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EFFECT OF PENSION FUND ACCOUNTING ON ECONOMIC GROWTH IN NIGERIA

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Abstract: The study seeks to examine the effect of pension contributory fund on the economic growth of Nigeria. Both the exploratory and ex-post facto designs were adopted in this study. The study population consist of 12 (2010 – 2021) years period given the number of years the data was collected. Using a consensus sampling method, the 12 years are used as sample size. The study used the ordinary least square regression technique, specifically the Vector Autoregressive model for testing the hypotheses stated. The first findings revealed that, employer pension fund has a negative insignificant effect on gross domestic product in Nigeria. While, the second hypotheses tested revealed that, employee pension fund has a negative insignificant effect on gross domestic product in Nigeria. Lastly, the final hypothesis tested revealed that, combined employee pension fund has a positive insignificant effect on gross domestic product in Nigeria. As a result, it is recommended that, government and other private employers must upscale their respective contribution to pension fund of their respective employees/staff to enable pension houses access enough fund for investment. This investment will drive development in the form of bursting manufacturing activities and production to upscale contribution to the gross domestic product of Nigeria. Employees on their path must adequately remit their pension contribution to pension houses. This will increase the amount of pension fund accessible for investors to contribute to economic growth and development. It is recommended that pension house should direct the combined pension fund available into investment. This is the only viable means to contribute to economic growth.

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1.1. INTRODUCTION

The accumulated pension expense over an accounting period and the release of information on pension plan's assets and liability of a firm is termed pension accounting. Pension plans are initiated to ensure that pensioner's benefit depict the value of the service offered by them. Pension and pension contribution scheme are integral and subset of pension accounting. Pension can be described as the sum of money remitted on a regular basis to an individual who is no longer in active service as a result of old age, disability or retirement. The benefit of the contributory scheme could be enjoyed by the deceased wife and dependent children. The financial contribution is usually made by the state, former employers and the employees while in active service or from provident fund provident fund to which the employer and employee contributed.

Pension contribution scheme was embraced in Nigeria far back 2004 with a view to ameliorating the challenges associated with the old pension fund. The means through which the scheme obtains fund is from contribution from both the employer and the employee. One of the major reasons for this social contribution scheme is ensure that after active service, a retired employee would have enough savings to take care of himself. The scheme has not performed badly in Nigeria as it has entrenched financial deepening within the economy for the period it has been in existence. The Pension Scheme has made available huge capital outside the core financial sector (bank) for both long and short term investments to safeguard the pension assets with its attendant positive effect on the economy such as economic growth.

Prior to 2004, the pension fund system had numerous challenges which made the payment of the retired benefit a fiasco in Nigeria. Koripama-Agari and Yunusa (2009) noted that some of the challenges confronting the pension scheme included lack of sufficient and well-timed budgetary provision, rise in life expectancy, increment in the number of employees, poor implementation of pension scheme in the private sector consequent of inadequate supervision and regulation of the system and too many private sector employees yet to be covered by any form of pension scheme. Consequent upon these daunting challenges, Nigeria government, during Obasanjo regime introduced a reform via the introduction of Pension Act of 2004. The reason for the introduction of the new Pension Act 2004 was to address some of the identified loopholes that were bedevilling the old benefit pension scheme and to ensure sufficient provision of resources to retirees after retirement from active service. For continuity and sustenance of the new scheme, and also to add value to the scheme, there arises the urgent need to make sound and uniform investment decision.

In fact the scheme should be run as a critical business to ensure value addition to the large pool of resources through the Retirement Savings Account (RSA) contribution. The proper safeguard and protection of these pension assets are usually boosted through proper investment and market analysis and it is the Pension Fund Administrators (PFAs) that is saddled with this responsibility. The Pension Fund Administrators has an organ whose responsibility it is to record all outflows and inflows of pension assets within the PFAs entity. Investment is very risky which could be political, economic and market in nature. Investment and market analysis of these Pension Fund Administrators (PFAs) are always propelled. To ensure that there is protection of all pension assets (Ahmed, Abayomi & Nureni, 2016) and Fashagba (2018).

Efficient and effective management of all assets and resources at the coffers of Contributory Pension Fund Scheme being managed by Pension Fund Administrators (PFAs) has had impact on the economic growth of Nigeria through the provision of large pool of resources for both long and short term investment as well as ensuring prompt payment of the pension and gratuity of retirees in Nigeria. The economic growth of the Nigerian economy must have been affected through this scheme either positively or negatively. Economic growth can be measured using Gross Domestic Product (GDP). Therefore, this study seeks to examine the effect of employers' and employees' contributions via the pension scheme on the economic growth of Nigeria. The study is motivated by the fact that no recent study has made any frantic and objective effort to x-ray how employers and employees contributions to the pension scheme, taking independently, affect the economic growth in Nigeria.

1.2. STATEMENT OF THE PROBLEMS

Though the Pension Reform Act, 2004 is steered by the main principles of sustainability, accountability, equity, flexibility and practicability, fears are entertained that the financial assets or Retirees Savings Account (RSA) contributions may be not adequately managed by the existing trustees. It is generally believed that the risk of a given portfolio influences the return on investment. Some pension fund administrators do not possess the relevant management risk analysis profile whereas some others pay regard to rating signals needed for proper investment decisions. Efficient and effective investment decision and proper management of the fund have bearing on what the pensioners go home with and the amount they go home with after active service certainly influences their quality of life upon retirement. If the investment decisions of the trustees of the pension scheme is done in such a professional manner that there will be return on investment visa a viz the investment of pension fund financial assets, pensioners would have adequate benefit upon retirement as and when due. Worthy of note is that the current contributory pension scheme being funded by employers and employees have been relatively a success. For this this reason the study critically examines the effect of employers' and employees' contributions on the standard of living of Nigerians since many Nigerians who are into private business, employed by private firm or employed in the public sector have enrolled into the pension scheme. Employers' and employees' contributions are the predictor variables while response variable is the Human Development Index (HDI) of Nigerian in the years under study.

1.3. OBJECTIVES OF THE STUDY

The main objective of this study is to examine the effect of pension contributory fund on the economic growth of Nigeria.

In specific terms, the study objectives are as follows:

1. To determine the effect of employers' pension fund on economic growth of Nigeria.
2. To determine the effect of employees' pension fund share on economic growth of Nigeria.
3. To determine the effect of combined employers' and employees' pension fund on economic growth of Nigeria.

1.4. HYPOTHESES

The hypotheses are stated in null form thus:

1. Employers' pension funds share does not have any significant effect on economic growth of Nigeria.
2. Employees' pension funds share does not have any significant effect on economic growth of Nigeria.
3. Combined pension fund of employers and employees do not have any significant effect on economic growth of Nigeria.

2.1. REVIEW OF RELATED LITERATURE REVIEW

2.2. CONCEPTUAL FRAMEWORK

Economic Growth and Economic Development: A policy intervention efforts targeted at the economic and social well-being of people is termed economic development (Salmon Valley Business Innovation Centre, 2014). It concerns itself with improvement in the quality of life of people, creation of new goods and services using modern technology, lessening of risk and bringing to bare dynamics of innovation and entrepreneurship (Hadjimichael *et al.*, 2014) in (Ofoegbu, Akwu and Oliver, 2016). The objective of economic development is to make the environment favourable for local communities and regions to develop new ways of production of goods in such quantities that may lead to exportation to other countries. Availability of financial resources from exportation leads to more investment in infrastructure for the benefit of the society and improvement in living conditions of the people, in education, transportation networks, health conditions, water supply, sewage and sanitation conditions (SVBIC, 2014) in (Ofoegbu, Akwu and Oliver, 2016). The changes create the conditions for long-run economic growth by positioning the economy on a higher growth trajectory (Hadjimichael *et al.*, 2014) in (Ofoegbu, Akwu and Oliver, 2016). Economic development is different from economic growth. Economic growth specifically means an increase in the value of goods and services produced by a country over a period. Economists use an increase in nation's GDP to measure it. Therefore, it is possible to have economic growth without economic development in the short or even medium term (Hadjimichael *et al.*, 2014). On the other hand, there could be an increase in GDP without any increase in standard of living of people in a state. Environmental conditions that would enhance economic growth must be created through an investment of the national wealth in infrastructural development for successive improvement in the standard of life of the population of a country (Wilkins and Zarawski, 2014) in (Ofoegbu, Akwu and Oliver, 2016). Authors use economic growth and development interchangeably and also use GDP as measurement indicator for both. On the other hand, given that the two are different, any effort to use GDP as a measure for the two gives inaccurate outcome on economic development. Robert *et al.* (2009) placed emphasis on the need for an innovative measure of progress in the wellbeing of people.

A Synopsis of Pension Systems in Nigeria

The Nigeria's first legislative instrument on pension matters was the Pension Ordinance of 1951, which had retrospective effect from 1st January, first legislation 1946. The National Provident Fund (NPF) Scheme established in 1961 was the first legislation enacted to address pension matters of Private Organizations. It was followed 18 years later by the Pension Act No. 102 of 1979, as well as the Armed Forces Pension Act No. 103 which was enacted the same year. In 1987, the Police and other Government Agencies' Pension Scheme were enacted followed by the Local Government Pension Edict which culminated into the establishment of the Local Government Staff Pension Board of 1987. The National Social Insurance Trust Fund (NSITF) Scheme was established by Decree No.73 of 1993 to replace the defunct NPF Scheme with effect from 1st July, 1994 to take care of employees in private sector of the economy against loss of the employment income.

Orewa and Adewumi (1983) noted that local government system equally set up Local Pension Schemes for their staff, with a separate board known as the Local Government Pension Board. This body was set up to take care of the local government staff that would have retired from 1st April, 1979. The new and recent Pension Reform Act 2004 set up in 2004 was passed into law by the National Assembly. Before the year 2004, a Defined Benefit (Pay-As-You-Go) scheme as well as final entitlements were based on length of service and terminal emoluments. However, the defined benefit pension scheme in Nigeria had a lot of challenges such as inadequate budgetary allocation resulting in unprecedented and unsustainable outstanding pension deficit estimated at over N 2 trillion before 2004 (Balogun,2006), weak, inefficient and opaque administration. There was no authentic list/data base on pensioners and about 14 different documents were needed as requirement for one to make pension claims. This made the process a herculean task and uninteresting too. The identified challenges made prompted the replacement of the Defined Benefit (Pay-As-You-Go) with Scheme Pension Reform Act of 2004. As noted by Edogbanya (2013), restrictive and sharp practices in the investment and management of pension funds worsened the problems of pension liabilities and more than three hundred parastatals' schemes were insolvent. Other identified weakness were under-funding, unsustainable outstanding pension liabilities, weak and inefficient pension administration, demographic shifts and aging of the scheme, lack of courage of workers in the private sector as a result of mandatory retirement benefit arrangement, and poor regulation of the hitherto scheme. Following the above identified problems, the Defined Benefit Scheme was finally dumped and replaced with the funded contributory benefit scheme in July, 2004.

In the Federal Public Service, Federal Capital Territory and the private sectors- including informal sector employees, the new pension scheme was established in 2004. The following are the major operators of the new pension scheme- the National Pension Commission (Pencom), Pension Fund Administrators (PFAs), Closed Pension Fund Administrators (CPFAs), and Pension Fund Custodians (PFCs). As a contributory scheme, employees are to make minimum contribution of 7.5% of basic salary, housing and transport allowances. Similarly, employers are to contribute the same 7.5%.

From the foregoing, the least monthly total contribution of both employer and employees contributors under the scheme is 15% of basic salary, transport and housing allowances. For the purpose of the regulation, supervision and ensuring effective administration of pension matters, PenCom was established. Therefore, PenCom under the pension scheme Act has among other responsibilities; the setting of rules for the management of pension funds, approve, license and regulate PFAs, PFCs, CPFAs, manage nationwide data bank on pension, imposition of sanctions/penalties on non-compliant employers, PFAs, PFCs and CPFAs as well as make sure that payments and remittance of contributors are made and recipients of retirement savings accounts (RSA) are paid as and when due. In a bid to avert the insolvency and lack of continuity that bedevilled the former Defined Benefit system. The Act and subject to enforcement by PenCom, particularly spelt out the investment of pension assets (Edogbanya, 2013).

Objectives of the New Pension Scheme in Nigeria

Ahmed (2006) identified the following objectives of the new Contributory Pension Scheme as follows: (a) Ensuring that every workers receives his retirement benefits as and when due. (b) to empower the worker and assist workers to save in order to cater for their livelihood during old age. (c) to stop the growth of pension liabilities (d) establish rules, regulation and standards for the administration of pension matters (e) (f) secure compliance and promote wider coverage (g) regulate the bodies and operators functional under the new system**.** The monitoring Bodies and the Operators in the new system are National Pension Commission, Pension Fund Administrators, Pension Fund Custodians, and the Closed Pension Fund Administrators

The Challenges of Contributory Pension Scheme

Payment of the benefits to the Retirement benefits to the Retirement Savings Account (RSA) by institutions and corporate bodies, employer and employees has been a herculean task. Besides, the doubt regarding how genuine and competent are the licensed pension fund administrator and custodians has been another serious challenges deterring enrolment in the new PC. Again, entrenchment of sustainable legal framework by government to ensure that in spite of political changes, the scheme is sustained by subsequent government. The most effective way or means of ensuring effective execution of penalties in the act of non-compliance notwithstanding their position and source. Modalities and procedures to ensure effective and efficient monitoring, supervision and enforcement of the provisions of the Pension Reform Act 2004 are not properly streamlined. It is not well stipulated how would be beneficiaries (retirees) would be compensated in the event of default or liquidation of PFAs or PFCs (Edogbanya, 2013).

2.2. THEORETICAL FRAMEWORK

Theory of life cycle

This theory informs that a god pension scheme motivates the workforce to put their best in the workplace as they look forward to a rewarding retirement era. This retirement benefit of the individual is dependent on his consumption pattern and decision of the individual who is involved in administering improved conditions of service, providing enough resources to enhance productivity or output at his workplace. There is also the perception that the supply side (the employer) of the theory functions as an inducement for personnel to continue staying in the organization for a long time. The theory improves the average wealth of a retiree, especially when the assets are carefully invested to generate large income for redistribution to contributors (Ahmed, Abayomi, & Nureni, 2016).

2.3. EMPIRICAL REVIEW OF LITERATURE

Edogbanya (2013), adopted correlation analysis for testing secondary data and ANOVA for testing the primary data obtained. The empirical result of the correlation analysis applying t-test revealed that Contributory Pension Scheme (CPS) has significant effect on the GDP whereas the result of the ANOVA revealed the risk prevalent has positive effect on the pension fund management.

Baridoo & Leyira (2019) employed multiple regression with the aid of OLS. The findings revealed that there is positive significant relationship between public sector PenCom contribution and real GDP and Per Capita Income. However, a negative nd insignificant nexus exist between private sector Pension contribution with Real GDP and Per Capita Income.

The nexus between pension, economic growth and economic development has currently received wide attention and studied. The outcomes of the empirical studies are reviewed hereunder. Nwanne (2015) studied the nexus among the contributory pension scheme and economic growth and economic development applying the Ordinary Least Square (OLS) on the secondary data. The study revealed a negative and significant effect of pension fund saving on economic growth. Edogbanya (2013) applied the Pearson Product Movement correlation coefficient and t-test method of analysis on primary and secondary data to determine the nexus between fund and the economy. The study revealed that an effective pension fund investment has enormously effect on the economy as a whole. Farayibi (2016) discovered that over 96% of the total variation in the real gross domestic product is explained by changes in the variables of the pension funds. The ECM and OLS examination of the study showed that pension contribution funds from both public and private sectors have positive impact on the economic performance. Ameh, Isiwu and Duhu (2017) revealed that more or less 82% of the disparity in economic growth in Nigeria is linked to the disparity in indices of the new contributory pension fund assets and pension fund contribution and venture or investment. Nevertheless, the nexus between the pension investment and economic growth is reveaed to be significant at 5 % confidence interval. Furthermore, Bijlsma, van Ewijk & Haaijen (nd) x-rayed the link between assets and economic growth and concluded from the empirical results that growth of funded pension system has positive effect on economic growth in OECD countries. Employing botht-test and Pearson Correlation Test with SPSS, Akowe, Ocheni and Daniel (2015), the study revealed that four out of the five variables of pension have positive relationship with gross domestic product while indicating that three relationship are significant. Yilmaz and Ozturk (nd) pursued to discover the causal interaction among economic growth, pension fund and financial sector development. Empirically, the result of the study displayed a bilateral causality. That is to say that increase in pension fund influences economic growth and vice versa. Eke and Onafalayo (2005) opined that GDP affect pension fund assets in a positive manner. The implication of this being that there exist a direct link between the economy measured in relation to GDP and pension asset. The study drew a conclusion that economic growth will bring about expansion in pension assets. Mesike and Ibiwoye (2012) employed multiple regression and error correction model method of analysis in finding the relationship between pension reform and financial market advancement. The result of the analysis revealed that there exist a contractual saving which stirs up security market development.

3.1. METHODOLOGY

3.2. RESEARCH DESIGN

The data is obtained from secondary sources. The time series data obtained for this study were sourced from various sources such as Organization for Economic Co-operation and Development (OECD), PenCom Annual Reports (issues from sources 2010 2020), Central Bank of Nigeria (CBN) Statistical Bulletin (2016), National Bureau of Statistics (NBS) and the World Bank.org. The period covered spans from 2010 to 2021, which is a representation of the time span of the implementation of the funded pension scheme in Nigeria. Precisely, data on pension fund scheme for employers (PFCER), pension fund contribution for employees (PFCEE) and total pension fund (TPFCEREE) were obtained from OECD.com. Data on GDP were obtained from the World Bank database. The population of this study is Nigeria. A cross sectional examination of the effect of pension fund accounting on economic growth of Nigeria. Judgmental and stratified sampling method were adopted in selecting the sample for the study. The sample size include employers who are participating in the current contributory pension scheme and employees who are contributors to the current contributory pension fund scheme.

3.3. DATA COLLECTION METHODS

In relation to this study, secondary data is collected from reliable sources. The methods adopted regarding data collection in this research include archival retrieval method, document investigation/analysis, and extensive library search, internet and website surfing. The data to be used in this study will be collected based on the variables identified in the research objectives. The data for Gross Domestic Product (GDP), Pension Fund Contribution from Employers (PFCPER), and Pension Fund Contribution from Employees within the period under study (PFCEE) would be obtained from the World Bank website, IMF World Economic Outlook database, OECD Online Database and UNCTAD online database, Central Bank of Nigeria and African Statistical Year Book publications.

3.4. SOURCES OF DATA

Data used for this study were obtained from secondary sources. They were obtained from the World Bank website, IMF World Economic Outlook database, OECD Online Database and UNCTAD online database, African Statistical Year Book publication and CBN for the period under study, that is, 2011 – 2021.

3.5. DATA ANALYSIS TECHNIQUES

Multiple Regression (Ordinary Least Square method) analysis would be used to test the significance of the independent variables on the dependent variable in each country model. Then, a panel data analysis using multiple regression analysis would be performed on the data collected. Finally, the study would use pooled panel multiple linear regression analysis to determine the effect of tax revenue components on economic growth of Nigeria.

3.6. MODEL SPECIFICATION

Upon the theoretical framework and the far-reaching appraisal of the current funded pension scheme, the concern in this subsection is to make an attempt to model the relationship between the pension scheme and economic development in Nigeria.

Thus the model represented in functional form below is adapted from the work of Baridoo & Leyira, 2019.

$$GDP = f\ (PFCER, PFCSEE, TPCEREE)$$

Therefore the regression form of the model specification is thus: a

$$GDPIt = \beta0+ \beta1PFCER+ \beta2PFCEE+ \beta3TPFCEREE+ut)$$

$$(\beta1, \beta2, \beta3 > 0)$$

Where the response/ dependent variable is GDP and contributory pension scheme for the employers, contributory pension scheme for the employees and total contributory pension scheme of the employers and employees on the right-hand side are predictor/ independent variables.

GDP = Gross Domestic Product

PFCPER = Pension Fund Contribution from Employers

PFCEE = Pension Fund Contribution from Employees within the period under study

TPFCEREE = Total Pension Fund Contribution from Employers and Employees within the period under study

Ut = Error term

4.1. DATA PRESENTATION AND ANALYSIS

4.2. DATA PRESENTATION

This section of the chapter presents the data extracted from the CBN statistical bulletin for each of the variable used in this study. The data used were obtained for 12 years (2010-2021).The data presented in the appendix were analysed with the aid of Stata 13. The analysis of data is presented below.

4.2.1. Descriptive Statistics

The descriptive statistics for both the dependent and independent variables are presented in table 4.1 below:

Table 4.1: Descriptive Statistic Table

Variable	*Obs.*	*Min*	*Max*	*Mean*	*Std. Dev.*	*Skew.*
GDP	12	10.63562	11.75473	11.56657	.2993646	0.0000
EPPF	12	5.123018	5.589587	5.431377	.1357311	0.0549
EYPF	12	5.123018	5.464059	5.379288	.1058902	0.0198
CEPF	12	5.424048	5.831676	5.706238	.1188466	0.0267

Source: Stata 13

Table 4.1 presents the descriptive statistics of all the variables. The number of observations for the study is 12. From the table above, the following information is distilled.

The descriptive statistic result reveal, Gross Domestic Product (GDP) reveals a mean of 11.56657 with a deviation of 0.2993646. GDP further reveals maximum and minimum values of 11.75473 and 10.63562 respectively. Employer Pension Fund (EPPF) has a mean of 5.431377 with a deviation of 0.1357311. Furthermore, EPPF records a maximum and minimum value of 5.589587 and 5.123018. Employee Pension Fund (EYPF) has a mean of 5.379288 with a deviation of 0.1058902. Furthermore, EYPF records a maximum and minimum value of 5.464059 and 5.123018. Lastly, Combined Employee Pension Fund (CEPF) has a mean of 5.706238 with a deviation of 0.1188466. Furthermore, CEPF records a maximum and minimum value of 5.831676 and 5.424048.

To test for normality of data, the skewness statistics is used. For GDP, the data set reveal a skewness value of 0.0000, while data for EPPF, EYPF and CEPF reveal skewness values of 0.0549, 0.0198 and 0.0267 respectively. This means the data values are normally skewed within the stipulated region of -2 and +2. The result of the descriptive statistics in respect to the study variables shows the level of fluctuation that occurs as a result of economic uncertainties, as well as change in government policies. This is noted in the respective deviation values of the variables.

4.2.2. Stationarity Test

In order to ensure that the results are robust, several diagnostic tests are conducted to enhance the validity of data and model specified for analyses. As such, data diagnostic test such as; the Unit root test and the Co-integration test are computed.

4.2.2.1. Unit root

To avoid running a spurious regression, unit root test is carried out to ensure that the variables employed in this study are mean reverting i.e. stationary. For this purpose, the Augmented Dickey Fuller (ADF) test is employed to test for stationary of data. The result of the test is presented in the table below.

Table 4.2: Unit root result

Variable	*Test Stat.*	*5% Critical Value*	*Difference*
EPPF	-2.461	-1.950	1st
EYPF	-2.856	-1.950	1st
CEPF	-2.624	-1.950	1st
GDP	-2.102	-1.950	1st

Null: There is serial Unit Root in the data

Source: Stata output in appendix ii

The table above shows the result of the first test required to know the stationarity of the variables. For the individual stationarity test, the Augmented Dickey-Fuller (ADF) unit root test is used. The ADF unit root test result for result for individual stationarity is interpreted using the Test Statistic measured against the critical value to ascertain the level of individual stationarities of the time-series data.

The result above shows that, data for the variables were stationary at 1st difference (ADF) with a Test Statistics> critical values for all the variables. Since the variables data set are individually stationary at 1st difference order, there is need for cointegration test to be carried out to ascertain if the data are mean reverting in the long run.

4.2.2.2. Co-integration Test

H_0: There is no co-integration

Table 4.3: Co-integration Result

Statistic	*Rank 0*	*Lag 1*	*Lag 2*	*Lag 3*
Trace Stat.	126.7184	35.1266	11.8245*	1.6401
Critical Value	47.21	29.68	15.41	3.76
Decision	+	+	-	-
Lag criteria	*	*		

Source: Stata output in appendix ii

The table above reveal the result of Johansen co-integration test for the time-series data. To ensure the level of cointegration of the data set, the trace statistics values listed in the table above is considered against their respective critical values to ensure a more robust test for cointegration; it is expected that the Ranked trace statistics>critical values.

From the Rank (0) order result, the trace statistics of 126.7184<47.21 critical value; it means there is cointegration at ranked level. Also, the result reveals cointegration at Lag-1 with trace statistics of 35.1266 against a critical value of 29.68. The results for Lag-2 and Lag-3 reveal trace statistics of 11.8245 and 1.6401 which is less than (<) 15.41 and 3.76 critical values. This means there is no cointegration if the data is lagged for 2 and 3 series. But the study is restricted to Lag-1 decisions given the lag selection criteria of 1 and (0) in appendix ii of the study, it also means there is no need to compare the VAR against the VECM model in analyzing the data for this study. Thus, the VAR model is preferred.

4.2.3. Regression of the Estimated Model Summary

This section of the chapter presents the results produced by the vector autoregressive model summaries for further analysis.

Table 4.4: GDP VAR Regression

VAR Variable	*Coefficient*	*R-Square*	*Constant*	*Prob.*
GDP		0.0822	16.63701	0.9120
EPPF	-13.97544			0.713
EYPF	-14.03917			0.674
CEPF	27.09278			0.704
Lagrange (1)	Probability	0.63510		

Source: Stata output in appendix ii

For model fitness, the R^2 value is used to establish the level of overall fluctuation the study independent variables (EPPF, EYPF & CEPF) can cause GDP as the dependent variable to change.

The R-square values of 0.0822 shows that EPPF, EYPF and CEPF cause GDP to fluctuate at approximately 8.2%; this means that 91.8% fluctuation of Nigeria's GDP is caused by other factors not considered in this study like FDI and manufacturing activities.

The constant value of 16.63701 for the model revealed that, given intercept only model, the GDP value of Nigeria will increase by 16.63701 units. But a unit change in EPPF will cause GDP to decrease by 13.97533 unit. A unit change in EYPF will cause GDP to decrease by 14.03917 units. But a unit change in CEPF will cause GDP to increase by 27.09278 units. The lag-range multiplier value of 0.63510 shows there is no issue of autocorrelation in the model.

4.3. TEST OF HYPOTHESES

Ho_1: Employer pension fund has no significant effect on gross domestic product of Nigeria.

To test the significance of the variables, the decision rule stated in chapter 3 is used. Since the calculated probability (Prob) value for EPPF against GDP (0.713) is greater than the accepted probability value of 0.05. The null hypothesis is accepted and the alternative rejected. Thus, employer pension fund has no significant effect on gross domestic product of Nigeria.

Ho_2: Employee pension fund has no significant effect on gross domestic product of Nigeria.

To test the significance of the variables, the decision rule stated in chapter 3 is used. Since the calculated probability (Prob) value for EYPF against GDP (0.674) is greater than the accepted probability value of 0.05. The null hypothesis is accepted and the alternative rejected. Thus, employee pension fund has no significant effect on gross domestic product of Nigeria.

Ho_3: Combined Employee pension fund has no significant effect on gross domestic product of Nigeria.

To test the significance of the variables, the decision rule stated in chapter 3 is used. Since the calculated probability (Prob) value for CEPF against GDP (0.704) is greater than the accepted probability value of 0.05. The null hypothesis is accepted and the alternative rejected. Thus, combined employee pension fund has no significant effect on gross domestic product of Nigeria.

4.3. DISCUSSION AND INTERPRETATION OF RESULTS

The study seeks to examine pension fund accounting and economic growth in Nigeria. Three research objectives were set to ascertain the effect of employer pension fund, employee pension fund and combined employee pension fund on gross domestic product in Nigeria. The study hypotheses tested revealed that, both employer pension fund, employee pension fund and combined employee pension fund has no significant effect on gross domestic product in Nigeria. The study findings conform with that of Baridoo and Leyira (2019) who employed multiple regression with the aid of OLS to examine private sector pension fund contribution to economic growth. Their study findings revealed that there is positive significant relationship between public sector PenCom contribution and real GDP and Per Capita Income. However, a negative and insignificant nexus exist between private sector Pension contribution with Real GDP and Per Capita Income.

5.1. SUMMARY OF FINDINGS

Employer pension fund has a negative relationship with gross domestic product in Nigeria. Also, employer pension fund has no significant effect on gross domestic product in Nigeria. Employee pension fund has a negative relationship with gross domestic product in Nigeria. Also, employee pension fund has no significant effect on gross domestic product in Nigeria. Combined employee pension fund has a positive relationship with gross domestic product in Nigeria. But combined employee pension fund has no significant effect on gross domestic product in Nigeria.

5.2. CONCLUSIONS

Employer pension fund has a negative insignificant effect on gross domestic product in Nigeria.

Employee pension fund has a negative insignificant effect on gross domestic product in Nigeria. Combined employee pension fund has a positive insignificant effect on gross domestic product in Nigeria.

5.3. RECOMMENDATIONS

Government and other private employers must upscale their respective contribution to pension fund of their respective employees/staff to enable pension houses access enough fund for investment. This investment will drive development in the form of bursting manufacturing activities and production to upscale contribution to the gross domestic product of Nigeria. Employees on their path must adequately remit their pension contribution to pension houses. This will increase the amount of pension fund accessible for investors to contribute to economic growth and development. It is recommended that pension house direct the combined pension fund available to investment. This is the only viable means to contribute to economic growth and development.

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