Post 2014 Pension Reform Act and Nigeria Economic Growth

Uwakwe Kalu Ikwor¹, Louis Chinedu Nkwagu²

¹Office of the Zonal Manager, South East, FCMB Pensions Limited is a member of FCMB Group PLC,
²E-mail: kaluikwor@fcmbpensions.com

Abstract

This study examined the post 2014 Pension Reform Act on Nigeria economic growth. The study specifically sought to ascertain the effects of post 2014: Retirement Savings Account (RSA) portfolio performance; Closed Pension Fund Administrators (CPFA) portfolio performance; and contributory pension scheme (CPS) portfolio performance on Nigeria economic growth. The study is hinged on the deferred wage theory and endogenous growth theory. The study adopted ex-post facto research design. Secondary data was quarterly sourced from National Pension Commission for a period of 2011 to 2019. The Ordinary Least Squares was employed in estimating the hypotheses as stated in the study’s model specification. The findings show that retirement savings account portfolio performance; closed pension fund administrators portfolio performance; and contributory pension scheme portfolio performance have positive and significant effect on Nigeria economic growth. This implies that the Nigeria pension industry is contributing significantly to Nigeria economic growth. The study recommended amongst others that policy makers, especially, the pension regulators such as PenCom, etc. should make concerted efforts at expanding and regulating the investment outlets for Pension Fund Custodians in the country.

Key words

Post 2014, Pension Reform, Nigeria Economic Growth

1. Introduction

Economic security which comprises basic social security and work related security have been of paramount concern to employees over centuries. All ages throughout human history have faced the uncertainties brought by unemployment, illness, disability, death and/or old age (Kaufmann et al., 2002). These inevitable facets of life are seen to be threats to economic security of citizenry all over the world. Maintenance of economic security was an individual responsibility in earlier times, until humans evolved into states and having the administrative machinery available for high-level political decision makers of a society to exercise sovereign political power (Kaufmann et al., 2002). Pension scheme is one of the economic security measures put together in other to safeguard the future and also plan for the aged. Pension is generally conceived as the sum of money paid regularly by employers to former employees who have retired from their service usually as a result of attaining a fixed age limit in service or due to other reasons like sickness, widowhood or sudden disability (Nyong & Duze, 2011).

It is a practice globally, even in the most advanced economies of the world, like the United State of America (USA), United Kingdom (UK), and France that issues relating to pension administration and treatment of the aged and the infirmed pose very deep and disturbing problems (Ahmad & Oyediran, 2013).
Workers generally in the public or private sectors are expected to live comfortable life devoid of any form of dependency after their successful retirement from active service. According to Sule and Ezegwu (2009) the working lives of employees transcend from active employment to retirement. Ideally, it is expected that governments and other employers of labour identify ways of accommodating and adequately rewarding the past efforts of these employees through pension plans.

In the Nigeria public sector, pension funds prior to this period were always subjected to budgetary allocations, non-contributory and not fully funded. This has created bottlenecks and deficits with an estimated ₦2.3 trillion pension liabilities to public servants in Nigeria owed by the Federal Government. There was also the issue of diversion of allocated funds and presence of ineligible pensioners on the payroll (Odia & Okoye, 2012; Nyong & Duze, 2011; Sule & Ezegwu 2009). These contending issues paved way for the then ‘2004 Pension Reform Act’, which gave rise to the Contributory Pension Scheme (CPS). However, the Pension Reform Act 2004 only covered employees of the Federal, Staff of the Federal Capital Territory as well as private sector employees (S.1(2) of PRA: 2004) and excluded employees of States and Local Governments. To this end, the Act granted States and Local governments the autonomy to evolve independent schemes that were in tune with their norms and specifics.

Pension schemes are designed to provide employees with security by currently building on rights that will give a guaranteed income to the employees or his dependents on retirement or death (Ngu, 2014). As such the central goal of pension scheme is to ensure lives of retirees’ after service are not jeopardized due to financial constraints (Yusuf, 2014). However, due to the limitations and failure of the 2004 Pension Reforms, it became imperative for the government to embark on a new set of reforms which gave rise to the 2014 Pension Reforms. It is in the light of these perceived limitations and failures of 2004 Pension Reforms and the enactment of the 2014 Pension Reforms that necessitated the examination of pre and post 2014 pension reform act on the economic growth of Nigeria.

1.1. Statement of the Problem

It is no longer debatable that pension is one of the economic securities for the aged and infirm yet, the administration of pension scheme has been confronted by multiple and diverse problems such as inadequate funding, poor documentation, inadequate subventions and grants, poor filing in pension office, lack of accountability, corruption and embezzlement of funds in Nigeria. This arguably has led to avoidable poor standard of living to retirees and infirm within the period of inactive service (Omah et al., 2013).

These observed limitations have led to reservations and agitations that gave rise to the enactment of 2014 pension reform Act. Unfortunately, the introduction of the pension reform Act 2014 has not only aroused expectations from stakeholders and members of the public but also created a new horizon of debate on its contributions to Nigeria economic growth. For instance, the rebasing of Nigeria economy in 2014 evidenced that Nigeria pension industry contributes insignificantly to economic growth of the country yet, the post 2014 pension reform Act is not without some reservations. Ahmed et al. (2016) however, contend that 2014 pension reform Act blocked all the identified loopholes inherent in the 2004 pension Act. Unfortunately, the sectoral GDP contribution from pension industry between 2015 and 2018 has not appeared quite impressive to suggest that 2014 pension reform Act is having an edge over 2004 and the rest of pension reform Acts.

Notwithstanding the modifications made on the minimum rate of pension contribution from 15 to 18 percent of monthly emolument by 2014 Act which allow the contributions of 8% and 10% by the employee and the employer respectively, the post 2014 pension Act rate of contributory pension scheme portfolio performance to economic growth in Nigeria has not appeared to be quite improved when compared with 2004 pension Act. Besides, upon death of an active contributor, the 2014 pension reform Act reduced the temporary access/benefit from 6 to 4 months on the contributor’s retirement savings accounts but the effect of the reduction on the retirement savings account portfolio performance and extension on economic growth in Nigeria is still a mirage. Just as arguments and debate still trail the possible improvement brought about by the 2014 pension reform Acts to the closed pension fund administrator’s portfolio performance and by extension on economic growth in Nigeria. The above contentions no doubt, suggest that a lot remained more unclear than unveiled about improvement brought about by 2014 Act on economic growth in Nigeria.

Meanwhile, to unravel the grey areas and unveil the contributions of 2014 compared with 2004 pension Acts, many authors have conducted studies in this area but these studies had concentrated more on evidence related to the ‘2004 Pension Reforms Act. Even the very few studies that have examined the pre and post 2014 Pension Reform Act was not in line with the objectives of this study. To this end, there is no existing empirical
evidence on the post 2014 pension reform Act in Nigeria. It is against the above background that this study, post 2014 pension reform Act on Nigeria economic growth becomes imperative considering the huge investments in the industry.

1.2. Objective of the Study
The broad objective of the study is to evaluate the post 2014 Pension Reform Act on Nigeria economic growth. Specifically, this study sought:
1. To ascertain the effect of retirement savings account portfolio performance on Nigeria economic growth.
2. To investigate the effect of closed pension fund administrators portfolio performance on Nigeria economic growth.
3. To evaluate the effect of contributory pension scheme retiree fund account portfolio performance on Nigeria economic growth.

1.3. Statement of Hypotheses
The following hypotheses were formulated in null and tested:
1. There is no significant effect of retirement savings account portfolio performance on Nigeria economic growth.
2. There is no significant effect of closed pension fund administrators’ portfolio performance on Nigeria economic growth.
3. There is no significant effect of contributory pension scheme retiree fund account on Nigeria economic growth.

1.4. Significance of the Study
The findings of the study are expected to be of immense benefit to the Pension Administrators, Pension Regulators, Pensionable workers, and Policy makers. The outcome would enable them evaluate the effect of post 2014 Pension Reform Act on Nigeria economic growth. It would enable business regulators in formulating policies and guidelines that could mitigate the effect of 2014 pension reform Act on Nigeria economic growth. The outcome no doubt is hoped to provide relevant literature on post 2014 Pension Reform Act on Nigeria economic growth.

2. Literature review
2.1. Overview of Pension in Nigeria
Pension is the amount paid by government or company to an employee after working for some specific period of time, considered too old or ill to work or have reached the statutory age of retirement (Adams, 2005). In this direction, it is safe to refer it as the monthly sum paid to a retired officer until death because the officer has worked with the organization paying the sum. It was in this perception that Robelo (2002) asserts that pension is the method whereby a person pays into pension scheme a proportion of his/her earnings during his working life.

A greater importance has been given to pension and gratuity by employers because of the belief that if employees' future needs are guaranteed, their fears ameliorated and properly taken care of, they will be more motivated to contribute positively to organization’s output. According to Ozor (2006), pension consists of lump sum payment paid to an employee upon his disengagement from active service. That study maintains that pension plans may be contributory or non-contributory; fixed or variable benefits; group or individual; insured or trustee; private or public, and single or multi-employer. Adebayo (2006) and Ugwu (2006) stated that there are four main classifications of pensions in Nigeria. This suggests that there are Retiring Pension which is usually granted to a worker who retire after completing a fixed period of quality service; compensatory pension which is granted to a worker whose permanent post is abolished and government or the organisation is unable to
provide him with suitable alternative employment; Superannuating Pension that is given to a worker who retires at the prescribed age limit as stated in the condition of service; and Compassionate Allowance which happens when a pension scheme is not admissible or allowed on account of a public servants’ removal from service for misconduct, insolvency or incompetence or inefficiency (Amujiri, 2009). Consequently, pension can be defined as a fixed regular sum paid to a person, following retirement on having attained the retirement age or decided to disengage from service before his/her retirement date or health grounds (Sule and Ezugwu, 2009). Therefore, this goes to suggest that pension creates an impression in retirees that there is life after retirement.

2.2. Concept of Retirement Savings Account (RSA)

From figure 1 below and as it is specified under section 11 of Pension Reform Act (PRA) 2014, a retirement savings account (RSA) is a deliberate account mandated by law to be opened with a PFA by an employer with more than 5 employees. Under the new Act the employer and employee contributed into the RSA of the employee. An employer may however elect to contribute the entire 18% on behalf of its employees. Prior to the recent announcement, for an employee to gain access to RSA, must be above 50 years of age. With the announcement, holders can negotiate the mode of withdrawals or annuity. There is also provision for initial lump sum withdrawal. An RSA holder can gain temporary access to the account before retirement only when out of job for six months but the RSA balance would be withdrawn before the age of 50 years. An employee may also choose to retire before 50 years on medical grounds in line with the terms and conditions of employment. In Nigeria, the RSA is currently N4.4 trillion.

Schematic representation of conceptual framework of the study

Source: Authors Conceptualization (2019)

Figure 1. Conceptual framework of the study

2.3. Closed Pension Administrators Fund (CPAF)

Currently, there are 22 Pension Fund Administrators, 7 Closed Pension Fund Administrators (CPFA) and 4 Pension Fund Custodian, and they are expected to capture a potential 50 million contributors PENCOM (2010). PENCOM (2010) reports indicates that pension fund assets have grown from N47 billion in 2004 to N2, 029.77 billion in 2010 while Pension savings contribution from the public and private sectors has grown from N15.6 billion in 2004 to N289.9 in 2010. These pension funds are expected to be invested in 11 specified asset classes which include: Local Ordinary Shares, Federal Government of Nigeria, State Government Securities, Corporate Bonds, Financial Institution Deposits, Open and Closed-End Funds, Foreign Money Market Securities, Real Estate Properties, Unquoted Securities and Cash/Other Assets. This study seeks to determine the impact of contributory pension scheme on economic growth in Nigeria.

Pension funds add value to world economies through direct contribution to the GDP, accumulation of savings, financial market development, reducing old age poverty and acting as consumers of financial services (Njugana, 2010).
2.4. Contributory Pension Scheme in Nigeria

The contributory pension scheme tends to address the huge unsustainable pension deficit estimated at about two trillion naira which characterized the former Pay-As-You-Go (PAYG) Pension Scheme. The contributory pension scheme would address the pension deficit of the past in Nigeria; that the scheme as of July, 2010, has an asset of 1.7 trillion naira (11.3 billion dollars) across the country. The contributory pension scheme is expected to have multiplier effect on workers’ commitment and attitudes towards retirement in the Nigeria Public Service, as well as attitude towards corruption especially in the civil or public service. This is because the uncertainty of receiving pension and gratuity after retirement was largely responsible for high labour turnover in the public service. There are certain features and safeguards that position the scheme with success chances. Such features include the introduction of Bio-Data and Biometric Recapture Exercise aimed at obtaining complete and accurate data of all RSA holders (both active and retired clients in both public and private sectors); enabling the PFAs to capture the 10 fingerprints of their RSA holders and their National Identity Number (NIN) to ensure compliance with NIMC’s minimum bio-data and biometric requirements and the use of NIN as a unique identifier for all Nigerians; providing a platform for the collation of relevant information on employees of Federal and State Government Treasury Funded MDAs who transited from the erstwhile Defined Benefit Scheme to the Contributory Pension Scheme; identification and elimination of multiple registrations from the RSA Registration Database; and ensuring that all PFAs implement the minimum standards and requirements set by the Commission for the registration of contributors in the Pension Industry.

2.5. Concept of Economic Growth

Economic growth is related to quantitative sustained increase in a country’s’ per capital output or income accompanied by expansion in its labour force, consumption, capital and volume of trade (Jhingan, 2006). In the context of this work therefore, economic growth refers to increase in the value of GDP or increase in the GDP growth rate. There is certain fundamental index for measuring economic growth and that is Gross Domestic Product (GDP). When the per capita income of an economy increases over a long period, it is recognized as economic growth. The salient issues became the crux of the 2004 Pension Reform Act, on whether the pension reform has integrated adequate safety nets against the observed deficiencies of previous pension schemes. A report from National Bureau of Statistics (NBC) unveils that the value of GDP over the years has been fluctuating and in some years, downwards especially, between 2016 and 2017.

2.6. 2004 Pension Reform Act

Earlier pension Acts were phased out to usher in 2004 pension reform Act with a view to ameliorate the shortcomings of the former. The major innovation in the 2004 pension is that it is contributory, fully funded, managed by third parties with some kind of control and checks and balances (Urhoghide & Ogiedu, 2008). The scheme covers employees of the federal government, Federal Capital Territory and private sector organizations with at least five persons in its employ. The state and local governments were expected to come up with their own legislations in relation to the contributory scheme. Thus, the 2004 reform involved complete shift in the pension systems from the defined benefit system to the defined contributory system (Dorstal, 2010).

The 2004 reform Act was quite remarkable as it paves way for establishment of an Apex regulatory body, the National Pension Commission that formulate, direct and oversee the overall policy on pension matters in Nigeria; maintain national data bank on pension matters, receive and investigate complaints against Pension Assets Custodians (PAC), employers or Pension Fund Administrators (PFA) (Sule & Ezugwu, 2009). The Act also provided for contributory pension scheme such that the employer and employee shall contribute at least 7.5% each of the monthly salary of the employee to the scheme. In the military service, the employee contributes a minimum of 2.5% while the employer (federal government) 12.5%. However, section 9 (1) of the Act, the contributions (7.5% and 7.5% or 12.5% and 2.5% that gave rise to 15%) may be borne solely by the employer. The Act provided that the employer shall deduct and remit same to the PAC within seven days of pay day and the PAC in turn to notify the PFA where the employee Retirement Savings Account is domiciled within 24 hours. It also provided that the employer is also expected to maintain life insurance policy in favour of the employee for a minimum of three times the annual emolument of the employee in line with section 9 (3).

The Act further provides that: a. individuals not covered under the scheme as stipulated in section 1 of the Act are free to make voluntary contribution under the scheme; b. individuals covered by the scheme can in addition to the minimum specified contribution, make additional contributions to their Retirement Savings Account; c. each employee is required by the Act to open a Retirement Savings Account in his/her own name
with a licensed Pension Fund Administrator (PFA) of his/her choice; and the Act acknowledges 50 years as the new age for retirement from which the contributor can be allowed to make withdrawal from his Pension account. Withdrawals from the account can be: A programmed periodic withdrawal (monthly or quarterly) calculated on the basis of an expected life span; a lump sum withdrawal which must not exceed a remaining balance that will be sufficient to procure an annuity or fund programmed withdrawals that will produce an amount not less than 50 % of his monthly remuneration as at the date of his/her retirement; a lump withdrawal for the purchase of annuity for life through a licensed insurance company with monthly or quarterly payments (PRA, 2004, Section 4(1) a-c).

In a bid to ensure effective, the 2004 Act provided three institutions; the National Pensions Commission (PenCom), the Pension Fund Custodian (PFC) and the Pension Fund Administrator (PFA). The provision of these three institutions and their respective functions, and, the overriding contributory nature of the new scheme were the basis of the great promises hoped for the scheme. There are expectations that the scheme would surmount major problems of the old schemes. Nigerian policy makers and those who were in support of the model (Demaki & Dedekuma, 2006) have tended to justify it based on the fact that some of the problems that contributed to ineffectiveness of previous schemes have been addressed by the new scheme and on the relative success which the new scheme has had in Chile from where it was adapted from. The issue of regulation and supervision has indeed given some credibility to the scheme since inception. The National Pension Commission has been fully committed in its regulatory and supervisory roles. In 2009, the service charges of pension fund operators were reduced from 3 to 2.25 per cent to ensure that operating cost do not swallow up gains of savings and investment of participants. It has also engaged in consistent surveillance of licensed operators and supervision of investment of pension assets in accordance with issued guidelines (National Pension Commission, 2008).

The Nigerian 2004 pension reform was inspired by the Chilean model and Nigerian policymakers have continued to refer to Chile’s experience with funded pensions as one of the grounds to justify its promises. Describing the Chilean model, Akintola-Bello (2005) writes that Chile replaced the public defined benefit model (DB) which had existed for over 50 years with a fully-funded privately managed defined contribution (DC) model to ensure that workers accumulated pension wealth was fully funded. It also guaranteed a minimum pension for those that had contributed for at least 20 years. The presumed success of the Chilean model seems to derive from the rate at which it was copied and replicated under the influence of the International Financial Institutions like World Bank that have punished neoliberal reforms since the late 1970s. The privatization promoted by the World Bank favours defined contribution schemes and individual accounts (Willmore, 2000). Conversely, the 2004 Act was not without limitations and as such, the limitations include poor funding, regulation, lack of comprehensive regulatory framework for the pension industry, poor administrative structures for pension schemes, weak and inefficient pension administration; and corrupt practices in the system (Urhoghide & Ogiedu, 2008; Demaki & Dedekuma, 2006). A mandatory contributory pension scheme should not be distorted by combining it with a universal social security programme since the contributions as in the case of the Nigerian model is a deferred individual savings except where contributions are flat. The view of scholars like Akintola-Bello (2005) that the objective of an efficient pension scheme must include guaranteeing the entire population a secure income during old age, long term illness and disability therefore is distortive of the particular merits of the scheme to those for whom it is directed. It cannot be evaluated as a basic safety net that is inclusive of every old person including those that have not been fortunate to be employed or work sufficiently to be guaranteed a minimum pension. Corruption and sharp practices also constitute a big challenge to the success of the pension administration in Nigeria. In recent years, huge losses through corrupt practices have been revealed in the pension sector. As contained in the 2009 Annual Report of the National Pension Commission, private sector employees that have opened Retired Savings Accounts (RSA) were 1,649.045 (41.1 per cent). The inclusion of private sector organizations with small number of workers (the scheme requires the participation of firms that have at least five employees) remains one of the most difficult aspect of the new scheme. There is currently little or no documentation of these establishments most of which operate in the informal sector. Most employers with five employees do not have a registered or incorporated business.

Yet, it is the private sector that holds key to the level of coverage that the scheme can reach. While civil servant population is about 260,000 and military and paramilitary about 200,000, membership from formal and informal sector is not expected to be less than 25 million (Tongola, 2014). It observes that the Commission as it were does not have the capacity to gather and manage the required data in this regard. The Pension Commission adopted some mobilization strategies that include on-site inspection of employers, collaboration with other regulatory and professional bodies, dispatching compliance letters to non-compliant organizations.
and engaging in public enlightenment and application of regimes of sanctions (NPC, 2009); these efforts however made small improvements in capturing the informal sector. As at 2009 the Commission reported that compliance-demand letters sent out to 5,088 private sector organizations, of these 2,910 organizations complied within the stipulated deadline; while the remaining 2,178 were sanctioned in accordance with the procedures laid down in the Regime of Sanctions (NPC, 2008). Thus, the issue of coverage especially for firms with lesser number of employees remains a daunting challenge to the reform.

2.7. Pension Reform Act 2014

The 2014 Pension Act expanded the coverage of the Defined Contributory Pension Scheme in private sector entities with three employees and above, in line with the drive towards increased informal sector participation. It also increased the minimum rate of pension contribution from 15 to 18 percent of monthly emolument, while 8 percent will be contributed by employees and 10 percent by the employers. This will provide additional benefits to workers’ retirement savings accounts and thereby enhance their monthly pension benefits and retirement. According to the new law, operators who mismanages pension fund will be liable on conviction to not less than 10 years’ imprisonment or fine of an amount equal to three times the amount so misappropriated or diverted or both imprisonment and fine. The Act will see stiffer penalties intended to serve as deterrent against mismanagement or diversion of pension funds’ assets under any guise. Under the new law, operators who mismanage pension funds will be liable, upon conviction; to not less than ten years’ imprisonment or five of an amount equal to three times the amount so misappropriated or diverted, or both imprisonment and fine. Ensuring greater protection of pension fund assets has been the core mandate for the National Pension Commission (PenCom) since its formation following the Pension Reform Act (PRA) 2004.PenCom is the body tasked with regulating, supervising and ensuring effective administration of pension matters in Nigeria. Prior to the enactment of the PRA 2004 and the subsequent formation of PenCom, pension schemes in the polity had been be devilled by problems and challenges of underfunding and vulnerable budgetary allocation. Prior to the new law, the commission reported that it had recovered a total of N13.33 billion from employers who defaulted in remitting pension deductions from their employees under the new Contributory Pension Scheme (CPS). The amount includes interests calculated along with the principal sum (Goodluck, 2014). The 2014 Pension Reform Act also accommodates employees of private firms in the Contributory Pension Scheme. The Act also makes it mandatory for a refund three times the amount embezzled by the thief. Operators who mismanage pension fund will be liable on conviction to not less than 10 years’ imprisonment or fine of an amount equal to three-times the amount so misappropriated or diverted or both imprisonment and fine (Tobiloba, 2014).

Consequently, the Pension Reform Act 2014 has created new offences and provided for stiffer penalties that will serve as deterrence against mismanagement or diversion of pension funds’ assets under any guise. It also empowers PenCom, subject to the fiat of the Attorney General of the Federation, to institute criminal proceedings against employers who persistently fail to deduct and/or remit pension contributions of their employees within the stipulated time. The Act further empowered PenCom to take proactive corrective measures on licensed operators whose actions or inactions jeopardize the safety of pension assets, which was the reverse with the 2004 Act. In 2018, PenCom report detailed that the Commission “received a total of 5,634 applications for issuance of pension clearance certificates. Out of these applications, certificates were issued to 5,427 organisations while applications from 207 organizations were turned down due to non-remittance of pension contributions for the appropriate period and/or non-provision of group life insurance policy for the employees” (Vanguard, 2018).

The Pension Reform Act 2014 consolidated earlier amendments to the 2004 Act, passed by the National Assembly. These include the Pension Reform (Amendment) Act 2011 which exempts the personnel of the Military and the Security Agencies(FGN,2011) from the CPS as well as the Universities (Miscellaneous) Provisions Act 2012, which reviewed the retirement age and benefits of University Professors. Furthermore, the 2014 Act has incorporated the Third Alteration Act, which amended the 1999 Constitution by vesting jurisdiction on pension matters in the National Industrial Court (FGN, 2014). It also makes provisions for the repositioning of the Pension Transition Arrangement Directorate (PTAD), to ensure greater efficiency and accountability in the administration of the Defined Benefits Scheme in the federal public service such that payment of pensions would be made directly into pensioners’ bank accounts in line with the current policy of the Federal Government. The Act also made provisions to enable the creation of additional permissible investment instruments to accommodate initiatives for national development, such as investment in the real sector, including infrastructure and real estate development. This is provided without compromising the paramount
principle of ensuring the safety of pension fund assets. In the event of loss of jobs, the new Act reduces the waiting period for accessing benefits from six months to four months. This is done in order to identify with the yearning of contributors and labour. The Pension Reform Act 2014 makes provision that would compel an employer to open a Temporary Retirement Savings Account, TRSA, on behalf of an employee that failed to open an RSA within three months of assumption of duty. This was not required under 2004 Act. The controversial clause of the post qualification years of experience of the director general of Pension Commission was lowered to 15 years from the previous 20 years’ experience.

2.8. Theoretical Framework

The study is anchored on the deferred wage theory and endogenous growth theory.

The Deferred Wage Theory was established by Malaski et al. (1981). The assumption of the theory hinges on the fact that deferral of wages often results in individual tax savings. The advantages to the employer of providing a pension plan are less obvious. Under the deferred wage theory, firms offer pension plans because of economies of scale in administrative, portfolio management and other costs. The employer receives cash flow benefits to the extent that the present value of deferred wages exceeds the required funding (especially as now required by ERISA). The endogenous growth theory was established by Folster and Henrekson (1997). The theory highlights the fact that if productivity is to increase, the labour force must continuously be provided with more resources hence considered fitting for this study. Resources in this case include physical capital (Technology). The assumption of this theory is that growth is driven by accumulation of the factors of production while accumulation in turn is the result of investment in the private sector. This implies that the only way a government can affect economic growth, at least in the long run, is via its impact on investment in capital, education and research and development. Reduction of growth in these models occurs when public expenditure deters investments by creating tax wedges beyond necessary to finance their investments or taking away the incentives to serves and accumulate capital Folster and Henrekson, (1997).

2.9. Empirical review

Eke et al. (2018) investigated the relationships between investment in housing infrastructure and safety-equity factor in Nigeria’s public pension funds management. The research adopted ex-post facto research design while secondary data drawn from legislative Acts/gazettes and national bureau of statistics was used. The outcomes of this study showed that public pension funds have strong relationships with safety of funds and equity returns factor, among other key elements necessary to grow and sustain public pension contract. Agbata et al. (2017) studied how the administration of the Pension Scheme could be perk up in Nigeria through effective management that would reduce fraudulent practices apparent in the scheme. The study adopted the survey design; a 5-point Likert Scale questionnaire was designed to adduce primary information about pension matters from a sample of 435 knowledgeable respondents. The collected data and hypotheses were tested based on Multiple Regression Analysis models. The findings show that despite the provisions of the Act (the Pension Reform Act - PRA), intents for committing Pension Fraud have not reduced to a significant extent. The study recommended among other things, amendment of Pension Reform Act to discourage acts of pension frauds by instituting severe punitive measures for culprits, and instill moral ethics among public servants in Nigeria.

Ameh et al. (2017) investigated the impact of contributory pension scheme on economic growth in Nigeria. Data for the study were sourced from various issues of PenCom Annual Reports and World Bank Development Indicators (database). The data were computed with the use of Statistical Package for Social Sciences (SPSS). It was found that pension fund assets and pension contribution/savings mobilized over the years have positive but insignificant impact on economic growth. The study recommended that there should be more emphasis on the management of pension assets in the capital market as well as government bond, real estate and investment trust to boost Gross Domestic Product (GDP) of the country (Nigeria). Christian & Wobiarainneri (2016) investigated the relationship between pension fund administration and infrastructure financing in Nigeria. The study answered four research questions and also tested four hypotheses. Correlation research design was used for the study. The population of the study consisted of all the licensed pension fund administrators in Nigeria. A simple random sampling was used to select 108 respondents for the study. Primary data and questionnaire was used to elicit information from the respondents after the reliability and validity test. The data collected was analysed using descriptive statistics while; the hypotheses were tested using Pearson
Products moment correlation at 95% level of confidence. Findings from the study show that there is a significant relationship between Retirement Pension Account and return on economic and social infrastructural financing.

Ahmed et al. (2016) examined some of the justification for the contributory pension scheme as part of its values and determined their implications for public servants’ productivity and pensioners’ welfare in Lagos State. The methodology employed in the study was carried out through primary source of information and personal interview. The primary source involved field survey that consists of administering questionnaire. The sample size is one hundred and twenty respondents (120). Simple random sampling method was used in administering the questionnaire. The result of the analyses reveals that there is significant relationship between adequate retirement package and employees’ productivity and that it has a positive impact on the organization efficiency. Both empirical study and oral interview conducted however, found that the contributory pension scheme (CPS) has positive potentials over the defined benefits pension scheme (DBPS). Okechukwu et al. (2016) examined the extent strategies adopted for pension management can enhance employees’ confidence in the scheme. The study adopted a survey design. The data were analysed using tables, frequencies, and mean. Z-test was used to test the hypotheses at 0.05 significance. It was revealed that to a very large extent strategies adopted for pension and retirement management can enhance employees’ confidence in the management of the schemes. The researchers recommended among others that an efficient structural framework should be put in place always to monitor the contribution and implementation of the Contributory Pension Scheme. Pension plays an increasingly important role in the economy of any country because the money earmarked for pension could be used for the establishment of small enterprises and infrastructural development.

Beredugo (2015) carried out a study on pension fund accounting and pensioners’ wellbeing together with their sustainability and life expectancy. The study was carried out on a sample of 400 pensioners drawn from Oyo, Rivers and Kano States; while, a judgmental sampling technique was used. The Ordinary Least Square (OLS) was however adopted for the hypotheses tests and it was discovered that pension fund accounting significant affect pensioners’ wellbeing and that pensioners’ sustainability is dependent on collective bargaining between the pensioners and their administrators. It was recommended that organizations should always recognize pension costs along with the plan’s assets and obligations in their financial statements; and organizations and/or governments should bear the contribution of low-income earners. Ikeanyihe & Osadebe (2014) did a review of the Promises and Challenges of the 2004 Pension Reform in Nigeria. They used a descriptive historical method to assess the 2004 pension reform in Nigeria. It examines the promises of the reform vis-à-vis the pre-reform crisis-ridden pension administration in both public and private sectors. The paper underscored some prospects of the new scheme which are mainly in the areas of regulation, third party administration by professional institutions and funding but identifies other challenges such as spread and coverage, slow pace of acceptance by lower tiers of government and corruption. The study found that most of the criticisms against the introduction of the scheme are based on economic projections which could be neither here nor there, and, which could be controlled by diversification in pension fund investments. It is underscored that a mandatory contributory pension scheme should be distinguished from poverty relief programme and universal social security benefits to avoid scheme overloading. Above all, there is need for enlightenment directed towards the employees understanding their rights and demanding it from the employers as concerning private sector coverage.

Nwagwu (2014) examined how the new Contributory Pension Scheme could be managed through transparency/accountability by employing a survey design. The study specifically sought to know whether transparency/accountability was maintained in managing the consolidated pension fund evident in the new CPS. A total of 478 questionnaires were administered in the South-Eastern part of the country to the employees and pensioners of Federal Universities, Pension Funds Custodians, Pension Funds Administrators, and the officials of the National Pension Commission (PENCOM), who had randomly been selected for the study. Based on their specific objectives, the hypotheses were formulated and tested using student T-test statistics. The findings indicated that until then, in managing pension funds, transparency/accountability had been maintained by the administrators and custodians of pension funds in Nigeria. Eme et al. (2014) did research on the popular police pension scam that was investigated by the Senate of the Federal Republic of Nigeria. The study specifically sought to detail the background information about the scam, the investigations and the findings. It discovered that debauched public officers massively laundered, embezzled, squandered and diverted public pension funds into accounts of private individuals and their associates without being indicted and/or halted. The researchers thus suggest a reversion to the earlier position of keeping the pension funds of MDAs with the CBN in order to minimize the recurrent abuse of such funds by pension officials through unauthorized lodgements with deposit money banks.
Aja (2014) studied an evaluation of the CPS administration in Nigeria, within a 10-year scope (2004-2013). The study used a sample of 381 participants. Data were analyzed using chi-square tool at 5% level of significance and 0.05 degree of freedom. SPSS was used to test the hypotheses. The result shows a high level of satisfaction with the time of pension payment, and the extent of pension coverage is still very low. This study evaluated the administration of CPS operating at the federal establishments neglecting the scheme operating at the states and local levels which form the basis for this study. Ahmad and Oyadiran (2013) examined the impact of the 2004 pension policy on the welfare of Nigerian civil servants. The main aim of the study is to examine the impact of the new pension policy and how it improves the living standard of the retired and serving civil servants in Nigeria in some selected federal ministries. Data for the research were collected through questionnaire using random sampling technique on 1500 respondents from the five ministries in Abuja. The analysis was carried out using simple percentage. The findings indicate that, the implementation of the new pension scheme significantly improves the welfare of the civil servants, but does not address the problem of corruption and inadequate budgetary allocation and therefore, the scheme is not effective in overcoming the problems of retirees in Nigeria.

Iyortsuun & Akpusugh (2013) explored how the lifestyle of employees could effectively be managed after retirement. The data obtained from secondary and primary sources were sought. Through the survey design, the disproportional stratified method of sampling was employed to select the required sample of the study. The descriptive and inferential statistics were based on the results of the computed simple percentages and the chi-square (X2) statistical test for the hypothesis. The findings led to the conclusion that a myriad of challenges like fraud, corruption, inefficiency, governance, regulatory challenges, etc. had scuttled the success of the country’s ongoing pension reform. Fapohunda (2013) conducted a study of the management of the pension systems in Nigeria by examining the attendant features and prospects vis-à-vis the challenges of the existing schemes since they form the important aspects of retirement planning. The study relied on the data obtained from secondary sources (official publications, paper clippings and the documentations of the relevant agencies and authorities). The findings indicate that sharp practices like fraud had impinged the success of pension management and administration in the country. It recommended that for reforms in pension to be successful, stakeholders would need to be sincere and committed to the objectives of the reform agenda of pension schemes.

Faruk (2012) conducted a study on the effects of the CPS on welfare of retirees from selected federal establishments in Nigeria. He collected data through questionnaire, interview and non-participant observation. The data collected for the study were analysed using chi-square alongside tables and percentages. The study found that CPS have partially addressed timely payment of benefits, it has also instilled some discipline in the savings habit of the federal public service. The study also found that, there is no complete adherence to rules by PFAs and finally, fluctuations in the stock markets exacerbates the pensioners fear about the scheme. Sanni (2012) examined how to develop effective strategy for pension administration in the Nigerian public sector, a study of Pension Commission Rivers State using a Questionnaire on a sample of 370 respondents. Two hypotheses were tested using simple percentage and chi-square tools. The findings revealed that a non-effective and efficient strategy of pension administration can be likened to poor pension administration and that budgeted income to pensioners is not implemented as at when due. This study is also limited in the sense that, the findings of the study that, non-effective and efficient strategy of pension administration can be likened to poor pension administration is a mere pedestrian finding which below empirical findings. Oladipo & Fashagba (2012) conducted a study on the evaluation of compliance with the stipulations of the contributory pension scheme of Quasi-government institutions in Nigeria. Interview method was used to obtain data from eleven universities stratified into private, state and federal owned universities. The analysis employed t-test and ANOVA and it was found out that, employers are operating within the stipulated 7.5% Pension contribution.

Chizueze et al. (2011) conducted a study titled, contributory pension scheme, workers commitment, retention and attitude towards retirement in the Nigerian civil service. The study drew respondents from the federal and state civil services in Calabar metropolis. Five hundred and forty-eight (548) participants were sampled and questionnaire was used to elucidate data from the respondents. Data obtained were analyzed using Pearson Product Moment Correlation (r). Findings revealed that, contributory pension scheme significantly affects workers’ commitment to work, retention and attitude towards retirement. Yon & Duze (2011) carried out a study on the Pension Reform Act 2004 and retirement planning in Nigeria. A descriptive survey research design was adapted using questionnaire instrument, using a sample of 3000 serving teachers and teacher-pensioners. The result revealed that the objectives of PRA 2004 were yet to be achieved since retired persons still suffered trauma, pains and even death before they receive their pension packages in Nigeria in which the sustenance of the scheme was questioned. Olarenwaju (2011) examined the pension act of 2004 and the well-
being of retirees in Nigeria using descriptive statistics. The study relied on the Marxian theory to analyse the
descriptive data that was collected through structured questionnaires administered to retirees in Nigeria. It was
gathered that while operators in the private sectors have started benefitting from the scheme, the public
operators are yet to benefit as bureaucracy in government especially the delay in releasing counterpart funding
from government has deprived many retirees from assessing their benefit after retirement.

Maiturare (2010) conducted a study on retirement benefit under the new pension scheme and the
challenges of global financial crisis. The study investigated the extent to which the new pension scheme
 Guarantees a sustained comfortable retirement income to workers over the long-run and how expected benefits
compare between the old schemes and the new scheme. A comparative research design was employed. The
result showed that, under varying scenarios, the expected benefits under the New Pension Scheme (CPS) are at
best only comparable to the gratuity portion of the old scheme. The findings revealed that while the new
pension system may be effective in removing the uncertainty and hassles associated with receiving benefits
under the PAYG scheme, benefits under the previous scheme were far more generous to the employees and
highly susceptible to financial market forces.

Sule & Ezugwu (2009) conducted a study on the evaluation of the application of the contributory pension
scheme on employees’ retirement benefits of quoted firms in Nigeria. The study sample covers 182 firms quoted
on the first-tier market of the Nigerian Stock Exchange and 10 quoted firms selected as sample size based on
judgmental sampling. The time frame for the study covered 1996-2005. Student’s t-test for paired observations
was used to analyze the data. The study found that even though the application of the CPS has positive impact
on employee retirement benefits of quoted firms in Nigeria, there is non-effective monitoring/supervision and
enforcement of the provisions of PRA 2004. Though a study was conducted on the application of the
contributory pension scheme on employees’ retirement benefits, the findings of the study may not be
generalized because the study adopted non-probabilistic sampling method of judgmental sampling technique,
instead of using probability sampling technique or both.

3. Methodology of research

The study adopted ex-post facto research design based on the fact that the study sought to examine the
impact of past factor(s) on the present happening or event, and its strengths as the most appropriate design to
use when it is not always possible to select, control and manipulate all or any of the independent variables. The
study made use of secondary data collected from the National Pension Commission annual report, Central bank
of Nigeria Statistical bulletin, Nigeria Stock Exchange, and the national bureau of statistics between 2004 and
2018.

Multiple regression technique anchored on the model specification below was used to test the
hypotheses in addition to using descriptive statistics with aid of E-views in testing descriptive characteristics of
the study. The model for this study which was derived from the general regression model is stated as follows:
\[ Y = a + bx \]
\[ RGDP = f \left( PCSP + RSAP + CPFAP + INFR + EXCR + INTR \right) \]

Put econometrically,
\[ RGDP = \beta_0 + \beta_1PCSP + \beta_2RSAP + \beta_3CPFAP + \beta_4INFR + \beta_5EXCR + \beta_6INTR + \mu \]  

CPSRPP = Contributory pension scheme retiree fund account portfolio performance; RSAPP =RSA Portfolio
Performance; CPFAPP =CPFA Portfolio Performance; RGDP = Real Gross Domestic Product; INFR = Inflation rate
(control variable); EXCR = Exchange rate (control variable); INTR = Interest rate (control variable); \( \alpha = \) Constant;
\( \beta_0 \ldots \beta_5 = \) coefficients; \( \mu = \) error term.

The descriptive statistics however, is shown in table 1 below.

<table>
<thead>
<tr>
<th>Table 1. Descriptive statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Maximum</td>
</tr>
<tr>
<td>Std. Dev.</td>
</tr>
<tr>
<td>Skewness</td>
</tr>
<tr>
<td>Kurtosis</td>
</tr>
<tr>
<td>Jarque-Bera</td>
</tr>
</tbody>
</table>
Probability 0.234900 0.469638 0.681788 0.283836 0.386209 0.299529 0.027286
Sum 206.6722 120.6128 99.41121 94.3469 257.8400 6136.8400 159.6000
Sum Sq. Dev. 0.730666 19.33148 0.186670 2.514203 158.4619 73004.61 45.99200
Observations 20 20 20 20 20 20 20

**Source:** E-Views 9

The table shows a mean of 10.33361, 6.030638, 4.970561, 4.717284, 12.89200, 306.84 and 7.980000 for Real Gross Domestic Product, Closed Pension Fund Administrators’ Portfolio Performance, contributory pension scheme retiree fund account portfolio performance, retirement savings account portfolio performance, inflation rate, Exchange rate, and Interest rate respectively. The p-values of the Jarque-Bera statistics were greater than 0.05 for all the variables suggesting that they are normally distributed.

### 3.1. Correlation Analysis

**Table 2. Correlation matrix of the study variables**

<table>
<thead>
<tr>
<th></th>
<th>LRGDP</th>
<th>LCPFAPP</th>
<th>LPCSP</th>
<th>LRSAP</th>
<th>INFR</th>
<th>EXCR</th>
<th>INTR</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRGDP</td>
<td>1</td>
<td>0.2589</td>
<td>0.7912</td>
<td>0.9209</td>
<td>0.1692</td>
<td>0.8654</td>
<td>-0.7182</td>
</tr>
<tr>
<td>LCPFAPP</td>
<td>0.2589</td>
<td>1</td>
<td>-0.1669</td>
<td>-0.0615</td>
<td>0.9868</td>
<td>0.4085</td>
<td>-0.7433</td>
</tr>
<tr>
<td>LPCSP</td>
<td>0.7912</td>
<td>-0.1669</td>
<td>1</td>
<td>0.7719</td>
<td>-0.2178</td>
<td>0.4202</td>
<td>-0.1813</td>
</tr>
<tr>
<td>LRSAP</td>
<td>0.9208</td>
<td>-0.0615</td>
<td>0.7719</td>
<td>1</td>
<td>-0.1691</td>
<td>0.8418</td>
<td>-0.5648</td>
</tr>
<tr>
<td>INFR</td>
<td>0.1692</td>
<td>0.9868</td>
<td>-0.2178</td>
<td>-0.1691</td>
<td>1</td>
<td>0.2949</td>
<td>-0.6552</td>
</tr>
<tr>
<td>EXCR</td>
<td>0.8654</td>
<td>0.4085</td>
<td>0.4202</td>
<td>0.8417</td>
<td>0.2948</td>
<td>1</td>
<td>-0.9058</td>
</tr>
<tr>
<td>INTR</td>
<td>-0.7181</td>
<td>-0.7433</td>
<td>-0.1813</td>
<td>-0.5648</td>
<td>-0.6551</td>
<td>-0.9059</td>
<td>1</td>
</tr>
</tbody>
</table>

**Source:** E-Views 9

Correlation analysis enables the researcher to check for multi-collinearity and explore the association between each explanatory variable and the dependent variable. The table presents the correlation between the performance variables of RSA portfolio performance, CPFAPP portfolio performance, RGDP, inflation rate, interest rate, and exchange rate. The RGDP is positively related to CPFAPP portfolio performance, contributory pension scheme retiree fund account portfolio performance, RSA portfolio performance, exchange rate, and inflation rate but, negatively related to interest rate.

**Table 3. Augmented Dickey Fuller Unit Root Test Intercept (series at level)**

<table>
<thead>
<tr>
<th>Series</th>
<th>ADF Test Statistic</th>
<th>5% Critical values</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCPFAPP</td>
<td>-4.064157</td>
<td>-3.040391</td>
<td>(1) Stationary</td>
</tr>
<tr>
<td>LCPSRPP</td>
<td>-4.619506</td>
<td>-3.040391</td>
<td>(1) Stationary</td>
</tr>
<tr>
<td>LRSAPP</td>
<td>-4.658305</td>
<td>-3.040391</td>
<td>(1) Stationary</td>
</tr>
<tr>
<td>LRGDP</td>
<td>-4.601994</td>
<td>-3.040391</td>
<td>(1) Stationary</td>
</tr>
<tr>
<td>INFR</td>
<td>-4.062136</td>
<td>-3.040391</td>
<td>(1) Stationary</td>
</tr>
<tr>
<td>EXCR</td>
<td>-5.778797</td>
<td>-3.040391</td>
<td>(1) Stationary</td>
</tr>
<tr>
<td>INTR</td>
<td>-4.093033</td>
<td>-3.040391</td>
<td>(1) Stationary</td>
</tr>
</tbody>
</table>

**Sources:** Researcher’s compilation from E-Views 9

**Table 4. Augmented Dickey Fuller Unit Root Test Intercept (series at 1st difference)**

<table>
<thead>
<tr>
<th>Series</th>
<th>ADF Test Statistic</th>
<th>5% Critical values</th>
<th>Order</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCPFAPP</td>
<td>-4.064157</td>
<td>-3.040391</td>
<td>(1)</td>
<td>Stationary</td>
</tr>
<tr>
<td>LCPSRPP</td>
<td>-4.619506</td>
<td>-3.040391</td>
<td>(1)</td>
<td>Stationary</td>
</tr>
<tr>
<td>LRSAPP</td>
<td>-4.658305</td>
<td>-3.040391</td>
<td>(1)</td>
<td>Stationary</td>
</tr>
<tr>
<td>LRGDP</td>
<td>-4.601994</td>
<td>-3.040391</td>
<td>(1)</td>
<td>Stationary</td>
</tr>
<tr>
<td>INFR</td>
<td>-4.062136</td>
<td>-3.040391</td>
<td>(1)</td>
<td>Stationary</td>
</tr>
<tr>
<td>EXCR</td>
<td>-5.778797</td>
<td>-3.040391</td>
<td>(1)</td>
<td>Stationary</td>
</tr>
<tr>
<td>INTR</td>
<td>-4.093033</td>
<td>-3.040391</td>
<td>(1)</td>
<td>Stationary</td>
</tr>
</tbody>
</table>

**Sources:** Researcher’s compilation from E-Views 9.
The results from table 3 and 4 on ADF unit root test showed that LCPFAPP, LCPSRPP, LRSAPP, LRGDP, INFR, EXCR, and INTR series were not stationary at levels but considering their series in 1st difference, all the series became stationary. Therefore, the results showed that the time series on LCPFAPP, LCPSRPP, LRSAPP, LRGDP, INFR, EXCR, and INTR are integrated of order one i.e. the same order; I(1) and as such, shows that the series do not have unit root. Therefore, the series are stable and predictable, thus, it is considered valid for prediction or forecasting.

Using the regression equations, the empirical data associated with its related statistics/regression results are as stated below:

### Table 5. Baseline Model Regression Results

Dependent Variable: LRGDP  
Method: Least Squares  
Date: 01/31/20   Time: 19:50  
Sample: 2015Q1 2019Q4  
Included observations: 20

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>5.135182</td>
<td>0.418375</td>
<td>12.27411</td>
<td>0.0000</td>
</tr>
<tr>
<td>LCPFAPP</td>
<td>0.068656</td>
<td>0.006296</td>
<td>10.90422</td>
<td>0.0000</td>
</tr>
<tr>
<td>LCPSRPP</td>
<td>0.600064</td>
<td>0.100589</td>
<td>5.965512</td>
<td>0.0000</td>
</tr>
<tr>
<td>LRSAPP</td>
<td>0.381944</td>
<td>0.027075</td>
<td>14.10671</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.983874</td>
<td></td>
<td></td>
<td>10.3361</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.980851</td>
<td>0.196102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.027137</td>
<td>-4.19907</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>0.011782</td>
<td>-3.999860</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>45.99007</td>
<td>-4.160131</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>45.99007</td>
<td>1.032363</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 6. Modified Baseline model Results with Control Variables

Dependent Variable: LRGDP  
Method: Least Squares  
Date: 01/31/20   Time: 20:16  
Sample: 2015Q1 2019Q4  
Included observations: 20

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>14.28423</td>
<td>0.564070</td>
<td>25.32350</td>
<td>0.0000</td>
</tr>
<tr>
<td>LCPFAPP</td>
<td>0.531128</td>
<td>0.039750</td>
<td>13.36054</td>
<td>0.0000</td>
</tr>
<tr>
<td>LCPSRPP</td>
<td>-4.678225</td>
<td>0.337528</td>
<td>-13.86026</td>
<td>0.0000</td>
</tr>
<tr>
<td>LRSAPP</td>
<td>4.173198</td>
<td>0.240970</td>
<td>17.31836</td>
<td>0.0000</td>
</tr>
<tr>
<td>INFR</td>
<td>0.025334</td>
<td>0.004306</td>
<td>5.883879</td>
<td>0.0000</td>
</tr>
<tr>
<td>EXCR</td>
<td>-0.015879</td>
<td>0.001001</td>
<td>-15.86038</td>
<td>0.0000</td>
</tr>
<tr>
<td>INTR</td>
<td>0.120232</td>
<td>0.013315</td>
<td>9.029933</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.999388</td>
<td></td>
<td></td>
<td>10.3361</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.999106</td>
<td>0.196102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.005863</td>
<td>-7.170929</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>0.000447</td>
<td>-6.822422</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>78.70929</td>
<td>-7.102896</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>3539.894</td>
<td>2.273631</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results shown in the table 5 and 6 above, show that the R-squared ($R^2$) (a statistical measure that represents the proportion of variance in the dependent variable due to changes in the independent variables in a regression model) showed a value of 0.983874; i.e., 98.4% variation was explained by the predictor variables. The Adjusted R-squared (i.e., $R^2$ adjusted for the number of predictors in the model) showed a value of 0.980851; i.e., the explanatory variables account for 98.1% variation in RGDP. The F statistic (ratio of the mean regression sum of squares divided by the mean error sum of squares) checks the statistical significance of the model a value 3539.894 (p value <.05). This led to the rejection of all the null hypotheses which had it that there is no significant effect of retirement savings account portfolio performance on Nigeria economic growth; there is no significant effect of closed pension fund administrators’ portfolio performance on Nigeria economic growth; and there is no significant effect of contributory pension scheme retiree fund account portfolio performance on Nigeria economic growth. Therefore, with the p-values of 0.0000, 0.0000, and 0.0000 for hypothesis one, two, and three respectively, the study rejected the null and accepts the alternate hypotheses which suggested that there is significant effect of: retirement savings account portfolio performance, closed pension fund administrators’ portfolio performance; and contributory pension scheme retiree fund account portfolio performance on Nigeria economic growth. The above results were at variance with the studies of Ameh, Ajie, and Duhu, (2017) and Abayomi, and Nuren (2016) that found that pension fund assets and pension contribution /savings mobilized over the years have positive but insignificant impact on economic growth.

4. Conclusions

From the findings, it is quite clear that the 2014 pension reform Act has tremendous impact on the Nigerian economic growth. Thus, the retirement savings account portfolio performance; closed pension fund administrators portfolio performance; and the contributory pension scheme retiree fund account portfolio performance over the years contribute largely to Nigeria economic growth. It is unarguable that since 1999 which ushered in yet unbroken democratic governance in Nigeria, various governments has came up with several policy reforms aimed at improving pension administration in the country.

However, the most recent policy reform that paved way for the introduction of the contributory pension scheme both in the public and private sectors is the 2014 pension reform Act. The Act was a creation of series of agitations and complaints from Nigerian workers and retirees. These complaints and agitations, no doubt have created room for researches in the country. Most related literatures though with slight reservations and uncommon findings had it that 2014 pension Act has positively contributed to Nigeria economic growth. Of course, there is no gain saying the fact that corruption, lack of accountability and transparency; inconsistent government policies have been part of the challenges militating smooth operation and performance of pension in Nigeria. Based on these findings, the study recommends that:

1. Nigerian pension regulatory authorities should make concerted efforts at expanding and regulating the investment outlets for Pension Fund Custodians in the country.
2. The SEC, CBN, etc. that is bodies responsible for corporate governance policy compliance in the country may further review guidelines for operators in this sector to further promote transparency and fund management.
3. The Government should further enact policies that are aimed at sustaining and strengthening this very vital part of the financial sector; which has a direct effect on the standard of living of the citizens and further ameliorate the plight of the masses.

References


28. Maiturare, M. N. (sic), Retirement Benefits under the Pension Scheme and the challenges of Global Financial Crisis. A paper, in the Department of Business Administration Ahmadu Bello University, Zaria.


