



RESEARCH ARTICLE

MEMORY RESPONSE OF CAPITAL MARKET PERFORMANCE TO INTEREST RATES ANNOUNCEMENT: A THEORETICAL EVIDENCE IN NIGERIA

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Abstract

Despite the management of interest rates by the monetary policy authorities over these years, the performance of the capital market has not been impressive in Nigeria. The study analyzed the memory response of the capital market performance to interest rates announcement in Nigeria. The study used monetary policy rate, and deposit market rate as against market capitalization. The study sourced data from the Central Bank of Nigeria Statistical Bulletin between 1985 and 2020. The study adopted the Augmented Dickey-Fuller, and the Autoregressive Distributed Lag for the analysis. The findings showed that, deposit money rate was stationery at levels, while monetary policy rate, and market capitalization were stationery at first differences, and no long run co-integrating equation. The theoretical evidence from the Error correction test findings revealed that, interest rates announcement did not constitute significant variables on the memory of the Nigerian capital market performance. Regular monitory and downward review of interest rates by the Nigerian monetary policy committee were recommended.

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Introduction:-

Memory is regarded as the process to acquire and retain information. The market system received and respond to information, and is evaluated through performance. Market information can be in qualitative or quantitative form which has the sensoryability to interact with the macroeconomicenvironment. The capital market can as well be referred to intelligent economic unit which does not operate in isolation but interface with external factors to produce results. The performance of the capital market process and reflect memory responsetoresults and influence attention. The capital market is one of those business entities that has the capacity to achieve results and influence attention in negative or positive direction. Capital market is an engine room for trading long-term securities that provides an avenue for financial intermediation. As an economic agent that support growth and development, the market accelerates the liquidity in the financial sector to other sectors of the economy. The market serves to replenish the economy, especially during recession, and recovery periods. Edame, and Okoro (2013) identified a positive and significant impactof the capital market on economic growth in Nigeria.

Knowing that the capital market plays a vital role to stimulate the economic growth activities, the macroeconomic factors such as interest rate, among others constitute adversely to the performance of the capital market

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environment. Madura (1995) stated that, one of the most prominent economic forces driving the stock market price is the risk-free interest rate. Conversely, Muktadir-Al-Mukit (2012) opined that, interest rate was considered to be among of the key index that significantly affected stock prices. Also, Omodero (2020) identified a harmful effect caused by interest rate on the capital market performance in Nigeria. Interest rate can be referred to an amount charged on funds as a percentage of the principal. The opportunity cost for investing in a stock is represented by the interest rate. The interest rate is regarded as one of the inspiring factors that move s the attitude of investors in the capital market. From instance, as the interest rises, bonds turn out to be more attractive given their risk-return features. This encourages investors to switch from capital market to the money market by buying bonds and selling stocks, hence, influenced the capital market performance. Although, Echekeoba, Ananwude, and Lateef (2018) argued, and identified monetary policy rate not co-integrated in the long run with capital market performance in Nigeria.

Consequently, Fama (1981) stated that the influence of the long-term interest rate on stock prices stems directly from the present value model, and such can influence the long-term interest rate on the discount rate. Campbell (1987) analysis showed that, the term structure of interest rate predicted the excess stock market return in US. Moreover, Zhou (1996) found interest rate to have impact on the stock price significantly, and ascertain that, the long-term interest rate explains a major part of the variation in the price dividend ratio. Issahaku, Ustarz, and Domanban (2013) supported the above statement from vector error correction model (VECM) results, that, it takes approximately 20 months for the capital market to fully adjust to a balance spot based on interest rate announcement in Ghana. Although, Phuyal (2016) discovered about 1.79% on monthly basis to correct the disequilibrium between stock prices and interest rate in Nepali.

In light of the above literatures, the capital market performance is influence by interest rates announcement bearing in mind about the much business failures in Nigeria. Despite the management interest rates by the monetary policy authorities, the performance of businesses and capital market environment has not been impressive in Nigeria. In this view, there is urgent need to theoretically and empirically analyze, and account for this phenomenon, since there is no recent study of this kind. Thus, the study will close this gap to assess the memory response of capital market performance to interest rates announcement in Nigeria. The study will focus on reviewing theoretical relationship between market performance and interest rate. In this domain, it is imperative to ask; to what extent did the memory of capital market performance significantly respond to interest rates of monetary policy rate, and deposit market rate announcement in Nigeria within the period, 1985-2020. Hypothetically, the memory of capital market performance did not significantly respond to interest rate of monetary policy rate, and deposit market rates announcement in Nigeria within the period, 1985-2020.

The findings from this study will enrich and serves as reference materials to scholars/academics. Again, policymakers will be guided in regulating the monetary policies, and the capital market. Further, industrial practitioners such as banks, investors, market players and other section in the financial institutions would find this study important as it will expose the memory response of capital market performance to interest rates announcement. Lastly, the findings from this study will further create awareness and give a better understanding about the reaction of interest announcement to capital market performance, especially in Nigeria.

The variables of this study were extracted from the Central Bank of Nigeria (CBN) statistical bulletin. In this light, market capitalization was proxy for capital market performance being the dependable variable, whereas monetary policy rate, and deposit market rate stand in for interest rates being the independent variables. The variables covered a period of 1985-2020, (35 years). The study intended to make the work as current as possible by adopting up-to-date information and to capture a longer period.

Theoretical Review

Risk and returns are guiding parameters for choice of investment by investors. It is however impossible for any potential investor to ventures into investment/portfolio without risk and returns thorough evaluation. Harry Markowitz in 1952 introduced the diversification construct of not putting all eggs in one basket as identified in the modern portfolio theory. Following this adage, some investors has opted to create a portfolio by combining short-term (money market) and long-term (capital market) investments. Markowitz (1952) ascertained that it is not enough to take one identity stock risk and return under acceptance but instead allocate it to different stocks with little correlation to one another. This is for the fact that, risks are commonly associated with the macroeconomic environment. Economic theories postulated that market performance could be affected by exogenous factors like

interest rate announcement. Scholars in financial economics have developed significant theories to test interest rate announcement and the stock market performance memory response. Among these theories were the arbitrage pricing theory (APT) introduced by Ross (1976) which postulated that, stock market performance is influenced by macroeconomic variables such as inflation, interest rate, money supply, industrial production, etc. The brain behind this theory is that market performance is generated by common factors for which different securities have diverse sensitivities in the market.

Theoretically, it implied that market performance is a function of macroeconomic factors. As opined by Fama (1965) cited in Alexndra (2015) that, market performance response to current information in the efficient market hypothesis. And, according to the theory of greater fool that, during the periods of market instability, speculators can achieve abnormal gains by buying high costs believing that investors will be willing to buy back high. Again, the theory of rational expectation assumed that, human knowledge is acquired and through the process of learning with the presupposition of an existing and highly constant which can be possibly revealed by economic variables. This theory supports the works of Ivan and Alfonso (2014) that macroeconomic instabilities are often caused by shocks that hit an economy.

According to Karp and Vuuren (2019) in fractal market theory, stated that, the chaotic environment just as the capital market has some features of unpredictability, instability, disorder, noise, and lack of much regulatory bodies. Vaga (2018) in relation with the coherent market, discovered that during periods of coherence, the performance from the market is over 25 percent and the standard deviation will drop 10 percent. In the market prospect theory, Kahneman and Tversky (1979) stated that, the prevalence of risk aversion is the best-known generalized regarding perilous choice. Sharpe (1964) stated two assumptions; there is a pure interest rate, secondly, investors are homogeneity. Also, Fama and French (2004) in the capital asset pricing theory, identified an efficient portfolio if the asset price is clear in the market.

The differential international Fisher's effect further showed a relationship between interest rate and capital market performance. The interest rate differential International Fisher's Effect (IFE) theory holds that the strategy of borrowing on one country and investing the funds in another country should not provide positive returns on average. The reason is that the exchange rate should adjust to offset the interest rate differential on average. The Discounted Cash Flow (DCF) Model is one of the most widely used stock valuation approaches which were based on the concept that the value of a stock is equal to the present value of the cash flow expected to be received from the stock. The discount rate that is related to the interest rate, is one of the most important parameters of these approaches. When an interest rate changes, investors will incorporate these changes in their stock price valuation. Therefore, a rise in interest rate will reduce the present value of future cash flow which investors are expected to receive in the form of dividends and capital gains.

Methodology:-

The study adopted *Ex-post facto* research design. The work is country-specific, and it was based on past phenomenon. The *ex post facto* research design is best fit for the establishment of response relationships. Thus, in an attempt to analyze and account for the memory response of capital market performance to interest rates announcement with bias to theoretical evidence in Nigeria. This study added in its design, the econometric/analytical framework to theoretically test the *ex-post facto*.

The data was sourced from the Statistical Bulletins of the Central Bank of Nigeria (various issues). The data sets were time series that followed regular time-frequency of annualized for both the dependent and explanatory variables. The proxy for the dependent variable being capital market performance was the market capitalization, and the explanatory variables were monetary policy rate, deposit market rate for interest rates announcement. The study did not adopt any technique for sampling and population given that the study employed already existed data. The coverage period was 1985 to 2020 representing 35 years, and adopted the Autoregressive Distributive Lag (ARDL) model. The adoption of ARDL was based on its merits in different order levels of data stationary.

Model specification

The theoretical application of this study is the arbitrage pricing theory (APT). The theory holds that market performance response to the macroeconomic environment such as interest rate. The theory implies that the announcement of new interest conveys shocks to the market performance. The theory has a connection with interest rates announcement, and the announcement rates affect the memory response of capital market performance. Thus,

the theory in itself provided a nexus between the interest rates announcement and the memory response of capital market performance in Nigeria. Although, with the instability of interest rates/marker performance in Nigeria it needed to be theoretically and analyzed, and accounted for, since there were other perceived macroeconomic factors like the inflation rate.

Thus, the APT function was expressed as:

$$MCAP = f(\text{interest rates announcement}) \text{-----eq. 1}$$

Using MCAP to be a performance index and interest rates announcement to be monetary policies indicators such as monetary policy rate, and deposit market rate were theoretically, and empirically analyzed, and accounted for, in a linear functional relationship as follows:

$$MCAP = f(MPR, DMR) \text{-----eq. 2}$$

Equation eq. 2 was restated into linear mathematical form, thus:

$$MCAP = \beta_0 + \beta_1 A_1 + \beta_2 A_2 \text{-----eq. 3}$$

From the theoretical standpoint, this study was designed to validate or otherwise of the APT using variables in Nigeria. Normally, from the empirical viewpoint, the regression in eq. 3 can be rewritten in econometric form. Based on this fact, the linear equation is stated thus:

$$MCAP_t = \beta_0 + \beta_1 MPR_t + \beta_2 DMR_t + \varepsilon_t \text{-----eq. 4}$$

In eq. 4 above, all the variables were β_0 = the constant (the value of the dependent variable when all the regressors are at zero); β_1 - β_2 were the coefficients of the explanatory variables and ε_t is the noise or error term. The model variables of this study consisted of market capitalization as a broad dependent variable that can response to interest rates announcement, which serves as explanatory variables.

Concepts of the model variables

The variables of this study consisted the dependent and the explanatory. The dependent of this study was the market capitalization of the Nigerian Stock Exchange. It served as the proxy for capital market performance. While monetary policy rate, and deposit market rate were the explanatory variables of the Central Bank of Nigeria. It served as the proxy for interest rate announcement.

Market capitalization:

Market capitalization (MCAP) was employed as the dependent variable in the model. It is a performance measurement for depth, and is valued in Billions of Naira. A yielding sensitivity higher than zero is expected.

Monetary policy rate:

Monetary policy rate (MPR) was adopted in the study as an independent variable. It is the interest at which the Central Bank of Nigeria lends to the money deposit banks. It is an interest rate used to control inflation in an economy. A yielding sensitivity less than zero is expected.

Deposit market rate:

Deposit market rate (DMR) was also adopted in the study as an independent variable. It is an interest rate that is paid by financial institutions to depositors holding an account. A yielding sensitivity higher than zero is expected.

Estimation Procedure

The estimation process for this work followed the preliminary and other diagnostics test, as well as inferences- Test of Hypotheses using the autoregressive distributive lag model estimates (ARDL). The preliminary test for data stationary of the study variables were conducted. The traditional unit root test for stationary of the data by Dickey-

Fuller test was initiated to indicate the unit root properties of the series following equation specified (eq. 5).

$$\Delta y_t = \beta_1 + \beta_2 t + \delta y_{t-1} + \alpha \sum_{t=1}^m \Delta y_{t-1} + \varepsilon_t \text{-----eq. 5}$$

Where the test is for $H_0 = \delta = 0$ and $H_1 = \delta < 0$.

The lag selection was based on the Bayesian Criterion generated automatically by the estimation software following the form of equation 6 below:

$$BIC = \ln(n)K - 2\ln(\hat{L}) \text{-----eq. 6}$$

where:

n represents either the sample size, the number of observations, or the number of data points in x.

k represents free parameters to be estimated.

$\hat{\mathcal{L}}$ represents the maximized value of the likelihood function for the estimated model M given as $\hat{\mathcal{L}} = p\left(\frac{x}{\theta}, \mathcal{M}\right)$.

Long Run and Co-integration Test (Bound Test)

This study also carried out the long run test following the ARDL framework.

ARDL short run error correction representation

After the establishment of the possible long-run relationship through the bound test, the ARDL model was used to test the lag of market capitalization to the response from the interest rates announcement. This follows the form specified below:

For the Model with LOGMCAPR as the dependent variable:

$$\Delta LOGMCAP_t = \pi_p + \sum_{i=1}^{\beta} \delta_{ip} \Delta LOGMCAP_{t-i} + \sum_{i=1}^{\beta_1} \sigma_{ip} \Delta LOGMPR_{t-i} + \sum_{i=1}^{\beta_2} \tau_{ip} \Delta LOGDMR_{t-i} + \omega_p LOGMCAP_{t-1} + \omega_{1p} LOGMPR_{t-1} + \omega_{2p} LOGDMR_{t-1} + \xi_{1t} \quad \text{--- eq. 7}$$

All the variables were discussed above with combined modeling of the short-run and long-run coefficients using the ARDL framework.

The *a priori* expectations from the models' tests of the hypotheses were given as follows; $\beta_1 > 0, \beta_2 > 0$

To ensure that estimates were valid, efficient, and unbiased inferences in this study, the diagnostic test and the procedure as prescribed two critical values namely lower and the upper bound, and the decision rule guides were contained in table 1 below:

Table 1:- Summary of Adopted Diagnostic Tests and Decision Rules for the Bound Tests Process.

S/No	Test Name/ State	Test Function/ Remark	Decision Rule/ Inference
1.	Coefficient of Correlation (R^2)	To measure the goodness of fit of the model	The higher the R^2 the better the fit
2.	F-Statistics	To Test the significance of the overall regression	A Probability value of F-stat less than 0.05 suggests that the model is good enough for analyses/inferences.
3.	t- Statistics	To confirm the significance level	t- Statistics higher than 1.96 shows evidence of significance.
4.	F stat is more than upper bound/t-statistics greater than 1.96 or P-value less than 0.05	A cointegrating relationship exists	Reject the null hypothesis
5.	F stat less than the lower and upper bound/t-statistics less than 1.96 or P-value higher than 0.05	No cointegrating relationship exists	Refuse to reject the null hypothesis
6.	F stat at the chosen level of significance falls within the lower and upper bound/ t-statistics equals to 1.96 or P-value exactly 0.05	Results are indecisive	Inconclusive Finding
7.	Durbin Watson Statistics	To measure the first-order autocorrelation	DW approximately 2 shows evidence against the first-order autocorrelation.
8.	Breusch Godfrey Serial Correlation test	To measure higher-order autocorrelation	A p-value greater than 0.05 shows evidence against higher-order autocorrelation
9.	White Heteroscedasticity test	To test for the constant variance of error term	A p-value greater than 0.05 shows evidence in favor of homoscedasticity.

Source: Authors' Compilation.

Inferences of this study were based on the outcome of the estimation approaches as well as conclusions drawn based on the tested hypothesis. The choice level of significance for all tests was the 0.05 or 5% level and in confirmation with the 1.96 t-Statistics critical value. All estimations were done using version 10 of the E-views estimation software.

Data presentation and discussions of results

This section presented data of the study and discussed the findings of the results.

Presentation of data

The data were presented in table 2 below:

Table 2:- Models variable data of market capitalization (MCAP), Monetary policy rate (MPR), and deposit market rate (DMR), 1985 – 2020 of Nigeria.

YEAR	MCAP	MPR	DMR
1985	6.6	10	9.75
1986	6.8	10	9.75
1987	8.2	12.75	15.1
1988	10	12.75	13.7
1989	12.8	18.5	21.4
1990	16.3	18.5	22.1
1991	23.1	15.5	20.1
1992	31.2	17.5	22.1
1993	47.5	26	23.99
1994	66.3	13.5	15
1995	180.4	13.5	13.96
1996	285.8	13.5	13.43
1997	281.9	13.5	7.46
1998	262.6	13.5	9.98
1999	300	18	12.59
2000	472.3	14	10.67
2001	662.5	20.5	9.98
2002	764.9	16.5	16.5
2003	1359.3	15	13.04
2004	2112.5	15	13.32
2005	2900.06	13	10.82
2006	5120.9	10	8.35
2007	13181.7	9.5	8.1
2008	9562.97	9.75	11.84
2009	7030.84	6	12.85
2010	9918.21	6.25	5.67
2011	10275.3	12	4.7
2012	14800.9	12	7.18
2013	19077.4	12	5.54
2014	16875.1	13	9.16
2015	17003.4	11	8.68
2016	16185.7	14	6.22
2017	21128.9	14	10.88
2018	21904	14	10.31
2019	25890.2	13.5	9.68
2020	38,589.58	11.5	8.67

Source: Extracted from the Central Bank of Nigeria Statistical Bulletin (various issues).

The table 2 showed the time series data of the Market capitalization (MCAP), and interest rates of Deposit market rate, (DMR), and Monetary policy rate (MRR) from 1985 to 2020.

Data analysis**Diagnostic tests**

The results of the unit root test were presented in table 3 below:

Table 3:- Summary of Augmented Dickey-Fuller unit root test results.

Variables	ADF Test Statistic	Test of Critical Level			Order of Integration	Probability Value
		1%	5%	10%		
D(MCAP)	-4.307047	-4.252879	-3.548490	-3.207094	1(1)	0.0088
D(DMR)	-5.224964	-4.262735	-3.552973	-3.209642	1(1)	0.0009
D(MRR)	-3.628618	-4.243644	-3.544284	-3.204699	1(0)	0.0417

Source: Extracted from E-view 10.0 and compiled by Author

The ADF unit root test results in table 3 showed that the variables were not stationery at levels except MRR, while MCAP, and DMR were integrated at first levels differenced. The affected probability values were less than 0.05 significance level. The study further conducted for otherdiagnostic tests of Breusch-Godfrey and Heteroskedasticity table 4 and 5 below.

The results of the Breusch-Godfrey serial correlation test were presented in table 4 below:

Table 4:- Breusch-Godfrey Serial Correlation LM Test.

F-statistic	0.910162	Prob. F(2,29)	0.4136
Obs*R-squared	2.067185	Prob. Chi-Square(2)	0.3557

Source: Extracted from E-view 10.0 and compiled by Author

From the table, the observed R^2 value of 2.067185 with its corresponding probability of 0.3557 which was above five percent (0.05) indicated that the model is free from serial correlation, since the p-value is greater than 0.05 shows evidence against higher-order autocorrelation. Nevertheless, the study can proceed to conduct for heteroskedasticity in table 5 below.

The results of the heteroskedasticity test were presented in table 5 below:

Table 5:- Heteroskedasticity Test: ARCH.

F-statistic	1.424470	Prob. F(1,32)	0.2414
Obs*R-squared	1.448997	Prob. Chi-Square(1)	0.2287

Source: Extracted from E-view 10.0 and compiled by Author

From the table, the observed R^2 value of 1.448997 with its corresponding probability of 0.2287 which was above five percent (0.05) implied that the model is free from heteroskedasticity. Since the p-value is greater than 0.05 showed evidence in favor of homoscedasticity, hence the model can proceed for further analysis. This however, authorized for of long run bound test in table 6, even at different order integration approved by ARDL model.

The results of the long run Cointegration Bound Test were presented in table 6 below:

Table 6:- The results of long run Cointegration Bound test**Cointegration Test Results****LONGRUN FORM OF ARDL**

ARDL Long Run Form and Bounds Test		
Dependent Variable: D(MCAP)		
Selected Model: ARDL(1, 0, 0)		
Case 2: Restricted Constant and No Trend		
Date: 09/14/21 Time: 16:29		
Sample: 1985 2020		

Included observations: 35				
Conditional Error Correction Regression				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1045.226	2157.210	0.484527	0.6314
MCAP(-1)*	0.121480	0.069872	1.738603	0.0920
DMR**	-113.2510	139.6775	-0.810804	0.4237
MPR**	48.86469	168.7563	0.289558	0.7741
* p-value incompatible with t-Bounds distribution.				
** Variable interpreted as $Z = Z(-1) + D(Z)$.				

Source: Extracted from E-view 10.0 computation

The long run cointegration bound test presented in table 6, showed no cointegration equation from the results. The results showed that the interest rates variables employed had no significant long run respond with market performance in Nigeria. This is because, the associated probability values were higher than 0.05 significance levels. Hence, it can be concluded from the findings that the memory of the capital market performance did not significant response to interest rate of monetary policy, and deposit market rate announcement in the long run in Nigeria. However, the short-term results for lag adjustment were followed as shown in table 7.

Table 7:- The results of short run lag test
ARDL RESULT

Dependent Variable: MCAP				
Method: ARDL				
Date: 09/14/21 Time: 16:21				
Sample (adjusted): 1986 2020				
Included observations: 35 after adjustments				
Maximum dependent lags: 2 (Automatic selection)				
Model selection method: Akaike info criterion (AIC)				
Dynamic regressors (2 lags, automatic): DMR MPR				
Fixed regressors: C				
Number of models evaluated: 18				
Selected Model: ARDL(1, 0, 0)				
Note: final equation sample is larger than selection sample				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
MCAP(-1)	1.121480	0.069872	16.05048	0.0000
DMR	-113.2510	139.6775	-0.810804	0.4237
MPR	48.86469	168.7563	0.289558	0.7741
C	1045.226	2157.210	0.484527	0.6314
R-squared	0.922108	Mean dependent var		7324.278
Adjusted R-squared	0.914570	S.D. dependent var		9683.406
S.E. of regression	2830.311	Akaike info criterion		18.84137

Sum squared resid	2.48E+08	Schwarz criterion	19.01913
Log likelihood	-325.7240	Hannan-Quinn criter.	18.90273
F-statistic	122.3284	Durbin-Watson stat	1.761241
Prob(F-statistic)	0.000000		

Source: Extracted from E-view 10.0

The ARDL lag estimation was the model with the Akaike Information Criterion (AIC) of 18.84 and the highest log-likelihood ratio of -325.72 is shown in table 7. Hence, the model as shown in table 7 is the optimal model for the test of hypotheses. From the table 7 results, R^2 is 0.922 represented 92% approximately. This value implied that the model is fit for the study, and also indicated that 92% of the total variation in market capitalization being the dependent variable (capital market performance) which were explained by the changes in the independent variables of monetary policy rate, and deposit market rate announcement as been captured in the study, while approximate of 0.08 or 8% can be attributed to noise or other associated variables not captured in the work.

The Durbin Watson test statistic from table 7, is 1.761241. And the rule of thumb stated that for a test against first-order autocorrelation it should be approximately 2. From the findings indicated approximate of 2, hence the results showed evidence against first-order autocorrelation.

Test of Hypotheses

The hypotheses were rewritten in null and alternative forms to enable the study conduct the test; thus:

H_{01} : memory of capital market performance did not significantly respond to monetary policy rate, and deposit market rate announcement in Nigeria within the period, 1985-2020.

H_{a1} : memory of capital market performance significantly responds to monetary policy rate, and deposit market rate announcement in Nigeria within the period, 1985-2020.

Discussion of Findings:-

The reported coefficients, from the ARDL lag 2 estimations, were 1.121480, 48.86469, -113.2510, with the probability values of 0.0000, 0.7741, 0.4237 respectively for MCAP, MPR, and DMR. Judging from these results, monetary policy rate had a positive, while deposit market rate exerted a negative but insignificantly responded with the memory of capital market performance in Nigeria. Conversely, capital market development responded positively and significantly to the Nigerian economic growth rate. The decision rule justified was based on the fact that the probability values of monetary policy rate and deposit market were greater than 0.05 significance level, except for market capitalization that was less than 0.05 significance level and as such H_0 cannot be rejected.

The economic implication to these results revealed that a unit change in monetary policy rate, had caused a 48 units passive increases, while deposit market caused a decrease of 113 units but with no significant effect on the memory of capital market performance in Nigeria. Whereas, capital market contributed about 1.12% to the Nigeria's economic growth rate for every reduction on interest rates announcement. These findings indicated a theoretical and empirical evidence that the memory of capital market performance did not respond to interest rates announcement in Nigeria. While, the Nigerian capital market respond to economic growth rate provided interest rate announcement would have reduced by 48.86 and 113.25 for monetary policy rate and deposit market rate respectively. From these results in every increase of deposit market rate adversely affected the capital market performance in Nigeria. Consequently, every increase of monetary policy rate contributes passively to the performance of Nigerian capital market. Following from these results, the memory of the capital market performance can be accounted to interest rates announcement in Nigeria between 1985 and 2020. Although, the monetary policy rate and the deposit market rate did not constitute significant variables but needed an urgent attention and management.

Conclusion:-

This study has identified extensive research in capital market performance and the macroeconomic environment, but only few scholars have shown interest on the response of capital market performance to interest rates announcement phenomenon in Nigeria. Also, no study has tested the theoretical perspective in Nigerian circumstance using current data. However, this theoretical test showed empirical evidence that the memory of the capital market performance had a negative response to deposit market rate, and positive to monetary policy rate but not significant. The study

concluded that interest rates announcement did not constitute significant variables to influence capital market performance memory in Nigeria. The study further discovered monetary rate to be passive, and the deposit market rate attempted to obstruct market performance. The findings revealed substantial evidence that a lower interest attracts for more investment in the capital market, and a higher interest rate conversely makes the money market more attractive for investors.

Recommendation:-

In view of the findings, the study recommended the following:

1. The Central Bank of Nigeria through the monetary policy committee should downwardly review the deposit market rate to assist the private sectors access more credits. This mechanism will aid and reduced crowding-out effect in the business environment, because a low interest rate will possibly encourage investors to invest more stocks in the capital market. Hence, it will invigorate the financial system to economic growth rate of Nigeria.
2. The Securities and Exchange Commission should strengthen the advisory roles on the capital market participants by initiating laws that will enhance corporate governance and protect investors/shareholders concerning dividend policies. The guarantee or the assurance of regular and incremental dividend will help and make the general public to own shares, and thereby increase the capital market base.
3. The Central Bank of Nigeria should at all time monitor the stock market activities with reaction to the macroeconomic environment. The constant checks and appraisal of the macroeconomic variables will assist to maintain a health capital market in Nigeria.

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