification. This result is consistent with findings by Eze and Ogiji

(2013), who found that government expenditure significantly affects manufacturing sector output based on the magnitude and the level of significance of the coefficient and p-value.

The trade policy result of this study showed that trade openness has a positive and significant effect on diversification during the period of our analysis. This is further confirmed by the joint macroeconomic analysis which result also showed a significantly positive impact of trade openness. This means that an increase in trade openness will result to a rise in diversification. This relationship is consistent with apriori expectations. To to further strengthen the impact of trade openness, it is expected that exports especially non-oil products should be highly encouraged and supported over and above imports. Domestic industries should be protected from import competition in order for the economy to be strong, rich and powerful and for trade openness to have a more positive effect on the economy. Revenue from crude oil exports should be used to develop other sectors of the economy in order to rapidly diversify her productive and export bases away from the primary sector to the secondary and tertiary sectors. In Nigeria, statistics show that imports exceed exports and domestic industries are faced with fierce competition as regards import competition. This thus retard efforts at significantly diversifying the economy. The result of this study is consistent with the study carried out by Huchet-Bourdon and Cheptea (2011). The authors found that exports of high quality goods have positive impact on growth and diversification and the countries exporting low quality goods experience lower growth and diversificationlevels of which Nigeria is an example. This result is consistent with theoretical *apriori* expectation and in line with the study carried out by Nduka, Chukwu, Kalu and Nwakaire (2013) and Olufemi (2004) whose work also confirmed the positive impact of trade openness on diversification.

Furthermore, trade policy result also shows that foreign direct investment has a positive and significant relationship with diversification consistent with the joint macroeconomic estimation. This is in line with theoretical apriori expectation. The reason behind this is that by providing new production process, techniques, managerial skills and new varieties of capital goods, foreign direct investment (FDI) promotes and encourages diversification of the less

developed countries like Nigeria. The implication from these results is very clear indicating that an increase in FDI is associated with a decrease in the concentration index. In other words an increase FDI promotes diversification in the various sectors of the economy. This result is consistent with the findings as shown by Harding and Javorcik (2007) who attested that there is robust evidence consistent with investment promotion efforts leading to higher FDI inflows.

The trade policy empirical result shows that Gross fixed capital formation (GFCF) has a positive and significant long run relationship with diversification. This is consistent with *apriori* expectation as it implies that an increase in GFCF will lead to a rise in diversification. This result is consistent with the result of Bakare (2011), Orji and Mba (2010). Gross fixed capital formation is expected to exert wide and significant influence on economic diversification, Hence, its application rests mainly on the contributions of the various findings of the study to economic formulation and implementation of same as statutory policies. The impact of such policies will be appreciated from the standpoint of how rapidly and effectively it fosters, innovates or modernizes local enterprises in the respective economies. This is because gross fixed capital formation has been recognized as an essential component to facilitate diversification which translates to economic growth (Overseas Development Institute, 2016). This is supported by Keynes as put by (Tobin, 1965) who argued that new and additional investment increases the aggregate demand in the economy. An increase in domestic investment occurs when existing firms make new investment or new domestic investors enter the market (Faulkner, Loewald & Makrelov, 2013). An increase in investment is expected to provide more jobs or increase the employment level. Meanwhile, higher growth rate of the economy has also been agued to stimulate domestic investments. As a result, from theoretical point of view, there exists bi-directional causality between gross fixed capital formation and economic diversification.

The long run result of trade policy equation further showed that Labour force has a negative but significant impact on economic diversification in Nigeria during the evaluation period. This may account for the fact that 23.1 percent of the labour force in Nigeria is unemployed and

therefore unproductive and in fact, counterproductive. This trend is loosely consistent over the period of study. This will therefore induce a negative impact on diversification. This is consistenct with the study by Kargi (2014) in his study on labour force participation rate and economic growth. He opined that population is advancing in opposite direction with labour force participation. He thought of this as a paradox which resulted in the coinage of concepts like "jobless growth" and "unskilled growth". His study revealed no meaningful correlation between labour force growth and economic growth.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Summary

The thrust of the study was to utilize empirical methods in investigating the impact of macroeconomic policies on economic diversification in Nigeria. In particular, the study examined impact of fiscal, monetary and trade policies on economic diversification in Nigeria. To achieve the above objective, empirical techniques based on bounds testing procedure was adopted within the frame work of autoregressive distributed lag (ARDL) modelling. The specified equations were estimated using ARDL estimation method and the following summary of findings are presented below.

The long-run results showed that monetary policies have significant effects on economic diversification as reflected by the impact of such variables as money supply and real effective exchange rate. The result showed that an increase in money supply impacts positively on investment which helps to expand and diversify the economy. The results also showed that real effective exchange rate has an inverse relationship with diversification. While a devaluation of the currency will stimulate growth and diversification, the result established that currency appreciation will also discourage exports and diversification. In addition, concentration on a narrow basket of primary products for exports and the importation of a wide range of products and services has also negatively impacted on diversification.

The estimated result of fiscal policy shows that domestic debt has a negative and insignificant impact on diversification but its first lag has both positive and significant impact on diversification. The result further indicates that tax has a positive and insignificant impact on diversification in the long run. Government expenditure was also shown to have a positive but insignificant impact on diversification.

The result of trade policy shows that trade openness, foreign direct investment and gross fixed capital formation had positive and significant effect on diversification over the period of study. The impact of labour force on diversification was however, a negative and significant.

To cap it up, the joint impact of these macroeconomic policies (monetary, fiscal and trade) was tested and the result showed that real effective exchange rate demonstrated a negative and significant impact on diversification while money supply showed a positive but insignificant impact on diversification. Tax, foreign direct investment and government expenditure, showed appositive and significant impact on economic diversification within the period of this study. Trade openness showed a positive but insignificant impact on economic diversification in Nigeria.

6.2 Conclusion

This study was undertaken to empirically investigate the impact of monetary, fiscal and trade policies on economic diversification in Nigeria. To crown the research work, this study also empirically investigated the joint impact of these macroeconomic variables on economic diversification. The components used in deriving diversification index (DIVX) were based on current data on the Nigerian economy. The Standard International Trade Classification (SITC) format was used in classifying trade activities into export categories. This afforded the researcher the unique advantage of computing detailed breakdown of sectoral export components (except petroleum sector exports) into the diversification index. Though there have been several studies on the effects of macroeconomic policies on economic diversification, very few, if any, have had to examine these effects on specific sectors and sub-sectors as was done in this study.

The study applied the augmented Dickey-fuller (ADF) test, the Phillip-Peron test, Autoregressive Distributed Lag (ARDL) bounds approach, Granger Causality test and the Error Correction Model (ECM) regression analysis technique. A time series data that spanned a period of thirty five years, from 1983 to 2018 was utilized. The error correction model is correctly signed

for all the equations and statistically significant. The granger causality test shows that there is a causal relationship between macroeconomic policy variables and economic diversification.

The result from the parsimonious estimation of the monetary policy variables shows that monetary policy exerts positive and significant influence on economic diversification in Nigeria. Money supply for instance, has a direct effect on diversification this is possibly because an increase in money supply raises demand and the market inducing expansion in existing products and stimulating the demand for new products and services. Devaluation of the domestic currency also attract similar effects as it encourages exports and discourage imports. Fiscal policy variables like tax and government expenditure also demonstrated strong influence on diversification. A reduction in company tax give more financial strength to corporations for investment, expansion, research and development. Trade openness has a negative but significant impact on diversification. This is possibly due to the fact that imports dominate the Nigerian international market. This trend needs to be reversed as our results have shown that trade openness play a significant role in economic diversification. Foreign direct investment was also seen to have a positive and significant effect on diversification indicating that trade policies are very vital for Nigeria's diversification drive.

The effects of monetary, fiscal and trade policies were tested and the results showed that these policies have significant effects on economic diversification in Nigeria thus leading to the rejection of the first three null hypotheses earlier proposed in chapter one that monetary, fiscal, trade policies individually, do not have any effect on economic diversification in Nigeria and the acceptance of their alternative that they do have significant effects on economic diversification. A fourth null hypothesis was also formulated to the effect that these macroeconomic policies do not have any joint significant effect on economic diversification in Nigeria. This hypothesis was also rejected as these policies, combined were seen to have a significant joint impact on economic diversification in Nigeria. The study therefore, concluded that macroeconomic policies play significant roles in the diversification drive of the Nigerian economy.

6.3.1 Policy Recommendations

Based on the findings of the study, the following recommendations are made to boost the economic diversification and growth of the Nigerian economy.

i. The positive and significant impact of monetary policies on economic diversification should be sustained. Specifically, the exchange rate policies aimed at preserving the value of the domestic currency, maintaining a favourable external reserves position and ensuring external balance should be pursued by the monetary authorities. A realistic exchange rate has the advantage of discouraging import and encouraging exports and diversification.

ii. Monetary authorities are also encouraged to increase money supply as this has similar benefit of increasing private consumption. It decreases interest rate and therefore encourages lending and investment and by extension, increase in output, diversification and growth of the economy. Monetary authorities must however be wary of the tendency of an increase in money supply to lead primarily to inflation. Monetary authorities must ensure viable productive potentials in the economy to respond positively to the rise in money supply.

iii. On the fiscal policy front, the positive impact of tax on economic diversification call for further strengthening of the tax system in Nigeria with the intention to enhance accountability and transparency from government regarding the management of revenue derived from taxation in terms of provision of public goods and services as this will create the enabling environment for rapid economic diversification and transformation. Furthermore, as part of the broader economic diversification programme, tax revenue mobilisation should be used as a policy instrument to shift from the historical overreliance on oil revenues to non-oil revenues which are less volatile and are thus critical for the country's macroeconomic stability.

iv. The positive impact of government expenditure shows that government should ensure that capital expenditure is properly managed to further pursue its objective of diversifying the productive and export bases of the economy in a manner that will raise the nation's production capacity. Government should minimize expenditures on community and social services and transfers. Instead, government should concentrate its expenditure on infrastructure, investment and productive activities to create the enabling environment that will enhance economic diversification. In the same vein, government expenditure should be tailored towards the development of the non-oil sectors of the Nigerian economy.

v. the negative impact of domestic debt implies that the Nigerian Government should drastically reduce domestic debts as our findings have shown that public debt does not help to advance the cause of economic diversification and growth. Government is encouraged to explore other financing options like Public-Private Partnership (PPP) and the encouragement of foreign direct investment. This will reduce the pressure and overreliance on government debt financing and provide the impetus for local and foreign private sectors to participate in economic activities leading to the diversification, growth and development of the Nigerian economy.

vi. On the trade policy front, trade openness and foreign direct investment showed positive and significant impacts on economic diversification. A lot however, needs to be done by policy makers to consolidate and sustain the gains of trade openness and foreign direct investment. Government should discourage, through higher import tariffs, the importation of goods and services that can be produced domestically. The enabling environment for foreign direct investment (stable general price level, good transport and other socio-economic infrastructure, political stability, property rights, exchange rate stability and open markets to mention but a few) should be created and maintained for government to sustain and increase its reservoir of foreign investment in the nation. Exports should carefully be managed away from oil to non-oil commodities. One of the best things the government can

do is to use proceeds from the oil sector to develop the non-oil sectors of the economy and break away from the mono-product economy which Nigeria presently finds herself. That way, over time, the oil sector will seize to be the mainstay of the economy and the largest contributor to the total government revenue and GDP.

6.4 Contribution to Knowledge

The contribution of this study to knowledge lies in the fact that effort has been made here to investigate the effects of macroeconomic policies on economic diversification. We took time to do a disaggregation of the sectors, computing diversification index with the use of the components of subsectors on the basis of Standard International Trade Classification (SITC) and not based on sectoral aggregates as is more common with existing literature. Unlike most other literature on this subject, the study disaggregated the individual effects of monetary, fiscal and trade policies and finally aggregated their combined effect on economic diversification in Nigeria.

6.5 Suggestion for Further Studies

A close examination of the various specifications for this study will reveal that the variables captured within the context of macroeconomic policies are not exhaustive in scope as far as diversification is concerned. Other macroeconomic variables that were not captured are by no means unimportant in influencing economic diversification in Nigeria. This study therefore suggests that intending researchers in this area should attempt to examine the impact of these other variables on the economy.

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Appendix 1

Nigeria's Foreign Trade; Oil and Non-oil Exports from 1981 to 2017 (N' Billion and Percentages)

	Imports					Exports				
Year	Oil	Non-Oil	Oil%	Non-Oil%	Total	Oil	Non-Oil	Oil%	Non-Oil%	Total
1981	0.1198	12.7198	0.93	99.07	12.8396	10.6805	0.3428	96.89	3.11	11.0233
1982	0.2255	10.545	2.09	97.91	10.7705	8.0032	0.2032	97.52	2.48	8.2064
1983	0.1716	8.7321	1.93	98.07	8.9037	7.2012	0.3013	95.98	4.02	7.5025
1984	0.2824	6.8959	3.93	96.07	7.1783	8.8406	0.2474	97.28	2.72	9.088
1985	0.0518	7.0108	0.73	99.27	7.0626	11.2237	0.4971	95.76	4.24	11.7208
1986	0.9139	5.0697	15.27	84.73	5.9836	8.3685	0.5521	93.81	6.19	8.9206
1987	3.1701	14.6916	17.75	82.25	17.8617	28.2086	2.152	92.91	7.09	30.3606
1988	3.8031	17.6426	17.73	82.27	21.4457	28.4354	2.7574	91.16	8.84	31.1928
1989	4.6716	26.1886	15.14	84.86	30.8602	55.0168	2.9544	94.90	5.10	57.9712
1990	6.0731	39.6448	13.28	86.72	45.7179	106.6265	3.2596	97.03	2.97	109.8861
1991	7.7722	81.716	8.69	91.31	89.4882	116.8581	4.6773	96.15	3.85	121.5354
1992	19.5615	123.5897	13.66	86.34	143.1512	201.3839	4.2278	97.94	2.06	205.6117
1993	41.1361	124.4933	24.84	75.16	165.6294	213.7788	4.9913	97.72	2.28	218.7701
1994	42.3496	120.4392	26.02	73.98	162.7888	200.7102	5.349	97.40	2.60	206.0592
1995	155.8259	599.3018	20.64	79.36	755.1277	927.5653	23.0961	97.57	2.43	950.6614
1996	162.1787	400.4479	28.83	71.17	562.6266	1286.216	23.3275	98.22	1.78	1309.543
1997	166.9025	678.8141	19.74	80.26	845.7166	1212.499	29.1633	97.65	2.35	1241.663
1998	175.8542	661.5645	21.00	79.00	837.4187	717.7865	34.0702	95.47	4.53	751.8567
1999	211.6618	650.8539	24.54	75.46	862.5157	1169.477	19.4929	98.36	1.64	1188.97
2000	220.8177	764.2047	22.42	77.58	985.0224	1920.9	24.8229	98.72	1.28	1945.723
2001	237.1068	1121.074	17.46	82.54	1358.18	1839.945	28.0086	98.50	1.50	1867.954
2002	361.71	1150.985	23.91	76.09	1512.695	1649.446	94.73185	94.57	5.43	1744.178
2003	398.9223	1681.313	19.18	80.82	2080.235	2993.11	94.77644	96.93	3.07	3087.886
2004	318.1147	1668.931	16.01	83.99	1987.045	4489.472	113.3094	97.54	2.46	4602.782
2005	797.2989	2003.557	28.47	71.53	2800.856	7140.579	105.9559	98.54	1.46	7246.535
2006	710.683	2397.836	22.86	77.14	3108.519	7191.086	133.595	98.18	1.82	7324.681
2007	768.2268	3143.726	19.64	80.36	3911.953	8110.5	199.2579	97.60	2.40	8309.758
2008	1315.532	4277.649	23.52	76.48	5593.18	9861.834	525.8592	94.94	5.06	10387.69
2009	1068.745	4411.911	19.50	80.50	5480.656	8105.455	500.8646	94.18	5.82	8606.32
2010	1757.14	6406.834	21.52	78.48	8163.975	11300.52	710.9537	94.08	5.92	12011.48
2011	3043.597	7952.267	27.68	72.32	10995.86	14323.15	913.5113	94.00	6.00	15236.67
2012	3064.256	6702.301	31.37	68.63	9766.557	14259.99	879.3352	94.19	5.81	15139.33
2013	2429.376	7010.049	25.74	74.26	9439.425	14131.84	1130.171	92.59	7.41	15262.01
2014	2215.032	8323.748	21.02	78.98	10538.78	12006.97	953.5282	92.64	7.36	12960.49
2015	1725.225	9350.843	15.58	84.42	11076.07	8184.481	660.6783	92.53	7.47	8845.159
2016	2384.412	7095.954	25.15	74.85	9480.367	8178.818	656.794	92.57	7.43	8835.612
2017	2615.454	8189.392	24.21	75.79	10804.85	12913.24	1074.902	92.32	7.68	13988.14

Sources: National Bureau of Statistics and Central Bank of Nigeria - Includes CBN estimates for informal cross border trade. (Percentage distributions are author's computation.)

Appendix 2

Export Diversification Index

YEAR	DIVX	YEAR	DIVX
1983	0.545020442	2001	0.595850516
1984	0.572498889	2002	0.652187921
1985	0.509058567	2003	0.270921544
1986	0.465076188	2004	0.489567837
1987	0.570936564	2005	0.357897482
1988	0.588473059	2006	0.365708451
1989	0.708438486	2007	0.803925968
1990	0.721919861	2008	0.794228914
1991	0.737856774	2009	0.776590259
1992	0.67856808	2010	0.769097038
1993	0.689934661	2011	0.595090515
1994	0.748836701	2012	0.659113103
1995	0.694229099	2013	0.747038568
1996	0.727439452	2014	0.786313507
1997	0.323951345	2015	0.589976789
1998	0.709428958	2016	0.761865306
1999	0.75123352	2017	0.820898403
2000	0.757743736	2018	0.743811358

Source: Author's computation based on data from NBS.

Appendix 3

Sample Calculation of Diversification Index

Export by commodity Sections 1980-2018 = N=Million

Commodity

SECTOR (x_i)	1983	sectional Ratio to Total Export (x_i/X)	$(x_i/X)^2$	1984	sectional Ratio to Total Export	$(x_i/X)^2$	1985	sectional Ratio to Total Export	$(x_i/X)^2$
0. Food and Live Animal	273.93	0.611640037	0.3741035	234.66	0.5234435	0.2739931	243.82	0.633329437	0.401106176
1. Beverages and Tobacco	0.04	8.48464E-05	7.199E-09	0.00	0	0	0.00	0	0
2. Crude materials Inedible Export Fuels	22.50	0.050242482	0.0025243	15.43	0.0344196	0.0011847	15.16	0.039386973	0.001551334
4. Animal and vegetable oils and Fats	3.94	0.008795002	7.735E-05	4.69	0.0104642	0.0001095	3.31	0.008608351	7.41037E-05
5. Chemicals	0.13	0.000288031	8.296E-08	0.96	0.0021459	4.605E-06	1.38	0.003584648	1.28497E-05
6. Manufactured Good Classified Chiefly by materials	9.18	0.020490412	0.0004199	12.39	0.0276405	0.000764	6.33	0.016429638	0.000269933
7. Machinery and Transport Equipment	13.69	0.030558111	0.0009338	5.59	0.012474	0.0001556	0.78	0.002031301	4.12618E-06
8. Miscellaneous manufactured Articles	0.25	0.000555967	3.091E-07	0.20	0.0004528	2.051E-07	0.04	0.000111696	1.24759E-08
9. Commodities and Transactions Not Classified According to Kind	124.21	0.277345111	0.0769203	174.37	0.3889594	0.1512894	114.15	0.296517956	0.087922898
Total	447.87	1.00	0.45	448.29	1.00	0.43	384.98	1.00	0.49
DIVX = 1 - Σ(xi/X)2			0.5450204			0.5724989			0.509058567

SOURCE :Researcher's Computation using data from NBS

Appendix 4

Export by commodity sections based on Standard International trade Classification (SITC) (1983-2018)

Export by commodity Sections 1980-2018 = N=Million

Commodity (SITC) \ YEAR	0. Food and Live Animal	1. Beverages and Tobacco	2. Crude materials Inedible Export Fuels	3. Mineral fuels Lubricants and related materials	4. Animal and vegetable oils and Fats	5. Chemicals	6. Manufactured Good Classified Chiefly by materials	7. Machinery and Transport Equipment	8. Miscellaneous manufactured Articles	9. Commodities and Transactions Not Classified According to Kind	Total All Sections:
1983	273.934	0.038	22.502	7303.987	3.939	0.129	9.177	13.686	0.249	124.214	7751.855
1984	234.655	0.00	15.43	8690.485	4.691	0.962	12.391	5.592	0.203	174.367	9138.776
1985	243.816	0.00	15.163	11335.811	3.314	1.38	6.325	0.782	0.043	114.152	11720.786
1986	254.7388	-0.03507	5.5384	8286.771533	-0.5844	0.7458	3.979533333	2.334333333	-4.233133333	169.2435333	8718.4993
1987	262.0764571	-0.06318	-0.430342857	7783.767019	-2.512371429	0.639886	1.086019048	-0.35952381	-6.250219048	191.4584476	8229.4122
1988	269.4141143	-0.0913	-6.399085714	7280.762505	-4.440342857	0.533971	-1.807495238	-3.053380952	-8.267304762	213.6733619	7740.325
1989	276.7517714	-0.11941	-12.36782857	6777.75799	-6.368314286	0.428057	-4.701009524	-5.747238095	-10.28439048	235.8882762	7251.2379
1990	284.0894286	-0.14752	-18.33657143	6274.753476	-8.296285714	0.322143	-7.59452381	-8.441095238	-12.30147619	258.1031905	6762.1508
1991	291.4270857	-0.17564	-24.30531429	5771.748962	-10.22425714	0.216229	-10.4880381	-11.13495238	-14.3185619	280.3181048	6273.0636
1992	298.7647429	-0.20375	-30.27405714	5268.744448	-12.15222857	0.110314	-13.38155238	-13.82880952	-16.33564762	302.533019	5783.9765
1993	306.1024	-0.23187	-36.2428	4765.739933	-14.0802	0.0044	-16.27506667	-16.52266667	-18.35273333	324.7479333	5294.8893
1994	313.4400571	-0.25998	-42.21154286	4262.735419	-16.00817143	-0.10151	-19.16858095	-19.21652381	-20.36981905	346.9628476	4805.8022
1995	320.7777143	-0.2881	-48.18028571	3759.730905	-17.93614286	-0.20743	-22.06209524	-21.91038095	-22.38690476	369.1777619	4316.715
1996	328.1153714	-0.31621	-54.14902857	3256.72639	-19.86411429	-0.31334	-24.95560952	-24.6042381	-24.40399048	391.3926762	3827.6279
1997	335.4530286	-0.34432	-60.11777143	2753.721876	-21.79208571	-0.41926	-27.84912381	-27.29809524	-26.42107619	413.6075905	3338.5408
1998	342.7906857	-0.37244	-66.08651429	2250.717362	-23.72005714	-0.52517	-30.7426381	-29.99195238	-28.4381619	435.8225048	2849.4536
1999	350.1283429	-0.40055	-72.05525714	1747.712848	-25.64802857	-0.63109	-33.63615238	-32.68580952	-30.45524762	458.037419	2360.3665
2000	357.466	-0.42867	-78.024	1244.708333	-27.576	-0.737	-36.52966667	-35.37966667	-32.47233333	480.2523333	1871.2793
2001	364.8036571	-0.45678	-83.99274286	741.703819	-29.50397143	-0.84291	-39.42318095	-38.07352381	-34.48941905	502.4672476	1382.1922
2002	372.1413143	-0.4849	-89.96148571	238.6993048	-31.43194286	-0.94883	-42.31669524	-40.76738095	-36.50650476	524.6821619	893.10505
2003	379.4789714	-0.51301	-95.93022857	-264.3052095	-33.35991429	-1.05474	-45.21020952	-43.4612381	-38.52359048	546.8970762	404.0179
2004	386.8166286	-0.54112	-101.8989714	-767.3097238	-35.28788571	-1.16066	-48.10372381	-46.15509524	-40.54067619	569.1119905	-85.069238
2005	394.1542857	-0.56924	-107.8677143	-1270.314238	-37.21585714	-1.26657	-50.9972381	-48.84895238	-42.5577619	591.3269048	-574.15638
2006	401.4919429	-0.59735	-113.8364571	-1773.318752	-39.14382857	-1.37249	-53.89075238	-51.54280952	-44.57484762	613.541819	-1063.2435
2007	408.8296	-0.62547	-119.8052	-2276.323267	-41.0718	-1.4784	-56.78426667	-54.23666667	-46.59193333	635.7567333	-1552.3307
2008	416.1672571	-0.65358	-125.7739429	-2779.327781	-42.99977143	-1.58431	-59.67778095	-56.93052381	-48.60901905	657.9716476	-2041.4178
2009	423.5049143	-0.6817	-131.7426857	-3282.332295	-44.92774286	-1.69023	-62.57129524	-59.62438095	-50.62610476	680.1865619	-2530.505
2010	430.8425714	-0.70981	-137.7114286	-3785.33681	-46.85571429	-1.79614	-65.46480952	-62.3182381	-52.64319048	702.4014762	-3019.5921
2011	438.1802286	-0.73792	-143.6801714	-4288.341324	-48.78368571	-1.90206	-68.35832381	-65.01209524	-54.66027619	724.6163905	-3508.6792
2012	445.5178857	-0.76604	-149.6489143	-4791.345838	-50.71165714	-2.00797	-71.2518381	-67.70595238	-56.6773619	746.8313048	-3997.7664
2013	452.8555429	-0.79415	-155.6176571	-5294.350352	-52.63962857	-2.11389	-74.14535238	-70.39980952	-58.69444762	769.046219	-4486.8535
2014	460.1932	-0.82227	-161.5864	-5797.354867	-54.5676	-2.2198	-77.03886667	-73.09366667	-60.71153333	791.2611333	-4975.9407
2015	467.5308571	-0.85038	-167.5551429	-6300.359381	-56.49557143	-2.32571	-79.93238095	-75.78752381	-62.72861905	813.4760476	-5465.0278
2016	474.8685143	-0.8785	-173.5238857	-6803.363895	-58.42354286	-2.43163	-82.82589524	-78.48138095	-64.74570476	835.6909619	-5954.115
2017	482.2061714	-0.90661	-179.4926286	-7306.36841	-60.35151429	-2.53754	-85.71940952	-81.1752381	-66.76279048	857.9058762	-6443.2021
2018	489.5438286	-0.93472	-185.4613714	-7809.372924	-62.27948571	-2.64346	-88.61292381	-83.86909524	-68.77987619	880.1207905	-6932.2892

Source: National Bureau of Statistics (various years)

Appendix 5

Data for Regression Analysis (1983-2018)

DATA FOR REGRESSION ANALYSIS

YEAR	DIVX	M2	REER	TAX	GEXP	FDI	DMD	GFCF	LF	OPEN
1983	0.54502	17.69	395.34	0.5615	4.89	8,225,000.00	22.22	12,679,330,000	23,651,428	10.0449686
1984	0.572499	20.11	546.4	0.7872	4.10	-27,000,000.00	25.67	7,989,760,000	24,451,958	9.38054123
1985	0.509059	22.3	489.93	1.0043	5.46	861,000.00	27.95	8,352,480,000	25,252,487	10.3919786
1986	0.465076	23.81	267.64	1.1025	8.53	1,501,000.00	28.44	11,762,460,000	26,053,016	9.13584572
1987	0.570937	27.57	85.27	1.2352	6.37	1,847,000.00	36.79	14,172,580,000	26,853,546	19.4953351
1988	0.588473	38.36	85.68	1.5508	8.34	14,411,000.00	47.03	14,569,710,000	27,654,075	16.9406097
1989	0.708438	45.9	76.3	1.9143	15.03	-7,890,000.00	47.05	26,835,510,000	28,454,604	34.1826173
1990	0.72192	52.86	70.79	2.9973	24.05	5,061,000.00	84.09	40,621,310,000	29,286,947	30.9247401
1991	0.737857	75.4	60.01	3.8279	28.34	797,748,186.29	116.20	45,390,230,000	30,040,723	37.0216049
1992	0.678568	111.11	49.78	5.4172	39.76	414,600,000.00	177.96	71,109,160,000	30,825,405	38.2273883
1993	0.689935	165.34	54.54	9.5541	54.50	411,500,000.00	273.84	97,365,510,000	31,635,860	33.7197549
1994	0.748837	230.29	100.86	12.2748	70.92	260,100,000.00	407.58	105,868,000,000	32,492,025	23.0592365
1995	0.694229	289.09	160.23	21.8783	121.14	532,700,000.00	477.73	142,271,000,000	33,394,658	39.5283784
1996	0.727439	345.85	207.77	22.0000	212.93	328,200,000.00	419.98	204,434,000,000	34,217,680	40.2577292
1997	0.323951	413.28	236.08	26.0000	269.65	191,753,359.71	501.75	243,347,000,000	35,100,936	51.4610108
1998	0.709429	488.15	272.52	33.3153	309.02	597,184,659.58	560.83	242,770,000,000	36,027,324	39.2786075
1999	0.751234	628.95	70.19	46.2112	498.03	102,972,821.10	794.81	232,240,000,000	37,011,197	34.4578312
2000	0.757744	878.46	69.91	51.1474	239.45	158,800,978.80	898.25	331,678,000,000	37,993,680	48.9955995
2001	0.595851	1269.32	77.88	68.6600	438.70	172,817,608.84	1,016.97	372,820,000,000	38,927,763	49.6805003
2002	0.652188	1505.96	78.13	89.1040	321.38	168,938,514.51	1,166.00	500,424,000,000	39,914,966	40.0351686
2003	0.270922	1952.92	73.25	114.7711	241.69	93,883,556.75	1,329.68	866,704,000,000	40,890,770	49.3349649
2004	0.489568	2131.82	74.96	130.1000	351.25	172,161,494.59	1,370.33	864,000,000,000	41,723,316	31.8958704
2005	0.357897	2637.91	85.55	162.2000	519.47	167,321,366.73	1,525.91	805,582,000,000	42,828,205	33.0594601
2006	0.365708	3797.91	91.5	244.9000	552.39	260,755,093.63	1,753.26	1,548,000,000,000	43,882,211	42.5665658
2007	0.803926	5127.4	89.65	327.0000	759.28	14,635,077.22	2,169.64	1,938,380,000,000	45,010,413	39.3369315
2008	0.794229	8008.2	99.12	416.8000	960.89	319,622,852.70	2,320.31	2,054,570,000,000	46,203,876	40.7968353
2009	0.77659	9411.11	92.14	568.1000	1,152.80	867,529,682.91	3,228.03	3,052,200,000,000	47,453,585	36.0587104
2010	0.769097	11034.94	100	657.3000	883.87	1,051,590,461.06	4,551.82	9,591,060,000,000	48,753,690	43.3207568
2011	0.595091	12172.49	100.31	700.5000	918.55	1,525,139,601.07	5,622.84	10,329,200,000,000	50,041,195	53.2779583
2012	0.659113	13895.39	111.39	848.6000	874.70	911,716,673.71	6,537.54	10,822,900,000,000	51,387,354	44.532368
2013	0.747039	15160.29	118.81	985.5000	1,108.39	816,764,595.74	7,118.98	12,073,600,000,000	52,794,893	31.0488599
2014	0.786314	17679.29	127.09	1,207.3000	783.12	1,530,129,291.17	7,904.03	14,244,100,000,000	54,234,993	30.8851937
2015	0.589977	18901.3	126.07	1,029.1000	818.35	1,227,437,644.36	8,837.00	14,743,100,000,000	55,790,869	21.4469297
2016	0.761865	21607.68	115.68	988.4000	634.79	1,601,232,660.38	11,058.20	17,795,298,214,286	57,369,993	20.7225189
2017	0.820898	23040.67	113.28	1,206.3000	612.91	1,754,367,679.66	11,518.95	19,613,399,761,905	59,012,447	26.34759900
2018	0.743811	24889.61	113.16	1,096.8500	535.93	1,933,338,181.85	12,594.89	21,431,501,309,524	60,698,492	20.2206612

Sources: Central Bank of Nigeria Statistical Bulletin and National Bureau of Statistics (various years)

Appendix 6

UNIT ROOT TESTS

AUGMENTED DICKEY FULLER

Null Hypothesis: DIVX has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on AIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.962863	0.0196
Test critical values:	1% level	-4.243644	
	5% level	-3.544284	
	10% level	-3.204699	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: DMD has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on AIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		2.073422	1.0000
Test critical values:	1% level	-4.243644	
	5% level	-3.544284	
	10% level	-3.204699	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(DMD) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic - based on AIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.748670	0.0029
Test critical values:	1% level	-4.252879	
	5% level	-3.548490	
	10% level	-3.207094	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: FDI has a unit root

Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on AIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.179164	0.4859
Test critical values:	1% level	-4.243644	
	5% level	-3.544284	
	10% level	-3.204699	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(FDI) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on AIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-8.107011	0.0000
Test critical values:	1% level	-4.252879	
	5% level	-3.548490	
	10% level	-3.207094	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: GEXP has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 2 (Automatic - based on AIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.809441	0.6773
Test critical values:	1% level	-4.262735	
	5% level	-3.552973	
	10% level	-3.209642	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(GEXP) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on AIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-7.379776	0.0000
Test critical values:	1% level	-4.252879	
	5% level	-3.548490	
	10% level	-3.207094	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: GFCF has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on AIC, maxlag=3)

	t-Statistic	Prob.*

Augmented Dickey-Fuller test statistic		0.506705	0.9989
Test critical values:	1% level	-4.243644	
	5% level	-3.544284	
	10% level	-3.204699	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(GFCF) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on AIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.725037	0.0002
Test critical values:	1% level	-4.252879	
	5% level	-3.548490	
	10% level	-3.207094	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: LF has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on AIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		10.77889	1.0000
Test critical values:	1% level	-4.243644	
	5% level	-3.544284	
	10% level	-3.204699	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(LF) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 1 (Automatic - based on AIC, maxlag=4)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-6.278754	0.0001
Test critical values:	1% level	-4.273277	
	5% level	-3.557759	
	10% level	-3.212361	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: MS has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 3 (Automatic - based on AIC, maxlag=3)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-0.101523	0.9926

Test critical values:	1% level	-4.273277
	5% level	-3.557759
	10% level	-3.212361

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(MS) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 4 (Automatic - based on AIC, maxlag=4)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.034051	0.0187
Test critical values:	1% level	-4.309824	
	5% level	-3.574244	
	10% level	-3.221728	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: REER has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 1 (Automatic - based on AIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.718197	0.0002
Test critical values:	1% level	-4.252879	
	5% level	-3.548490	
	10% level	-3.207094	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: TAX has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 3 (Automatic - based on AIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.853973	0.6545
Test critical values:	1% level	-4.273277	
	5% level	-3.557759	
	10% level	-3.212361	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(TAX) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 8 (Automatic - based on AIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.459253	0.0079
Test critical values:	1% level	-4.356068	
	5% level	-3.595026	
	10% level	-3.233456	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: OPEN has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on AIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.106254	0.5246
Test critical values:	1% level	-4.243644	
	5% level	-3.544284	
	10% level	-3.204699	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(OPEN) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 3 (Automatic - based on AIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.493879	0.0061
Test critical values:	1% level	-4.284580	
	5% level	-3.562882	
	10% level	-3.215267	

*MacKinnon (1996) one-sided p-values.

PHILIPS PERRON TEST

Null Hypothesis: DIVX has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 0 (Newey-West automatic) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-3.962863	0.0196
Test critical values:	1% level	-4.243644	
	5% level	-3.544284	
	10% level	-3.204699	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(FDI) has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 5 (Newey-West automatic) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-9.215822	0.0000
Test critical values:	1% level	-4.252879	
	5% level	-3.548490	
	10% level	-3.207094	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(GEXP) has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 3 (Used-specified) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-7.227267	0.0000
Test critical values:	1% level	-4.252879	
	5% level	-3.548490	
	10% level	-3.207094	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(GFCF) has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 3 (Used-specified) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-5.739721	0.0002
Test critical values:	1% level	-4.252879	
	5% level	-3.548490	
	10% level	-3.207094	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(LF) has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 3 (Used-specified) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-11.21455	0.0000
Test critical values:	1% level	-4.262735	
	5% level	-3.552973	
	10% level	-3.209642	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(MS) has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 3 (Used-specified) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-4.916125	0.0019
Test critical values:	1% level	-4.252879	
	5% level	-3.548490	
	10% level	-3.207094	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(REER) has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 3 (Used-specified) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-5.129558	0.0011
Test critical values:	1% level	-4.252879	
	5% level	-3.548490	
	10% level	-3.207094	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(DMD) has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 3 (Used-specified) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-4.773639	0.0027
Test critical values:	1% level	-4.252879	
	5% level	-3.548490	
	10% level	-3.207094	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(TAX) has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 3 (Used-specified) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-5.862989	0.0002
Test critical values:	1% level	-4.252879	
	5% level	-3.548490	
	10% level	-3.207094	

*MacKinnon (1996) one-sided p-values.

RESULT OF MONETARY POLICY MODEL

Dependent Variable: DIVX
Method: ARDL
Date: 10/19/19 Time: 00:06
Sample (adjusted): 1985 2018
Included observations: 34 after adjustments
Maximum dependent lags: 3 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (3 lags, automatic): LOG(M2) LOG(REER) LOG(DMD)
Fixed regressors: LOG(GFCF) LOG(LF) C
Number of models evalulated: 192
Selected Model: ARDL(1, 2, 1, 2)
Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
DIVX(-1)	0.101722	0.168097	0.605138	0.5513
LOG(M2)	-0.099528	0.294900	-0.337496	0.7389
LOG(M2(-1))	0.742788	0.418911	1.773141	0.0901
LOG(M2(-2))	-0.839144	0.302737	-2.771857	0.0111
LOG(REER)	-0.015925	0.084713	-0.187983	0.8526
LOG(REER(-1))	0.143244	0.081735	1.752539	0.0936

LOG(DMD)	0.128543	0.205685	0.624948	0.5384
LOG(DMD(-1))	0.301129	0.258644	1.164263	0.2568
LOG(DMD(-2))	-0.522798	0.202586	-2.580621	0.0171
LOG(GFCF)	0.019437	0.109808	0.177006	0.8611
LOG(LF)	2.600110	1.089508	2.386499	0.0260
C	-44.34581	17.68552	-2.507465	0.0200

R-squared	0.540904	Mean dependent var	0.645977
Adjusted R-squared	0.311356	S.D. dependent var	0.148745
S.E. of regression	0.123435	Akaike info criterion	-1.075632
Sum squared resid	0.335199	Schwarz criterion	-0.536916
Log likelihood	30.28574	Hannan-Quinn criter.	-0.891914
F-statistic	2.356386	Durbin-Watson stat	2.297633
Prob(F-statistic)	0.041898		

*Note: p-values and any subsequent tests do not account for model selection.

ARDL Long Run Form and Bounds Test
Dependent Variable: D(DIVX)
Selected Model: ARDL(1, 2, 1, 2)
Case 2: Restricted Constant and No Trend
Date: 10/30/19 Time: 05:37
Sample: 1983 2018
Included observations: 34

Conditional Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-44.34581	17.68552	-2.507465	0.0200
DIVX(-1)	-0.898278	0.168097	-5.343814	0.0000
LOG(M2(-1))	-0.195884	0.121638	-1.610380	0.1216
(REER(-1))	0.127319	0.070060	1.817276	0.0428
LOG(DMD(-1))	-0.093126	0.099358	-0.937272	0.3588
DLOG(M2)	-0.099528	0.294900	-0.337496	0.7389
DLOG(M2(-1))	0.839144	0.302737	2.771857	0.0111
D(REER)	-0.015925	0.084713	-0.187983	0.8526
DLOG(DMD)	0.128543	0.205685	0.624948	0.5384
DLOG(DMD(-1))	0.522798	0.202586	2.580621	0.0171
LOG(GFCF)	0.019437	0.109808	0.177006	0.8611
LOG(LF)	2.600110	1.089508	2.386499	0.0260

ARDL LONG RUN ESTIMATION AND BOUNDS TEST

Levels Equation
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(M2)	0.218066	0.129369	1.685614	0.1060
(REER)	-0.141737	0.078103	-1.814748	0.0332
C	-49.36757	20.46798	-2.411941	0.0247

EC = DIVX - (-0.2181*LOG(M2) + 0.1417*(REER)
-49.3676)

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	6.493966	10%	2.37	3.2
K	2	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66
			Finite Sample: n=35	
Actual Sample Size	34	10%	2.618	3.532
		5%	3.164	4.194
		1%	4.428	5.816
			Finite Sample: n=30	
		10%	2.676	3.586
		5%	3.272	4.306
		1%	4.614	5.966

SHORT RUN ESTIMATION

ARDL Error Correction Regression
Dependent Variable: D(DIVX)
Selected Model: ARDL(1, 3, 2)

Case 2: Restricted Constant and No Trend
Date: 10/18/19 Time: 23:46
Sample: 1983 2018
Included observations: 33

ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLOG(M2)	0.023975	0.259109	0.092528	0.9271
DLOG(M2(-1))	1.054929	0.283466	3.721532	0.0012
DLOG(M2(-2))	0.427999	0.305393	1.401471	0.1750
D(REER)	-0.044377	0.072207	-0.614573	0.5451
D(REER(-1))	-0.138382	0.075501	-1.832851	0.0804
LOG(GFCF)	0.192203	0.039625	4.850560	0.0001
LOG(LF)	2.273792	0.440937	5.156725	0.0000
CointEq(-1)*	-0.984386	0.190705	-5.161816	0.0000

R-squared	0.566462	Mean dependent var	0.007114
Adjusted R-squared	0.5245071	S.D. dependent var	0.168134
S.E. of regression	0.125249	Akaike info criterion	-1.109810
Sum squared resid	0.392183	Schwarz criterion	-0.747020
Log likelihood	26.31186	Hannan-Quinn criter.	-0.987742
F-statistic	6.493966	Durbin-Watson statistic	2.090282
Prob(F-statistic)	0.0002		

* p-value incompatible with t-Bounds distribution.

Prob(F-statistic)

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	6.493966	10%	2.37	3.2
K	2	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66

LM TEST FOR MONETARY EQUATION

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.786629	Prob. F(2,20)	0.4690
Obs*R-squared	2.406568	Prob. Chi-Square(2)	0.3002

Test Equation:
Dependent Variable: RESID
Method: ARDL
Date: 10/18/19 Time: 23:52
Sample: 1986 2018
Included observations: 33
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DIVX(-1)	0.187063	0.424081	0.441102	0.6639
LOG(M2)	0.002705	0.307186	0.008806	0.9931
LOG(M2(-1))	0.107857	0.495852	0.217518	0.8300
LOG(M2(-2))	-0.273776	0.521393	-0.525087	0.6053
LOG(M2(-3))	0.151550	0.452588	0.334853	0.7412
(REER)	0.006318	0.093747	0.067391	0.9469
(REER(-1))	-0.018605	0.123467	-0.150690	0.8817
(REER(-2))	0.025133	0.105432	0.238377	0.8140
LOG(GFCF)	0.079714	0.135027	0.590357	0.5616
LOG(LF)	-0.645416	1.487052	-0.434024	0.6689
C	9.033633	24.80628	0.364167	0.7196
RESID(-1)	-0.297203	0.473801	-0.627275	0.5376
RESID(-2)	-0.329795	0.297413	-1.108878	0.2806

R-squared	0.072926	Mean dependent var	-5.38E-15
Adjusted R-squared	-0.483318	S.D. dependent var	0.110705
S.E. of regression	0.134830	Akaike info criterion	-0.882502
Sum squared resid	0.363582	Schwarz criterion	-0.292969
Log likelihood	27.56128	Hannan-Quinn criter.	-0.684142
F-statistic	0.131105	Durbin-Watson stat	2.090853
Prob(F-statistic)	0.999577		

Q-STATS

Date: 10/18/19 Time: 23:54
Sample: 1983 2018

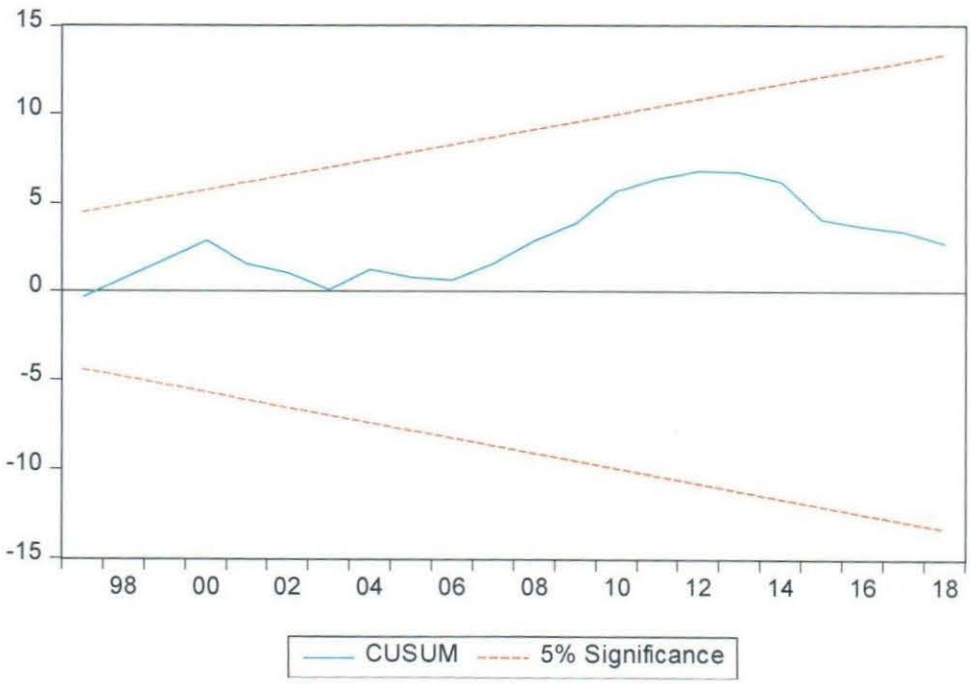
Included observations: 33
Q-statistic probabilities adjusted for 1 dynamic regressor

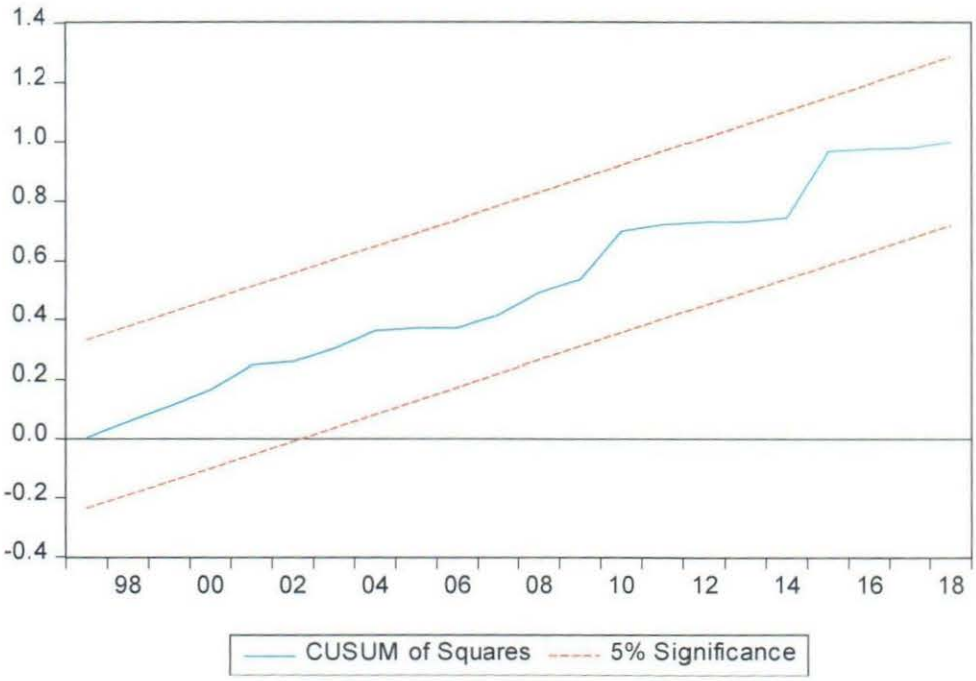
Autocorrelation	Partial Correlation		AC	PAC	Q-Stat	Prob*
. | . |	. | . |	1	-0.057	-0.057	0.1189	0.730
. *| . |	. *| . |	2	-0.169	-0.173	1.1881	0.552
. | . |	. | . |	3	0.062	0.042	1.3351	0.721
. | . |	. | . |	4	-0.018	-0.043	1.3486	0.853
. *| . |	. *| . |	5	-0.079	-0.068	1.6072	0.900
. | . |	. | . |	6	0.064	0.044	1.7803	0.939
. *| . |	.**| . |	7	-0.187	-0.211	3.3304	0.853
. *| . |	. *| . |	8	-0.112	-0.119	3.9064	0.865
. |*. |	. | . |	9	0.109	0.019	4.4786	0.877
. *| . |	. *| . |	10	-0.099	-0.135	4.9749	0.893
. | . |	. | . |	11	-0.061	-0.056	5.1681	0.923
. | . |	. *| . |	12	-0.008	-0.114	5.1713	0.952
. | . |	. | . |	13	-0.016	-0.052	5.1852	0.971
. | . |	. | . |	14	0.055	0.004	5.3719	0.980
. *| . |	.**| . |	15	-0.113	-0.227	6.1842	0.976
. *| . |	. *| . |	16	-0.089	-0.126	6.7202	0.978

*Probabilities may not be valid for this equation specification.

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.573990	Prob. F(11,22)	0.1757
Obs*R-squared	14.97365	Prob. Chi-Square(11)	0.1837
Scaled explained SS	4.945811	Prob. Chi-Square(11)	0.9338





RESULT OF FISCAL POLICY MODEL

Dependent Variable: DIVX
Method: ARDL
Date: 10/19/19 Time: 00:11
Sample (adjusted): 1985 2018
Included observations: 34 after adjustments
Maximum dependent lags: 3 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (3 lags, automatic): LOG(TAX) LOG(GEXP) LOG(DMD)
Fixed regressors: LOG(GFCF) LOG(LF) C
Number of models evalulated: 192
Selected Model: ARDL(1, 0, 0, 2)
Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
DIVX(-1)	0.182074	0.180164	1.010603	0.3219
LOG(TAX)	-0.147151	0.130493	-1.127654	0.2702
LOG(GEXP)	0.105637	0.075187	1.404983	0.1723
LOG(DMD)	0.033475	0.199207	0.168042	0.8679
LOG(DMD(-1))	0.320655	0.262442	1.221814	0.2332
LOG(DMD(-2))	-0.524278	0.194462	-2.696045	0.0124
LOG(GFCF)	-0.005499	0.096519	-0.056973	0.9550
LOG(LF)	2.187580	1.166222	1.875783	0.0724
C	-36.50727	18.97623	-1.923842	0.0658

R-squared	0.394513	Mean dependent var	0.645977
Adjusted R-squared	0.200757	S.D. dependent var	0.148745
S.E. of regression	0.132979	Akaike info criterion	-0.975328
Sum squared resid	0.442083	Schwarz criterion	-0.571292
Log likelihood	25.58058	Hannan-Quinn criter.	-0.837540
F-statistic	2.036132	Durbin-Watson stat	2.164509
Prob(F-statistic)	0.083328		

*Note: p-values and any subsequent tests do not account for model selection.

ARDL Long Run Form and Bounds Test
Dependent Variable: D(DIVX)
Selected Model: ARDL(1, 0, 0, 2)
Case 2: Restricted Constant and No Trend
Date: 10/19/19 Time: 00:12
Sample: 1983 2018
Included observations: 34

Conditional Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-36.50727	18.97623	-1.923842	0.0658
DIVX(-1)*	-0.817926	0.180164	-4.539894	0.0001
LOG(TAX)**	-0.147151	0.130493	-1.127654	0.2702
LOG(GEXP)**	0.105637	0.075187	1.404983	0.1723
LOG(DMD(-1))	-0.170148	0.139620	-1.218653	0.2344
DLOG(DMD)	0.033475	0.199207	0.168042	0.8679
DLOG(DMD(-1))	0.524278	0.194462	2.696045	0.0124
LOG(GFCF)	-0.005499	0.096519	-0.056973	0.9550
LOG(LF)	2.187580	1.166222	1.875783	0.0724

* p-value incompatible with t-Bounds distribution.
** Variable interpreted as Z = Z(-1) + D(Z).

ARDL LONG RUN ESTIMATION AND BOUNDS TEST

Levels Equation
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(TAX)	0.075786	0.078870	6.592947	0.0222
LOG(GEXP)	0.130858	0.109494	1.195114	0.2506
LOG(DMD)	-0.268942	0.128500	-2.092923	0.0438
C	33.77336	25.70823	1.313718	0.2087

EC = DIVX - (0.0757*LOG(TAX) -0.1309*LOG(GEXP) - 0.2689*LOG(DMD) + 33.7734)

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	3.781482	10%	2.37	3.2
k	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66
			Finite Sample: n=35	
Actual Sample Size	32			
		10%	2.618	3.532
		5%	3.164	4.194
		1%	4.428	5.816
			Finite Sample: n=30	
		10%	2.676	3.586
		5%	3.272	4.306
		1%	4.614	5.966

SHORT RUN ESTIMATION

ARDL Error Correction Regression
Dependent Variable: D(DIVX)
Selected Model: ARDL(4, 3, 4, 0)
Case 2: Restricted Constant and No Trend
Date: 11/06/19 Time: 19:55
Sample: 1983 2018
Included observations: 32

ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(DIVX(-1))	0.755303	0.256686	2.942515	0.0101
D(DIVX(-2))	0.602927	0.205854	2.928903	0.0104
D(DIVX(-3))	0.406767	0.154920	2.625649	0.0191
DLOG(TAX)	0.038134	0.138086	0.276164	0.7862
DLOG(TAX(-1))	-0.065290	0.140483	-0.464757	0.6488
DLOG(TAX(-2))	-0.692285	0.137996	-5.016714	0.0002
DLOG(GEXP)	0.070194	0.075044	0.935374	0.0364
DLOG(GEXP(-1))	0.158892	0.071886	2.210333	0.0430
DLOG(GEXP(-2))	0.040597	0.070213	0.578192	0.5717
DLOG(GEXP(-3))	0.272945	0.067072	4.069456	0.0010
LOG(GFCF)	0.044692	0.014987	2.982056	0.0093
LOG(LF)	-2.662637	0.573263	-4.644708	0.0003
CointEq(-1)	-0.616667	0.066179	-9.318214	0.0113

R-squared	0.792681	Mean dependent var	0.008710
Adjusted R-squared	0.661743	S.D. dependent var	0.170570
S.E. of regression	0.099203	Akaike info criterion	-1.492090
Sum squared resid	0.186984	Schwarz criterion	-0.896635
Log likelihood	36.87344	Hannan-Quinn criter.	-1.294714
F-statistic	3.981482	Durbin-Watson stat	2.162748
Prob(F-statistic)	0.002320		

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	3.981482	10%	2.37	3.2
k	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66

Q -STATS

Date: 11/06/19 Time: 20:16
Sample: 1983 2018
Included observations: 32
Q-statistic probabilities adjusted for 4 dynamic regressors

Autocorrelation	Partial Correlation		AC	PAC	Q-Stat	Prob*
. *| . |	. *| . |	1	-0.114	-0.114	0.4593	0.498
***| . |	***| . |	2	-0.373	-0.391	0.5107	0.564
. | . |	. *| . |	3	-0.057	-0.193	0.6336	0.131
. |* . |	. | . |	4	0.185	-0.010	0.9696	0.138
. |* . |	. |* . |	5	0.158	0.129	0.9817	0.157
. *| . |	. | . |	6	-0.099	0.034	0.3920	0.211
.**| . |	.**| . |	7	-0.337	-0.272	0.8335	0.464
. | . |	.**| . |	8	-0.027	-0.221	0.7369	0.100
. |*** |	. |* . |	9	0.359	0.090	0.5482	0.221
. *| . |	.**| . |	10	-0.189	-0.287	0.7243	0.619
.**| . |	. *| . |	11	-0.223	-0.176	0.2815	0.214
. | . |	. *| . |	12	-0.015	-0.196	0.1828	0.721
. |*** |	. |* . |	13	0.360	0.211	0.3261	0.863
. | . |	. *| . |	14	0.013	-0.067	0.4272	0.235
. *| . |	. | . |	15	-0.129	0.046	0.2330	0.276
. *| . |	. | . |	16	-0.137	-0.053	0.4607	0.736

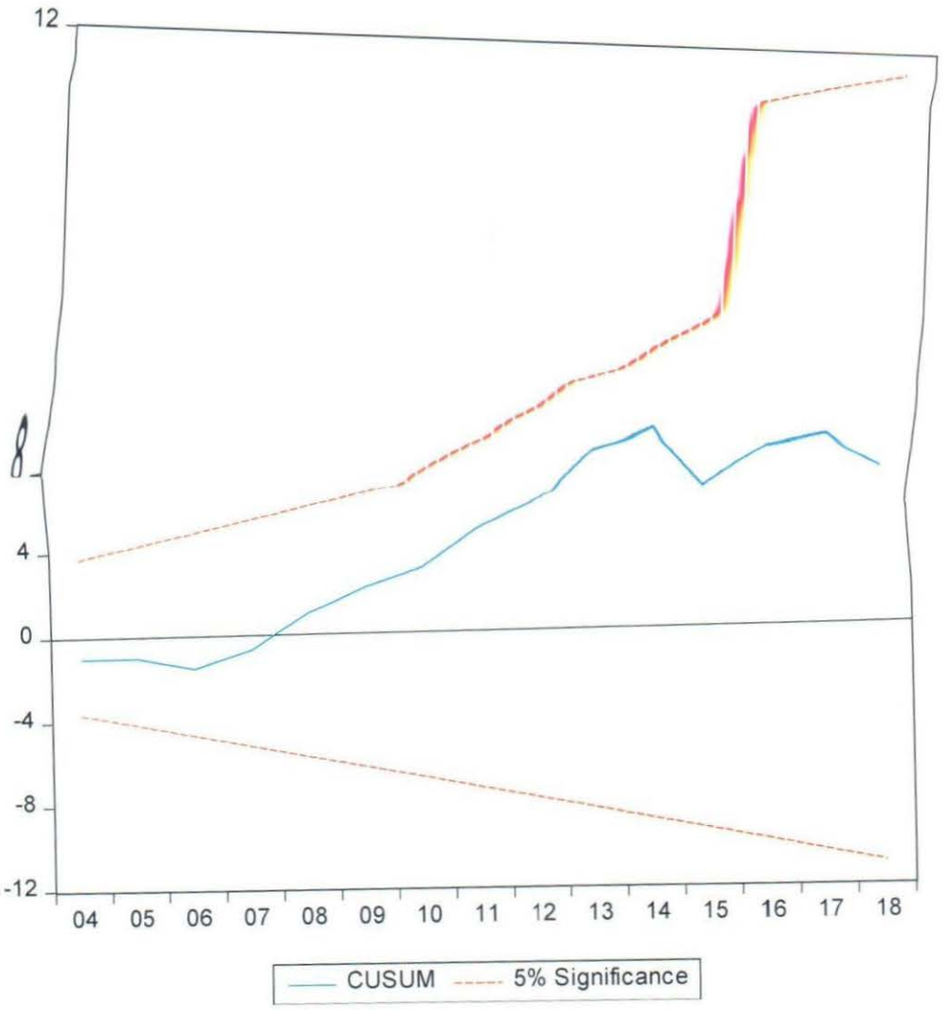
*Probabilities may not be valid for this equation specification.

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.723564	Prob. F(16,15)	0.7362
Obs*R-squared	13.93928	Prob. Chi-Square(16)	0.6032

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.426013	Prob. F(2,13)	0.4342
Obs*R-squared	0.196286	Prob. Chi-Square(2)	0.7315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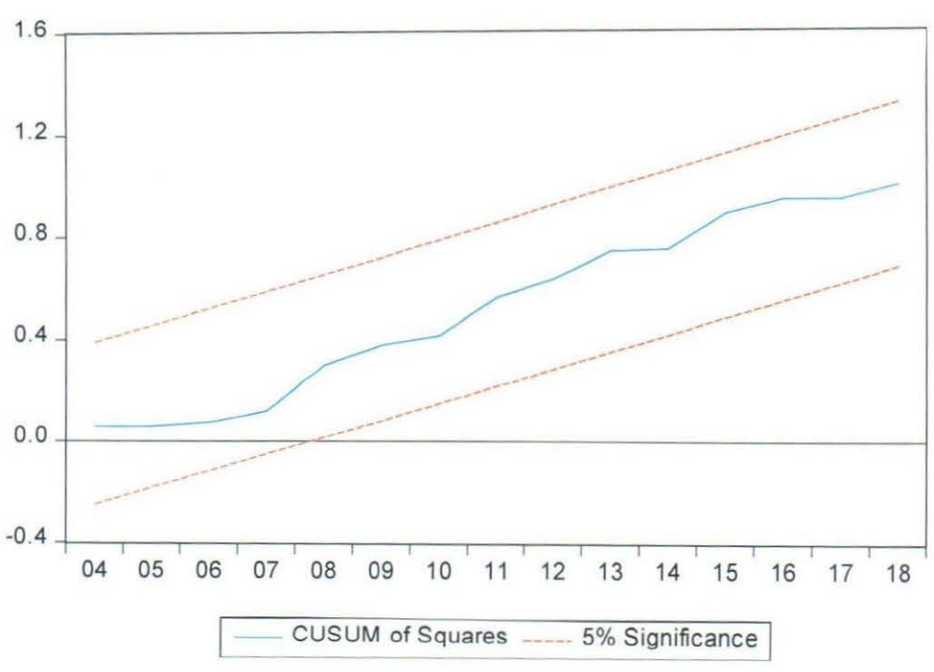
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5% Significance

RESULT OF TRADE POLICY MODEL

Dependent Variable: DIVX
Method: ARDL
Date: 10/19/19 Time: 00:32
Sample (adjusted): 1986 2018
Included observations: 33 after adjustments
Maximum dependent lags: 3 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (3 lags, automatic): OPEN LOG(FDI) LOG(GFCF) LOG(LF)
Fixed regressors: C
Number of models evalulated: 768
Selected Model: ARDL(3, 2, 3, 3, 3)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
DIVX(-1)	-0.320590	0.273378	-1.172697	0.2605
DIVX(-2)	-0.837413	0.336740	-2.486825	0.0261
DIVX(-3)	-0.882306	0.292795	-3.013395	0.0093
OPEN	-0.008056	0.004121	-1.954970	0.0709
OPEN(-1)	0.013658	0.004953	2.757266	0.0154
OPEN(-2)	0.008886	0.004931	1.802012	0.0931
LOG(FDI)	0.115837	0.043355	2.671803	0.0182
LOG(FDI(-1))	0.065486	0.030627	2.138148	0.0506
LOG(FDI(-2))	0.030187	0.024498	1.232240	0.2382
LOG(FDI(-3))	0.043449	0.027124	1.601850	0.1315
LOG(GFCF)	0.336620	0.200833	1.676117	0.1159
LOG(GFCF(-1))	-0.267112	0.212545	-1.256731	0.2294
LOG(GFCF(-2))	-0.335902	0.185306	-1.812683	0.0914
LOG(GFCF(-3))	-0.195571	0.139571	-1.401230	0.1829
LOG(LF)	50.28280	25.99783	1.934115	0.0736
LOG(LF(-1))	3.506247	38.71014	0.090577	0.9291
LOG(LF(-2))	31.58544	41.86957	0.754377	0.4631
LOG(LF(-3))	-81.82568	31.08942	-2.631946	0.0197
C	-58.06165	24.98862	-2.323524	0.0357

R-squared	0.682055	Mean dependent var	0.650126
Adjusted R-squared	0.273268	S.D. dependent var	0.149040
S.E. of regression	0.127055	Akaike info criterion	-0.994336
Sum squared resid	0.226000	Schwarz criterion	-0.132711
Log likelihood	35.40655	Hannan-Quinn criter.	-0.704426
F-statistic	1.668485	Durbin-Watson stat	2.064551
Prob(F-statistic)	0.167700		

*Note: p-values and any subsequent tests do not account for model selection.

ARDL LONG RUN ESTIMATION AND BOUNDS TEST

Levels Equation
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.

OPEN	0.004765	0.001661	2.868680	0.0124
LOG(FDI)	0.083860	0.010937	7.667824	0.0000
LOG(GFCF)	0.151946	0.055285	2.748416	0.0157
LOG(LF)	-1.167249	0.498833	-2.339958	0.0346
C	-19.09728	7.509041	-2.543239	0.0234

EC = DIVX - (0.0048*OPEN + 0.0839*LOG(FDI) -0.1519*LOG(GFCF) + 1.1672 *LOG(LF) -19.0973)

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	4.478246	10%	2.2	3.09
k	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37
			Finite Sample: n=35	
Actual Sample Size	33			
		10%	2.46	3.46
		5%	2.947	4.088
		1%	4.093	5.532
			Finite Sample: n=30	
		10%	2.525	3.56
		5%	3.058	4.223
		1%	4.28	5.84

SHORT RUN ESTIMATION

ARDL Error Correction Regression
Dependent Variable: D(DIVX)
Selected Model: ARDL(3, 2, 3, 3, 3)
Case 2: Restricted Constant and No Trend
Date: 10/19/19 Time: 00:35
Sample: 1983 2018
Included observations: 33

ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(DIVX(-1))	1.719719	0.370888	4.636762	0.0004
D(DIVX(-2))	0.882306	0.242519	3.638090	0.0027
D(OPEN)	-0.008056	0.002932	-2.747819	0.0157
D(OPEN(-1))	-0.008886	0.003700	-2.401388	0.0308
DLOG(FDI)	0.115837	0.028642	4.044272	0.0012
DLOG(FDI(-1))	-0.073636	0.022671	-3.248005	0.0058
DLOG(FDI(-2))	-0.043449	0.018632	-2.331983	0.0351
DLOG(GFCF)	0.336620	0.139915	2.405896	0.0305
DLOG(GFCF(-1))	0.531473	0.135438	3.924108	0.0015

DLOG(GFCF(-2))	0.195571	0.097931	1.997019	0.0656
DLOG(LF)	50.28281	19.01549	2.644307	0.0192
DLOG(LF(-1))	50.24024	19.04886	2.637440	0.0195
DLOG(LF(-2))	81.82569	22.17652	3.689745	0.0024
CointEq(-1)*	-0.882306	0.292795	-3.013395	0.0093

R-squared	0.750169	Mean dependent var	0.007114
Adjusted R-squared	0.579231	S.D. dependent var	0.168134
S.E. of regression	0.109063	Akaike info criterion	-1.297367
Sum squared resid	0.226000	Schwarz criterion	-0.662485
Log likelihood	35.40655	Hannan-Quinn criter.	-1.083748
Durbin-Watson stat	2.064550	F-statistic	4.478246
Prob(F-statistic	0.000720		

* p-value incompatible with t-Bounds distribution.

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	4.478246	10%	2.2	3.09
k	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37

Date: 10/19/19 Time: 00:38
Sample: 1983 2018
Included observations: 33
Q-statistic probabilities adjusted for 3 dynamic regressors

Autocorrelation	Partial Correlation		AC	PAC	Q-Stat	Prob*
. *| . |	. *| . |	1	-0.144	-0.144	0.7440	0.388
.**| . |	.**| . |	2	-0.262	-0.289	3.3079	0.191
. | . |	. | . |	3	0.051	-0.043	3.4080	0.333
.**| . |	***| . |	4	-0.253	-0.365	5.9565	0.202
. | . |	. *| . |	5	-0.025	-0.182	5.9830	0.308
. |** |	. |*. |	6	0.335	0.130	0.2787	0.495
. | . |	. | . |	7	-0.065	-0.043	10.975	0.140
. | . |	. | . |	8	-0.056	-0.008	11.119	0.195
. |*. |	. |*. |	9	0.125	0.105	11.866	0.221
***| . |	.**| . |	10	-0.405	-0.332	0.1099	0.328
. | . |	. *| . |	11	-0.023	-0.143	0.2128	0.344
. |** |	. | . |	12	0.306	0.001	2.2294	0.413
. *| . |	. *| . |	13	-0.089	-0.103	5.7148	0.218
. | . |	. *| . |	14	-0.041	-0.199	5.2848	0.427
. |*. |	. | . |	15	0.128	-0.049	6.2904	0.530
. *| . |	. | . |	16	-0.188	-0.049	2.3305	0.322

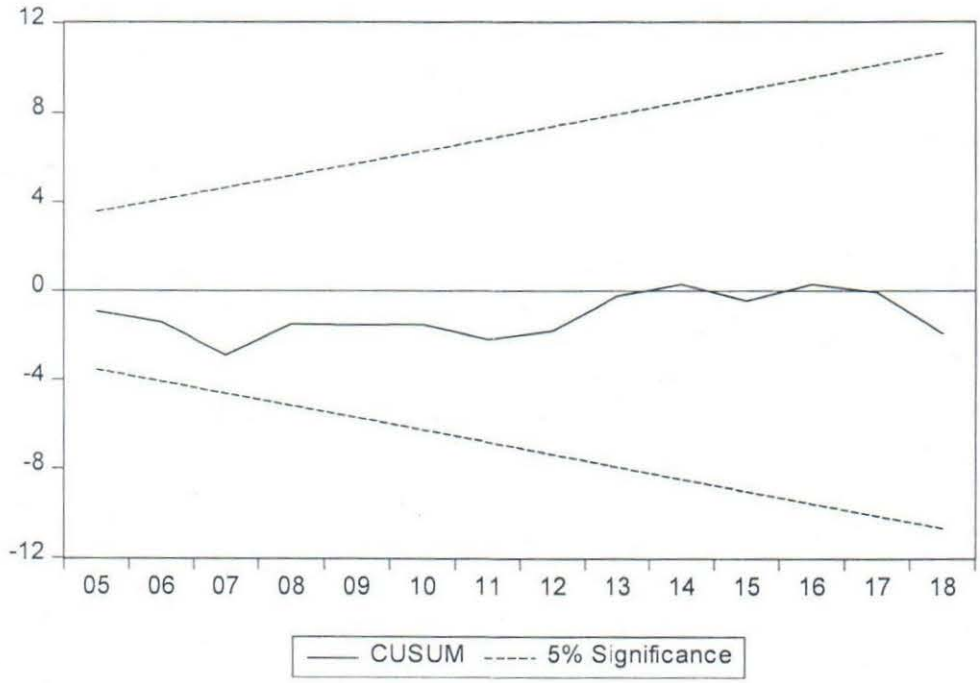
*Probabilities may not be valid for this equation specification.

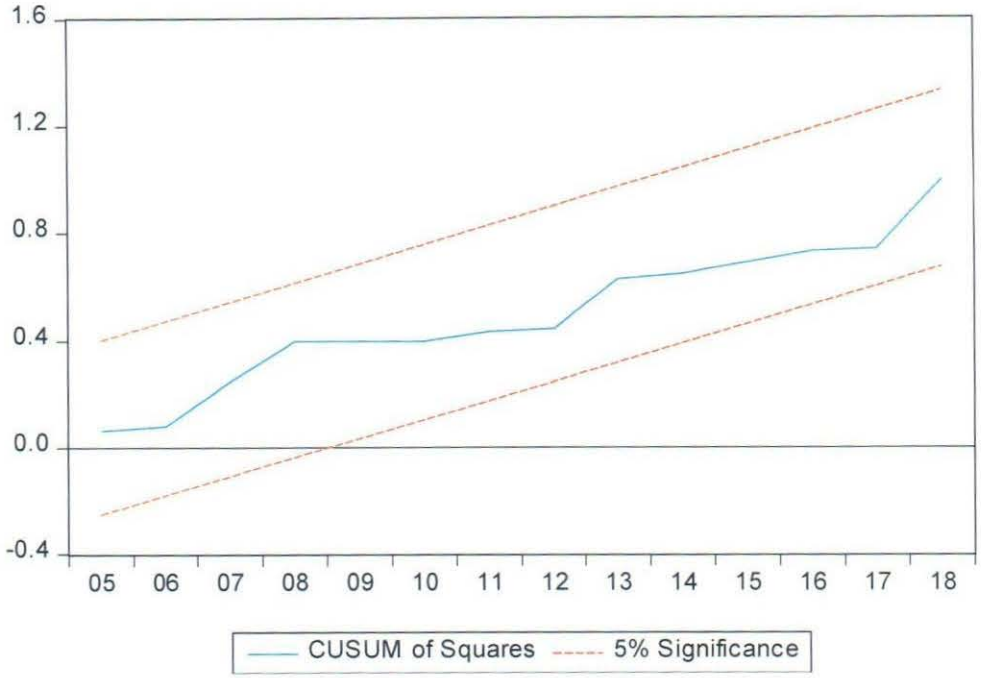
Breusch-Godfrey Serial Correlation LM Test:

F-statistic	8.624222	Prob. F(2,12)	0.1134
Obs*R-squared	10.04141	Prob. Chi-Square(2)	0.3366

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.401303	Prob. F(17,14)	0.9619
Obs*R-squared	10.48445	Prob. Chi-Square(17)	0.8821
Scaled explained SS	1.481781	Prob. Chi-Square(17)	1.0000





RESULT OF MACROECONOMIC POLICY MODEL

Dependent Variable: DIVX
Method: ARDL
Date: 10/19/19 Time: 00:50
Sample (adjusted): 1986 2018
Included observations: 33 after adjustments
Maximum dependent lags: 3 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (3 lags, automatic): REER LOG(M2) LOG(TAX) LOG(GEXP) OPEN LOG(FDI)
Fixed regressors: LOG(GFCF) LOG(LF) C
Number of models evalulated: 12288
Selected Model: ARDL(3, 3, 3, 3, 3, 3, 3)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
DIVX(-1)	0.241023	0.229777	1.048943	0.3713
DIVX(-2)	-0.441669	0.392675	-1.124768	0.3426
DIVX(-3)	-0.512554	0.431856	-1.186866	0.3207
REER	0.001054	0.000849	1.241373	0.3027
REER(-1)	-0.002505	0.001078	-2.323032	0.1028
REER(-2)	0.002743	0.001167	2.350603	0.1003
REER(-3)	-0.001295	0.000992	-1.304705	0.2831
LOG(M2)	-0.188954	0.456215	-0.414177	0.7066
LOG(M2(-1))	-0.469852	0.700444	-0.670791	0.5504
LOG(M2(-2))	-0.290927	0.534621	-0.544174	0.6242
LOG(M2(-3))	-0.797034	0.527315	-1.511495	0.2278
LOG(TAX)	0.591112	0.324811	1.819864	0.1663
LOG(TAX(-1))	-0.277628	0.337314	-0.823056	0.4708
LOG(TAX(-2))	-0.413866	0.284083	-1.456850	0.2412
LOG(TAX(-3))	0.418017	0.379650	1.101059	0.3513
LOG(GEXP)	0.254700	0.191979	1.326706	0.2766
LOG(GEXP(-1))	-0.296278	0.221267	-1.339005	0.2730
LOG(GEXP(-2))	0.120276	0.179816	0.668885	0.5514
LOG(GEXP(-3))	0.573910	0.152869	3.754269	0.0330

OPEN	-0.014443	0.006182	-2.336287	0.1016
OPEN(-1)	-0.003147	0.004968	-0.633500	0.5714
OPEN(-2)	-0.001519	0.004541	-0.334525	0.7600
OPEN(-3)	-0.012316	0.006268	-1.964981	0.1442
LOG(FDI)	0.022056	0.034623	0.637046	0.5694
LOG(FDI(-1))	-0.053275	0.029792	-1.788208	0.1717
LOG(FDI(-2))	-0.107585	0.029930	-3.594532	0.0369
LOG(FDI(-3))	0.083453	0.027494	3.035377	0.0561
LOG(GFCF)	1.142587	0.220169	5.189594	0.0139
LOG(LF)	-1.077966	2.900597	-0.371636	0.7349
C	-1.843878	47.58908	-0.038746	0.9715

R-squared	0.965189	Mean dependent var	0.650126
Adjusted R-squared	0.628687	S.D. dependent var	0.149040
S.E. of regression	0.090818	Akaike info criterion	-2.539628
Sum squared resid	0.024744	Schwarz criterion	-1.179166
Log likelihood	71.90385	Hannan-Quinn criter.	-2.081874
F-statistic	2.868300	Durbin-Watson stat	2.171299
Prob(F-statistic)	0.209613		

*Note: p-values and any subsequent tests do not account for model selection.

ARDL LONG RUN ESTIMATION AND BOUNDS TEST

Levels Equation
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
REER	-0.309992	0.045092	-6.874683	0.0205
LOG(M2)	1.019593	0.510126	1.998706	0.1395
LOG(TAX)	0.626467	0.076260	8.214883	0.0213
LOG(GEXP)	0.593274	0.041814	14.188405	0.0062
OPEN	0.018343	0.010404	1.763062	0.1761
LOG(FDI)	0.454966	0.049978	9.103318	0.0119
C	-1.076277	27.84806	-0.038648	0.9716

EC = DIVX - (-0.0000*REER -1.0196*LOG(M2) + 0.1854*LOG(TAX) + 0.3809 *LOG(GEXP) -0.0183*OPEN -0.0323*LOG(FDI) -1.0763)

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	4.190839	10%	1.99	2.94
K	6	5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99
			Finite Sample: n=35	
Actual Sample Size	33	10%	2.254	3.388
		5%	2.685	3.96
		1%	3.713	5.326
			Finite Sample: n=30	

10%	2.334	3.515
5%	2.794	4.148
1%	3.976	5.691

SHORT RUN ESTIMATION

ARDL Error Correction Regression
Dependent Variable: D(DIVX)
Selected Model: ARDL(3, 3, 3, 3, 3, 3, 3)
Case 2: Restricted Constant and No Trend
Date: 10/19/19 Time: 00:53
Sample: 1983 2018
Included observations: 33

ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(DIVX(-1))	0.954223	0.175479	5.437817	0.0122
D(DIVX(-2))	0.512554	0.141621	3.619193	0.0363
D(REER)	0.001054	0.000297	3.552620	0.0380
D(REER(-1))	-0.001448	0.000334	-4.334328	0.0227
D(REER(-2))	0.001295	0.000351	3.685958	0.0346
DLOG(M2)	-0.188954	0.154907	-1.219786	0.3097
DLOG(M2(-1))	1.087961	0.193839	5.612694	0.0112
DLOG(M2(-2))	0.797034	0.172825	4.611802	0.0192
DLOG(TAX)	0.591112	0.112089	5.273587	0.0133
DLOG(TAX(-1))	-0.004151	0.103382	-0.040154	0.9705
DLOG(TAX(-2))	-0.418017	0.104855	-3.986635	0.0283
DLOG(GEXP)	0.254700	0.069555	3.661854	0.0352
DLOG(GEXP(-1))	-0.694186	0.114358	-6.070286	0.0090
DLOG(GEXP(-2))	-0.573910	0.071773	-7.996217	0.0041
D(OPEN)	-0.014443	0.001974	-7.318090	0.0053
D(OPEN(-1))	0.013835	0.002039	6.783886	0.0065
D(OPEN(-2))	0.012316	0.002080	5.921242	0.0096
DLOG(FDI)	0.022056	0.010946	2.014991	0.1373
DLOG(FDI(-1))	0.024132	0.009514	2.536420	0.0849
DLOG(FDI(-2))	-0.083453	0.010063	-8.293083	0.0037
LOG(GFCF)	1.142587	0.101436	11.26413	0.0015
LOG(LF)	-1.077966	0.091829	-11.73880	0.0013
CointEq(-1)*	-0.573910	0.152869	-3.754269	0.0330

R-squared	0.972647	Mean dependent var	0.007114
Adjusted R-squared	0.912470	S.D. dependent var	0.168134
S.E. of regression	0.049743	Akaike info criterion	-2.963870
Sum squared resid	0.024744	Schwarz criterion	-1.920850
Log likelihood	71.90385	Hannan-Quinn criter.	-2.612925
Durbin-Watson stat	2.171299		

* p-value incompatible with t-Bounds distribution.

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	4.190839	10%	1.99	2.94
K	6	5%	2.27	3.28

	2.5%	2.55	3.61
	1%	2.88	3.99

Q STATS FOR MACRO POLICY EQUATIOON

Date: 11/06/19 Time: 20:43
Sample: 1983 2018
Included observations: 33
Q-statistic probabilities adjusted for 3 dynamic regressors

Autocorrelation	Partial Correlation		AC	PAC	Q-Stat	Prob*
******| . |	******| . |	1	-0.786	-0.786	0.3285	0.343
. |*** |	****| . |	2	0.406	-0.552	0.4535	0.762
. | . |	. | . |	3	-0.065	-0.011	0.5597	0.345
.*| . |	. |*. |	4	-0.118	0.090	0.2147	0.519
. |*. |	. | . |	5	0.160	0.050	0.2400	0.231
.*| . |	.*| . |	6	-0.148	-0.103	0.1342	0.264
. |*. |	. | . |	7	0.116	-0.046	0.2744	0.461
.*| . |	.**| . |	8	-0.149	-0.269	0.2773	0.376
. |*. |	. | . |	9	0.206	-0.017	0.4813	0.488
.**| . |	. | . |	10	-0.238	-0.014	0.3654	0.648
. |*. |	. | . |	11	0.203	-0.005	0.4807	0.113
.*| . |	.*| . |	12	-0.150	-0.174	0.5050	0.642
. |*. |	. | . |	13	0.121	0.024	0.3895	0.441
.*| . |	.*| . |	14	-0.133	-0.155	0.3965	0.701
. |*. |	.**| . |	15	0.108	-0.210	0.6713	0.248
. | . |	. | . |	16	-0.020	-0.002	0.4740	0.214

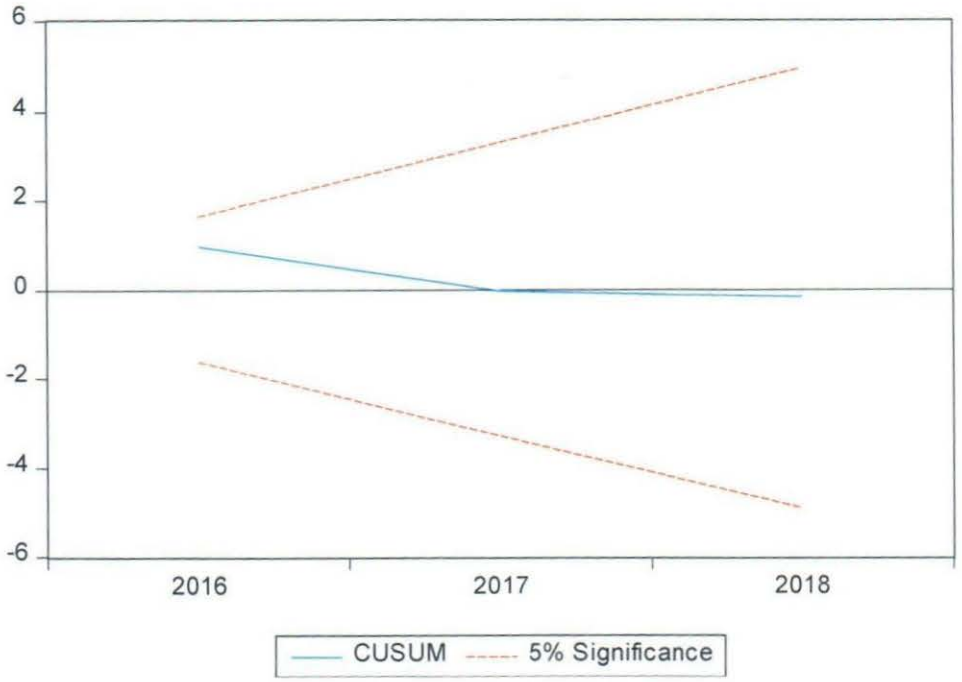
*Probabilities may not be valid for this equation specification.

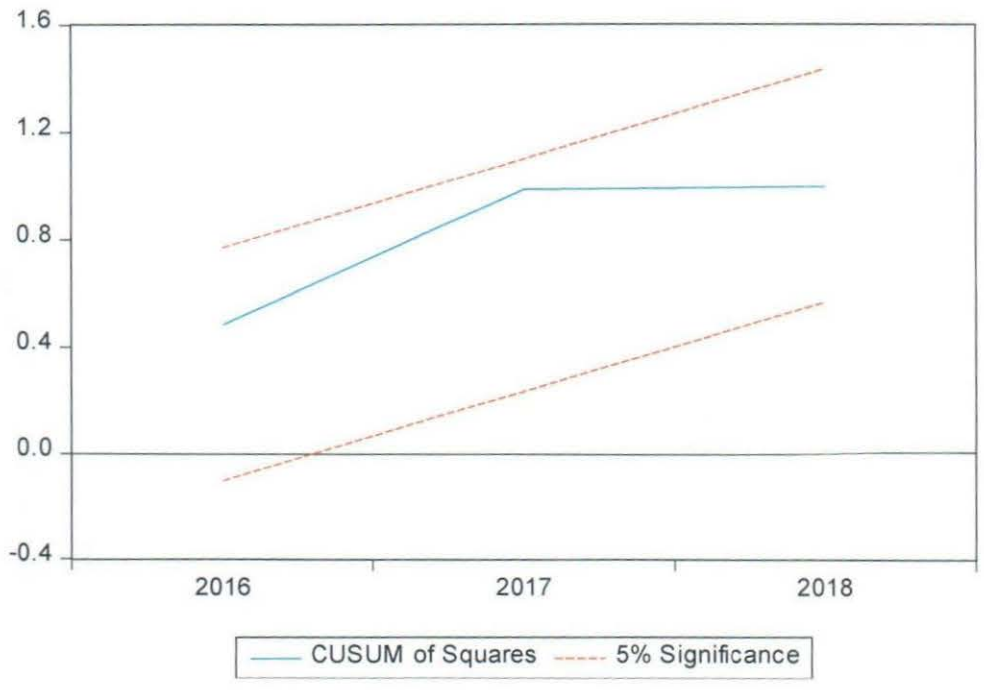
Breusch-Godfrey Serial Correlation LM Test:

F-statistic	17.77486	Prob. F(2,1)	0.1654
Obs*R-squared	32.09712	Prob. Chi-Square(2)	0.2356

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.772637	Prob. F(29,3)	0.7049
Obs*R-squared	29.10335	Prob. Chi-Square(29)	0.4597
Scaled explained SS	0.241275	Prob. Chi-Square(29)	1.0000


6
4
2
0
-2
-4
-6
2016
2017
2018
CUSUM
5% Significance


1.6
1.2
0.8
0.4
0.0
-0.4
2016
2017
2018
CUSUM of Squares
5% Significance

Department of Religious and Cultural Studies
University of Calabar,
Calabar

13th January, 2022

The Dean
Post Graduate School,
University of Calabar,
Calabar

CERTIFICATE OF CORRECTION AFTER VETTING

This is to certify that **Oparji, Robert Emeka** with Registration Number: **REL/Ph.D/17/009** has satisfactorily affected corrections in his thesis as printed out by the Graduate School Thesis and Result Committee (GSTRVC) on his Thesis titled, **"The Traditional Religious and Cultural Basis for the Acceptance of Christianity in Igbo Land".**

I therefore recommend that the thesis be approved.

17/01/2022

Dr. Chris Akpan
Chairman Faculty of Arts

THE TRADITIONAL RELIGIOUS AND CULTURAL BASIS FOR THE ACCEPTANCE OF CHRISTIANITY IN IGBOLAND

BY

OPARAJI, ROBERT EMEKA
REL/Ph.D/17/009

A DOCTORAL DISSERTATION CARRIED OUT IN THE DEPARTMENT OF RELIGIOUS AND CULTURAL STUDIES UNIVERSITY OF CALABAR CALABAR, NIGERIA

PROF. CHIKE A. EKEOPARA (CHIEF SUPERVISOR)
DR. GIDEON IMOKE EMENG (SUPERVISOR)

SEPTEMBER, 2021

DECLARATION

I, Oparaji, Robert Emeka with Registration Number REL/Ph.D/17/009 hereby declares that this thesis titled, "**THE TRADITIONAL RELIGIOUS AND CULTURAL BASIS FOR THE ACCEPTANCE OF CHRISTIANITY IN IGBOLAND**" is original and was written by me. It is the record of my research work and has not been published in any previous publication.

Oparaji, Robert Emeka
REL/Ph.D/17/009
(Student/Candidate)

Signature: .....
Date: 17/01/2022

CERTIFICATION

We certify that the dissertation titled **"The Traditional, Religious and Cultural Basis for the acceptance of Christianity in Igboland "** by **Oparaji, Robert Emeka** with Registration Number **(REL/Ph.D/17/009)** carried out under our supervision, have been examined and found to have met the regulations of the Postgraduate School, University of Calabar. We, therefore recommend the work for the award of Doctor of Philosophy (Ph.D) degree in Religious and Cultural Studies (Comparative Religion).

Prof. Christopher O. T. Ugwu
(External Examiner)
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B.A.(Hons) 1st Class UNN, M.A., Ph.D.,/Professor

Date: 08-09-2021
Signature:

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Date: 08/09/2021
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B.A., M.A., Ph.D.,/Professor

Date: 08/09/2021
Signature:

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It was William Shakespeare who said "Ingratitude is greater than the traitor's sword". Consequently, my profound gratitude goes to God Almighty for sustaining me and giving me the strength to carry out this work. I remain grateful for His benevolence. Nonetheless, I say "Deo Gratias!".

In special way, I remember my phenomenal supervisors Prof Chike A. Ekeopara and Dr. Gideon Imoke Emeng, who painstakingly read and corrected this work. They are rare gems and intellectual gurus. May God continue to reward them.

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Finally, I acknowledge the prayerful support from Bodurin Yewande, Aladum Ann and the entire members of the Beloved Friends of Jesus Adoration Family Abuja and Lagos. For all those whose names and

meaningful encouragement to me are not acknowledged herein, I pray God to reward and shield you under His safe wings. Amen.

ABSTRACT

This work, "The Traditional Religious and Cultural Basis for the Acceptance of Christianity in Igboland," examines the notion that traditional religion is still viewed by some adherents of Christianity in Igboland as a dead religion which only encourages practices that they hold as barbaric, uncivilized, fetish and devilish. Such adherents build and retain a wall of divide between themselves and the traditionalists. They somehow allow their religious differences to affect even the traditional and cultural values they have in common, as members of the same or related communities. The effect is that Christianity, which preaches love and which ought to be a unifying force, becomes a dividing factor. Christians in Igboland often describe the traditionalists as pagans and unbelievers and tend to dissociate themselves from them. Religious bickering among Christians and traditionalists in Igboland has, to some extent, impeded on the growth and development of many Igbo communities. In the tussle of religious relevance and superiority, the Christians tend to give deaf ears to the obvious fact that Christianity could not have been accepted and entrenched in Igboland, if there were no areas of common appeal and meeting points between the new religion (Christianity) and the old (Traditional) religion. This study is concerned with identifying those cultural and traditional religious practices that

facilitated the acceptance of Christianity in Igboland. Phenomenological research method was applied in the study. This research method allows the researcher to explore the factors that gave rise to the studied behaviour, through a non-numerical method. Data gathered through interviews are analysed using qualitative content analysis and Key Informant Interviews (KIIs) and In-depth Interviews (IDIs) were employed in data gathering. Those interviewed were randomly selected from each of the five States of Igboland namely: Abia, Anambra, Ebonyi, Enugu and Imo States. It was found that there were various traditional religious and cultural practices in Igboland that paved way for the acceptance of Christianity in these areas. For instance, because the indigenous people were already used to the practice of offering sacrifices to appease their gods, the Christian missionaries likened that and taught the converts that the Jesus Christ they preach was sacrificed on the cross to appease the Almighty God and atone for their sins. It was also found that the culture of the people which emphasized communal living and care for one another, could be seen as relating to the Christian central teaching of love for one another. With the identified common practices between the two religions, it is posited that some of the early Christians who were converted from traditional religion, may have yielded to the conversion because of the substantial similarities and areas of agreement. It is recommended that Christians should be accommodative of the

traditionalists and also be able to separate traditional religious practices from cultural practices and encourage participation of Christians in certain cultural activities that promote love and fraternity. This is the gap this work fills, that Igbo-African traditional religion aided the acceptance of Christianity by the Igbo of South Eastern Nigeria.

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TABLE OF CONTENTS

CHAPTER FOUR: ELEMENTS OF AFRICAN TRADITIONAL RELIGIOUS AND CULTURAL PRACTICES IN IGBOLAND

CHAPTER FIVE: THE TRADITIONAL RELIGIOUS AND CULTURAL PRACTICES OF THE IGBO FOR THE ACCEPTANCE OF CHRISTIANITY IN IGBOLAND

CHAPTER SIX: SUMMARY, CONCLUSION, CONTRIBUTION TO KNOWLEDGE AND RECOMMENDATION

LIST OF TABLES AND FIGURES

molested or troubled in any manner whatsoever (Nwabara 590).

The signing of the treaty was considered a phenomenal achievement and merited a "blessing of Almighty God." The invocation by the Chaplain, *Theodore Muller, was regarded by the Obi as a charm by incantation,* which was countered by his juju Priest who ran into the cabin of the Albert with a protective charm that he placed between the king's feet (Nwabara 590).

It is imperative to note that, right at the beginning, government, commerce and mission had hands in the attempt to evangelise Igboland. Hence, until 1879, both worked hand in hand, intermingling religion with commerce (Nwabara 590). Nwabara further observes that: "I hope to make a judicious beginning in forming missionary stations near each trading settlement. The arrangements with trading settlements on the river will no doubt be very advantageous at the beginning as regards financial affairs" (590). In the letter of September 29, 1857, also to the Secretary, William Baikie reported choosing the Onitsha site with Crowther, because of its strategic location as an entry to the whole of Igboland (Nwabara 590).

This letter supported an earlier one written by Crowther to the Secretary in which he stated that, a trading factory had been established at Onitsha near the waterside, and a site had been selected for the Mission

Station in the suburb of the town, about one and a half miles from the factory (Nwabara 591).

In another letter of May 20, 1858, Baikie wrote to Macgregor Laird of the flourishing trade activities at Onitsha, as well as of the mission operations. Taylor (the Church agent) began his work within the time and by April 23, 1958, reported to Crowther that the first mission house in the Igbo district was completed; though he (Taylor) was to be involved in the Ibo 'compound' squabbles later (Nwabara 591). Taylor's next activity was to start a school, which began in August 1857. Onitsha the highway into the Igboland, had become the headquarters of the Christian Missionary Society in Igboland, and it remains so until today (Nwabara 591).

As the years passed by, Christian missionaries continued to progress in Igboland. However, the death of the veteran interpreter, Simon Jonas (in December 1858) was recorded as a sad loss to the cause of evangelism in Igboland (Nwabara 592). It stalled significantly, evangelical works at the time, because of the difficulty of communicating effectively with the people.

Though missionary activity continued to expand, but the bishop was yet to learn that, for the natives, expansion was in terms merchandise and not evangelism. Further, by imitating the traders in showering gifts upon both converts and non-converts, the presence of a church agent in

communication to Mr. Hutchinson (of the Mission House in London), to reoccupy Onitsha on the following conditions:

i. a grant of money from the Parent Committee to enable reoccupation on more solid footing and with effective force;

ii. a guarantee from the native authorities of unequivocal protection of the mission, agents and converts;

iii. that the Committee request the authorities at the Foreign office to instruct the Acting Consul of the Bright of Benin and Biafra on the Niger, to prohibit the mercantile agents from firing on the shore and Onitsha market unless in self-defense from aggression by the natives (Nwabara 599).

In a "Proposed stipulation with the Authorities of Onitsha," dated January 4, 1880, Bishop Crowther elaborated upon condition No. 2 above, thus:

1. The native authorities must give us unequivocal assurance of their united protection of the mission, agents and converts, and to tolerate to their people, the adoption of the Christian religion, whosoever feels so disposed may, without hindrance by persecution, or by putting any other impediments on the way of his doing so.

2. Christianity as a religion was established through Jesus Christ aimed at worshiping God, to whom all power is given in heaven

and earth; therefore the law of any country can never stand against it, as God is the owner of heaven and earth and all that are in them.

3. The nation which God blesses is truly blessed and the nation which he forsakes is destroyed. Christianity is a great blessing.

4. This Religion generally forbids the destruction of children who are born twin, as well as human sacrifices and commands us to preach against these customs, and to rescue the victims to barbarous superstition. That is what we teach in all countries…other countries being convinced of their barbarous nature, are giving them up because the practices are contrary to God's holy will and all wise providence.

5. Christianity being the religion of God, it is therefore principally the religion of the soul, to be conscientiously professed from the inward persuasion of it, truth, and not by compulsion.

6. As God's messengers, no hindrance must be put in our way in going to preach God's word in other towns in the Igbo country, till we meet our fellow labourers from Bonny, Brass and New Calabar in the middle of the Igbo country…

7. Although Christianity is principally the religion of the soul, yet it is primarily concerned with not just the life that we live now but that which is promised.

8. We as God's messengers do not wish to go away from Onitsha, as long as the authorities are willing to protect us, and the people are willing to listen to our preaching, unless they themselves drive us out of the country.

So fortified, Rev Perry returned to Asaba from Lagos and soon moved to Onitsha to resume his work

People who accepted Christianity before 1900 are particularly those who were alienated from the others, with disabilities and had one misfortune or the other. May be it was based on these that Christianity "is proving itself to be more than a match for the ancient faith of the country. The heathens are looking on, bewildered and powerless to stem the torrent of enthusiasm that is flowing like a river towards the religion of the Lord Jesus Christ" (Ekechi 103).

Missionaries succeeded in their evangelistic work in the Igbo land. Before this period, it's assumed that most Igbo people treated missionaries with "respectful indifference". This is to the effect that though many of the Igbo people conducted themselves religiously, they were not genuinely interested in the missionaries' new religion (Christianity).

With enthronement of British colonial rule in Nigeria, unresponsiveness to the Christian missionaries changed radically to a mass movement. In Igboland, attending a Church service became

something someone may be reckoned with. The inability of the Christian Missionaries to make the Africans believe the Gospel was based on the improbable assumptions of the missionaries that the people are not easily convinced to change their traditional beliefs by mere introduction of the Bible in their localities.

Africans can be generalized to the Igbo people. Though, the Igbo people are seen to be open to change, their positive answer to creativity may be dependent on their evaluation of the relative advantages involved. They rarely accept change merely for the sake of change but basically as a result of the expected benefits that follows. Uchendu observes that: "the crucial question is this: will the acceptance of this innovation make the individual or the town get up? If the answer is in the affirmative, there is a great possibility of immediate acceptance; but to be retained, the innovation must work, the material and symbolic evidence of getting up must be demonstrated" (19).

Ekechi observes that: "The new social environment made it relatively easy for the so-called 'consul men' to impersonate either the Soldiers or Government officials and thereby commit great havoc in various communities" (Ekechi 104).

At the beginning, the entire population faced military expedition and reckless maltreatment. As time went on, it became obvious that the Christians were immune to some local exaction. For instance, it was

observed that Christian villages were given high measure of respect by the British colonialists, including being exonerated from regular military patrol of their locality. It was also observed that, people close to the Christian missionaries got special treatments. As a result of insecurity and fear, together with the awareness that Christianity had become a insignia of honour, more people were persuaded to change their stands.

More of the Igbo people began to go to church at the time, so as to partake of the temporal benefits of becoming a Christian. Outstanding Christian movements that sprang up as a result of the belief that accepting Christianity means exemption from government's exploitations. The ploy to avoid these numerous exploitations and harassments, made many people (particularly young people) to start associating themselves with the Christian missionaries. Hence, many villages and towns sent requests to the missionaries for the opening of mission stations in their localities; expectedly, during a short period of time, the number of the congregation in different parts of Igboland increased significantly.

The significant number of people in the early 20th century was based on certain forces such as scared of floging and/or imprisonment for not accepting with "the Government's forced Labour Ordinance or failure to pay local fines". Consequent upon this, it was seen that missionaries usually intercede on behalf of their new followers with the argument that a "pagan Chief had no jurisdiction over Christians". The intervention

saved many Christians from public flogging and imprisonment. The acceptance of Christian religion mainly by the males was a clear indication of fine-tuning the new colonial reign brought in by Christianity which gave notable social rewards.

The mission school is a significant factor that brought about mass "rural conversion". Its significant benefit of engendering social change, with the exposure and consciousness it imbued in those that were attending the schools, made them resist certain local demands by the Chiefs. This contributed in transforming the people's attitudes to Christianity.

Another remarkable event that gave impetus to missionary activities in the Igboland was the demolition of the Arochukwu oracle, known as the "Long Juju" by the Europeans. The Aro Priests had earlier resisted the inversion of the missionaries. The demolition of Aro reduced the missionaries' fear of reaching the heartland of the Igbo (Ekechi 106).

The Igbo's acceptance of Christianity as a lesser evil compared to the British political authority made the Christian Missions to intensify their campaign for territorial power. An examination of the factors that led to the Igbo's acceptance of Christianity in the early 20thcentury shows that the communities that embraced the new religion believed that by relating with the missionaries, they would perhaps break away from the various types of imperialism.

The increase of British political authority in Igbo land widened the frontiers of missionary influence in the region. The subdued people were also ready to accept the new religion as they could relate from the teachings of the missionaries, that they are some features of their indigenous religion that are similar to that of the new religion. As the Christian missionaries discovered that the Igbo people were becoming willing to accept the missionary propaganda, they became more willing to apply its religious influence on the people. This denominational influence led to the increase in inter-denominational rivalry mostly between the Protestants and Roman Catholics, with each group grappling to win as many converts as possible – even though it means modifying their evangelical approach and messages. This study examines those traditional religious and cultural practices in Igboland that encouraged, in one way or the other, the acceptance of Christianity in the area, as introduced by the various missionary groups.

1.2 Statement of the Problem

The distain and contempt with which Christians approach the traditional and cultural values, norms and beliefs of Igbo people (past and present) has become worrisome and calls for urgent and deep concerns and attention.

Though most of those interviewed are aged people who are presumed to have a good knowledge of the activities of the early missionaries, some of them have suffered mental derailment and incapable of recalling some facts. More so, some of the traditionalists still nurse suspicion against scholars (including researchers) as they continue to see them as products and agents of the Christian missionaries who perhaps may still be serving the interests of the missionaries - whom the traditionalists see as always working to undermine their traditional religion.

The poor nature or unavailability of critical infrastructures, also constitute a problem on the scope of research work in Nigeria. Erratic power supply, poor and expensive internet facilities, poor road network which makes it difficult to access respondents, among others, are the challenges the researcher had to contend with.

1.3 Objectives of the Study

The main objective of this work is to find out whether there are elements of traditional religion as practised by the Igbo prior to the coming of Christian missionaries that facilitated the acceptance of Christianity in Igboland. This is in consideration of the fact that, prior to the introduction of Christianity in Igboland, the people had an established method of worship which constituted their core traditional religion.

Specifically, it is the aim of the work:

i.) To examine how Igbo traditional religion facilitated the acceptance of Christianity in Igboland.

ii.) To examine relevant cultural and religious practices Igbo people had prior to the coming of the Christian missionaries and how these practices contributed to the acceptance of Christianity by the people through the lens of their world view. More so, to evaluate the relationship between culture and the traditional religion of the Igbo people.

iii.) To establish that the Igbo people were already religious before the advent of Christianity and could only be receptive to a new religion if the object and instrument of worship of the religion could be likened to that of their traditional religion.

iv.) To explore the areas of incompatibility in the practices and observances in traditional religion and Christianity and consider ways of creating a compromise between the two religions.

v.) To show that the Igbo traditional religion, despite its shortcomings, should not be regarded as inferior to Christianity or any other religion.

vi.) To make recommendations on the kind of friendship that should exist in traditional religion and Christianity within Igboland.

vii.) Areas of compatibility that paved way for the acceptance of Christianity be studied.

1.4 Significance of the Study

The traditional life of the Igbo man has always been anchored on social justice, fairness and equity. He believes in "live and let live" (aptly captured in the Igbo saying: "*égbe bere, ugo bere; nke si ibeya ebena ka nku kwapu ya*"). The traditional Igbo society was such in which fraternal love reigned and it was condemnable for a person to deliberately do a thing that will hurt another person. Hence the people would say: "onye mara ihe ga-ese okwu, ya emena ya" (meaning, *he who knows what will offend the other should avoid doing such thing*). The African society encouraged peaceful co-existence, honesty, hard work and living a moral life, among other virtues. The people paced high value on human life and family values; and revered ancestors – whom they believe to be dead relatives who lived good life, and whose spirit keep watch over them.

The tradition and custom of Igbo communities, prior to the coming of Christian missionaries, abhorred stealing, killing, cheating, taking of somebody's wife, bearing false witness against another person, and every act that offends and negatively affects the next person (one's neighbour). It used to be the practice that, when an Igbo man wants to pour libations or pray to his *Chi* or the gods, he would raise his hands up, with kola-nut

in one hand and with the other hand outstretched; then standing bare-footed, he begins to make declarations – which he trust the gods to bring to pass. This posture is interpreted to signify, his conviction that his hands are clean, hence his raising it up to the gods; and that the goddess of the earth on which his foots rest bear witness to that. It means that, the traditional practice of the people, at the time, demanded that one be upright before appearing before the gods to ask for anything.

From the above analogy, it is evident that the Igbos have always believed in the existence of a Supreme Being and other spirits (described with different names) and reverenced them. They offered sacrifices of different types to these Supernatural Beings. They relied on these Beings for protection, for procreation, for increase in their crops animals, and so on. The names the Igbos gave their children, was reflective of this belief; so also do Igbo folk-tales and incantations point to the fact that, the people believe in the existence of a Supreme Being – who decides the fate of every man, and to whom worship and sacrifice is due. Everything around their world, be it misfortune or fortune, illness or good health, among other occurrences of life, were all accredited to the supernatural Supreme Being.

Sacrifice is a usual cultural and religious way of life of the Igbo people, which is of such relevance to the Igbo traditionalists as it (sacrifice) was to the Christians. While the people already practiced their

own form of sacrifices to their gods in the shrines, the Christian missionaries introduced the Igbo converts to the sacrifice of Jesus the son of God on the Cross of Calvary. This sacrifice was said to be for forgiveness of man's sins – including the sin of worshipping idols and false gods.

In the Niger Mission, J.L.B Wood of the Church Missionary Society, who was on a fact finding mission to Asaba and other parts of Eastern Nigeria, described the peoples' traditional religion, while at Asaba, as "Animalism and certainly no world would better set forth the worship and ideas of the Asabas. They are worshippers of nature but nature in its lowest, in its very lowest and worst form" (CA3/045).

The evangelical activities of some of the early missionaries to Igboland were predicated on this wrong notion about the Igbo people and their Traditional Religion. Harold Turner posits that, there were several reasons for this serious mistake by Europeans. Some of them had such a prejudiced view of these "uncivilized" peoples that they did not expect anything of value in their cultures. Others could not recognize tribal religions when they met them, because they were not expressed in ways familiar to Europeans, in temples, priesthoods and creeds, or in rituals like baptism; others again dismissed what they discovered as mere superstition, idolatory or stupid 'mumbo jumbo' (Turner 6).

The approach to supplant and substitute the native religion of the Igbo people with the new "European" Christian religion, which was presented by the missionaries to be superior and more redemptive, was strongly resisted by the indigenous people, especially the elderly ones. This necessitated a change in approach and the Catholic missionaries championed the more tolerant and complementary approach to evangelism – where what is good in the existing religious practice is retained or modified to fit into the new religion.

The study will expose the need for each of the religions (traditional religion and Christianity) to relate cordially with each other. Since the two religions are directed at the worship and reverence of a Supreme Being, it will be shown by the study that it is erroneous for one religion to assume superiority over the other. The study will show that one way to maintain that cordiality between the two religions is for the adherents of each of the religions to identify the areas of incompatibility in the practices and observances of their religions, and respect without interfering on the other person's right to worship the supreme being in that particular way their own religion prescribes.

1.5 Scope of the Study

This work is limited to traditional religion and in particular cultural basis for the acceptance of Christianity in Igboland. However, other works on traditional religious and cultural practices in Africa will be consulted since the research shall be concentrating on those observances and practices that facilitated the acceptance of Christianity in the five (5) Igbo States of: Anambra, Imo, Enugu, Abia and Ebonyi. This work is also not limited to any country or epoch. It is purely a reflection on the Igbos worldview and properly evaluated to appraise their belief system vis-à-vis other peoples' belief system, and examine how their traditional method of worship which is founded on their belief system, contributed to the acceptance of Christianity in Igboland.

1.6 Definition of Terms

As a common prerequisite to research work, and due to the ambiguous nature of concept that are likely to be used or employed in this research, it is required therefore that these key terms be clearly and coherently analyzed so as to convey contextual meaning to the audience. Consequently, the work acknowledges the necessity to define the following terms:

Asceticism: This is the practice of the denial of physical or psychological desires in order to attain a spiritual ideal or goal. Deezia "Asceticism is a

means of realising the absolute, owing to the fact that man does not live in harmony with the ultimate reality, which is observed as a common notion in the world religious traditions of mankind, as they all strive to bridge the visible world with that which is unseen and unknown" (85). The origins of asceticism lie in man's attempts to achieve various ultimate goals or ideals For instance, the ancient Israelites abstained from sexual intercourse before going into battle. The value of asceticism in strengthening an individual's will and his deeper spiritual powers has been a part of many religions and philosophies throughout history. It is very difficult to trace any religion without at least some features of asceticism.

Christianity: Christianity is one of the world's most influential religions that has to deal with the life and teaching of Jesus Christ and the belief in God. It is also the religion that is based on the teachings of the Bible.

Culture: Generally speaking, culture is seen as those practices which man get involved in to make him members of the society. Such practices include laws, customs, arts, beliefs, knowledge, etc. For Anongu, "Culture… When the concept is used in a special sense in sociology and anthropology, it refers to the sum total of human beings' way of life, their behavior, beliefs, thoughts and feelings. In this sense, culture connotes all the human beings acquired as social beings" (150-151).

Eschatology: According to Ball, "In recent times there has been within the Church a growing interest in the future and final events and in what Scripture has to say about the end-time and the kingdom of God" (207).

Inculturation: Inculturation for Bisong, "...involves mutual interaction and influence between culture and Christianity, whereby the culture is transformed in the process and the Christianity is interpreted in the light of a new culture and historical life experience" (149).

Missionary: This is a person who is sent on an assignment for the purpose of evangelization. A missionary is a person sent into an area to promote Christianity base on their faith.

Proselytization: Ughaerumba observes that: "For over ten decades now, Christianity has remained on steady rise and boom in Nigeria. Christian denominations have flourish in spreading the Christian massage, conquering and/or winning converts from different cultural backgrounds" (https://www.researchgate.Net/publication/34170884)

This means that, proselytization is the act of trying to persuade someone to change his or her religious beliefs to your own. In Nigeria, Christianity and Islam are typical examples. The aim of proselytization is the seeking to coverts and Christians for instance believes that the Bible commands to

do. Though the making of a proselyte is more of God's work, but there is also a human element required in the process of proselytization.

Religion: Religion deals with one's faith and the pattern of worship. It has to do with a relationship that exists between a human and a supper-human. Omoregbe confirms this when he asserted that: "Religion…a link established between two persons, namely, the *human person* and the *divine person* believed to exist. It is something that links or units man with a transcendent being, a deity, believed to exist and worshipped by man" (2-3). Furthermore, "Religion from the traditional African perspective is the recognition of our duties as divine commands" (206). Furthermore, religion can be defined "the feelings, acts, and experiences of individual men in their solitude, so far as they apprehend themselves to stand in relation to whatever they may consider divine" (James 31). For James the term "divine" means "any object that is godlike, whether it be a concrete deity or not" to which the individual feels impelled to respond with solemnity and gravity.

Emile Durkheim the sociologist in his seminal book *The Elementary Forms of the Religious Life*, sees religion as a "unified system of beliefs and practices relative to sacred things" (36). Durkheim notion of sacred things implies "set apart and forbidden – beliefs and practices which unite into one single moral community called a church, all those

who adhere to them." However, sacred thing can be a "rock, a tree, a spring, a pebble, a piece of wood, a house – in a word, anything can be sacred" (Durkheim 37).

Sorcery: This is the belief in magical spells that harness evil spirits or occult forces to produce unnatural results. Davidson observes that:

> The social fact of several categories of individuals either referencing themselves or being referenced by others as magicians, sorcerers, witches or seers, and pursuing livelihoods by those means in ancient, medieval and modern India is a reality worthy of investigation, given the observable contribution of these groups to the eventual emergence of tantrism in the sixth or seventh century. They do not appear to have expressed ideologies of liberation or transcendent divinity but were concerned with magical crafts of various kinds (1).

Consequently, it is believed that sorcery involves the use eof power acquired through from evil spirit to carry out divination. It is against biblical injunctions.

Syncretism: Schreiter observes that "In the twentieth century, syncretism has been understood as a negative force in Christianity in general and in missiology in particular.... syncretism has been viewed as a distorted form

of the Christian faith, skewed by cultural and religious forces in the environment into which Christianity has come" (50).

Totem: A totem refers to plants, animals, natural objects among certain tribes or peoples as the mark of the family or clan and sometimes reverenced and venerated as the peoples' guardian or ancestor. According to Quarcoopeme, "Totemism refers to the relationship that is supposed to exist between a person or group of persons and an animal or object or a group of animals or objects" (176). Ojong confirms Quarcoopeme definition when he asserts thus: "This relationship that exist between a clan, a person, or group of persons and an animal or species of animals is what is referred to as totemism. (Its derivative is from totem)" (112). He further explained that "Totemism was therefore necessary in African cultural societies to established diverse in kind different modes of existence that include human and non-humans" (Ojong 112). Thus, It is usually a carved or painted representation of such an object.

Tradition: This has to do with the transition of beliefs, practices or behaviour's passed down from one generation to another generation that has origin from the past and has significance to the people it is passed down to.

Transcendent: This is used of the deity to refer to its attribute of being above and independent of the material universe. One can transcend socially through music, philosophically through the human mind (thinking), aesthetically through the plausible experiences associated with beauty, epistemically through intuition and religiously through the experience of God.

CHAPTER TWO

LITERATURE REVIEW

For the purpose of clarity and ordered review, the literature will follow a thematic approach and the themes include: Igbo traditional religion and early missionary activities in Igboland, the Igbo cultural and religious world view, the Igbo worship of *Chukwu,* and the initial religious conflict in Igboland. Having said this, a review on some works on Igbo traditional religion and early missionary activities in Igboland is therefore necessary at this point.

2.1 Traditional Religion and early Missionary Activities

Opinions vary as to the time for which the study of traditional religion began to receive serious attention. Onyeidu holds that: "indeed, interest in the study of non-Christian Religions (including African Traditional Religion) was awakened of late, after the International Missionary Conferences at Edinburgh, Scotland in 1910" (18). He further observed that, it was this conference that gave an insight into the existence and resilience of primordial world in different mission fields. This insight generated interest in the study of religions other than one's own, including African traditional religion of which Igbo traditional religion is a part of. It was this awareness that gave rise to comparative study of religions.

Onyeidu is of the view that Igbo traditional religion prepared the ground for the acceptance of Christianity in the area. He further argued that, without the original African idea of the deity, worship, taboos, sacrifices and charity, Christianity could have found it more difficult to make converts in Africa and particularly in Igboland (14). Onyeneke further argues that African Traditional Religion is an adumbration of what gained complete fulfillment in the gospel (16). The above, most likely indicates that there are some elements in Igbo traditional religion that paved way for the acceptance of Christianity in Igboland.

Onyeidu observes that the factors that had contributed to the acceptance of Christianity and Islam in West Africa can be seen thus:

> The appeal of these new religions is really derived from the most deeply seated beliefs in their own (African) indigenous religions, and as St. Paul appealed to the Athenians through their "unknown Gods" so do these new religions appeal to the fundamental and barely conscious monotheism that underline all West coast religions (15).

Crowder (the founding father of the Niger Mission) writing on the African Traditional System of sacrifice, made a declaration which is an eloquent testimony that sacrifice is one of the elements in African Traditional Religion (Igbo religious practices inclusive), that paved way

for the acceptance of Christianity in Africa. He is quoted in Onyeidu to have said:

> When we first introduced the gospel in any place we should take advantage of any principle which they themselves admit....this though, the heathens in this part of Africa possess no written legends, yet whenever we turn our eyes, we find among them in their animal sacrifices, a text which is the main spring of Christian faith (31).

It is an obvious fact that, prior to the coming of Christian missionaries, the Igbos were already a very religious people. Ajayi in his contrast of African Traditional Religion with other religions, including Christianity, argues that African Traditional Religion is a revealed religion because "it came into existence like any other religion, as a result of human experience of the mystery of the universe. In an attempt to solve the riddle of the mystery of the universe, man everywhere asked questions and searched for answers to these questions". Man has come to the inevitable realization that there should be a supernatural force behind the universe (1). The African Traditional Religion, which the Igbo religious practices is part of, was founded on the premise of this observation made by Ajayi.

The Igbo relief practice is characterized by a belief in a variety of symbols that takes the form of spirits pertaining to the following: spirits

of the streams, rivers, hills, rain, lakes, caves, iron, lightening, the earth, the farm, fertility, strength, and witchcraft". The spirit in water was specifically considered very beneficial to the Igbo since they are believed to wash away evil and uncleanliness amongst the traditionalists. Many significant rituals of cleansing by adherents of the traditional religion were performed, either near or inside a river or stream. This can be compared to the Christian practice of baptism by immersion – which is believed to serve the purpose of washing away the original sin of creation and admitting a "born again" Christian into the Christian fold.

Quarcoopume while commenting on African's belief in ancestors said that: The Igbos believed that those who lived a good life and were committed to mother earth became ancestral spirits who guarded the living relatives (128). Spirits and the ancestors are believed to have power to influence the affairs of the living for better or for worse. This places our ancestors in similar category of holy people in other religions like the saints in Christianity. It could be said that the belief in the ancestor is equivalent to the veneration of Christian saints.

In Igbo land at the time, "any object could be turned into an object of worship if consecrated". Though, the objects used in the consecration neither acquires the features of a god nor does it become one; rather they become religious object. "A body of water, a piece of metal, a stone, or even a piece of bone might serve as an object of worship. However, it is

not the stone or bone that is being worshipped, but rather the spirit that it represents" (Ohadike 17).

Among the common article of worship in Igboland is *Ikeng* – a wood carved to symbolize a man's success and strength. Though anyone can buy *Ikeng* in the market, but a traditional priest will need to invoke the right spirits into it and thereafter, it will begin to manifest the strength of the spirit(s) it held. Unless the necessary acts of incantations are performed, it remains an ordinary object with no supernatural power. Every Igbo household has an *Ikenga* and it is said that no man parts ways with his *Ikenga* – but consults with the *Ikenga* before embarking on a project or a journey. When the traditionalist serves palm wine in his house, he often pours libation in the name of his *Ikenga.*

Concerning the method of African prayer, it is "...observed that Africans offer prayers which centered on worldly and selfish motives without any thought about future salvation" Onyeidu (15). According to him, the typical heathen in Igboland prays thus:

> For long life, many wives and children, for riches and many slaves. For honour and dignity in the world, for power and victory over their enemies, for protection against the malice of their enemies. To ensure the nearness of the gods, they wear various charms about their body, for honourable burial at their death in old age; to be buried with many slaves to be

> put to death as their attendants in the world of spirits where they will meet their fathers (49).

The above view was, however, opposed by Solomon Amadium in his book *The Church and Native Tradition (Omenala).* In the book, he said that Africans like the Israelites pray a prayer for all. He observed that when the Igbo gather and kola nut is presented to the eldest among them, his incantations will be in a form of prayer to god, the creator, for long life and prosperity for all. He solicits for god's guidance and protection for all, even for those present and those not present (Amadium 27).

Beyond elders, certain persons played the role of priests, within the Igbo traditional religion. Metuh in his article entitled "The Religious Dimension of African Cosmogonies: A case study of the Igbo of Nigeria" remarked that, the *Nri* priests were the Levites of the Igbo people who dwell within the Igbo land and beyond. All the kings and Chiefs of the Igbos were crowned or consecrated by them. From time immemorial till the present day, the *Nri* itinerant priests have the exclusive right to perform certain rituals among some Igbo groups (11). Only they have the power to establish and abolish taboos of the earth goddess (*isabi Nso Ala*); they only could cleanse abomination (*aru*) and they have final say in interpreting traditions (*ikowa odinala*). One could deduce that, the Priests of the Igbo traditional religion perform similar functions as the ones performed by Reverend Fathers, Pastors and so on, in Christendom.

From the foregoing, it is evident that as at the time of the advent of the missionaries in Igboland, the people had already established modes of religious worship or practice, native to them. The different missionaries groups, therefore, had to adopt different strategies to convince the people to convert to their respective denominations. Hence, early missionary activities in Igboland were characterized by rivalry as the different missionary groups tried to outwit each other and convert more people to their respective denominations.

Rivalry and competition ensued between Catholics and Protestant because the missionaries were contending converts. The proliferation of Churches (which is still prevalent up to date) started as a result of the competition for members among the denominations instead of canvassing for souls for God. Because the major interest of the missionaries appeared to be on getting more converts into their religious denomination (for whatever reason) and not on the spirituality of the converts, the early missionaries had some of the portent gods of the people to contend with. For instance, the *Chukwu Oracle* and *Priest* and its worshippers, resisted the Christian missionaries in the areas they existed. But the power of *Chukwu* was minimized by the *Aro* expedition in 1902 which gave "the Holy Ghost Fathers" an upper hand in establishing a Christian base in Calabar.

The quest for territorial denominational influence and control among the various Christian missionaries produced "an atmosphere of war" as stated by one Catholic Priest. This opened the door in the land for "unlimited and natural expansion". Consequently, Methodist Church whose influence was restricted to east of the Cross River, commenced scouting for territories in the Igbo districts, around 1902.

The protestant groups at an individual and collective level, tried without success, to avoid the fathers of the Roman Catholic Church from coming to the territories they have influenced. The rapid growth of the Catholicism was through the establishment of catholic schools. The Catholic Church was also more tolerant of the traditional religious and cultural practices of the people and rather innovated some of these traditional religious practices into the Christian religion they preached and practiced in different parts of Igboland. For instance, in the area of *Ozo* title taking, Ilogu, reports the position of the RC church to be that, Christians can and should take the *Ozo* title; secondly that all Christians, irrespective of denomination, should have a common front and accept a common type of the title; thirdly, that both Christians and non-Christians share in the lineages of clans of *Ozo* wealth and accept reciprocally each other's title, except that details of the ceremony in Christian title taking should differ from details of the ceremony in the non-Christian one (71).

Another factor that made Catholic schools more desirable was because there were well reduced by the grant by government in form of aids, particularly after 1901. In actual fact, Fr. Shanahan recognized this in 1906 when he opined that "the receipt of government grants provided for leverage for the Catholic victory over the Protestants".

British government exercise of authority gave "the impulse for change with onerous exactions and exploitation, either from the European or African officials, exasperated many people". Most local Court Clerks, principally the non-locals of the regions they worked, subjugated the local people to an extent that majority thought that what can be done to end colonial repression was to have their children get western education. This led to the unusual demands for missionaries and their schools.

The changes (whether social or political changes) provided the climate for mission education to strive. The manner in which the Igbos received the education (that indicates the acceptance of the religion 'Christianity' that came alongside it), gave a boost to the Christian missionaries to use western learning as the most swift-way of preaching the gospel. "From 1901, both the C.M.S and the RC Missions were intent on expanding their education programme, especially in the Onitsha and Asaba Districts" (Todd 62).

However, the Christian missionaries were in a state of dilemma as to regarding the subjects to teach in the new established schools. For the

government, catholic schools are incorporate subjects like "English, Mathematics (algebra and geometry), and other 'technical' subjects (carpentry, book-keeping and accounting)" in the school curriculum. On the part of the CMS, they thought that the subjects listed above aimed at commercial and government's interest leading to their opposition to the teaching of English language which was considered "ambitious subject". This they thought would prepare the people for good jobs rather than for them to serve as catechists and teachers. The Catholic Church was the only group that could bend to government's suggestion for which they made changes at all levels including primary Schools, in agreement with government specification.

Ralph Moor who was the High Commissioner at that time was satisfied with the Catholic school's curriculum and opted to give grants to them from the Colonial office as a way to make them effective. This strategy yielded significant result, as Catholic schools remain prominent in Igboland with records of excellence by its students, till date.

One salient fact is that, while the entire mission schools "had the common aim of propagating the ideals of Christianity, each school, however, had to teach 'the basic doctrines of the particular denomination' which established it". Evidence from Protestant sources disclose that, between (1900 – 1911), Roman Catholic baptisms went from two thousand four hundred and fifty (2,450) to thirty-two thousand seven

hundred and eighty-one (32,781) and average school attendance from one hundred and fifty-six (156) to five thousand, four hundred and twenty-one (5,421) students (Okeke, Ibenwa and Okeke 17). The Protestants saw this growth as a well-planned activity to make Southern Nigeria a catholic region, or at most the Igbo territory. The "Romanization of the Igbo territory that persuaded the C.M.S authorities to launch their own programme of 'Anglicanization' through the school" (Mbiti 50). The ultimate outcome of these efforts was that, Christianity penetrated deeper into the Igbo land.

2.2 The Igbo Cultural and Religious World View

According to Ikenga-Metuh: "...people's world view is defined as the complex of their beliefs and attitudes concerning the nature, structure and interaction of beings in the universe with particular reference to man" (52). Agwaraonye posits that, "Man is at the centre of African worldview and that every ontological and material activity revolves around man and is geared towards his welfare and happiness" (97).

For the Igbo people conceived the world as two entities-invisible and visible with the assertion that all human beings fit in to one of these worlds. Also, there is a belief in "hierarchy of beings". For Ikenga-Metuh comprises the five classes of: "A Supreme Being – *Chi Ukwu* (gods, earth goddess), human beings (*Ndiiche*), totem animals such as *Eke Idemili* (the

sacred python), tree gods such as Akpu, Oji and so forth and physical features such as river gods and gods of evil forest. Parrinder in his book *West African Religion* discusses the beings under the four headings of: the Supreme God, the Sky gods, the Mother earth, and other divinities" (78).

To the Igbo man, God created the visible universe – *Uwa*. Many things in this visible universe have spiritual forces (Awolalu 20). These things that possess spiritual forces are called "*muo*" or "*alusi*" and are as a result regarded as sacred, e.g the earth goddess of the earth; the sun god (*anyanwu)* of the sky, among others. Unlike the Supreme God who is always benevolent, the *alusi* are forces for blessings or curses with regards to the circumstances. Social offenders are punished as well as those who infringe on their privilege, hence the major role of the diviners who work as link between man and spirits. Spirits inhabit the spirit world; not every person can see things in the spirit world.

The veil that exist between the seen and the unseen is to the Igbos a very thin veil, so transparent is it that, it can hardly be said to exist (Ezeanya 35). It is believed by the Igbos that beings in the spirit world see and parade the visible world. This visible world is again believed to be made up of two spheres namely: *eluigwe* and *ala* – the sky and the earth. Generally, *eluigwe* and *ala* are known as "Uwa" or the visible world. This visible world is peopled by animate and inanimate objects

like men, animals, sky, forests, mountains, the earth and the rivers. The invisible world is peopled by invisible spirits like the Supreme Being, divinities, and ancestors. It is called *ala muo* – the land of the spirits. S. N. Ezeanya correctly identifies invisible beings as follows:

a) "the Supreme God,

b) a multitude of lesser divinities and spirits,

c) the ancestral spirits, and the evil spirits" (45).

The Igbo believe that the *Chi* – a personal provision is from *Chukwu* and goes back to him when one dies. Everyone has his own *Chi,* either good or evil. Every community has a revered place with a particular divinity that inhabits the revered forest, rock, cave or streams. The living, the dead, and the unborn, form part of the continuum. The ancestors are those that live well when alive, die in socially approved manner and are given befitting funeral rites and live in one of the world of the dead which reflect the world of the living. Those that are still alive respect them by making sacrifices to them. The relatives who have died look after those that are still living and occasionally reincarnate among them, hence, "the name *ndichie"*.

Taboos (Religious prohibitions) particularly of the priests and title holders, involve a vast treaty of what could be called asceticism. An Igbo traditionalist can go to any length to satisfy the wishes of the gods. Religion influenced the Igbo to engage in some acts of oppression and

injustice. For instance, while single child birth was considered as typical human, multiple births were considered as typical of animal and unacceptable. So twins were considered less human and as such were killed at birth. Also, the quest to make costly sacrifices led to human sacrifices – for nothing is as precious as human life. The belief that the world of the dead shows that the world of the living encouraged them to sacrifice slaves during burials to give entourage to the dead man in the life hereafter. Though the intention (which could be to aid and honour a respected person at his death) may be good, but the result was an institution of great cruelty.

2.3 The Igbo Worship of *Chukwu*

Worship, in a general and secular sense, implies a recognition of worth, and an act of worship is an expression of this recognition. It is often used as a title of honour in addressing or speaking to a person of note. But in the religious sense, which is of concern to this study:

> Worship…is the turning of man to God in faith and adoration. It is an ascription of absolute worth to God who evokes the sense of worship. It is an acknowledgement of Transcendence and a Reality independent of the worshipper. Without a God-word orientation of the personality, there can be no religious worship (Awolalu 93).

The Igbos are known to be very religious. The central point in their religious life is *Chukwu*. According to Ilogu:

> Chukwu (Chineke) is sometimes spoken of by the Igbo as the Amama Amacha Amacha, the known and the Unknown. It is a name which among other things indicate the mysterious nature of Chukwu. Yet the Igbo spirituality generated the practice of trying to penetrate into the being of this mysterious Chukwu through prayers, invocations, incantations, sacrifices and annual celebrations in the pleasing of the Constituents of the mysterious God-head. It is all these put together that we speak of as worship in Igbo religious life (1).

Coincidentally, the worship of the "Supreme God in Igbo Traditional Religion" has attracted controversies. For instance, many share the view that while there are several images, altars, priests and elaborate worship of the divinities, there was none at all for the Supreme Being (*Chukwu*). Thus, there is no direct sacrifice to God. On the other hand, there are those who suggest partial or negligible worship of *Chukwu.*

It must be noted that in Igboland, the "worship of the Supreme Being" can be liken to the "cult of the Supreme Being". Given that sacrifice is a very essential integral aspect of Igbo traditional worship, the

controversy as to whether there is a determinable sacrifice to the Supreme Being, should not just be dismissed by a wave of hand. To justify any stand about the presence or absence of sacrifice to the Supreme Deity (*Chukwu*) in the Igbo pantheon, it will be necessary to look out for helpful evidences of sacrifices with such intentions. This can be through images of God (*Chukwu*), Altars, Temples, Shrines, religious functionaries and devotees, sacrifices and any other acts of worship directed (directly or indirectly) to the Supreme Being. These evidences will eventually enable us to realize the extent to which the worship or cult of Chukwu is given attention in the life of the Igbo.

Sacrifice to *Chukwu*

Sacrifice is usually the meeting point of both the visible and the invisible worlds. There is no doubt that there is direct sacrifice to the Supreme Being. Even when there is no elaborate altar, a very simple type may be found. For instance, in most parts of Igboland there are bottles buried up to the neck, in many peoples' compound. This often serves as a place of sacrifice.

Also among *Aro* (just like among several other Igbo groups), a sacrifice of white fowls may be offered at the base of a "palm mid-rib". In the days gone-by, every eight day, called *Afo Ukwu*, was sacred to god who the *Aro* people refer to as *Obassi* – and people were forbidden to

work on that day. According to Talbot, "it is a rule among the Aro that sacrifices have to be made to God at the two great festivals of seed-time and harvest. Among most Abam Edda and Ngwa people, an egg is usually offered up every day" (Arinze 53).

In Igboland, sacrifices to *Chukwu* are often done with white items. The colour 'white', (sign of painting) as in the case of the use of white fowls or animals is significant, in the Igbo culture and worship. The argument which most people offer is that since the sun, *Anyanwu,* Chukwu's closest messenger is white, anything passing through it to the Supreme Being must also be white (Basden 61). Others believe that God is pure and white is often an indication of purity. Therefore, anything going to the Supreme Being must be pure or white.

There is hardly any worship of God at the shrines without sacrifices to the Supreme Being. The ends of such sacrifices to the Supreme Being are mainly "expiation, sacrifice to ward off molestation from unknown evil spirits, petition and thanksgiving". The natures of sacrifices are usually determined through divination. While direct sacrifice during public worship of the deity must be outstanding, being a communal or collective effort, the individual direct sacrifice to God usually may depend on his economic standing.

2.4 The initial Religious Conflict in Igboland

Areas of disagreements between Christianity and traditional Igbo religion existed. Teachings early Christian missionaries were without regard to the peculiarities of the Igbo people and were in conflict, in many material respects, with the culture and religion of the Igbo people. The doctrines of most of the missionary groups, at the time, condemned many practices of the people and most of what the people held as sacred. For this reason, this new teaching was resisted by many core traditionalists in different parts of Igboland; resulting in some form of conflict, particularly with respect to the following areas:

2.4.1 Totem and Sacred Animals

A time came in the early days of the missionaries in Igboland, when some of the new converts who thought that their new found faith had freed them from obligations imposed by the customs and traditions of the land, became to challenge some of their age long observances. This made them to start neglecting norms and violating restrictions imposed by their culture and traditional values; and doing abominable things. These people began to dare the laws of the land and sometimes violate them, with impunity.

For instance, in most parts of the land, there were certain animals considered sacred and so not hunted and/or killed for food. These kinds

of animals were treated with respect by the followers of traditional religion and people were not permitted to harm them. Harming these animals was considered as a serious abomination and the violation of which is termed "*nso-ala*" which required atonement. By the teachings of Christianity, particularly as revealed by God to Peter when He said: "Get up, Peter, kill and eat…Do not call anything impure that God has made clean…" (Acts 10:13-15). Such exposition demystified the sacredness of totem and sacred animals; hence some of the radical new converts began to kill and eat these animals. They even encouraged others to do same, boasting that the gods are incapable of visiting them with any calamities, as they have always been made to be afraid of.

Similar experiences where recorded in different parts of Igboland at the time. In Anambra State for instance, the Aroh people, the people of Idemili revered "*eke*" (that is, a python) as a totem and as such any body who kills it deliberately was ostracized by the community. If someone who killed the python is not killed by the people, he will face "social ostracism, and when he eventually dies, he will not be given an honourable burial under the traditional religion of the people. But with the coming of Christianity, the early Christians in Anambra State sometimes kill the "*eke idemili*" (the sacred python of idemili deity) deliberately for food. Not only that they killed and ate this totem animal, but they also ridiculed the traditionalists and the gods they served. This is

days in Igboland, and in many of the places, the people branded as the *Osu* were among the early converts of the Christian missionaries.

Be that as it may, by the 1956 legislation, it was no longer a taboo for "a free born to marry an *Osu/Ohu* because an enterprising *Ohu* could buy back his freedom and could even marry into the household of his master" as King Jaja of Opobo was the first to set an example (Okeke et al 5). It is regrettable that in the present Igbo land (about 65 years after the making of the law) the *Osu* caste system is still practiced in some parts of Igboland.

2.4.4 Sorcery, Magic Charms, and Witchcraft

In typical Igbo tradition, whenever things go wrong in the live of an individual or group of persons, it is always presumed that someone or something must be responsible. In many instances, the person may suspect that somebody have used "evil magic, sorcery, or witchcraft against him or his household, animals or fields". Meanwhile, the traditionalists are afraid of these forces. The early Christians were taught not to believe that "sorcerers, witches, and charms have any effect on their lives or their property". The Christian faith rejects magic power, they believe in the use of prayer and sacrament to pursue danger and hardship.

2.4.5 Modes of Worship

Hastings defined worship as that which "comprise all modes of giving expression to the various feelings towards the divine power, feelings of awe, reverence, obligation, depreciation, gratitude, hope, and others". The Igbos who are traditional worshippers, worship the Supreme Being via several "minor gods or divinities". The Christians worship God through prayers, church services, meditation, songs, and through other assorted services.

The traditionalists erect shrines as places of worship for their gods. Because of this, they often use little gods as well as ancestors called mediators. The Christians believe that the Supreme God cannot be worshipped in a shrine, since He is invisible and his kingdom is the heavens and that He descendent from God. To the Christians, therefore, God can be effectively worshiped through certain rituals performed by an ordained priests, pastors, catechists, among others. They regard the holy saints and angels as God's messengers.

The early Christians were opposed to such traditional sacrifices that involved human blood, the killing of twin, and other fetish practices and saw them abominations. They encouraged each other not to participate any longer in traditional family thanksgivings and festivals; since they always involve abominable sacrifices. Because of the refusal

2.5 Summary of Review Literature

One of the things that the review of literature above shows is that Igbo-African traditional religion has been studied by many scholars. Also, the literature review records that many authors have had something to say about the encounter between the same Igbo-African traditional religion and Christianity. But none of these scholars has considered how Igbo (African) traditional religion aided the acceptance of Christianity by the Igbos of South Eastern Nigeria. This is the gap that this work seeks to fill.

CHAPTER THREE

RESEARCH METHODOLOGY AND THEORETICAL FRAMEWORK

3.1 Research Method

This work adopts the phenomenological research method. This method arrives at its conclusion using non-numerical figures. Instead, it focuses on the use of Key Informant Interviews (KIIs), In-Depth interviews (IDIs) and Focus Group Discussion (FGDs). A total of fifty (50) respondents were interviewed in this work.

3.1.1 Research Design

Instead of adopting survey design, this work has adopted qualitative research design. This is ethnographic in nature.

3.1.2 Research Study Area

Below is the map of the south east region of Nigeria where the oral interview was conducted.

3.1.5 Method of Data Analysis

Qualitative content Analysis was adopted in the analysis of the data derived from the interview. The data were grouped based on the data and descriptive explained.

On the other hand, use of secondary data involves study of works already carried out by scholars on the subject matter as found in journals, textbooks, internet materials and so on. The researcher believes that when these methods are effectively applied and used, the goal of the study will be achieved.

3.2 Theoretical Framework

In this research work, certain theories were applied to explain the relationship that existed between traditional religion and culture and how the elements inherent therein must have facilitated the acceptance of Christianity in Igboland. Therefore, the social integrative, social solidarity and indigenization theories were considered more suitable and appropriate.

3.2.1 Emile Durkheim's Theories

Emile Durkheim was a renowned sociologist known for his early works on the formation of the society. He is regarded as one of the originators of "Modern Sociology". His writings focused on the way

traditional and contemporary societies should develop and function. Durkheim's postulations were founded on the theory "of social facts, defined as the norms, values, and structures of a society" (Hurst, Melissa 2).

His view of the society was completely different from those of his contemporaries who dwelt on things of internal nature while he concentrated on the external things in nature. Some of the externalities discussed by Durkheim were motivations and desires of individuals. From his perspective, "collective consciousness, values, and rules are critical to a functional society" (Hurst 2). Though many theories are credited to Durkheim, including theories of social integration, stability, anomie and functionalism; this work shall examine his social integration and social solidarity theory.

3.2.2 Social Integration Theory

This theory refers to "a situation where minority groups come together or are incorporated into mainstream society". It can also be "a process of largely agreeing on a shared system of meaning, language, culture, religion and the like". What this means is that there were no differences, but that the people involved accept to stay together as one, and to some extent, feel as part of a larger whole. Increased social

levels of social integration which are political, religious and familial integration.

Regarding integration based on religious, Durkheim emphasized that "religion provides a social context where people interact and form strong emotional, psychological, and social bonds". Adolescents were not discussed in this regards, obviously his postulation of religious integration apply to them as much as other members of the society.

Integration based on politics is often ignored by followers of Durkheim. "Political crisis or upheavals increase the intensity of collective sentiments and stimulate patriotism" (Durkheim 219). It makes people to be familiar with their common interest, goals, and values of the political institutions, hence, the attachment between the individuals and the groups to get much stronger.

In his view, Peter Blau saw "social integration and how we might achieve it as key concerns in modern society" (Blau 546). First, attraction is key to Blau's theory of social integration. Attraction in his context, is not necessarily based on physical appearance but instead on how well a person is able to demonstrate his or her value to a group. Blau was of the view that possible members of a group should make a deliberate attempt to show themselves as very nice-looking to other group members. The hope is that existing group members will see a new member as potentially making an important contribution to the group.

3.2.3 Social-Solidarity Theory

This theory regards the need of the society principally and explains how religion should cater for them, particularly by its expected promotion of cohesion and harmony. Social solidarity can be simply defined as, "a feeling of membership" (Collins 49). The Roman Catholic early missionaries in Igboland, seemed to have significantly applied the social solidarity theory in their early missionary days, as they identified with the need of the people and by providing them, got the followership of a good number of the people.

The social-solidarity theory is indebted mostly to Durkheim who was thoughtful on how societies come together. He said that "they do it largely by through religion, which comprises beliefs and practices that are relative to sacred things and which organizes followers into solidarity groups. Sacred things need not include gods (Buddhism, Durkheim writes, is a religion without them) but are anything representing the essential elements of society". Durkheim concluded that "the chief object of worship for members of Australian clans, the totem actually stands for the clan itself, and that it is the clan that is sacred. The same principle holds for complex, modern societies. The explicit object of worship, whether totem, flag, or God, represent all that is vital and hence regarded as sacred in the society". The members of a society mutually dependent on each other with a feeling of oneness and religion often strengthens and

supplements that sense of dependency. This usually makes members to behave justly towards others and rally around themselves in defending society.

This theory which started in the late 19th century is considered as a major approach in anthropology. It is regarded as a type of "functionalism", in that it x-rays why religion pays respect to the society. Religion uses symbols, representative means, showing nice clothings, architectures, songs, dances and verbal formula to supplement communal feelings. This theory sometimes is described as symbolism, since it points to religion as totally a symbolic action that does not take on the world as a whole, but only human social relations. Many scholars, including Wilson, Rose and Raymond among others, have supported the fact that religion help to maintain social order.

There are arguments that one of the strengths of the social solidarity theory is that religions produce solidarity and that leaders in various societies have employed this ability to achieve different goals. However, contrary opinions are to the effect that, while social grouping purportedly are conserved by religion, many others are been damaged by it. Those on this side of the divide maintain that there are much groups as follows: "families, villages, ethnic communities, states that are rather split, not joined, by religion".

If this theory is applied to the activities of the early missionaries in Igboland, it would be seen and therefore humbly submitted, that, the Christian religion brought division (along denominational lines) rather cohesion among the Igbos, in its early days and even up to date. This is against the background that before to the coming of Christian missionaries, the Igbo traditional religion was primarily based on their culture and common sense of origin. Their traditional religion was a unifying factor. Most sacrifices required the coming together of family members or members of the community who after killing and offering animal(s) for sacrifice, would remove some sacred portions that are designated for the gods and present the remaining portion to the people for communal feasting. This is in contrast to the competition for converts by the various missionary groups, upon their coming to Igbo land which wiped away this cherished age-long sense of oneness and brotherhood, and divided the people along the line of the respective Christian denominations they belonged.

3.2.4 Indigenization Theory

Indigenization is a process in mission methodology which aims at evolving and maintaining a culturally integrated Christianity. It describes the process of planting ministries that "fit naturally into their environment" (MacDonald 327).

Prior to the origin of Christianity and other religions to Africa and Igboland in particular, the peoples practiced a religion that was deep-rooted in their culture and tradition. This African religion is interlaced with the history, experiences, and cultures of the Africans. It prepared the room for the acceptance of Islam and Christianity among the Africans. Generally, the African people believe in God as a sovereign being, known by various names in different regions. God was worshipped through diverse rituals based on the tradition of the people. Ultimately, Christians in Africa sees the hand of God working in and through traditional religions. Hence, it was erroneous for the Western missionaries to dismiss "African religion as fetishism, spiritism, animism or paganism".

Remarkably, some missionaries recognized quite early that Africa had a belief system that was truly efficient. A Belgian missionary known by the name Placide Tempels saw the need to study and understand African traditional religions in order to Christianize Africa without damaging their cultures. His *Bantu Philosophy* formulated in 1945, gave way to a considerate study of the African religions (Nthamburi 113). E. W. Smith also made comparable studies in a symposium edited in 1936, under the title "*African Beliefs and Christian Faith* showed that Africans had a concept of God long before Christianity arrived" (Nthamburi 113).

The societies in Africa started to break up when traditional religions were assaulted. Prior to the coming of Christianity, African religion was known to take life holistically.

Theologians in Africa had over the years struggle with the issue of indigenization. The major question that comes to mind is "how can Christian faith be harmonized with African beliefs and practices so that Christianity may truly become a religion for Africans?" This is desirable as the African theologians believe that the African religion promotes good living no less than Christianity. For instance, in Uganda, the Christian concept of sin is translated as "aronis" which literarily means, "a bad thing." This is to the effect that, in African religion, sin is always attached to a wrong doer (Kasomo 147). Awolalu holds that:

> Africans live in an ethical covenant relationship with one another and with their ancestors, their divinities, and the creator. Guilt is incurred when the established taboos are violated and when the ancestors are neglected. Sin is also recognized in antisocial behaviour such as murder, theft, adultery and individualism – for what disturbs equilibrium in society disrupts the union between the human and the divine (277).

Nyamiti postulated "Christ's ancestor ship as the source of Christian tradition and its stability. Christ's divine status sets him apart from other

ancestors. He is not merely an extrinsic prototype of behaviour for human counterparts but is the inner source and ritual principle of Christian life" (Nyamiti 113). Pobee also tried to clarify the idea of Christology via "African ancestorship". For Pobee, "Christ is the great and greatest ancestor. As ancestor, the God-man is characterized by power and authority and by virtue of being closest to God as God, Christ's ancestorship is superior to that of other ancestors" (112).

Kasdorf observes that when Henry Venn conceived the ideas of the principles of indigenous church, his primary target was the "euthanasia of a mission." His thought in "subjecting the mission to a painless death was indigenization of the national church on one hand and the devolution of the mission on the other. He contends that "devolution" for Venn meant "full transfer of all responsibilities from the foreign mission to the national church at the earliest possible date in order to free the mission for pioneer evangelism and church planting" (Kasdorf 112).

But what then is the difference between an indigenized church and an indigenous church? An indigenized church is one which foreign missionaries planted, but which later came under the leadership and support of national people, without foreign domination. On the other hand, an indigenous church is a church which nationals founded in their own locality, exclusive of any direct foreign influence or control. In *The Indigenous Church,* Hodges defines the indigenous church thus: "The

indigenous churches. Though most of these leaders of the African church attended the same Theological Schools and received the same education as their Western counterparts, these national leaders are still regarded as incapable of genuine theological creativity. They are expected to depend on commentaries and insights of their Western colleagues in order to interpret the bible correctly.

Many national church leaders have been noted to over-react to this uncharitable treatment in their indigenization attempts. Some of these leaders go to extremes in their attempt to localize Christianity through unnatural native forms of worship and synthesis of theological beliefs. When indigenization of Christianity is situated within the Igbo culture, Christian faith can be presented to the Igbo so that they will have an indigenous understanding and an indigenous expression of both Christ and Christianity, whose origins were not Igbo? He holds and the researcher agrees with him that, first, the Igbo perceive Jesus Christ as a universal divine personality. Second, the Igbo must use the Igbo language, Igbo symbols and Igbo metaphors to postulate authentic biblical affirmations.

But a careful evaluation of Igbo Christianity will show that the "Igbonization of Christianity" (that is, the genuine incarnation of Christianity with the Igbo society) is still miles away. Though most Igbo Christians regret the unnecessary loss and disparagement of their cultural

norms by most of the early Euro-American anthropologists, Sociologists, historians and even Christian missionaries; yet many still feel guilty today when they want to effect some necessary changes. The master-servant relationship which existed as it were, between the missionaries and the national church, still lingers till date. This situation is a real limitation to genuine indigenization of Christianity in Igboland.

3.2.5 Adaptation Theory

Adaptation, as a Sociological term, "refers to the process of interaction between changes made by an organism on its environment and changes made by the environment on the organism." Humans as organisms react to environmental, sociological and religious changes. Their reactions may be positive or negative. When they react positively to a given innovation, they may develop a tendency towards adaption, which established "a moving balance between the needs of a population and the potential of its environment" (Haviland 140).

In the area of missionary works, adaptation encourages a borrowing of foreign ideas and practices by the national Church. The goal of adaptation is mainly to change existing ideas and practices in the minds and in the ecclesiastical behaviour of the national Church, so as to bring conformity in these areas with those of the foreign mission boards. "Adaptation" implies a peripheral, superficial or non-essential activity

within a culture. Its concept, with respect to early Christian evangelism in Igboland, encoded Western cultural superiority complex and domination. This was soon realized by the African people and African Theologians have long fought against it and rejected it (Onwubiko 47).

Adaptation may suggest the mere Christianization of cultural practices, which lacks depth and meaning. For example, the changing of one's Igbo name to either a Biblical or English one at baptism does not necessarily make that individual a Christian. It may satisfy the missionary, but not the individual who is so baptized; for such an individual may still be entangled to his old traditional lifestyle.

It is obvious that the Igbos readily adapts and tends to changes in life situations, including social and religious changes. But the question in perspective is, how deeply rooted is their adaptation to the cultural changes that was occasioned by the new Christian religion? The adaptation appears to have been shallow; not going beyond the surface level. It did not get to the root. Some Igbo look at adaptation with disdain and contempt; arguing that, adaptation sometimes carries the baggage of insult for the Igbo culture. These people are opposed to the religious adaptation because they see it as yielding to superiority and cultural imposition by the missionary and dependence on the foreign mission agency (Domnwachukwu 121).

The establishment of creative synergies is a critical factor in the reflection on early missionary activities in Africa, particularly Igboland. There exists a relationship between local agents, communities, missionaries, and the lasting effects on all parties concerned. Sugden suggested that "missionaries erred in the belief that in order to evangelize black people, they had to persuade them to reject their traditional heritage and religious culture and adopt a new identity in order to be remade as converts" (6).

Certainly, Africans could not simply have given up on all those practices that have made them what and who they are, before converting to Christianity. A considerable number of Africans resisted the imposition of Christianity and situated their Christian religious beliefs, with its extraction from the African religious cultures.

CHAPTER FOUR

THE TRADITIONAL RELIGIOUS AND CULTURAL PRACTICES OF THE IGBO FOR THE ACCEPTANCE OF CHRISTIANITY IN IGBOLAND

The success of Christian missionaries in Igboland and the acceptance of Christianity in the area, notwithstanding initial resistance, is predicated on the fact that the traditional, cultural and religious and lives of the people prior to the time, already had some attributes that were related to the teachings of the new Christian religion. The people already believed very firmly in the existence of a superior beings to whom they offered sacrifices and relied on his providence for life, productivity and procreation, protection, blessings, among others. The missionaries sometimes related their teachings to some of the beliefs and traditional practices of the people, as to convince them to accept their new Christian religion on the basis of the nexus between the two religions. Discussed below are those beliefs and traditional attributes that facilitated the acceptance of Christianity in Igboland.

4.1 Belief in the Supreme Being

Every rational man knows that the fact of his existence and how he came to be, is to a large extent, a mystery which he cannot explain with certainty. For this reason, majority are inclined to believe that there is a higher (Supreme) Being that must be responsible for the existence of

man; and what becomes of a man while he exists and perhaps what happens when his human existence comes to an end (that is, upon death). Hence, one can assert that the primary thing which binds together the system of belief and practices in the whole world, is the concept of God.

Although the European Missionaries and scholars conceived the African God as abstract, fetish, remote and non-potent, but considering the names and attributes of God in African belief, one can admit that their God is a reality and not an abstract concept. Africans see him as a personal being with whom one can enter into communion and communication; who is worshipped through the divinities and ancestors. It remains undisputable that, prior to the advent of Christianity in Igboland, the traditional religion was a strong factor of morality in the sense that it dealt with the ethical principles, ideas and rules that guide and uphold the life of the people in their day-to-day relationship with one another, and with the spiritual world (Ekeopara 91).

Based on experience, the Igbo hold that the Supreme Being (that is, the first cause of all things) exist – but because of his great distance in the heaven, he created lower Deities to superintend different parts of the universe. The Supreme Being (*Chukwu/Chineke*) in Igbo context, is in fact perceived and explained as the highest in the hierarchy of Beings (Ezeugwu and Chinweuba 3). The Igbo refer to God as "*Chineke*" – a word which recognizes God as the creator as well as the one who allots

blessings to us in accordance to His wish. He is the Great and Supreme one who divides to the people their respective lots, in the quantity and manner that pleases Him. In appreciation, the Igbo offer sacrifice from time to time and believe that their God is the ultimate receiver of all sacrifices. He is spoken of as the unselfish God who is satisfied with His lot and does not envy the progress of man (Onyeidu 42).

Drawing from the revered position accorded to the Supreme Being by the Igbo, Uchendu, V.C in Onyeidu opined that, the Christian doctrine of one God is not new, what is new is that Christianity introduced orthodoxy and heresy into a culture where they were foreign. The Christian one God is essentially reinterpreted as high God, already part of the religious belief of the people (Onyeidu 9).

It is found from the gamut of available literature and the responses got from those interviewed, that there is a strong belief of the Igbo people in the existence of a supreme being (God) who controls the affairs of all human persons and to whom they offer sacrifices in worship or atonement for wrongs done; similar to what obtains in Christian worship. John Okeke, a man of about 88 years, stated that they fore-fathers taught them not to do evil to their fellow men, so that *obasi bi n'elu* (the god that lives above) will always fight for them (*Oral Interview*, March 4, 2019). This evinces a belief in the existence of a powerful supreme being, who though far from the people, is capable of defending them in times of

trouble. He added that, with his conversion to Christianity, he came to realize that, of a truth that, the Almighty God is able to protect him and his household, from all harms and evil arrows from the enemies.

Egbere Owoh, Ibekwe Nnamani, Ejike Okoro opined that, they were convinced from their respective personal experiences that, in this world, there exist a super power that tends to control the affairs of men and determines what comes to each man in life (*Oral Interviews*, March 5, 2019) . Owoh (92 years old) wondered why two men will plant yam next to each other, and at harvest, one of the farms will produce huge tubers of yam while the other will produce small-sized tubers. He attributes this to be, the varying rewards to men by the supernatural being (Supreme Being) whom they generally believe, rewards men according to their deeds. Nnamani (80 years) believes that, the yearly sacrifices he makes to the gods, using the best of his farm produce, is the reason why the gods keep blessing him with better harvest, each subsequent year. Okoro (85 years) disclosed that, his repeated failure in palm wine business ended, the year he decided to buy big fowl and sacrifice to the god (Supreme Being) through his *alobu* (personal shrine).

In the opinion of Ugonna Onwuekwe and Obumneme Nweze, they have come to the conviction that, there is really a Supreme Being who watches over the affairs of men and controls the circumstances of each person (*Oral Interviews*, March 8, 2019). Amaechi Ubakara, Nnaemeka

Ugwuozor, Ezekiel Mbam and Paul Onyia, by the reason of their narratives in response to questions asked, recognize the existence and potency of the Supreme Being – who does His things His own way and at His own time. Onwuekwe (89 years) narrated how his household was living in penury bur kept making supplications to *Chineke* (god the creator) to recreate their destiny. A time came when things began to move well for them, and different members of the family got increased in riches.

Mbam (86 years) disclosed how he married three wives because he was seeking for a male child. Sadly, each of the three women repeatedly gave birth to female children; however, he did not relent in making sacrifices to *Chukwu Okike* (god the creator). Eventually, it was the first wife that gave birth to male twins and he accepted that his wife and the twins be ostracized from the community than be killed – in accordance with the practice then (of killing twins). The children were taken to a missionary hospital located miles away from his community for safe-keep. As he (Mbam) continued to visit the hospital, to provide his wife and the children with necessaries, the white missionaries kept preaching Christianity to him, reminding him that it is only God that could have blessed him with twins, after all his human efforts have failed. He eventually got converted.

and against enemies. At times, prayer may take the form of thanking God or the divinity for good things received, for victory over enemies, among

others. In the context of liturgy, prayer comes immediately after the invocation and as the officiate presents the offering to the divinity (Awolalu 129).

Prayer is offered by people in formal worship, also it is offered at any time and in any place, as the worshipper feels or as the occasions. The Igbo man who is reputed to be very religious, prays anytime and anywhere. At home, he prays in the morning before leaving his bed or house; at his place of business or work place, he prays before starting the day; before sleeping at night, he still utters words of prayer: indeed, he lives and dies religiously.

It has been contended that, the motives and content of traditional prayers differ markedly from that of Christianity. For instance, they prayed for long life, many wives, many children, for riches and many slaves. At Onitsha, similar prayers which centered on worldly and selfish motives without any thought about future salvation.

Iruka Nweze, Onyeoma Utazi and Ugonna Nweke disagreed that the prayer of the Igbo man is always centered around himself. They stated, albeit differently that, when the Igbo man prays, he prays for his progress and that of his kinsmen, for peace in the land and for the gods to ward-off sickness, epidemics, hardship and every form of difficulties in their lands, amongst others. The Igbo man believes and advocates the principle of "live and let live" (*ugo bere, egbe bere, nke siri ibe ya ebena,*

nku kwapu ya) and this can be said to be the summary of Christianity – which is love for one another (Luke 10:27; 1 Cor. 13:13).

Utazi (87 years), maintained that, while the prayer of the Igbo man may dwell much on his personal needs, it need be noted that, the Igbo man who is praying for God to bless him and grant his "worldly desires" is expected to have a clean hand and not have stood on the way of any other man receiving good things from the gods. This means that, the act of prayer in Igbo traditional religion requires self-purification and we submit that, the prayer is also capable of attracting the adherents, the grace for salvation. After all, the model prayer that Jesus taught his disciples (Our Lord's Prayer of in Luke 11:3-4) contains a request for the "self" thus: "...give us day by day our daily bread. And forgive us our sins; for we also forgive everyone that is indebted to us..." So, the prayers of the Igbo traditionalists were in essence, spiritual.

4.2 Prayer

Prayer is an integral part of worship because it has its origin from man's way of verbal expression of his thoughts and emotion. A prayer is seen as a communication of a religious man with God". Prayer can also be seen as the act of requesting/asking for assistance from the object of worship and/or begging for forgiveness of one's sin. The adherent of Igbo Traditional Religion prays to the gods, spirits and ancestors. The

typical traditional morning prayer to Chukwu by the head of the family include, amongst others:

> Water for washing the hands, powdered chalk in a vessel, the *ọfọ,* kolanut(s), a seat or animal skin for sitting, and sometimes wine and an elephant tusk. One of the children normally has the duty of preparing these. Before he starts the prayer, the man washes his hands, then he makes signs on the ground with chalk (may do this later), and places down his *ọfọ.* He breaks the kolanut, chews and spits part of it on the *ọfọ,* and generally throws a little to the invisible spirits outside, while reserving the rest for people present or his guests during the day. Now comes the heart of the prayer. Greetings and salutations are made in the invariable order: to *Chukwu, the Spirits,* and *the Ancestors.* Then he makes petitions for himself, his family, his kindred, and his property. Now follow curses against his enemies: may *Chineke* (God) repay them! He prays thus while knocking his *ọfọ*on the ground several times. Then comes the conclusion which almost always is: *Egbe belu ugo belu, nke si ibe ya ebena nku kapu ya* (live and let live)… (Arinze 35).

The morning prayers is usually carried out in homes under the leadership of the family head at a shrine or *Chukwu's* symbol – if that family has

one. This is usually the first thing the members of the family do every morning, prior to talking to anybody. The prayer normally ends by the affirmation in unison of *Isee!* or *Ehaa!* by all around. The prayer usually consists of different parts thus:

Invocation of God, Deities and Ancestors

Chineke taa *ọjị*	Chineke (God creator) eat kola
Obasi di n'elu, ekene	Lord of heavens, greetings
Anyanwu na Eze enu, ekene	Sun king of heaven, greetings!
Ndị ichieukwu, ndị ichie nta	Great and small ancestors,
tanu *ọjị*	eat kola
Onye wetara *ọjị* wetara ndu	Who brings kola brings life
Ndu ka anyi na arịo	We are asking for life
Ndu nwoke, ndu nwanyi	Life of man, life of woman
Ndu anyi n'ayo abughi ndu	The life we are asking of is not the
life of a osisi akpu	cassava tree
Chineke nyere aku oyibo	Chineke, you who give coconut
mmiri ona anu	the water which it drinks
nye anyi ndu n'ihe eji akwado ya	Give us life and the wherewithal to sustain it
Gi bu Chineke na-ata n'ogbe	You God eat whole,
ma anyi na-ata n'ibe	we eat in pieces

Chineke bia nara anyi ojia waa	God, come break this cola for us
maka na anyi enweghi aka	for we have no hands
Asi nwata ya ghuba aru	If you tell a child to wash himself
Oghuba so na afo	he will wash only his stomach
Ma oku agunyere nwata na aka	But the fire given to a child
adighi ahugbu ya	does not hurt him/her

Petitions

Ihe anyị na arịọ bu ndu	We ask for life
Nye anyị omumu nye anyi ego	Give us children, give us money
Nke onye na eme ka ona agara ya	Whatever man does, let him prosper by it

Blessings and Curses

Ihe onye na eroru mmadu	What one plans for others is
Ka Chineke n'eroru ya	what God gives him back in return
Obiara be onye abiagbuna ya	May one's visitor not constitute a problem
Olawa mkpukpu akwana ya	so that on his departure he will not leave with hunchback
Aka ekpe kwo aka nri	Let the left hand wash the right hand
Ha abụọ ewe di ocha	both will be clean

Ochu nwa ọkụkọ nwe ada	Those that pursue me will continue to fall
nwa ọkụkọ nwe mbombo oso	while I move on

Admittedly, the adherents of the traditional religion do not pray for the forgiveness of their enemies as the Christians do and they believe in the law of Moses, that is, an eye for an eye and a tooth for a tooth. Their prayers is founded on the principle of let both the kite and eagle perch together and whoever tells the other not to perch, let his wings break. This is the reverse in Christian prayers. Average heathen in Igbo society prays for long life, many wives and children, for riches, honour, for power and victory over enemies and so on. The Christians in their daily prayers equally ask God for similar things; and this could be said to account for part of the reason why the traditionalists were convinced to accept Christianity. Both religions encourage prayers, notwithstanding the different methods applicable to each of them

4.3 Worship

In a general and secular sense, worship implies a recognition of worth, and an act of worship is an expression of this recognition. But in the religious sense, worship "...is the turning of man to God in faith and adoration. It is an ascription of absolute worth to God who evokes the sense of worship. It is an acknowledgment of Transcendence and a

Reality independent of the worshipper. Without a God-word orientation of the personality, there can be no religious worship" (Awolalu 93).

Noteworthy is the fact that "worship is a person's act of turning to an object of worship. This may be formal or informal, regular or irregular, communal or individual." (Gbenda 32) They further identified essential rudiments of worship in African Traditional Religions to include prayers, offerings, sacrifices, invocations, libation, singing and dances, pilgrimage, ethical codes, thanksgiving, charity and so on (Gbenda 32).

The central point and focal person in their religious life is Chukwu. According to Ilogu:

> Chukwu (Chineke) is sometimes spoken of by the Igbo as the *Amama Amacha Amacha,* the known and the unknown. It is a name which among other things indicates the mysterious nature of Chukwu. Yet the Igbo spirituality generated the practice of trying to penetrate into the being of this mysterious Chukwu through prayers, invocations, incantations, sacrifices and annual celebrations in the pleasing of the constituents of the mysterious God-head. It is all these put together that we speak of as worship in Igbo religious life (1).

In Igbo cosmology, the Supreme Being is worshipped through a myriad of earth deities each of which the Supreme Being had entrusted with a

specific responsibility in the world. Although the Igbo traditionalist may worship God directly yet it must be observed that very often he is aware of his superiors in the universe. These superiors are the spirits who are subordinate to Chukwu. They are also God's creation. These spirits are seen as God's agents, His messengers and they are the forces who more or less, run the world. The Igbo, therefore, does not neglect the regular presence of the spirits while worshipping God.

Remarkably, the Igbo recognize God's supreme dominion and believes that no spirit can be potent if *Chukwu* decides otherwise, even if the blood of victims keep flowing. This is why the Igbo make such statements like: "*Ike chukwuka*" (the power of God is greater), "Chukwu kere gi kee Chi nwe gi" (God created you and your guardian spirit), "*Chukwu ji nma jide ji, onye O wanyere ya erie*" (God has the knife in His hands and the yam too, to whom he slices off a portion, that person eats). The validity of these assertions is quite evident in the Igbo man's attitude during prayer and sacrifices and in his general beliefs. Hence during worship, God is always invoked first.

They come when faced with misfortunes, when the wrath of the divinity is upon them, when they are asked to offer sacrifices through prediction, oracle, or dream, or when they want to show their gratitude for the blessings which they have received from their tutelary divinity. More so, there are annual festivals observed everywhere in Igboland, in

honour of each divinity. During the festivals, worship is usually elaborate, and characterized by thanksgiving and rejoicing (Awolalu 127). .

One major gods of Igbo people is "*Ani*- the earth deity, the great mother goddess and the spirit of fertility". Udu, Ani, Ikenga, Utazi, disclosed that in their Amaechi community, each lineage and homestead has a shrine devoted to *Ani* with a special priestesses who is dedicated to its worship. The presence of the *Ani* priestess is fundamental when important matter of incest, birth, death, and burial is being discussed, in any part of Igboland.

Worship involves prescribed types of ritual through which the worshippers communicate and commune with God/the gods. This is known as liturgy; and the responses got from elderly persons that were interviewed, show significant similarities between the ritual of worship in the Igbo traditional religion and in Christianity. Liturgy is made up of several elements, some of which are discussed as follows (Awolalu 128):

i) *Offerings:* These are related elements of liturgy. Offering is what is given as a gift or presentation to the spiritual beings in worship. Kola-nut is the item most frequently used by the Igbo people, while rendering offering to the gods. Other food items like yam, bitter-kola, porridge, fowl, goat, and others, can also be offered.

As the gift is offered, the officiant invokes the spiritual being to accept the offering by pronouncing such words like: *Ala taa ọjị* (the earth goddess, come and eat kolanut), *Ndi ichie, bia taa ọjị* (the ancestors, come and eat kolanut), *Chukwu okike, bia taa oji* (God the creator, come and eat kolanut). The kolanut presented is usually a four-valve one. When broken, the officiant asks questions and cast the valves on the ground as a means of divination. Through the casting and the falling of the valves, the divinity wish is known and the certainty of acceptability of the gifts offered (Awolalu 129).

Okonkwo (90 years) and Otubo (85 years) agree that, when the valves of kolanut thrown as offering to the gods, show by the pattern they lie on the ground, that the offering is acceptable to the gods, there is always an accompanying joy and merriment; less, the elders may go to soothsayer for consultations, to know why the gods rejected the offering (*Oral Interviews*, March 19, 2019). In like manner, the Christians bible distinguishes between acceptable and non-acceptable offerings/sacrifices. For instance, Cain's offering of some fruits of the soil was rejected by God whereas Abel's (Cain's brother) offering of fat portions from some of the firstborn of his flock, was acceptable to God (Gen. 4:3-5). Also, because Abraham was ready to slay his only son Isaac and sacrifice him to God, God swore by himself to bless Abraham and make his descendants as numerous as the stars in the sky (Gen. 22:2,10,12,16-18).

ii) *Libation:* This is the act of pouring some liquid (usually palm wine, liquor, water, and others) on the ground, for the spirits/ancestors, while uttering some words of prayers alongside. An elder blessing a person will pour out some liquid on the ground, for the spirits of the family to sanction the blessing. This may be likened to the spraying of holy water upon worshippers, by some Churches, as a symbol of an outpouring of God's blessing upon them.

Nkemakolam (92 years) stated that, when they pour libation, it serves as an invitation to the ancestors, spirits or gods to come and eat of what they have to offer, and to witness to whatever thing they are to say and or do, thereafter (*Oral Interview*, March 19, 2019).

iii) *Invocation:* This is the method or form of calling or addressing upon the Supreme Being or Deity or the divinities. Nkemakolam reiterated that, before one pours libation and make invocation, the person is supposed to purify himself first – and this is sometime done by the person taking the liquid in his mouth, gaggling it and then spitting the liquid out. This symbolic cleansing of the mouth is believed to, at least, take away the guilt of any offence committed by a wrong use of the mouth, including use of the mouth to plan evil.

In Christendom, certain prayers are similarly offered to invoke the Holy Spirit (believed to the third person of the Trinitarian God), the saints

and even Virgin Mary (the mother of Jesus Christ). Through such prayers, Christians seek a comforting of the Holy Spirit (confer John 14:1-17, Eph. 2:14, Phil 4:7) and also seek the help of the Holy Spirit or the Saints (or the blessed Virgin Mary – particularly for Catholics) to enable them live righteously and do the will of God, in manifestation of the fruits of the Holy Spirit (Galatians 5:22, 23, 25). Invocation can also be an invitation for the intercessions of the Holy Spirit, the Saints, the Blessed Virgin Mary to God, for Him (God) to grant that which the Christians pray for.

iv) *Posture and Attitude at Worship:* The Igbo, like the people of West Africa believe that the outward form of worship actually has a symbolic significance, totally different from the imagination of a casual observer. For example, during congregational worship, each worshipper may stand or kneel while the officiant (usually the Priest or Priestess) stands, kneels, or genuflects in front of the shrine.

Oke Nwonwe, Iruka Nwancho, Ebere Uzoke and Iloabuchi Eke remarked that under their traditional religion, the Igbo people reverence the gods exceedingly and glaring display this during private or communal worships (*Oral Interviews*, March 22, 2019). Nwonwe (90 years) a traditionalist who has a shrine just close to his *"obi"* (personal residential house) said: "because we believe that "*Obasi bi n'elu"* (the god that lives

in heaven) is a great god whose abode is in the skies, we normally look up to the sky with hands outstretched when we invoke the gods during sacrifices; gently bowing our heads each time we call any of the names we attribute to the gods. Then we kneel before the shrine and sprinkle the blood of the animal used for the sacrificial offering over the emblems in the shrine, after the sacrifice."

Nwancho (92 years) and Uzoke (91 years) disclosed that they take similar postures when offering sacrifices to the gods. When asked their reasons, they variously responded that, it is generally believed amongst the Igbo people that "*Obasi bi n'elu*" is a great god, who created the earth and the sky and who sits up above in the sky to control the affairs of men and to determine what good or evil happens to each man. So when they worship him, they comport themselves and take up postures that show respect and reverence. Eke (80 years) added that, his grand-father told him story of how a man who spoke rudely to another while they were before the *Amadioha* (the god of thunder) shrine, was instantly struck and killed by thunder. According to Eke, this story which is passed from generation to generation, has contributed greatly in influencing the conducts of his people, any time they appear before their shrines, to make sacrifices.

One of the cardinal messages of Christianity (the religion which the missionaries introduced to the Igbo people), is the message of the birth of

Jesus Christ – the savior of mankind. At the birth of Jesus Christ, a star led three wise men from the East to Bethlehem where Jesus was born. When they found the child Jesus with Mary his mother, they fell down and worshipped Him (Mtt. 2:1-11). The New Living Translation records it as: "they bowed and worshipped." This is indicative of one of the postures that should be adopted during worship. And why do we need to bow or fall on our knees to worship God? Because He is a great God that needs to be reverenced. This is why He warned the Israelites through Moses, when He was to appear to them at Mount Sinai, thus: 'Be careful! Do not go up on the mountain or even touch its boundaries. Anyone who touches the mountain will certainly be put to death' (Ex. 19:12).

It goes without saying that, it would not have been of any difficulty, getting the early Igbo coverts take the appropriate postures of standing, closing of eyes, kneeling and bowing down, raising hands up, and the likes, during worships. They were already used to such practices.

4.4 Sacrifice and Communion Feast

Sacrifice has to do with offering to the divine Power(s) life animal or person, or some object. By offering good sacrifices, men create right relationship with the divinity and attract abundant favour upon themselves.

Sacrifice is also seen as the act of committing ones time, money and other valuables to the services of God in expectation of a reward. Mbiti made a distinction between sacrifice and offering. For him: "sacrifices involve the shading of the blood of human beings, animals or birds whereas offerings do not involve blood but concern the giving of all other things such as foodstuffs, water, milk, honey or money" (57).

Sacrifice is usually the meeting point of both the visible and the invisible world. Religion manifests itself in cult or worship. In what does the sacrificial rite consist? We can for convenience and brevity, class them into three: communion, oblation and immolation (Arinze 32). The theory of sacrifice-communion originated from R. Smith who makes totemism the basis of all religion. The worshippers eat the sacrificed totem whose blood strengthens union with the god and wields social unity (Smith 32). The root of oblation is to come near. The person making a sacrifice does so, in order to come closer to the gods/God. Other authors place the essence of sacrifice on immolation. The 'something done' to the offered thing is called immolation. Immolation is according to the nature of the victim. Animals may be killed, liquids poured out, solids burnt. The main point to keep in mind is that, external sacrifice is essentially a sign of the interior sacrifice. Hence any immolation capable of showing this interior sacrifice will suffice for the sacrificial rite (Arinze 33).

The practice of sacrifice can be said to be indigenous to the Igbos. From ancient time, the people have been known to always make different sacrifices to the different powers, as integral part of their traditional religions. There is no doubt that there is different sacrifice to the Supreme Being. Even when there is no elaborate altar, a very simple type may be found. For instance, in most parts of Igboland, bottles were always seen in compounds buried up to the neck. At the time of planting, palm-wine is poured into the cycle of the bottles as an offering to god.

Sacrifice in Igboland was referred to as "*aja*." For the sacrifices, the people either used farm crops or animals but at the height of it, used human being. It was believed by them that, for any request that is backed by human sacrifice, the gods were sure to grant such request. Onyeidu compared this to the sacrifice of Jesus Christ to the Christians – where the life of Jesus Christ the son of God was offered as a supreme sacrifice for the redemption of mankind (31). The Christian missionaries taught the people that through they believe in the sacrificed Son of God, they could get anything they asked of the Almighty God.

There is hardly any worship of God at the shrines, by the Igbos, without any sacrifice to the Supreme Being. The nature of sacrifice is usually determined through divination. While direct sacrifice during public worship of the Deity must be outstanding, being a communal and collective effort, the individual's direct sacrifice to God usually may

depend on his economic standing. For the Igbos, the ends of such sacrifice to the Supreme Being may include: "expiation; sacrifice to ward off molestation from unknown evil spirits; petition; and thanksgiving" (Arinze 34).

Expiatory sacrifice is a sacrifice made to regain the favour of the higher powers, when one has made the higher powers frown because of sin. Ude Ezeani (93 years) stated that in the years past, sacrifice for forgiveness of sins of the people, was conducted once in a year. During the sacrifice, each household gathers at the village square with at least a tuber of yam and red oil. The village head then provides a goat for the sacrifice. Every male adult of the village takes turn to confess his sin upon the goat. When everyone has confessed, the goat is marked and offered to the spirits and then taken to the forest to wander away. The villagers begin to celebrate their renewed relationship with the gods, with a feat of roasted yam served with oil to all members of the village who have gathered for the sacrifice.

The early missionaries may have related the bearing of the peoples' sin by the sacrificial goat, with the bearing of our sins by Jesus Christ, who like the scapegoat, was led inside the palace, mocked by the soldiers and later taken away to be crucified. He died that we may be saved. (Mk. 15:16-20). As the immolated goat, Jesus even took the place of a notorious prisoner called Barabbas (Matthew 27:15-26). The Chief

medications for his sickness, but never got better. He commented that the boy got better after the sacrifice.

Nwadike (95 years) stated that it was the practice when they were youth that, before they embarked on any war, as warriors, they would all gather at the village square and the priest will offer sacrifices to the gods to protect them in the battlefield. Each of them will then be marked with the blood from the sacrificial animal. Uguru and Nwadimkpa, who were also warriors of the same community, narrated the same story. Uguru (92 years) remarked that, most of them escaped being killed in the battle fields in some occasions, by what appeared to be mystic ways. He attributed this to the intervention of the gods to whom they offered sacrifices, before embarking on the battle. He confessed that though he is now a baptized Catholic, he still visits the *Dibia* to seek solution to any challenge that confronts him, for which he has prayed repeatedly and booked mass without getting solution.

Nwadimkpa (who leaps in one leg) explained how he narrowly escaped being killed in one of the battles, after being hit on the leg by an arrow from the enemy's spear. For him, it is only the gods that came to his rescue, in the form of bees that came upon the enemies and drove them far from where he lay bleeding from the arrow's wound.

Nwadimkpa added that he was converted to Christianity, when after relaying his story of the mystic bees to a white missionary, the

missionary told him of how one Jephthah (who was hitherto rejected by his people as a son of a prostitute) later led his people to fight their enemies (the Ammonites) and how God gave him victory after he had vowed to the Lord, to sacrifice as a burnt offering unto the Lord, whoever comes out of the doors of his house to greet him when he returns safely from the Ammonites; which promise he fulfilled (Judges 11:30, 39). For Nwadimkpa, this God can be likened to the god who saved him following the communal sacrifices of his people; hence his acceptance to serve that God for the rest of his life.

Many sacrifices of thanksgiving and good fellowship are directed to the ancestors – who are generally regarded as nearest to man (than the spirits and God) and most interested in the family's well-being (Arinze 42). After childbirth, the couple may offer sacrifice of thanksgiving to the spirit of *Omumu* (to whom the woman had made a special request for a child). If the baby is a boy – a cock is the accepted victim, while a hen is given in the case of a baby girl (Basden 42). The couple may also offer sacrifices to the ancestors, seven Igbo weeks (28 days) after the birth of the child: which is the most joyous and familiar.

The sacrifice of first-fruits, is another example of a thanksgiving offering. After harvesting of new yam, the first crops are offered to the spirits by the farmers, in the feast of *'Iwaji'* (literarily, the breaking of the yam). From then on, men are free to harvest for themselves. Responses

elicited from those interviewed show that, many farmers do not harvest their yams until after the rituals of the new yam festival is concluded.

Okechukwu Orji, Nnamchi Ukom and Odinaka Ugwuanyi said that in their community, they are forbidden from eating new yam, each year, until the *'Iriji'* festival is celebrated (*Oral Interviews*, 28 March 2019). Orji (86 years) stated that the festival is meant to thank the gods for giving yields to their yams for the year, and to pray for a better harvest in the years to come. Ukom (91 years) gave the same reason as Orji as to the essence of *Iriji* festival and added that, it is believed by their people, that anyone who harvest new yam from his farm before the festival, will either need to make expiatory sacrifices to appease the gods, or his farm in subsequent years, will yield very poor harvest of yams.

Ugwuanyi (87 years) added that, the people are generally forbidden from eating yam, including the ones they bought from the market, before the *Iriji* festival. He stated that in the 'olden days' yam was believed to be the 'head' of all farm crops and as such, anyone who failed to observe the tradition of not eating yam (whether bought from the farm or harvest from the person's farm) before the new yam festival, suffered from poor harvest of all crops in his farm, in the subsequent years, unless he appeased the gods through a sacrifice. This is the fulcrum of the message of Christianity; and the sacrifice of first-fruits which the Igbo

traditionalists celebrated, could apply to the teachings of Christ as the first fruit.

The Igbo duly realizes that there is nothing which exists outside the knowledge of the great creator of the universe. The forces of the invisible universe are under the control of the Majestic Deity. Since man is able to give elaborate attention to these universal forces, how much more the Supreme Being – Chukwu. It is therefore not doubtful that the Igbo do not hesitate to make direct sacrifice to Chukwu, the source Being. How frequent such practise is, is very relative.

Sacrifices to Chukwu have several characteristics among which include:

i.) Such sacrifices are never to be thrown on the ground. They must be elevated above the ground;

ii.) Filthy things are never used; and

iii.) It is always a sacrifice of joy (Arinze 53).

It is imperative to note that the act of offering sacrifices is an essential aspect of the Igbo worship of *Chukwu*. Although it is not peculiar to the Igbo yet, it is not a borrowed culture. It is tradition (*omenala*), hence it is always said by the people: "so did our forefathers."

When sacrifices of goodwill and petition are made to God, the good spirits (impliedly) are asked to act as conveyors. But when the joyless sacrifices (*ichu-aja*) is made to evil spirits, God is rather invoked

"to tie down the goblins" with such words as '*Chukwu chụpụrụ anyị njọ*' (God drive away evil from us) being said during such sacrifices. Though the lesser beings or spirits seem to be given more frequent sacrifices, that should not be seen as a neglect of the Supreme Being. In as much as the Igbo traditionalists are concerned, Chukwu is thought of as the ultimate recipient of all sacrifices. He is the end of all Igbo worship.

As to the aspect of communion feast, it was the practice among the traditionalists that after making sacrifices, the priests will remove the sacred parts of the sacrificed items reserved for the gods and what is left is then eaten together by all those present, sometimes from the same pot. For instance, if a goat or sheep used for sacrifice is slaughtered and the remains roasted and cooked, the people will gather together and each person is served a portion, in the order of seniority with the elders receiving first. The feasting together by the people on the sacrificial animal promotes the spirit of oneness, friendliness, trust and love among the traditional worshippers. This is likened to the Eucharist or Holy Communion and love feast amongst Christendom – where the Christians gather around the altar to eat the Holy Communion which is said to symbolize the body of Christ, eaten to receive eternal life.

4.5 Sacred Objects and Sacred Places

These are objects and places regarded as sacred by the traditionalists because of their use and importance in Igbo Traditional Religion and Culture. The shrines of deities, some streams and rivers together with the fish in such streams and rivers, animals and trees are totemic and thus sacred. A case in point is that of Obosi in Idemili LGA of Anambra State – where fishes in Idemili River are regarded as sacred and neither killed nor eaten by Obosi indigenes. Odiri Peter admitted that despite his been into a Christian home in Idemili, neither him nor any of his siblings have ever fished at the Idemili River. (*Oral Interview*, May 5, 2019).

Similarly, some images are sacred because of the things they represent – they are symbolic. Symbols like ritual can be religious or not religious. In Igbo Traditional Religion, we have images of different gods, divinities, ancestors and symbols of *Ofo, Ikenga,* among others. In Christianity, we have images of Jesus Christ, Virgin Mary (*the mother of Jesus Christ*) and even the twelve Apostles and such symbols like cross, candles, incense, and others.

Representation in concrete form had always been one of the essential characteristics of the traditional religions of the Igbo. Ancestral Spirits were represented in concrete forms. All these representations constitute to the Igbo the substance and not the essence of true things.

Some persons too are regarded under the Igbo culture and religion as sacred. These are religious personnel and they include: priests, rain makers, medicine men, fortune tellers, among others. The degree of sacredness attached to them is relative to the degree of their commitment to their duties and the potency of the gods they represent and/or serve.

Nnanna Okorieagu and Anyigor Nweke noted that objects found in the places of traditional worship, are many. According to them, most of these implements are kept by the Priest in his house; but where the shrine is big, they are kept in a special room in the shrine itself, called *nkola alụsị* (*Oral Interviews*, 1st April 2019). No one steals things kept in shrine; rather people leave their articles such as hoes, knives, market baskets, and others, there for safer custody.

Okorieagu (88 years) identified some of the implements found at the shrine to include: statutes, wooden cups, the horn of a bush-cow for libations (*mpi atu*), wooden trays for the sacrificial meal, a better-carved wooden tray (*okwa-mmụọ*) from which the spirit is served by the priest, small earthen pots (*udu*) and a two-edged sword (*mma opio*). Nweke (91 years) confirmed these to be true and mentioned other items to be found there to include: an earthen pot for cooking (*ite nni*), a stool for the priest, an elephant tusk (*okike*), a small wooden tray for the division of kola nuts (*ufo*), the *ọfọ* cult stick, and chalk with which the priest and the worshippers sometimes powder their eye lids to show that they are in the

safe protection of the spirits. He added that a shrine could also contain bones left over from past sacrificial feasts, as well as trophies or emblems of ancient

In Christendom, the church building is generally regarded as a holy place for the worship of God: a holy sanctuary where God lives among men (Ex. 25:8 NLT). No wonder it is recorded that: "The Scriptures declare, 'My Temple will be called a house of prayer,' but you have turned it into a den of thieves..." (Matthew 21:12-13). Within the building are many objects of worship, which are sacred and handled only by authorized persons. The new converts were taught to treat the place of worship and the sacred objects found therein, with decorum – same way they treated their shrines.

4.6 Initiation Rites (Baptism)

Traditional Igbo society was built on a series of initiation rituals that spanned the whole course of life, from naming rituals after birth, to funerals that were conceived as initiation into the realm of the ancestors. Each of the above makes the initiate more of a more full-fledged part of the community, conferring increasing prestige and responsibility on the person. Initiation is a community and not a matter of personal decision. The community decides for the individual.

"Among the traditional Igbo, the uninitiated is not only anonymous, he is equally ignonymous. He is 'no body' and belongs 'no where'... He is not yet recognized as a complete human being." No matter what his other accomplishments, he has no right "to appear in the traditional gathering of his kinsmen, nor raise his voice in the gathering of the initiated. Though the Christian missionaries worked to replace many initiation rituals, the traditionalists still contend that, the inherent meanings of the rituals has remained, despite possible changes in the original form of the initiation rituals.

Initiation rites are among the most important religious rituals and include not only initiation into adult status in society, but also entrance into secret societies and admission to a special vocation, such as the enthronement of a king or the ordination and consecration of a nun, priest or Bishop. This is a classifies examples of lifecycle rites to three, namely: Social puberty (initiation into Adulthood); Rites of initiation into special societies or vocations; and Marriage and funeral rites.

i. ***Social Puberty (Initiation into Adulthood)***: In primal societies, transitions to adult status often coincide with physical puberty or sexual maturity. However initiation into adulthood does not always take place at the time of physical puberty, especially in the case of boys. Nevertheless, social puberty rites have to do with the transition from the asexual world of childhood to an adult society that is differentiated by sexual roles.

Rites marking the transition to adulthood reveal a rather common pattern in which the initiates are socially isolated and their behaviour restricted, while they:

- Undergo certain ordeals to test their ability to take on their new responsibilities;
- Are instructed in the secret knowledge of the community;
- Shown the sacred objects;
- Finally are given the insignia of their new status and formally recognized as having made the transition (39).

Another feature of puberty rites is the physical mutilation of the body, which marks the separation from childhood and incorporation into adult life. In the case of boys, this often involves circumcision or sub incision, a slitting of the underside. In some societies, a ritual act, called *Clitoridectomy*, is performed on girls. It often involves a painful excision of the clitoris, part of the female genital organ. It is interpreted as an act of purification and initiation into adult membership.

Orji Ekene (88 years), Kanu Ogbonna (90 years) and Okorie Nnanyelugo (members of *Oja-dike Age Grade)*, recounted in separate interviews, their initiation into the Age grade Society. They maintained that despite the fun-fair and glamour that marked the day of the Initiation, in which people gathered at their village square to enjoy the dances, wrestling and other entertaining activities, the frightening experiences

they had in the forest, for the one week they were made to spend each night in the forest, remains indelible in their hearts – much as this experience made them become very brave and courageous.

ii. *Rites of initiation into special societies or vocations (Knighthood):* In many societies, there are, in addition to the usual social puberty rites, initiation ceremonies for special groups or fraternities that consist of an elite class of persons who have demonstrated that they possess a special capacity to understand the sacred mysteries or are gifted with unique spiritual powers. Membership in a sacred society often cuts across tribal or social boundaries, and entrance can involve a series or rites extending over several years. The initiation rites vary from place to place.

Jerome Muoneke, Iffeanyi Dike, Ogbonna Ezeluo, IKenna Anyanwu and Moses Iloghalu recounted the stages they passed through and the price they paid, to become Ozo title holders (*Oral Interview*, 9 & 10 April 2019). Iloghalu (93 years) disclosed that as a precondition for his being accorded the Ozo title, he gave items of yam, goat and some amount of money, to a gathering of members of his community and other items, to other different titled groups in the community. He also provided food for the gathering. Anyanwu (86 years) and Ezeluo (90 years) attested to doing same, in addition to giving cow to the *Azu* title holders – which differentiates them as "*Ozo Ogbuefi.*".

Dike (93 years) said that his attraction for joining the coveted group of Ozo title holders is the honour accorded to members and the life of integrity expected of them. Muoneke (87 years) noted that, because the Ozo title holders are among the key custodian of the peoples' values and culture, it was a taboo at the time, for them to be kidnapped. They were also expected to live above board and demonstrate the best of the peoples' culture in their daily lives.

Ukachukwu Ozioma (89 years) stated that though it cost him much to be crowned an Ozo, he fills satisfied and fulfilled that the title affords him the priviledge of being among the voice of the voiceless in the community. As someone who detests oppression of the less priviledged and common people, he is emboldened to speak loudly against any form of oppression that comes to his knowledge, as an Ozo title holder (*Oral Interviews*, April 11, 2019).

For Ekele Nnadozie (90 years), he paid the price of becoming an Ozo because, as a rich and fulfilled man, he wants to be given the elaborate burial ceremony that is characteristic of Ozo title holders. This, he presumes, will give him an elated place in the hierarchy of ancestors (*Oral Interview*, April 11, 2019). In his response to interview, Ejidike Chiemerie (80 years) said he became an Ozo title holder because of his desire to see his people live in peace and love. He stated that he has been involved in many dispute resolutions involving his people, and has

continued to function as an ambassador of people (*Oral Interviews*, April 12, 2019).

iii. *Marriage and funeral rites:* As a holy estate, marriage is hedged around by numerous taboos and customs, such as the throwing of rice or grain at the bride to ensure her fertility, the seclusion of the bride and the groom for a period, the changing of clothing before the marriage, and the tying of knots and the exchange of rings to strengthen the marriage bond.

Funeral rites also reflect the threefold patter of separation, transition, and reincorporation. For most religions, death is viewed as a threshold leading from one mode of existence to another, a liminal period before rebirth to a new status.

Similarly, mourning rites represent a time of separation and transition for the deceased's family and friends. The greater the role played by the deceased in the community (a ruler, for example), the more elaborate and extended is the funeral

ceremonies. And, features depend to a considerable degree on the society's attitude towards the role of the deceased in the afterlife state. For example, fear of the dead often means elaborate rites of purification or efforts to appease and to placate the spirit of the dead; while the funeral ceremony of an upright person that died at old age, is celebrated as a transition from mortal existence into ancestorship. .

Within the context of Igbo traditional religion, no life process begins and/or ends that is not accompanied with some process of initiation. There are many forms of initiation under the Igbo culture, and it goes from one stage to the other. You need to leave one and enter the other in a progression. For instance, there is a time for separation, transition and incorporation and each stage has a specified period that it lasts.

In Christianity, we see similar thing being applicable. For instance, before one is qualified to be addressed as a full Christian with the rights and privileges arising thereof, the person has to be baptized with water and this can be described as an initiation rite into Christendom. The person is subjected to different stages and period of preparation before receiving the baptism. For those in Catholic Church, as the baptized member grows in years of membership, the person is expected to undergo another period of learning that will qualify the person to receive the sacrament of confirmation. The Christian of full membership is eventually expected to be admitted into the order of matrimony after undergoing and/or performing marriage rites or to be initiated into the ecclesiastical order of Priesthood/Pastorship through ordination.

With particular interest on the converts who were identified to be Ozo title holders, they generally revealed during their respective interviews that, they expended much money and other material resources

John Paul II wonders if this not in some way a preparation for belief in the communion of the saints? (43).

It is imperative to note that, Africans venerate and reverence their ancestors and not actually worship them. This is better explained from the viewpoint and knowledge that not all those that die among the members of the Igbo community qualify to be regarded and designated as Ancestors. It is believed by the traditionalists that, since ancestors are the guardians of "public morality and law", men who lived wickedly and died "bad deaths" have no part in the order of the ancestors. Such people who died bad deaths will never come back to the world of the living to help members of the community; neither can they enter the land of the dead – as their ways are abominable to the ancestors. They wander homelessly and dispossessed, causing hurt among those that are living in their grief.

The ancestors are those who lived well on earth and are worthy of emulation. They could be men or women. The good things they did are so good that people talk about them. Because of their good deeds, their surviving relatives venerate but not worship them. Ajayi gave credence to the position that, Africans do not worship ancestors (Ajayi 62).

Among those that practice indigenous African traditional religion and culture, is a firmly entrenched belief in ancestors. The Africans see the ancestors as their protector while the Christians unequivocally declare Jesus Christ as their protector. The Africans, although not discounting of

the ultimate God, meditate through the ancestors. These ancestors are seen as the link between God the Creator and human beings (Mbiti 63).

It is contended that, because of the high moral and ethical standards required for the dead to be accorded the status of an ancestor, together with contributing to the total welfare of the community, the ancestors play a role (for the traditionalists) that could be likened to that of Saints (to Christians). The Christians venerate the saints whom they take to be intermediaries between men and their God. This is particularly common among members of the Roman Catholic Church who regularly call on Virgin Mary (the mother of Jesus Christ) and the Saints, to intercede for them.

With the status the ancestors occupied in Igbo traditional religion, the missionaries found a fertile ground to teach the people about the institution of sainthood; encouraging them to live "a good life" according to the teachings of their Christian bible. The catholic missionaries taught their converts of the mystery of sainthood: as to how those who lived a holy life reveal years after their death, of their sanctity and holiness even up to death. With such revelations, investigations are carried out and sometimes it is even found that some portion of the buried body of the person (when exhumed) did not decay. Such persons are eventually canonized as saints; and by the teachings of the church, the saints are already in the company of God.

Amos Nworie, Ekechi Otubo, Nnamdi Obeji and Uchechi Ugbega are elderly Christians who are reputed for their uprightness. When interviewed, each of them disclosed that they had wished to be revered at death, as good ancestors. For this, they lived their early lives with utmost regard to the values and traditions of their people; and ensuring that they deal fairly with every man (*Oral Interviews*, 19 April 2019). It is in this might and with the knowledge received from the missionaries, that they could be admitted into the company of the saints, if they live a holy life that, has made them continue to strive to live uprightly. Hence, for these persons and others like them, their traditional believe and reverence for the ancestors is a motivation for them to accept Christianity and live uprightly so that, they too can be revered as holy saints, when they are dead.

4.8 Hereafter: Life after death

Although the idea varies from one religion to another, it is commonplace in both religions that there are rewards for life well lived and punishment for deviant behaviour. In the afterlife, according to Christian teachings, judgment takes place. It is the general belief among Christians that, upon death, the soul appears before God for judgment – as it is appointed unto men once to die, but after this the judgment (Heb.

9:27). The judgment is essentially determined by ones conduct while on earth.

For the Igbo people, death is not the final end of man. The African concept of death emerges as follows: Death is a creation of God, made for the purpose of removing people from the earth when their time is up (Asuquo 173). It happens gradually, starting from the time of one's departure from the earth physically, to the time when the last person who knew him physically, dies off (Asuquo 173). Death is a transition which involves transformation from the physical into the spiritual as the dead continue to live as ancestors (Asuquo 133).

All men continue to live in one form or the other after their death. Those who lived bad lives or died evil deaths, that is, violent deaths or deaths by horrible disease (*onwu ojoo*) are allowed to wander in an intermediate state between the spirit-land and the land of the living. This latter place is the Igbo concept of hell: its occupants are visualized as frustrated, wandering and restless evil spirits (Metuh 102).

On the other hand, those who lived a good life and died a good death, that is, a natural death at a ripe old age (*onwu chi ya*) and received funeral rites appropriate to their status, go to the Spirit-land (*ala mmuo*) where they continue a life similar to their earthly life and are eventually allowed to reincarnate (*ilo uwa*).

CHAPTER FIVE

ELEMENTS OF AFRICAN TRADITIONAL RELIGIOUS AND CULTURAL PRACTICES IN IGBOLAND

5.1 African Traditional Religion

African Traditional Religion (ATR) is the native religion of Africa. It is the religion that came into existence through the sustaining faith held by the ancestors of the present generation of Africans and is still being practised today in a variety of ways and levels by Africans, especially the Igbos of South East Nigerian. The general pattern of the religion is held to be one with a belief in the Supreme Being, belief in divinities and spirits, belief in life after death, and belief in some mysterious powers.

Igbo's of Nigerian practised the indigenous religion of their forefathers prior to the advent of foreigners of different types, including: the merchants, the imperialists, the explorers and the missionaries. All these foreign forces, particularly the foreign missionaries, mounted vigorous campaigns against the indigenous religion which was regarded as heathenish, paganish, uncivilized, and evil (Olupona 112).

Because of the Christian background of these foreigners, they were convinced that it would be best to have Nigerians converted to Christianity. In consequence of this, there was a collaboration among the merchants, the administrators and the missionaries to suppress the indigenous religion and to impose Christianity (Olupona 7).

> condemned the traditional title system, marriage, rituals, songs, arts and labelled them things of Satan (175).

The greatest and most effective weapon used by Christian missionaries to disrupt traditional beliefs, was Western education. As the missionaries claimed that they were working for spiritual salvation of the people, so also did they claim to be working for their material wellbeing. All new converts were taught in the mission houses and were encouraged to look down upon their culture. Some of them who were knowledgeable in the scriptures, became powerful preachers against the 'idolatrous practices' of their people. In this way, traditional life was deeply undermined and the family structure was disrupted (Awolalu 114).

In addition to Western education, medicine and technology also came through the missionaries. These improved people's health, reduced infant mortality, put under control diseases and ailments which the people dreaded, discouraged superstition and unwarranted fear that hitherto arose with the linking of certain ailments with the grievances of the gods. By this, the gods of the Igbos were somewhat demystified.

Upon the introduction of Christianity in Igboland, the newly converted Christians during baptism were made to adopt new names which must be Jewish or English – to show that they accepted Christianity. However, with the attainment of Nigeria's independence and

the associated mental and psychological emancipation, most of the people began to reason that it was of no spiritual value to take these Jewish or English names. Taking of such names was then regarded as a form of colonialism.

Despite the continuous and overbearing influence of Christianity over the traditional religion of the people over the years, in 1977, Nigeria resonated her rich cultural heritage when it held the Festival of Arts and Culture (FESTAC). During the event, different aspects of traditional religious practices, in addition to the traditional music, dancing, drama, art, and oral literature, featured prominently. This, somehow, revived traditional worship amongst the indigenous people, including the Igbos. However, most of the inhuman and crude practices associated thereto, like the killing of twins, offering of human sacrifices, and so on, had long been dispensed with. But some aspects of the traditional religion like the use of extempore prayer, drumming, singing, and dancing during worship, have not only been retained in the traditional religion, but have been adopted in Christendom, in Igboland.

5.2 Elements of African Traditional Religion

The African Traditional Religion (ATR) can be said to be a complex of feelings, rites and ideas based on:

a.) belief in two worlds – visible and invisible;

b.) belief that both worlds involve community and hierarchy;

c.) belief in the intersection of the two worlds, the transcendence of the invisible world in no way contradicting its immanence.;

d.) belief in a Supreme Being, Creator, and Father of all that exists.

On the premises of the foresaid outline, Mulago holds that traditional African religion can be considered as based on four essential elements, viz:

i) Unity of life and participation;

ii) Belief in the enhancement or diminution of beings and the interaction of beings;

iii) Symbol as the principal means of contact and union;

iv) An ethic that flows from ontology.

5.2.1 Unity of Life and Participation

The unity that exists in life may be understood in terms of relationships of each person with brothers and sisters in the clan, family, descendants with ancestors, and with God who is the ultimate source of life; and an analogous ontic relation of each with their patrimony, their land, and all it contains and produces, with all that grows and lives there. Vital union is the bond joining together, vertically and horizontally, beings living and dead. "It is the result of communion, a participation in

(Olupona 120).

The life an individual lives is considered as a participatory life where members of the clan, tribe, and family know that they live not for themselves but for the community. They also know that should they be separated from the community, they may lack the resources to survive as an individual. Most of all, they also know that the lives they live is in collaboration of their ancestors, and that its preservation is dependent on them continuously.

The life with which Africans are preoccupied is not merely experiential life but also super-experiential life, that is, life that goes beyond death. Two belief systems lie behind the worship of the dead amongst the Igbos: the survival of the individual after death and the exchange of relations between the dead and the living. To many Africans, living refers to existence in the bosom of the community, that is, participation in the consecrated life of the ancestors. It also implies the continuation of their ancestors and it further involves a way of preparing one's continuity through one's offspring.

There is a true continuation of the family and of the individual after death. "The dead form the invisible element in the family, in the clan, in the tribe, and this invisible element is the more important. In all ceremonies of any significance, on the occasions of birth, marriage,

the one reality, the one vital principal that unites various beings"

death, funerals, among others, there is often reference to the ancestors for guide and the will of the gods yields only to that of the creator" (Olupona 121).

Africans (including the Igbo's) believe definitely that there is a close association between the life of members of the family and that of clans. So, family, clan and tribe form wholes in which each member is only a part. The same blood, the same life participated in by all and received from the first ancestor, the founder of the clan, circulates in everyone's veins. The African philosophy, customs, religion and institutions is directed towards the protection, maintenance, enhancement, and perpetual preservations of this common treasure. Hence, the reverence to ancestors in line with the African religious and cultural practices, contributes in building the unity among members of the family and clan.

Vital union, besides being a relationship of life uniting all the members of one community, it is also the analogous ontic relation uniting all its members and all that affects the maintenance or improvement of life, including patrimony and land ownership (Olupona 121). The import of this second element is that, all the appurtenances of the ancestor are closely connected with their being and one might refer to these objects that have belonged to the ancestors (drum, spear, diadem and so on) as instruments of vital union. Therefore, "life for the Africans can be

understood in two ways: as community in blood – the principal and primordial element; and as community in possessions". Each society, family, clan, tribe or nation can be considered from the point of view of participation (Olupona 121).

5.2.2 Belief in the Enhancement of Beings and in the interaction of Beings

Some Africans conceive some changes to be ontic, a profound transformation, a new form of being. This new form of being modifies or, better, adapts one's intimate being so that it can lives and behaves according to the new situation. That is to say, it behaves like the ancestors so as to be a worthy continuation of them. Investiture conferring on the heir the possession of his ancestors is the rite which is meant to produce this internal modification (Olupona 122).

Before his designation, before the investiture that consecrates and transforms him, the king is no more than a simple mortal – a man like the others. But after the god's mighty hand and that of his family have pointed him out to take up again the administration of the people, there is produced in him a total change.

It could be pointed out that with investiture, all the vital energies from the blood line of the ancestors become activated in the man; he is strengthened to begin to act in the supernatural state. Thus, he becomes a

synthesis of the ancestors, and also the living expression of the Supreme Being and of His divine munificence. Succession is always conceived as an ontic modification, a vital enhancement of "passing over" of the deceased parents to their successors. As there can be an increase in being, so also it can happen that being is violently diminished.

Life is also diminished by any evil spell. Sorcerers are universally detested for that. Equally, it is reduced by the contravention of the neighbour's rights. Every spiritual or material injury has its repercussion and influence on life. Just as "every service, all help and assistance, counts as a support and enhancement of life for the one who benefits" and as "its value corresponds exactly to the value of the life that is enhanced," so every injustice, however minimal, will be regarded primarily as a slight on the integrity of being and on the intensity of life. Any injustice is regarded, in the first place, as an attack on life (that is, on the vital force) of the person who is injured (Olupona 123).

For Africans, beings always retain their intimate ontic relationship to one another. All the expression of life brings out the component of contact among beings. Thus, the African society forms a vital route where every member lives depending on each other for their mutual benefits, including advancing on their traditional, religious and cultural life.

5.2.3 Symbol: The Principal Means of Contact and Union

If the bond uniting the members of an African community is nothing other than participation, "that is to say, a given solidarity presenting itself under two inseparable aspects, one personal and the other material," then the principal means available to the community members for entering into mutual contact and of strengthening their union, is the symbol. Symbolism appears as a "language" available to all the members of the community but inaccessible to strangers; a language expressing the relationship of the person using the symbol with society and the universe.

According to Udechukwu, "It is not every object seen or used for representation that is generally accepted by the community in question" (111). A symbol can be generally accepted in a community for usage when it has the following characteristics:

i. Symbols are meaningful through the setting in life: In order to understand the full implication of symbols, it is needful to appreciate the given situations of the people for whom the symbols are useful. For example, without the history and full knowledge of traditional religion, all the objects of worship such as Ofo, Ikenga, white chalk/clothe, kola nut etc will become meaningless.

ii. Symbols are meaningful only when there is consensus about the meaning: Symbols do not have meaning in themselves but have

national unity and divine authority), the patriarch (symbolizing the authority of the ancestor over their descendants), the totem (symbol of clanic unity), words (like the name of the ancestor or the names of powerful personages), actions and gestures (like the imitation of the deeds and gestures of someone).

ii) Contact with an invisible power: Man, in quest of means of vital enhancement, comes up against the world, against "things" which in reality are not "things." For in truth, there are no things; there are only channels and reservoirs which on occasion can contain power. There exist two possibilities: first is the "things" a man encounters which are receptacles to be filled with power, and the "things" that are creatures. Hence, actions, words or persons can at any time become "powers," either by the competence of the man who by direct force makes it his own power or else by the competence of God the creator (Leeuw 288).

So the symbol aims at putting us in contact with invisible powers and forces, by virtue of certain correspondences or resemblances, a relation of connotation or analogy. The mediation of the symbol establishes anexchange of lives and vital energies between the being symbolized and the person entering into contact with the being.

iii) A unifying and effective role: The being symbolized is so present in and so united with its symbol, at least from an operational standpoint that becomes possible for it to exercise its actions and influence, as if time and space did not exist. Thus, the symbol's action can affect anyone who makes contact with it.

5.2.4 An Ethics that Flows from Ontology

For Africans, we observe that human life, and so man himself, is the criterion of good and evil. The basis of moral conscience relates to the African conception of being, which is essentially synthesizing and unifying. Being is fundamentally one and all beings that exist are ontologically bound to one another. In this conception, human being is central.

5.3 The Primacy of Religion in the Life of Africans/Igbo

The study of rites and symbols in the life of African people, including the Igbo, and of the veneration they offer to their ancestors, and of their approach to God leads us to opine that, religion permeates the entire lives of African; including their socio-political, family and personal life. Through religion, the reality between human and their worlds, invisible and visible, is overcome and unity is achieved.

Igbo traditional religion is one of the many religions of Africa. The Igbo's, as an ethical and cultural group, live in the south-eastern part of

Nigeria. Among Ndi Igbo, religion is integrated with the political, social and economic lives of the people so that religious beliefs have control over many aspects of the people's lives. Nwala observes that the traditional Igbo people are deeply religious. He identifies five elements of Igbo religion to include:

i) Belief in the Supreme Being – who is known as *Chukwu, Chineke,* or *Osebuluwa;*

ii) Several local gods with definite but overlapping functions. These deities are called *Agbara* or *Arusi;*

iii) The divinity of the ancestors, known as *Ndichie;*

iv) Oracles and system of divinations;

v) Various conceptual forces are often personified and religiously influenced through "sacrifices, prayers, medicine and charms in order to achieve certain objectives". (Nwala 11)

Okorocha posits that, the primary goal of religion for the Igbo is salvation. Okorocha's definition of salvation in Igbo is *Ezi Ndu* (the good life). He identifies two main contributions of the Igbo to the understanding of man's religiousness. First, the Igbo emphasized the need to not distinguish the sacred from the secular. They viewed the whole of life as one indivisible, though unconfused, sacrosanct whole, which is altogether sacred because it is created and inhabited by *Chineke* and his

innumerable Spirit agents. (Okorocha 19,20) The second contribution is that religion is created by people and for their service. Okorocha states:

> Religion is for man, for his own benefit, and not man for religion. This means that to claim to be religious and at the same time refuse to be human, to respond to humanity, to the pressing practical needs of one's fellow human beings is, to the Igbo mind, a contradiction in terms. Igbo Primal Religion is more of a lived religion than a mere theoretical exercise in fantasy, dogmatism or philosophy which is devoid of or insensitive to "Life" and to man as "man." (21)

The import of Okorocha's statement if situated within the context of the present day Christian missionary activities is that, while Igbo religion has both external salvation and social gospel elements, it places greater emphasis on social gospel as validation for external salvation. Igbo religion is evidently a practical religion which is responsive to the needs of the people around us. This can be said to be in consonance with the requirement of Jesus Christ that we love our neighbours – as He demonstrated in the parable of the good Samaritan (Lk. 10:25-37).

It is believed amongst the Igbo, that the type of life a person lived on earth (*n'ime uwa*) determines the type of life the person will live in the land of spirits (*ala mmuo*) (Domnwachukwu 23). While the good life (*Ezi*

Ndu) is the concern of the Igbo here on earth, it is also their concern in the Spirit world. The traditional Igbo believe fully in life after physical existence in this world. Hence, they attempted to conduct themselves in a good manner in this world, so that even after death, they might still live well with their ancestors and the gods in the spirit worlds.

Nwala recognizes the Igbo concept of life after death. He agrees that for the Igbo, the good life (*Ndu Oma*) is the *sumum bonum* or of the highest value (24). Nwala recognizes that for the Igbo, life goes beyond the physical or material realm; it is spiritual. He writes:

> In such institutions as mortuary and marriage, one sees the supreme importance attached to *ndu.* To them, *ndu* is a never-ending process and its perpetuation is the goal of all activity and aspirations. *Ndu,* in their conception, is the dynamic quality of material and human existence. *Ndu* is also existence itself and existence could take various forms either material/spiritual or pure spirit. Death in this world is seen as the dissolution of the flesh during when the Spirit enters a separate existence maintaining the *Ndu* of the individual in another sphere or form of existence (22).

Drawing from the religious belief of the Igbo (who are an integral part of Africa) as elucidated above, it could be inferred that, one of the essential characteristics of the religion of Africans, reside in the relation between

their native religion and their daily life. Muzorewa attests that African theology is an "attempt to respond to a mandate to construct a biblically-based and relevant theology that speaks to the spiritual needs of the African people"

This is suggestive that the future of African religion is not completely bleak but promising for our generation. The African Traditional Religion still has its place and plays certain vital roles at every level of our African societies. A balance and integrated society will give all Africans an opportunity to remain true to herself and also develop her cultural and traditional civilizations in a modern way. It is then that the traditional religion scan be given the needed priority and must be made the foundation and the top of the cultural edifice of Africans.

5.4 African Traditional Religion and the Cultural Basis for the Enhancement of the Acceptance of Christianity by the Igbos

In the light of the conflicting ways of worshipping the same Supreme Being by the Christians and traditionalists, the work intends to bring to the fore, practices and observances that apply to the traditional religion which formed the basis for the acceptance of Christianity in Igboland.

Igbo religion is traditional can be seen as rooted in their culture. The religion was founded on the peoples' tradition and culture and involved the use of sacred objects in worship. This work seeks to know

whether there are practices in the traditional religion that could have facilitate the acceptance of the new (Christian) religion by the adherents of the traditional religion.

The belief in a transcendent Supreme Being has always been a lifestyle for Africans and the Nigerian people in particular. In other words, the Nigerian people (the Igbos inclusive) have always practised a form of religion, even before the coming of Christian missionaries to Igboland. Religion (be it the Traditional African Religion or Christianity) has always been a veritable force with strong influence on human interaction and social behaviour.

In Igboland, the people are greatly religious and believe in a generous creator, which they call *Chukwu*. They believe that He created the entire universe that we can see (*uwa*). *Chukwu,* the eternal creator is conceived among the Igbo as the great receiver of all sacrifices made to the gods and was presumed to be represented in the shrines of these deities. They also believe that no sacrifice is made directly to Him. It is also believed that an individual has a personalized providence (a *Chi*) which comes from *Chukwu* and goes back to Him at death. These minor deities are assumed to have much part in the daily lives of the people. It is believed that these gods could be reached through offering of sacrifices, in order for them to protect the people and serve their interest.

The Igbo hitherto believed strongly in the potent powers of their *Chukwu* and *Chi* and offered regular sacrifices to them, for one reason or the other. But with coming of the Western missionaries, the indigenous religions of the people the Igbo (traditional religion inclusive) was challenged by the Christian religion of the Europeans, which presented itself to be superior to the native religion of the people and sought to supplant it. Expectedly, the indigenous people resisted the new religion and with this arose the problem of developing evangelical approaches that will make Christianity more acceptable to the Igbo people of Africa.

The missionaries partly relied on the colonial activities of their countrymen to foster their religion on the people. For example, while the white officers severely restricted night gatherings (which were vital to the worship of various deities in Igboland), Christian activities were encouraged in its stead. Hence, Christianity got a boost sufficient to almost replace traditional and indigenous rites of worship in Igboland.

Besides the effect of the activities of agents of the colonial rule and the belligerent form of evangelism that was adopted by some of the missionaries, there were other factors that made Christianity gain more acceptance and popularity among the Igbos, over time. One of these factors is the western education and civilization that accompanied the advent of Christianity in the area. This exposed the indigenous people to

a refined lifestyle that was seen by many to be more preferable to the crude and primitive lifestyle they were living, before then.

It could also be said that, some of the people had less difficulty converting to Christianity because they discovered that, though the mode of worship varied, there were many belief systems and features of their traditional religion that were similar and applicable to the new Christian religion.

It is a fact that traditional beliefs in African still hold sway in the hearts of some Igbo Christians, as a lot of them still participate in traditional religious activities. This is because most of them still believe in the potency of their gods and the capacity of their gods to wrath vengeance on their offenders more readily than the "merciful God" of Christianity. Hence, they resort to the gods when they feel that the Christian God is delaying in intervening in their situation.

Despite the complementary posture that the two religions of traditional religion and Christianity tend to present at times, the two religions at other times constitute a source of conflict, one to the other. As previously observed, the early missionaries demonized virtually everything about the traditional religion of the Igbo people and sought to completely super-impose Christianity on the peoples' native religion. This was, initially, greatly resisted by the people who were afraid that should they become Christians, disaster would come upon them from

their gods. The medicine men and diviners reported that the gods were angry because of the new religion and advised that no one should embrace Christianity. On the other hand, some of the natives declined to accept the new religion on the basis that the missionaries want to tear down their culture.

At different times and places, there were face-offs between the traditional worshipers and Christians as a result of the missionaries' actions as social revolutionaries. They condemned and tried to eradicate the peoples' traditional religion. "Traditional music and songs, dramas and dances were totally denounced as bad and immoral. Statutes, images and emblems of remarkable artistic work were destroyed by some overzealous converts as idols and works of the devil. These acts set the stage for conflicts which soon ensued between Christians and the traditionalists" (Okeke et al 4).

However, with the resistance that continued to trail the extremist activities of some of the missionaries, the others adopted a compromising strategy. Such diplomatic missionaries, rather than condemn the traditional religion in its entirety, identified those traditional religious and cultural practices that are permissible by the churches' doctrines and allowed their converts to continue with such practices, even as they live as Christians. Much as such posture attracted more converts to churches with the flexible doctrines, some other churches still wanted their

converts to be completely separated from everything that had to do with their traditional religion and cultural lives. Thus, the tussle continued and has somehow so remained till date.

The stance to completely replace a religion that not only represented the moral views of a people but also their culture could not have gone without a strong resistance. One of the fundamental errors of the early missionaries that impeded their initial success is that, they failed to first study the peoples' traditional and cultural practices, to see if there were aspects of these practices that align with their Christian religious teachings; which could be adapted into the new (Christian) religious teachings; and which could make the new religion more acceptable to the people. If they had done that, they would have found out that some of the traditional music, songs and dances of the Igbo people depicted their culture and also served religious purposes. They would have also found out that, most Igbo festivals, songs and dances were always performed in thanksgiving to the gods. Regrettably, without prior evaluations, the missionaries denounced all these as bad and immoral; and this perhaps account for the initial stiff resistance to Christianity by the Igbo people.

With the initial resistance (which sometimes was violent and/or diabolic), some of the missionaries then saw the need to align the teachings of their Christian religion with the already existing traditional religious practices of the people – with necessary modifications. These

missionaries took into cognizance the elements of the peoples' traditional religion and culture and married them with those aspects of the Christian religion that are compatible and re-enforcing. This approach resulted in the successful conversion of many native people.

Even with the compromise over the years, the relationship between Christianity and traditional religion has not really measured up to expectations, Christians have continued to demonize traditionalists and hold as ungodly, everything that has to do with traditional religion and cultural practices. But how come the Christianity of the day, does not see anything morally and/or spiritually good in the way of the traditionalists? Against the background that the early missionaries saw some aspects of the traditional religion that could be adopted in the practice of the Christian religion, can the prevailing attitude of modern day Christians towards African traditional religion be said to be based on the contents and teachings of the religions or on the proponents of the religion? It is hoped that by, establishing that the two religions are directed towards belief and worship of Supreme Being, adherents of both religions will be inclined to encouraging true worship – irrespective of whether you are worshipping as a Christian or as a traditionalist

Since the Igbo believe in the Super natural Being, same way as the Christians believes in a Supreme Being, it could be said that both traditional and Christian religious practices are directed at worshipping

the Supreme Being, hence it could be said that there is a correlation. However, it is the method of worship that is evidently at variance, perhaps because of how adherents of the religions conceive and understand the Supreme Being they worship. For the traditionalists, the Supreme Being (conceived as transcendental and incomprehensible) is often worshipped through the lesser deities who are often represented in Shrines and Images. But most Christian doctrines, on the other hand, condemn the worship of images and hold that God is a Spirit who is everywhere at all times. And since He is always by our side to receive our worship at all times, there is no need worshipping him through any image or the likeness of it. Even for the Church denominations (like the Catholic Church) that keep images in their place of worship, they still contend that they do not worship those images but only reverence what the images represent.

CHAPTER SIX

SUMMARY, CONCLUSION, CONTRIBTION TO KNOWLEGDE AND RECOMMENDATION

6.1 Summary

This work is a study of the traditional religious and cultural basis for the acceptance of Christianity in Igboland. Prior to the coming of Christianity in Igboland, people practised a system of religion which was a reflection of their traditional and cultural values. It is contended that, in the attempt to solve the puzzles posed by the mysteries of life and seek solution to the challenges of life, men asked questions and search for answers. Man (including Africans) arrived at the conclusion that there must be a supernatural universe. The African Traditional Religion (ATR) including that practised by the Igbo, was founded on the strength of this conclusion.

The Igbo believed in the existence of the Supreme Being (*Chukwu*) and other lower deities and spirits. The Supreme Being is presumed to live far away in the sky. For them, *Chukwu* is the origin of all things and had the power to direct the activities of all things. Since the Supreme Being which the people revered so much was believed to be everywhere at the same time, the Igbo people hardly ever keep "special altars or shrines for his worship, but communed with him through the major Spirits and deities".

Ani (earth goddess) is a major god in Igboland and every homestead, as it were, had a temple devoted to her. Ani was known to offer the final place of rest to those who lived "a good life" and a place of shame or destruction to those who lived "bad life". Those who live bad lives can't be in "*Ani*'s abode" for such people are not buried at home but thrown in the evil forest.

The traditional religion practised by the Igbo and which also is reflective of their culture, gave a pride of place to belief in ancestors. The belief is based on the general notion that life continues after death and that communion and communication always exist between the dead and the living. It is believed among the traditionalists that, it is only people who live good and upright lives while on earth that receive the power to become ancestor upon their death. These ancestors are thought to have the powersto influence the affairs of the living, positively or negatively. The power ascribed to the ancestors in African Traditional Religion especially as practised in Igboland, can be equated to that ascribed to Saints in Christendom. In other words, belief in the ancestors is more or less equivalent to the veneration of Christian Saints.

In Igboland, as it were, any object upon consecration, could become an object(s) of worship. This undoubtedly shows the level of religious consciousness of the people, at the time. The object, after consecration, assumes the name of the spirit it represents with the potency

to discharge the role ascribed to such Spirit. A piece of metal, stone, tree, and so on, might serve as an object of worship; but a worship before them is a worship to the Spirit they represent. This is comparable to the directive given to Moses in the wilderness by the Almighty God – to mold a bronze serpent which anyone who was beaten by the fiery serpent in the wilderness would look onto and live (Numbers 21:9). Prayers by way of incantations, invocations, are always conducted by designated Priests or Elders during traditional worship.

Upon the arrival of the early Christian missionaries, they discovered that the people already had established modes of worship. But the missionaries where still determined to introduce their own religion to the people; a religion they presumed to be superior to that of the Africans and that leads a surer way to heaven. In the circumstance, the early evangelical activities of the missionaries were resisted by the Igbo traditionalists, creating conflict situations in most of the areas. Such subject matters of conflict included: totem and sacred animals, osu/ohu practice, modes of worship, demolition of shrines and sacred grooves, among others.

As a way to contain the conflicts that attended early missionary activities in Igboland, different missionary groups had to adopt various strategies to convince the people and convert them to their respective denominations. While some of them were confrontational in their

approach; others were diplomatic and accommodative of the some of the peoples' traditional religious activities and practices. The Christian denominations in Igboland today, remain to a large extent, a reflection of the approach that was adopted by the missionaries that established each of the denominations.

Finally, the work considered those traditional religious beliefs and cultural practices that obtained in Igboland prior to the advent of Christian missionaries that might have paved way for the acceptance of Christianity in Igboland. Based on disclosed facts, the work makes an objective and/or recommendation that aim at heightening the relationship between traditional religion and Christianity in Igboland.

6.2 Conclusion

It is among the key objectives of this work to disclose whether there are components of traditional religious and cultural practices that facilitated the acceptance of Christianity in Igboland. This is imperative because such knowledge will expose adherents of both religions to the commonness of their belief (which is in the Supreme Being) and cause Christianity to agree with the theologies and system of belief of the African Traditional Religion and vice versa. This will particularly enable Christian scholars to evolve African Christian theologies that correspond to a culturally fragmented Africa. Such should be a theology suited to

modern national culture, which is polytheic in character and striving to weld together into unity, a variety of African cultures and traditions.

It is important to note that because the Igbo people already had an established system of worship which had a strong link to their culture, they were reluctant to accept the new Christian religion. However, because of the similarity in the belief system (belief in the Supreme Being) not minding differences in the modes of worship, some of the traditionalists converted to Christianity; while continuing to identify with and participate in some traditional practices (that is, syncretism).

To win more of the Igbo people to Christian worship, some of the missionaries introduced health care centers to treat some of the sicknesses that afflicted the people, some of which were held by the people to be a punishment by the gods for the wrongful act of the sick person. Others established schools and encouraged the people to enroll and be enlightened through education. Though the two religions continued to operate side by side, the Christian religion soon became more powerful and influential through the interference of the ruling colonial masters. For instance, by restricting night gathering which was the time for some traditional religious observances, the colonial masters were indirectly limiting traditional religious worship in the land.

Early missionaries, through the instrumentality of their new converts, demolished most of the structures and objects of worship of the

missionaries generally resorted to preaching and introducing a hybrid religion that married and permitted those aspects of the traditional religions and cultural practices that were not incongruent with the Christian religion they brought to the Igbo. This contributed significantly to the acceptance and growth of Christianity in Igboland, over the years.

Based on the findings of this work as regards certain traditional religious and cultural practices in Igboland prior to the coming of the Christian missionaries, it is needful that leaders of both religions rely on their areas of common interest to promote the growth and unity in each of the religions, rather than one trying to ridicule or demean the other. Christian theologians and scholars are also expected to develop a Christian doctrine and liturgy that is founded on the morally upright principles of African traditional religion and culture.

6.3 Contribution to Knowledge

This work, which is a study of the elements of African Traditional Religion (ATR) that facilitated the acceptance of Christianity in Igboland, has improved on previous studies on the relationship between African Traditional Religion (ATR) and Christianity, particularly in Igboland, by bringing to the fore the discuss below.

The main objective of this work is to find out whether there are elements of traditional religion as practiced by the Igbos prior to the

coming of Christian missionaries that facilitated the acceptance of Christianity in Igboland. In the course of research, the work discovered these following elements of traditional religion in Igboland that makes the acceptance of Christianity by the Igbo people possible. These elements of traditional religion include: Belief in the Supreme Being, Prayer, Worship, Sacrifice and Communion Feast, Sacred Objects and Sacred Places, Initiation Rites, Veneration of Ancestors and Saints, and Hereafter: Live after death. It is these elements of traditional Igbo religion and culture that predisposed the Igbo people to accepted Christianity. This is contrary to the existing body of knowledge on the socio-historical interaction between Traditional Igbo/African religion see the zealous activities of missionaries, foreign merchants, and colonial administrators as being responsible for the acceptance of Christianity in Igboland.

Based on the foregoing, it was noted in the cause of this research that, the traditional religion of the Igbo people, prior to the advent of Christianity, was a major unifying factor amongst the people. Religion, as it were, served both spiritual and cultural purpose; as the occasional gathering of the people to offer sacrifices and the communal feasting that often followed, demonstrated love and unity among the traditional worshippers. The import of this practice need not be watered down; as the Christian missionaries sometimes described the African traditional

worship as fetish, without isolating and commending those aspects of the worship that engendered true love among the adherents of the religion.

More so, it was observed during this research that, the early Christian missionaries obviously lacked the spiritual power to perform miracles and heal the sick - as no record of divine healing of the sick by the missionaries, is found in all previous studies reviewed. Had they exercised such supernatural powers, the people perhaps would have more readily converted to their Christian religion.

Hence, what happened in Igboland at the introduction of Christianity is not necessarily religious conversion in the meaning of the word but religious accommodation and adaptations. This is because the very theological beliefs of Christianity are already present in the lived experience of the Igbo people. The missionaries did not actually introduce a 'foreign God' but they only make explicit the 'indigenous God' of the Igbo people. It is the mutual integration of the so-called practices of traditional Igbo/African Religion that some people mistake as syncretism. While syncretism is negative but mutual integration of the positive values of African/Igbo religion and culture in modern Christianity is worthwhile because it will enrich the Christian experience within Igboland.

Biblically or Scripturally, It is this error of holding as condemnable, every aspect of the ATR, that the early Christian missionaries ran foul of, hence the initial rejection of Christianity by the people. Curiously, the bible which served as the guiding manual for Christianity, taught about the relevance of offering sacrifices (see for instance, the sacrifice of the Passover Feast by the Israelites in Ex. 12:8). The bible reckoned the sacrifice of Jesus Christ on the cross, as the greatest sacrifice of love, that brought redemption to mankind (Jn 3:16-17; Is 53:5,10). But Jesus did not offer Himself as a sacrificial lamb without first charging His followers during the Passover meal (Lk. 20:15) to continue to hold the communion feast in memory of Him (Lk. 20:19). Why then will most adherents of the Christian religion condemn the communion feast by the traditional worshippers made up of the remains of the items used for sacrifice - after the removal of the sacred portion? Is the communion feast any different, by intent and procedure, from that offered by the Israelites in accordance to God's directive.

Practically, the infusion of the positive elements of Igbo religious practices like drumming, dancing, the dynamism of worship, and meaningful symbolism into Christianity is making Christianity in Igboland not necessarily a foreign religion but a religion that is in touch with the culture of the Igbo people. This calls for mutual accommodation and respect between adherents of the two religious systems. The

acceptance of the fact that indigenous religious practices and understanding are not devilish, pagan, or heinous to Christians is the beginning of tolerance and mutual recognition for mutual enrichment of both religions. Therefore, it suffices to argue that since those elements of traditional Igbo/African religion is what makes the acceptance of Christianity possible in Igboland then there is no need for the conflict of supremacy between the adherents of the two religious systems. Based on the foregoing is where the practical contribution of this work rest and various recommendations was deduced therein.

Theoretically, this work was design to test some existing theories of religion. It employed the following theories: Social Integration Theory, Social-Solidarity Theory, Indigenization Theory, and Adaptation Theory. These theories explain the socio-historical relationship and influences between Christianity and Traditional Igbo/African Religion. In relation to what the data from the field is suggesting the above theories don't have sufficient explanatory power to give an account of what is going on in Igboland. Thus, there is a need to rethink those theories as regards the socio-historical influences that made Christianity acceptable in Igboland during the Igbo colonial experience and encounter with western culture. Hence, the work is suggesting further research in the area of theoretical reconceptualization and the need for homegrown theory to explain what had happened and what is happening on the reasons Christianity has easy

acceptance among the Igbo people and it is now intertwined with their cultural practices today.

Finally, it is posited that, integrating a new system into an existing established system by harmonizing the attributes similar to both systems, rather than trying to supplant and/or replace the existing one, is likely to yield more positive result. This is most needful when the subject matter is something the people are emotional about, like religion in the extant study.

6.4 Recommendation

Specifically, the following recommendations are proposed:

1. It is recommended that a Religious Conference comprising leaders of both African and Christian religions, Traditionalists and Christians, theologians and scholars with interest in inter-religious relationship, among others, be organized to dialogue on ways of promoting smooth and cordial relationship amongst adherents of both religions. This is necessary in view of the fact that, both religious share in similar belief in the Supreme Being and as such, one should not be antagonizing the other. This will help encourage the acceptance of the various religions by adherents of other religions.

2. It is recommended that the Church in Africa and, particularly, in Igboland, with the support of her benevolent members, founders and other public spirited individuals, should organize periodically, seminars, workshops, retreat, synod and the likes, so as to discuss issues of religious worship that are peculiar and of common interest to the Igbo Christians. In such gatherings, discussions relating to creating our indigenous method of worship which allows for the use of our local musical instruments and makes our liturgy truly African, can be engaged in.

3. It is recommended that from time to time, Church leaders and workers such as Priests, Pastors, Catechists, Elders, Evangelists, Deacons, Deaconess, Group Leaders, among others, should be subjected to upgrading courses as well as training and retraining programmes. This is imperative bearing in mind the changing nature of human beings and the human society. Since knowledge is power, there is need for religious leaders to undertake career progression packages as to update their knowledge, in line with the changing realities. This will equip them on better ways of making the people voluntarily and happily submit to their leadership. The knowledgeable religious leaders will also be able to breed harmonious co-existence between the Christians and adherents of African traditional religion and other religions.

4. There is a great need to preserve the African culture and save it from extinction. Thus, it is recommended that, while the more acceptable Christian worship is glorified amongst the majority of the Igbo people, the Church should encourage her members to continue to be identified with those traditional and cultural practices of the Igbo people that are not opposed by any known biblical teaching. The gains of 1977 FESTAC (Festival of Arts and Culture) were a good initiative that has promoted the rich culturally values of the various ethnic groups in Nigeria till date. The preservation of our culture will remind the Igbo people and Africans at large, where they came from and where they are going. Christianity should not replace or substitute our Traditional African Religion.

5. An African Christianity that deprives the people of some of their customary rights can be said to be defective. Hence, it is recommended that the Africans be allowed to develop their own creed of worship and articles of faith as well worship responses in their own words and in agreement with their culture, except where such responses contradict biblical principles.

6. Not minding the view of the early Christian missionaries about African Traditional Religion, it is still recommended that the African Christianity be Africanised, indigenized or localized. This

means that the gospel should be applied to scrutinize the people's culture with the positive aspect adopted, while the evil, wicked and satanic aspects of the culture be dropped. The adopted aspects of the culture should be blended with the Christian gospel in a way that the gospel should be African in outlook and practice.

To appreciate the positive relationship between African Traditional Religion and Christianity and how the former gave room for the acceptance of the latter in Igboland, it is suggested that further studies be carried out in related subject matter.

Premised on this, the following topics are suggested for further studies:

1. The African Traditional Religion and the notion of life after death.
2. Salvation of mankind under the Traditional Religion and Christianity
3. Africanization of Christianity in Igboland.
4. Igbo Culture and Traditional Religious Practices in Igboland.
5. The Search and Worship of the Supreme Being in African Traditional Religion.

APPENDIX 1
Primary Sources

S/N	NAME	AGE	OCCUPATION	PLACE OF INTERVIEW	DATE
1	John Okeke	88	Rtd Catechist	Amaechi, Enugu	04/03/19
2	Egbere Owoh	92	Farmer	Ngwo, Enugu	05/03/19
3	Ibekwe Nnamani	80	Rtd Minner	Ngwo, Enugu	05/03/19
4	Ejike Okoro	85	Farmer	Ngwo, Enugu	05/03/19
5	Ugonna Onwuekwe	89	Trader	9th Mile Enugu	08/03/19
6	Obumneme Nweze	87	Trader	9th Mile Enugu	08/03/19
7	Amaechi Ubakara	93	Farmer	Nike, Enugu	13/03/19
8	Nnaemeka Ugwuozor	90	Farmer	Emene, Enugu	13/03/19
9	Ezekiel Mbam	86	Rtd Pastor	Emene, Enugu	13/03/19
10	Paul Onyia	93	Farmer	Nike, Enugu	13/03/19
11	Okorie Nkemakolam	92	Trader	Ebonyi L.G.A	19/03/19
12	Uchechi Okonkwo	90	Builder	Ebonyi L.G.A	19/03/19
13	Onyeoma Utazi	87	Goldsmith	Abakaliki LGA	08/03/19
14	Ugonna Nweke	82	Rtd Civil Servant	Abakaliki LGA	08/03/19
15	Iruka Nweze	87	Farmer	Ikwo L.G.A	08/03/19
16	Oke Nwonwe	90	Farmer	Ohaukwu LGA	22/03/19
17	Iruka Nwancho	92	Farmer	Abakaliki LGA	22/03/19
18	Ebere Uzoke	91	Rtd Teacher	Abakaliki LGA	22/03/19
19	Iloabuchi Eke	80	Trader	Abakaliki LGA	22/03/19
20	Ogboji Otubo	85	Farmer	Izzi L.G.A	19/03/19
21	Okechukwu Orji	86	Rtd Teacher	Aboh Mbaise	28/03/19

22	Nnamani Ukom	91	Rtd Principal	Aboh Mbaise	28/03/19
23	Odinaka Ugwuanyi	87	Trader	Aboh Mbaise	28/03/19
24	Ude Ezeani	93	Rtd Lecturer	Elele Rivers	29/03/19
25	Onyeze Onwudinjo	89	Rtd Civil Servant	Onu-Imo	27/03/19
26	Uchechukwu Uguru	92	Trader	Nguru Centre	03/04/19
27	Etochi Nwadike	95	Rtd Catechist	Nguru Centre	03/04/19
28	Udeme Nwadimkpa	87	Trader	Nguru Centre	03/04/19
29	Nnanna Okorieagu	88	Fisher	Onu-Imo	27/03/19
30	Anyigor Nweke	91	Farmer	Onu-Imo	27/03/19
31	Moses Iloghalu	93	Transporter	Nimbo Anambra	09/04/19
32	Ikenna Anyanwu	86	Transporter	Nimbo Anambra	09/04/19
33	Ogonna Ezeluo	90	Trader	Awka Anambra	10/04/19
34	Ifeanyi Dike	93	Contractor	Awka Anambra	10/04/19
35	Jerome Muoneke	87	Contractor	Awka Anambra	10/04/19
36	Ukachukwu Ozioma	89	Trader	Ukpo Anambra	11/04/19
37	Ekele Nnadozie	90	Trader	Ukpo Anambra	11/04/19
38	Ejidike Chiemerie	80	Manufacturer	Ukpo Anambra	12/04/19
39	Amos Nworie	85	Trader	Amasiri Afikpo	19/04/19
40	Ekechi Otubo	89	Trader	Amasiri Afikpo	19/04/19
41	Nnaji Obeji	87	Mechanic	Ohaofia Abia	19/04/19
42	Uchechi Ugbega	94	Goldsmith	Ohaofia Abia	19/04/19
43	Toochukwu Ezike	90	Trader	Ngwa Abia	21/04/19

44	Ugochukwu Nwele	89	Trader	Ngwa Abia	21/04/19
45	Kenechukwu Udeme	78	Farmer	Ngwa Abia	21/04/19
46	Egonna Nwankwo	88	Trader	Izzi Ebonyi	28/03/19
47	Peter Odiri	56	Lecturer	Awka Anambra	05/05/19
48	Orji Ekene	88	Trader	Aba Abia	23/04/19
49	Kanu Ogbonna	90	Rtd Principal	Aba Abia	23/04/19
50	Okorie Nnanyelugo	88	Trader	Aba Abia	23/04/19

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