

Contributory Pension Scheme and Workers Investment in Nigeria

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ABSTRACT

The study investigated the relationship between contributory pension scheme and workers' investment in Nigeria from 2007 to 2021. Specifically the study assessed the relationship between private sector contribution and workers' investment in Nigeria; examined the relationship between public sector contribution and workers' investment in Nigeria; and examined the relationship between total contribution and workers' investment in Nigeria and also employed workers investment (WI) as independent variable while Private Sector Contribution (PRSC), Public Sector Contribution (PUSC), and Total Contribution (TC) as dependent variable. The study also employed Engle Granger Causality Test as estimated technique, the result revealed that a causal relationship between contributory pension scheme and workers investment in Nigeria. Evidence from the result revealed that there is a unidirectional relationship from private sector contribution (LNPRSC) to workers investment (LNWI) (6.41808, 0.0217***), also, there is a unidirectional relationship from public sector contribution (LNPU SC) to workers investment (LNWI) (13.5808, 0.0027***). Furthermore, there is a unidirectional relationship from total contribution (LNTC) to workers investment (7.92275, 0.0127***) and concluded that the direction of the flow comes from pension contribution scheme to worker investment. Therefore, recommended that pension regulatory authorities in Nigeria should compel strict compliance with the relevant provisions of the Act in order for the workers investment to experience the expected quantum growth; and the stakeholders should review the contributions to increase the volume of pension benefits to enable retirees take care of their basic needs at retirement.

INTRODUCTION

People worldwide favour the pension programme to protect retirees (Sule & Ezugwu, 2009). Many think that commercial and public sector workers may retire comfortably without worrying about money. From hiring to promotion to retirement is a common professional path. Most individuals quit without saving anything, while a tiny number have enough for retirement or unexpected financial needs. In an ideal world, governments and corporations would provide pension plans to reward hardworking people. According to Rabelo (2002), this method will help them achieve their objectives faster. Key retirement programmes include the National Provident Fund, Defined Benefit (pay-as-you-go), and the soon-to-be-fully-funded contributory pension scheme. The company must provide pensions and gratuities to long-serving retirees (Robelo, 2002). Pensions safeguard retirees from poverty by providing a regular income throughout their

working years and preventing economic uncertainty in old age (Nanshuwan & Moses, 2021). Two kinds of pension plans exist: defined benefit and defined contribution. A Defined Benefit Scheme ensures retirement benefits regardless of investment pool performance. A Defined Contribution Scheme requires employers to set away money for their workers at regular periods, and those contributions are generally matched. Khan (2020). Optimising computational and economical efficiency distinguishes the contributing theories. Second, some accounting regulatory organisations support the non-contributory position (McGill, 1984; Byrne, 2003). This school of thought holds that only employers should pay into the pension system. The school believes the sponsor's exclusive financial support encourages talented and devoted staff to join and stay. A mathematical equation defines this arrangement's benefit. People might receive their pension as a lump amount or as a regular stream after retirement (SAS 8, 1991). Policymakers in various countries are now considering pensions, which enable older workers to save privately for retirement (World Bank, 1994). The Compulsory Pension Scheme requires governmental and commercial employers and workers to contribute 18% of their monthly wages to an employee retirement savings account (RSA). These accounts provide retirement benefits to workers. The Pension Fund's assets were N14.99 trillion in 2022. This value was classified into many groups: The allocations are: N10.72 trillion for the RSA 'Active' Funds (RSA Funds I, II, III, and V), N1.19 trillion for the RSA Retiree Fund IV, N1.57 trillion for the CPFAs, and N1.48 trillion for the Approved Existing Scheme The Fund VI Active and Retiree Fund was worth N36.20 billion. FGN comprised 64.33 percent of the Pension Fund's assets. FGN Securities investments were allocated as follows: This is the budget breakdown: Most of the total is FGN Bonds (95.60%), followed by Treasury Bills (2.06%), Agency Bonds, Sukuk, and Green Bonds (2.34%). PENCOM's 2023 report showed that pension fund assets rose to N17.292 trillion in August.

Nigeria's pension funds have traditionally been difficult to manage (Sule & Ezugwu, 2009). Retirees need a pension for their personal and society's well-being (Nkanga, 2005). Most of our workers lack adequate retirement benefits owing to inadequate arrangements. Inefficient administration plagues the few active programmes.

Some of the Pension Reform Act of 2014's goals include helping folks who aren't excellent planners save enough money for retirement. The Nigerian economy expands when deposits are distributed to financial assets. Mesike and Ibiwoye (2012) say the Contributory Pension Scheme invests in contractual savings long-term and boosts the securities market. Nigeria's pension system had several issues before the 2004 Pension Reform Act. Public sector retirement benefits were paid from the yearly budget under the unfunded Defined Benefits Scheme (Nwanne, 2013). Low resources threatened pension provision in the yearly budget during implementation. Even with budgeted funds, financial transfers were sometimes late and resulted to underpaid pensions. Thus, financing the Defined Benefits Scheme is impossible. But many private sector workers were left out of their companies' pension plans, and many of those plans were underfunded.

However, prominent analysts believe the contributory pension system can save for economic development (Balogun, 2006; Ogumike, 2008; Gunu & Tsado, 2012). As the contributory pension system was expanded throughout the economy, several sectors opposed it, causing delays and disobedience. The programme provides specific fines for people, corporations, and government organisations who violate it, but the absence of a powerful task force or penalties makes executing the legislation more difficult. Previous study has focused on how financial sectors like the contributory pension system affect the economy. Many experts have examined how the contributing pension scheme has influenced different disciplines. I am unaware of any study linking the contributing pension system to Nigerian worker investment. Employee investments and contributory pension schemes are the focus of this study. We aim to utilise the Granger causality test to

determine how much the public sector affects Nigerian workers' investments and how private sector contributions affect them. This research seeks to determine whether Nigerian workers' investments affect the contributory pension scheme. The goals are to examine the overall contribution, public sector, and private sector correlations with Nigerian workers' investment.

REVIEW OF RELATED LITERATURE

Conceptual Framework

Pension

Pension helps retired workers with their costs after working for the firm. It shows gratitude for their efforts. Ojiya, Ojije, and Duhu (2017) define a pension as a savings plan to which working-age people contribute each pay period. Adams (2006) defines a pension as monetary compensation provided to an employee upon attaining the legal retirement age or becoming too elderly or unwell to work. The government or a company may provide this compensation. Pensions may be defined benefit (DB) or defined contribution (DC). A defined contribution (DC) plan does not guarantee fund performance or employer remuneration, therefore the employee assumes investment risk. In a defined benefit (DB) plan, the employer assumes all investment risk. According to Mumy (1979), retiring workers get an annuity as a pension for their financial contributions to the company. This income is provided regularly after retirement. Anyafo (2000) defines it as a recurring stipend or payment provided to a person or family when they meet specific conditions, such as being a certain age, working for a certain period of time, or contributing a certain amount. Diamond (1996) claims that pensions allow corporations to split earnings between present and future retirees. Although workers and pensioners gain from company outputs, it's important not to imply that solely they share corporate earnings.

Pension Fund Investment

Pension funds are investments that provide interest or income for retirement savings. A financial transaction aimed at profit. The pension fund's return on investment is its profit after investing. Pension fund investment seeks income and long-term value. An investment is a strategy to build money. Many examples include buying bonds, equities, and real estate (Chen, 2021). Pension funds give retirees with long-term financial stability (Klumpes & Tippet, 2004). Private pension arrangements are essential for pension asset investment and management. To make pension plan benefits more trustworthy and effective, we must manage and execute this role properly. Policymakers must create policies that promote responsible pension fund asset usage to fulfil retirement income goals (OECD, 2006). Pension funds' investing functions differ per pension plan. The investment function for defined benefit plans seeks maximum returns that meet the pension plan's commitments and liquidity requirements while taking into account stakeholders' risk tolerances. According to the OECD (2006), the investing function in a defined contribution plan aims to produce profits and add them to members' account balances while considering their investment objectives. Nigerian pension funds strive to offer reasonable, long-term benefits to fund members, keep assets secure, pay benefits on schedule, and balance risk and return via asset allocation (Ndum, Okoye & Amahalu, 2019). To accomplish this goal, the National Pension Commission (PENCOM), which regulates, monitors, and ensures the proper administration of pension matters in Nigeria, proposed allowing pension contributors the right to choose their investment opportunities.

Private sector contribution

Jorg (2015) found poor private sector plan compliance due to inadequate system control and monitoring. Most efforts lacked regular advantages. Many private sector workers have no pension plan. Most official and informal workers had no retirement benefit plans. The first private sector pension scheme in Nigeria was established in 1954 for Nigerian brewery workers. UAC was founded in 1957.

Public sector contribution

Ijeoma, Oghoghomeh, and Charles (2013) remark that the public sector pension system has expanded multiple times since the initial pension legislation. Example: The basic pension directive 102 of 1979 created the civil service pension system. Local government pensions were created by military order in 1977. Directive 103 of 1979, retroactive to April 1974, created the armed services pension plan. Judges' pensions were defined by Decree 5 of 1985, revised by 51 of 1988, 29 and 62 of 1991. A turning point in the Nigerian pension system was Decree No. 75 of 1993, which retroactively established the police and other agencies pension scheme from 1990. Insurance firms successfully managed the pension system for government parastatals and agencies in Nigeria using money from the public budget. The National Provident Fund was Nigeria's first legal pension system, created in 1961. Act No. 102 of 1979 established Nigeria's first pension reform under the second Republic. It took effect April 1, 1974.

Nigerian firms prioritise pension and gratuity because they believe it would incentivize workers to work more and boost production. Several government agencies and unions have stressed the need for a robust, effective, and feasible pension programme (Ahmad, 2007). Several government agencies and labour organisations have called for a robust, effective, and feasible pension programme (Rabelo, 2002). Pension administration in Nigeria was plagued by the federal and state governments' incapacity or delay in disbursing pension and gratuity. At N2.56 trillion in December 2005 and N2.3 trillion in 2004, the pension backlog was projected. Mismanagement and diversion of the current pension fund by the board of trustees and fund managers, bureaucratic roadblocks, corruption, economic downturns, public sector inefficiencies, demographic concerns, and past-due pension and gratuity payments all contribute to the issue.

These issues prompted the 2004 Pension Reform Act (PRA). This bill aims to overhaul Nigeria's pensions. This helps older Nigerians who struggled under the former pension system. The federal and state governments' late or nonpayment of pensions and gratuities is Nigeria's pension fund management concern, according to Adebayo and Dada (2012). The expected pension backlog was about N2.56 trillion in December 2005. Pension fund management is becoming more cumbersome, putting many older Nigerian workers in abject poverty. Unfortunately, these retirees are generally ignored and given no help. Pensioners had to jump through several hoops to get pensions, gratuities, and other retirement benefits. The Pension Fund Administrators weren't always available to help retirees, and sometimes there wasn't enough money to pay their benefits. In summary, the previous system had several issues. Other concerns included demographic changes, paying unpaid pensions and gratuities, and combining services to calculate retirement benefits. These issues, together with bureaucratic processes, corruption, public sector inefficiency, and the economic crisis, have delayed terminal benefit payments. Other issues included pensioner exploitation and political manipulation of pension fund disbursements. PENCOM's (the Pension Commission) weak corporate governance skills should be addressed while reviewing the previous plan (Okolie and Omenma, 2011).

Theoretical Framework

Modern Portfolio Theory

According to Modern Portfolio Theory (MPT), risk-adjusted investment portfolios maximise ROI. Corporate Finance Institute (CFI) (2021) says investors always chose the safest portfolio regardless of profitability. Current portfolio theory aims to maximise earnings and minimise risk. In an efficient market, investors switch assets, according to Thune (2021). Harry Markowitz developed modern portfolio theory (MPT) in 1952. Through diversity, portfolio returns may be maximised with little risk. Modern portfolio theory emphasises on how each investment's return and risk influences the portfolio. Maximum Probability Trading (MPT) illustrates how to develop a portfolio with low loss and high return potential. Investors may minimise risk and maximise profit using a portfolio. Variance and correlation demonstrate the significance of portfolio performance over individual assets. Additionally, (2021). Every investor should optimise long-term returns while minimising short-term market swings, according to Modern Portfolio Theory. Low-risk assets like bonds and cash provide lesser returns (Thune, 2021). Before choosing an investment plan, it's important to examine the advantages and drawbacks of each option. Modern Portfolio Theory (MPT) advises against choosing portfolios based on projected return since it overlooks diversification. According to the MPT, investors should pick portfolios that incorporate return variances and future returns to maximise expected return while maintaining a certain risk. The principles of current portfolio theory are:

1. Investors avoid risk due to potential unfavourable outcomes.
2. Reason underpins stocks.
3. Investors have reliable data.
4. Profit sharing is common among all four parties.
5. Pension fund managers may carefully tune portfolio returns and risk using MPT. Pension fund managers may diversify using this tool. ETFs have given pension fund managers more asset classes, making Modern Portfolio Theory (MPT) more relevant. Modern Portfolio Theory may help pension fund managers decrease portfolio risk by investing in safe assets like government bonds. Government bonds limit portfolio volatility by generating modest returns and without affecting projected returns.

Emperical Review

Private Sector Contribution and Workers' Investment

Kamaldeen, Ahmed, and Taiwo (2019) evaluated Nigeria's pension fund and capital market development from 2008Q3 to 2018Q2. This research used market capitalization as the dependent variable and real interest rate, inflation, real GDP per capita, and the proportion of people above age as independent variables. I utilised the Augmented Dickey-Fuller (ADF) unit root test and the Auto-Regressive Distributive Lag (ARDL) model to evaluate whether the variables had a long-run or equilibrium connection. The Error Correction Model (ECM) calculates the short-term correction in disequilibrium, while the Wald test measures short-term relationships. Both ARDL and ECM models were tested for residuals using the Cusum stability and serial correlation LM tests. The variables show long-term co-integration, and the system reaches equilibrium with 113% efficiency. The analysis demonstrated a short-term causal relationship between pension fund assets and the stock market at 10% significance. It also found a causal relationship between inflation and the capital market at 5% significance. Real interest rates and the capital market were

not causally linked near-term. The analysis recommends market discipline for Nigeria's pension fund capital market investments.

Ndum, Okoye, and Amahalu (2019) examined pension fund investment and economic development in Nigeria from 2006 to 2017. Ordinary Least Square, Augmented Dickey-Fuller, and unit root estimates were used. A positive and statistically significant correlation was found between GDP, pension fund assets, contributions, and investment at 5%. The paper suggests improved capital market management of investment trusts, real estate, government bonds, and pension assets to boost Nigeria's GDP. Odo, Ani, and Agbo (2021) investigated 2005–2015 data to assess how Nigeria's contributory pension system and insurance premium base interacted. In addition to contributory pension, gross domestic product, interest rate, market capitalization of listed companies, and non-contributory pension fund, the study used insurance premium income at a given time. This descriptive statistics and correlation analysis study examined contributory pension funds and Nigeria's insurance sector growth. Results show that contributory pension systems are essential for industry longevity. Pension funds increase insurance premiums, although the research reveals that this impact is minor and not statistically significant. Thus, Nigerian regulatory organisations should aggressively implement the Act to ensure the insurance sector's planned growth.

Public Sector Contribution and Workers' Investment

Akowe, Ocheni, and Daniel (2015) assessed the new contributory pension plan's portfolio impacts on Nigeria's economy from 2007 to 2012. The dependent variable was GDP, whereas the explanatory variables were domestic ordinary shares, federal government securities, local money market securities, and real estate property. Our estimating approaches were the F-test and Pearson product-moment correlation test. Domestic ordinary shares, federal government securities, and pension fund real estate assets favourably affected the Nigerian GDP throughout the study period. But local money market assets damage Nigeria's GDP. To enhance Nigeria's GDP, pension funds should invest more in domestic ordinary shares, Federal Government securities, and real estate. This analysis reveals that Local Money Market Securities hurt Nigeria's GDP, hence pension funds should reduce their exposure.

Amusan and Ajibola (2018) examined how the contributory pension system affects government personnel commitment in Nigeria. Simple random sampling (SRS) and Likert scale questionnaire were utilised. After that, the estimated technique was utilised to analyse the data statistically. Along with gender and age as explanatory variables, the study analysed employee commitment and the contributing pension scheme. The study shows that a Contributory Pensions Scheme (CPS) boosts employee loyalty. Additionally, research showed that worker devotion is connected with age. The paper suggests public sector organisations use strategic human resource management to manage their millennial workforce. To ensure CPS is a reliable safety net for retirees, it emphasises adopting the 2014 Pension Reform Act.

Using 2010–2019 data, Adekoya and Nwaobia (2021) assessed pension fund investments in FGNS' influence on Nigeria's GDP growth. Study employed ex-post facto research design. The research employed descriptive, trend, inferential, and regression statistics. Pension money invested in Federal Government Securities has a significant beneficial impact on GDP. Pension money invested in Federal Government Securities (FGNS) may boost Nigeria's economy. Investment in FGNS should get more pension money. Ogonda and Okiakpe (2022) examined pension fund investments and Nigerian economic growth from 2004 to 2020. They estimated using descriptive statistics, correlation analysis, and the Fixed/Random Effects Regression Model. This study's HDI was the dependent variable, while IMMI, IFGS, IQOS, and ICDS were the independent variables for money market instruments, quoted ordinary shares, and corporate debt

securities. Pension fund investments in money market instruments had a tiny and negligible impact on HDI, whereas federal government securities had a positive but minor effect. Pension fund investments in publicly traded common shares and corporate loan instruments boost Nigeria's HDI. The HDI says pension fund investments effect economic development. We encourage pension funds to invest more in common shares and corporate debt to support HDI economic development.

Madukwe, Anyanwaokoro, and Mike (2023) examined the Nigerian economy's impact from 2010Q1 to 2021Q1 from the contributory pension fund's federal government securities investment. The research examined how pension funds' US government securities investments influenced inflation using GDP as an explanatory variable. Research estimation used the ordinary least square (Autoregressive distributed lag) model. The findings showed that the contributory pension fund's federal government securities investment did not effect Nigeria's GDP. The dismal Nigerian economy and rising inflation may explain the insignificance. The contributory pension fund's investment in federal government assets may not harm the Nigerian economy. Thus, more state government agencies and formal and informal businesses should join the contributing pension programme.

Total Contribution and Workers' Investment

Nwanne (2015) examined Nigeria's contributory pension scheme's influence on economic development from 2004 to 2012. Study estimates used conventional least square regression. It also employed GDP (Economic Growth) as the dependent variable and pension funds invested in particular investment outlets and private and public sector pension savings in Nigeria as the independent variables. Pension funds hurt economic growth, while pension savings help it, and this effect is statistically significant. Thus, pension fund investment channels should be expanded and we should work harder to persuade more individuals to participate.

The contributory pension programme harmed Nigeria's economic development, according to Etim, Umoren, and Udo (2023). Economic development (ED) was the independent variable, while total pension funds (TCPF), public pension funds (PubSPF), and private sector pension funds (PrivSPF) were the dependent variables. The analysis employed multiple regression, the Fully Modified Least Squares (FMOLS) Model, the co-integration test, and descriptive statistics like standard deviation and mean. State and private pension funds increased per capita income with p-values of 0.0117 and 0.0089, respectively. Total pension funds and per capita income were not significantly related ($p = 0.8641$). The contributory pension programme greatly increased Nigeria's GDP, according to inferential research. Pensions, whether public or private, must be given quickly to boost economic growth.

Gap(s) in Literature:

Research has largely examined how contributing pension plans impact workers' data-driven investment choices. I'm unaware of any causal relationship between employee investments and contributory pension plans. This study examines how Nigerian workers' investments affect pension schemes.

RESEARCH METHODS

This study adapt an empirical model that is built based on the modification of the model used in the study carried out by Madukwe, Ayanwaokoro and Okeke (2023). The model is expressed mathematically in its original form. Hence, the model is stated as:

$$WI = f(\text{PRSC}, \text{PUSC}) \dots\dots\dots 3.1$$

Where;

f = functional notation

WI = Workers Investment (pension Total Asset)

PRSC = Private Sector Contribution

PUSC = Public Sector Contribution

μ = Error Term

β_0 = Constant Parameter

β_1 - β_2 = Coefficients of Regression

μ = Error Term

However, this study examine the relationship between contributory pension scheme and workers investment in Nigeria by adopting Total Asset as a measurement for workers investment and adopting private sector contribution, public sector contribution and total contribution as an explanatory variables. Hence, this model can, for simplicity, be stated in the econometric form of equation as depicted below:

$$WI = \beta_0 + \beta_1\text{PRSC} + \beta_2\text{PUSC} + \beta_3\text{TC} + \mu \dots\dots\dots 3.2$$

Where;

PRSC = Private Sector Contribution

PUSC = Public Sector Contribution

TC = Total Contribution

μ = Error term

β_0 = Constant Parameter

β_1 - β_3 = Coefficients of Regression

Data Analysis and interpretation

Nigerian researchers studied workers' investment and the contributory pension programme from 2007 to 2022. The researchers utilised the paired Granger causality test to see whether the contributory pension scheme correlated with employee investment. Total assets replaced workers' investment (WI), the study's independent variable. PRSC, PUSC, and TC—private, public, and total contributions—were independent variables. This component of the study analyses and interprets the research results.

Data Presentation

The raw and log-linearized data used in the study were secondary data spanning from 2007 to 2022 culled and analysed and is duly presented as shown in the table below.

Data Analysis - Granger Causality

After the ARDL model was implemented, Granger (1988)'s Pairwise Granger causality test was applied. The Granger causality test can determine if the variables are causally connected, but ARDL cannot. Probability and F-statistics determine hypothesis acceptance.

Two variables impact each other in both directions in bidirectional causality, one variable influences another in unidirectional causality, and there is no link in the absence of causation.

Test of Hypotheses - Causality Result

Table 4.1 Causality Result

Null Hypothesis:	Obs	F-Statistic	Prob.
LNPRSC does not Granger Cause LNWI	13	6.41808	0.0217
LNWI does not Granger Cause LNPRSC		3.12578	0.0993
LNPUSC does not Granger Cause LNWI	13	13.5808	0.0027
LNWI does not Granger Cause LNPUSC		0.07731	0.9263
LNTC does not Granger Cause LNWI	13	7.92275	0.0127
LNWI does not Granger Cause LNTC		0.54428	0.6003
LNPUSC does not Granger Cause LNPRSC	13	7.27810	0.0158
LNPRSC does not Granger Cause LNPUSC		0.68679	0.5306
LNTC does not Granger Cause LNPRSC	13	6.91152	0.0181
LNPRSC does not Granger Cause LNTC		1.52298	0.2751
LNTC does not Granger Cause LNPUSC	13	0.66801	0.5392
LNPUSC does not Granger Cause LNTC		2.48709	0.1446

Source: Eviews 9 (2023)

To evaluate whether the contributory pension system inhibits workers from investing, a causality test was performed. This linked Nigerian workers' investments to the contributory pension scheme. Results suggest a one-way link between private sector investment (LNPRSC) and employee investment. Workers' investment (LNWI) negatively affects public sector contribution. Worker investment and total contribution (LNTC) are only positively connected. Employee investments get pension contribution programme funds.

Validity of Hypotheses

H₀₁: There exists no causal relationship between private sector contribution and workers' investments in Nigeria.

The result of the granger causality indicated that the coefficient of private sector contribution is 6.41808 units with probability value of 0.0217, which is less than 0.05. Therefore, $P < 0.05$ (i.e. $0.0217 < 0.05$) thereby confirming that private sector contribution is positive and significantly cause workers' investment in Nigeria. Therefore, the alternative hypothesis is accepted while null is rejected.

H₀₂: There exists no causal relationship between public sector contribution and workers' investment in Nigeria.

The result of the granger causality indicated that the coefficient of public sector contribution is 13.5808 units with probability value of 0.0027, which is less than 0.05. Therefore, $P < 0.05$ (i.e. $0.0027 < 0.05$) thereby confirming that public sector contribution is positive and significantly cause workers' investment in Nigeria. Therefore, the alternative hypothesis is accepted while null is rejected.

H₀₃: There exists no causal relationship between total contribution and workers' investment in Nigeria.

The result of the granger causality indicated that the coefficient of Total contribution is 7.92275 units with probability value of 0.0127, which is less than 0.05. Therefore, $P < 0.05$ (i.e. $0.0127 < 0.05$) thereby confirming that Total contribution is positive and significantly cause workers' investment in Nigeria. Therefore, the alternative hypothesis is accepted while null is rejected.

DISCUSSION OF FINDINGS

This research examined Nigeria's contributory pension plan workers' investments from 2007 to 2021 using empirical analysis. The data links Nigerian workers' investments to the contributory pension programme. The data indicated that there's a unidirectional relationship between private sector contribution (LNPRSC) and workers' investments (LNWI); unidirectional relationship between public sector contribution (LNPU SC) and workers' investments (LNWI); and lastly, unidirectional relationship between total contribution (LNTC) and workers' investments (LNWI). Moreover, all variables remained consistent with the initial assumption across time. Therefore, research results may be trusted for recommendations and decision making.

SUMMARY AND RECOMMENDATION

This research investigated contributory pension scheme and workers' investments in Nigeria from 2007 to 2021. The study employed workers' investment as dependent variable while private sector contribution,

public sector contribution and total contribution were employed as independent variable. Also, pairwise granger causality was employed as method of analysis to examine the relationship between variables and various theories and concepts that are related to the topic were also employed as well. The data for the study were extracted from the softcopy of annual financial report of National pension commission from 2007 to 2021 for which data is available. The study revealed that there was a unidirectional relationship from private sector contribution to workers' investment in Nigeria (i.e., private sector contribution affect workers' investment in Nigeria); also, there was a unidirectional relationship from public sector contribution to workers' investment in Nigeria (i.e., public sector contribution affect workers' investment in Nigeria). Lastly, total pension contribution has a unidirectional relationship from total contribution to workers' investment in Nigeria (i.e., total contribution affect workers' investment in Nigeria). Therefore, recommended that pension regulatory authorities in Nigeria should compel strict compliance with the relevant provisions of the Act in order for the workers investment to experience the expected quantum growth; and the stakeholders should review the contributions to increase the volume of pension benefits to enable retirees take care of their basic needs at retirement.

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