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CONTENTS

Capital Structure and Firm Financial Performance of Listed Deposit Money Banks in Nigeria: Moderating Effect of Board Financial Literacy <i>Anas Idris Abdulwahab, Hussaini Bala Ph.D, Mansur Lubabah Kwambo Ph.D, & Abubakar Adamu</i>	1
Influence of Socialization On MSME Compliance by Mediating Understanding and Moderating Knowledge of Tax Visits <i>Yayuk Ngesti Rahayu</i>	17
Does International Financial Reporting Standard Narrows Audit Expectation Gap? <i>Musa Ibrahim Dauda, Ibrahim Adagye Dauda, PhD</i>	35
Sustainability Reporting and Financial Performance of Listed Manufacturing Firms in Nigeria <i>Aiyesan, Olabode Olutola Ph.D</i>	49
Firm Attributes and Financial Reporting Timeliness of Listed Consumer Goods Firms in Nigeria <i>Akume James Terkende, Dele Ikese Karim</i>	67
Value Relevance of Accounting Information for Listed Financial Service Firms in Nigeria <i>Kassim Busari, Ishaya Luka Chechet Ph.D, Aliyu Ahmed Abdullahi Ph.D, & Ibrahim Mohammed Ph.D</i>	87
Nigeria Economic Growth and Capital Market Development: Does Contributory Pension Scheme Matter? <i>Akinwumi Ayorinde Olutimi, Toluwa Celestine Oladele Ph.D, &Adeboye Emmanuel Sanmi</i>	101
Audit Committee and Financial Reporting Quality: The Moderating Effect of Board Independence of Listed Deposit Money Banks in Nigeria <i>Kassim Yusha’u Shika, Mark David Kantiyok</i>	117

Determinants of Financial Performance of Listed Deposit Money Banks in Nigeria <i>Mary Seansu Lazarus, Nurradden Usman Miko Ph.D, & Saifulahi Abdullahi Mazadu Ph.D</i>	140
Human Resource Accounting and Profitability of Listed Deposit Money Banks in Nigeria <i>Ahmad Adamu Ibrahim, Ahmad Rufa'I Adamu, Fatihu Mahmud Alhassan & Muhammad Iliyas Abdulsalam</i>	158
Board Independence, Audit Effectiveness and The Quality of Reported Earnings in The Nigerian Consumer Goods Firms <i>Isah Shittu Ph.D, Misbahu, Abubakar Muhammad</i>	175
Impact of Capital Structure On Financial Performance of Listed Agricultural Companies in Nigeria <i>Ahmad Muhammad Ahmad, Shehu Usman Hassan Ph.D., & Abubakar Abubakar</i>	192
Trade Oriented Money Laundering and Era of Cybersecurity Tax Evasion in Nigeria <i>Oluwayemi Joseph Kayode, Adewole Joseph Adeyinka Ph.D, Adewale Abass Adekunle & Kadiri Kayode Ph.D</i>	205
Effect of Females in the Boardroom on Corporate Sustainability Reporting <i>Salami Suleiman Ph. D, Olanrewaju Atanda Aliu Ph.D</i>	224

NIGERIA ECONOMIC GROWTH AND CAPITAL MARKET DEVELOPMENT: DOES CONTRIBUTORY PENSION SCHEME MATTER?

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Abstract

Whether the contributory pension scheme (CPS) has addressed the shortage of capital for investments, the challenge of full compliance with the system and the shortage of investment outlets spurred the interest to investigate the impact of the CPS on capital market development and economic growth from 2005 to 2021. Secondary data was adopted for this study, and the data were extracted from the National Pension Commission and world development indicators. The study employed the auto-regressive distribution lag (ARDL) model as an estimation technique. The empirical results show that among the proxies for gross domestic product, total pension fund asset (TPFA) was significant in both the short and long run, which showed that a 1% increase in TPFA would produce a 0.0028% increase in the GDP. Also, among the proxies for capital market development, total pension fund asset (TPFA) was significant in both the short and long run, which showed that a 1% increase in TPFA would produce a 0.024% increase in capital market development. Based on these findings, the study concluded that CPS influenced capital market development and economic growth. Consequently, this study recommended, among others, that the NPC should continue to partner with relevant stakeholders such as pension fund administrators and custodians by making its investment regulations more flexible and encouraging increased pension fund investments.

Keywords: Capital Market, Economic Growth, Contributory Pension Scheme, ARDL.

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1. Introduction

The world's pension issue was credited to the French and British governments when they made special provisions for public servants (Haruna, Makama & Daniel, 2015). Pension in Nigeria Public Service came into being with the enactment of the

pension ordinance of 1951 during the British colonial era with retrospect effect from January 1, 1946 (Barrow, 2008; Nafisat, 2015). Consequently, the pension programme was modelled after the British structure, where the government or employer set aside funds to provide colonial retirement benefits to its staff. Other decrees were promulgated following the 1958 Pension Act to cater for different categories of workers, such as the private sector, police, agencies and the armed forces (Gunu & Tsado, 2012). These decrees, which remained operative laws in the public service and the military pension in Nigeria until 2004, were known as Defined Benefit (DB) or Pay-As-You-Go Scheme. The federal government supported it through financial allocation, and the pension division of the office of the head of service of the federation oversaw its administration (Balogun, 2016).

The old pension schemes were met with notable and decisive defeats following the attendant challenges and problems that marred their successful operations. They include lack of adequate and untimely budgetary provisions, increase in salaries and pensions, lack of effective regulation and supervision of the system, it was poorly funded or unfunded, owing to inadequate budget allocations, corruption and pension liabilities estimated to be about N2 trillion, in addition to too many private sectors not been covered by the scheme. (Haruna, Makama & Daniel, 2015; Yunusa, 2009).

Due to the failure of the old scheme, a new pension scheme, known as the pension reform act (PRA) 2004 or contributory pension scheme (CPS), became a reality to ameliorate the inadequacies of the old pension scheme thereby gearing the economy towards growth (Farayibi, 2015). It established a uniform pension system for both the public and private sectors, respectively. It also made it mandatory for employers and employees of both private and public sectors to contribute to employees' retirement benefits, coupled with establishing an Agency to regulate all pension matters in the country (Asekunowo, 2009; Gunu & Tsado, 2012). The CPS is relevant to Nigeria's capital market development and economic growth by growing its pension assets from N649.92 billion in 2006 to N13.42 trillion in December 2021 (PenCom, 2022). Therefore, it is credible that the introduction of CPS could serve as a tool for realising savings mobilisation goals, contribute to the development of the capital market and impacting positively on the economic growth (Price Waterhouse Coopers, 2016).

However, a significant concern is whether the CPS has achieved the above milestones on the one hand, and on the other hand, whether it has significantly

impacted the nation's domestic capital market and economic growth respectively. Consequently, there are still questions on whether the CPS introduction has addressed the scarcity of funds for long-term investments in Nigeria and whether this fund as gone a long way in impacting the capital market and eventually engendering economic growth. This is because many pension funds are yet being taken as Government Bonds (PenCom, 2016). As a result, many private and public sectors are refusing the scheme (Maduekwe, 2015; James, 2013; Al-Faki, 2006 & Achimugu, Ocheni & Akabo, 2015). Studies (Balogun, 2006; Ogwumike, 2008; Osaze, 2000 & Vitas, 2000) expressed confidence about the contributory pension scheme's potential to mobilise savings. Notwithstanding, as of 2014, full compliance with the PRA 2004 amended remained low. Also impacting capital market development and economic growth is the shortage of investment outlets. The objectives of the PRA 2004 restrict pension contributions held by the pension fund custodians and administered by pension fund administrators (PFAs) to limited categories of investment outlets. This has continued to inhibit the PFA managers' investment decision-making performance (BGL Report, 2010). The implication is that a large portion of pension funds contributions are left un-invested, and the consequence is that there will be a diminution in income accruing to contributors. To further worsen the above problem, is the underdevelopment of the capital market. Over 70% of the total market capitalisation belongs to the top twenty companies; thus, there would be a pool of pension funds chasing a few quality investments (Gunu & Tsado, 2012).

The PRA 2004 adopted the Chilean Pension model with an expectation of capturing the potential of millions of contributors, making the pension industry the most potent buy-side investor in the country (BGL Report, 2010). However, the reality is very different. Employee and employer compliance has been a significant challenge to PRA 2004. This can be due to the knowledge gap and general misconception (Odia & Okoye, 2012). Despite the informal sector reportedly employing over 35 million Nigerians, there are no strict procedures to assure compliance (Nwanne, 2015). Only 9.55 million contributors, or 13.70% of the 69.68 million people employed in the official and informal sectors, have cooperated with the programme. This suggests that the PRA 2004 purposefully left an opportunity for the scheme's noncompliance (NBS, 2021).

Many studies (Walker & Lefort, 2002; Mesike & Ibiwoye, 2012; Gunu & Tsado, 2012; Romer 2006; Stiroh, 2003; Iyiola, Munirat & Nwifo, 2012; Okoro, 2014; Alejandro & Mark, 2016; Meng & Pfau, 2010) have examined contributory pension

schemes, capital market development and economic growth. They opined that the CPS is a backbone for mobilising savings and, by implication, developing the domestic capital market and fostering the country's economic growth. Nevertheless, their studies did not adequately consider some salient economic factors such as stock market liquidity, interest rate, exchange rate, increase in the labour force, gross capital formation and technology growth. In this regard, this study covered the above gap. Following these arguments, this study investigates whether the CPS is a catalyst for capital market development and economic growth. As a result, the above arguments gave rise to the following research questions: What is the contributory pension scheme's impact on the Gross Domestic Product? To what extent does the contributory pension scheme affect the Nigeria capital market? Hence, to answer the research questions above, the following hypotheses were formulated:

H₀₁: Contribution Pension Scheme has positive and significant impact on Gross Domestic Product.

H₀₂: Contribution Pension Scheme will lead to a significant improvement in the Nigerian Capital Market.

This study covered the period from 2005–2021. This is because the CPS was enacted into Nigerian law on June 25, 2004, and the licences for the administrators of pension schemes were issued on March 5, 2005. (Maduekwe, 2015). The findings of this study will be useful to pension regulatory authorities and other stakeholders in their policy formulation. This study will also be a platform for future research and expanding intellectual frontiers.

2. Literature Review

Empirical Evidence

Levine (1991) investigated growth, taxation, and stock markets. A thorough literature analysis was conducted as part of the study to highlight the role financial markets play in economic growth. The study developed an endogenous growth model to explain this association better. The study also showed that stock markets foster growth by enabling enterprises to exchange ownership without interfering with internal production processes and enabling firms to diversify their portfolios. It concluded that tax policy affects growth directly by altering investments and indirectly by changing financial contracts' incentives.

Catalan, Wilbert, Kenneh, Friedman, and Paddison (2000) findings showed that contractual savings institutions like pension funds cause capital market growth. Furthermore, growing contractual savings sectors' potential benefits were more substantial for developing countries than developed countries. The influence of Nigeria's CPS on economic growth was examined by Gunu and Tsado (2012). Findings revealed that the ratio of pension funds to total market capitalisation gradually increased marginally from 2007 to 2010, showing that the contributory pension system has improved the mobilisation of savings, which translates to economic growth. Using the error correction model (ECM) technique, Mesike and Ibiwoye (2012) investigated whether pension reform will accelerate the growth of Nigeria's financial industry. According to the performance analysis of all the factors, the reform phase produces long-term contractual savings and encourages the growth of the securities market.

Madukwe (2015) assessed the importance of the link between Nigeria's market capitalisation (MC), ordinary local share (LOS) of the contributory pension plan, and pension asset under management (AUM). The study additionally used a pairwise correlation model. According to the study, the contributory pension plan had no discernible influence on Nigeria's capital market. It was determined that the national contributory pension scheme's money pool was invested and distributed among various assets. However, it had no appreciable impact on the expansion of the Nigerian capital market throughout the period under consideration.

Nwanne (2015) investigated the effect of Nigeria's contributory pension plan on economic development using the ordinary least square (OLS) regression approach. Findings showed that while pension deposits have a favourable and considerable influence on economic development, pension funds have a negative impact. It was suggested that pension funds should broaden their investment options and increase their compliance and mobilisation of participants' savings efforts.

Farayibi (2015) examined the impact of the functioning of the funded pension system since its beginning in 2004 on economic development in Nigeria. Findings showed that Nigeria's commercial and governmental sectors dramatically expanded their contributions to pension funds, creating a sizable investment pool for the capital and money markets. The study found that, with prudent risk and portfolio management by pension administrators and custodians, contributory pensions might increase Nigeria's Gross Domestic Product (GDP).

Edogbanya (2013) examined the impact of contributory pension scheme on Nigerian economic development. The objective of this study was to examine how contributory pension scheme influence the Gross Domestic Product (GDP) in Nigeria. The main problem of the study was centred on the nature and effect of risk prevailing in the pension assets management. Data were collected from both primary and secondary sources and analyzed using percentage. The research work adopted correlation analysis for testing secondary data and ANOVA for the primary data. The result of correlation analysis using t-test revealed that Contributory Pension Scheme (CPS) has significant impact on the GDP while the result of ANOVA revealed that risk prevalent has positive effect on the pension fund management. The researcher therefore, recommends that the Pension Fund Administrators should invest in less risky portfolio to enhance prompt payment of pension to retirees.

Adeoye (2015) did an evaluation of the pension industry in Nigeria. The paper assessed the success and challenges of pension industry in Nigeria, as a result of various reforms that had taken place. The study made use of both primary and secondary source of data. Findings from the study showed that the pension Reform Act (PRA) 2004 make it possible for the industry to grow. Moreover, the empirical evidence showed that there was a positive relationship between Contributory Pension Scheme (CPS) and Gross Domestic Product (GDP).

Bijlsma, Bonekamp, Ewijk and Haaijen (2017) in their paper; funded pensions and economic growth, analyzed the impact of funded pensions on capital markets and economic growth. They opined that if larger savings through funded pensions lead to deeper capital markets, this can be expected to have a positive effect on economic growth in particular for firms that rely on external finance. In their study, they used differential impact on firms with less or more external finance to study the effect of pension saving on economic growth. The study used data for 69 industrial sectors in 34 OECD countries for the period 2001-2010, findings from the study showed a significant impact of pension assets on growth in sectors that are more dependent on external financing. For a sector with average external dependence an increase in the pension assets to GDP ratio by one standard deviation (40 percentage points) increases growth by 0.24 percentage points.

3. Methodology

Model Specification

The model for this study is rooted in Solow growth theory and Calderon-Rosellmodel. The first model is based on the augmented Solow growth model modified by Mankiw, Romer and Weil (1999).

Model 1

The original model by Mankiw *et al.* (1999) is stated as:

$$\ln\left(\frac{Y_t}{L_t}\right) = \ln A_0 + gt + sy_t - (n+g+\delta)K_t \dots\dots\dots(1)$$

Mankiw *et al.* (1999) modified the Solow growth model by adding A_0 as vector, which allows the inclusion of variables of interest

Where $\left(\frac{Y_t}{L_t}\right)$ = output per capita, A_0 = initial level of technology and other factors, gt = technological progress, g = rate of technological progress, s = rate of savings, n = growth in the labour force.

$$\lambda = sy_t - (n+g+\delta)K_t \dots\dots\dots(2)$$

In this study λ proxy capital formation

$$\ln\left(\frac{Y_t}{L_t}\right) = \ln A_0 + gt + \lambda \dots\dots\dots(3)$$

The study modified equation 3; the dependent variable becomes economic growth (GGDPP), and the vector A_0 is expanded to accommodate those variables of interest to the research work. The vector A_0 is expanded and stated as;

$$\ln A_0 = \beta_0 + \beta_1 EXCH + \beta_2 \ln GLR + \beta_3 \ln TPFA + \beta_4 \ln MC + \beta_5 \ln INT \dots\dots\dots(4)$$

Substituting equation 4 into 3 while the dependent variable is replaced with economic growth

$$\ln GGDPP_t = \beta_0 + \beta_1 EXCH_t + \beta_2 \ln GLR_t + \beta_3 \ln TPFA_t + \beta_4 \ln MC_t + \beta_5 \ln INT_t + \beta_6 \ln gt_t + \beta_7 \ln \lambda_t + \varepsilon_t$$

Where: GGDPP= Economic growth; EXCH= Exchange rate; GLR= growth in the labour force

TPFA= Total pension fund asset for the period; MC= Market capitalization; INT= Interest rate

λ = Gross capital formation; and gt = technology progress.

Model 2

The second model, which addressed capital market development, is based on the Calderon-Rosell model. Calderon-Rosell (1991) developed a model or theory that explored capital market development's main determinants. This model is one of the most comprehensive efforts to lay the groundwork for a financial theory of the growth of capital markets. The main indicators in this approach are economic growth and stock market liquidity. The model is stated as:

$$MCD = SML, GGDPP \dots\dots\dots(6)$$

MCD= Capital Market Development; SML = Stock Market Liquidity

GGDPP = Economic growth

The model is modified to allow the inclusion of other variables of interest. Thus it is stated as:

$$MCD = \beta_0 + \beta_1 SML_t + \beta_2 \ln GGDPP_t + \beta_3 \ln TPFA_t + \beta_4 \ln GCF_t + \beta_5 INT_t + \varepsilon_t \dots\dots(7)$$

MCD= Market Capital Development; SML=Stock Market Liquidity; INT= Interest rate

GGDPP= Growth GDP per capita; TPFA= Total Pension Fund Asset; and GCF= Gross Capital Formation

Equations 5 and 7 were used to achieve the objectives of this study

β = Intercept; t = Time Period ε_t = error term $\beta_1-\beta_7$ & $\beta_1-\beta_5$ = Parameters

The study employed the autoregressive distribution log (ARDL) as the estimation technique. *Ex-post facto* was employed for the research design. *Ex-post facto* does not give the researcher direct control of variables because their manifestations have already occurred or because they are inherently not easily manipulated. This study's time series data were obtained from various sources, including the National Pension Commission Annual Reports and World Development Indicators. It is expected that $\beta_1-\beta_7$ & $\beta_1-\beta_5$, which are parameters in equations 5 and 7, will contribute positively to both the capital market development and economic growth.

4. Data Analysis and Interpretation of Results

Pre-Estimation Test

According to Pesaran *et al.* (2001), to avoid spurious results, it is imperative to conduct pre-estimation before determining the estimation technique. Therefore, the parameter estimates were subject to various econometric tests. Thus, the study employed Augmented Dickey-Fuller (ADF), Unit Root Test, Auto-Regressive Distribution Lag (ARDL) bound test and Error Correction Model (ECM) as estimation techniques.

Table 2: Test for Stationarity

Variable	ADF Statistics	1% critical value	P-Value	Stationarity
ΔGDPP	-5.128885	-3.610453	0.0001	I(0)
D(CMD)	-6.890903	-3.615588	0.0000	I(1)
D(EXCH)	-6.101799	-3.615588	0.0000	I(1)
DGCF	-4.743700	-3.610453	0.0004	I(0)
D(ΔLF)	-11.81686	-3.621023	0.0000	I(1)
D(PTFA)	-4.648318	-3.615588	0.0006	I(1)
INT	-5.507968	-3.610453	0.0000	I(1)
D(SML)	-7.420748	-3.615588	0.0000	I(1)

Source: Author's computation, 2022.

Augmented Dickey-Fuller (ADF) Unit Root Test was conducted to test the order of Stationarity of the variable. Table 2 shows that the variables were a combination of I(0) and I(1)

The Analysis of Long-run Relationship (ARDL BOUNDS TEST)

Since the variables of the model are the combination of the I(1) and I(0) series ARDL bound test is the most suitable for testing of long-run relationship (Pesaran *et al.*,2001)

Table 3: Cointegration Test for the two Models

Null Hypothesis: No long-run relationships exist			
ARDL (2, 0, 0, 0, 0, 2, 1) Model 1		ARDL (1, 1, 1, 0, 1, 0) Model 2	
Test Statistic	Value	Test Statistic	Value
F-statistic	4.76	F-statistic	4.51
K	7	K	5
I1 Bound	3.61	I1 Bound	3.79
I0 Bound	2.45	I0 Bound	2.62

Source: Author's computation, 2022.

Significance Level (5%)

The result of the ARDL Bound Test displayed in Table 3 shows that the null hypothesis of no long-run relationship at 5% statistical significance level will be rejected for the two models because the value of the F-Statistic in model 1 (4.76) and model 2 (4.51) are more significant than the I1 bound value (3.61) and (3.79) respectively when ΔGDPP (growth GDP per capita) and CMD (capital market development) are treated as the dependent variables for model 1 and 2 respectively. Accordingly, it can be concluded that there exists a long-run equilibrium relationship between the variables in the two models in this study.

Table 4: The result of the Short-run and Long-run Coefficients of the ARDL

Short-run Coefficient				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LogGDP(-1))	0.275765	0.152833	1.804353	0.0828
D(EXH)	-0.031267	0.010802	-2.894584	0.0076
D(LogLF)	0.011251	0.001545	1.374117	0.1811
D(LogPTFA)	0.002995	0.001065	2.812206	0.0317
D(LogCMD)	0.257795	0.092624	2.783248	0.0099
D(RINTR)	0.163832	0.045511	3.599825	0.0013
D(RINTR(-1))	-0.120546	0.051137	-2.357323	0.0262
D(LogGCF)	-0.532599	0.392904	-1.355546	0.1869
CointEq(-1)	-0.706606	0.262662	-6.497347	0.0000
Cointeq = $_GDP - (-0.0183*EXH + 0.0000*LABOUR - 0.0018*PTFA + 0.1511$				
$*CMD + 0.2560*RINTR - 0.0320*GCF + 2.2961)$				
Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXH	-0.018321	0.006459	-2.836723	0.0087
LogLF	0.004327	0.002552	1.454397	0.1578
LogPTFA	0.002755	0.000892	3.088565	0.0311
LogCMD	0.151057	0.046045	3.280648	0.0290
RINTR	-0.256035	0.049424	-5.180361	0.0000
LogGCF	-0.032032	0.153684	-0.208428	0.8365
C	2.296100	4.271190	0.537579	0.5954

R-squared = 0.6911320; Adjusted R-squared= 0.615223;

F-statistic=8.423521; Prob. (F-statistic) = 0.000032

Selected Model: (2, 0, 0, 0, 0, 2, 1)

Source: Author's computation, 2022.

With a coefficient value of 70.6%, the lag error correction term CointEq(-1), which quantifies the adjustment rate to restore long-run equilibrium in the dynamic model, has the anticipated negative sign. At a 1% significance level, it is statistically significant. The high coefficient shows that the speed of adjustment to long-run equilibrium is very high if there is a deviation in the short-run dynamic. This supports the results of the bound test *F*-statistic that the long-run equilibrium relationship between Δ GDP and its main determinants is attainable.

Table 5: The result of the Short-run and Long-run Coefficients of the ARDL
Short-run Coefficient

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(SML)	0.098861	0.118787	0.832257	0.4121
D(RINTR)	0.074750	0.027477	2.720457	0.0082
D(LogPTFA)	0.05286	0.012550	4.211952	0.0003
D(LogGCF)	0.911894	0.643310	1.417504	0.1670
D(LogGDP)	0.584271	0.234758	2.488820	0.0188
CointEq(-1)	-0.895250	0.123931	-3.996182	0.0004
Cointeq = CMD - (0.1996*SMC -0.4890*RINTR + 0.0026*PTFA + 0.9119				
*GCF + 2.4862*_GDP -16.1717)				

Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SML	0.199619	0.054898	3.636179	0.0005
RINTR	0.489037	0.256532	1.906336	0.0666
LogPTFA	0.02397	0.008749	2.739742	0.0063
LogGCF	1.453925	0.562713	2.583777	0.0151
Log Δ GDP	2.486160	0.752409	3.304267	0.0025
C	-16.171685	12.245780	-1.320592	0.1970

R-squared = 0.769667; Adjusted R-squared= 0.667150; F-statistic=6.532245

Prob. (F-statistic) = 0.000048

Selected Model: ARDL (1,0,1,0,1,1)

Source: Author's computation, 2022.

With a coefficient value of 89.5%, the lag error correction term CointEq(-1), which quantifies the adjustment rate to restore long-run equilibrium in the dynamic model, has the anticipated negative sign. At a 1% significance level, it is statistically significant. The high coefficient shows that the speed of adjustment to long-run equilibrium is very high if there is a deviation in the short-run dynamic. This supports the bound test *F*-statistic results; the long-run equilibrium relationship between capital market development and its main determinants is attainable.

Residual Diagnostic Test

Serial correlation, heteroskedasticity and normality tests were conducted to ensure that models are void of biased results. The errors of these models must be serially independent. The parameter estimates will not be consistent because of the lagged value of the dependent variable that appears as regressors in the model. When a regression model includes the lagged value of the dependent variable as a regressor, using the Durbin-Watson *d* test to detect serial correlation will be biased in such a model. The result of the Breusch-Godfrey test from the two models shows that H_0 cannot be rejected because the P-value of Obs*R-squared and F-Statistic in both models is more than 0.05 significant level (See Table 1 from the Appendix).

Heteroskedasticity occurs when a model's error term's variance is not constant; it varies as an independent variable. It causes the standard error estimates biased, leading to unreliable hypothesis testing. There are numerous tests to detect heteroskedasticity in the model, but the Breusch-Pagan-Godfrey test is used in this study. From table 2 in the Appendix, the results show that all the criterion (F-statistic and Obs* R-squared) agrees that the estimated ARDL model 1(2, 0, 0, 0, 0, 2, 1) and ARDL model 2 (1, 0, 1, 0, 1, 1) in this study are free from the problem of heteroskedasticity because the P-value (0.0764 and 0.1054) of model 1 and P-value(0.0903 and 0.1126)of model 2 is greater than 0.05 significant. Also, the Jarque-Berra test shows that the error terms of the estimated ARDL model 1 (2, 0, 0, 0, 0, 2, 1) and ARDL model 2 (1, 0, 1, 0, 1, 1) are generally distributed because their respective p-value of 0.080 and 0.43 is more than the 0.05 significance level.

Discussion of Findings

The result in Table 4 shows that Δ GDP is a negative function of the exchange rate in the short-run and long-run under the period review and is statistically significant at a 1% significance level. The negative coefficient of D(EXCH) and EXCH implies that both the short and long-run rise (fall) in the exchange rate moves at a faster rate (slower rate) than the growth rate of outputs in the economy. The result reveals that at a 1% significance level, a 1% reduction in the exchange rate is expected to raise economic growth by 0.018 in the long run. Changes in the labour force were insignificant in the short and long run. This could be attributed to Nigeria's continuous unemployment rate rise in the previous years. The pension fund was both positively significant in the short and long run; it implies that the increase in the pension fund scheme tends to increase economic growth.

Economic growth is a positive function of Capital market development in both the short and long run; a 1% increase in capital market development produces a 0.15% increase in economic growth (Δ GDP). Interest rates negatively influenced economic growth in the short-run and long-run, respectively. A 1% increase in interest rate produces a 0.25 increase in economic growth in the long run. Gross capital formation was not significant both in the short-run and long-run. Table 5 shows that capital market development is a negative function of stock market liquidity in the short-run and long-run under the period review. It is statistically significant at a 1% significance level. The positive coefficient of D(SML) and SML implies that both the short and long-run rise (fall) in the stock market liquidity moves at a faster rate (slower rate) than the growth rate of capital market development. The result reveals that at a 1% significance level, a 1% increase in stock market liquidity is expected to raise capital market development by 0.199% in the long run. A 1% increase in pension total fund assets produces a 0.024% increase in capital market development. This result aligns with the findings of Levine (1991).

Gross capital formation was not significant in the short-run but became substantial in the long run; a 1% increase in gross capital formation promotes capital market development by 1.45. Capital market development is a positive function of economic growth in the short-run and long-run under the period review, and it is statistically significant at 1%. A 1% increase in economic growth increases capital market development by 2.5%.

5. Conclusion and Recommendations

The study concluded that CPS influenced capital market development and economic growth based on the findings. The study further infers that an improvement in CPS shall lead to an improvement in Nigeria's GDP and capital market. Consequently, the study recommended that the National Pension Commission partner with relevant stakeholders such as pension fund administrators and custodians, making its investment regulations more flexible and encouraging increased pension fund investments. Also, the government should implement a mechanism to unify the contributory pension system across the federation states, both the private and public sectors. Finally, periodical fund returns should be transparent enough to build the utmost trust of contributors in the scheme.

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