

## EFFECT OF PENSION REFORMS ON POVERTY REDUCTION IN NIGERIA

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### **ABSTRACT**

*This study examined the effect of pension reform on poverty reduction in Nigeria. To be specific, the study appraised the effect of pension fund investment in financial assets on poverty reduction in Nigeria. The study covered a period of 12 years i.e. 2004-2015. The data for the study were sourced from Central Bank of Nigeria Statistical bulletin, National Bureau of Statistics yearbooks and Pencom Publications among others. The application of descriptive statistics and multiple regression analysis were considered suitable for the study. The findings of the study revealed that Pension fund investments in financial assets have positive effect on poverty Reduction in Nigeria. It implied that pension fund played a very important role in determining the poverty level of a country. It is therefore recommended that the Federal Government focus on adequate handling of the reform package which will ensure economic growth and national development which will in turn lead to reduction in poverty level within the system.*

**Key words: Reforms, pension, poverty reduction.**

### **INTRODUCTION**

Pension reform in Nigeria was necessitated by many problems confronting the public and private sectors pension system. Prior to 2004, when Nigeria embarked on reform of the pension sector, the Federal Government was saddled with various problems relating to its pension scheme. The public sector operated the pay-as-you-go (PAYG) scheme which became unsustainable due to inadequate budget provisions and low funding, while many employees in the private sector were not covered by any form of pension scheme and most of the ones covered had their schemes unfunded (Ahmad,2007).

To compound these issues, there was a low compliance ratio which was further compounded by the absence of regulation and supervision by government agency (Eke & Omfalajo, 2015).

With the reform, the industry witnessed an inflow of contributions and transfer of assets both from the public and private sectors, the bulk of which were invested in Federal Government Securities, quoted stocks, and domestic money market instruments (Owo,2008).

To ensure safety and proper investment of the funds, Pencom got involved in collaboration activities with The Central Bank of Nigeria (CBN), Debt Management Office (DMO), Securities And Exchange Commission (SEC), Federal Inland Revenue Service (FIRS), National Insurance Commission (NAICOM), Bureau For Public Enterprises (BPE). These collaborative activities were on issues that cut across the jurisdictions of the regulatory agencies, issuance of guidelines and regulations, as well as Financial System Strategy(FSS 2020), (Ogunleye,2006). According to Taiwo and Agwu (2016),they were also meant to address the problems occasioned by the defunct defined benefit system for existing pensioners who retired under the old pension scheme.

The Federal Government therefore embarked on the reform of Nigerian Pension System to achieve the following objectives:

- (i) Ensure that every retiree receives his/her retirement benefits as and when due.

- (ii) Empower the worker to decide which licensed Pension Fund Administrator should manage his/her pension assets.
- (iii) Assist workers to save in order to cater for their old age livelihood.
- (iv) Establish uniform rules, regulations and standard of administration of pension matters in Nigeria.
- (v) Establish a strong framework for regulating and supervising the pension industry.

The reform was expected to impact the economy positively and ensure sustainable economic growth by promoting employment generation activities. The impact is supposed to be by way of improved standard of living of the elderly; secured financial autonomy and independence of retirees; and improved labour market. These were all geared towards reduction of poverty level of the citizenry.

Furthermore, the departure from defined benefit pension scheme was to ensure that retirees/pensioners receive their pensions as and when due as it was noticed that pensioners were not regularly paid under the Defined Benefit Scheme. The reforms of the pension system is expected to inject a lot of funds into the economy which will bring about economic growth thereby reducing poverty (World Bank, 1996). However, the increasing economic growth in the country has not translated to increased wealth generations and by extension low levels of poverty.

Despite the reform and the various poverty alleviation programmes by the Nigerian government and the huge capital outlays, Nigeria is still being ranked as a poor nation hence this study. Something therefore needs to be done so that the objectives of the pension reforms can be achieved.

The objective of this study is to ascertain the effect of pension funds investments in financial assets on per capita income in Nigeria.

#### **STATEMENT OF RESEARCH HYPOTHESES**

Investment of pensions fund in financial assets does not have a positive effect on per capita income in Nigerian.

The study was based on Nigeria Economy using the Federal Government of Nigeria. The success or otherwise of the reform of the pension system is determined by its impact on the economy as expressed by macro-economy and social/development indicators. In line with the objectives of the study, the macro-economic indices used are: Pensions fund investment in financial assets, GDP, poverty index. The study spans 2004 to 2015 that is 12 years.

The study therefore focused on the effect of pension reform on poverty reduction in Nigeria. The macro-economic indices used will throw more light on the effect of the reform on poverty reduction in Nigeria. The year 2004 was considered as the take off point of the study as most economic reforms under the current democratic dispensation in Nigeria were flagged off that year.

#### **Pension Reforms in Nigeria**

Pensions fund is a major step that is a weighty as the consolidation in the banking sector. According to the Pension Fund Act of 2004, the PFAs are to manage pensions of both the public and the private concerns. Pension is expected to be funded, either jointly by both employees and employers or solely by the employers (Oyegoke, 2007).

The Government was compelled to drop the defined benefit and embrace the defined contribution scheme of pension in 2004 as it became obvious that most schemes were either underfunded or unfunded entirely. Also, there were unsustainable outstanding pension liabilities, weak and inefficient pension administration which showed the defined benefit scheme as being unsustainable. To cap it all, most workers in the private sector were not covered by any form of retirement benefit arrangements.

According to Ahmad (2007), pension reform was embarked upon to ensure that every worker receives his retirement benefits as the when due, empower the workers and assist them to save in order to cater for their livelihood during old age, establish uniform rules, regulations and standards for administration of pension matters, secure compliance and promote wider coverage.

Secondly, the reform was perceived as an integral parts of government medium term development agenda - National Economic Empowerment and Development Strategy (NEEDS) which will help to reduce the fiscal cost of pension to the government, stem the growth of outstanding pension liability, mobilize long-term savings, stimulate the development of an efficient capital market, provide long-term finance for the real sector and promote GDP growth (Stewart & Yermo 2009).

The impact of pension reform on Nigerian economy has been positive. It has brought about Buoyant Capital Market by ensuring increased market integrity/ transparency, innovative products, improved regulation/supervision, creation of domestic institutional investors, vibrant and competitive securities

market, lower transaction costs, improved integrity/corporate governance and avenue for long term borrowing.

Socially, it has brought about improvement in living standards of the elderly, secures financial autonomy and independence of retirees, and also has improved the labour market (Moleko & Ikehide 2016).

### **Poverty Reduction**

Poverty reduction in this work is represented by per capital income. Per capital income measures the average income earned per person in a given area in a specified year. It is calculated by taking a measure of all sources of income in the aggregate and dividing it by total population. It can apply to the average per-person income for a city, region or country and is used as a means of evaluating the living conditions and quality of life in different areas.

### **Theoretical Framework**

The theoretical framework underpinning the study is the ‘Human Capital Theory’. The human capital theory term refers to the stock of knowledge, habits, social and personal attributes, including creativity, embodied in the ability to perform labour so as to produce economic value. This theory was popularized by Becker (1994) and Mincer (1993).

Alternatively, human capital is a collection of traits – all the knowledge, talents, skills etc possessed individually and collectively by individuals in a population. These resources are the total capacity of the people that represents a form of wealth which can be directed to accomplish the goals of the nation. “Human capital theory” asserts that human capital is a key determinant of economic success.

### **METHODOLOGY**

This section deals with the research design and the procedure adopted in carrying out this study. This work is aimed at evaluating the effect of pension reform on poverty reduction in Nigeria. It therefore stands to reason that it is interested in finding out if the pension reform in the country has led or can lead to improved wellbeing of the citizenry.

Therefore, the design adopted in this study is the Ex-post facto research design. This design is appropriate because it seeks to determine the extent of the association between the variables and to draw inferences. Such inferences concerning the relationship between the variables involved can then be used for purposes of prediction, in this case, the effect of pension reform on poverty reduction in Nigeria.

The data for this research work were sourced from Central Bank of Nigeria and National Bureau of Statistical yearbooks and Journal articles.

The population of the study therefore is the federal republic of Nigeria as the study covers the entire economy of the country.

The sample size of the study is the financial sector of the economy. The sample used here was drawn from raw data extracted from the sources listed below and were used in constructing tables for data presentation and analysis as well as testing of the hypotheses in this study:

- i. Central Bank of Nigeria Annual Report and statement of Accounts (covering financial years 1997 - 2015);
- ii. The Nigerian Statistical Fact sheets on Economic and Social Development (2015)
- iii. Central Bank of Nigeria Statistical Bulletin;
- iv. National Bureau of Statistics Year Books.

### **DATA PRESENTATION AND ANALYSIS**

#### **Data Presentation**

This section presents the data used in the test of hypotheses. The data were firstly presented and analysed using a trend analysis to show the increases and decreases in data trend as well as the interactions between variables.

**Table 1: PENSION FUND INVESTMENTS IN FINANCIAL ASSETS**

Year	Investment (N'm)	GDP N'bn	PINV/GDP %
2004	-	11411.07	-
2005	-	14610.88	-
2006	-	18564.59	-
2007	815.19	20657.32	3.946252
2008	1098.99	24296.33	4.523276
2009	1529.63	24794.24	6.169296
2010	2029.77	54612.26	3.716693
2011	2442.84	62980.40	3.878731
2012	3153.11	71713.94	4.396788
2013	4058.87	80092.56	5.067794
2014	4811.29	89043.62	5.403296
2015	5302.88	94144.96	5.632675

**Source: Pencom Annual Accounts for several years.**

Table:1 presents the percentage movements of pension fund investments in financial assets as scaled by the gross domestic product for the years 2004 – 2015. The table also seeks to demonstrate the relationship between the increase in pension fund investments in financial assets and impact on the GDP.

**Table 2: PER CAPITA INCOME**

Year	GDP	POPULATION	PCI
2004	11411.07	134307403	3354
2005	14610.88	137822312	3606
2006	18564.59	141464657	3860
2007	20657.32	145235257	4139
2008	24296.33	148134093	4403
2009	24974.24	153161414	4678
2010	54612.26	157315944	5128
2011	62980.40	161597706	5522
2012	71713.94	166005536	5522
2013	80092.56	170528460	5755
2014	89043.62	175146252	6061
2015	94144.96	179838974	6121

**Source: CBN STATISTICAL BULLETINS AND Annual Accounts**

Table 2 shows the per capita income for the country for the years 2004 – 2015.

**Table3 : Descriptive Statistics**

	PCI	PENINV
Mean	0.028850	4.748303
Median	0.025558	4.523276
Maximum	0.052350	6.169296
Minimum	0.008496	3.716693
Std. Dev.	0.017130	0.863875
Skewness	0.157226	0.318431
Kurtosis	1.311789	1.772388
Jarque-Bera	1.474469	0.717234
Probability	0.478435	0.698642
Sum	0.346196	42.73473
Sum Sq. Dev.	0.003228	5.970241
Observations	12	9

Source; Author’s Eviews 7.2 Output.

where:

PCI = Per Capita Income

PENINV = Pension Fund Investment in Financial Asset

Table shows that the maximum per capita income, pension fund investment in financial asset as percentages of GDP are 0.052 and 6.16% respectively between 2004 and 2015 with mean values of 0.028 and 4.74% respectively. These resulted in the standard deviations of 0.017 and 0.86% for per capita income and pension fund investment in financial asset respectively. The positive skewness for per capita income and pension fund investment in financial asset shows the leanness of the dataset to one side of the distribution. This suggests that the larger probability distribution of the variables means have fatter tails to the right of the distribution and lies closer to zero.

The Jarque-Bera statistics is concerned with the normality of the probability distribution and accepts the null hypothesis that the variables are not normally distributed. This is because the probability of the Jarque-Bera statistics of 0.478 and 0.698 > 0.05 for per capita income and pension fund investment in financial asset respectively.

**Table 4: Regression result for Pension Fund Investment in Financial Asset**

Dependent Variable: PCI

Method: Least Squares

Date: 04/29/17 Time: 11:18

Sample (adjusted): 2007 2015

Included observations: 9 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<b>PENINV</b>	<b>0.002978</b>	<b>0.006657</b>	<b>0.447397</b>	<b>0.6681</b>
C	0.020744	0.032072	0.646773	0.5384
R-squared	0.027800	Mean dependent var		0.034886
Adjusted R-squared	-0.111086	S.D. dependent var		0.015432
S.E. of regression	0.016266	Akaike info criterion		-5.206292
Sum squared resid	0.001852	Schwarz criterion		-5.162465
Log likelihood	25.42832	Hannan-Quinn criter.		-5.300872
F-statistic	0.200164	Durbin-Watson stat		0.388695
Prob(F-statistic)	0.668105			

Source; Author’s Eviews 7.2 Output

The probability of the t-Statistic of pension fund investment in financial assets stood at 0.6681 > 0.05. Thus, the result shows that pension sector investment in financial asset representing reforms in the Nigerian pension industry does not have a significant effect on poverty reduction in Nigeria.

### Test of Hypotheses

The test of hypotheses was carried out in the following steps:

*One:* Statement of the hypothesis in both null and alternate forms

*Two:* Statement of the decision rule

*Three:* Presentation of the regression results

*Four:* Decision.

Hypotheses examine the effect of pension fund investment in financial assets used to capture the reforms in the pension industry on poverty reduction in Nigeria. Data from the appendix was used in the test hypothesis.

**Step one:** Statement of the hypothesis in both null and alternate forms

H<sub>0</sub>: Investments of pension fund in financial assets does not have a positive effect on poverty reduction in Nigeria

H<sub>1</sub>: Investments of pension fund in financial assets has a positive effect on poverty reduction in Nigeria

**Step Two:** Statement of the decision rule

The decision rule is “do not reject” the null hypothesis if the sign of the coefficient is negative and the probability of the t-statistics is > 0.05 ie 5%. Otherwise, reject the null hypothesis and accept the alternate hypothesis accordingly.

**Step Three:** Presentation of the regression results for the test of hypothesis

**Table 5: Multiple Regression Analyses**

Dependent Variable: PCI

Method: Least Squares

Date: 04/29/17 Time: 11:19

Sample (adjusted): 2007 2015

Included observations: 9 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CPS	-0.000767	0.000258	-2.976887	0.0409
INSINV	-2.21E-05	2.01E-06	-11.00923	0.0004
M2	1.87E-05	0.000145	0.129328	0.9033
<b>PENINV</b>	<b>0.005163</b>	<b>0.001438</b>	<b>3.590203</b>	<b>0.0230</b>
C	0.043512	0.005440	7.998841	0.0013
R-squared	0.990520	Mean dependent var		0.034886
Adjusted R-squared	0.981040	S.D. dependent var		0.015432
S.E. of regression	0.002125	Akaike info criterion		-9.170015
Sum squared resid	1.81E-05	Schwarz criterion		-9.060446
Log likelihood	46.26507	Hannan-Quinn criter.		-9.406465
F-statistic	104.4865	Durbin-Watson stat		2.174154
Prob(F-statistic)	0.000268			

Source: Author’s Eviews 7.2 Output

where:

PCI = Per Capita Income

CPS = Credit to Private Sector

INSINV = Insurance Industry Investment in Financial Asset

M2 = Money Supply

PENINV = Pension Fund Investment in Financial Asset

**Step Four:** Decision

The decision rule is “do not reject” the null hypothesis if the sign of the coefficient is negative and the probability of the t-statistics is > 0.05 ie 5%. Otherwise, reject the null hypothesis and accept the alternate hypothesis accordingly. Table shows the coefficient of 0.005163 for pension industry investment in financial asset to be positive and the probability of the t-Statistic of 3.590203 being 0.0230 < 0.05. Therefore, we reject the null hypothesis and conclude that pension industry investment in financial asset has a positive and significant effect on poverty reduction in Nigeria.

**Findings, Conclusion and Recommendations**

The study revealed that pension fund investments in financial assets have positive and significant effect on poverty reduction in Nigeria.

Pension fund plays a very important role in determining the poverty level of a country. It is against this backdrop that the Federal Government of Nigeria embarked on the reform of the system which has ensured the mobilization of savings for investments, facilitated inflows of capital, and optimized the allocation of capital between competing uses. It was observed that pension fund investment in financial assets have positive and significant effect on poverty reduction.

Based on the findings of the study, it is strongly recommended that the Government should create pension investment management strategy and guidelines which would reduce the duration of mismatches between pension assets and liabilities, ensure adequate pension benefits in future and simultaneously deepen the financial system and improve economic growth which would in turn enhance the positive effect of pension funds in poverty reduction in Nigeria.

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