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EVALUATION OF THE CONTRIBUTION OF PORTFOLIOS OF NEW CONTRIBUTORY PENSION SCHEME ON NIGERIAN ECONOMY

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ABSTRACT: *Pension fund investment is one of the key areas in the new contributory pension fund in Nigeria. One of the major challenges confronting the managers of the PFAs in investment decisions is the dearth of investment outlets which has been spread into various securities. The focus of this study is to evaluate the contribution of portfolios of new contributory pension fund on Nigerian gross domestic product (GDP) and the relationships between the pension portfolios with the Nigerian GDP. The population of the study entails nine (9) years while six (6) years were sampled for study (2007-2012). The parameters like Domestic Ordinary Shares, Federal Government of Nigeria Securities, Local Money Market Securities and Real Estate Property of pension fund for the period under review were used. Statistical tool like Scientific Packages for Social Scientists (SPSS) version 18.0 were used to regress the data and the hypotheses were tested using F-test and Pearson product moment correlation test. Result shows that, Domestic Ordinary Shares, Federal Government of Nigeria Securities and Real Estate Property of pension fund all have positive contributions to Nigerian gross domestic product for the period under review while Local Money Market Securities have negative contribution to Nigerian GDP. We recommended that, there should be more investment of pension fund in Domestic Ordinary Shares, Federal Government of Nigeria securities and Real estate property to boost Gross Domestic Product (GDP) of Nigeria. However, there should be a reduce investment of pension fund in Local Money Market Securities because of its negative impact on the Nigerian gross domestic product as revealed by this study.*

KEYWORDS: Evaluation, Contribution, Portfolios, New Contributory Pension Scheme, Nigerian Economy

INTRODUCTION

PenCom regulations require that investment of pension fund can only be made on the floor of a recognized Stock Exchange or a money market platform approved by the CBN or Money Market Association of Nigeria. All instruments should have rating grades stipulated in the Investment Regulations issued by PenCom before pension fund is invested in them (Sule & Ezugwu, 2009). Thus, the actual licensing of pension fund operators, registration of contributors and investment activities commenced in 2006. There are currently 24 Pension Fund Administrators (PFAs), 7 Closed Pension Fund Administrators (CPFAs) and 4 Pension Fund Custodians (PFCs). Approximately 5 million registered contributors under the Contributory Pension Scheme (CPS), with 64% below 40 years. There are 51,000 retirees under the CPS, already receiving their monthly pensions as and when due. Pension contributions are invested as a pool of funds by the PFAs / CPFAs, in line with Regulations & Guidelines issued by the Commission. Value of Pension Fund Assets under Management was N2.7trillion as at 30 June 2012, with current average monthly pension contributions of N25billion. Pension funds

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investment could provide long term funds for economic and social development of the country (Henshaw, 2012). Pension is a periodic payment or allowance to an individual or to his family, given because of some meritorious work or when certain conditions such as age, length of service and others, have been fulfilled (Okoye & Ani, 2004). Pension is a form of income that workers or their dependents receive after workers retire, becomes disabled or die. Pension plans benefit people who have had careers in private industry; in a nation's armed forces or in national, state and local governments. Many individuals who benefit are self-employed or whose employers do not provide a pension plan establish their own pension plans (World Book Encyclopedia, 1991).

Pension scheme was introduced into Nigeria during the Colonial era to provide old age income and security to British citizens working in the country upon retirement. Nigeria's first ever legislative instrument on Pension matters was the Pension Ordinance of 1951, which had retrospective effect from 1st January, 1946. The National Provident Fund (NPF) Scheme established in 1961 was the first legislation enacted to address pension matters of Private Organisations. It was followed 18 years later by the Pension Act No. 102 of 1979, as well as the Armed Forces Pension Act No. 103 of the same year. The Police and other Government Agencies' Pension Scheme were enacted under Pension Act No. 75 of 1987, followed by the Local Government Pension Edict which culminated into the establishment of the Local Government Staff Pension Board of 1987. In 1993 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 cater for employees in the private sector of the economy against loss of the employment income. As identified earlier by Orewa & Adewumi (1983) Local government system also established pension schemes for their staff, with a separate board known as the Local Government Pension Board. It was established to take care of the local government staff that would have retired from 1st April, 1979.

Elumelu (2005) posits that the 2004 Pension Reform Act established a uniform, contributory; private sector managed and fully funded pension system for both the public and private sector of the economy. The Pension Reform Act of 2004 was also established to address the manifest loopholes in the old defined benefit pension schemes and provide adequate resources to retirees after retirement from services. The pension system prior to 2004 was characterized with many problems which makes the payment of retirement benefit a failure in Nigeria. Koripamo - Agary (2009) and Yunusa (2009) pointed out that the major weaknesses in Defined Benefit Pension Scheme (DBPS) is lack of adequate and timely budgetary provisions coupled with rising life expectancy, increasing number of employees, poor implementation of the pension scheme in the private sector due to inadequate supervision and regulation of the system and too many private sector employees were not even covered by any form of pension scheme. These problems associated with payment of pension in Nigeria necessitated the rethink on how the system could be reformed or revived, which gave birth to the Pension Reform Act of 2004.

Although the new reform is guided by the key principles of sustainability, accountability, equity, flexibility and practicability, there is also this fear that the funds or Retiree Savings Account (RSA) contribution can be mismanaged by the existing trustees. Risk is also an important factor in investment. Risk of a given portfolio determines the return thereof. Some PFA's do not have the necessary risk management profile while some fail to pay regard to rating signals needed to make sound investment decision and diversified their risk into various

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securities. Regulation is very key in safeguarding the savers' fund. Lag in the submission of necessary reports to the regulator has undermined the seriousness accorded by the Act. It is undoubted that if PenComwho happens to be at the apex of control fails in its crucial role of fund protection, the confidence of the contributors will be negatively affected.

Managing and administering pension funds have continued to pose a major challenge to government in Nigeria. Yet, pension which guarantees an employee certain comfort in his or her inactive years is critical to the sustenance of the life of the individual and the society (Nkanga, 2005). In our society today, most workers are not covered by any reasonable form of retirement benefit arrangement while the few schemes suffer from poor management. Pension reform in Nigeria was necessitated by many problems confronting both the public and private sectors pension schemes. The public sector operated largely the Pay-As-You-Go scheme, which depended on budgetary provisions from various tiers of government for funding. Under the PAYG, which was also a Defined Benefit (DB) scheme, contributions were not generally made, and projections were required to be made of the pension entitlements of each employee by the employer, with such projections being determined by the employee's years of service and earnings. Thus, the pension obligations were effectively the debt obligation of the employer. The scheme became unsustainable due to lack of adequate and timely budgetary provisions and increases in salaries and pensions. Even where adequate budget provision was made the scheme was not generally funded. There was also demographic shift due to rising life expectancy, which was a phenomenon that elongated the pension obligations of various tiers of government in the country. Most of the private sector schemes were akin to Provident Fund Schemes, which did not provide for periodic benefits. Even at that, many private sector employees were not covered by any form of pension scheme. The schemes had been characterized by diversified arrangements that were largely unregulated. The number of pension schemes became unwieldy as there were almost as many schemes as the number of employers that managed them. In addition, prior to the commencement of the Contributory Pension Scheme in 2004, there was very low compliance ratio due to absence of regulation and supervision of the system. At best, pension administration in both public and private sectors had been grossly underfunded, weak, inefficient, less transparent and cumbersome. In that abysmal state, it became logical to contemplate a scheme that would meet the yearnings of workers and pensioners.

One of the major challenges confronting the managers of the PFAs in investment decisions is the dearth of investment outlets which has been spread into various securities. According to Pencom (2008), this situation is further complicated by the recapitalization program of the financial sector (banks, insurance companies and stock broking companies). The Nigerian capital market is still under developed. The top twenty companies in the capital market have more than 70% of the total market capitalization, thus, there will be a pool of pension funds chasing few quality investments (Tsado & Gunu, 2011). Regulatory restrictions of asset allocation and investing limits have also continued to inhibit the performances of the PFA managers in their investments decision making (BGL, 2010).

The primary objective of the study is to assess the contributions of portfolios of the contributory pension scheme in Nigeria. The following are the specific objectives:

(1) To assess the contribution of Domestic Ordinary Shares of new Pension Scheme to Nigerian GDP

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(2) To assess the contribution of Federal Government of Nigeria securities of new Pension Scheme to Nigerian GDP
(3) To assess the contribution of Local Money Market Securities of new Pension Scheme to Nigerian GDP
(4) To assess the contribution of Real Estate Property of new Pension Scheme to Nigerian GDP
(5) To assess the relationships between the pension portfolios with the Nigerian GDP.

Based on the above objectives, the following hypotheses have been formulated:

Ho_1: Domestic Ordinary Shares of new Pension Scheme have no significant contribution to Nigerian GDP

Ho_2: Federal Government of Nigeria securities of new Pension Scheme have no significant contribution to Nigerian GDP

Ho_3: Local Money Market Securities of new Pension Scheme have no significant contribution to Nigerian GDP

Ho_4: Real estate property of new Pension Scheme has no significant contribution to Nigerian GDP

Ho_5: There are no significant relationships between pension portfolios and Nigerian GDP

REVIEW OF RELATED LITERATURE

Over the years, Nigeria is faced with a lot of challenges among which is pension and gratuity of her workers. Both the private and public sector workers have been faced with this challenge. The public sector workers have suffered a lot under the Defined Benefit Scheme (DBS) and their private sector counterparts have been in pains owing to different pension plans by their respective employers. Retirement benefit paid to retired employees prior to 2004 Reform Act was gratuity and pension. Adegbayi *(*2005*)* views gratuity as the payment of a lump sum to an ex-employee at the period of retirement while pension is the payment of monthly stipend to a person who has retired from active employment or business engagement. The payment is sustained by way of deductions from past entitlements or past earnings, which are saved to provide retirement benefits. Thus as a tax saving devise, savings toward pensions is quite encouraging. Equally, since pension saving is long term, it is also useful as a macro-economic tool for national development by enabling money to be in circulation for long-term investment.

As viewed by Ugwu (2006) in Amujiri (2009) there are four main classification of pension in Nigeria. These are retiring pension, compensatory pension, superannuating pension and compassionate allowance. It should also be noted that gratuity is a one-and-for-all lump sum of money paid to an employee on retirement. A retiring worker can be entitled to gratuity only or both gratuity and pension. It then means that a worker who is entitled to pension is also entitled to gratuity.

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Objectives of the New Pension Scheme in Nigeria

Prior to the new pension scheme, Nigeria operated a Pay As You Go defined Benefit Scheme burdened with a lot of problems. Ahmad (2008) attributed the non-performance of the defined benefit system of pension to under fund; unsustainable outstanding pension liabilities; weak and inefficient pension administration; demographic shifts and aging of the scheme; non-encouragement of workers in the private sector by any form of compulsory retirement benefit arrangement; and poor regulation of the hitherto scheme.

Due to the above deficiencies, there was need for proper and adequate reformation in order to properly cater and provide for retiree benefit. These identified loopholes necessitated the ushering in of the new Contributory Pension Scheme (CPS). The CPS in the words of Ahmed (2006) is premised on the following objectives:

(a) To ensure that every worker receives his retirement benefits as and when due;
(b) To empower the workers and assist workers to save in order to cater for their livelihood during old age;
(c) Stem the growth of pension liabilities;
(d) Establish uniform rules, regulation and standards for the administration of pension matters; and to
(e) Secure compliance and promote wider coverage.

Investment of Pension Assets under the New Contributory Pension Scheme

Part IX of the Pension Reform Act 2004 provides that all contributions by members shall be invested by the Pension Fund Administrators with the objectives of safety and maintenance of fair returns on amount invested. The authorized trading markets under the Act and the investments guidelines issued by PenCom states that pension assets shall be invested in any of the following:

Equities: Pension Fund Assets may be invested in ordinary shares of public limited liability companies subject to a maximum portfolio limit of 25% of pension assets under management provided that such companies have made taxable profits in the preceding five years and have paid dividends of those taxable profits one of the preceding five years.

Money Market: Pension Fund Assets may be invested in money market instruments of banks/discount houses as well as the commercial papers of corporate entities subject to a maximum portfolio limit of 35% on pension assets under management.

Infrastructure Funds: Pension Fund Assets may be invested in Infrastructure Funds subject to a maximum portfolio limit of 5% on pension assets under management.

Private Equity Funds: Pension Fund Assets may be invested in Private Equity Funds subject to a maximum portfolio limit of 5% of pension assets under management.

Open/Close-End and Hybrid Funds including REITs: Pension Fund Assets may be invested in Open/Close-Ended Hybrid Funds registered with SEC subject to a maximum portfolio limit of 5% of pension assets under management.

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Global Depositary Receipts/Notes and Eurobonds: Pension Fund Assets may be invested in Global Depositary Receipts/Notes and Eurobonds issued by listed Nigerian companies for their operations within Nigeria as certified and approved by SEC.

Bankers Acceptances (BAs) and Commercial Papers (CPs): Pension Fund Assets may be invested in commercial papers of corporate entities provided it is in compliance with the CBN's guidelines on BAs and CPs.

Bonds: Pension Fund Assets can be invested in FGN or CBN Bond and Securities to a maximum of 80% of pension assets under management. Pension Fund Assets may be invested in bonds issued by State and Local government or State Government Agencies or wholly owned companies, provided that such securities are fully guaranteed by Irrevocable Standing Payment Orders (ISPOs) or external guarantees by eligible banks or development finance institution or MDFOs. Also included are bonds, debentures, redeemable/convertible preference shares and other debt instruments issued by corporate entities, including asset backed securities and infrastructure bonds and supranational bonds issued by eligible MDFOs a PFA may invest assets in units of any investment fund; provided that such an investment fund may only be invested in the categories listed above and in real estate (74). Subject to Central Bank of Nigeria exchange rules, the PenCom may recommend to the President that approval be granted for the investment of assets outside the Federal Republic of Nigeria (74) Egbe, et.al (2013).

A PFA shall not invest assets in the shares or any other securities issued by the PFA and shareholder of the PFA (75). The PFA shall not sell assets to itself, any shareholder, director or affiliate of the PFA, any employee of the PFA, the spouse of any of the aforementioned or those related to the said persons, affiliates or any of the said persons, affiliates or any shareholder of the PFC or the PAC nor the PAC holding assets to the order of the PFA (76). The PFA shall not purchase any pension fund assets and apply assets under its management by way of loans and credits or as collateral for any loan (76).

The PenCom may impose additional restrictions on investments by PFA's where such restrictions are imposed with the object of protecting the interest of the holders of RSA's (77). Every PFA shall have due regard to the risk rating of instruments that has been undertaken by a registered risk rating company (77).

The Investment Strategy Committee shall formulate strategies for complying with investment guidelines issued by the PenCom; determine an optimal investment mix with risk profile agreed by the board of the PFA; evaluate the value of the portfolios and make proposals to the board of the PFA; review the performance of the major securities of the portfolios of the PFA; carry out other functions related to investment strategy as the board of the PFA may determine (66) (Pension Reform Act, 2004 and Peterside, 2006).

Investments of Pension Fund Assets

Adegbayi (2005) asserts that there is a relationship between pension contributions and payment of benefits. He adds that "pension funds can be invested in many different types of financial securities and can own assets directly. The type of investments undertaken by a pension fund depends on its "investment policy statement". The nature of the investments allowed in policy statement depends in a large part on the financial situation of the firm. Generally, the better the

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finances and the younger the plan participants, the more risky the investments that can be held by the planners.

Generates long term savings (compulsory savings, tax incentives & desire for increased retirement benefits) Promotes bond and equity markets thereby developing the financial market and demands Raises productive capital formation that positively impacts on GDP growth, triggers positive qualitative factors privatization, modernization of capital market infrastructure (trading, settlement system) creation of domestic institutional investors (PFAs/CPFAs) with long term focus with moderate stock market and price volatility and provide more efficient avenue for financing government(s) long term borrowing needs through infrastructural bonds".

In accordance with provision of Investment Guideline (2010) as released by the Regulatory Authority, pension fund assets shall be invested in instruments such as bonds, treasury bills, debentures, redeemable and Convertible preference shares, ordinary shares of public limited liability companies listed on a securities exchange registered by SEC, money market instruments of banks and discount houses as well as commercial Papers issued by corporate entities, open/close-ended/hybrid investment funds among others.

In Nigeria, the investment guidelines produce typical long term pension funds portfolios that consist of the following categories of asset ratios:

Asset Type	Maximum investment as % of pension fund assets	Per Issuer	Issuer
FGN security	100%	Maximum of 100% of total issue of FGN bond	No limit
State govt. Securities	20%	Maximum of 2% of pension fund assets in one state	Maximum of 2% of one of state govt. issue
Corporate bond and debt	30%	Maximum of 2.5 % of all issue by one corporate entity	Maximum of 2.5% of any issue
Money market instruments	25%	Maximum of 1 % of pension fund assets in all instruments issued by one bank	Not applicable
Ordinary shares	25%	Maximum of 1 % of pension fund assets in any one corporate entity.	Maximum of 1% of issued capital
Open end and closed end funds	5%	Maximum of 0.5 % of pension fund assets to one issue	Maximum of 0.5% of any open, close or hybrid fund issued

Source: National Pension Commission, (2012)

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Pension Reform Act 2004 Position on Investments of Pension Fund Assets

Section 72 of Act states that, all contributions under this Act shall be invested by the pension fund administrators with the objectives of safety and maintenance of fair returns on amount invested.

73.-(1) Subject to guidelines issued by the Commission, from time to time, pension funds and assets shall be invested in any of the following:

(a) Bonds, bills and other securities issued or guaranteed by the Federal Government and the Central Bank of Nigeria;
(b) Bonds, debentures, redeemable preference shares and other debt instruments issued by corporate entities and listed on a Stock Exchange registered under Investments and Securities Act 1999;
(c) Ordinary shares of public limited companies listed on a Stock Exchange registered under the Investments and Securities Acts of 1999 with good track records having declared and paid dividends in the preceding five years
(d) Bank deposits and bank securities:
(e) Investment certificates of closed-end investment fund or hybrid investment funds listed on a Stock Exchange registered under the Investments and Securities Act 1999 with a good track records of earning;
(f) Units sold by open-end investment funds or specialist open-end investment funds listed on the stock exchange recognised by the Commission;
(g) Bonds and other debt securities issued by listed companies;
(h) Real Estate Investment; and
(i) Such other instruments as the Commission may, from time to time, prescribe.

74.-(1) A pension fund administrator may invest the pension fund assets in units of any investment funds: Provided that such investment fund may only be invested in the categories of investments set out in subsection (1) of this section and in real estate.

(2) Subject to the subsisting Central Bank of Nigeria foreign exchange rules, the Commission may recommend to the President for approval the investment of pension fund assets outside the territory of the Federal Republic of Nigeria.

75. A pension fund administrator shall not invest pension fund assets in the shares or any other securities issued by:

(a) The pension fund administrator or custodian; and

(b) A shareholder of the pension fund administrator or custodian.

Social and Economic Benefits of the New Contributory Pension Scheme

The scheme (CPS) empowers Nigeria workers by giving them the choice as to how their pension is managed and the assurance of their retirement benefits. It enhances labour mobility as workers can work freely from one organization to another without losing any benefit, in other words, should a worker worked for relatively short period in one organization and move to another, he or she has nothing to lose in terms of retirement benefits. The schemes also instill a savings culture in Nigerians and which will create a pool of investible funds in the long term

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to boost the economy. This also encourages the development of both capital and money markets in Nigeria. The scheme require a group life insurance cover for employees in an organization and this tend to improve staff welfare, promote workers commitment and loyalty and as well provide adequate cover for employee's family in event of disability or he or she died in service, (Atedo, 2006). Management or Directors of PFA, PFC or other institutions must be guided by the Commission, reporting requirements by PFAs, PFCs & Pension Departments and adequate sanctions, Statutory Reserve Fund by PFA & Minimum Pension Guarantee, public disclosure of information by operators in the industry must be ensured.

Opportunities Created by the Contributory Pension Scheme

A lot of opportunities are created in the modern CPS. The scheme has boosted the capital/money markets and this has brought a tremendous growth to the economy. As it stands, all PFAs have their funds invested in the capital market through equities and bonds. Also the banks and other money market operators have had their own share through fixed deposits. The PFAs and PFCs that were the offshoot of the new scheme have created employment opportunities and savings for employees among others. Oshiomole (2007) caped up the available and inherent potentials that Nigerians' stand to gain with advent of the CPS. In his opinion CPS has created opportunities ranging from individual retirement savings account which enhances fund accumulation, mobility of labour without any effect on the RSA fund, contributors' rights to change PFA as the occasion demands, access to retirement benefits as at when due, minimum pension guarantee to accumulation of long-term funds which has contributed to the growth in the capital market.

The new pension scheme has laid to rest Ghost Pension Syndrome (Amujiri. 2009). Also, Agbese (2008) in Amujiri (2009) opined that the introduction of the new pension scheme in Nigeria marked a turning point in the life of retirees as well as the economy through elimination of ghost pensioners from the pay roll.

Gross Domestic Product

The Gross Domestic Product (GDP) is the monetary value of goods and services produced in an economy during a period of time irrespective of the nationality of the people who produced the goods and services. It is calculated without making deductions for depreciation (CBN, 2013). Gross Domestic Product is the market value of all officially recognized final goods and services produced within a country in a given period (NBS, 2014).

The Theoretical Framework

This study is based on Pension Benefit Guarantee Insurance Theory:

Pension Benefit Guarantee Insurance Theory

The problem of underfunded DB pension plans was a driving element in the introduction of pension benefit guarantee insurance in most cases such schemes have been introduced, such as the Pension Benefit Guarantee Fund (PBGF). Ippolito (1987) in the union hold-up model provides an economic rationale for the introduction of the PBGF. In this model, a period of high inflation reduced the incentive of firms to use underfunding as a tool to hold unions in check, hence reducing their opposition to benefit insurance, while, on the other hand, unionized workers were able to obtain a significant transfer from the PBGF. This works in situations

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where the fraction of beneficiaries is small enough with respect to the overall universe of plan members, such that the additional cost of insurance is negligible for each individual.

Benefit guarantee funds face challenges of their own. As usual in an insurance setting, these challenges can be analyzed along the lines of moral hazard and adverse selection. Cooper and Ross (2003) take up their model and discuss the introduction of public insurance in this setting. Again they look at an optimal labour contract with the additional feature that firms might face borrowing constraints. As before, underfunding can be an equilibrium outcome in the absence of benefit guarantee. When introducing a public benefit guarantee fund, they find that the problem of underfunding is accentuated; a standard moral hazard argument. Specifically, while firms with sufficient capital would fully fund pension plans in the absence of insurance and only firms with low levels of capital reduce funding of plans, the introduction of a benefit guarantee induces *all* firms to reduce contribution to the plan. Additionally, the authors look at the investment decision of plan managers by introducing a risky asset. While a risky asset might increase the funding tendency of firms in their plans it is also the case that risk exposure of the plan increases with minimal funding level. Hence, the introduction of a benefit guarantee might induce firms to increase their risk exposure.

A different feature of moral hazard is presented in Niehaus (1990): High risk firms have the incentive to increase benefit levels. Niehaus builds a simple model, where the benefit insurance represents a put option for the firm, with the particular feature that the insurance fee does not depend on the default risk of plans. The author shows that, as long as benefits are lower than the upper limit of the guarantee, the value of the put options increases with the level of promised benefits. Furthermore, this form of moral hazard increases with the level of underfunding of the plan.

Finally, benefit insurance where insurance rates do not adequately reflect bankruptcy risks, might induce firms with well-funded Defined Benefit pension plans to terminate their plans (or convert them into defined contribution plans). This gives rise to a problem of adverse selection in the universe of plans benefiting from the insurance (Wilcox, 2006). In summary, the existence of a benefit guarantee insurance can i) increase (but need not cause) the degree of underfunding; ii) induce plan managers to invest in risky portfolios; and iii) induce firms to terminate well-funded plans.

METHODOLOGY

This study entails analytical research in which the historical method was used in collecting the data. The method of data collection was necessitated by the objectives of this study. The population of the study entails nine (9) years and the data were generated from the Central Bank of Nigeria Statistical Bulletin (2012) and PenCom (2012). Parameters like Domestic Ordinary Shares (DOS), Federal Government of Nigeria Securities (FGNS), Local Money Market Securities (LMMS), Real Estate Property (REP) and Gross Domestic Product (GDP) of Nigeria figures were used to measure the contribution of Portfolios of New Contributory Pension Scheme on Nigerian Economy. The period of six years was selected as the sample size of this research. Data covering a period of six (6) years, i.e. (n=6). This period was chosen for the study because of the availability of data and the need to evaluate the contribution of the new contributory pension scheme portfolios in Nigeria. Statistical packages for social scientists

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(SPSS) version 18.0 were employed to analyze the data while F-test and Pearson correlation test were used to test the hypotheses.

Model Specification

$GDP = f(DOS + FGNS + LMMS + REP)$

$GDP = B_o + B_1DOS_i + B_2FGNS_i + B_3LMMS_i + B_4REP_i + \mu_i$ ....1 [Model]

Where:

GDP = an indicator representing Gross Domestic Product (Dependent Variable)

B_o = a Constant;

$B_1DOS_i + B_2FGNS_i + B_3LMMS_i + B_4REP_i$ = Coefficients of the Independent Variables;

DOS_i = a predicator representing Independent Variable (Domestic Ordinary Shares);

$FGNS_i$ = a predicator representing Independent Variable (Federal Government of Nigeria Securities);

$LMMS_i$ = a predicator representing Independent Variable (Local Money Market Securities);

REP_i = a predicator representing Independent Variable (Real Estate Property); and

μ_i = Stochastic error term.

Data Presentation

Table 4.1: Figures of Domestic Ordinary Shares (DOS), Federal Government of Nigeria Securities (FGNS), Local Money Market Securities (LMMS), Real Estate Property (REP) and Nigerian Gross Domestic Product.

YEAR	DOS	FGNS	LMMS	REP	GDP
2007	240	280	160	79	20,657,317.67
2008	221	351	332	125	24,296,329.29
2009	221	499	542	143	24,794,238.66
2010	358	829	489	171	33,984,754.13
2011	320	1361	319	188	37,409,860.61
2012	380	1729	418	182	40,544,099.94

Source: Pension Annual Report 2007 - 3rd Quarter 2012

The table 4.1 above shows, the figures of Domestic Ordinary Shares (DOS), Federal Government of Nigeria Securities (FGNS), Local Money Market Securities (LMMS), Real Estate Property (REP) and Gross Domestic Product for the period of six years within 2007-2012.

The data collected were regressed on SPSS 18.0 version; the following results were obtained as indicated below:

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Table 4.2: Coefficients

Model	Regression Coefficients	Standard Coefficients	Standard Error
CONSTANT	5117089		2034499
DOS	33888.517	.299	8002.704
FGNS	4696.033	.341	1377.623
LMMS	-5185.640	-.088	3374.825
REP	90120.857	.461	20039.953

Source: SPSS Version 18.0

Table 4.3: Pearson Correlation

Variables	Pearson Correlation (R)	R^2	R^{-2}	Sig.
DOS	0.917	0.999	0.993	0.01
FGNS	0.964	0.999	0.993	0.002
LMMS	0.334	0.999	0.993	0.513
REP	0.921	0.999	0.993	0.009

Source: SPSS Version 18.0

Table 4.4: ANOVA

df_1	df_2		$F_{computed}$	Sig.
1	4		188.956	.05

Source: SPSS Version 18.0

Model Presentation

$GDP = 5117089 + 33888.517DOS_i + 4696.033FGNS_i + -5185.640LMMS_i + 90120.857REP_i + \mu i$ --- 2 [Model]

(2034499) (8002.704) (1377.623) (3374.825) (20039.953)

Where: GDP = Gross Domestic Product

DOS_i = a predicator representing Independent Variable (Domestic Ordinary Shares);

$FGNS_i$ = a predicator representing Independent Variable (Federal Government of Nigeria Securities);

$LMMS_i$ = a predicator representing Independent Variable (Local Money Market Securities);

REP_i = a predicator representing Independent Variable (Real Estate Properties)

The figures in parenthesis are the respective Standard Errors values for the parameter estimates B_o, B_1, B_2, B_3 and B_4 respectively.

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Interpretation of Results

The R values are the Pearson correlation coefficients that show the level of the relationships between the GDP (Dependent Variable) and the Independent Variables: DOS, FGNS, LMMS and REP. Model 2, evaluates the contribution of Portfolios of New Contributory Pension Scheme on Nigerian Economy for the period under review. Thus; R values of 0.917, 0.964, 0.334 and 0.921 translates to 91.7%, 96.4%, 33.4% and 92.1% respectively. This affirms that the dependent variable GDP is linearly positive correlated with the independent variables (DOS, FGNS, LMMS and REP). The Adjusted R Square being R^{-2} = 0.993, this shows that, the 99.3% of the change in the dependent variable is caused by the independent variables.

Test of Hypotheses

To evaluate the contribution of Portfolios of New Contributory Pension Scheme on Nigerian Economy for the period under review (2007-2012), the following hypotheses were examined using F-test and Pearson correlation test.

Ho_1: Domestic Ordinary Shares of new Pension Scheme has no significant contribution to Nigerian GDP

Ho_2: Federal Government of Nigeria securities of new Pension Scheme has no significant contribution to Nigerian GDP

Ho_3: Local Money Market Securities of new Pension Scheme has no significant contribution to Nigerian GDP

Ho_4: Real estate property of new Pension Scheme has no significant contribution to Nigerian GDP

Ho_5: There is no significant relationship between pension portfolios and Nigerian GDP

F-test

At 5% level of significance, F_{tab} i.e. $F_{(1)\,(4)} = 7.71$, $F_{computed} = 188.956$. From Model 2, when $F_{computed} > F_{tabulated}$, thus: 188.956 > 7.71, the null hypothesis will be rejected (Adefila, 2008). Therefore, we reject the null hypotheses 1, 2, 3 and 4 that, say Domestic Ordinary Shares of new Pension Scheme has no significant contribution to Nigerian GDP, Federal Government of Nigeria securities of new Pension Scheme has no significant contribution to Nigerian GDP, Local Money Market Securities of new Pension Scheme has no significant contribution to Nigerian GDP and Real estate property of new Pension Scheme has no significant contribution to Nigerian GDP.

Pearson Product Moment Correlation Test

The Pearson Product Moment correlation test shows that, there are significant relationships between pension portfolios and Nigerian GDP as indicated by the correlation coefficients of .917, .964, .334 and 921 which are significant at .01 (DOS), .002 (FGNS), and .009 (REP) respectively except LMMS which is not significant as indicated by correlation coefficient of .513 though the relationship is positive and weak at .334. Also, pension portfolios have positive

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significant relationships with the Nigerian GDP as indicated by the correlation coefficients of .917, .964, .334 and 921.

SUMMARY

This study evaluates the contribution of Portfolios of New Contributory Pension Scheme to Nigerian Economy (2007-2012) with the following findings: That;

(i) Domestic Ordinary Shares of new Pension Scheme has significant positive contribution to Nigerian GDP as indicated by regression coefficient of 33888.517;
(ii) Federal Government of Nigeria securities of new Pension Scheme has significant positive contribution to Nigerian GDP as indicated by regression coefficient of 4696.033;
(iii) Local Money Market Securities of new Pension Scheme has a significant negative contribution to Nigerian GDP as indicated by regression coefficient of -5185.640; and
(iv) Real estate property of new Pension Scheme has significant positive contribution to Nigerian GDP as indicated by regression coefficient of 90120.857.
(v) There are significant relationships between pension portfolios and Nigerian GDP as indicated by the correlation coefficients of .917, .964, .334 and 921 which are significant at .01 (DOS), .002 (FGNS), and .009 (REP) respectively except LMMS which is not significant as indicated by correlation coefficient of .513 though the relationship is positive and weak at .334.

CONCLUSION

The Pension Reform in Nigeria has created a huge pool of stable and long-term funds for the socio economic and infrastructural development of Nigeria, it contributes to the development of the Nigerian financial system, as PFAs are now major institutional investors. However, the impact pension funds would play is determined by the size and stage of development of the capital market and availability of investible products that satisfy the investment criteria as well as meet the long-term risk-reward profile of the pension funds. The Contributory Pension Scheme is still at its accumulation stage and would remain so for a long while (in view of the relatively young age of registered contributors). Hence, with controlled inflation and reduced interest rates, pension fund managers would change their investment strategies and further diversify their portfolios into growth and alternative assets, in order to enhance their investment returns in the long-term. The fund's managers who are professionals in this regard take calculated risks that will enhance the performance of the sector. It is a known fact that, no risk no return, the fund managers should consider the issue of risk-return trade-off as a priority before taking their investment decisions whether to invest, reinvest or de-invest their finance resources from the organizations or a particular sector of the economy.

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RECOMMENDATIONS

The findings in the course of this study necessitated the following recommendations:

i. There should be more investment of pension fund in Domestic Ordinary Shares, Federal Government of Nigeria securities and Real estate property to boost Gross Domestic Product (GDP) of Nigeria. However, there should be a reduced investment of pension fund in Local Money Market Securities because of its negative impact on the Nigerian gross domestic product as revealed by this study.

ii. Small, medium and micro enterprises should be brought to the new contributory pension scheme to increase the capital for more investible funds to boost the Nigerian economy. This is because there is a positive relationship between the pension portfolios and the gross domestic product as revealed by this study.

iii. Pension fund administrators are enjoined to continuously scan the macro-economic environment and liaise with institutional investors, in order to develop investible products that will satisfy the risk-reward profile of institutional investors.

iv. The National Pension Commission should continue to partner with relevant stakeholders, make its Investment Regulation more flexible and encourage increased pension fund investments in order to further develop and deepen the Nigerian capital market.

v. Pension Fund Administrators and Pension Fund Custodians risk assessment should be improved upon in the area of pre-investment risk appraisal. This will help to guide against economic and political risks that are prevalent in an emerging economy of ours.

vi. PenCom should ensure effective monitoring, supervision and enforcement of the provision of the PRA 2004, which are the inevitable ingredients in the Contributory Pension Scheme towards Gross Domestic Product (GDP).

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