THE GROWTH IMPACT OF CAPITAL FORMATION AND FINANCIAL MARKETS IN NIGERIA

***OGBUJI, A. I., OKE, B. O. & ADEGBITE, E. O.**
Department of Finance, University of Lagos, Akoka, Nigeria
**Corresponding Author: chibuike3014@gmail.com*

Abstract

The study looked at the effect of capital formation and financial markets on growth in Nigeria. Data for the period from 1981 to 2013 were obtained from the Annual Reports of the Central Bank of Nigeria (CBN) and the World Development Indicators (WDI). The Fully Modified Linear Regression Model (FM-LRM) was used in the study to synthesize the money market and gross capital formation, as well as the capital market and gross capital formation, to evaluate their impact on Nigerian growth. The FM-LRM results show that, in the long run, all money market variables that interacted with capital stock had a positive impact on Nigerian growth. The gross capital formation-monetary policy rate interaction (INTM) and the gross capital formation-treasury bills rate interaction (INTM2) had positive impact on economic growth in Nigeria. The study also revealed in the long run that all the capital market variables that were interacted with gross fixed capital formation had negative but significant impact on growth in Nigeria. The gross capital formation-market capitalization interaction (INTCI) and the gross capital formation-new issues interaction (INTC2) had negative but significant impact on economic growth in Nigeria. The study therefore concludes that although the level of capital formation in Nigeria is low, but it has significant impact on economic growth in Nigeria. The study recommends that the government of Nigeria at all levels should save and inject fresh funds into the financial markets for capital formation purposes, thereby creating more job opportunities for the increasing population of the country and reducing her poverty level.

Keywords: Capital formation, Money Market, Capital Market, Economic Growth, FM-OLS.

1.0 Introduction

The benefits of stock markets and capital formation in the growth of the economy cannot be over-emphasized. According to Michael and Stephen (2011), capital formation is an important factor of growth in all developing countries. Goldsmith (1969) suggested that the origin of stock markets and capital formation are usually studied together. Shaw (1973) views financial market as the market where financial assets such as shares, and bonds are traded. Himanshu (2007) defines capital formation as the method of growing

the asset value of fixed capital of a country. Capital is, therefore, 'formed' in the sense of mobilizing funds to procure or produce capital goods for productive investment purposes aimed at spurring economic growth. Empirical evidence from economics literature confirms that the differences in economic growth among countries of the world are because of the differences that exist in the level of their capital formation over time (Kusmadi, 1997). Himanshu (2007) observes that the general theme of capital formation is central to the problem of development in developing countries when compared with developed countries and are less equipped with capital in relation to their population and resources. Lucas (1988) posits that the level of capital formation in a country is used in determining the magnitude of her productive capacity and rate of economic growth.

After independence in 1960, Nigeria was predominantly into agriculture business and increased the level of the gross domestic product relative to the available level of capital formation of Nigeria (Okereke-Onyiuke, 2000). The level of capital formation then was adequate to manageably contain the population size of Nigeria. However, from the early '80s the size of Nigeria's teeming population increased geometrically while capital formation level increased arithmetically. In 1981 GDP was ₦94.33b with a capital formation of ₦18.2b while the population size of the country then was 75.72m. GDP later rose from ₦101.01b to ₦110.06b between 1982 and 1983. Conversely, capital formation fell from ₦17.15b in 1982 to ₦13.34b in 1983 while the population size rose from 77.72m in 1982 to 79.72m in 1983 (WDI, 2014). Soludo (2010) posits that the economy of Nigeria should at least be growing at the rate of 15% per annum for the country to attain rapid economic growth and that growth is only possible, where there is constant increase in capital formation arising from huge public and private investment in capital goods. The key obstacle to economic development is the relatively low level of new capital formation in most poor countries of the world. Kalu and Ozurumber (2014) submit that countries which can save 15% to 20% of their GDP can grow at a much faster rate than those that save less. High saving-oriented countries will therefore have self-sustaining growth.

The available statistics reveal that the level of capital formation astronomically increased from ₦231.6b to ₦331.05b in 2001 (CBN, 2014).However, following the recapitalization of banks in year 2004, the level of capital formation almost doubled. This marked the era when more capital was injected into the Nigerian banking sector to boost financial markets activities and enable the real sector have greater access to capital. This is evidenced by the rise in domestic capital formation of the country from ₦499.6b in year 2003 to ₦865.8b in year 2004. Table 1.1 gives a summary of the country's ratio of GCF to GDP from 2003 to 2013.

Table 1.1: Gross Capital Formation to GDP Ratio of Nigeria (2003-2013)

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
GCF/ GDP Ratio	8.73	7.56	5.50	8.33	9.37	8.44	12.30	17.38	16.06	14.91	14.61

Source: Author's Computation (2015)

The increase in domestic capital formation during these periods is hugely due to the rise in savings from ₦8.4b in 2003 and thereafter to ₦11.4b in 2004, respectively. The ratio of gross capital formation to GDP declined between 2007 and 2008 from 9.37 to 8.44 and between 2010 and 2011 from 17.38 to 16.06 and further dropped in 2013 to 14.91 (CBN, 2014). The implication of the above statistics in Nigeria is that, if the Nigerian economy is more investment friendly. From the foregoing, there is need to undertake a study such as this to investigate the impact of capital formation and financial markets on growth in Nigeria.

2.0 REVIEW OF LITERATURE

LINKAGE BETWEEN FINANCIAL MARKETS AND CAPITAL FORMATION

Ngerebo (2006) posits that the financial market acts as the catalyst of capital formation. This suggests that it is difficult for real capital formation to take place without the activities of financial markets which helps to mobilize savings from savers to spenders for investment purposes. The findings of the empirical studies of Demestriades and Hussein (1996), Osaze (2007) and Ajao (2011) revealed that capital market activities stimulate growth in the economy.

Ngerebo et al. (2014) employed the hypothetico-deductive research method to capture the relative effects of stock prices and fluctuation on total investment accumulation, market cap, quantity and value of transaction, primary market securities and All Share Index. The research revealed of that a long run equilibrium relationship exists between total fixed investment accumulation and stock market performance indicators in Nigeria. The result of the study also revealed that the total fixed investment accumulation in Nigeria grows with the increase in capital market performance. The study also showed that there is a unidirectional causality between capital market activities and capital formation in Nigeria, which flows from gross capital formation to market capitalization.

However, the findings of other empirical studies Ibadin, *et al*. 2014 revealed that capital market activities in Nigeria tend to stimulate growth in the level of capital formation in the economy, thereby boosting the value of listed securities. Osaze (2007) maintains that primary market issues of shares

contribute to the share capital in the economy as well as capital formation. Ngerebo et al. (2014) maintained that capital formation is positively impacted by the activities of the capital market when the ratio of primary market issues to net investment in fixed assets, quantity and value of all market transactions are on the increase. Ngerebo et al. (2014) also asserted that such increase will drive both direct and foreign portfolio investment in fixed tangible asset and this will in turn lead to high capital formation and output growth in the country.

2.2 LINKAGE BETWEEN FINANCIAL MARKETS AND ECONOMIC GROWTH

Since the early nineties, acknowledgement of the financial market's beneficial effect on the economy has occurred. Research has established that well-developed stock markets are valuable and contribute to the overall economy's growth. Essentially, the argument for this concept is that efficient capital allocation within an economy promotes economic growth. Pagano (1993) posits that stock markets can impact economic growth by controlling the rate of savings, the portions of savings targeted toward investment, and the efficiency of investment. By and large, financial market development benefits economic growth. Michael and Stephen (2011) identified three components of economic growth, namely:(i) capital formation (ii) population growth (iii) technological progress.

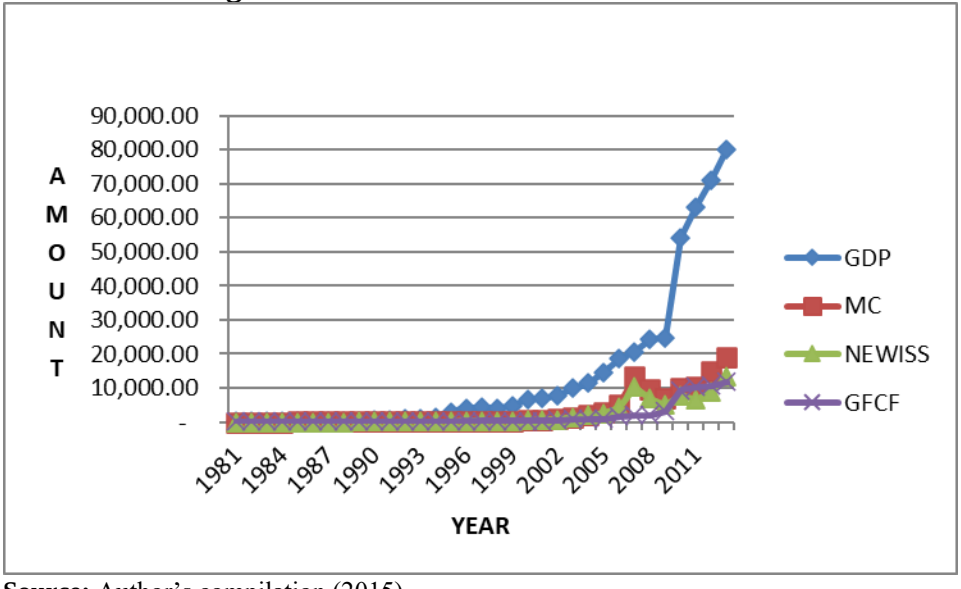
The first empirical study on the relationship with both financial markets development and economic growth was first documented by Goldsmith (1969), McKinnon (1973) and Shaw (1973). The findings of the studies of McKinnon (1973) and Shaw (1973) revealed that a positive correlation exists between financial markets development and economic growth. However, the study had two major interpretative problems. First, does the causal link between financial markets and economic growth run from financial markets development to economic growth, or run from economic growth to financial markets development or even both ways? Second, does financial markets development enhance growth by improving the efficiency of investment? Although the two problems were unresolved, the finding of Kings and Levine (1993a) in a cross-country study shows that the indicators of financial markets development correlate with economic growth.

Adegbite and Oke (2008) empirically evaluated the link between stock market development and economic growth in Nigeria empirically using time series data from 1981 to 2005. The result of the study showed that a short-term dynamic exists between financial market development and economic growth in Nigeria during the period covered by the study. The study also revealed that financial market development has negative but significant impact on economic growth in Nigeria. The findings of the study are since not all currency in circulation is routed through the financial system and the effect of

the bank distress of the early 1990s. The study of Adegbite and Oke (2008) further found that the indicator of stock market liquidity used has negative but significant impact on economic growth in Nigeria. The study attributed the finding to the imperfections in the Nigeria capital market or substitutability between bank and the capital market in Nigeria. However, the study found that financial intermediaries truly perform their intermediation role of channeling funds to the private sector to spur economic growth.

Okunlola (2012) used a multi-linear approach to conduct a regression analysis of the economic output against annual stock markets performance variables using time series data from the Nigerian Stock Exchange. The study found that there is a positive and significant relationship between market capitalization and economic growth. is a catalyst for long-run economic growth in developing countries. However, the study of Shan, Moris and Sun (2001) shows that economic growth precedes financial market development. The study of Woon and David (2005) study established that Japan's stock market liquidity and economic determinants are congruent with the money supply. The research also found that liquid stock in the stock market has an impact on macroeconomic variables and is comparable to money stocks. Furthermore, the study discovered that stock market liquidity in Japan is influenced by output and capital formation rather than money market variables (call rates), and that macroeconomic activities have a significant impact on stock market liquidity. The relationship between market capitalization, new issues, gross capital formation, and gross domestic product in Nigeria was graphically represented in Figure 2.1.

Figure 2.1: Financial Markets, Capital Formation and Economic Growth in Nigeria



Source: Author's compilation (2015)

In figure 2.1, gross domestic product (GDP), market capitalization (MC), new issues (NEWISS) and gross fixed capital formation (GFCF) had the same growth pattern in Nigeria between1981 to 1994. Nevertheless, the amount of gross domestic product was higher than the amount of market capitalization (MC), new issues (NEWISS) and gross fixed capital formation (GFCF) in Nigeria between 1995 and 2013.Furthermore, market capitalization (MC), new issues (NEWISS) and gross fixed capital formation (GFCF) experienced the same growth pattern between 1981 and 2006. However, the level of market capitalization was higher than the level of new issues (NEWISS) and gross fixed capital formation (GFCF) in Nigeria from 2007 to 2013.

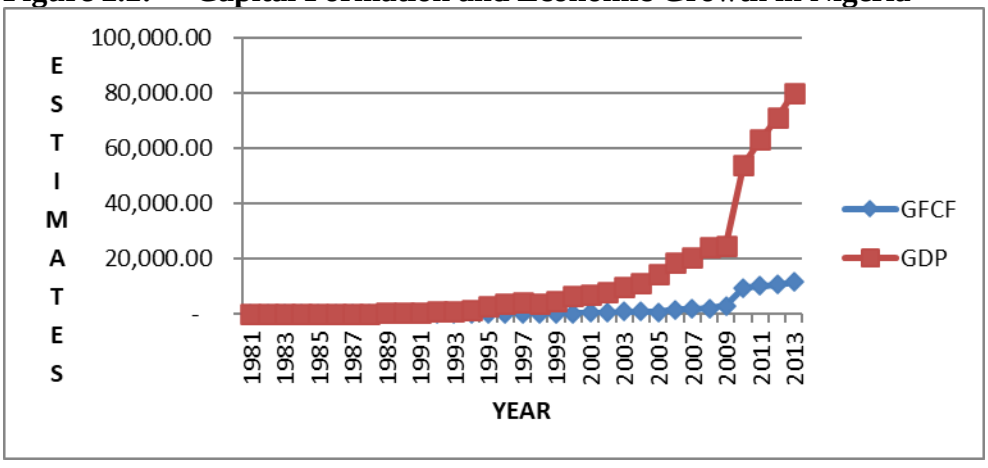
2.3: LINKAGE BETWEEN CAPITAL FORMATION AND ECONOMIC GROWTH

Capital accumulation defines a country's ability to produce, which has a positive effect on the rate of economic growth. Adhikary (2011)argues that increased employment results in increased savings, which in turn inspires confidence to make larger investments, and this chain effect ultimately benefits economic growth. Blomstorm and Kokko's (1996) empirical study established a one-way causal relation between capital expenditure investment and economic growth, concluding that changes in the level of capital accumulation have no discernible effect on the rate of economic growth in the sampled 33 upper-middle income countries. According to Kendrick (1994), capital accumulation by itself does not result in economic growth; rather, the efficiency with which capital is allocated from less effective to more productive sectors of the economy have an effect on economic growth.

Bakare (2011) used the Ordinary regression method to examine the connection between investment and economic growth in Nigeria from 1979 to 2009. The result of the study showed that there is a significant relationship between capital formation and economic growth in Nigeria and that the growth rate of national income is positively related to the ratio of savings and capital. Ugwuegbe and Uruakpa (2013) conducted an empirical examination of the relationship and causal direction between financial development and economic growth in Nigeria from 1982 to 2011. Additionally, the study discovered that financial market development has a positive effect on Nigeria's economic growth.

Erma and Pahlavani (2007) used Langrange Multiplier and Granger Causality techniques to determine the interdependence of capital formation, savings rate, and economic growth in Iran from 1960 to 2000. The study's findings indicate that savings has a short run equilibrating impact on the economic growth, whereas investment generates economic growth dynamically with a short run elasticity of 0.17.

Figure 2.2: Capital Formation and Economic Growth in Nigeria



Source: Author's Compilation (2015)

In figure 2.2, the amount of GDP and GFCF had the same growth pattern in Nigeria between 1981 and 1994. However, between 1995 and 2013, the amount of gross domestic product (GDP) grew more than the amount of gross fixed capital formation (GFCF) in Nigeria.

2.3 THE HARROD-DOMAR MODEL OF ECONOMIC GROWTH

The Harrod-Domar model, which was developed in 1946, argues that increasing financial reserves is essential for growth. This means that for an economy to grow, it must set aside a portion of its national income in order to boost output and replacing damaged capital goods. The H-D growth model numerically demonstrates that economic growth is directly related to earning and inversely linked to capital output ratio.

$$\frac{\Delta Y}{Y} = \frac{s}{k} \quad \text{.....3.1}$$

The left-hand side ($\Delta Y/Y$) represents the rate of growth in gross domestic product (GDP). Equation 3.1 is a simplified version of the famous H-D model in the theory of economic growth. This implies that the rate of growth in GDPis determined jointly by the savings ratio (s) and capital-output ratio (k). More specifically, it holds that the growth rate of the economy is directly related to savings ratio. This means that the more an economy is able to save and invest out of a given GDP, the greater her growth rate. The economic implication of equation 3.1is that for the economy to grow, economic agents must save and invest a certain proportion of their savings into the real sector.

3.0 Research Methods

The Fully Modified Ordinary Least Square Method (FM-OLS) was used to assess the impact of the money market and total capital formation interaction on economic growth in Nigeria, as well as the impact of the capital market and gross capital formation interaction. The FM-OLS technique is used because it outperforms the traditional Ordinary Least Square (OLS) technique

$$LnGy_{t_1} = \gamma_0 + \gamma_1 LnTBR_t + \gamma_2 LnMPR_t + \gamma_3 LnMC_t + \gamma_4 LnNEWISS_t + \gamma_5 LnCPS_t + \gamma_6 LnSR_t + \gamma_7 LnCOR_t + \gamma_8 LnGFCF_t + \gamma_9 LnINFR_t + \gamma_{10}(LnGFCF_t * LnTBR_t) + \gamma_{11}(LnGFCF_t * LnMC_t) + \varepsilon_t \quad 3.2$$

$$LnGy_{t_2} = \delta_0 + \delta_1 LnTBR_t + \delta_2 LnMPR_t + \delta_3 LnMC_t + \delta_4 LnNEWISS_t + \delta_5 LnCPS_t + \delta_6 LnSR_t + \delta_7 LnCOR_t + \delta_8 LnGFCF_t + \delta_9 LnINFR_t + \delta_{10}(LnGFCF * LnMPR_t) + \delta_{11}(LnGFCF * LnNEWISS_t) + \varepsilon_t \quad 3.3$$

$LnGy_{t_1}$ represents natural log of treasury bills rate and gross capital formation interaction as well.

as the natural log of market capitalization and gross capital formation interaction

$LnGy_{t_2}$ represents natural log of monetary policy rate and gross capital formation interaction.

as well as the natural log of new issues and gross capital formation interaction

The difference between equation 3.2 and equation 3.3 is that, equation 3.2 captures the interaction between treasury bills rate and gross capital formation as well as the interaction between market capitalization and gross capital formation while equation 3.3 captures the interaction between monetary policy rate and gross capital formation as well as the interaction between new issues and gross capital formation. Also, $\gamma_0 and \delta_0$ represent constant terms while $\gamma_1, \gamma_2, ,,,,,, \gamma_{11}$ and $\delta_1, \delta_2, ,,,,,, \delta_{11}$ are the various coefficients. More so, ε_t denotes the error termwhile t denotes time period. All variables are as defined.

Test of Fully Modified Ordinary Least Square Method (FM-OLS)

The Fully Modified Ordinary Least Square (FM-OLS) Method was used to test hypothesis three. The FM-OLS was chosen because it helps to resolve the problem of endogeneity and makes the results obtained unbiased and robust than the convetional ordinary least square (OLS) method, as the estimates obtained using the OLS are likely to be dependent on the stochastic disturbance term caused by dynamism in the model. The study interacted gross fixed capital formation with two variables from the money market (treasury bills rate and monetary policy rate) and tested the significance of the coefficients of the interacted variables. LR and SMT were not interacted with GFCF because they are both measures of financial markets liquidity.

4.0. Presentation and interpretation of results

Table 4.1: Empirical Result Showing the Impact of New Issues and Treasury Bills Rate Economic Growth through Gross Fixed Capital Formation Channel

Dependent Variable: LOGGDP			
Variable	**Coefficient**	**Std. Error**	**Prob.**
INTC2	-0.013466	0.003646	0.0012
INTM2	0.009240	0.010978	0.4086
LOGGFCF	1.218468	0.075594	0.0000
MPR	0.004703	0.009386	0.6211
TBR	-0.020423	0.010027	0.0533
LOGMC	0.004028	0.080989	0.9608
LOGNEWISS	-0.051939	0.085336	0.5487
COR	11.02018	1.069167	0.0000
C	3.067438	0.145450	0.0000
R-squared	0.999205		
Adjusted R-squared	0.998929		
S.E. of regression	0.070091		
Durbin-Watson stat	1.800683		

Source: *Author's Compilation (2015)*

Table 4.2: Empirical Result Showing the Impact of Market Capitalization and Monetary Policy Rate on Economic Growth through Gross Fixed Capital Formation Channel

Dependent Variable: LOGGDP			
Variable	**Coefficient**	**Std. Error**	**Prob.**
INTC1	-0.013460	0.003613	0.0011
INTM2	0.004264	0.013909	0.7619
LOGGFCF	1.254500	0.078179	0.0000
MPR	-0.000460	0.010944	0.9668
TBR	-0.013862	0.008319	0.1092
LOGMC	0.067130	0.093817	0.4815
LOGNEWISS	-0.127341	0.092945	0.1839
COR	-11.39110	1.059262	0.0000
C	3.016887	0.163901	0.0000
R-squared	0.999190		
Adjusted R-squared	0.998908		
S.E. of regression	0.070751		
Durbin-Watson stat	1.618856		

Source: Author's Compilation (2015)

The FM-OLS method used revealed that both gross capital formation and treasury bills rate interaction (INTM2) in table 4.1and gross capital formation and monetary policy rate interaction (INTM) in table 4.2 have positive impact on economic growth in Nigeria. This implies that money market instruments such as TBR and MPR have positive influence on capital formation in the country and consequently enhance economic growth. This might be because money market instruments have short term maturities, and their returns are tax exempt unlike capital market instruments. This makes the aged and quick returns-motivated young investors to prefer investments in money market instruments to investments in capital market instruments. Also, short term funds in the money market provide working capital for firms. However, firms that have invested hugely in capital formation (fixed assets) but lack adequate working capital for daily operation of their businesses would be grounded in the long run and might lose future profitable investment opportunities.

Furthermore, the result of the FM-OLS found that both gross capital formation and market capitalization interaction (INTC1) in table 4.2and gross capital formation and new issues interaction (INTC2) in table 4.1 have negative but significant impact on economic growth in Nigeria. The negative impact of the capital market and gross capital formation interaction on economic growth in Nigeria might be due to insiders' fraudulent dealings and share price manipulations of the directors of many quoted companies in Nigeria, who do not allow the market system to determine the prices of securities in the capital market.

Table 4.3: UNIT ROOT TEST

Variables		ADF Test Statistic	ADF Critical Value		Remark	Order of Integration
			1%	5%		
LogCor	Level	-1.7536	-4.2967	-3.5684	Reject H_1	
	1st Diff	-6.2992	-4.2967	-3.5684	Accept H_1	I(1)
Logcps	Level	-3.5465	-4.2846	-3.5629	Reject H_1	
	1st Diff	-4.2399	-4.2846	-3.5629	Accept H_1	I(1)
LogSr	Level	-2.8300	-4.2733	-3.5578	Reject H_1	
	1st Diff	-5.2069	-4.2846	-3.5629	Accept H_1	I(1)
LogTbr	Level	-2.8505	-4.2734	-3.5578	Reject H_1	
	1st Diff	-6.7853	-4.2846	-3.5629	Accept H_1	I(1)
Loginfr	Level	-3.9726	-4.2846	-3.5629	Reject H_1	
	1st Diff	-6.0579	-4.2967	-3.5684	Accept H_1	I(1)
Loggfcf	Level	-3.3756	-4.2733	-3.5576	Reject H_1	
	1st Diff	-4.6874	-4.2967	-3.5684	Accept H_1	I(1)
Loggdp	Level	-2.1970	-4.2734	-3.5578	Reject H_1	
	1st Diff	-5.1979	-4.2846	-3.5629	Accept H_1	I(1)
Logmc	Level	-2.9725	-4.2846	-3.5629	Reject H_1	
	1st Diff	-4.3906	-4.2846	-3.5629	Accept H_1	I(1)

LogMpr	Level	-2.8093	-4.2734	-3.5578	Reject H_1	
	1st Diff	-6.5096	-4.2846	-3.5629	Accept H_1	I(1)
Lognewiss	Level	-2.3584	-4.2734	-3.5578	Reject H_1	
	1st Diff	-6.5037	-4.2846	-3.5629	Accept H_1	I(1)
logIntc1	Level	-1.7607	-4.2967	-3.5683	Reject H_1	
	1st Diff	-7.0168	-4.2967	-3.5684	Accept H_1	I(1)
logIntc2	Level	-2.0007	-4.2967	-3.5684	Reject H_1	
	1st Diff	-7.3054	-4.2967	-3.5684	Accept H_1	I(1)
LogIntm	Level	-2.4184	-4.2733	-3.5578	Reject H_1	
	1st Diff	-5.6371	-4.2846	-3.5629	Accept H_1	I(1)
logIntm1	Level	-2.8032	-4.2733	-3.5578	Reject H_1	I(1)
	1st Diff	-6.0555	-4.2846	-3.5629	Accept H_1	I(1)
Logsmt	Level	-5.1510	-4.2732	-3.5577	Accept H_1	I(1)
	1st Diff	-6.8475	-4.2967	-3.5683	Accept H_1	I(1)
Loglr	Level	-3.0382	-4.2732	-3.5577	Reject H_1	I(1)
	1st Diff	-5.7000	-4.2845	-3.5628	Accept H_1	I(1)
Logmlr	Level	-2.7200	-4.2732	-3.5577	Reject H_1	I(1)
	1st Diff	-5.8439	-4.2967	-3.2183	Accept H_1	I(1)

Source: *Author's Compilation (2015)*

Decision Criterion: If the ADF test statistics (absolute term) is greater than the ADF critical value, accept the null hypothesis.

Table 4.4: Johansen Co-integration Test for interaction of TBR and MC with GFCF

Hypothesized no of CE(s)	Trace Statistic	5% Critical Value	Max-Eigen Statistic	5% Critical Value
None **	431.9058	197.3709	125.4037	58.4335
At most 1 **	306.5021	159.5297	113.4641	52.3626
At most 2 **	193.0380	125.6154	55.2261	46.2314
At most 3 **	137.8119	95.7537	43.4028	40.0776
At most 4 **	94.409	69.8189	40.0655	33.8766
At most 5 **	54.3436	47.8561	22.4924	27.5843
At most 6 **	31.8513	29.7971	17.4682	21.1316
At most 7	14.3830	15.4947	13.7507	14.2646
At most 8	0.6323	3.8414	0.6324	3.8415

Source: *Authors Compilation (2015)*

The outcome of the co-integration test for the interaction of treasury bills rate and market capitalization with gross capital formation is shown in table 4.4. The trace statistic indicates 7 co-integrating equations while that of the max-eigen statistic indicates 5 co-integrating equations. Thus, the null hypothesis of no co-integration is also ruled out. This indicates that the interacted variables in the study have a long-term relationship. As a result, the study concludes that the interacted variables have a long-term relationship with GDP.

Table 4.5: Johansen Co-integration Test for interaction of MPR and NEWISS with GFCF

Hypothesized no of CE(s)	Trace Statistic	5% Critical Value	Max-Eigen Statistic	5% Critical Value
None **	441.3969	197.3709	144.1309	58.4335
At most 1 **	297.2661	159.5297	99.3321	52.3626
At most 2 **	197.9335	125.6154	67.0674	46.2314
At most 3 **	130.8660	95.7537	43.3984	40.0776
At most 4 **	87.4676	69.8189	28.6431	33.8769
At most 5 **	58.8246	47.8561	25.4716	27.5843
At most 6 **	33.3529	29.7971	22.2403	21.1316
At most 7	11.1127	15.4947	10.6116	14.2646
At most 8	0.50114	3.8415	0.5011	3.8415

Source: *Authors Compilation (2015)*

Table 4.5 shows the outcome of the co-integration test for the interaction of the monetary policy rate and new problems with gross fixed capital formation. The trace statistics show that there are 7 co-integrating equations, while the max-eigen statistics show that there are only 4 co-integrating equations. No co-integration is rejected as a null hypothesis. This indicates that the interacted variables in the study have a long-term relationship. As a result, the study concludes that the interacted variables have a long-term relationship with GDP.

5.0 Summary of Findings, Conclusion and Recommendation

Money market instruments such as treasury bills rate and monetary policy rate have positive influence on capital formation in Nigeria and consequently stimulate economic growth. It therefore follows that the government needs to concert efforts in making the Nigerian money market more efficient, if Nigeria is to build a capital base that would strengthen the growth of her economy. Delisting Nigerian government bonds from the Government Bonds Index for Emerging Markets (GBI-EM) of JP Morgan and Chase might extend to corporate bonds, if the Federal Government of Nigeria does not take immediate remedial measures to increase liquidity in the financial markets and the real sector by injecting more liquidity into the Nigerian financial markets.

More so, the study discovered that gross capital formation and capital market interaction have a negative impact on Nigerian economic growth. The negative impact of the capital market and gross capital formation interaction on economic growth in Nigeria might be due to insiders' fraudulent dealings and share price manipulations of the directors of many quoted companies in Nigeria, who do not allow the market system to determine the prices of securities in the capital market. The implications of the negative impact of capital market and gross capital formation interaction on economic growth in Nigeria are that (i) the confidence of both local and foreign investors on the

Nigerian capital market will be weakened or totally lost (ii) the Nigerian capital market might not be market-driven or well regulated (iii) the Nigerian capital market is not efficient, perhaps in the strong form (iv) there are distortions in the Nigerian capital market that need to be detected and corrected or completely eliminated (v) the Nigerian capital market might crash in the future, if immediate measures are not taken now to check and strengthen its weaknesses (vii) investors and firms might rely less on the Nigerian capital market to raise long term funds for investment and capital formation purposes.

Furthermore, the study found that there is a bi-directional connection between the short security term market and economic growth in Nigeria and there is a unidirectional association between the capital market and economic growth in Nigeria which runs from economic growth to the long-term security market. This indicates that the development of the money market can cause economy expansion in Nigeria. In the same vein, economic growth in turn can engender money market development. It further suggests that economic growth can lead to capital market development in Nigeria whereas development in the capital market does not bring about economic growth in Nigeria. Based on the foregoing results, the study concludes that, while Nigeria's capital creation is tiny, it has a major effect on the country's economic development. The study recommends that the government of Nigeria at all levels should save and inject fresh funds into the financial markets for capital formation purposes, thereby creating more job opportunities for the increasing population of the country and reducing her poverty level.

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