

Influence of Contributory Pension Scheme on Economic Development in Nigeria

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Abstract

It is almost two decades since the enactment of the Pension Act 2004 yet there are still concerns as to whether the new pension scheme has addressed the problems that were preponderant in the previous scheme. The main objective of this study was to examine the influence of contributory pension scheme on economic development in Nigeria. The design adopted for this study was ex-post-facto; data used for analysis were elicited from Central Bank Statistical Bulletin and National Pension Commission Annual Report. To achieve this objective, a model was formulated based on empirical and theoretical reviews. Per Capita Income was used as the explained variable, while private-sector pension funds, public-sector pension funds and total pension funds were the explanatory variables in the model. The scope of the study covered pension matters in respect of public and private sector retirees in Nigeria as a whole. The researchers employed the Fully Modified Least Squares (FMOLS) Model to analyze data. The researcher used the p-value as the basis for the acceptance and rejection of null hypotheses. Where the critical p-value computed is less than a 5% significance level, the variable was taken as being significant, hence it was rejected. The findings elicited from this study revealed that private sector pension funds and public sector pension funds with p-values of 0.0117 and 0.0089 respectively, had a positive significant influence on Per Capita Income, while total pension funds recorded an insignificant influence on per capita income with a p-value of 0.8641. From the inferential result, it was deduced that the contributory pension scheme had a positive and significant influence on economic development in Nigeria. Making timely payments of pensions to beneficiaries both in the private and public sectors would inject money into the economy which will boost economic development. From the foregoing, the researcher recommended that government should ensure that the payment of pensions is made timely, in line with Pension Reform Act 2014.

Keywords: contributory pension scheme, pension reforms, private sector funds, public sector funds, economic development

Introduction

The pension system in Nigeria includes both private and public pension funds. The public pension system is administered by the National Pension Commission (PenCom, 2020). The Defined Benefit Scheme (DBS), which is also known as the old pension scheme, was established in 2004 and covers public sector workers. This scheme was non-contributory and largely unfunded. Following the weakness of the DBS, the Contributory Pension Scheme (CPS), which is also known as the new pension scheme, was established in 2005. This new scheme covers both public sector and private sector workers, including self-employed individuals. Under the CPS, workers are required to contribute a minimum of 7.5% of their monthly income to their pension fund, while their employers are required to contribute an additional 7.5%. The contributions are invested in a variety of assets, including government bonds, corporate bonds, and equities, to achieve a high rate of return. The private pension funds in Nigeria are managed by Pension Fund Administrators (PFAs) who are licensed and regulated by PenCom.

As of 2020, there were 21 PFAs in Nigeria. The private pension funds' assets have grown significantly over the years and as of 2020, it was approximately NGN 4 trillion (Anaesoronye, 2022). The CPS has seen significant growth in assets over the years. Private pension funds and public pension funds in Nigeria differ in terms of their funding sources, governance, and regulation. Private pension funds are typically funded by contributions from individual members and their employers, while public pension funds are funded by government revenues. In terms of governance, private pension funds are typically managed by private-sector companies, while public pension funds are managed by government agencies. In terms of regulation, private pension funds are regulated by the National Pension Commission (PenCom, 2020), while public pension funds are not subject to the same level of regulation. In terms of performance, private pension funds tend to have higher returns on investment due to their diversified investment portfolios, while public pension funds tend to have lower returns due to their more conservative investment strategies. One of the advantages of private pension funds is that they offer more flexibility and choice in terms of investment options. On the other hand, public pension funds are seen as more secure, with the government standing behind them. Overall, private pension funds and public pension funds in Nigeria both have their benefits and drawbacks, and the choice between them will depend on an individual's personal circumstances and investment goals.

In many other countries of the world, the sustainability of the defined benefit pension scheme is being threatened by the ageing population. However, in Nigeria, corruption was singled out as a major complementary factor for the change from the Defined Benefit (DB) pension scheme to the new contributory pension scheme. A contributory pension scheme provides for the contribution of funds for the pension benefit of the employees. The scheme was passed into law in Nigeria in 2014 and refers to as the Defined Contribution (DC) pension scheme. The new rates of contributions are employees 8% and employers 10% respectively.

The contributory pension scheme, since its embracement by the concerned entities and possible enforcement to make it operational in the economy, has witnessed serious setbacks due to unacceptable dynamism and non-conformity by various sectors (Ukoh, 2021). The level of success recorded so far in the economy, cannot be compared with desired result presupposed to have been attained assuming all affected entities, individuals and states that are yet to enact a bye-law to back its operational and enforcement embrace the scheme. Therefore, the problem of enforcement of the enacted law/act becomes imperative as there is no strong task force or

sanctions even though there are sanctions prescribed for those individuals, entities and government parastatals that refuse to embrace the scheme. This nonchalant attitude on the part of the regulatory agency has encouraged most affected entities to evade or circumvent the scheme that could have served as a pool of funds for a long-term source of funds for infrastructure development, provision of social amenities and other economic growth greed. On the other hand, the quoted companies probably complied not because they wanted to but as an operational requirement for them to remain on the floor of the capital market, but what happen to unquoted companies in which most of them employ a large active workforce of the population that have refused to embrace the scheme? Most of them are compelled to comply because either they require a compliance certificate for contract bidding, otherwise they discontinued to remit for the employees, thereby creating unfunded accounts. The Pension Fund Administrators might follow up to recover the unremitted sum, but they are not empowered by the law to compel the employer to pay or remit for the employees. Though, the new Act provides that such companies should be reported to the regulator in the event of non-remittance of pension contribution over a certain period (not specific), most Pension Fund Administrators give a grace period of six (6) months of discontinuity. However, the basic question is, how many of these defaulters have been persecuted or tried in the law court?

This reveals the lackadaisical attitude of the regulator in enforcing the provision of the Act. Apart from the non-enforcement of the act on the part of the regulator and the fact of no strict compliance by most unquoted companies and government parastatals/states, there is low sensitization and dissemination of information by the Pension Fund Administrators to the public (Christian & Wobiaraeri, 2016). The investment apparatus set up by the regulator also constrains the Pension Fund Administrators from investing the pension funds in the real economy to boast economic growth and development. The National Pension Commission (PENCOM) has strictly set out percentages of funds under management (FUMS) to be invested in various sectors or markets or financial instruments to guide against Pension Fund Administrators taking the unreasonable risk that will erode the pool of funds. The trends in the capital market during the economic recession where the Nigerian capital market and the global market experienced a downturn in funds and the impairment of funds cannot be overemphasized because of its negative influence on the economy; therefore, the strict measure is put in place by the regulator to safeguard the individual's funds, that is, pension benefits or fund.

Statement of the Problem

The new Pension Reform Act, predicated upon a defined contributory scheme, was established in 2004 to ameliorate the inadequacies of the old scheme. Many years after the establishment, several amendments have been made to the 2004 Act. These include the Pension Reform Amendment Act 2011 and 2014, which exempts the personnel of the Military and the Security Agencies from the Contributory Pension Scheme (CPS), as well as the Universities (Miscellaneous) Provisions Act 2012, which reviewed the retirement age and benefits of University Professors and the Pension Reform Act 2014. 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, whether the new pension act has been able to address the problems associated with retirement schemes in the past is a major concern. Specifically, some have asked whether the Contributory Pension Act of 2004 has been able to address the problems of economic development, corruption, poor administration of pension funds embezzlement, inadequate build-up of the pension fund, poor monitoring and evaluation, and the general institutional failure which characterized pension schemes in Nigeria. This situation poses a great challenge to the financial security of workers after retirement.

With weak institutions, corruption, social injustice and insecurity, it is clear that the operation of the funded pension scheme in Nigeria has been hampered as it faces a lot of challenges which threaten its prospects. Despite the transition from a defined benefit scheme to a contributory pension scheme, several issues have come up such as embezzlement of funds which brings about doubt as to whether the scheme is truly contributing to the economic development of the country. Scholars have sought to give answers to this question. For instance, studies carried out by Edogbanya (2013) and Dostal (2010) suggested a positive influence of contributory pension scheme on economic development in Nigeria, while other scholars such as Eme & Sam (2011) and Fapohunda (2013) suggested a negative influence. Generally, there is mixed result to the outcome of the influence of pension fund on the economy of Nigeria. This study is also poised to give independent evidence to this question.

Objectives of the Study

Generally, the objective of this study is to examine the influence of the contributory pension scheme on economic development in Nigeria. The specific objectives are to:

- i. Examine the influence of Private sector pension funds on economic development in Nigeria.
- ii. Ascertain the influence of public sector pension funds on economic development in Nigeria.
- iii. Evaluate the influence of the total pension fund on economic development in Nigeria.

Hypotheses of the Study

The following null hypotheses have been developed to achieve the research objectives:

Ho1: There is no significant influence of private sector pension funds on economic development in Nigeria.

Ho2: Public sector pension funds have no significant influence on economic development in Nigeria.

Ho3: There is no significant influence of the total pension fund on economic development in Nigeria.

Literature Review

Conceptual Review

Contributory Pension System in Nigeria

The contributory pension scheme was to address the huge unsustainable pension deficit estimated at two trillion naira which characterized the former Pay-As-You-Go (PAYG) Pension Scheme (Yilmaz & Ozturk, 2016). According to Yilmaz & Ozturk (2016), the contributory pension scheme would address the pension deficit of the past in Nigeria; 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 a multiplier effect on workers' commitment and attitudes towards retirement in the Nigeria Public Service, as well as attitudes towards corruption especially in the civil or public service. This is because the uncertainty of receiving a pension and gratuity after retirement was largely responsible for high labour turnover in public service. WHO (2007) posits that poor remuneration, delay in payment of fringe benefits and poor condition of service, among others, are jointly responsible for the exodus of medical personnel from Nigeria to the United States of America and the United Kingdom. Some certain features and safeguards position the scheme with success chances.

Features Retirement Savings Account (RSA)

The Act provides for the licensing of PFAs whose duty is to open retirement savings accounts for employees and invest and manage the funds in fixed-income securities and other instruments as

may be determined by the Regulatory Agency, National Pension Commission (PENCOM).

Section 8(1) of the Act provides that every employee shall open and maintain an account in his or her name with any pension fund administrator of his or her choice. This account belongs to the employee throughout his or her life whether he changes jobs or otherwise. The account is meant to receive monthly contributions from the employee and his employer. This fund is to be invested in such prescribed investment outlets. For security reasons, pension fund administrators are allowed to invest 75% of fund assets in federal government securities (FGN Bond) while the balance of 25% of assets may be invested in publicly quoted companies. Pension Fund Administrators (PFAs)

Pension Fund Custodians (PFC)

The law also provides for the licensing of PFC to keep all pension fund assets in safe custody. That is, all monthly contributions on behalf of each employee are sent to a Pension Fund Custodian who, upon receipt of such contributions, duly instructs the PFA to credit the account of the employee(s) concerned with the total contributions thus remitted. The person who keeps the assets (PFC) is different from the person who carries out the investment (PFA). The custodian will execute transactions and undertake activities relating to the administration of pension fund investments upon instructions by the PFA. (Federal Min. of Information and National Orientation, 2006). Given the large number of assets to be handled, the licensed Pension Fund Custodian, being a limited liability company, and a licensed financial institution, must have a minimum capital base of N5,000,000,000 unimpaired by losses. The National Pension Commission (PENCOM) is to ensure the effective administration of pension matters in Nigeria. The Act established a regulatory agency, (PENCOM) to regulate and supervise the scheme. The commission is to make certain that payment and remittance of contributions are made and retirees are paid when due. Furthermore, the agency will ensure the safety of funds by issuing guidelines for licensing, approving, regulating and keeping a tab on the investment behaviour of PFAs. It is the watchdog of the scheme that must act in the interest of all stakeholders.

Transition gap: Retirement Benefit Bond Redemption Fund

Switching from the DB Scheme to the new scheme creates a financing gap for workers who have earned pension rights under the old scheme. The retirement benefit bonds are to be issued to workers concerned, the value of which will be equal to the accrued pension benefits up till the commencement of the funded scheme. The bonds are redeemable at the retirement date for each worker as appropriate. The law provides that a fund known as the "Retirement Benefits Bond Redemption Fund" be established and maintained by the Central Bank of Nigeria (CBN). FGN pays 5% off its total monthly wage bill in the public service of the Federation and Federal Capital Territory into the fund to retire any retirement benefit bond issued. The fund shall cease to exist after all affiliates in the old scheme have had their bonds redeemed.

Theoretical Framework

This study is anchored on the deferred wage theory

The Deferred Wage Theory

The Deferred Wage Theory was propounded by David Richardo. Weaver (2003) views the pension plan as a method to defer some compensation until an employee retires. The employer promises to provide a pension payment in exchange for current services. The deferral of wages often results in individual tax savings. The advantages to the employer in 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 (Ajiboye, 2011). The employer receives cash flow benefits to the extent that the present value of deferred wages exceeds the required funding. The deferred wage theory generally incorporates a long-term or lifetime implicit labour contract between the employer and employee that has various implications for the employer. Common Wealth (2023) indicates that the delayed vesting of pension plans may decrease employee turnover costs. Firms have the incentive to expand training costs as a result of delayed vesting, since it causes “average” employees to work longer for the company, resulting in a greater payback of these training costs. Deferred compensation refers to that part of one's contribution that is withheld and paid at a future date. Retirement plans and employee pensions are examples of deferred compensation. Employers usually withhold a fraction of employees' compensation every month, accumulate it over time, and pay the lump sum amount on a date previously agreed upon in the employment contract. Since the compensation is paid at a later date, the amount deferred for payment is not included while computing tax. Therefore, it reduces the amount of taxable income in the current year. However, the requisite amount of tax is deducted at the time the employee receives this payment. In some cases, employers invest the amount of deferred income into stock options or mutual funds. It increases the value of the payment due to the addition of interest payments and the possibility of capital gains.

Empirical Review

Fashagba (2018) studied how the administration of the Pension Scheme could be perked 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 showed that despite the provisions of the Act (the Pension Reform Act - PRA), intents for committing Pension Fraud have not been reduced to a significant extent. The study recommended among other things, the amendment of the Pension Reform Act to discourage acts of pension fraud by instituting severe punitive measures for culprits, and instilling moral ethics among public servants in Nigeria.

Ameh, Isiwu & Duhu (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 a 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 bonds, real estate and investment trusts to boost the Gross Domestic Product (GDP) of the country (Nigeria).

Christian & Wobiaraeri (2016) investigated the relationship between pension fund administration and infrastructure financing in Nigeria. The study answered four research questions and also tested four hypotheses. A correlation research design was used for the study. The population of the study consisted of all the licensed pension fund administrators in Nigeria. Simple random sampling was used to select 108 respondents for the study. Primary data and a questionnaire were used to elicit information from the respondents after the reliability and validity test. The data collected were analysed using descriptive statistics, while the hypotheses were tested using Pearson Products moment correlation at 95% level of confidence. Findings from the study showed that there is a significant relationship between Retirement Pension Accounts and return on economic and social infrastructural financing.

Ahmed (2016) examined some of the justifications 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 sources of information and personal interview. The primary source involved a field survey that consisted of administering a questionnaire. The sample size is one hundred and twenty respondents (120). A simple random sampling method was used in administering the questionnaire. The result of the analyses revealed that there is a significant relationship between adequate retirement packages and employees' productivity and that it has a positive impact on the organization's efficiency. Both the empirical study and oral interview conducted, however, found that the contributory pension scheme (CPS) has a positive potential over the defined benefits pension scheme (DBPS).

Okechukwu & Ugwu (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 pensions could be used for the establishment of small enterprises and infrastructural development.

Nwanne (2015) investigated the impact of contributory pensions on economic growth using simple percentages and chi-square. Most of the studies reviewed employed descriptive statistics which may not give clear and robust results of the impact of contributory pension funds on the Gross Domestic Product, hence this study sought to re-examine the concept through the use of a more robust econometric tool of SPSS and Granger Causality testing. It was recommended that investment outlets of pension funds should be increased and efforts should be intensified to ensure greater compliance and mobilization of savings from contributors.

Beredugo (2015) carried out a study on pension fund accounting and pensioners' well-being 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 significantly affected pensioners' well-being 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.

Marcellus & Osadebe (2014) reviewed 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 examined the promises of the reform vis-à-vis the pre-reform crisis-ridden pension administration in both the 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 a poverty relief programme and universal social security benefits to avoid scheme overloading. Above all, there is a need for enlightenment directed towards the employees understanding their rights and demanding it from the employers 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 copies of 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) researched 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 study thus suggested a reversion to the earlier position of keeping the pension funds of MDAs with the CBN to minimize the recurrent abuse of such funds by pension officials through unauthorized lodgments with Deposit Money Banks.

Methodology

Research Design

This study adopts the *ex-post facto* research design. This design is relevant to secondary data already available. *Ex post facto* investigation provides a solution to research problems by using data which are already in existence. Most importantly, the analysis when concluded can provide considerable insight into future outcomes (forecast). As rightly affirmed by Eme & Johnson (2012), *ex-post-facto* research design involves events that have already taken place.

Population and Sample of the Study

The research covered pension matters as it affects retirees in both the public service and private sectors of the Nigerian economy.

Sources of Data Collection

Data for this study were elicited from different institutions, Central Bank of Nigeria Statistical Bulletin and the National Pension Commission (PENCOM) annual report. The study period covers 2004 through 2020.

Method of Data Analysis

This study employed some estimation techniques which include descriptive statistics such as mean, standard deviation, analytical tools like multiple regression, unit root test of Augmented

Dickey–Fuller (ADF), Cointegration test, as well as Fully Modified Least Squares (FMOLS). The use of Ordinary Least Squares (OLS) has increased in literature over the years owing to its ability to accommodate dynamic relationships among variables. The estimate of the economic development of Nigeria is mainly on the postulation that the underlying data process is mixed in integration order. This assumption is verified by conducting the unit root test and cointegration analysis on the time series variables. E-views 9.0 version statistical programme was employed for the analysis.

Model Specification

This research adopted the econometric model previously used by Fashagba (2018) who empirically analyzed the effect of the new scheme on the economic growth in Nigeria.

The econometric model of this study, which had earlier been reviewed in the preceding section, is specified below:

$$PCI = f(\text{PubSPF}, \text{PrivSPF}, \text{TCPF}) \dots\dots\dots (3.1)$$

Where:

ED = Economic development

PubSPF = Public Sector Pension Funds

PrivSPF = Private Sector Pension Funds

TCPF = Total Contributory Pension Funds

f - Functional notation

From the above function, they derived the statistical models as follows:

$$ED = \beta_0 + \beta_1 \text{PubSPF} + \beta_2 \text{PrivSPF} + \beta_3 \text{TCPF} + \mu \dots\dots\dots (3.2)$$

Where:

β_0 - intercept

$\beta_1, \beta_2, \beta_3$ - coefficients of the independent variables

μ - Stochastic variable

Data Presentation and Data Analysis

The data collected are presented and analyzed and findings are reported in this section. The five variables computed for this study are presented in the Table below: Data on economic development, Public Sector Pension Funds, Private Sector Pension Funds and Total Contributory Pension Funds from 2004 to 2020.

Table 1: Data Presentation
Data on Dependent and Independent Variables (2004-2020)

Year	PrivSPF (₦' b)	PubSPF (₦' b)	TCPF (₦' b)	ED (₦' b)
2004		15.6	15.6	992.7453
2005		34.68	34.68	1250.407
2006	23.03	37.36	60.39	1652.154
2007	68.34	80.63	148.97	1876.413
2008	80.81	99.28	180.09	2227.79
2009	91.21	137.1	228.31	1883.887
2010	103.03	182.46	265.49	2280.112
2011	119.53	228.92	348.45	2504.878
2012	159.52	302.24	461.76	2728.023
2013	225.42	278.5	503.92	2976.757
2014	343.97	237.76	581.73	3200.953
2015	358.91	200.05	558.96	2679.555
2016	262.33	225.86	488.2	2144.78
2017	353.73	257.11	610.84	1941.879
2018	340.72	226.64	607.55	2125.834
2019	369.13	331.56	700.69	2204.182
2020	371.12	536.97	908.09	2074.614

Source: CBN Statistical Bulletin, World Bank Dev. Indicator and Pencom Annual Report

Table 1 presents the data of the variables for analysis: Human Development Index, Economic development, Public Sector Pension Funds, Private Sector Pension Funds and Total Contributory Pension Funds. The data were gathered from the year 2004 to 2020.

Inferential Result

Table 2: Co-integration Regression Results (PCI)

Dependent Variable: ED

Method: Fully Modified Least Squares (FMOLS)

Date: 01/18/23 Time: 05:52

Sample (adjusted): 2007 2020

Included observations: 14 after adjustments

Cointegrating equation deterministics: C

Long-run covariance estimate (Bartlett kernel, Andrews bandwidth =

9.2709)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ED(-1)	0.066768	0.070817	0.942821	0.3891
PRIVSPF	7.124565	1.838416	3.875383	0.0117
PUBSPF	6.702796	1.615885	4.148065	0.0089
TCPF(-1)	0.082042	0.455413	0.180149	0.8641
C	1586.065	123.8267	12.80875	0.0001

R-squared	0.939568	Mean dependent var	2346.404
Adjusted R-squared	0.842877	S.D. dependent var	412.2782
S.E. of regression	163.4221	Sum squared resid	133533.8
Long-run variance	2430.981		

Source: Researcher’s Computation (2022)

The Fully Modified Least Squares (FMOLS) result as shown in Table 2 suggests that all the explanatory variables have a positive influence on the explained variable. That is, the independent variables in the model exerted a positive influence on the dependent variable. The result further revealed that a unit increase in Private Sector Pension Funds would bring about a 7.13-unit increase in economic development, while a unit increase in Public Sector Pension Funds would bring about a 6.70-unit increase in economic development. Also, a one-period lag unit increase in Total Contributory Pension Funds would bring about a two-period lag .008-unit increase in economic development.

A keen observation of the result shows that the R-squared and Adjusted R-squared was approximately 0.94 and 0.84 respectively. This means that the explanatory variables accounted for about 94% of variations in the explained variable. Put differently, about 94% of the variation in economic development was explained by the independent variables, while the remaining 6% may be attributed to variables not captured in the model (stochastic variables).

Test of Hypotheses

The researcher tested three hypotheses which were earlier stated in the null form. The purpose of this section is to draw inferences following the results obtained from data analysis and hypotheses tested.

Decision Rule: The researcher used p-value as the basis for acceptance and rejection of null hypotheses. Where the critical p-value computed is less than a 5% significance level, the variable was taken as being significant, hence it was rejected.

Test of Hypothesis One

H0₁: There is no significant impact of Private sector pension contribution on economic development in Nigeria.

Variables	Coefficient	t-Statistic	P-value
PrivSPF	7.12	3.875	0.0117

Source: Researchers’ Computation (2022)

The test of hypothesis (H0₁) revealed that the p-value of PrivSPF (0.0117) is less than the 0.05 significance level. The researcher, therefore, rejects the null hypothesis. This result shows that Private sector pension contributions have a significant influence on economic development in Nigeria.

Test of Hypothesis Three

H₀₃: There is no significant impact of total pension fund on human development index in Nigeria.

Variables	Coefficient	t-Statistic	P-value
TCPF(-2)	0.082	0.180	0.8641

Source: Source: Researchers' Computation (2022)

The test of hypothesis (H₀₃) revealed that the p-value of TCPF for one period lag (0.8641) is greater than the 0.05 significance level. The null hypothesis which states that there is no significant influence of total contributory pension fund on economic development in Nigeria is not rejected.

Summary of Result

1. Private sector pension contribution funds statistically and significantly influence economic growth within the study period.
2. Public sector pension contribution funds statistically and significantly influence economic growth within the study period.
3. The impact of total contributory pension funds is statistically insignificant on economic growth within the study period.

However, the total variations on the dependent variable jointly explained in the independent variables R² were 93% for the first model, while the second model recorded 94% explanatory power; this is an indication of a high level of goodness of fit of the regression line.

Conclusion

The study examined the influence of contributory pension scheme on economic development in Nigeria. Based on the result of the test of hypotheses, it is submitted that the contributory pension scheme influences economic development in Nigeria positively.

Recommendations

Based on the results, a summary of findings and conclusions discussed in the foregoing paragraphs, the government and policy-makers in Nigeria should consider the following recommendations to improve contributory pension fund administration for effective economic development.

i. Since Private sector pension contribution funds have a significant positive influence on economic development, governments at all levels have to ensure that the welfare of the retirees in the private sector is taken into consideration, by ensuring that the private sector complies with the provisions of the Pension Reform Act 2014. If this is achieved, economic development would be attained through improvement in the standard of living of the citizens.

ii. From the results of the analysis, it was discovered that public sector pension contribution funds had a significant positive influence on economic development in Nigeria. This goes a long way to show the vital part such funds could play in providing investible funds in the economy as well as being available for the consumption and well-being of retirees (if properly pooled). So the government at all tiers needs to ensure the implementation of the contributory pension scheme, to guarantee a continuous increase in economic development in Nigeria.

iii. Since total contributory pension funds recorded positive and insignificant influence on economic development in Nigeria, it is important for governments at all levels to key into the

scheme by fully complying with the provisions of the Pension Reform Act 2014; enhance service delivery by pension operators and increase public awareness. This would increase the pool of pension funds available for investment and improve the economy/the standard of living of the populace. of the populace which would in turn improve

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