FISCAL POLICIES AND STANDARD OF LIVING IN NIGERIA: INVESTIGATING THE TREND 1980 - 2016

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Abstract
This paper assessed the impact of Nigeria's fiscal policies on standard of living using data obtained from the Central Bank of Nigeria (CBN) and the Nigeria Bureau of Statistics (1980 – 2016). Eight variables including Per Capita Income (PCI), Consumer Price Index (CPI), Level of Education (EDL), Gross Capital Formation (GCF), Gross Domestic Product (GDP), Labour Force (Proxy for Employment) (LABF), Population Growth (POPG), and Terms of Trade (TOT) were included in the study. Per-Capita income (proxy for standard of living) was used as the dependent variable. The Fully Modified Least Square method used to predict the impact of the independent variables on the independent variable revealed that the gross domestic product (GDP) had a significantly positive impact on per capita income. Similarly, the Labour Force (Proxy for Employment) suggests that increasing employment had positively and significantly impacted on standard of living. However, government expenditures on human capital development and knowledge did not exert significant impact on standard of living during the period under review. Additionally, the Consumer Price Index (CPI) though positive, was statistically insignificant for the model. The Gross Capital Formation (GCF) and Population Growth (POPG) were not only insignificant, but also exerted negative effect on the standing of living. Based on these findings, the study recommended among others that Government should design fiscal policy that would place emphasis on investment in knowledge and human capital with time line on target achievement, and invest more on education and in so doing encourage research on technological development.

Key words: Fiscal policy, Standard of living, New Growth Theory (NGTs),

Introduction

The right to adequate standard of living is acknowledged by many international organisations, to which Nigeria is a member. For instance, the International Labour Organisation (ILO), the Food and Agricultural Organisation of the United Nations (FAO), the World Health Organisation (WHO), each emphasized that "at a minimum, everyone shall enjoy the necessary subsistence rights: adequate food and nutrition, clothing, health, housing and the necessary conditions of care when required" (World Bank, 2016a). In the stipulations of several organs of the United Nations Organization, several programmes are designed for the realization of adequate standard of living;

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and state members are encouraged through aids, direct funding, as well as counterpart funding to implement the programmes for the welfare of their citizens (World Bank, 2016b). Given this development, the United Nations Human Right Commission (UNHRC, 2014, p.12) argued that "people should be able to enjoy their basic needs in conditions of dignity"; that under no condition should anyone be either degraded or deprived basic freedoms or be pushed into begging, prostitution or forced labour to earn a living. The World Bank (2016b) provided two elements that makes adequate standard of living possible. These include, "expenditure necessary to buy minimum standard of nutrition and other basic necessities and a further amount that varies from country to country, reflecting the cost of participating in the everyday life of society".

In recent time, standard of living in Nigeria has become a matter of serious concern. A review of Nigeria's macroeconomic indices revealed that inflation has remained in double–digit for many years (Kanu & Ozurumba, 2014). By May 2018, an estimated 87 million Nigerians were said to be living in extreme poverty by the Washington-based Brookings Institution report (2018). Given this ugly development, and the rise in unemployment rate, it is not likely that the internationally agreed Sustainable Development Goals (SDGs) for the elimination of extreme poverty set for year 2030 can be achieved in Nigeria, except government takes effective fiscal policy to grow the economy and improve the standard of living of the people.

Many scholars have described the poverty situation in Nigeria as a paradox (Anyanwu, 2007; Nurudeen & Usman, 2010; Ubesie, 2016). This is because even when the country was being ranked as the 3rd largest economy in Africa, it was occupying the 160th position out of 177 countries on the scale of the Human Development Index (HDI). In his work, Ubesie (2016) revealed some deepening challenges to adequate standard of living of many Nigerians to include a deteriorating deprivation and inequalities. Economic turmoil experienced during the recession and the consequent rise in the prices of food items, and other commodities, the dual and unstable exchange rate of the Naira, and the rising rate of unemployment exerted adverse effects on the standard of living. The burden of these economic down turn is still being felt in the widening gap of inequality, increasing poverty rate, and crime. The Labour Union has recently asked for increase in the minimum wage for workers in the country due to biting inflation.

Globally, the use of economic policy guideline for efficient and effective achievement of macro-economic needs and wants has been acknowledged (Easterly & Rebelo,1993). In Nigeria, the macro-economic goals are not limited to high employment level, but also favourable balance of trade, and sustainable price for achievement of sustainable growth (Ubesie, 2016). Macro-economic goals, therefore, include fiscal and monetary policies (Adeoye, 2006). Fiscal policy is one of the most powerful instruments that governments use to maintain macroeconomic stability for growth, as well as for intra- and intergenerational transfers of wealth and for correcting market failures. Elsewhere, governments often have at their disposal between 25 and 40 percent of national income for spending, including redistributions across social groups (Easterly & Rebelo, 1993).

Fiscal policy is a budgetary policy instrument of government on taxes, expenditures, income, borrowing and financing (Ndiyo & Udah, 2003). The aim of fiscal policy is to reduce inflation rate, increased economic growth, employment creation, and establishment of favourable balance of payment. It is in this context that fiscal policy remains a primary weapon of economic stabilization (Gbosi, 2008). Studies have shown that budgetary policy when efficiently and effectively implemented is useful for poverty reduction (Ravallion & Chen 2004) and increase in standard of living of the people (World Bank, 2005). While standard of living may simply refers to the amount of goods and services produced and made available for purchase by households, organizations and /or government (Fumitaka & Qaiser, 2014), it is also a measure of the quality of

life or level of material property enjoyed by individuals, a specific demographic group or a geographic region such as a country (Montgomery, Gragnaloti, Burke, & Paredes, 2000). It is a major tools used for the determination of the relative prosperity of the population of an entire country.

In financial discourses, the standard of living is measured by the use of per capita income. Per capita income is known to be the average amount of money earned per person in the country. A higher per capita income allows people to buy more goods and services, increase access to education and healthcare as well as improve quality of life and life expectancy (McKay, 2000). A high per capita income also could suggest a high tax base that can support social services and infrastructure (Kanu & Ozurumba, 2014); public education and other investments that can further improve the population's standard of living (Dollar & Aart, 2002). Despite the facts that fiscal policies are expected to enhance and improve living standard, it may sometimes become harmful if it results in budget deficit (Ogbole, Amadi & Essi, 2011).

Different scholars have studied the effects of fiscal policies on exchange rates and the macroeconomic impacts of fiscal spending in Nigeria (Ndiyo & Udah, 2003; Nurudeen & Usman, 2010; Ubesie, 2016). There are also robust literature that focused on allocative effects of government spending, taxes, and subsidies on the quality aspects of growth, such as poverty and inequality (Barro, 1991; Gbosi, 2008). It is sometimes assumed that fiscal policies in Nigeria would stimulate economic growth and development and hence promote the standard of living of the people (Agu, Idike, Okwor & Ugwunta, 2014). That assumption has not always been true. The Nigerian economy over a long period of time has been observed to be experiencing a high and rising rate of inflation. In recent time high rate of unemployment, decreasing per capita income, decreasing level of external reserves, and high foreign exchange rate have been observed (Ubesie, 2016; Brookings Institution report, 2018). This is contrary to observations in other countries, even within the Sub-Saharan Africa, whose fiscals' policy is enhancing steady living standard for its citizens (Elva, Christina & Sampawende, 2016).

Despite repeated claims from official quarters of sound fiscal policy implementation, poor and deteriorating living standard in Nigeria has become a hallmark over the years. It calls for investigation into the impact of governments' incomes and expenditure on the standard of living of Nigerians. Government income and expenses are multidimensional concepts made up of variables, which analysis can reveal economic performance and thus can suggest coordinating and or regulatory role that government can take to stabilize the economy. Very few analysts have tended to assess the impact of fiscal policy on the standard of living of Nigerians. The significance of this paper, therefore, lies on finding out the extent to which fiscal policy serves as an instrument of attainment of the goals of adequate living standard for Nigerians. It can also help in making suggestions for policy recommendations that can kick start sustainable strategies to achieving adequate standard of living in Nigeria.

Sometimes, excessive increase in aggregate demand, political instability, natural disasters and other factors may lead to recession, unemployment, balance of payment deficit amongst others (Agu, Idike, Okwor & Ugwunta, 2014). During such instances government tries to stimulate the economy through deliberate changes in its spending and taxation using its budgetary actions to achieve full employment. The implication of such economic stimulation on the living standard of the citizens deserved to be known. This study examines the impact of fiscal policy on standard of living of Nigerians from 1980 – 2016. Specifically, the study seeks to assess the extent to which per capita income, used here as proxy for living standard, depends on Government revenue and

expenditure. The research question that guides the study therefore, is: to what extent does the government revenue and expenditure impact on the per capita income of people in Nigeria?

The analysis of findings is guided by the theoretical explanations of the new growth theory (NGTs) of Jonathan Temple (1999). The paper is organized into themes, beginning with this introduction. The next theme provides conceptual explanation, literature and theory. Thereafter, the paper explains the methodology and sources of data collection. The presentation of the result is followed with analysis, test of hypothesis and discussion of findings. The paper concludes with a summary and recommendations.

Conceptual Explanation and Literature Review

Standard of Living

The concept of "standard of living" has two overarching terms: "standard" and "living condition". While "standard" refers to a level of quality or attainment (McKay, 2000). "living condition" refers to a state of existence (Sen, 1987). Taking these terms together, we can refer to standard of living of a people as a measure of the material aspects of their economy, which Article 25(1) of the UDHR, defined to include food, clothing, housing, medical care, necessary social services. In this context, Sen (1987, pp. 23-45) observed that the "standard of living is really a matter of 'functioning' and 'capabilities', and not a matter directly of opulence, commodities, or utilities". A 'functioning' is an achievement, whereas a 'capability' is the ability to achieve. While "functionings" are more directly related to living conditions, 'capability' refers to freedom and/or real opportunities one has in life. Some capabilities, like being healthy and well-nourished, may have more or less similar demand on commodities, such as good food, earning living wages, and having good health services. Some of the capabilities needed for a "minimum" level of living, include more real income and opulence in the form of commodity possession. The value of the living standard therefore, is given by the capability to lead various types of life (Sen, 1987).

In taking Sen's (1987) argument further, Fumitaka and Qaiser (2014) suggested that standard of living is influenced by economic means, not necessarily on the basis of sound definition, but on the basis of empirical relationship; and this is the pathway this paper follows. This is because commodity-based measures such as GNP and GDP can easily aggregate and can conveniently be used for comparison. In this context, "standard of living" can be affected by factors such as income, quality and availability of employment, poverty rate, quality and affordability of housing, gross domestic product, inflation rate, educational attainment (Gbosi, 2008) and having minimum and average wages that can help one to keep up with the steady rise in the cost of living (McKay, 2000).

Per Capita Income

According to Easterly and Rebelo (1993), GDP per capita is a rough guide to living standards of the people because it measures average incomes and the amount produce in an economy. The per capita income is estimated by the total national income and size of population (Dawson & Tiffin, 1998). Given this relationship, if the size of population is large while the national income is small, the per capita income is going to be low, and thus exert negative effect on the standard of living. In addition to low per capita income, the distribution of income may also be distorted by some measured of favouritism. When this happened, few rich persons may enjoy higher standard of living, while a majority of the masses would live in extremely low standard (Shatakshee, Anna, Wendy & Ulcka, 2006). It is in this context that many scholars who advocated for equal wealth distribution, emphasis on enhanced level of education as a panacea to high standard of living

(Sachs & Andrew, 1995; Perotti, 1996). The argument here is that "educated people tend to have high standard of living than the illiterate ones" (Ubesie, 2016). Above all, a country with a low price level can provide a good standard of living to her people (Nuxoll, 1994).

Fiscal Policy

In order to understand the conceptualization of fiscal policy and link it with standard of living, one may begin to see the activity of government as an economic agent that collects revenue through taxation and spend it on education, provision of subsidies, infrastructure, and well-being of the citizen. In this context, fiscal policy becomes a tool that the government uses to achieve its economic objectives (Adeoye, 2006). The tools basically include government expenditure and taxation, which can be manipulated for expansionary and contractionary purposes of the economy. According to the Central Bank of Nigeria (CBN, 2011), fiscal policy is the use of governmental expenditure and relevant collection through tax to influence the economy. In his analysis, Onoh (2007) observed that the primary aim of fiscal policy is for economic stabilization. Against this background, fiscal policy can be used to achieve several objectives. These include full utilization of resources, which can result in increased employment and improved standards of living of the people; it can also result in price stabilization and a reduction in inflation rate (Elva, Christina & Sampawende, 2016). Additionally fiscal policy can exert significant positive influence on investment in the economy, as well as equal distribution of resources, and optimization of resource (Easterly & Rebelo, 1993; World Bank, (2005). In the analysis of Ndiyo and Udah (2003), expansionary fiscal policy which entails increasing government spending and decreasing taxes, or a mixture of both will create more money in the economy and can help in creating more jobs and more economic growth. Decreasing taxes will increase the purchasing power of people which in return will increase the aggregate demand in the economy. By applying this policy, aggregate demand and employment will increase thus the government will achieve higher economic growth. On the other hand, contractionary fiscal policy, which involves increasing taxes, decreasing government spending, or both, often decrease the purchasing power of the citizens and may result in lower demand.

The implementation of either expansionary or contractionary policy option is not without consequences. For instance, if increase in public spending is financed through increase taxation, it will raise the issue of who bears the burden of deficit financing. As increase in inflation exacerbates increase in interest rate, there is the likelihood of the debt burden rising with compounding interest. The impact on the living standard will therefore depend on the nature of the spending. In this context, Easterly and Rebelo (1993) have argued that increase in spending on basic health and education could have wide positive beneficial imparts on human development and living standard. Studies have also shown that increased spending on public transfers or in-kind transfer (such as food subsidies) can have beneficial impact on "income and nutrition amongst the poor if these transfers effectively reach them" (Persson & Tabellini (1994). It can also affect the standard of living in the area of infrastructure development (Ogbole, Amadi & Essi, 2011). However, Levine and Renelt (1992) have argued that the relation between fiscal policy and standard of living is non-linear; a lot depends on various partial effects, which suggests how government expenditure flows through the various channel of expenses.

Factors in Standard of Living

Different scholars have offered explanation on factors that determine the standard of living of a country (Sen, 1987; Montgomery, Gragnaloti & Paredes, 2000; Fumitaka & Qaiser, 2014). There

seem to be no agreement on which factor is more important than the other, but the consensus in the argument is the acknowledgement of the importance of the factors in the achievement of enhance standard of living. Many scholars have mentioned the level of national income (Barro, 1991; Ndiyo & Udah, 2003), level of productivity, size of the population (Fumitaka & Qaiser,2014), consumer price index or general price level (Nurudeen & Usman, 2010), level of education (Pritchett, 1996), gross capital formation, gross domestic product, labour force, and terms of Trade (Kanu, & Ozurumba, 2014). Strong associations have been found between the level of national income and the total volume of production in the country (Easterly & Rebelo, 1993). A country that has higher national income enjoy higher standard of living (Koop, Osiewalski & Mark, 1995). Similarly, the national income depends upon the level of productivity of the citizens, be it in agricultural, industrial or other economic activities. It is an established fact that a higher productivity will always results in a higher national income and high standard of living (Kravis, 1984).

Term of Trade (TOT

The terms of trade (TOT) is a measure of the relative value of one commodity to another (Ndiyo & Udah, 2003). The inclusion of 'relative' in the definition suggests 'comparison' of price of exports to the price of imports. Simply put, therefore, TOT is a measure of the exchange value of the good or service to be traded. Terms of trade determines the number of imports that each export can purchase. In the argument of Hansen (1994), when the terms of trade rises, exports can be exchanged for more imports, and thus exert positive impact on real incomes and by implication the standard of living. In this context, terms of trade improves for every unit of export that a country sells. An increase in TOT therefore becomes important as it enhances a country's exports to buy a given number of imports.

Nigeria depends largely on a single commodity (crude oil) for export. Crude oil export therefore, determines to a very large extent Nigeria's TOT. Given this situation, Nigeria's TOT suffers decline whenever the price of crude oil fall. Many scholars who have analyzed 'resource curse' theory have argued that resource dependence may be detrimental to TOT due to price fluctuation in the international market (Karl, 1997; Flatters & Jenkins, 1986). If the price fluctuation in exported goods last for long, it could exert negative impact on economic health of the country. There is little or no empirical work in Nigeria that seek to use TOT to evaluate improvement in the living standard of Nigerians. However, the observation by Schubert (2006) and Torres, Afonso and Soares (2013) proved valid in many developing countries. According to them, many food insecure households have very few stores of wealth or savings at any given time. The value of exchange for those limited wealth determines their "ability to acquire their basic needs". The value of the exchange (TOT) remains a critical indicator of the ability that influences their standard of living.

Consumer Price Index

The Consumer Price Index (CPI) measures the average change over time in prices of goods and services consumed by people for day-to-day living (NBS, 2018). The construction of the Nigeria's CPI includes varieties of commodity and services such as food and non-alcoholic beverages, alcohol, tobacco, clothing, and footwear, housing, water, electricity, gas, furnishings, household equipment, health, transport, communication, recreation and culture, education, restaurant and hotel, miscellaneous goods and services, like barbing, jewelries, clock, etc.

The CPI fluctuates from time to time thus indicating the rate of inflation in the economy. For instance, the recent data from the National Bureau of Statistics (NBS, 2018) revealed that

composite food index had increased by 17.59 percent in February 2018. All items inflation for the twelve-month period ending February 2018 over 2017 was highest in Kebbi (18.60%), Bauchi (17.68%) and Yobe (17.65%), while Delta (11.74%), Edo (12.33%) and Kogi (12.74%) recorded the slowest rise in headline year on year inflation.

Population and Standard of Living

The relationship between increase in population and standard of living has a long history dating to Thomas Malthus 1789 argument on "geometrical increase in population and arithmetical increase in food production. It was a warning about impending calamity that can possibly befall a country that exceeded her carrying capacity. Since then many scholars have offered argument for and against Malthus position but no consensus appear to be near. For instance, emerging climate change and the likely impact on food crisis amidst rapid increase in population have renewed worries similar to that evoked during Malthus era (Ahlburg, 1996). However, Simon (1996) considered the relationship between population growth and per capita income as beneficial when such increasing population stimulates economic development by encouraging business completion and market growth. In this context, it means there is another side of the coin for rapidly increasing population that failed to stimulate economic development. In many instances a rapidly expanding population tends to increase dependency burden by producing many children with no facility to gather for as well as the elderly with no welfare system that can support them (Becker & Tomes, 1976).

In support of 'existing large population' that can stimulate economic development, Schultz (1979), highlighted the measurable gains that the improvements in the population quality could bring to the economic development in developing nations. The author found nothing wrong with rapidly expanding population so long as it is qualitative. It suggests that a qualitative population constitute a huge human capital. In the analysis of Becker and Tomes (1976, p.147), as a "country becomes more prosperous the increase in demand for a high quality human resource would lead to the reduction of the population quantity". This is because more economically wealthy people tend to have fewer children, thus suggesting that economic development could offer a solution for over-population. This later argument tends to support the new growth theory (NGTs) adopted for this work. The existence of a qualitative population means a population that benefit from investment in human capital and knowledge. It is only such population that can stimulates economic development and hence, adequate standard of living. Any increase in population short of quality will exert negative impact on the standard of living of the people.

Empirical Review

The review of literature revealed several studies undertaken to assess the effect of fiscal policy on economic growth. However, none of the studies examined the impact of fiscal policy on standard of living in Nigeria, directly. The studies on fiscal policy and economic growth nexus have resulted in different and conflicting results. For instance a study by Olajide and Adekoya (2012) revealed that fiscal policy has not been very useful in the promotion of sustainable economic growth in the country. The analysis of findings blamed fiscal policy measures for wasteful spending, poor policy implementation and lack of feedback mechanism for implementation. Contrary to their findings, Nurudeen and Usman (2010) found a significant relationship between government income and expenditure and its impacts on the growth of the economy. The multiple regression models that predicted the behaviour of the variables revealed that public finance priorities such as capital expenditure for infrastructural development, recurrent expenditure on salaries, external debt ratio,

domestic debt ratio, debt servicing ratio and inflation had direct relationship with economic growth.

In another work by Agbohe, Amadi and Essi (2011) on fiscal policy and economic growth in Nigeria from (1970 - 2006) using a time series data with Granyer Casualty Analysis, a causal relationship was found between government expenditure and gross domestic product (GDP). The finding also reported that between 1970 and 2006, fiscal operations exerted positive significant effect on economic growth in the economy. What the study lacks was in showing the precise extent of the impact and the individual performance of the several independent variables used in the study. When Udokang (2013) adopted the same time series data with extension (1970-2011), using Johnsen Co-integration test Vector Error Correction Mechanism (VECM) test and Granger Casualty Test, he found that gross domestic product (GDP) was significantly affected by government capital expenditure, oil revenue and non-oil revenue, as well as Treasury bill and fiscal deficit.

However, a divergence result was observed in a longitudinal study conducted by Ezeabasil, Tsegba and Ezi-Herbert (2005) with data drawn from 1970 to 2006. The authors found that fiscal deficit affected economic growth negatively, and was capable of diminishing economic growth by about 0.023 percent during the period. A strong negative association between government consumption expenditure and economic growth was also observed. Given these results, the author warned that while fiscal policy may be used to decrease aggregate demand during recession, it should also be used to increase aggregate demand during boom times; as poorly timed fiscal policy can increase inflation and accelerate declines in economy during crowding.

In a trend analysis carried out by Onwe (2014) to assess the effect of fiscal policy components on Nigeria's economic growth, the author found a negative significant impact of fiscal policy on economic services and transfer payments. Even where significant effects were observed on administration, social and community services, the author noticed several complex trade-offs due to distortion, which eventually downplay any effective impact that the policy would have had on the beneficiaries. In such instances, the distortion cloud-out the efficiency-enhancing roles that fiscal policy would have had in addressing market failures, providing social and economic infrastructure, and offer a net positive impact on overall economic performance and growth.

In their study, Daveri and Tabellini (1997) explained the likely cause of possible distortion effects of government expenditure directed to ease the suffering of the citizen. According to them "government taxation is not only a means of raising revenues to back up expenditures, but it is also an instrument through which income inequality and labour markets may be affected". Once tax is increase on labour, there is a likelihood of increase on labour cost. An excessively high cost of labour is often the main cause of an increasing rate of unemployment as well as the slowdown in economic growth (Nijkamp & Poot, 2004). If distortionary taxation reduce the incentives to save; it can also reduce the incentives to invest; the combination of such impact could exert a depressing effect on economic growth (Ndiyo & Udah, 2003; Rodrik, 1998). Other than distortion caused by taxation, Ubesie (2016) blamed the failure of fiscal policy in Nigeria to enhance the standard of living on gross mismanagement and misappropriation of public funds, corruption and lack of integration of macroeconomic plans. In addition to these factors, Anyanwu (2007) added, imprudent public spending, weak sectoral linkages, and other socioeconomic maladies.

In the study conducted by Nurudeen and Usman (2010), using data from 1970-2008, the finding was mixed. While government total capital expenditure, total recurrent expenditures and expenditure on education had negative effect on economic growth, expenditures on health, transport and communication exerted positive impact on economic growth. Similarly, Oyinlola,

(1993) found that budgetary expenditure on the defense sector exerted a significant positive influence on economic growth in Nigeria, when the influence of security on investment was considered. However, evidences from empirical literature suggest that the effect of government fiscal policy on standard of living is often fraught with problems (Barro, 1991; Ubesie, 2016). The problems increase further at the level of implementation, especially, when attention is shifted to implementation of programme designed to enhance the standard of living by politicians, where corruption thrives. As Dao and Loungani (2010, p. 16) observed, "corruption in government and quality of bureaucracy are taken as proxies for the general efficiency with which government services are provided, and to the extent and damage of rent-seeking behavior". Where corruption thrives, there is the tendency to distort the efficiency criteria that would have prevailed in the allocation of public goods. In this context a corrupt government and low quality bureaucracy will negatively affect programmes designed to enhance the standard of living of the citizens. In Nigeria, this is glaringly seen in contract enforceability, infrastructure quality, and bureaucratic delays (Ubesie, 2016).

Theoretical Framework

The theories adopted for this study seeks to enhance explanation on how fiscal policy can be used for the realization of adequate standard of living. Different types of government expenditures and different types of taxes may have very different effects on the citizens' standard of living. In this context, several models have shown various mechanisms by which proper fiscal policies can be effective in enhancing the standard of living within an endogenous growth framework (Barro 1991). The New Theory of Growths (NGTs) propounded by Jonathan Temple (1999) have stimulated studies that attempt to test the relationships between public expenditures and economic growth with focus on standard of living.

The main tenet of the NGTs is that investment in knowledge and human capital are inputs that can generate reliable outputs. This is because when knowledge and human capital accumulate, they can make increasing returns possible. The key features of NGTs are that human capital creates useful knowledge, and that this knowledge can be used by many and used repeatedly without being exhausted. By so doing, knowledge becomes both an input to the creation of new goods and the creation of an output that adds to future input (Romer, 1986; Lucas, 1988). When government expenditure is directed at investment in human capital and knowledge, the population becomes a qualitative one that can stimulate the economy toward more production and development. Such investments are what individuals and firms do not necessarily have private incentives to do. In the analysis of Grossman and Helpman, (1991), investment in human capital like the development of education and skills can generate increasing returns and drive economic growth. For instance, expenditure channel to support research and development is likely to create multiplier effect that can generate more creative ideas and hence, investment. In such instances, the per capita income per person will increase as people get involved in the use and practices of the new ideas. Similarly, the NGTs supports the involvement of government in the creation of public-goods, such as financing infrastructure projects, like road and rail infrastructures, sea, and air transport. These projects are capable of generating positive externalities (Lucas, 1998).

There are several implications of the NGTs. These include the recognition that knowledge can be used by multiple users without diminishing the benefit to each, and that human capital is a key input to research and innovation activity. Investment with the aim of producing qualitative population produces spillovers that can drive economic growth (Schultz, 1979). In this context, the NGTs suggests a shift from consideration of exogenous to endogenous factors as drivers of

economic growth; it can reduce poverty, unemployment, social ills and promote education, and hence, standard of living.

Data and Methodology

This study relies on ex-post facto research design and drew data from the Central Bank of Nigeria (CBN) and the National Bureau of Statistics (NBS) yearly report on Nigeria's macroeconomic performance for the period 1980 – 2016 (appendix 1). Eight variables including Per Capita Income (PCI) (proxy for standard of living), Consumer Price Index (CPI), Level of Education (EDL), Gross Capital Formation (GCF), Gross Domestic Product (GDP), Labour Force (Proxy for Employment) (LABF), Population Growth (POPG), and Terms of Trade (TOT) were included in the study. We disaggregated the variables into dependent and independent variables using multiple regression model of a functional relationship. Our independent variables were operationalized to include Consumer Price Index (CPI), Level of Education (EDL), Gross Capital Formation (GCF), Gross Domestic Product (GDP), Labour Force (Proxy for Employment) (LABF), Population Growth (POPG), and Terms of Trade (TOT). For the dependent variable we used Per Capita Income to represent the standard of living.

Model Specification

Since the study has more than two explanatory variables, it was necessary to adopt the linear regression model, express in the equation as:

$$T_t = \alpha_o + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \ldots + \beta_n X_{nt} + \mu \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where: T_1 = The trend series of dependent variables

αo =The intercept of the autonomous constant

β_1- β_n =Coefficient of each of the independent variables

$X_{1t} X_{nt}$ = The trend series of the independent variables

μ=Stochastic term

In this paper, T_x is assumed to be the per capita income (proxy for standard of living, while government income and expenditures are used as proxy for X_{1t}, X_{2t}, X_{3t}…….X_{nt}. Equation 2 thus states that the standard of living depends on government income and expenditure. We now denoted the standard of living" as PCI to suit the dependent variable of the study, and thus modify equation one to obtain equation 2 as:

$$PCI = f(CPI + EDL + GCF + GDP + LABF + POPG + TOT) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

The baseline regression equation thus becomes:

$$PCI = \alpha o + \beta_1 CPI_t + \beta_2 EDL_t + \beta_3 GCF_t + \beta_4 GDP_t + \beta_5 LABP_t + \beta_6 POPG_t + \beta_7 TOT_t + \mu \ldots\ldots (3)$$

Where,

PCI = Per Capita Income (proxy for standard of living)

CPI = Consumer Price Index

EDL = Level of Education

GCF = Gross Capital Formation

GDP = Gross Domestic Product

LABF = Labour Force (Proxy for Employment)

POPG = Population Growth

TOT = Terms of Trade

Hypotheses

There is no significant impact of fiscal policy on standard of living of the Nigerian citizens. In this context, fiscal policy was operationalized to include income and expenditure of government. We decomposed income to into Gross Domestic Product and Terms of Trade, while expenditure included, Gross Capital formation (or government investment) - government spending on goods and services intended to create future benefits, such as infrastructure investment in transport (roads, rail airports), health (water collection and distribution, sewage systems, communication (telephone, radio and tv) and research spending (defence, space, genetics), cost of Education at the different levels. Other key indicators of the economic performance include Consumer Price Index, and Population Growth. The standard of living was measured by per capita income.

Result

In order to assess the effect of fiscal policy on standard of living, we first conduct a descriptive analyses of the variables used in the study. The summary of the findings is in table 1.

Table 1; Descriptive Statistics of Mean and Standard Deviations of Fiscal policy performance (1980 – 2016)

	CPI	EDL	GCF	GDP_NB	LABF	PCI	POPG	TOT
Mean	20.39206	123.6574	4.14E+12	28459.07	38.00267	223646.2	2.575002	-2.03E+12
Median	12.87658	123.2308	2.74E+12	21789.10	36.63529	190287.0	2.562732	-2.01E+12
Maximum	72.83550	150.2452	9.84E+12	63218.72	55.25116	354713.8	2.715063	0.000000
Minimum	5.382224	103.1751	1.44E+12	13779.26	27.02782	160042.4	2.488183	-6.00E+12
Std. Dev.	18.26210	11.79126	2.62E+12	15023.72	8.864744	60355.19	0.069291	1.41E+12
Skewness	1.539861	0.203995	1.121324	1.027351	0.458118	0.940738	0.297972	-0.648650
Kurtosis	4.080227	2.191455	2.727526	2.736724	1.947275	2.469485	1.787658	3.395323
Jarque-Bera	14.64593	1.127775	7.017607	5.900280	2.678112	5.254425	2.509270	2.528992
Probability	0.000660	0.568993	0.029933	0.052332	0.262093	0.072280	0.285180	0.282382
Sum	672.9378	4080.695	1.37E+14	939149.4	1254.088	7380325.	84.97507	-6.69E+13
Sum Sq. Dev.	10672.14	4449.084	2.20E+26	7.22E+09	2514.678	1.17E+11	0.153642	6.40E+25

Source: Authors computation using EView

Table 1 shows the descriptive statistics of each the variables. In the first row the mean performance of each variable is reported. These include that mean for Consumer Price Index (CPI), Level of Education (EDL), Gross Capital Formation (EDL), Gross Domestic Product (GDP), Labour Force (Proxy for Employment)(LABF), Per capita Income (proxy for standard of living), Population Growth (POPG) and Terms of Trade (TOT) for the 36 years under review (20.39206, 123.6574, 4.14E+12, 28459.07, 38.00267, 223646.2, 2.575002 and -2.03E+12 respectively). The range between the minimum and maximum values for each of the variables was wide, which suggested the yearly fluctuation. The standard deviation also suggests wide differences from the mean except

for population growth, although it demonstrated a positive skewness, that suggested yearly positive increase. While the Kurtosis scores for consumer price index (4.08) and terms of trade (3.40) suggest evidence of fatter tail than the normal distribution (leptokurtic), other variables exhibited evidences of thinner tail than the normal distribution (platykurtic) that ranged from 1.79 to 2.74. Such differences have consequences on the standard of living of the people, which is worth investigating. The Jaque-Bera statistics of consumer price index, gross capital formation and gross domestic product are significant at 5% while that of other variables were not. It was necessary to investigate the Unit root of the data inorder to know what model to use.

Table 2: Result of Unit Root Test (Newey-West automatic) using Bartlett kernel

Variables	**Phillip-Perron test statistics**	**5% Critical values**	**Prob***	**Order of Integration**
CPI	-10.59011	-3.544208	0.0000	1(1)
EDL	-3.545262	-3.557759	0.0513	1(1)
GCF	-3.706170	-3.544284	0.0351	1(0)
GDP	-3.320132	-3.552973	0.0806	1(1)
LABF	-5.177205	-3.552973	0.0010	1(1)
PCI	-6.197850	-3.548490	0.0001	1(1)
POPG	-4.100037	-3.540328	0.0139	1(0)
TOT	-5.506988	-3.548490	0.0004	1(1)

*MacKinnon (1996) one-sided p-values

Source: Author's computation using EView

The result in table 2 indicates that at 5% level of significance, all-time series values for CPI, EDL, GDP, LABF, PCI and TOT are stationary at 1st difference, I(1). This finding denies the tendency for spurious regression results (Greene, 2012). However, GCF and POPG are stationary at level [1(0)]. The stationarity at level and at 1st difference, suggest the presence of long-run relationship between the variables (Hjalmarsson & Osterholm, 2007). In order to ascertain this, Bound Testing Co-integrating Procedure was carried out.

Table 3: Analysis of Bound Testing Cointegration Procedure for variable in the Model

Test Statistics	**Values**	**K**
F-Statistics	4.236195	7
Critical value bounds	1(0) bound (3.251)	1(1) bound (4.124)

Significance (5%)	√

Source: Author's computation using EView.

The analysis of the cointegration test reveals a value of 4.236195 within a critical bound that ranged from 3.251 to 4.124. This establishes a long-run relationship between per capita income fiscal policy (income and expenditure) of government. It suggests that standard of living (as proxies by per capita income) and government fiscal policy are not far apart and are attracted to long term equilibrium. However, the results of the Modified Least Square prediction (table 4) indicate that standard of living would experience negative growth in the absence of government income and expenditure directed at enhancing per capita income of the citizens. The negative value of the coefficient of the intercept (β_0 = -18124.99) confirmed this. Since the negative values of the coefficient is not statistically significant (Standard error = 189699.9, p-value = 0.9247), there is no sufficient information to reject the null hypothesis of this study. Result of the regression analysis is summarized in table 4

Table 4: Fully Modified Least Square prediction of Impact of some variables of Fiscal Policy on Standard of Living

Dependent Variable: PCI

Method: Fully Modified Least Squares (FMOLS)

Date: 08/21/18 Time: 16:43

Sample (adjusted): 1982 2013

Included observations: 32 after adjustments

Cointegrating equation deterministics: C @TREND

Long-run covariance estimate (Bartlett kernel, Newey-West fixed bandwidth =4.0000

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CPI	-85.08881	102.6892	-0.828605	0.4158
EDL	21.03876	232.9630	0.090309	0.9288
GCF	-4.71E-09	2.79E-09	-1.685317	0.1054
GDP_^B	6.165302	1.320403	4.669256	0.0001
LABF	10680.81	2422.439	4.409116	0.0002
POPG	-32945.58	67050.25	-0.491357	0.6278
TOT	4.54E-09	1.48E-09	3.074592	0.0054
C	-18124.99	189699.9	-0.095546	0.9247
@TREND	-13336.00	2320.329	-5.747462	0.0000

R-squared	0.974269	Mean dependent var	223106.6
Adjusted R-squared	0.965318	S.D. dependent var	61239.99
S.E. of regression	11404.71	Sum squared resid	2.99E+09
Long-run variance	79672549		

Source: Author's computation using EView

As shown in table 4, only 32 of the 36 observations were used in the regression, the remaining 4 were removed due to negative values. The statistical significance of the regression is evaluated at $p<.05$. The R^2 of 0.974269 suggests a good fit as it indicates that about 97.43% of the variances in per capita income (proxy for standard of living) are explained by the independent variables in the model. Generally, the result estimations suggest that the gross domestic product (GDP) had a significantly positive impact on per capita income. This is indicated by the standard error (1.3204) as well as the p-value (0.0001) associated with the t-statistics (4.6691) of the coefficient of GDP (6.1653). Similarly, the standard error (2422.44) and p-value (0.0002) of the t-statistics of the coefficient of Labour Force (Proxy for Employment) suggest that increasing employment had positively and significantly impacted on standard of living. The result also revealed that Terms of trade during the period under review exerted favourable impact on standard of living. This is shown in the standard error (3.0746) as well as the p-value (0.0054) of the t-statistics (3.0746) associated with the coefficient of 4.54E-09.

However, government expenditures on human capital development and knowledge, which is the key areas emphasized by the New Growth Theory (NGTs), did not exert significant impact on standard of living during the period under review. This is observed specifically on expenditure on education (EDL) and Cross Capital Formation (GCF) as indicated in the estimation of the coefficients (ps = 0.9288 and 0.1054, respectively). Additional the Consumer Price Index (CPI) with a p-value of 0.4158 was statistically insignificant for the model. The Gross Capital Formation (GCF) and Population Growth (POPG) were not only insignificant, but also exerted negative effect on per capita income (the proxy of standing of living), thus suggesting that a unit increase in these variables decreases standard of living of the people. The negative sign of the coefficient associated with trend (-13336.00) is a measure of the speed of adjustment of the variables to long-run equilibrium for any disturbance in the short run equilibrium. It suggests that if fiscal policy is favourably channeled to enhance human capital and knowledge development, it has the potential of exerting positive impact on the standard of living of the citizens. The equation of the regression slope provides a summary of the effect: PCI = – 18124.9947 - 85.08881CPI + 21.0388EDL – 4.7076GCF + 6.1653GDP + 10680.8144LABF - 32945.5789POPG + 4.5408TOT - 13336.0034@TREND.

Summary and Recommendation

The paper had hypothesized that standard of living in Nigeria was not significantly impacted by government fiscal policy adopted between 1980 and 2016. Following the data analysis, the finding was mixed. For instance, increase in GDP, expenses that increase job creation/employment (labour force) and term of trade, exerted positive significant impact on standard of living. This finding suggests that capital accumulation (increase in national wealth) had significant and positive effect on the standard of living of Nigerians. However, consumer's price index CPI), expenses on education (EDL), gross capital formation (GCF), and population growth (POPG) had no

significant impact. Here lies the problem of channeling the huge capital accumulation to human capital investment, which is made endogenous through substantial investment in knowledge as evidence in research and development. Empirical evidences in other studies have shown that increase in crude oil prices (the economy main stay of Nigeria) contribute to increase in the GDP (Ubesie, 2016). Crude oil exports remain the major revenue earner and to a large extent influence the TOT. Since increase in crude oil export results in increase in income, it suggests a positive impact on economic growth; and this may have positive influence on per capita income (proxy for standard of living). But this may last for only a short period, since the prices of crude fluctuate based on supply and demand detect of the oil market. In this context the economy fortune of the country also fluctuates from time to time. In the analysis of Shatakshee, Anna, Wendy and Ulcka (2006), as an economy grows certain incomes remain unchanged (a case of a mono-economy like Nigeria) or change over longer periods of time; and some social classes may reap all the benefits from the growth/changes in income while others remain predominantly unaffected (Dawson & Tiffin, 1998). Given such condition government must take deliberate decision to make sure that the benefits from growth/change is equally distributed by investing in human capital that generate increasing returns and ensure economic growth.

The failure of Nigeria's fiscal policies to channel investment to human capital and knowledge is seen today in high unemployment rate, poverty, and poor quality of living. In the argument of Barro (1991, p.421), economic growth is not a natural phenomenon. It is "influenced by market forces, incentives and consequently by policy variables". As our regression analysis (table 4) suggests, investment in human capital and knowledge creation (EDL) as well as infrastructural development (GCF) was not significant enough to impact on standard of living. The consumer price index (a proxy of inflation rate) suggests that whatever positive impact the GDP exerted on per capita income was wipe away in the short run. Even when the population growth rate become a serious factor that undermine better standard of living, investment in human capital that would enhance the emergence of a qualitative population in the long run, and hence an enhanced standard of living (Schultz, 1997) was not favourably targeted by the fiscal policy.

Recommendations

i). Government should design fiscal policy that would place emphasis on investment in knowledge and human capital with time line on target achievement.
ii). Based on recommendation one above, government may wish to invest more on education and in so doing encourage research on technological development.
iii). Investment in human capital is likely to generate spill-overs in knowledge that may use other channels than academic research institutes and scientific publications. Given this development, government may wish to invest in information and communication technology (ICT) and other sector of the internet to ensure transfer and the dissemination of technological competence.
iv). A policy that target food production and industrialization will promote TOT and curb the incessant rise in consumer price index, and hence inflation.

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Appendix

Federal Government Income and Expenditure Variables with Per Capita Income (1980 – 2016)

Year	CPI	POPG	LABF	GCF	TECH	PCI	EDL	TOT
1980	9.972261990	2.85750229379562	27.552721024		1		108.497159	6.29271E+11
1981	20.812822910	2.71506341629255	28.687494278	8.66E+12	2	240915.3904	120.1480083	-8026888803
1982	7.697747247	2.60267579330492	28.924072266	6.3E+12	3	234301.4423	133.752142	-3.23737E+11
1983	23.212331550	2.53541177606772	28.104373932	4.17E+12	4	217820.6334	138.2157078	-1.05652E+11
1984	17.820533290	2.52928716273128	27.027818680	2.37E+12	5	206863.7762	140.631773	-25380052277
1985	7.435344828	2.56273208154271	27.206838608	2.58E+12	6	216770.7276	135.5681667	-2.00979E+12
1986	5.717151454	2.60320259262434	27.342655182	2.6E+12	7	188247.9323	120.6703396	-2.40369E+12
1987	11.290322580	2.62563875001607	28.052858353	1.68E+12	8	160042.4242	116.8992481	-2.63344E+12
1988	54.511224780	2.63093067527225	29.171718597	1.44E+12	9	178326.0298	112.556633	-2.33382E+12

1989	50.466688120	2.61241488994348	29.891416550	1.95E+12	10	173958.6607	107.246891	-2.42863E+12
1990	7.364400306	2.57903723361845	30.672021866	2.74E+12	11	190287.0328	111.1542683	-2.36255E+12
1991	13.006973100	2.54561098157603	31.463233948	2.72E+12	12	184465.9442	110.073184	-1.67518E+12
1992	44.588842720	2.52124155228140	32.267814636	2.65E+12	13	178434.445	114.2426591	-2.30742E+12
1993	57.165252830	2.50297104637536	33.141902924	3.07E+12	14	170755.0023	118.2944	-3.03817E+12
1994	57.031708910	2.49299563935160	33.825634003	2.74E+12	15	173077.2758	118.1121613	-2.66428E+12
1995	72.835502300	2.48943469406083	34.541519165	2.02E+12	16	175055.3715	113.7959167	-1.6605E+12
1996	29.268292680	2.48836524238200	35.525676727	2.38E+12	17	180746.0397	103.175135	-2.96704E+12
1997	8.529874214	2.48818296470291	36.635292053	2.59E+12	18	181907.7859	108.4855259	-4.1982E+12
1998	9.996378124	2.49072441544799	37.934040070	2.46E+12	19	180245.576	105.8303305	-3.03709E+12
1999	6.618373395	2.49581303399580	39.517257690	2.39E+12	20	182096.4218	117.597578	-1.49911E+12
2000	6.933292156	2.50339743975096	39.341995239	2.8E+12	21	166991.3258	123.2308025	-1.14503E+12
2001	18.873646210	2.51121437075988	39.509899139	2.18E+12	22	179741.7221	123.3429871	-1.27817E+12
2002	12.876579200	2.52110640165057	40.486232758	2.63E+12	23	180240.8866	127.5523472	-1.67902E+12
2003	14.031783610	2.53684000164677	40.595008850	3.94E+12	24	191417.6285	127.7258005	-1.71368E+12
2004	14.998033820	2.55923925783274	43.454460144	3E+12	25	251177.82	135.6086311	-7.86547E+11
2005	17.863493370	2.58522180612352	44.641273499	2.68E+12	26	250024.2243	136.2583313	-3.08538E+12
2006	8.239526517	2.61039107606180	46.063014984	4.28E+12	27	288204.6026	136.5015526	-7.505E+11
2007	5.382223652	2.63165399188610	47.595428467	6.06E+12	28	286932.1923	125.1206169	-9.87571E+11
2008	11.577983520	2.64896708696089	49.047088623	6.02E+12	29	296388.8194	119.4694672	-6.40995E+11
2009	11.537672750	2.66122133492306	50.383079529	8.1E+12	30	304998.9323	124.5611649	0
2010	13.720201840	2.66874685716410	51.818099976	9.59E+12	31	331296.2461	129.2721214	-4.65364E+12
2011	10.840792590	2.67475496243975	52.239562988	8.83E+12	32	338673.9174	136.1577339	-2.50402E+12
2012	12.217007180	2.67765922167605	53.728210449	9.13E+12	33	345205.4136	139.1984749	-4.00631E+12
2013	8.475827285	2.67291860643002	55.251155853	9.84E+12	34	354713.7942	150.2451782	-6.00138E+12
2014	8.057382626	2.65955070115917	56.821067810	1.11E+13	35	373447.2722		-1.12476E+13
2015	9.017683791	2.64035713540557		1.09E+13	36	376642.2137		-1.4638E+13
2016	15.696854470	2.61903352559025		1.04E+13	37	362909.8952		

Sources: CBN Statistical Bulletin and NBS Reports of several years