International Journal of Management Studies, Business & Entrepreneurship Research
ISSN: (Print): 2545-5907 (Online): 2545-5885
Volume 3, Number 1, Maech2018
http://www.casirmediapublishing.com

The Effect of Funded Pension on the Economic Growth in Nigeria

Mathew Olasehinde Fashagba, *PhD*

Department of Business Administration
Ibrahim Badamasi Babangida University, Lapai, Niger State
E-mail: mfashagba@yahoo.com

ABSTRACT

Contributory pension scheme was adopted in 2004 in Nigeria in order to solve the crisis laden old pension scheme. The scheme provides for funds through contributions from both employers and employees in the country for the employee's retirement benefit. The funded created by the adoption of the new scheme has enhanced the financial deepening. The objective of the study is to seek the effect of the new scheme on the economic growth in Nigeria. The study employs secondary data of the gross domestic product and pension funds from both public sector and private sector for period in ten years due to availability of data. The method of data analysis used in the study is ordinary least square. The study finds empirical evidence that the adoption of the new pension fund have significant positive impact on the economic growth in Nigeria. The study recommends for the consolidation of the contributory pension scheme to enhance the economic growth of the country,
Keywords: *Private Sector, Public Sector, Pension Scheme, Economic Growth*

INTRODUCTION

Pension is post retirement payment to old employees after disengagement from active service to sustain their livelihood. Employees while in services enjoy their monthly emolument for the service rendered at the end of each month. Pension is a device to ensure that employee at retirement can continue with a regular income for livelihood. Pension, conventionally, has been paid with Defined Benefit (DB) pension scheme. Defined Benefit does not require contribution of funds to pay the old retired employees. The system therefore requires a growing working population to sustain the effective pension for the old as the current employees only pay the retirement benefit for the and make no provision for their retirement. The Defined Benefit (DB) pension was actually effective across nations of the world for some time. This however became unsustainable and needed replacement in the last few decades. The factors that have contributed to the sustainability of the Defined Benefit have been identified to include, predominantly, aging population and low fertility (Hu, 2005; Yilmaz Ozturk, nd). Also, Lachman (2013) identified increasing lifespan of humankind with other economic problems as the reasons for transition from the old scheme to the new scheme By governments and employers. Similarly, Meng and Pfau (2010) observed that the sustainability of old scheme was threatened by increasing longevity and reduced fertility.

The sustainability of the traditional pension scheme came under serious threat with the improved technology and medical facility thereby leading to aging population the rate of birth keep on decreasing while the old lifespan is on the increase hence the dependency continuously increasing as lower number enters into labour force. While the aging population threatens the old pension scheme sustainability was a universal fact, going home to Nigeria, corruption was single out as a major complementary factor for the change from the old pay-as-you-go pension scheme to the new contributory pension scheme in Nigeria. The new scheme provides for contribution of fund for the pension benefit of the employees. The scheme was passed into law in Nigeria in 2014 and refers to as Defined Contribution (DB) pension scheme.

The law provides that retirement saving account should be opened for all employees in public sector and private sector with at least five employees where 15% of the employees' monthly emolument should be jointly contributed by both the employers and employees. The pension contributions constitute viable funds for investment in economic activities to further grow the economy. On the importance of the contributory pension scheme in Nigeria, Tule, Okafor, Obioma, Okorie, Oduyemi, Muhammad and Olaoye (2015) asserted that pension funds are seen to be additional source of capital requires for the infrastructural development of the country.Pension funds are major component of the non-banking financial sector generating private capital to fund the economic growth activities. For instance Bijlsma, van Ewijk & Haiijen (nd) noted that "the role of pension funds and life 'insurance companies in the economy has increased by aging population. Also Binuomoyo (2015) opined that the funded pension is a form of saving that can spur economic growth in a process that start by affecting financial market positively. This study seeks to find the relationship between the pension funds and economic growth in Nigeria.

Research Questions

The study seeks to provide answer to the questions stated below:

i. Does private pension fund affect economic growth in Nigeria?
ii. Does public pension fund affect economic growth in Nigeria?
iii. What is the effect of total pension fund on Nigeria economy?

Objectives of the Study

While the main objective of the study is to determine the impact of pension fund on the economy growth in Nigeria, the specific objectives are stated as followings:

i. to determine the effect of the private pension fund on economic growth in Nigeria;
ii. to determine the effect of the public pension fund on the economic growth in Nigeria; and,
iii. to determine the impact of the total pension fund on the economic growth in Nigeria

Review of Empirical Literature

The relationship between pension and economic growth has recently received wide attention and studied. The findings of the results of some of the empirical studies are reviewed in the section. Nwanne (2015) examined the relationship between the contributory pension scheme and economic growth using the Ordinary Least Square (OLS) on the study secondary data. The study found a negative and significant impact of pension fund saving on economic growth. Edogbanya (2013) used the Pearson Product Moment correlation coefficient and t-test method of analysis on primary and secondary data to determine the relationship between pension fund and the economy. The study revealed that an effective pension fund investment has tremendously impact on the economy as a whole. Farayibi (2016) found that over 96% of the total variation in the real gross domestic product is explained by changes in the variables of the pension funds. The ECM and OLS analysis of the study revealed that pension contribution funds from both public and private sectors have positive effect on the economic growth. Ameh, Isiwu and Duhu (2017) found that about 82% of the variation in the economic growth in Nigeria is tied to the variation in the indices of the contributory pension scheme which is pension fund asset, pension fund contribution and investment. However, only the relationship between the pension investment and economic growth is found to be significant at five percent (5%) confidence interval. Also Bijlsma, van Ewijk & Haaijen (nd) studied the relationship between assets and economic growth. They concluded from the results with empirical evidence "that growth of funded pension system has positive effect on economic growth in OECD countries.

Akowe, Ocheni and Daniel (2015) employed both t-test and Pearson Correlation Test with SPSS. The result of the study indicated that four out of the five variables of pension have positive relationship with gross domestic product and three of the relationships are significant. Yilmaz and Ozturk (nd) sought to find the causal interaction among economic growth, pension funds and financial sector development. The empirical result of the study showed a bilateral causality between the economic growth and pension fund. In other words, growth in pension fund affects the economic growth and vice versa. Eke and Onafalayo (2005) found that gross domestic product affect pension assets positively. This implies a direct link between the economy measured in term of DGP and pension asset. The study revealed that a growth economy will translate to a growth in pension. Mesike and Ibiwoye (2012) adopted multiple regression and error correction mechanism method of analysis to find the relationship between pension reform and financial market development. The result of the analysis revealed that the pension reform create long-term contractual saving which stimulate security market development.

METHODOLOGY OF THE STUDY

The objective of this study is to determine the impact of the adoption of the contributory pension on the economic growth in Nigeria. The dependent variable of the study is the economic growth proxy by gross domestic product while the independent variables are measured by pension contributions for both public sector and private sector. The data were obtained from secondary sources. The data of the pension fund contributions were collected from annual publication of the Central Bank of Nigeria (CBN). The study employs ordinary least square method of data analysis. The relationship between the independent variable and dependent variable are evaluated with the model specified as follows:

$GDP = f(PF)$

And the components of PF are PubSPF and PrivSPF.

Hence,

$GDP = \beta_0 + \beta_1 PubSPF + \beta_2 PrivSPF + e$

Where GDP = gross domestic product

β_0 = Constant

β_1 = Coefficient for public sector pension funds
β_2 = Coefficient for private sector pension funds
e = error

Data Presentation

The data for the gross domestic product and pension fund contributions were obtained from the secondary sources of the publications of the Central Bank of Nigeria (CBN) for 10 years of 2006 to 2015 due to data availability. The data is presented in table 1 below

Table 1: Data of Pension Funds and Gross domestic Product for 2006 to 2015

Year	Public Sector Contributions	Private Sector Contributions	total Contibutions	Gross domestic Product
2006	37.38	23.03	60.41	222,790
2007	80.63	68.34	148.97	262,220
2008	99.28	80.81	180.09	330,260
2009	137.1	91.21	228.31	297,460
2010	162.46	103.03	265.49	369,060
2011	228.92	119.53	348.45	414,100
2012	331.14	174.43	505.57	460,950
2013	228.5	225.42	453.92	574,970
2014	237.76	343.97	581.73	568,500
2015	200.05	358.91	558.96	493,840

Source: Central Bank of Nigeria 2015 Annual Report

RESULTS AND DISCUSSION

The data of the study were obtained from sources of the Publications annual publication of the Central Bank of Nigeria (CBN). The data analysis method employed is ordinary least square using the gross domestic product proxies for the economic growth for independent variables and the public sector pension funds, private sector pension fund and total pension funds contribution for independent variables. The results of the ordinary least square analysis of the study are presented in tables 2 and 3 in this section. The results of the relationship between the public sector pension fund and the economic growth and the private sector pension fund and economic growth are presented in table 2 below

Table 2: Reggross domestic product public sector private sector, rT

Linear regression Number of obs = 10
F(2, 7) = 24.64
Prob > F = 0.0007
R-squared = 0.8756
Adj R-squared = 0.8401
Root MSE = 49602

Gross domest~t	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Public sector	614.6188	238.9155	2.57	0.037	49.67346	1179.564
Private sector	642.302	181.6168	3.54	0.010	212.8465	1071.758
_cons	190232.2	36404.87	5.23	0.001	104148.4	276316

Source: Author's Computation, 2018

Positive and significant relationships are found in both cases. A positive relationship is shown between public sector pension funds and the economic growth and significant at 5% confidence interval. Likewise, the result shows positive and significant relationship at 5% confidence interval between the private sector pension funds and the economic growth. The adjusted R-square value of 0.84 shows that changes in the independent variables (public sector pension funds and private sector pension funds) jointly explains for over 84% changes in the economic growth. This finding is in perfect agreement with Farayibi (2016) where a similar over 96% percent variation in real gross domestic product is found to be explained by the variables of pension fund contributions The results show empirical evidence of positive and significant relationship between public pension funds and the economic growth. Thus, the public pension fund has a significant positive impact on the economic growth. The results indicate that one naira (₦1) increase in public pension fund leads to 614.62 naira (₦614.62) growth in the gross domestic product. Similarly, the results of the analysis shown in table 2 reveal a statistical evidence of a significant positive relationship between private pension funds and the economic growth. This means that economic growth is significantly impacted positively by the performance of the private sector pension funds. The results of the analysis for the relationship in the table 2 show that one naira (₦1) increase in the private sector pension funds leads to 642.30 naira (₦642.30) increase in the economic growth. These results agree with Mesike and Ibiwoye (2012) finding that show that pension reform period generate long-run saving and equally stimulate security market development.

Table 3: Reggross domestic product total contributions, r

Linear regression Number of obs = 10
F(1, 8) = 76.55
Prob > F = 0.0000

R-squared = 0.8755
Root MSE = 46416

Gross domestic pr~t	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Total contributions	630.78	84.09582	7.50	0.000	436.8547	824.7053
_cons	189245.4	31631.57	5.98	0.000	116302.9	262187.9

Source: Author's Computation, 2018

Also, there is a positive relationship between the total pension funds contributions that combined the public pension funds with the private pension funds and the economic growth. The results of the analysis presented in the table 3 provide an empirical evidence of a significant impact of the total pension funds on the economic growth. This implies that an increase in pension funds will invariably bring about an increase in the economic growth and vice versa. From the results it can be seen that a one naira (₦1) increase in total pension funds leads to an increase of 630.24 naira (₦630.24) in the economic growth in Nigeria. The adjusted R square results of the relationship between the two variables in the table 2 with the value 0.84 also reveal that over 84% of the variation in the independent variable (economic growth) is explained by the independent variable (total pension funds).The findings of this study are in agreement with results of Edogbanya (2013) where contributory pension scheme was found to have a significant effect on the gross domestic product. Also, the findings of this study are partially in agreement with Hu (2015) where only a long-run positive but not significant relationship is found between pension funds and economic. Finally, the findings of the study agree with the implied results of Eke and Ohafalego (2015), Kalu and Attamah (2015) and Zahler (2005) that found significant relationship between pension fund and capital market development.

CONCLUSIONS

The study sought to find the effect of the implementation of the contributory pension scheme on the economic growth in Nigeria. Secondary data were obtained from public sector pension funds and private sector pension funds for the independent variable and the gross domestic product for the economic growth for a period of 10 post adoption of the new scheme based on data availability. The study employed ordinary least square for data analysis. The results show that there is an empirical positive relationship between all independent variables (public pension fund, private pension fund and the combined funds) and the economic growth. The positive relationships between the dependent variable are statistically significant at 5% confidence interval for all variables and at 1% confidence interval for the last variable. Therefore the study concludes that an increase in pension funds will lead to positive growth in the economy of the country and vice versa. The financial deepening of the country has been significantly enhanced with the adoption of the new scheme. Any effort to increase the funds will bring about direct positive growth in the economic growth of the country. The study recommends that effort should be made to consolidate the pension industry in Nigeria in order harvest the gain to rapidly grow the economy.

REFERENCES

Akowe, A., Ocheni, S. I. & Daniel, A. (2015). Evaluation of the Contribution of Portfolios of the new Contributory Pension Scheme in Nigeria Economy. *European Journal of Accounting, Auditing and finance research 3(10)*

Ameh, U. E., Isiwu, & Duhu, G (2017). Impact of Contributory Pension Scheme on Economic empirical Analysis, International Journal of Research in Humanities and Social Studies

Bijlsma, M., van Ewijk, C. & Haaijen, F. (nd). Economic Growth and Funded System , *CPB Netherlands Bureau for Economic Policy Analysis*

Binuomoyo, Y. K. (2015). A Review of Babatunde Alayanda's Funded Pension, Financial Sector development and economic growth in Nigeria, *Journal of Management and Science 5 (4)*

Edogbanya, A. (2013). Assessment of the Impact of the Contributory Pension Scheme to Nigeria Economic Development , *Global Journal of Management and Business Research 13 (2)*

Eke, P. O. & Onafaleyo, A. K. (2015). Interest Rate Capital Market and Pension Management: Lessons from Nigeria, African Journal of Business Management 9(3)

Farayibi, A. (2016). .The Funded Pension Scheme and Economic Growth in Nigeria, Munich Personal RePEc Archive. MPRA

Hu, T. (2005). Pension Reform, Economic Growth and Financial Development –

An Empirical Study, Brunel Unievrsity Unbridge Middlesex

Lachman. J. (2013). Pension: Its Impact on the World Economy. International *Journal of Business and Commerce 3 (2)*

Meng, C. & Pfau, W. D. (2010). The Role of Pension Funds in Capital Market Development, Graduate Institute for Policy Studies (GRIPS) Minato-Ku Tokyo

Mesika. G. & Ibiwoye, A. (2012). Pension Reform and Financial Market Development Nexus: Evidence from Nigeria*, International Journal of Academic Research in Business and Social Sciences*

Nwanne, T. F. I. (2015). Impact of the Contributory Pension Scheme on Economic growth in Nigeria, *Global Advanced Research Journal of Management and Business Studies 4(8)*

Tule, M. K., Okafor, P. N., Obipma, E. C., Okorie, G., Oduyemi, A. O., Muhammad, A. A. & Olaoye, O. J. (2015). Leveraging Pension Fund for Financial Infrastructural Development in Nigeria, CBN Working Paper Series

Yilmaz, B. & Ozturk, O. F. (nd). Pension Funds and Economic Growth: Evidence from OECD Countries 13th International Conference of ASECU Social and Challenges in Europe 2016 – 2020.