
EFFECT OF MONEY MARKET INSTRUMENTS ON CAPITAL MARKET PERFORMANCE IN NIGERIA

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ABSTRACT: *The study examined the effect of money market instruments on capital market performance in Nigeria using time series spanned data over a period, 1981-2018. Secondary data were sourced from the central bank of Nigeria statistical bulletin 2018. Descriptive statistics, covariance Analysis, Johansen cointegration and vector error correction model were used in the study, the study is to determine how the trading of commercial paper, Bankers' acceptance and Treasury Bills affects capital market performance in Nigeria for the period under review. The result of the study indicates that treasury bills (TB) is negative at lags 1 and 2; the implication is that an increase in purchase of treasury bills in the money market would result to a fall in the annual market capitalization of the Nigerian capital market. Similarly, a negative relationship was also noticed between commercial paper (CP) trading and annual market capitalization which implies that an increase in trading on commercial paper will lead to a decrease in the trading of annual capital market. However, a positive relationship was observed between bankers' acceptance (BA) and annual market capitalization. Following the above results, the following recommendations are made. There should be adequate market information to investor in stocks to enable them transform their stock from money market to capital market depending on the market outlook. Both market (money and capital market) should ensure that they work harmoniously because investors holding one stock can cause adverse negative effect on the other.*

KEYWORDS: money market, capital market, treasury bill, bankers' acceptance.

INTRODUCTION

The money and capital market make up the Nigerian financial system. The main goal of the financial system is to mobilise funds from the surplus sector to the deficit sector which in turn stabilise the economy. While the money market deals on short term money market instruments, the capital market deals on long term instruments. Both are required for the improvement of the economy as they enhance the long-term and short-term capital needs of the economy. Money market is a market where instruments that mature in less than one year are traded, short term funds from the surplus sector of the economy to the deficit sector which could be public or private to bridge financial gaps by trading in short term instruments such as treasury bills, treasury certificate, call money, certificate of deposit and commercial papers.

While the capital market according to the Investopedia is a broad-spectrum market where tradeable assets that includes the stock market as well as other venues for trading different

financial products. The stock market allows investors and banking institutions to trade stocks, either publicly or privately. Stocks are monetary instrument that represent partial ownership of a company. Capital market may trade in other financial securities including bonds; derivatives, contracts such as options, various loans, and other debt instruments, other financial instruments may be sold in capital markets. The capital market is used extensively by companies as a means of meeting their long-term financial needs. According to the Central Bank of Nigeria (CBN 2004). The role of money market operation as a wholesale market is for low risk, highly liquid, short term debt instrument and open market operation in worth stressing.

Statement of Problem

Both the capital market and the money market are all needed to bridge different financial gaps and ensure smooth running of the economy while some may prefer to hold short term fund others may require long term securities ranging from development bond, stocks of blue-chip companies' debenture etc. Others prefer to hold short term securities ranging from Bankers' acceptance, commercial papers, treasury bills, call money and certificate of deposit, that mature in less than one year. However, holding a particular financial security will have effect on the other, that is, there is an inverse relationship between combination of securities held by an individual or investor, but to what extent does holding a particular security affect the other these and more shall be unravelled in this study more so, most of the studies like ayunku and etali (2017) pavtar (2016) and other cantered there studies on money market and economic growth while other focused on bank and insurance sector performance but this study will concentrate on the inverse relationship between the two market owing to the fact holding a combination of securities could have effect one another in Nigeria for the period under this study

Objective of the Study

The main objective of this study is to determine the effect of money market instrument on capital market performance in Nigeria. Other specific objectives of the study are as follows:

1. To examine the effect of commercial paper on Annual market capitalisation of the capital market in Nigeria.
2. To examine the effect of Bankers' acceptance on Annual market capitalisation of the capital market in Nigeria.
3. To determine the effect of certificate of deposit on Annual market capitalisation of the capital market in Nigeria.

Research Questions

Based on the objectives of the study, the following research questions would be formulated:

1. To what extend does commercial paper have effect on Annual market capitalisation of the capital market in Nigeria.
2. How far does Bankers' Acceptance have effect on Annual market capitalisation of the capital market in Nigeria.?
3. Is there any effect of certificate of deposit on Annual market capitalisation of the capital market in Nigeria.?

Research Hypotheses

The following research hypotheses will be formulated as:

1. **HO₁**: commercial paper does not have any positive and significant effect on Annual market capitalisation of the capital market in Nigeria.
2. **HO₂**: Bankers' Acceptance does not have any positive and Annual market capitalisation of the capital market in Nigeria.
3. **HO₃**: Certificate of deposit does not have any significant effect on Annual market capitalisation of the capital market in Nigeria.

LITERATURE REVIEW

Uruakpa (2019) investigated the impact of money market reforms on economic growth of Nigeria from 1990–2017 using the ordinary least square method. The study used gross domestic product as a measure for economic growth while treasury bill rate, treasury bill issued and money market value are used as parameter to measure money market, gotten from the Central Bank of Nigeria statistical bulletin. The OLS result of the study found that money market value has positive and significant effect on GDP while treasury bill outstanding has positive but insignificant effect on gross domestic product. However, treasury bill rate has negative and significant effect on GDP. The F-statistics suggests that all the money market proxies together impacted of GDP, the implication is that money market is a viable financial market in Nigeria. Moreover, the variance decomposition showed that GDP has a decreasing variance with money market value and treasury bill rate but an increasing variance with treasury bill outstanding. The variance impulse showed that GDP responds to the activities or movement in money market value and treasury bill rate. In conclusion, it was observed that money market reform has helped to boost the effect of the market on Nigeria's economic growth. The study recommended constant reform of the market. As it urged the authorities of the market to deepen the market with more trading instruments.

Umasom (2018) used multivariate model to study money market instruments and Nigeria inflation rate. Inflation Rate (INFR) was used as a function of Percentage of Treasury Bills to Gross Domestic Product (TB/GDP), Percentage of Stabilization Securities to Gross Domestic Product (STS/GDP), Percentage of Treasury Certificate to Gross Domestic Product (TC/GDP), Percentage of Eligible Development Stock to Gross Domestic Product (EDS/GDP), Percentage of Central Bank of Nigeria Short Term Fund to Gross Domestic Product (CBNSF/GDP) and Percentage of Call Money Scheme to Gross Domestic Product (CMS/GDP). The integration, Augmented Dickey Fuller Unit Root, Granger Causality Test and Vector Error Correction Model (VECM) were employed to determine the relationship between the money market instruments and Nigerian inflation rate. The results revealed that money market instruments are statistically significant in explaining variation in Nigerian inflation rate. the study recommends that the money market should well be structured, properly managed and its operational efficiency enhanced to achieve the monetary policy objective of price stability.

Eze & Mansi (2017) conducted a causality analysis on money market and economic growth in Nigeria from 1990 to 2014 using. Four money market instruments (treasury bills, treasury certificates, certificates of deposits, and bankers' acceptances) were regressed against the gross domestic product (representing economic growth), The unit root tests, co-integration tests, and parsimonious error correction results shows that money market has significant impact on the growth of the Nigerian economy, the impact was specifically significant with respect to bankers' acceptances and certificates of deposits. Based on the findings, it was recommended

among others, that, more instruments and innovations should be introduced into the money market to enlarge the scope of the market, and that the money market should be fragmented for expansion.

Igbinosa & Aigbovo (2015) examined the Nigerian Money Market and National Economic Development from 1986 to 2013. The study uses money market indicators (values of treasury bills, commercial papers and bankers acceptances) as measures of money market development and real GDP per capita for economic development, while monetary policy rate was the only control variable. It adopts a multivariate OLS analysis for the estimation process, co-integration analysis for long-run equilibrium relationship and the associated error correction model to determine the short-run impact of the variables. The Granger causality test is used to determine the direction of causality among the variables. The findings of the study are that banker acceptances (LVBA) significantly influences economic development in both the short run and long-run respectively, while value of treasury bills and commercial papers as well as the monetary policy rate have significant impact on economic development only in the long run. Also, a unidirectional causality is found running from value of bankers' acceptances and monetary policy rate to economic development. It was recommended that measures to improve and strengthen the money market instruments in order to improve the level of development in Nigerian economy. Also, policies measures by the monetary authority (CBN) to promote market integrity and soundness which will enable the money market to continue to stimulate economic development in Nigeria.

Pavtar, (2016) conducted a time series analysis on the Nexus between Money Market Instruments and Nigeria's Economic Growth from 1985 to 2014. ex-post-facto research design was adopted. Data sourced from CBN annual statistical bulletin for the years under review were Descriptive statistics and the ordinary least square (OLS) multiple regression techniques were used to analysed. the T-test statistics was used to test the null hypotheses of the study at 5% level of significance for a two tailed test. The study found that Treasury bill, Treasury certificate, Commercial paper does not have any significant effect on the gross domestic product (GDP) of Nigeria while Certificate of deposits was found to significantly impact on the gross domestic product (GDP) of Nigeria. The study recommends amongst others the need for Government to create appropriate macroeconomic policies, legal framework and consolidate and improve on reforms with a holistic view to developing and deepening the market so as to promote productive activities, investments, and ultimately economic growth Etali and Ayunku (2017) investigated if money market spur economic growth in Nigeria? using a granger causality approach. The study adopted money market instruments such as treasury bills (TBs), commercial papers (CPs) and bankers' acceptances (BAs) as proxy for money market (independent variables), and gross domestic product (GDP) as proxy for economic growth (the dependent variable). Secondary time series data for the variables were collected from CBN Statistical Bulletin and the National Bureau of Statistics for the period 1989-2014. The study employed econometric techniques such as ADF, Unit Root Test, OLS, multiple regression and Granger Causality Test to analysed the study data; strong evidence that TBs, and CPs had positive and significant influence on GDP, while BAs had positive but insignificant influence on GDP in Nigeria. The granger causality test result revealed no directional causality relationship between TBs and GDP, meaning that TBs does not granger cause GDP and vice-versa. There was also no directional causality relationship between CPs and GDP, BAs and GDP. However, there exists bi-directional relationship running from CPs

to TBs and BAs as it was established at 5 per cent level of significance. The study recommended among others that for the money market to influence meaningful economic growth and development in Nigeria, appropriate policies should be employed to strengthen and deepen the market

Akarara and Eniekezimene (2018) Employed empirical analysis to study Money Market Instruments and Growth of the Nigerian Economy. Using data obtained from Central Bank of Nigeria Statistical Bulletin 2017. Autoregressive Distributive Lag (ARDL) Bound Testing approach to co-integration were conducted. Results shows no form of convergence among the variables in the long-run. It also revealed that money market variables are positively related with economic growth rate both in the short and long-run, except for Certificate of Deposit (COD) and Commercial Paper (CPR) that has an inverse relationship with economic growth in the long run. Broad Money Supply (M2G) which does not seem to have a significant relationship with GDPR both in the short and long-run, while Treasury Certificate (TRC) has a significant positive impact on GDPR in the short-run but an insignificant impact on GDPR in the long-run. It was advised that Central Bank of Nigeria in the use of Treasury Certificate as a means of managing liquidity in the short-run, as its prolonged use would amount to no significant effect in the economy. Also, Certificate of Deposit and Commercial Paper should be used on short term basis, if otherwise; their impact on the economy would be negative.

CONCEPTUAL FRAMWORK

Money Market Instrument

Treasury bill

Treasury bills are short-term money market debt instruments with a maturity date of one year or less. They are sold at a discount. The Federal Government of Nigeria, through the Central Bank of Nigeria can issue Nigerian Treasury Bills (NTB) with the view to providing short-term funding of government budget deficit or projects

Commercial Paper

The Investopedia defined Commercial paper is an unsecured, short-term debt instrument issued by a corporation, typically for the financing of accounts payable and inventories and meeting short-term liabilities. Maturities on commercial paper rarely range longer than 270 days.

Banker Acceptance

A banker's acceptance according to the Wikipedia is an instrument representing a promised future payment by a bank. The payment is accepted and guaranteed by the bank as a time draft to be drawn on a deposit. The draft specifies the amount of funds, the date of the payment, and the entity to which the payment is owed.

Certificate Of Deposit

A certificate of deposit (CD) is a time deposit, and a financial product commonly sold by commercial banks, thrift institutions, & credit unions. Certificate of Deposit are similar to savings accounts but has higher returns when compered normal savings account.

Capital Market Instruments

Bonds --- Bonds are fixed income investment which an investor loans money to an entity that borrows fund for a specific period at an interest rate.

Debentures – The word debenture is derived from a latin word ‘debere’ which means to borrow. It is a type debt instrument or medium- or long-term debt instrument used by large companies to raise fund at a fixed rate of interest

Capital Market Performance Indices

All Share Index

The All-share Index is a total market (broad-base) index, reflecting a total picture of the behaviours of the common shares quoted on the Nigerian Stock Exchange. It is calculated on a daily basis, showing how the prices have moved

Total Market Capitalization

Is the total value of all outstanding shares of a publicly-traded company. The market capitalization is calculated by multiplying the shares outstanding by the value per share. Market capitalization is one of the basic measures of a publicly-traded company; it is a way of determining the rough value of a company. Generally speaking, a higher market capitalization indicates a more valuable company

Roles of the Capital And Money Market

For an economy to function optimally both the capital market and money market most play the following vital roles.

Capital Market

1. Providing means of raising long-term finance to assist companies to expand and modernize its operations
2. Providing liquidity for investment funds from the standpoint of the individuals, corporate organization and the economy.
3. Serve as a measure of confidence in the economy and as an important economic barometer
4. providing avenues of marketing securities in order to raise fresh funds for expansion.

Money Market

1. Providing means of raising short term finance to lubricate companies and government activities
2. maintaining balance between supply and demand for money for transaction that are done for a short period.
3. Money market promotes growth and development of the economy.

From the above roles plays by

Theoretical Framework of the Study

Cumulative process Theory: It was propounded by Knut Wicksell's in 1898. Wicksell made a key distinction between the natural rate of interest and the money rate of interest. The money rate of interest, to Wicksell, is the interest rate seen in the capital market; the natural rate of interest is the interest rate at which supply and demand in the market for goods are in equilibrium – as though there were no need for capital markets. The theory of the cumulative process of inflation is an early decisive swing at the idea of money as a "veil". Wicksell's

process was much in line with the ideas of Henry Thornton's earlier work. Wicksell's theory claims, that increases in the supply of money lead to rises in price levels, but the original increase is endogenous, created by the conditions of the financial and real sectors.

The applicable areas are:

Interest rates and the price level, the marginal efficiency of investment (MEI), etc.

The assumptions are:

The endogenous creation of money, and how it leads to changes in the real market.

Money is not a "veil" - agents do react to it and this is not due to some irrational "money illusion".

METHODOLOGY

The study utilized annual time series data for the period 1981-2018, obtained from Central Bank of Nigeria (CBN) statistical bulletin. The data used includes; annual market capitalization, treasury bill, commercial paper and bankers' acceptance.

Model Specification

The model adopted for this study is thus specified below as;

$$MKTCAP = f(BA \ CP \ TB) \quad (1)$$

$$MKTCAP = \beta_0 + \beta_1 BA + \beta_2 CP + \beta_3 TB + u \quad (2)$$

Where;

MKTCAP is the Market Capitalization

BA is Bankers' Acceptance

CP refers to Commercial Papers

TB refers to Treasury Bills

Methodology and Empirical Results

Descriptive Statistics of Data

The analysis of descriptive statistics is hereby performed so as to find out the properties of the data. Table 2 shows the data characteristics including total number of observations, means, standard deviation, skewness, Jarque-Bera statistics and their respective minimum and maximum values of the variables from the period of 1981 to 2018.

From table 2 below, it was observed that the mean values of market capitalization (MKTCAP), treasury bills (TB), commercial papers (CP) and bankers' acceptance (BA) were 5049.940, 832.7126, 73.93711 and 21.38895 respectively. The variability in the distributions as captured by the standard deviation, suggests that MKTCAP, TB, CP and BA were dispersed from its mean since its standard deviation value exceeds its mean.

Furthermore, the skewness values of MKTCAP (1.127328), TB (1.341721), CP (3.112482) and BA (1.142337) suggests that MKTCAP, TB, CP and BA are positively skewed.

Finally, the Jarque-Bera statistics indicates that the variables MKTCAP, TB, CP and BA were considered not to have a normal distribution since their p-values were above 10% level. However, as per the central limit theorem, if the number of observations are greater than 30, the issue of normality can be ignored.

Table 2: Descriptive Statistics

	MKTCAP	TB	CP	BA
Mean	5049.940	832.7126	73.93711	21.30895
Median	386.1500	413.6500	7.635000	11.84500
Maximum	21904.04	3665.250	822.7000	81.83000
Minimum	5.000000	5.780000	0.070000	0.010000
Std. Dev.	7235.740	1080.475	166.4876	24.46018
Skewness	1.127328	1.341721	3.112482	1.142337
Kurtosis	2.731860	3.448245	12.95963	3.281540
Jarque-Bera	8.162672	11.71949	218.4118	8.390090
Probability	0.016885	0.002852	0.000000	0.015070
Observations	38	38	38	38

Correlation Analysis

Correlation is a statistical tool that describes the degree of linear association between two or more variables. From Table 3, a strong significant positive association was noticed between treasury bills (TB) and market capitalization (MKTCAP) with a value of 0.931136, similarly a weak significant positive association was also observed between bankers' acceptance (BA) and market capitalization (MKTCAP) with a value of 0.406623. However, a weak and insignificant association was noticed between commercial paper (CP) and market capitalization (MKTCAP) with a value of 0.194480.

Furthermore, according to Gujarati (2006) if the pair-wise correlation among the independent variables is greater than 80%, then multicollinearity is said to have occurred. From table 3 below, the result attested to the fact that pair-wise correlation for all the independent variables are less than 80%. The highest been 73.46% between commercial paper and bankers' acceptance. Therefore, it can be concluded that multicollinearity does not exist in the model.

Table 3: Covariance Analysis: Ordinary

Sample: 1981 2018

Included observations: 38

Correlation Probability	MKTCAP	TB	CP	BA
MKTCAP	1.000000 -----			
TB	0.931136 (0.0000 ^a)	1.000000 -----		
CP	0.194480 (0.2420)	-0.021785 (0.8967)	1.000000 -----	
BA	0.406623 (0.0113 ^a)	0.294333 (0.0729 ^c)	0.734617 (0.0000 ^a)	1.000000 -----

p-values are in parenthesis ()

a/b/c, indicates significance at 1%, 5% & 10% respectively

Source: Authors Computation Using Eviews 10+

Unit Root Test

Stationarity implies that the mean, variance and covariance are constant across different periods. Existence of unit roots can lead to serious issues such as; spurious regressions and errant behaviour variables due to econometric assumptions for analysis not being valid. Before estimating the Johansen cointegration test, unit root test would be conducted to examine the stationarity process of the variables to ensure that none of the variables are I(0) and I(2). Since the model will yield bias and spurious results in the presence of I(2) variables. Hence a formal test is still required. The Augmented Dickey Fuller (ADF) and Phillip Perron (PP) test were used to access the stationarity properties of the variables; as show in table 4 below, we established that none of the variables were I(2), as they were all I(1).

Table 4 Unit Root Test Results

Variables	ADF Test	Remarks	PP Test	Remarks
BA	-6.882425 ^a	I(1)	-7.094197 ^a	I(1)
CP	-5.433420 ^a	I(1)	-5.433420 ^a	I(1)
TB	-5.602225 ^a	I(1)	-5.852321 ^a	I(1)
MKTCAP	-5.613617 ^a	I(1)	-5.255453 ^a	I(1)

Optimal lag order for ADF and bandwidth for PP tests are determined using the Schwarz Info Criterion

a/b/c, indicates significance at 1%, 5% & 10% respectively.

Test includes Trend and Intercept

Source: Authors Computation Using Eviews 10+.

Vector Error Correction Model (VECM)

The Vector Error Correction Model (VECM) also known as a cointegrating VAR (CVAR) is a restricted vector autoregressive (VAR) model, which has cointegration restrictions built into its model specifications, so as to enable the use of non-stationary series that are known to be cointegrated. The VECM restricts the long-run behaviour of the endogenous variable to adjust to their long-run equilibrium relationship, while also allowing for the estimation of their short-run dynamics. This estimation of the short-run dynamics is done by including an error correction mechanism. A general notation of a VECM can be thus specified as;

$$\Delta y_t = \mu + AB^t x_{t-1} + \sum_{i=1}^{p-1} \tau_i \Delta x_{t-i} + \varepsilon_t \quad (7)$$

Where μ represents a deterministic shift vector. τ_i are $(k \times k)$ parameter matrices of the lagged stationary differences, B being the $(k \times r)$ matrix of the k-dimensional cointegrating vectors and A the corresponding $(k \times r)$ matrix of the error correction coefficients. However, the matrix $\Pi=AB'$ represents the long-run relationship between the variables in y_t .

Johansen Cointegration Test

From Table 5, the outcome of the cointegration test indicates the presence three cointegrating equation as suggested by the trace and max-eigen statistic. We therefore reject the null hypothesis of no cointegration. It is therefore evident that a long-run relationship exists.

Table 5: Johansen Cointegration Test

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.686943	82.39060	47.85613	0.0000
At most 1 *	0.457463	40.58128	29.79707	0.0020
At most 2 *	0.366630	18.56734	15.49471	0.0167
At most 3	0.057348	2.126096	3.841466	0.1448

Trace test indicates 3 cointegrating eqn(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 No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.686943	41.80932	27.58434	0.0004
At most 1 *	0.457463	22.01394	21.13162	0.0375
At most 2 *	0.366630	16.44125	14.26460	0.0223
At most 3	0.057348	2.126096	3.841466	0.1448

Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Vector Error Correction Estimates

From table 5 below, we find out that treasury bills (TB) is negatively significant at lags 1 and 2; suggesting that an increase in treasury bills trading in the money market would result to a fall in the annual market capitalization of the Nigerian capital market. Similarly, a negative relationship was noticed between commercial paper (CP) trading and annual market capitalization at both lags with that of lag 1 being significant. However, a positive relationship was observed between bankers' acceptance (BA) and annual market capitalization at both lags with that of lag 1 being significant.

The estimates of the short-run dynamics suggest that the coefficient of the lagged error correction term (ECT) is negative and significant at 1%. The coefficient of the error term, -0.452830, suggests that only about 45% of the discrepancy in market capitalization between the long and short-run is corrected within a year. This suggests a low speed of adjustment in the model.

Furthermore, the adjusted R^2 value suggests that 33.33% of the variation in the dependent variable; MKTCAP is explained by the independent variables (BA, CP and TB). The 66.67% variance in MKTCAP is explained by other factors not captured in this research. Also, the F-

statistic of 2.889209 suggests that the model is significant at a 1% level. While the Durbin-Watson statistic of 2.022876 indicates the absence of autocorrelation in the model.

Table 5: VECM Estimates

Dependent Variable: D(MKTCAP)

Sample (adjusted): 1984 2018

Included observations: 35 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
ECT	-0.452830	0.181706	-2.492098	0.0197 ^a
MKTCAP(-1)	0.446253	0.217987	2.047154	0.0513 ^b
MKTCAP(-2)	0.702916	0.420018	1.673540	0.1067 ^c
TB(-1)	-1.139601	2.890740	-0.394225	0.6968
TB(-2)	-2.580132	3.123133	-0.826136	0.4165
CP(-1)	-19.81203	7.832782	-2.529373	0.0181 ^a
CP(-2)	-2.456133	3.319063	-0.740008	0.4662
BA(-1)	13.87021	29.64423	0.467889	0.6439
BA(-2)	84.30462	26.46288	3.185769	0.0038 ^a
C	311.2433	417.9235	0.744737	0.4634
R-squared	0.509832	Mean dependent var	625.6669	
Adjusted R-squared	0.333371	S.D. dependent var	2136.262	
S.E. of regression	1744.201	Akaike info criterion	18.00094	
Sum squared resid	76055946	Schwarz criterion	18.44532	
Log likelihood	-305.0164	Hannan-Quinn criter.	18.15434	
F-statistic	2.889209	Durbin-Watson stat	2.022876	
Prob(F-statistic)	0.017349			

a/b/c, indicates significance at 1%, 5% & 10% respectively.

Source: Authors Computation Using Eviews 10+.

CONCLUSION AND RECOMMENDATIONS

The study analyzed the effect of money market instrument on capital market performance in Nigeria over the period of 1981- 2018. The findings revealed that capital market has negative relationship between treasury Bills (TB) and Commercial paper at both first lag 1 and 2 respectively while commercial paper is significant at lag 1 and not significant at lag 2. The implication of the above result indicates that the purchase of both treasury bill and commercial paper will lead to low performance of the capital market as investor will prefer to hold short term securities instead of long-term financial securities as revealed by the result. The above result is in line with the findings of Pavtar (2016) but differs in his conclusions.

From table 5 below, we find out that treasury bills (TB) is negatively significant at lags 1 and 2; suggesting that an increase in treasury bills trading in the money market would result to a fall in the annual market capitalization of the Nigerian capital market. Similarly, a negative relationship was noticed between commercial paper (CP) trading and annual market capitalization at both lags with that of lag 1 being significant. However, a positive relationship

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Furthermore, the adjusted R^2 value suggests that 33.33% of the variation in the dependent variable; MKTCAP is explained by the independent variables (BA, CP and TB). The 66.67% variance in MKTCAP is explained by other factors not captured in this research. Also, the F-statistic of 2.889209 suggests that the model is significant at a 1% level. While the Durbin-Watson statistic of 2.022876 indicates the absence of autocorrelation in the model.

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APPENDIX**1. VECM Estimates**

Vector Error Correction Estimates

Date: 05/12/20 Time: 18:50

Sample (adjusted): 1984 2018

Included observations: 35 after adjustments

Standard errors in () & t-statistics in []

Cointegrating Eq:	CointEq1			
MKTCAP(-1)	1.000000			
TB(-1)	-7.656027 (0.18857) [-40.6014]			
CP(-1)	-10.80006 (1.85621) [-5.81835]			
BA(-1)	84.25280 (13.1870) [6.38906]			
C	349.8688			
Error Correction:	D(MKTCAP)	D(TB)	D(CP)	D(BA)
CointEq1	-0.452830 (0.18171) [-2.49210]	0.057783 (0.01901) [3.04029]	-0.029050 (0.00455) [-6.38981]	-0.004520 (0.00099) [-4.57213]
D(MKTCAP(-1))	0.446253 (0.21799) [2.04715]	-0.080398 (0.02280) [-3.52614]	0.066811 (0.00545) [12.2498]	0.003460 (0.00119) [2.91777]
D(MKTCAP(-2))	0.702916 (0.42002) [1.67354]	-0.044617 (0.04393) [-1.01559]	0.050859 (0.01051) [4.83966]	0.009571 (0.00229) [4.18828]
D(TB(-1))	-1.139601 (2.89074) [-0.39422]	0.750125 (0.30236) [2.48092]	-0.492003 (0.07233) [-6.80258]	-0.064101 (0.01573) [-4.07575]
D(TB(-2))	-2.580132 (3.12313) [-0.82614]	-0.057015 (0.32667) [-0.17454]	-0.323964 (0.07814) [-4.14592]	-0.055135 (0.01699) [-3.24480]
D(CP(-1))	-19.81203 (7.83278) [-2.52937]	0.553843 (0.81927) [0.67602]	-1.059315 (0.19598) [-5.40534]	-0.208666 (0.04262) [-4.89653]
D(CP(-2))	-2.456133 (3.31906) [-0.74001]	-0.321185 (0.34716) [-0.92518]	-0.184198 (0.08304) [-2.21811]	0.042451 (0.01806) [2.35084]
D(BA(-1))	13.87021 (29.6442) [0.46789]	-5.919834 (3.10065) [-1.90922]	3.305420 (0.74170) [4.45657]	0.175160 (0.16128) [1.08604]

D(BA(-2))	84.30462 (26.4629) [3.18577]	-3.673053 (2.76790) [-1.32702]	2.729084 (0.66210) [4.12187]	0.170671 (0.14397) [1.18543]
C	311.2433 (417.924) [0.74474]	88.87294 (43.7129) [2.03311]	12.83247 (10.4564) [1.22723]	5.277779 (2.27375) [2.32117]
R-squared	0.509832	0.530177	0.904126	0.724304
Adj. R-squared	0.333371	0.361041	0.869612	0.625054
Sum sq. resids	76055946	832066.9	47610.69	2251.266
S.E. equation	1744.201	182.4354	43.63975	9.489501
F-statistic	2.889209	3.134614	26.19548	7.297741
Log likelihood	-305.0164	-225.9984	-175.9335	-122.5311
Akaike AIC	18.00094	13.48563	10.62477	7.573206
Schwarz SC	18.44532	13.93001	11.06916	8.017591
Mean dependent	625.6669	84.01743	0.395143	0.248000
S.D. dependent	2136.262	228.2299	120.8544	15.49740
Determinant resid covariance (dof adj.)		5.24E+15		
Determinant resid covariance		1.37E+15		
Log likelihood		-808.5263		
Akaike information criterion		48.71579		
Schwarz criterion		50.67109		
Number of coefficients		44		