



Maturity Transformation And The Performance Of Capital Market In Nigeria 2009-2017

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ABSTRACT

The paper reviewed the effect of maturity transformation on the performance of capital market in Nigeria. Data were collected from NDIC annual report and account for the period of nine (9) years. Descriptive statistics and econometric tools such as ordinary least square multiple regression and granger causality were utilized for this assessment. The findings show that lending operation and shareholders' fund have no significant result on capital market index whereas deposit mobilization had positive and significant effect on financial market index. The researcher therefore recommended that banks should lunch into aggressive deposit mobilization to ensure greater performance in Nigeria capital market, bank management should carefully select the customers that have character and capacity to avoid non-performing loan. This will help to reduce non performance in Nigeria capital market.

Keywords: Capital market, Market index, Lending operation, Deposit mobilization, Shareholders funds

1. INTRODUCTION

Commercial banks accept deposits from the superfluous commercial unit on a short-term basis and transforming these resources as credits. The act of converting this short term deposit to long term loan is called maturity transformation (Anon n.d). The long-term loan sourced by the deficit economic unit from the commercial banks to advance business is capital market activities (Mbat, 2000). This means that, there is a linkage between money market and capital market. A well-functioning of money market transformation has a great effect on capital market performance.

Capital market operations tend to be discussed within the narrow framework of activities connected with the issue and distribution of long-term securities. One plausible explanation of this myopia is the apparent preference of firms to raise capital funds through the issue of long-term negotiable instruments (Akujuobi, 2004). The apparent popularity often creates the impression that capital funds are raised exclusively through the issue of securities (Akujobi, 2004).

As students of finance with a broadened mind, we understand that capital market funds can be raised through: market for negotiated capital fund (NCF) (such as informal capital markets and market for institutionalized capital fund) and long-term security market (LSM). Market for institutionalized capital fund includes development finance companies and development banks.

The security market which is also called Stock market is the most organized part of the capital market and it is divided into primary and secondary market. Nigerian Stock Exchange (NSE) is typical example of secondary market. Market index is used to measure the performance of capital market.

A market index is a speedy measure to pass judgment on the general heading of the market and the extent of its development. A market list is a factual boundary to mirror the composite estimation of market qualities. It is a normal of offer costs of all organizations on the stock trade market, frequently utilized as a manual for analyze the exhibition of various organizations and ventures. Or on the other hand it is a progression of numbers which shows the changing normal estimation of the offer costs of all organizations on a stock trade and which is utilized as a proportion of how well a market is performing (Olaniyi, Abiola & Adebayo 2014).

The market index is viewed as a significant pointer by the contributing public everywhere and can be utilized as a benchmark by which financial specialist or asset supervisor thinks about the profits of their own portfolio (Senol, 2012). It is a device utilized by speculators and monetary chiefs to depict

the market, and to look at the profit for explicit ventures. It is likewise a strategy for estimating the worth of the stock market. A market index tracks the performance of capital market in the Nigerian economy.

2. Objective of the Study

The general objective is to establish the effect of maturity transformation on the performance of capital market in Nigeria. Below are the specific objectives:

- i To ascertain the effect of lending operation on Capital Market index in Nigeria
- ii To examine the effect of deposit mobilization on Capital Market index in Nigeria
- iii To determine the effect of shareholders funds on capital market index in Nigeria

3. Statement of hypotheses

H₁- lending operations do not have significant effect on capital market index in Nigeria.

H₂- deposit mobilizations do not have significant effect on capital market index in Nigeria.

H₃- shareholders funds do not have significant effect on capital market index in Nigeria.

4. Literature Review

Maturity transformation- This is the training by budgetary foundations where they get cash on more limited time spans than they loan cash out. Monetary business sectors likewise have the impact of development change whereby speculators, for example, investors and bondholders can sell their offers and securities in the optional market (for example the bigger aspect of the securities exchange) whenever without influencing the organization that gave the offers or bonds. Hence the organization can be a drawn out borrower from a market of momentary loan specialists. The transient loan specialists are essentially purchasing and selling the responsibility for offers or securities on the financial exchange. The organization keeps a register of proprietors and changes the name at whatever point there is a deal (Wikipedia n.d).

Capital market-“This is a market wherein long haul obligation (longer than a year) or value upheld protections are purchased and sold, But Capital business sectors channel the abundance of savers to the individuals who can put it to long haul gainful use, for example, organizations or governments making long haul speculations (wikipedia n.d), while capital market is where purchasers and dealers participate in exchange of monetary protections like securities, stocks, and so forth of purchasing/selling is attempted by members, for example, people and organizations. Capital business sectors help channelling surplus assets from savers to organizations which at that point put them into beneficial use. By and large, this market exchanges generally in long haul protections”(Economic Times n.d).

Nigerian Capital market- According to Nzotta (2004), Nigerian capital market is segmented into three: non-securities market, securities market and derivatives market. The non-securities market consists of the market for various long-term loan and fund provided for various productive purposes. It is also called market for negotiated capital funds. It is all transactions in capital funds not covered by negotiable securities. Examples are development banks, development finance intermediaries etc.

Securities market is the most organized part of capital market. It is divided into primary and secondary market. Primary market is the market for new issued stock whereas secondary market is the market for already existing securities. A typical example is Nigerian stock exchange.

Derivative represents any holding, which is founded alongside derives values from alternative result. It is used for hedging, speculations and portfolio diversification. Examples of offshoot tools are onward bond (that is contract), futures contract, options contract and swap.

Market index - This is a speedy measure to pass judgment on the general bearing of the market and the extent of its development. A market record is a factual boundary to mirror the composite estimation of market attributes. It is a normal of offer costs of all organizations on the stock trade market, regularly utilized as a manual for look at the presentation of various organizations and ventures. Or on the other hand it is a progression of numbers which shows the changing normal estimation of the offer costs of all organizations on a stock trade and which is utilized as a proportion of how well a market is performing (Olaniyi, Abiola & Adebayo,2014). Also, it is viewed as a significant marker by the contributing public everywhere and can be utilized as a benchmark by which speculator or asset director analyzes the profits of their own portfolio (Senol, 2012). Furthermore,

market index is an additionally a technique for estimating the estimation of the financial exchange. A market index tracks the performance of capital market in the Nigerian economy.

5. METHODOLOGY

The researcher adopted experimental design for the work. Here the researcher wants to evaluate if the maturity transformation has effect on capital market performance. Data were collected from NDIC annual report and account 2017. The annual NDIC report has becomes the instrument for data collection. The data collected here are used for the analysis having been audited by both internal and external auditors.

The researcher employed descriptive statistics and ordinary least square multiple regression for the analysis.

(i) Descriptive statistics

In this section, central of measurement, standard deviation, skew-ness alongside kurtosis of all the variables were carefully examined.

(ii) Ordinary least square multiple regression test

The above test was employed to capture the short-run estimations of the foretelling regression calculation. The worth of the associated statistical test (t-test) of the test variables is anticipated to be less than 0.05, if the null hypothesis is to be discarded.

Ordinary least square regression

$$CMI = \alpha + \beta_1 LO + \beta_2 DM + \beta_3 SF + \mu$$

$\beta_1, \beta_2, \beta_3,$ = Coefficient of independent variables

μ = error term.

On the apriori, the study expects: $b > 0, b > 0, b > 0$ μ = error term.

DATA PRESENTATION AND ANALYSIS

The data used for the work is presented below:

Table 1. Capital Market Index (CMI), Lending Operations (LO), Deposit Mobilization (DM) and Shareholders' Fund (SF) in billions 2009-2017

YEARS	CMI	LO	DM	SF
2009	20,827.2	8912.14	9560	2201.84
2010	24,770.5	7166.76	10840	312.36
2011	20,730.6	7273.75	12330	1934.93
2012	28,078.8	8150.03	14390	2150.32
2013	41,329.2	10042.73	16770	2418.75
2014	34,657.2	12626.96	18020	2440.2
2015	28,642.3	13328.77	17510	2782.27
2016	26,874.6	16260	18540	2650
2017	38,243.2	15910	19380	1760

Source: NDIC Annual Report and Account 2017

Aprior expectation: A positive significant effect is expected between the maturity transformation variables such as LO, DM and SF and capital market performance variable (CMI).

Table 2 Descriptive Statistics

	CMI	DM	LO	SF
Mean	29350.40	15260.00	11074.57	2072.297
Median	28078.80	16770.00	10042.73	2201.840
Maximum	41329.20	19380.00	16260.00	2782.270
Minimum	20730.60	9560.000	7166.760	312.3600
Std. Dev.	7305.007	3606.612	3566.727	735.6826
Skewness	0.407555	-0.441652	0.341510	-1.611455
Kurtosis	1.921762	1.665796	1.598274	4.801674

Source: Extracts from E-Views 9 Output

“Table 2 indicated that the measure of CMI in Nigeria during the epoch of 9 years (2009 – 2017) has minimum and maximum value N20730.60 billion and N41329.20 billion respectively. The mean value of the CMI throughout the phase is N29350.40 billion with standard deviation of N7305.007 billion inferring that the data digressed after both sides of the mean by N7305.007billion. This suggested that the data for the CMI is widely dispersed during the sample period. The measurement of skewness of 0.407555 suggested that the data is clearly skewed. Similarly, the coefficient of kurtosis 1.921762 also denoted that the Gaussian dispersal theory of normal distribution is not met.

Also table 2 indicates that the measure of deposit mobilization (DM) in Nigeria during the period of 9 years (2009 – 2017) has minimum and maximum value N9560 billion and N19380 billion respectively, while the average value of the DM during the period is N15260 billion with standard deviation of N3606.612 billion implying that the data deviated from both sides of the mean by N3606.612billion, furthermore, this suggested that the data for the DM is widely dispersed during the sample period, but the coefficient of skewness of -0.441652 suggested that the data is negatively skewed. Similarly, the coefficient of kurtosis 1.665796 also implies that the Gaussian distribution assumption of normal distribution is not met”(p;10).

Table 2 further indicated that the measure of lending operation (LO) in Nigeria during the period of 9 years (2009 – 2017) has minimum and maximum value N7166.760 billion and N16260 billion respectively. The average value of the LO during the period is N11074.57 billion with standard deviation of N3566.727 billion indicating that the fact digress from both sides of the mean by N3566.727 billion. This suggests that the data for the LO is widely dispersed during the sample period. The coefficient of skewness of 0.341510 suggests that the fact is confidently tilted. Similarly, the coefficient of kurtosis 1.598274 also entails that assumption on Gaussian of normal distribution is not met.

In conclusion Table 2indicates that the measure of shareholders’ funds (SF) in Nigeria during the period of 9 years (2009 – 2017) has minimum and maximum value N312.360 billion and N2782.270 billion respectively. The mean figure of the SF throughout the period is N2072.297 billion with standard deviation of N735.6826 billion indicating that the data digressed from both sides of the mean by N735.6826 billion. From all indications the data for SF is extensively distributed between the given periods. -1.611455 represents the constant of skewness which denoted that the data was negatively skewed. Similarly, the coefficient of kurtosis4.801674 also signifies that the Gaussian distribution assumption of normal distribution is not met.

Table 3 Ordinary least Square multiple regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5359.117	8535.016	0.627898	0.5576
LO	-1.176070	1.025889	-1.146392	0.3035
DM	2.693110	1.041266	2.586379	0.0491
SF	-1.969360	3.026421	-0.650722	0.5439
R-squared	0.665406	Mean dependent var		29350.40
Adjusted R-squared	0.464649	S.D. dependent var		7305.007
S.E. of regression	5344.902	Akaike info criterion		20.30678
Sum squared resid	1.43E+08	Schwarz criterion		20.39443
Log likelihood	-87.38049	Hannan-Quinn criter.		20.11762
F-statistic	3.314493	Durbin-Watson stat		1.828670
Prob(F-statistic)	0.114963			

Source: Extracts from E-Views 9 Output

The equation is given as

$$CMI = 5359.11683 - 1.17607LO + 2.6931DM - 1.96936SF$$

Table 3 showed that lending operation (LO) has no significant effect on the capital market index in Nigeria under the period of the study. The probability of the t-statistic 0.3035 is more than 0.05 power of test. The coefficient -1.176070 shows that 1% increase in lending operation decreases the capital market index by N1.176070.

Secondly, the analysis also confirmed that deposit mobilization (DM) has positive significant effect on capital market index in Nigeria. The probability of the t-statistic 0.0491 is less than 0.05 power of test. The coefficient 2.693110 shows that 1% increase in deposit mobilization increases the capital market index by N2.693110.

Thirdly, the analysis shows that shareholders' funds (SF) have no significant effect on the capital market index in Nigeria under the period of the study. The probability of the t-statistic 0.5439 is more than 0.05 power of test. The coefficient - 1.9693 shows that 1% increase in shareholders' funds decreases the capital market index by N1.9693. The coefficient of determination (R^2) of 0.464649, which implies that variations in all the explanatory variables account for 46.46% of the variations in profit before tax, while the rest 53.54% of the variations is attributable to other variables not captured in the study. F – Statistic measures the overall significance of the model. The F-statistic is 3.314493 and the probability of F-statistic is 0.114963. This is more than 0.05 power of test. This means that the joint variables have no significant effect on capital market index. Durbin Watson is 1.828670 showing the absence of auto correlation.

Table 4. Granger Causality Test Results

Null Hypothesis:	Obs	F-Statistic	Prob.
LO doesn't Granger Cause CMI	8	0.31086	0.6012
CMI doesn't Granger Cause LO		3.01651	0.1429
“ DM does not Granger Cause CMI”	8	1.08916	0.3445
“CMI does not Granger Cause DM”		0.06169	0.8137
SF does not Granger Cause CMI	8	1.40697	0.2888
CMI does not Granger Cause SF		2.66183	0.1637
DM does not Granger Cause LO	8	12.4081	0.0169
LO does not Granger Cause DM		1.06913	0.3485
SF does not Granger Cause LO	8	0.59497	0.4754
LO does not Granger Cause SF		0.06612	0.8073
SF does not Granger Cause DM	8	0.02432	0.8822
DM does not Granger Cause SF		7.25946	0.0431

Source: Extracts from E-Views 9 Output

From table 4, there is a uni-directional relationship between DM and LO. DM granger cause LO within the period of the study. $DM \longrightarrow LO$

Also there exists a uni-directional relationship between DM and SF. DM granger cause SF within the period of the study. $DM \longrightarrow SF$

LO, DM and SF do not granger causes CMI within the period of the study, neither does CMI granger cause them.

CONCLUSION AND RECOMMENDATIONS

From the findings, it is very apparent that the lending operations and shareholders' fund have no significant effect on capital market index but deposit mobilization has positive and significant effect on capital market index in Nigeria

Therefore, the researcher recommends that banks should lurch into aggressive deposit mobilization to ensure greater performance in Nigeria capital market.

Bank management should carefully select the customers that have character and capacity to avoid non-performing loan. This will help to reduce nonperformance in Nigeria capital market. Banks management should also be innovative in designing new products, ensure customers satisfaction and engage in aggressive marketing to increase their profit. The increase in the profit with the retained earnings of the bank will boost the shareholders funds which will be re-invested to enhance performance in Nigeria capital market.

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