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Pension Fund Assets and the Nigerian Economy

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Abstract: The study examined impact of contributory pension fund assets on Nigeria economy. The specific objective were to ascertain the impact of private sector pension contribution on gross domestic product in Nigeria and to determine the influence of public sector pension contribution on gross domestic product in Nigeria. The study period covered from 2004 to 2020. The stated hypotheses was analyzed with unit root test, descriptive statistic and multiple regression. The finding of the study revealed that private sector pension contribution LOG(PRSP) has positive and insignificant impact on gross domestic product in Nigeria and that public sector pension contribution LOG(PUSP) has positive and insignificant impact on gross domestic product in Nigeria. It was recommended PenCom should ensure effective monitoring, supervision and enforcement of the provision of the PRA 2004, which are the inevitable ingredients in the private sector pension contribution towards Gross Domestic Product (GDP).

Keywords: Contributory pension, assets, public sector, gross domestic product, pension contribution

1. BACKGROUND TO THE STUDY

The history of Nigeria's pension system dates back to the year 1951 when the first pension scheme was inaugurated in the country. According to Balogun (2016), Nigeria's first ever legislative instrument on pension matters was the Pension Ordinance of 1951 which had a retroactive effect from 1st January, 1946. The law provided public servants with both pension and gratuity. The National Provident Fund (NPF) which was established in 1961, was the first legislation enacted to address pension matters of private organizations. Conceptually, pension is the

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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. It is a monthly sum paid to a retired officer until death because the officer has worked with the organization paying the sum. It is generally expected in social welfare theorizing that an employee who has worked for an organization for some years is entitled to some benefits which could be in form of gratuity and pension payable to such employee by his/her employer at the time of retirement (Amujiri, 2019).

The important of pension fund asset on the Nigerian economy cannot be overemphasized. Pension fund asset scheme allows for voluntary contributions to be made by employees (including those exempted by the Act) that could only be taxed at the point of withdrawal where the withdrawal was made before five years from the date the first voluntary contribution was made. The scheme is fully funded, meaning that the contribution of an employee is deducted monthly from the employee's salary while the employer will provide the counter-part contribution for the employee, which will both be transferred to the relevant retirement savings account. By so doing, the pension assets are set aside from the onset to meet future pension liabilities. Each employee is required by law to open a "Retirement Savings Account" (RSA) in his/her name with a Pension Fund Administrator (PFA) of his choice. This individual account belongs to the employee and will remain with him/her for life even if he/she changes employers or PFA. Specifically, some have asked whether the Contributory Pension Act of 2004 has been able to address the problems of corruption, poor administration of pension fund, embezzlement, inadequate build-up of pension fund, poor monitoring and evaluation, and the general institutional failure which characterized pension schemes in Nigeria. This situation poses great challenge to the financial security of workers after retirement (Adeoti,. Gunu, and Tsado, 2012)

The Pension Reform Act 2014 was also established to address the manifested loopholes in the old defined benefit pension scheme and provide adequate resources to retirees after retirement from the service. The large capital pool demands that there should be sound and uniform investment decision making to ensure that value is added to Retirement Saving Account (RSA) contribution. Investment is normally done in the presence of numerous risk mostly political, markets and economic in nature. Investment and market analysis of these Pension Fund Administrators (PFAs) are always propelled to ensure that there is safeguard and safety of these pension assets. The fund accounting organ of PFAs record every bit of inflow and outflow of pension assets in and out of the entity fund. (Enache, 2015).

1.2. STATEMENT OF THE PROBLEM

In Nigeria public and private sector, life after retirement is dreaded by most workers. The fears of facing the future after retirement create an ambiance of disturbance among employees. This necessitated the introduction of public sector pension contribution and private sector pension contribution scheme in the country. However, public sector pension contribution and private sector pension contribution scheme prior to 2004 was characterized by many problem which made the payment of the retirement benefit a failure in Nigeria. The old pension scheme lacked adequate and timely budgetary provision coupled with rising life expectancy, increasing number of employers, poor implementation of pension scheme in the private sector due to inadequate supervision and regulation of the system and the fact that too many private sector employees were not even covered by the pension scheme. The new Pension Reform Act, predicated upon a defined contributory scheme, was established in 2004 to ameliorate the inadequacies of the old scheme. Ten years after the establishment, several amendments have been made to the 2004 Act. These include; the Pension Reform Amendment Act 2011, which exempts the personnel of the Military and the Security Agencies from the contributory pension scheme. This incorporated the Third Alteration Act, which amended the 1999 Constitution by vesting jurisdiction on pension matters in the National Industrial Court (FGN, 2014). However, it is assume that with the introduction of public sector pension contribution and private sector pension contribution scheme little or no impact have been feel on the gross domestic product of the country(Micah, 2019).

Finally, a lot of scholars have attempted to conduct a related studied on impact of contributory pension fund assets on Nigeria economy. These include Nwana *et al,*(2019) who conducted a study on evolution of pension management in Nigeria and it's important to the economy, Adekoya *et al*;(2019) also examine pension funds and infrastructural development financing in Nigeria, Barido, Micah (2019) conducted a study on contributory pension fund and economic growth in Nigeria and Tijani (2018) conducted a study on impact of the contributory pension fund scheme on Nigeria economic growth. It should be noted to the base of the knowledge of the researcher, none of these scholars have attempted to breakdown contributory pension fund assets into private sector pension contribution and public sector pension contribution. Hence, the study examined impact of contributory pension fund assets on Nigeria economy.

1.3. OBJECTIVES OF THE STUDY

The main objective of this study is to examine the impact of contributory pension fund assets on Nigeria economy .The specific objectives are:

1. To ascertain the impact of private sector pension contribution on gross domestic product in Nigeria
2. To determine the influence of public sector pension contribution on gross domestic product in Nigeria

1.4. RESEARCH HYPOTHESES

The following formulated hypotheses stated in null form were be tested:

$H0_1$: Private sector pension contribution has no significant impact on gross domestic product in Nigeria

$H0_2$: Public sector pension contribution has no significant impact on gross domestic product in Nigeria.

2.1. CONCEPTUAL FRAMEWORK

2.1.1. Concept of Contributory Pension Fund Assets

Pension funds' assets are defined as assets bought with the contributions to a pension plan for the exclusive purpose of financing pension plan benefits. The pension fund is a pool of assets forming an independent legal entity. Pension fund assets need to be prudently managed to ensure that retirees receive promised retirement benefits. For many years this meant that funds were limited to investing primarily in government securities, investment-grade bonds, and blue-chip stocks. Changing market conditions and the need to maintain a high-enough rate of return have resulted in pension plan rules that allow investments in most asset classes. These are some of the most common investments to which pension funds allocate their substantial capital. The introduction of contribution pension scheme in Nigeria through an Act in 2004 has made a large pool of fund available for investment. The pension fund assets had increased on yearly basis from 2004 to date with a value of ₦9.583 trillion as at 30th September 2019 and infrastructure fund of ₦34.895 billion at the same date (PENCOM, 2019). Pension fund is seen as alternative means of fund available for financing capital and infrastructural development as this is regarded as long term capital available for financing long term assets. It has become an effect in Nigeria economy as it is a catalyst in development of capital market due to long term nature of financial liabilities and therefore it becomes a unique sources of finance as long term capital for businesses and government. National Pension Commission (PenCom) announced the strategic goal of pension industry in 2019 as the allocation of 40% pension fund assets invested in various types of infrastructure. This is backed up with regulations that 15% of pension fund assets could be invested in infrastructure bond. PenCom regulation (2019) section 5.2.3 stipulated that pension fund assets could be invested in infrastructure projects through bonds or Sukuk based on the fact that such infrastructure projects has a minimum value of ₦5 billion and must be a core infrastructure projects with economic and financial viability. The bond issued to finance infrastructure project shall have credit enhancement as well as being guarantee by the Federal government of Nigeria. Infrastructure project financed by means of infrastructure fund must be well defined and has publicized investment objectives and strategy with a minimum of 60% of infrastructure funds being invested in infrastructure development in Nigeria (Ahmed, 2017).

Table 1: Pension Fund Assets as at 30th September 2019

S/N	*Asset Class*	*Amount ₦'000*	*Percentage weight (%)*
1	Domestic Ordinary Shares	492,082.59	5.13
2	Foreign Ordinary Shares	65,141.76	0.68
3	FGN Securities	6,844,876.52	71.43
4	State Government Securities	125,242.84	1.31
5	Corporate Debt Securities	621,955.85	6.49
6	Supra-national Bonds	4,030. 98	0.04
7	Local Money Market Securities	1,074,563.09	11.21
8	Foreign Market Securities	8,417.81	0.09
9	Mutual Funds	21,813.43	0.23
10	Real Estate Properties	231,482.33	2.42
11	Private Equity Funds	32,053.89	0.33
12	Infrastructure Fund	34,895.96	0.36
13	Cash and Other Assets	26,472.77	0.28
14	Total Asset Value	9,583,029.81	100

Sources: PenCom (2021).

2.1.2. Infrastructure as an Asset Class

Infrastructure has recently become an asset class in its own right for private sector investors- most notably pension funds. Pension funds have tended to invest mostly in “core-assets” such as money market instruments, government bonds, and large-cap equity, and, to a lesser extent, in "alternative assets" such as real estate, private equity and hedge funds, the average allocation to infrastructure representing only 1% of total assets under management by pensions- excluding indirect investment through ownership of stocks of listed utility and infrastructure companies. Investments are a small part of most pension-plan assets, but they are a growing market of a diverse assortment of public or private developments involving power, water, roads, and energy. Infrastructure is key to transformative power in a country and its economies. In order to address infrastructure gap, there is need to mobilize both domestic and external financing resources to infrastructural developments. Infrastructure represents those capital projects or goods that will serve as the basis for the enhancement of industrialization and economy growth of a nation. This includes paved road, good railway system, constant electricity, operational sea port, good communication networks, effective financial system, good security system and good governance/ legal system that support business growth and good return on investment which aimed at the overall wellbeing of the populace and the economy of the nation. Public projects experience limitations due to budgets and the borrowing power of civil authorities. Private projects require large sums of money that are either expensive or difficult to raise. Pension plans can invest with a longer-term outlook and the ability to structure creative financing (Amujiri, 2017).

2.1.3. Pension

Pension is the model realization by the employer to make available to its employee some cash when the employee becomes retired either due to old age or physical disability or change of service. The fund being set aside by the employer is a kind of insurable even if privately invested. In view of this, the chapter aims at reviewing some scholars' conception about pension funds and to investigate their role as Institutional Investors in Emerging Market Economies. The chapter further seeks to create more light on the concept of pension Funds, investigate the contribution of pension funds in emerging markets economies, establish the main factors determining the investment performance of emerging market pension funds, assesses the contribution of domestic pension funds to the development of local securities markets in emerging market countries, establish the factors that determines the emerging market asset allocation of pension funds in developing countries and highlight on the concept of Emerging Market Economies (Ahmed, 2016).

Robelo (2012) asserted that pension is also a method whereby a person pays into pension scheme a proportion of his/her earnings during his working life. The contributions provide an income (or pension) on retirement that is treated as earned income. This is taxed at the investor's marginal rate of income tax. On the other hand, gratuity entails a lump sum of money payable to a retiring officer who has served for a minimum period of time.

Ahmed, (2015) in his assessment of pension, declared that pension is the amount paid by government or company to an employee after working for some specified period of time, considered too old or ill to work or have reached the statutory age of retirement. Similarly Ozor (2016) explained that pension consists of lump sum payment paid to an employee upon his disengagement from active service. He further stated that pension plans may be contributory or non-contributory, fixed or variable, group or individual, insured or trustee, private or public, and single or multi-employer.

According to Adebayo(2006) and Ugwu (2016), there are four main classification of pensions in Nigeria, namely, retiring pension, compensatory pension, superannuating pension and compassionate allowance. This was supported by Amujiri, (2017) who defined compassionate allowance as a pension scheme that is not admissible or allowed on account of a public servants removal from service for misconduct, insolvency or incompetence or inefficiency. In the same vein, Dhameji and Dhameji (2019) tried to link commitment to motivation and opined that commitment is also tied to how well an employee is motivated. Motivation here entails the process of influencing employee's behaviour towards the attainment of organizational goals. Accordingly, Sule and Ezugwu (2019) asserts that a good pension guarantees employees comfort and commitment to the organization during his/her active years.

A pension is a contract for a fixed sum to be paid regularly to a pensioner, typically following retirement from service. It is different from, severance pay because the former is paid in regular installments while the latter is paid in one lump sum (Eme and Uche, 2014). A pension plan created by an employer for the benefit of employees is commonly referred to as an occupational or employer person. Labour Unions, the government and other organizations also fund pensions. Many pension plans also contain an additional insurance aspect, since they often will pay benefits to survivors or disabled beneficiaries.

Ayegba *et al;* (2013) described the term pension as payments a person receives upon retirement, usually under pre-determined legal and/or contractual terms. The

Nigerian new Pension Scheme increased the coverage of the Defined Contributory Pension Scheme in the private sector entities with three employees and above, in line with the drive towards informal sectors participation.

2.1.4. Importance of Pension

Pension is a tool used to manage employment. It can be applied in an organization to attain and retain certain levels of labour productivity. Armstrong (2010) affirms that pension helps employees to readjust themselves properly into the society after leaving employment. It constitutes an important tool in the hands of management for boosting employee morale which may lead to efficiency and increased productivity of employees in particular and the organization as a whole. Besides pension is a device which employers use to meet their social responsibilities and thereby attract goodwill. Furthermore, pension now 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. It can also relieve pressure on the company for individual assistance by instilling in employees a sense of confidence at challenging responsibilities for their future. Sterns (2016) observes that pensions could discourage labour turnover. If both the employees and employers contribute to the scheme, then it serves as a general area of joint interest and cooperation and therefore helps to foster better employment relations. However, employer and employee relationship in the provision of pension as a form of employee benefits is often affected by factors including: pensionable and gratuity age; the amount or the percentage of the proposed pension; method of financing; administration of pension and psychological pressure. Pension administration consists of five basic elements namely: flexibility; amount of benefits; finance; contribution to cost of pension and gratuity and death benefits.

2.1.5. Stylized Facts on Contributory Pension Scheme in Nigeria

The Nigerian Contributory Pension Scheme came through the Pension Reform Act of 2004. The new pension scheme is called contributory because it is fully funded, on individual accounts that are privately managed by Pension Fund Administrators (PFAs) with the pension fund assets held by Pension Fund Custodians. Under the system, the employees contribute a minimum of 7.5% of their Basic Salary, Housing and Transport Allowance while the employers shall contribute 7.5% in the case of the public sector. Employers and employees in the private sector will contribute a minimum of 7.5% each. An employer may elect to contribute on behalf of the employees such that the total contribution shall not be less than 15% of the basic salary, housing and transport allowance of the employees. The recent amendments to the Act exempted military personnel from contribution. According to PRA (2004), an employer is obliged to deduct and remit contributions to a custodian within 7 days from the day the employee is paid his salary while the custodian shall notify the PFA within 24 hours of the receipt of contribution. However, the contribution and retirement benefits have tax exemption. The employee opens an account known as "Retirement Saving Account in his name with a Pension Fund Administrator of his choice. This individual account belongs to the employee and will remain with him throughout his life time. He may change employers or pension fund administrators but the account remains the same. The employee may only withdraw from this account at the age of 50 or upon retirement thereafter. Meanwhile every employer shall maintain life insurance policy in favour of an employee for a minimum of three times the annual total emolument of the employee. Based on the guidelines of Pension Commission of Nigeria (PENCOM) and National Insurance Commission (NAICOM) for group life insurance, employers must bear all costs related to life insurance for its employees, separate from contributions made under the scheme. The contributory pension scheme requires pension funds to be kept by pension fund custodians (PECs) and privately managed by pension fund administrators (PFAs). PFAs are private organizations that have been duly licensed to open retirement savings accounts for employees, invest and managed the pension funds in fixed income securities listed and other instruments as the commission may from time to time prescribe, maintain books of accounts on all transactions relating to the pension funds managed by it, provide regular information on investment strategy to the employees or beneficiaries and pay retirement benefits to employees in accordance with the provision of the Act (Dalang, 2016),.

2.2. THEORETICAL FRAMEWORK

The study is hinged focusing on the financial theory of defined benefit scheme.

2.2.1. The Financial Theory of Defined Benefit Pension Scheme

The financial theory of defined benefit pension scheme was propounded by C.J. Exley, S.J.B. Mehta and A.D. Smith in 1997. The financial theory of defined benefit pension scheme state that a successful blueprint for this mark-to-market valuation discipline and considers whether and how it can be applied to pension schemes both in theory and in practice. In their work, it is asserted that adoption of this market based approach appears now to be essential in many of the most critical areas of actuarial advice in the field of defined benefit corporate pension provision and that the principles can in addition be used to establish more efficient and transparent methodologies in areas which have traditionally relied on subjective or arbitrary methods. And that corporate pension funds provision from the perspective of such financial theory. The theory increasingly, modern business and investment management techniques are founded on approaches to measurement of profit and risk developed by financial economists. This theory begins by analyzing They extend the hope that the insights gained from financial theory can be used to level the playing field between defined benefit and defined contribution arrangements from both corporate and member perspectives. In their work ''the financial theory of defined benefit pension scheme" They suggest that there are many companies across the world running occupational pension schemes of one form or another (Ahmed, 2016).

2.3. EMPIRICAL REVIEW

Many studies abound in the literature that provided empirical evidence on the contributions of funded pension schemes. For instance, in an assessment of the impact of contributory pension assets to Nigerian economic development by Edogbaya (2013), Methodology used was Ordinary least square based regression Analysis, the objective of this study has been to examine how contributory pension scheme influences the Gross Domestic Product (GDP) in Nigeria. More so, this study is aimed at suggesting the best reliable way for tackling or handling the fear that the funds or Retiree Savings Account (RSA) contributions can be mismanaged by the existing trustees. the result of correlation analysis using t-test revealed that Contributory Pension Scheme (CPS) has significant impact on the GDP while the result of ANOVA revealed that risk prevalent has positive effect on the pension fund management. The study recommended that the Pension Fund Administrators should invest in less risky portfolio to enhance prompt payment of pension to retirees.

Nnanta, Okoh and Ugwu (2011) carried out a study on the Impact of contributive pension scheme on workers commitment to work, retention and attitude towards retirement, Methodology used was Pearson product moment correlation .The objective of this study is to carry out contributory pension scheme and workers commitment to work in the Nigeria Civil Service. The result of Pearson product moment correlation findings revealed that contributive pension scheme significantly affects workers commitment to work, retention and attitude towards retirement. The study recommended among others that strict measures be put in place by government to ensure the effective monitoring and implementation of the provisions of the 2004 Pension Reform Act.

Adeoti*et al* (2012), examined the determinants of pension fund investment and economic growth in Nigeria, Methodology used was Regression analysis. The study found that economic risk and security of real estate factors were identified as the major determinants of pension fund investment and economic growth. The study concluded that variables such as interest rate, internal control system etc., are not critical in determining investment of pension funds in Nigeria. The study also recommended that pension fund managers should develop good systems of mitigating on the enormous risks they face in their duty as investment managers.

A review of the promises and challenges of the 2004 pension reform in Nigeria by Eme and Sam (2011) noted that a mandatory contributory pension scheme should be distinguished from poverty relief programme and universal social security benefits to avoid scheme overloading. Above all, the study opined that there is need for enlightenment directed towards the employees understanding their rights and demanding it from the employers as concerning private sector coverage.

The study of Egbe, Awogbemi, and Osu (2013) about Portfolio Optimization of Pension Fund Contribution in Nigeria found that the Pen Com guided portfolio is not optimum. Ozor (2006) examined the role of Pension Fund Administrators on Nigerian economy. The findings showed that the Pension Fund Administrators play significant roles on Nigerian economy according to the dictates of 2004 Pension Reform Act. Such factors as finance, too many regulations and overlapping functions amongst others, affect them in playing their roles effectively and more so, those problems affecting the Pension Fund Administrators are rated as significantly high. In the light of this discovery, the study recommended the formulation of a robust policy that would enhance the capacities of the Pension Fund Administrators and boost economic growth and development.

Dhameji (2009), did an analysis of the impact of the 2004 pension policy on the welfare of the Nigerian civil servants, with emphasis on selected Federal ministries. From the analysis, results obtained clearly indicated that the implementation of the funded pension significantly improved the welfare of the civil servants but does not address the problem of corruption and inadequate budgetary allocation and therefore not effective in overcoming the problems of retirees in Nigeria. In view of the above findings, the study recommended among others that government and Pension Commission must strengthen monitoring and supervision unit of the commission to ensure effective monitoring, supervision, and enforcement; and effective implementation of penalties as provided by the Act on non-compliers regardless of their status in the society.

Ayegba (2013), did an evaluation of Pension Administration in Nigeria. Methodology used was Regression analysis. The study advocated the need for public enlightenment on the merit of the new contributory pension scheme, the 2004 Pension Reform Act is key to enable Nigerians in Diaspora who may want to contribute to the retirement saving scheme to do so and the government should punish those who steal pensioners' funds to serve as deterrent to others. The study concluded that a well-organized structure that will ensure prompt payment of retirees and pensioners is highly desirable and this must be vigorously pursued by the government to facilitate economic development. The study recommended that the Nigerian government should encourage the option of having the banks where the salary accounts of employees are domiciled to make pension deductions on monthly basis possible and have it remitted to the Pension Fund Administrators.

The issues of influencing assessment of Pension Fund as a housing finance instrument in Nigeria was investigated by Farayibi (2015), Methodology was Multiple regression analysis. The findings indicated that there is no significant difference in the challenges to real estate development. World over Pension Fund due to its long term nature and a booster of economic growth, has been recognized as a major source of housing finance. This made many developers in Nigeria to breadth relief after the Pension Fund reform of 2004 the study opined that in recent times, only a small sum apart from capital market investments is invested in real estate companies because the instruments prescribed for real estate investment for Pension Funds - Mortgage Backed Securities (MBS) and Real Estate Investment Trusts (REITs) are yet to be widely available in the market.

3.1. RESEARCH DESIGN

This study is an *ex-post facto* research design. *Ex-post facto* is a systematic empirical enquiry in which the scientist does not have direct control of independent variables because they are inherently not manipulated. At the time of the study, the pension funds assets have already taken place. This design helped the researcher establish, describe and explain existing phenomena and draw generalization on the study universe based on the data collected.

3.2. METHOD OF DATA COLLECTION

In carrying out this research work, data was gathered from secondary sources. The sources include Central bank of Nigeria's statistical bulletin of various issues and journals, etc.

3.3. TECHNIQUES OF DATA ANALYSIS

Hypotheses were analysed using multiply regression analysis. Multiple regression was used to ascertain the causes and effect of the relationship that exist between the variable.

3.4. MODEL SPECIFICATION

Using multiple regression analysis, the model is stated below. This study adopted the model of Farayibi (2015) in Baridoo (2019) . Models are represented in functional form as

Y=f(X)

RGDP=f(PFA)

The model was then modify to suit the present study. The model for the study is stated below:

$$GDP = \beta_0 + \beta_1 PRSP + \beta_2 PUSP + Ut$$

Where

RGDP = Gross domestic product

PRSP = Private sector pension contribution

PUSP = Public sector pension contribution

$\beta 0$ = constant term

β_1 = coefficient of prediction

Ut = error term

4.1. DATA ANALYSIS

4.2. DESCRIPTIVE ANALYSIS

The descriptive analysis displayed the basic features of the time series data presented in table 4.1 above. The outcome of the descriptive analysis was presented in Table 4.2 below:

Table 4.2: Descriptive Analysis

	LOGGDP	*LOGPRSP*	*LOGPUSP*
Mean	76133.69	192.40	201.9376
Median	72599.63	159.52	225.86
Maximum	154252.3	371.12	536.97
Minimum	18124.06	0.0000	15.600
Std. Dev.	42924.5	142.0965	131.245
Skewness	0.36103	0.058212	0.65417
Kurtosis	1.97523	1.406035	3.60681
Jarque-Bera	1.113181	1.809281	1.47333
Probability	0.57316	0.404687	0.47870
Sum	1294273	3270.8	3432.94
Sum Sq. Dev.	2.9516	323062.6	275607
Observations	17.0000	17.0000	17.0000

Source: Researcher computation from E-views 11

Table 4.2 above displace the descriptive statistic of gross domestic product (LOGGDP), private sector pension contribution LOG(PRSP) and public sector pension contribution (LOGPUSP) The descriptive analysis revealed that gross domestic product was very high as the mean value showed ₦76133.6 billion over the period of study. The maximum value, on the other hand indicated that ₦154252.3billion observed over the period was which occurred in 2020. The value of skewness (0.36103) is indicative of the fact that gross domestic product in Nigeria have been increasing persistently over the period. Also, the mean value of private sector pension LOG(PRSP) was ₦192.40billion, which is indication that the private sector pension in the country has been increasing over the period under study. The value of skewness (0.058212) is indicative of the fact that private sector pension in Nigeria have been increasing persistently over the period.

Finally, the mean value of public sector pension contribution (LOGPUSP) was ₦201.9376billion, which is indication that the public sector pension contribution in the country has been increasing over the period under study. The value of skewness (0.65417) is indicative of the fact that public sector pension contribution in Nigeria have been increasing persistently over the period.

4.3. TEST FOR STATIONARITY

The test for stationarity of the data was carried out based on the Augmented Dickey Fuller (ADF) unit root technique to ensure that none of series is integrated beyond order one i.e. I(1). The results obtained from the unit root is as follows:

Table 4.3 : Summary of ADF test results

Variable	*ADF First difference: I(0)*		
	t-Statistic	*P-Value*	*Order of Integration*
LOGGDP	-4.083578	0.0073	1(0)
LOG PRSP	-3.157211	0.0423	1(0)
LOG PUSP	-3.055144	0.0510	1(0)

Source: Researcher computations from E-views 11

The results of the ADF test revealed that all the series were integration of order i.e. I(0). For instance, the ADF test results showed that both dependent gross domestic product (LOGGDP) and independent variables (private sector pension contribution LOG(PRSP) and public sector pension contribution (LOGPUSP) in the series were all stationarity at level. I(0). This is because, in absolute term, their actual values (t-Statistic) are greater than their respective critical values, which indicates that; null hypothesis which stipulates that, the series are not stationary is rejected. Consequently, with the integration of order, the ordinary least square regression can be applied since all the variables were stationary at level.

4.4. SIMPLE REGRESSION ANALYSIS FOR HYPOTHESIS ONE

Having carried out the result obtained from the analysis was presented in table 4.5 as shown below:

Table 4.4: Regression Analysis (dependent variable, RGDP)

	Coefficient	*Std. Error*	*t-Statistic*	*Prob.*
LOGPRSP	0.073818	0.080774	0.913872	0.3763
LOGPUSP	0.512776	1.160912	0.441702	0.6066
C	3.544056	0.215256	16.46434	0.0000
R-squared	0.50000			
Adjusted R-squared	0.462866			
F-statistic	0.335712			
Prob(F-statistic)	0.176500			
Durbin-Watson stat	1.551108			

Source: E-views 11 Output

From the regression results as shown in table 4.5, the adjusted R-squared of 0.50000reveals that approximately 50% of the total variations in the dependent variable (LOGGDP) was accounted by the explanatory variables LOGPRSP and LOGPUSP while the remaining 50% was due to the error term. The F-statistic

(0.335712) indicates that the entire result was statistically significant at 1%). The coefficient of private sector pension contribution LOG (PRSP) was 0.073818. This implies that a unit increases in private sector pension contribution lead to corresponding increase in gross domestic product (LOG GDP) by 0.07381units and a unit increases in public sector pension contribution (LOGPUSP)lead to corresponding increase in gross domestic product (LOG GDP) by 0.512776units. The constant (C) implies that *ceteris paribus* (holding the explanatory variable constant), gross domestic product (LOGGDP) will be increasing by -3.544056units.

4.4.1. Hypotheses Testing

For the hypotheses testing, the decision was based on the p-values of the t-Statistics associated with each coefficient of the independent variables. If a p-value is less than 0.05 (5%), the null hypothesis is rejected. However, if a p-value is greater than 0.05 (5%), the null hypothesis was accepted.

$H0_1$: Private sector pension contribution LOG (PRSP) has no significant impact on gross domestic product of Nigeria

The p-value (0.3763) of Private sector pension contribution LOG(PRSP) in table 4.5 is greater than 0.05. Hence, the null hypothesis (H_{o1}) was accepted and the alternative hypothesis rejected that Private sector pension contribution LOG(PRSP)has positive and a insignificant impact on gross domestic product in Nigeria.

$H0_2$: Public sector pension contribution LOG(PUSP)has no significant impact on gross domestic product of Nigeria

The p-value (0.6066) of Public sector pension contribution LOG(PUSP) in table 4.5 is greater than 0.05. Hence, the null hypothesis (H_{o1}) was accepted and the alternative hypothesis was rejected that public sector pension contribution LOG(PUSP)has positive and a insignificant impact on gross domestic product in Nigeria.

4.5. DISCUSSION OF RESULT

The study examined the impact of pension fund assets on Nigerian economy. The study were reviewed under two hypotheses. The result of the first hypothesis revealed that private sector pension contribution LOG (PRSP) has positive and insignificant impact on gross domestic product in Nigeria. The result holds on the ground that over the years the difference companies in the country have been involved in private sector pension contribution but there is little or no impact on the economy of the country. The result is in line with the finding of Adekunle (2018).

The result of the second hypothesis revealed that public sector pension contribution LOG(PUSP) has positive and insignificant impact on gross domestic product in Nigeria. The result holds on the round that over the years pension system prior to 2014 in Nigeria was characterized with many problems which made the payment of the retirement benefit a failure in Nigeria. The major weaknesses of pension scheme was lack of adequate and timely budgetary provision coupled with decreasing life expectancy, increasing number of employers, poor implementation of pension scheme in the private sector due to inadequate supervision and regulation of the system and too many private sector employees were not even covered by the form of pension scheme. The result is in line with the finding of Dele, (2019).

5.1. SUMMARY OF FINDINGS

The study examined the impact of pension fund assets on Nigerian economy. The study covered from 2004 to 2020**.** Based on the specific objectives of this study and the result of the hypotheses tested, the findings of this study are stated below;

1. Private sector pension contribution LOG(PRSP)has positive and insignificant impact on gross domestic product in Nigeria.
2. Public sector pension contribution LOG(PUSP) has positive and a insignificant impact on gross domestic product in Nigeria

5.2. CONCLUSION

The pension system in Nigeria was characterized with many problems which made the payment of the retirement benefit a failure in Nigeria. The major weaknesses of pension scheme was lack of adequate and timely budgetary provision coupled with decreasing life expectancy, increasing number of employers, poor implementation of pension scheme in the private sector due to inadequate supervision and regulation of the system and too many private sector employees were not even covered by the form of pension scheme. These problems associated with payment of pension in Nigeria necessitated the government during the administration of President Goodluck Jonathan regime could be reformed or reviewed which gave birth to the Pension Reform Act of 2014. Contributory Pension Act established a uniform contributory; private sector managed and fully funded pension system for both the public and private sector of the country. Hence, The study examined the impact of pension fund assets on Nigerian economy. The study covered from 2004 to 2020**.** Based on the specific objectives of this study and the result of the hypotheses tested, the findings of this study are stated below private sector pension contribution LOG(PRSP)has positive and insignificant impact on gross domestic product in Nigeria and public sector pension contribution LOG(PUSP) has positive and a insignificant impact on gross domestic product in Nigeria

5.3. RECOMMENDATIONS

Having reviewed the Contributory Pension Scheme (CPS), the researcher hereby recommend thus;

1. PenCom should ensure effective monitoring, supervision and enforcement of the provision of the PRA 2004, which are the inevitable ingredients in the private sector pension contribution towards Gross Domestic Product (GDP).
2. There should be prompt reconciliation between PFAs, PFCs and PENCOM and statements of accounts should be given to contributors regularly. This will bring transparency and accountability to the system.

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