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COLLECTIVE INVESTMENT FUND: AN IMPERATIVE FOR THE GROWTH OF THE NIGERIAN CAPITAL MARKET

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ABSTRACT: This Research Paper purposed to evaluate Collective Investment Scheme in the Nigerian Capital Market, its impact performance of the Capital Market. The study focused on the Weekly performance of 48 Collective Investment Funds operating in Nigerian Capital Market and Secondary data was collected using the data available on Security and Exchange Commission and Central Bank of Nigeria. OLS Multiple Regression analysis and One-Sample t-tests using Eviews 9 were undertaken and used to test the research hypotheses. Findings of this study revealed that there existed a noteworthy connection between growth of collective investment funds and the development of the capital market. It is concluded that efforts to strengthen Fund Managers enlistment on this scheme is strategic to strengthen the Nigerian financial system and create an appropriate platform for comparative dealings on global financial market.

Keywords: Capital market, Collective investment, Growth, Equity Fund, Real Estate Fund, Bond Fund

1. INTRODUCTION

It is critical for Nigeria as one of the quickest developing economies globally to harness its resources strategically to support robust economic development. This is seen in the intermediation process of channeling available resources from the surplus economic units to the deficit sectors for development. The recent global financial crises are evidence of the need to deepen this integration process of financial intermediation and engineering function in a dimension that hedge against business risk. Again the need to access new frontiers of cross-border opportunities demands more sophisticated and advance financial tools to meet global challenges. This can be achieved through creating a financial system that is efficient, sound and dynamic with wide range of financial products and services to meet the implicit changes in business strategies.

Regis (2013) recommends greater focus on non-traditional financial institutions which would cater to the needs of households and small investors. The money and capital markets in Nigeria at its developmental stage have not fully captured the comparative sophistication and prowess that can adequately facilitate the required level of economic growth. The volume of market capitalization, types of tradable instruments available and alternative funds mobilization vehicles other than stocks are still at the rudimental stage. This does not guarantee several investible options for small investors to build investment portfolios of choice.

One of the vehicular options that is birthed recently in the Nigerian financial system is the collective investment schemes tailored as options for small investors and for harnessing the potential of the financial sector growth. It is believed that the economic role played by Unit trust/Mutual Funds is likely to grow with time considering higher burdens on average citizens, as against to governments and business organizations in facilitating economic needs like quality education, retirement benefits to the aged and provision of public health care (OECD., 2005). From this point of view, collective investment scheme could be channeled as means for citizens to manage the financial plan, either totally or in combination with other savings vehicles like pension funds and insurance. Recently, financial intermediation development process is said to be witnessing transformation in pooling funds from small investors and channeling same to different financial assets of short to long term in nature through Collective Investment Schemes (CIS). Even though authorities maintains that Collective Investment Schemes are playing a

catch-up among other capital market vehicles, and offer investment rewards that are not encouraging, the Net Asset Values and unit prices of funds under collective investments schemes between 2014 and 2016 has increased significantly over time (Komolafe, 2014).

1.1. Statement of Problem

The benefits of development of collective investment scheme in the financial system can be deduced from their performance of capital markets in developed economies, as individuals still consider investing in mutual funds in view of their children education or health notwithstanding the global financial crisis. The Nigerian case differs as most retail investors are still cautiously awakening from the shock of the 2008 crises and some are not aware of several benefits inherent in collective investment scheme (Anthony-Uko, 2014). Moreover, the notion of Collective Investment Schemes in the Nigeria struggling with low earnings for retail investors is critical to the development of the scheme itself. Therefore, considering its pivotal role of the financial intermediation and yet to be evaluated impact of Collective Investment Scheme on the performance of the capital market, the challenges of the scheme, public awareness and acceptance, the research is engaged to proffer solutions to problems above envisaged by Nigerian investors. Again, OECD. (2005) maintains that the growth of collective investment scheme is one manifestation of the growing reliance on capital markets and on institutional investors, as opposed to on-balance sheet lending by banks, in financial intermediation. Hence, the study is aimed at evaluating the performance indices of the sector resulting from the scheme.

1.2. Objective of the Study

The study purposes an assessment the impact of the growth of collective investment scheme in Nigeria on the Capital Market development from 2011 to 2016. Specific objectives include;

- a) Evaluation of the impact of Equity Based Fund (EBF) on the Capital Market;
- b) Assessment of Real Estate Fund (REF) influence on the Capital Market
- c) Impact Analysis of Bond Fund (BF) on the growth of the Capital Market
- d) Appraisal of the impact of Ethical Fund (ETF) on the Capital Market growth
- e) Find out the impact of Balanced Based Fund (BBF) on the growth of the Capital Market

1.3. Research Question

In view of the above, the following questions would be answered in the course of the study.

- To what extent has Equity Based Fund (EBF) impacted the growth of Capital Market?
- Does Real Estate Fund (REF) influence the growth of Capital Market in Nigeria?
- Has Bond Fund (BF) affected the growth of the Nigerian Capital Market?
- To what extent does the growth Nigerian Capital Market depend on Ethical Fund (ETF)?
- How does Balanced Based Fund (BBF) influence the growth of the Nigerian Capital Market?

1.4. Research Hypotheses:

The study purposes to empirically evaluate and test the following hypotheses in view of the Nigerian perspective, all expressed in the null form

- Equity Based Fund (EBF) has no impact on the growth of Capital Market
- Real Estate Fund (REF) does not influence the growth of Capital Market
- The Value of Bond Fund (BF) does not affected the growth of the Capital Market
- The growth Capital Market is not influenced by the value of Ethical Fund (ETF)
- Balanced Based Fund (BBF) does not influence the growth of the Capital Market

1.5. Scope of the Study

This study is primarily concerned with evaluating the effect of introduction of the Collective investment scheme in the Nigerian Capital market as alternative instrument for veritable retail investors who wishes to reduce the risk exposure in their various investments. It further analysis the assets allocation and its implication of various funds on the capital market from 2011 to 2016

2. THEORETICAL REVIEW

Two obvious reasons explain the decision of an individual to invest. First is the desire to manage the present cash flow in anticipation of a futuristic financial need, a condition refers to as savings, and then for capital appreciation or in a bid to manage the present cash flow to increase within a fixed and determinable time. (Bogle, 1998; Brown and Goetzmann, 1997; Orok *et al.*, 2017). Since an investor has to decide in view of the above motivations, the concept of risk comes into play in determining the kind of investment he wishes to undertake with regards to the level of returns that he is willing to accept.

Investment theory covers the body of knowledge used as a basis to choice of investments for various purposes. Various theories of investments differ in their underlying assumptions. It further demonstrates approaches which investors stipulates and quantify risk vis-à-vis return. (Marx *et al.*, 2003) described extensively that investors are confronted in the business by systematic and unsystematic risk, which they variegate into portfolios of different kinds of assets as a way to lessen risk. However, that it was not just the expected risk and return of one stock that should be evaluated (Markowitz, 1952), an investor could reap the benefits of risk reduction by diversification of investible assets into various portfolios.

The Modern Portfolio Theory (MPT) developed in the early 1950's by Harry Markowitz in his work "Portfolio Selection," and has its foundation from the works of John M Keynes and Irving Fisher. (Markowitz, 1952). The Modern Portfolio Theory is defined as a "theory of finance that attempts to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets" (Wikipedia, 2014).

The MPT seen as an advancement of the traditional investment theory improved upon mathematical modeling in finance by proposing assets diversification models as a means of hedging against firms' specific risk and industry or market. There have been several improvements on MPT by researchers who introduced realistic assumption models (Lintner, 1965; Mossin, 1966; Sharpe, 1964) while MPT was broadened and strengthened by Post-modern portfolio theory who assumed non-normally distributed and asymmetric measures of risk. However, an advancement of MPT by Black-Litterman utilized an optimization model proposed by Markowitz but unconstrained the variables in order to integrate relativity and absolute views' on inputs of risk and returns. (Black and Litterman, 1992; Walters J., 2014).

2.1. Conceptual Review

2.1.1. Overview of the Nigerian Capital Market

Nigerian capital market came into existence in 1946, with the floatation of £300,000 development bond by the colonial government for its 10-year development plan. It was restructured with the establishment of Lagos Stock Exchange in 1959. The promulgation of the Capital Issues Commission Decree 1973 to regulate new issues gave rise to Capital Issues Commission which was replaced with the establishment of Security and Exchange commission as recommended by Dr. Pius Okigbo of 1976. Consequently, the SEC was established in 1979 by the Securities and Exchange Commission Act 1979 (The SEC Act 1979) which was later repealed and replaced by the SEC Decree 1979. Similarly, The Investment and Securities Act No. 45 of 1999" was promulgated on May 26, 1999 to repeal the SEC Act of 1998. The new Act was expected to promote a more efficient and virile capital market, pivotal to meeting the nation's economic and developmental aspirations. The Securities and Exchange Commission (SEC) joined the International Organization of Securities Commissions (IOSCO) in June 1985. The role of the Nigerian Capital Market cannot be over emphasized, among other roles.

"Capital markets hasten the rate of capital formation, foster a meritocracy and promote good corporate governance, innovation, and entrepreneurship. In addition, capital markets broaden access to economic prosperity by enabling the emergence of financially responsible citizens, accelerating wealth creation and wealth distribution, providing capital for small and medium scale enterprises(SMEs) and catalysing housing finance" Otteh (2013).



Performance on Capital Market Type of Investments

	Market Indicator	Value* @ 16-Dec-16	WTD (%)	MTD (%)	YTD (%)	YoY (%)
Equities (NSE)	All Share Index (ASI)	26,707.10	2.4	5.7	-6.8	-0.9
	Market Capitalisation (N'tn)	9.2	2.3	5.8	-7.2	-0.9
Unlisted (NASD)	Unlisted Securities Index (USI)	614.2	-0.6	-4	5.4	2
	Market Capitalisation (N'bn)	415.7	-0.6	1.7	-	-
Collective Investment	Net Asset Value (N'bn)	215.9	-	-	-13.4	-13.7
Money	Overnight (O/N) (%)	4.4	0.6	-6.8	3.4	3.4
	Open Buy Back (OBB) (%)	3.9	0.6	-6.1	3.4	3.4
	FGN Bond Implied Yield (%)	15.8	0.1	-0.3	4.8	4.6
Commodities	Crude Oil (\$/b)	55.2	-0.9	2.4	11	49.7
	Gold(\$/t oz)	1,137.40	-2.4	-2.7	5.8	6.8
	Cocoa(\$/mt)	2,238.00	-0.1	-7	-25.3	-31.2
	Wheat(\$/bu)	4.1	-1.9	3.5	-13.7	-16
	Corn(\$/bu)	3.6	-1.4	3.8	-14	-5.1
	Cotton(\$/lb)	71	-0.9	0.2	17.5	11.5
External	Interbank Ex-rt (N/US\$)	305	-	-	-34.7	-34.8
	Parallel Ex-rt (N/US\$)	487	-0.5	-1	-37.5	-47
	External Reserves (\$'bn)	25	0	0.9	-14	-15
	S&P 500	2,258.10	0	3.1	9.7	8.9

Source: Nigerian Capital Market Data from Security and Exchange Commission 2017

Market Capitalization of Listed Securities

	No Listed	Market Capitalization (NGN) As of Dec 30, 2015	No Listed	Market Capitalization (NGN) As of Dec 30, 2016	
Equities – Premium Board	3	3,522,149,848,566	3	3,548,225,397,593	0.74 %
Equities – Main Board	176	6,328,455,652,044	163	5,698,697,421,790	-9.95%
Equities – AseM	11	8,641,416,006	9	8,957,153,629	3.65%
Exchange Traded Products	7	4,018,648,158	8	4,798,651,125	19.41%
FGN Bonds	15	6,372,809,785,065	17	6,101,548,318,713	-4.26%
Corporate Bonds	21	205,890,000,000	23	281,973,226,960	36.95%
State and Municipal Bonds	22	536,472,598,400	22	516,579,469,400	-3.71%
Supranational Bonds	2	24,950,000,000	2	24,950,000,000	0

Source: Nigerian Capital Market Data from Security and Exchange Commission 2017.

2.1.2. Collective Investment Scheme

Collective Investment Scheme is a scheme that pools together the resources of investors into a portfolio that is managed by experienced fund administrators and managers for the investors. Investments and Securities Act (ISA) No. 29 of 2007 (Section 153) defines Collective investment scheme as.

“a scheme, in whatever form, including an open-ended investment company, in pursuance of which members of the public are invited or permitted to invest money or other assets in a portfolio, and in terms of which (a) two or more investors contribute money or other assets to and hold a participatory interest in a portfolio of the scheme through shares, units or any other form of participatory interest; and (b) the investors share the risk and the benefit of investment in proportion to their participatory interest in a portfolio of a scheme or on any other basis determined in the deed, but not a collective investment scheme authorized by any other Act (2007)”.

The security and exchange commission itemize CIS to include Unit Trusts, Venture Capital Funds, Open-ended Investment Companies, Real Estate Investment Schemes and Specialized Funds. CIS became operational in Nigeria in the early 1990s with the introduction of the deregulation policy of 1980s that resulted in rapid expansion of the sector funds and operators. The financial markets innovations from deregulation produced two funds with total net value asset of about ₦2million and increased in 2008 (26 funds with ₦96billion holdings), and further increased to 60 funds (mutual) and 5 (Exchange Traded Funds) with total net value asset of ₦220billion as at December 2016.

2.1.3. The Need for Collective Investment Scheme

Review has revealed that little research has been conducted in the area of Collective investment scheme in Nigeria. (Eugene, 2012) concluded that most economies have reversed their low productivity using small business sector in the renewal/regeneration process citing evidences of Bangalore, the “Silicon Valley of India” that new technological advancement introduced by small firms took small high-tech businesses have outdistanced the old “chaelbol”-the big firms. While making a case for venture capitalist to Ekiti State government, he recommended Collective investment approach as an option for economic development. (Dhar, 2012) underlined the issue of trust with regards to CIS. He further iterated that the word “unit” refers to part of the CIS portfolio controlled by the investors. And “trust” as a monetary instrument permits professionals to invest the funds on behalf of the investors in the scheme (Kovaleva, 2015).

FSB. (2013) justified the role of CIS as a scheme that allow ordinary individuals to buy stocks that would be out of the reach of their income by simply creating a pool with other investors, and by doing so, reduces investors’ risk by way of diversification. This pool allows for individuals to buy wide range of stocks and insures against individual stock volatility that affects one sector while providing for higher returns that exceeds inflation.

2.1.4. Challenges of Collective Investment Scheme

Oyetan (2011) identified challenges of collective Investment scheme in Nigeria to include lack of awareness and financial education for individual investors, few alternatives and investment options to operators and asset types, aggressive expected returns on the part of Nigerian investors, confidence of investors on safety of investment, intrigues of unregistered and unregulated operators and high cost for operators as a result of lack of infrastructures to support operations across Nigeria.

2.2. Empirical Review

Few literatures support the growth of Collective Investment Scheme. Walters A. B. (2008) studied collective investment scheme value chain in South Africa and its impact on investors using primary data, sampled 200-500 in a population of 300,000 individual investors. The Study discovered that the average investor acknowledges the influence of the value chain of collective investment, while seeing them as being knowledgeable in handling ineffectiveness of the value chain through proper investment decisions those results in desired returns. Walters concluded that over-diversification results in value erosion which brings down long term returns by investors who switch between funds unnecessarily.

OECD. (2010) x-rayed several benefits of collective investment vehicles to include exposure of small investors to advantages of economies of scale even with their relatively small investible funds, access to capital market experiences as well as professional fund managers, collective risk diversification and government recognition and protection. They concluded that in most economies, collective investment vehicle is domesticated with good percentage of investors residing locally while tax rules do not favour foreign investors and fund administrators.

Tershukova *et al.* (2016) reviewed theoretical provisions of mutual funds as Collective Investment Scheme, and identified collective investment in Russia to include mutual funds, general funds of bank management and pension funds. They further stressed that despite the minimization of the active mutual funds in Russia, there has been witnessed gradual increment in the value of net assets of mutual funds and the contribution to the GDP in Russia.

Oyebola and Okonkwo (2016) examined the emergence, growth, regulatory regime and future potential for collective investment schemes in Nigeria confirmed that A foreign collective investment scheme which will not be listed in Nigeria should invest no less than 20% of the fund's total assets in Nigeria.

The above studies perused captured various definitions and exploration of the subject of Collective investment scheme without articulating empirically its contribution to the growth of the economy. The closest study evaluated contribution of funds managed on the Nigerian Capital market to the growth of the Nigerian economy was conducted by Benjamin (2016). The researcher targeted evaluation of how net funds managed in terms of total assets (MFNAV) influenced the growth of Capital market and the growth of the Nigerian economy using MCAP and GDP respectively.

The present study is all encompassing in decomposing aggregated funds managed on the Nigerian Capital Market under the collective investment fund scheme (CIS) into different funds, namely Equity Based Fund, Bond Fund, Real Estate Fund, Balanced Based Fund and Ethical Fund, with a view to establishing empirically, various contributions to the growth of the Capital Market. This will sufficiency close the study gap identified from previous investigations and appropriate recommendations will ensue.

3. RESEARCH DESIGN

An Ex-post facto approach or causal comparative design was adopted for the Study as the researcher had no direct control of independent variables. This because the independent variables are inherently not manipulable since the events evaluated has already taken place and data drawn from various reports.

3.1. Data Source and Population of the Study

Data were obtained from various secondary sources which includes Central Bank of Nigeria (CBN) Statistical Bulletin, Central Bank of Nigeria (CBN) Statistical database, Security and Exchange Commission database, BGL Securities database, textbooks, journals and publications.

The population of the study was drawn from operators of collective investment funds only in the Nigerian Stock Exchange. Our analysis was tailored to cover weekly performance of Operators of Equity Based Funds, Money Market Funds, Bond Funds, Real Estate Funds, Balanced Funds and Ethical Funds on the capital market from 2011-2014. The population covers total of 17 Equity Based Funds (31.48% of Total Collective Investment Fund), 5 Money Market Funds Funds (9.26% of Total Collective Investment Fund), 10 Bond Funds Funds (18.52% of Total Collective Investment Fund), 3 Real Estate Fund Funds (5.56% of Total Collective Investment Fund), 8 Balanced Based Fund Funds (14.81% of Total Collective Investment Fund), 5 Ethical Funds Funds (9.26% of Total Collective Investment Fund) available on the Capital Market translating to 48 Collective Investment Funds.

3.2. Technique of Data Analysis

The study utilizes multiple regression analysis (OLS) to evaluate the growth of Capital Market measured by All Share Index and the Market Capitalization, against the growth of collective investment scheme economic growth proxied as independent variables and measured by the Net Asset Value of Equity Fund, Bond Fund, Real Estate Fund, Money Market Fund, Balanced Fund and Ethical Fund available on the Nigerian capital market. This study focuses on the weekly performance of the market from 2014 to 2016. The estimated OLS equation will also be subjected to a dynamic estimation, using the lagged structure of the variables

3.3. Model Specification

Our econometric models link the explained variable Y to the explanatory variables X_1, \dots, X_m , an unobservable variable E (the error term of a linear regression), and parameters β_1, \dots, β_k , via some function f :

$$Y = f(x_1, x_2 \dots x_m, e, \beta_1, \beta_2 \dots \beta_k) \dots \dots \dots (1)$$

The intercept of the above function f in our linear regression model can be shown as below
 $f(x_1, x_2 \dots x_m, e, \beta_1, \beta_2 \dots \beta_k) = \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_{k-1} x_{k-1} + \beta_k + e \dots \dots \dots (2)$

It therefore becomes

$$Y = \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_{k-1} x_{k-1} + \beta_k + e \dots \dots \dots (3)$$

For correctness of our model, the conditional expectation of the error term of the explanatory variables is zero

$$E[e|x_1, x_2 \dots x_{k-1}] = 0 \dots \dots \dots (4)$$

Then

$$E[e|x_1, x_2 \dots x_{k-1}] = \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_{k-1} x_{k-1} + \beta_k + e \dots \dots \dots (5)$$

For alternative Hypothesis

$$E[e|x_1, x_2 \dots x_{k-1}] = \gamma_0 + \gamma_1(\beta_1 x_1 + \beta_2 x_2 + \dots + \beta_{k-1} x_{k-1} + \beta_k) + \gamma_2 (\beta_1 x_1 + \beta_2 x_2 + \dots + \beta_{k-1} x_{k-1} + \beta_k)^2 \dots \dots \dots (6)$$

$$= \delta_1 x_1 + \delta_2 x_2 + \dots + \delta_{k-1} x_{k-1} + \delta_k + \beta_k + \gamma_2 (\beta_1 x_1 + \beta_2 x_2 + \dots + \beta_{k-1} x_{k-1} + \beta_k)^2 \dots \dots \dots (7)$$

Where $\delta_k = \gamma_0 + \beta_k$ and $\delta_i = \gamma_i \beta_i$ for $i = 1, \dots, k - 1$

For our OLS Estimation test procedure, we have:

$$\hat{Y} = \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_{k-1} x_{k-1} + \beta_k \dots \dots \dots (8)$$

And for the OLS Residuals we have:

$$e = \tilde{Y} - \beta_1 x_1 - \beta_2 x_2 - \dots - \beta_{k-1} x_{k-1} - \beta_k = Y - \hat{Y} \dots \dots \dots (9)$$

Based on proxy of Market Capitalization for the growth of the Nigerian Capital Market, and as a function of the Net Value of Assets of the Collective investment funds:

Modell

$$MKTCAP_{it} = f(EBFund_{it}, REFund_{it}, MMFund, REFund_{it}, BBFund_{it}, EthFund_{it},)$$

$$MKTCAP = \beta_0 + \beta_1 EBFund_{it} + \beta_2 REFund_{it} + \beta_3 MMFund_{it} + \beta_4 BEFund_{it} + \beta_5 BBFund_{it} + \beta_6 EthFund_{it} + U$$

Model 2

$$ASI_{it} = f(EBFund_{it}, REFund_{it}, MMFund, REFund_{it}, BBFund_{it}, EthFund_{it},)$$

$$ASI = \beta_0 + \beta_1 EBFund_{it} + \beta_2 REFund_{it} + \beta_3 MMFund_{it} + \beta_4 BEFund_{it} + \beta_5 BBFund_{it} + \beta_6 EthFund_{it} + U$$

Y= Market Capitalization; All Share Index

X₁ = Equity Based Fund

X₂ = Bond Fund

X₃ = Money Market Fund

X₄ = Real Estate Fund

X₅ = Balanced Based Fund

X₆ = Ethical Fund

$$MKTCAP = \beta_0 + \beta_1 EBFund_{it} + \beta_2 REFund_{it} + \beta_3 MMFund_{it} + \beta_4 BEFund_{it} + \beta_5 BBFund_{it} + \beta_6 EthFund_{it} + U$$

4. DATA ANALYSIS AND INTERPRETATION

Table 1. Descriptive Data Analysis

	LASI	LBBFUND	LBFUND	LEBFUND	LETFUND	LMKTCAP	LMMFUND	LREFUND
Mean	10.30078	23.10511	23.13644	24.17464	22.48141	29.91287	24.33775	24.08143
Median	10.29692	23.10242	23.26046	24.34764	22.46921	29.94093	24.76542	24.50229
Maximum	10.65221	23.96146	23.60238	24.68001	23.29444	30.26741	25.90888	24.59276
Minimum	9.909576	21.13805	22.31245	23.24072	22.21338	29.47669	22.41636	21.60360
Std. Dev.	0.225722	0.554991	0.444174	0.460491	0.185935	0.232054	1.066482	0.737155
Skewness	-0.151811	-1.109551	-0.491011	-1.154854	1.362555	-0.400516	-0.302862	-1.898690
Kurtosis	1.865619	6.013135	1.727445	2.782282	7.121440	2.087601	1.717224	6.654156
Jarque-ra	3.447513	35.00850	6.459412	13.45539	61.03124	3.685315	5.031037	69.43237
Probability	0.178395	0.000000	0.039569	0.001197	0.000000	0.158396	0.080821	0.000000
Sum	618.0470	1386.307	1388.187	1450.478	1348.884	1794.772	1460.265	1444.886
Sum Sq. Dev.	3.006065	18.17286	11.64013	12.51109	2.039733	3.177090	67.10570	32.06041
Observations	60	60	60	60	60	60	60	60

Source: Researcher’s computation with Eviews 9

The result in table 1 shows the descriptive statistics and interprets that, the LASI has an average value of 10.30078 with a standard deviation of 0.225722 ranging from 9.909576 to 10.65221. The mean value of LBBFUND is 23.10511 with a range from 21.13805 to 23.96146 while the LBFUND shows its minimum value as 22.31245, with a mean value and standard deviation of 23.13644 and 0.444174 respectively. The LEBFUND value rally round 23.24072 and 24.68001 with an average of 24.17464. LETFUND shows its minimum value as 22.21338, with a mean value and standing deviation of 22.48141 and 0.185935. The period under standard shows that MKTCAP has its lowest (29.47669) and highest (30.26741) in 2011 and 2016 respectively. Furthermore, MMFund shows its minimum value as 22.41636, maximum value as 25.90888 and of 24.33775 and standard deviation of 1.066482. LREFUND has an average value of 24.08143 with a standard deviation of 0.737155 ranging from 21.603060 to 24.59276.

It is deserving of note that the estimation of skewness demonstrate the measure of skewness as well as where it is skewing to. Our estimation of skewness demonstrated that factor (LETFUND) exhibited positive direction and LASI, LMKTCAP, LBFUND, LEBFUND,LBBFUND, LREFUND,LMMFUND, all exhibited a negative skewness (leftward skewed). Kurtosis estimates the height and flatness with regards to the ordinary dispersion. The result showed a flat skewness (platykurtic) for the factors with regards to Jarque-Bera (JB) test estimates. The JB estimations of 35.00850 (LBBFUND), 13.45539 (LEBFUND), 61.03124 (LETFUND) and 69.43237 (LREFUND) and their relating likelihood of not exactly or equivalents to 0.05 affirms that the series is normal and is appropriate for our study. It likewise demonstrates the nonappearance of exceptions in the information.

Table 2. Ordinary Correlation Analysis

	LASI	LBBFUND	LBFUND	LEBFUND	LETFUND	LMKTCAP	LMMFUND	LREFUND
LASI	1							
LBBFUND	0.239714	1						
LBFUND	0.455955	-0.40222	1					
LEBFUND	0.081822	-0.61017	0.307007	1				
LETFUND	0.210686	-0.57552	0.235548	0.661023	1			
LMKTCAP	0.98957	0.303844	0.480853	-0.01594	0.111177	1		
LMMFUND	0.452118	0.534742	0.34217	-0.66856	-0.57754	0.569099	1	
LREFUND	0.535256	0.632544	0.226069	-0.33267	-0.48745	0.614997	0.751622	1

Source: Researcher’s computation with Eviews 9

Table 4.2 indicates how the variables correlate among themselves. Real Estate fund (ETFund) and money market fund (MMFund) had the highest positive correlation of 75 percent with each other, while Ethical Fund (ETFund) and market capitalization (MKTCAP) depicted the lowest positive correlation of 11 percent. Equity Based Fund topped the negative correlation of 66 percent with Money Market Fund (MMFund) while it also had the lowest correlation with market capitalization (MKTCAP) of 1.5 percent.

Table 3. Test for Stationarity

Group unit root test: Summary				
Series: LASI, LBBFUND, LBFUND, LEBFUND, LETFUND, LMKTCAP, LMMFUND, LREFUND				
Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-1.71955	0.0428	8	472
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-2.66838	0.0038	8	472
ADF - Fisher Chi-square	46.7083	0.0001	8	472
PP - Fisher Chi-square	49.9009	0.0000	8	472
** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.				

Source: Researcher’s computation with Eviews 9

Table 3 shows that the variables were all stationary at 0.5 level of significance given a probability of 0.0425, 0.0038, 0.0001 and 0.0000 employing all methods in a group unit root test. In view of the results it can be concluded that all the variables are stationary at levels. In order to avoid spurious results, there however, the need to test if the variables are cointegrated for long term relationship.

Table 4. Summary of Cointegration Test

Date: 09/05/17 Time: 06:42				
Sample (adjusted): 2011M04 2015M12				
Included observations: 57 after adjustments				
Trend assumption: Linear deterministic trend				
Series: LASI LBBFUND LBFUND LEBFUND LETFUND LMKTCAP LMMFUND LREFUND				
Lags interval (in first differences): 1 to 2				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.783386	256.2685	159.5297	0.0000
At most 1 *	0.572502	169.0791	125.6154	0.0000
At most 2 *	0.538737	120.6402	95.75366	0.0004
At most 3 *	0.413469	76.53433	69.81889	0.0132
At most 4	0.329745	46.12313	47.85613	0.0721
At most 5	0.188348	23.31764	29.79707	0.2308

At most 6	0.134852	11.42266	15.49471	0.1868
At most 7	0.054028	3.165906	3.841466	0.0752
Trace test indicates 4 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.783386	87.18943	52.36261	0.0000
At most 1 *	0.572502	48.43895	46.23142	0.0286
At most 2 *	0.538737	44.10583	40.07757	0.0167
At most 3	0.413469	30.41120	33.87687	0.1227
At most 4	0.329745	22.80549	27.58434	0.1819
At most 5	0.188348	11.89498	21.13162	0.5581
At most 6	0.134852	8.256749	14.26460	0.3532
At most 7	0.054028	3.165906	3.841466	0.0752
Max-eigenvalue test indicates 3 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Source: Researcher’s computation with Eviews 9

4.1. Cointegration Result

The study examined the long run relationship among the variables of this study using the trace test and maximum Eigen value as presented in tables respectively. In order to establish the long non-equilibrium relationship among the variables of this study, the study employed multivariate co-integration approach based on trace and maximum eigen value tests.

The above cointegration results showed three co-integration equations at five percent significance level. The estimations of the test measurements in the co-integration equation were observed to be more prominent and higher than critical values. These outcomes reasoned that, there is presence of long run relationship among the factors.

Since the variables are co-integrated, this recommends there is a type of causal relationship among the factors. The Pairwise Granger causality test was utilized so as to set up the causality relationship among the factors. From the test outcome, it demonstrated a unidirectional co-existence among the factors.

Table 5. OLS Results and interpretation for Model 1

Dependent Variable: LASI					
Included observations: 60 after adjustments					
Variable	Coefficient	Std. Error		t-Statistic	Prob.
C	-22.99968	3.319301		-6.929072	0.0000
LBBFUND	0.116114	0.060762		1.910962	0.0614
LBFUND	-0.088877	0.090652		-0.980425	0.3313
LEBFUND	0.297716	0.090757		3.280350	0.0018
LETFUND	0.844952	0.128602		6.570296	0.0000
LREFUND	0.040919	0.046334		0.883138	0.3812
R-squared	0.738918		Mean dependent var		10.30078
Adjusted R-squared	0.709362		S.D. dependent var		0.225722
S.E. of regression	0.121689		Akaike info criterion		-1.265423
Sum squared resid	0.784829		Schwarz criterion		-1.021083
Log likelihood	44.96270		Hannan-Quinn criter.		-1.169849
F-statistic	25.00024		Durbin-Watson stat		1.772006
Prob(F-statistic)	0.000000				

Source: Researcher’s computation with Eviews 9

The result of OLS showed that R-squared of 0.738918 and adjusted R-squared of 0.709362 showed a good fit for our estimated model and high degree of explaining the dependent variable in the factor. At 95 percent confidence level, the f-statistic 25.000 reveals that the estimated model is statistically significant, while the Durbin Watson test for serial correlation value of 1.772, implies that the model could be said to be free from serial correlation problem.

Table 6. OLS Results and interpretation for model 2

Dependent Variable: LMKTCAP				
Method: Least Squares				
Date: 09/05/17 Time: 06:55				
Sample (adjusted): 2011M01 2015M12				
Included observations: 60 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.920193	3.014911	-0.968584	0.3372
LBBFUND	0.116047	0.055190	2.102680	0.0403
LBFUND	-0.078737	0.082339	-0.956251	0.3433
LEBFUND	0.288907	0.082435	3.504678	0.0009
LETFUND	0.802162	0.116809	6.867315	0.0000
LREFUND	0.040143	0.042085	0.953864	0.3445
R-squared	0.796201	Mean dependent var		29.91287
Adjusted R-squared	0.773130	S.D. dependent var		0.232054
S.E. of regression	0.110529	Akaike info criterion		-1.457792
Sum squared resid	0.647486	Schwarz criterion		-1.213451
Log likelihood	50.73375	Hannan-Quinn criter.		-1.362217
F-statistic	34.51011	Durbin-Watson stat		1.258947
Prob(F-statistic)	0.000000			

Source: Researcher’s computation with Eviews 9

In model 2, the R-squared of 0.796201 and adjusted R-squared of 0.773130 showed that the model estimated has a good fit. The model therefore has a high explanatory power. The F-statistic value of 34.510 showed that, at 5 percent level, the overall model was found to be statistically significant. Meanwhile, there was no autocorrelation in the model as shown by the DW value of 1.25. Hence, the residual terms are not interdependent.

4.2. Test of Hypothesis

Testing for the impact of growth of Collective investment funds on the development of Capital Market Using our model. Test on the overall model on the significant relationship between Market Capitalization and the Collective Investment Funds. From the regression result, the calculated F-value of Market Capitalization was 582.34. Now since the calculated F-value is greater than the critical value, i.e. $582.34_{cal} > 3.04_{crit}$ we rejected the null hypothesis and conclude that there existed a significant relationship between the effect of growth of collective investment funds and the development of the capital market.

Testing for the impact of growth of Collective investment funds on the development of Capital Market Using specific variables of the model, we restate the hypotheses below:

- Hypothesis I: Equity Based Fund (EBF) has no impact on the growth of Capital Market
- Hypothesis II: Real Estate Fund (REF) does not influence the growth of Capital Market in Nigeria
- Hypothesis III: The Value of Bond Fund (BF) does not affected the growth of the Nigerian Capital Market
- Hypothesis IV: The growth Nigerian Capital Market is not influenced by the value of Ethical Fund
- Hypothesis V: Balanced Based Fund (BBF) does not influence the growth of the Nigerian Capital Market

Summary of Hypothesis Testing

	Model I			Model II		
	ASI			MKTCAP		
	Tabulated *t	Calculated *t	Decision	Tabulated *t	Calculated *t	Decision
Hypothesis I	1.671	1.910962	Reject Null	1.671	2.102680	Reject Null
Hypothesis II	1.671	-0.980425	Accept Null	1.671	-0.956251	Accept Null
Hypothesis III	1.671	3.280350	Reject Null	1.671	3.504678	Reject Null
Hypothesis IV	1.671	6.570296	Reject Null	1.671	6.867315	Reject Null
Hypothesis V	1.671	0.883138	Accept Null	1.671	0.953864	Accept Null

Source: Researcher’s compilation of test results

5. DISCUSSION OF FINDINGS

The findings of this study revealed that there existed a significant relationship between growth of collective investment funds and the development of the capital market. This finding is in line with the finding obtained by Dhar (2012) who in his study on the relationship between collective investment fund and the growth of the capital market. This finding is also in agreement with the study carried out by FSB. (2013) who noted that there existed a significant relationship between collective investment funds and development of capital market.

Specific decomposed finding showed that Equity Based Fund (EBF) has a positive influence that is statistically significant on the growth of Capital Market in Nigeria while Real Estate Fund (REF) has negative and insignificant relationship with the growth of Capital Market in Nigeria. On the other hand, the Value of Bond Fund (BF) affects the growth of the Nigerian Capital Market positively and is statistically significant, while the growth Nigerian Capital Market is significantly influenced by the value of Ethical Fund. It is also found that Balanced Based Fund (BBF) does not influence the growth of the Nigerian Capital Market when statistically measured.

This is not unconnected with the level of awareness of Equity Based Fund (EBF) that small saver have had over time in Nigeria. According to Anthony-Uko (2014), Security and Exchange Commission in Nigeria have embarked on massive awareness under the leadership of Otteh to small savers for involvement in the capital market. Notwithstanding the level of campaign, concerns of minimal return on investment hand the enabling protective legal requirement is synonymous with real estate fund. Majority of low income earners and small savers do not appreciate huge investment in capital intensive projects and are discouraged by their low capital, hence the result of our findings.

The findings may not be unconnected with the development of the specific funds in the capital market and the awareness of the benefits of such schemes Anthony-Uko (2014). Negative influence of Real Sector Fund is clear reflection of the poor state of real estate developments resulting from capitalization of the sector. Again, our findings on the managed funds under the collective investment scheme is not at variant with the discovery of Benjamin (2016) who found that Net Asset Value of managed fund positively influenced financial development of Nigeria significantly, and proposed that NSE, SEC and as regulators should capacitate reinvigoration of organizations and fund managers, and take cursory look into the derivative values of investment to encourage expansion.

5.1. Conclusion

From the findings above, it is concluded that collective investment funds in Nigeria is imperative to the development of the capital market and efforts to strengthen Fund Managers enlistment on this scheme is strategic to strengthen the Nigerian financial system and create an appropriate platform for comparative dealings on global financial market.

5.2. Recommendations

To strengthen the financial market through Equity Based Fund (EBF), investible funds on new equities should be regulated by Security and Exchange Commission as a means of encouraging small investors.

Government regulation should be redirected on up scaling Real Estate Fund (REF) capitalization as this will have a spillover effect on the development of the Real Estate.

Again, It is recommended that Bond issue in the capital market should be reformed and information made available to small investors, in order to maximize the benefit of the scheme in capital market development.

Policy formulation for Ethical Fund and Balanced Based fund should be enhanced in line with the thrust for capital market development. Hence pricing framework should be reviewed to enable investors have clear evaluation of fee structure as an incentive for fund growth.

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