

Pension Fund Contribution and Economic Growth in Nigeria

Ndum Ngozi Blessing

Department of Accountancy
Nnamdi Azikiwe University
Awka, Anambra State
ngodona71@gmail.com

Okoye Emmanuel Ikechukwu

Department of Accountancy
Nnamdi Azikiwe University
Awka, Anambra State

Abstract

This study assessed the relationship between Pension Fund contribution and Economic Growth in Nigeria utilizing time series data spanning for a twelve year period, from 2008 to 2019. Secondary data for the period were collected from the National Pension Commission (PenCom) Annual Reports, Central Bank of Nigeria, National Bureau of Statistics and World Bank development indicator (database) of twenty-one licensed pension fund administrator as at 31st December, 2019. The data collected were analyzed and tested for unit root, using the Augmented Dickey-Fuller test using E-Views, 9.0 statistical software. The Ordinary Least Square techniques were used to estimate three models in line with the formulated hypothesis. The results from the models revealed a significant positive relationship between pension fund contribution and gross domestic product at 5% level of significance. Following the empirical findings of this study, it was recommended that PenCom was advised to maintain efficient monitoring, supervision, and enforcement of the provisions of the Pension Reform Act 2004, which are inextricably linked to the Contributory Pension Scheme's contribution to Gross Domestic Product (GDP).

Keywords: Pension Fund, Fund contribution, and Economic growth

Introduction

The Pension Reform Act of 2004 (PRA) and the Pension Reform Act of 2014 were signed into law in Nigeria and are now in effect. The act that established the New Contributory Pension Scheme, applies to both public and private sector employees. Each employee and employer contribute a minimum of 7.5 percent of the employee's monthly emoluments under the program, although in the military, an officer contributes 2.5 percent and the company contributes 12.5%. An employer may choose to contribute on behalf of employees as long as the total contribution does not go below 15% of the employees' monthly emoluments. The scheme also 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. To ensure that every retiree in Nigeria is financially self-sufficient at retirement, the Pension Reform Act 2014 increased the minimum rate of pension contribution from 15% to 18% of monthly salary, with 8% contributed by the employee and 10% by the employer. A defined contribution fund is what this is called. When the employee retires, he or she receives the funds.

The new pension scheme in Nigeria is fully funded, which means that an employee's contribution is collected monthly from his or her income, and the employer contributes the corresponding amount, which is then sent to the appropriate retirement savings account. Thus, the pension assets are kept aside from the onset to meet future pension liabilities, and that every employee is required by law to open a Retirement Savings Account (RSA) in his name with a Pension Fund Administrator (PFA) of his choice. The act also required and specified that the pension funds assets collected are to be invested in securities and stocks from which the returns accrued to the retirees. Due to the relatively huge quantities of capital they handle, pension funds are often the largest institutional investors in many countries. As a result, many pension plans are now guaranteed by assets. As a result, there is a growing correlation between retirement income and the performance of these assets. Because pension funds are experts at assessing investment possibilities and dangers, improved investment performance and consequently utility maximization are expected. As a result, institutional investors, like as pension funds, take on the task of accumulating and managing their wealth opportunities.

The studies of various scholars on the attempt to ascertain the relationship between pension fund asset investment and economic growth have yielded divergent views, contradictory and inconsistency results. For instance, Ndugbu, Ojiegbe, Uzowuru and Okere (2015) found a negative relationship between pension fund asset investment and economic growth. On the other hand, Ofoeda, Gariba, and Amoah (2016) documented a positive relationship between pension fund asset investment and economic growth, while Rousseau and Wachtel (2011) found no relationship between pension fund asset investment and economic growth. In the light of the foregoing, there is a clear gap in knowledge which this study tends to fill. Most of the studies reviewed employed descriptive statistics which may not give a clear and robust results of the relationship between pension fund asset investment on Gross Domestic Product, hence this study seek to close gap in knowledge through the use of a more robust econometric tool via regression analysis using Pension Fund Contribution, which previous study failed to employ. Furthermore in an attempt of resolving the periodic gap, this present study is extended to 2019 as the scope of previous study ended in 2016. It is against this backdrop that this study tends to evaluate the relationship between Pension Fund Asset Investment and Economic Growth in Nigeria from 2008 to 2019. The main objective of this study is to evaluate the relationship between Pension Fund Asset Investment and Economic Growth in Nigeria. The specifically, the study ascertain the relationship between Pension Fund Contribution and Gross Domestic Product of Nigeria.

Conceptual Framework

Pension funds are financial intermediaries that gather and invest funds on a pooled basis for ultimate distribution to members in the form of pensions. They are typically sponsored by non-financial companies. In certain national financial markets, pension funds are among the most important entities. Pension funds are institutions created under a jurisdiction's social security policy. Social security refers to any set of collective policies or activities aimed at ensuring that individuals of a society achieve their fundamental necessities and are safeguarded from unforeseen events in order to preserve a socially acceptable level of living. The International Labour Organization (ILO) defines social security in its broadest sense as "the protection measures that society provides for its members through a series of public measures against economic and social distress that would otherwise be caused by stoppages or substantial reductions in earnings due to sickness, maternity, employment injury, unemployment, disability, old age, death, and the provision of medical care subsidies for families with children" (Yartey, 2008).

Pension Fund Contributions

A pension contributory system is one that ensures that employees receive their pension in a timely and adequate manner when they reach retirement age. The fund is governed by the Pension Commission. It's set up in such a way that your employer has no say in how your pension is invested or paid out to you. Every month, employees are asked to contribute 8% of their (Basic+Housing+Transport allowance). Every month, your company deducts this amount from your pay. Every month, your employers contribute a minimum of 10% of your (Basic+Housing+Transport allowance) on your behalf. A total contribution of at least 18% of your Basic, Housing and Transport Allowance is then transferred at the end of the month to your Retirement Savings Account (RSA), which is opened in your name by your Pension Fund Custodian. Your Pension Fund Administrators will then examine the amount and assist you in investing it. Employees are allowed to contribute more than the required 8%. Your company can also donate more than the 8% limit, or even the entire 18% limit on your behalf. You can also donate any lump sum amount on your own, as long as you meet the 8% contribution requirement. If you have extra money, you can simply contribute voluntarily. The Act exempts any sum paid as a retirement benefit from taxation. However, any income derived from a voluntary contribution (as defined above) will be taxed at the time of withdrawal if it is made before the end of the 5-year period after the date of the voluntary contribution. According to the Act, any employee who has three years (or less) left to retire prior to the commencement of the act is exempted. This means that only individuals who were scheduled to retire three years before to 2004 are free from the legislation; hence, all employees are not currently exempt. Section 291 of the Constitution of the Federal Republic of Nigeria 1999 exempts certain groups of people from the Scheme. Judicial officers include Supreme Court Justices, Judges, and others. Exemptions are also granted to members of the armed forces. The Pension Commission regulates and regulates the Pension Fund Administrators, and they operate under a set of guidelines. As a result, they must only invest your money in particular recognized marketplaces and within certain parameters. They can currently invest in equities, Treasury bills, bonds, real estate, and other permitted investments (Pension Reform Act, 2004).

Gross Domestic Product

The monetary value of all finished goods and services produced inside a country's borders in a certain time period is referred to as GDP. Private and public consumption, government expenditures, investments, private inventories, paid-in building expenses, and the international balance of trade are all included in GDP (exports are added, imports are subtracted). Foreign Direct Investment in the oil and non-oil sectors has had a favorable and considerable impact on Nigeria's Gross Domestic Product (Okegbe, Ezejiofor & Ofurum, 2019). The Gross Domestic Product (GDP) is a broad measure of a country's overall economic activity. GDP is a widely used metric of a country's economic health as well as a measure of its level of life. Since the mode of measuring GDP is uniform from country to country, GDP can be used to compare the productivity of various countries with a high degree of accuracy. Adjusting for inflation from year to year allows for the seamless comparison of current GDP measurements with measurements from previous years or quarters.

Theoretical Framework

The Life-Cycle Theory

The Life-Cycle Hypothesis (LCH) is an economic theory that pertains to the spending and saving habits of people over the course of a lifetime. The concept was developed by Franco Modigliani and his student Richard Brumberg in the early 1950s. LCH presumes that individuals plan their spending over their lifetimes, taking into account their future income. Accordingly, they take on debt when they are young, assuming future income will enable them to pay the debt off. They then save during middle age in order to maintain their level of consumption when they retire. This results in a "hump-shaped" pattern in which wealth accumulation is low during youth and old age, and high during middle age (Modigliani, 1966 in Deaton, 2005).

Anchored Theory

Because it was established that the development of a pension fund can be seen in three stages, namely start-up, growth, and maturity, this study is based on the life cycle theory. The life cycle hypothesis covers the three stages of development of pension fund managers, as well as their funding requirements. According to the life-cycle hypothesis, the sources of funding for pension fund managers are linked to their separate stages of development and, as a result, economic growth.

Empirical Review

Eke, Ndubuisi, and Eleagu (2018) explored the relationship between housing infrastructure investment and the safety-equity factor in the management of Nigeria's public pension funds. Ex post facto analysis was used to create the research design, which drew data from primary and secondary sources such as legislative acts/gazettes, guidelines, books, journals, conference, workshop, and seminar papers, newspapers, statistics tables, and the internet. The findings of this study revealed that, among other critical aspects required to create and preserve public pension contracts, public pension funds have strong correlations with the safety of funds and equity

returns factor. These findings pave the way for the development of future intellectual architecture in the field of pension fund administration. Ojiya, Ajie and Duhu (2017) embarked upon to provide empirical evidence on 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 concluded that pension fund assets and pension contribution /savings mobilized over the years have positive but insignificant impact on economic growth. The impact of Nigeria's contributory pension program on economic growth was explored by Ameh, Ajie, and Duhu (2017). The study's data came from a variety of PenCom Annual Reports and World Bank Development Indicators publications (database). Statistical Package for Social Sciences was used to calculate the data (SPSS). Pension fund assets and pension contribution/savings mobilized over time have a favorable but modest impact on economic growth, according to the findings. The relationship between pension fund administration and infrastructure financing in Nigeria was explored by Christian and Wobiaraeri (2016). The study addressed four research topics while also putting four hypotheses to the test. The study was conducted using a correlational research design. The population of the study consisted of all the licensed pension fund administrators in Nigeria. A simple random sampling was used to select 108 respondents for the study. The secondary data and questionnaire was used to elicit information from the respondents after the reliability and validity test. The research questions were analyzed using descriptive statistics, while the hypotheses were tested using Pearson Products moment correlation via SPSS at 95% level of confidence. Findings from the study show that there is Relationship between Retirement Pension Account and Return on Economic and Social Infrastructural Financing; also the study found that there is a significant Relationship between Superannuation Pension Account and Economic and social Infrastructural Financing in Nigeria. Agbata, Ekwueme, and Edirin (2017) investigated how the Pension Scheme administration in Nigeria may be improved by competent management, which would eliminate fraudulent behaviors in the scheme. A 5-point Likert Scale questionnaire was constructed to deduce main information concerning pension matters from a sample of 435 competent respondents, following the concept of library research via the survey design. The information gathered was presented and examined. Minitab version 17 was used to create multiple regression analysis models. Despite the provisions of the Act (the Pension Reform Act - PRA), the data reveal that the intent to perpetrate Pension Fraud has not decreased significantly. Also, the accumulated assets of pension funds have not been adequately diversified into profitable investment alternatives.

Methodology

Research Design

This study adopted the ex-post facto method of research and time series design procedure.

Population of the Study

In order to avoid the generation of spurious regression normally associated with time series data, the model specified above requires the test for the existence of unit root for each of the variables. This study makes use of the Augmented Dickey-Fuller (ADF) test.

Table 1: Detrended Result

Variables	Test Statistic	Test Critical Values			Status	Prob.
		1% level	5% level	10% level		
	ADF				Stationary	
GDP	-4.843076	-4.420595	-3.259808	-2.771129	1(1)	0.0167
PFC	-5.032030	-4.420595	-3.259808	-2.771129	1(1)	0.0019

Source: E-Views 9.0 ADF Output, 2021

Thus, it is clear in table 1 that all the variables have unit root in their level form but at first difference the variables became stationary. Thus, the model follows integrating process.

Test of Hypotheses

H₀: There is no significant relationship between Pension Fund Contribution and Gross Domestic Product of Nigeria.

H₁: There is significant relationship between Pension Fund Contribution and Gross Domestic Product of Nigeria.

Table 2: Ordinary Least Square regression analysis testing the relationship between GDP and PFC

Dependent Variable: DGDP
Method: Least Squares
Date: 01/11/21 Time: 29:07
Sample (adjusted): 2008- 2021
Included observations: 11 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.217050	0.659405	5.329160	0.0000
DPFC	0.629874	0.707845	6.889848	0.0000
R-squared	0.480866	Mean dependent var		0.010909
Adjusted R-squared	0.421260	S.D. dependent var		2.026171
S.E. of regression	2.047596	Akaike info criterion		4.434175
Sum squared resid	37.73383	Schwarz criterion		4.506520
Log likelihood	-22.38796	Hannan-Quinn criter.		4.388572
F-statistic	15.71829	Durbin-Watson stat		1.578144
Prob(F-statistic)	0.000010			

Source: E-Views Output, 9.0, 2021

Interpretation of Regressed Result

The model as shown in table 4 shows a good fit since it has an R-squared of about 48 per cent. This suggests that about 48% of the variation in economic growth is associated with variation in

pension fund contribution in the economy. In other words, only about 52% variation in economic growth is attributed to other variables other than PFC, captured by the stochastic error term. However, the p-value of 0.0000 and t-statistic values of 6.889848 suggests that PFC coefficient is statistically significant in explaining variation in economic growth. The PFC coefficient value of; $\beta_1 = 0.629874$ implies that GDP positively correlates with PFC. On the basis of a priori expectation, the variable (PFC) has the expected positive signs.

$$GDP = 0.217050 + 0.629874PFC + \mu$$

Thus the study upholds that there is a significant positive relationship between Pension Fund Contribution and Gross Domestic Product of Nigeria at 5% level of significance.

Conclusion

The broad objective of this study was to ascertain the relationship between Pension Fund contributory and Economic Growth in Nigeria from 2008-2019. This research adopted the Augmented Dickey Fuller test to verify the stationarity of the data. Ordinary Least Squares regression model (OLS) was employed in examining the variables in the hypotheses. The empirical findings revealed that PFC exerted a positive and significant relationship with the GDP. Hence, it was concluded therefore that Pension Fund contribution has significant impact on Nigeria economy at 5% level of significance.

Following the study's empirical findings, PenCom was advised to maintain efficient monitoring, supervision, and enforcement of the provisions of the Pension Reform Act 2004, which are inextricably linked to the Contributory Pension Scheme's contribution to Gross Domestic Product (GDP).

References

- Agbata, A., Ekwueme, C. M., and Jeroh, E., (2017). The Anatomy of Pension Fraud In Nigeria: Its Motives, The Management And Future Of The Nigerian Pension Scheme. *Ekonomski horizonti*, Septembar - Decembar 2017, 19(3), 179 - 191 . UDC: 33 ISSN: 1450-863 X
- Ameh, O. E., Ajie, H. A., and Duhu, I. G., (2017). Impact of Contributory Pension Scheme on Economic Growth in Nigeria: An Empirical Analysis. *International Journal of Research in Humanities and Social Studies* Volume 4, Issue 6, 2017, PP 24-35 ISSN 2394-6288 (Print) & ISSN 2394-6296 (Online) International
- Christian, M. L., and Wobiaraeri, . G., (2016). Pension Fund Administration and Infrastructure Financing in Nigeria. *British Journal of Economics, Management & Trade* 13(2): 1-13, 2016, Article no.BJEMT.22534 ISSN: 2278-098X SCIENCEDOMAIN international. www.sciencedomain.org
- Eke, O. A., Ndubuisi P., and Eleagu, G. I., (2018). Public Pension Asset and Investment In Housing Infrastructure: Rethinking The Safety-Equity Net In Nigeria. *Global Journal of Arts, Humanities and Social Sciences* 6(8) pp.43-63, August 2018. Published by European Centre for Research Training and Development UK (www.eajournals.org)

- Ndugbu, M.O., Ojiegbe, J., Uzowuru, B.L. & Okere, P.A. (2015). Bank and non-bank financial institutions and the development of the Nigerian economy. *International Journal for Innovation Education and Research*, 3(8), 23–36.
- Odia, J.O., and Okoye, A.E. (2012). Pensions reform in Nigeria: A comparison between the old and new scheme. *Afro Asian Journal of Social Sciences*, 3(1), 2229–5313.
- Ofoeda, I., Gariba, P. and Amoah, L. (2016). Regulation and performance of non-bank financial institutions in Ghana', *International Journal of Law and Management* 58(1), 108–125.
- Okegbe, T. O. Ezejiofor, R.A. and Ofurum, D. I. (2019) Foreign Direct Investment (FDI) and Nigerian Economic Growth. *International Journal of Accounting, Finance and Risk Management*. 4(1), pp. 15-23. doi: 10.11648/j.ijafm.20190401.12
- Okoye, E.I., Amahalu, N.N., Nweze, C.L., & Obi J.C. (2016). Effect of financial leverage on dividend policy of quoted conglomerates. Managing diversification for sustainable development in sub-saharan Africa, Faculty of Management Sciences, 2016 International Conference, 8-10, November, 2016.
- Pencom, (2012). *Annual report*. Retrieved from ww.pencom.gov.ng.on26february,2011
- Pension Commission (2016). National pension commission. www.pencom.gov.ng
- Yartey, C. (2008). *The determinants of stock market development in emerging economics: Is South Africa Different?* IMF Working Paper, African Department.