CAPITAL MARKET OPERATIONS AND THE NIGERIAN ECONOMY

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Abstract

The objective of this study is to investigate the relationship between capital market operations and the Nigerian economy over the period 1981 to 2016,using theStructural Vector Autoregressive Econometric Technique. The results of this study show that the relationship between capital market development and economic growth was found to be positive. Empirically the impulse response result of this study shows that the response of real domestic product to market capitalization was positive and significant. On the second-row shock on market capitalization shows a negative response to real gross domestic product and later positive and did not die out in the long run. The response of all share price index to real gross domestic product and which is depicted in the third row shows that all share price index responds positively to real gross domestic product shocks. Total volume of transaction response to real gross domestic product, was negative over the first through the third forecasting period and became positive from the fourth period and did not die out in the long-run. The variance decomposition result shows that as market capitalization, all share price index and total volume of transaction increase, more shocks occur on real gross domestic product; thus, capital market impacts on economic growth to a large extent. This study therefore concludes that the capital market impact on economic growth via market capitalization, all share index, value of transaction and total listing of equity and government stock. As it was observed, market capitalization, government stock and value of transaction are important capital market variables that can influence economic growth. This study therefore recommends that the Nigerian government should strictly implement policy directed at officially ending laws that hamper its effective functioning of the Nigeria capital market. Also, there is the need for effective and favourable macroeconomic environment to facilitate the stock market to influence remarkable growth of the Nigerian economy.

Keywords: Capital Market Capitalization, Total Volume of Transaction, All Share Price Index, Capital Accumulation

Introduction

The Nigerian capital market plays an indispensable role in Nigeria's economy by providing funds for the investors without inconveniencing the companies. Today, the activities and performance of the capital market in Nigeria have much wider implication and this arises partly because of the growing influence of ideas and structure associated with the concept of democracy.

The capital market is a network of specialized financial institutions, series of mechanisms, processes and infrastructure that, in various ways, facilitate the bringing together of suppliers and users of medium to long-term capital for investment in socio-economic developmental projects. The capital market is viewed as a complex institution imbued with inherent mechanism through which long-term funds of the major sectors of the economy comprising households, firms, and government are mobilized, harnessed and made available to various sectors of the economy. For sustainable economic growth, funds must be effectively mobilized and allocated to enable businesses and the economies harness their human, material, and management resources for

optimal output. Hence, the capital market is an economic institution, which promotes efficiency in capital formation and allocation (Ndako, 2010; Al-Faki, 2006).

The capital market is subdivided into the primary and secondary market. The primary market or the new issues market provides the avenue through which government and corporate bodies raise fresh funds through the issuance of securities which is subscribed to by the public or a selected group of investors. The secondary market provides an avenue for sale and purchase of existing securities. Sule and Momoh (2009) found that the secondary market activities have impacted more on Nigeria per capital income by tending to grow stock market earnings through wealth than the primary market.

The Nigerian economy has over the years been subjected to series of social, political and economic policies and reforms. In the pre – 1970 era, the economy was basically agrarian and food security was largely achieved with the various regional governments then. The need to encourage private capital in development was realized long enough, with the establishment of the Nigerian Stock Exchange (NSE). NSE started in 1961 as a result of the recommendation of Barback committee announcement in 1958 to consider the ways and means of fostering the development of a Nigeria capital market. The Lagos exchange was registered on March 1st, 1958, incorporated on 5th June, 1981. It was transformed to Industrial Enterprises Panel in 1976 and supported by the view of the committee on the Nigerian financial system.

The capital market institution is critical to the economic growth of any nation. Aremu et al., (2011) and Donwa and Odia (2011) argued that the capital market has been identified as an institution which contributes to the socio-economic growth and development of emerging and developed economies. This is made possible by the intermediary role played by the capital market in mobilizing funds from surplus units to deficits units to be invested into projects with positive net present value (NPV) which may enhance economic growth of the nation. Economic development is regarded as the major goal of national policy in any economy, while capital accumulation or formation is also seen as a potent factor in the process of economic development.

It is regarded as the core process by which all other aspects of growth is made possible and feasible. However, the rate of economic development is always limited by shortage of productive factor and if any scarce factor associated with development should be singled out (Oke and Adeusi 2012).The Nigerian capital market could be assessed as having performed fairly well despite the numerous challenges and problems some of which include the buy and hold attitude of Nigerians, massive ignorance of a large population of the Nigerian public, the nature and benefits of the capital market, few investment outlets in the market, lack of capital market friendly economic policies and political instability, private sector led economy and less than full operation of recent developments like the Automated Trading System (ATS), Central Securities Clearing System (CSC), On-line and Remote Trading, Trade Alerts and Capital Trade Points of the Nigerian Stock Exchange.

Literature Review

Based on the performance of capital market in accelerating economic growth, government of most nations tends to have keen interest in its performance. The concern is for sustained confidence in the market and for a strong investor's protection arrangement. Economic growth is generally agreed to indicate development economy, because it transforms a country from a five percent saver to a fifteen percent saver. Thus, it is argued that for capital market to contribute or impact on the economic growth in Nigeria, it must operate efficiently. Most often, where the market operates efficiently, confidence will be generated in the minds of the public and investors will be willing to part with hard earned funds and invest them in securities with the hope that in future they will recoup their investment (Ewah et al, 2009).

Rouseau and Wachtel (2000) advanced four reasons for the importance of capital market on financial institutions even when equity issuance is a relatively minor source of funds. First, an equity market provides investors and entrepreneurs with a potential exit mechanism. According to them, venture capital investments will be more attractive in countries where an equity market exists than one without an adequately functioning public equity market. Secondly, capital inflows and Portfolio flows tend to be larger to countries with organized and liquid markets. Thus, the existence of equity markets facilitates capital inflow and the ability to finance current account deficits. Thirdly, the provision of liquidity through organized exchanges encourages both international and domestic investors to transfer their surpluses from short term assets to the long-term capital market, where the funds can provide access to permanent capital for firms to finance large, indivisible projects that enjoy substantive scale economies. Thus, given this scenario, the importance of domestic resource mobilization cannot be underestimated. Finally, the existence of a stock market provides important information that improves the efficiency of financial intermediation generally.

Irving (2004), considered the links between capital market and overall socio-economic development to be tenuous, nonexistent or even harmful. He advised African countries not to devote further scarce resources and efforts to promoting stock exchange, since there are many weightier problems to address in Africa: high poverty levels, inadequate social services and undeveloped infrastructure. Even if the resources were available, stock markets could expose already fragile developing economies to the stabilizing effects of short-term, speculative capital inflows. Demirguc-Kunt and Asli (1996) examined the relationship between capital market earning and economic growth, they found out that there is a positive relationship but not a very strong one.

Osei (2005) and Nzue (2006) also attempted to investigate the relationship between the development of the Ivorian capital market and the country's economic performance. Their empirical results suggested that gross domestic product and stock market development were cointegrated when the control variables were included in the analysis. That is, there is a long-run relationship between these variables taken together. The result also indicated a unidirectional causality running from capital market development to economic growth. From the afore

discourse it would be recalled that various researchers have posited that bi-directional causation is evident in developed economies while unidirectional causation exist in developing economies. It therefore becomes necessary to examine the directional effect of causation between capital market and economic development.

Yadirichukwu, &Chigbu, (2014) examined the impact of capital market on economic growth in Nigeria. The study adopted a time-series research design relying extensively on secondary data covering 1985 -2012. The study utilizes regression analysis as data analysis method incorporating multivariate co-integration and error correction to examine characteristics of time series data, adopting disaggregate capital market indices approach. Observation across studies on this subject is the heterogeneity in empirical findings over what may be termed a considerably uniform theoretical framework at least with regards to causality. Their finding suggests that two exhibits positive while two exhibit inverse and statistically significant relationship with economic growth. This could stimulate dialogue on the implication for policy simulation. They recommended that relevant regulatory agencies should focus on enhancing efficiency and transparency of market to improve investor's confidence. Therefore, the need for effective and favourable macroeconomic environment to facilitate economic growth and ensure that channels of capital market induced growth are built around effective systems; and that policy institution are active in making systemic checks and appropriate policy innovations to ensure capital market led economic growth.

Theoretical Framework

The Bernoulli Hypothesis

Daniel Bernoulli was very much concerned about finding solution as to why the Russians of his time were very much averse to risk and are not willing to make bets at a better than 50-50 odds knowing that the expected monetary value (EMV) of such bets are infinite, a situation known as the St. Petersburg paradox. In resolving this paradox, he came to the conclusion that though the monetary gain or loss is equal, the loss in utility is greater than the gain in utility. Thus, in Bernoulli's view, rational decisions in the case of risky choices would be made on the basis of expectations of total utility rather than the mathematical expectations of monetary value. Therefore, the primary reason influencing peoples' choices in cases of uncertainty (risks) is the fact that marginal utility than a gain in utility of money diminishes as income rises. There is a greater loss in utility than a gain in utility in an equal amount of money lost or gained. This suggestss why majority of Nigerian are seldom interested in the activities of the stock market and makes it even more difficult restoring confidence in the market.

Rational Expectations Theory

Rational expectations theory states that the players in an economy will act in a way that conforms to what can logically be expected in the future. That is a person will invest, spend, etc. according to what he or she rationally believes will happen in the future. Although this theory has become quite important to economics, its utility is doubtful. For example, an investor thinks a stock is going to go up, and by buying it, this act actually causes the stock to go up. This same

transaction can be framed outside of rational expectations theory. An investor noticess that a stock is undervalued, buys it, and watches as other investors notice the same thing, thus pushing the price up to its proper market value. This is the problem with Nigerian stock market trying to restore market confidence since after the global financial crunch. The general expectation of Nigerian investors is pessimistic and hence the market is dragging irrespective of the innovations introduced by the regulatory agency and the Nigerian stock exchange.

Loss-Aversion Theory

Loss-Aversion theory states that people's perceptions of gain and loss are skewed. That is, people are more afraid of a loss than they are encouraged by a again. If people are given a choice of two different prospects, they will pick the one that they think has less chance of ending in a loss, rather than the one that offers the most gains. For example, if you offera person two investments, one that has returned 5% each year and one that has returned 12%, lost 2.5%, and returned 6% in the same years. The person will pick the 5% investment because he puts an irrational amount of importance in the single loss, while ignoring the gains that are of greater magnitude. In the above example, both the alternatives produce the net total return after three years,

Loss-Aversion theory for financial professionals and investors, although the risk/reward trade-off gives a clear picture of the risk amount an investor must take on to achieve the desired returns. Prospect theory tells us that very few people understand emotionally what they realize intellectually. For financial professionals, the challenge is in suiting a portfolio to the client's risk profile, rather than rewards desires. For the investor, the challenge is to overcome the disappointing predictions of the prospect theory and become brave enough to get the returns you want.

Harrod-Domar Model

Harrod-Domar Growth Model suggests that growth depends on the quantity of labour capital and that more investment leads to capital accumulation, which generates economic growth in economically less developed countries. Labor is in plentiful supply in these countries, but physical capital is not, thereby showing the economic growth process. This theory is an early Keynesian economic growth. It is used in explaining an economy's growth rate in terms of the level of saving and productivity of capital. The theory also suggests that there is no natural reason for an economy to have a balanced growth. The theory was developed independently by Harrod (1939) and Domar (1946). The theory was the precursor to the exogenous growth theory.

Kenneth Arrow Growth Theory

Kenneth (1962) opines that endogenous growth theory is about investment in human capital, size of capital stock, innovation and knowledge. The theory focuses on positive externalities and spillover effect of a knowledge-based economy which will lead to economic development. Endogenous growth has an impact on the long-term growth rate of an economy. It further improved on the work of other scholars like Harrod-Domar (1946), Solow-Swan (1956) by looking at the investment in technology and knowledge as the major factors of economic growth.

Solow-Swan Growth Theory

The neoclassical growth theory also known as the Solow-Swan growth theory or exogenous growth theory is a class of economic model of long-run economic growth. The growth theory explains long-run economic growth. The growth theory explains long-run economies by looking at productivity, capital accumulation, population growth and technological progress (Solow &Swan, 1956). This theory was developed independently by Robert Solow and Trevor Swan in 1956 and supersedes the post Keynesian Harrod–Domar theory. Due to its attractive mathematical characteristics, Solow-Swan proved to be a convenient starting point for various economic growth theories.

Methodology

The Vector auto-regression (VAR) model was adopted as the fundamental model for this work to capture the evolution and the interdependencies between all the variables in the VAR model and are treated symmetrically by including for each variable an equation explaining its evolution based on its own lags and the lags of all the other variables in the model. Correct specification of time series models requires that the data used are stationary. Thus, we used both the Phillip-Perron and Augmented Dickey-Fuller statistics to establish if there is unit root in our model or not. We alsoanalyzed and forecasted macroeconomic activities,while tracing the effects of unstable capital market and economic growth o on Nigeria.s

Sources of Data

This study used annual time series data covering 1981 to 2016 sourced mainly from the Nigerian Stock Exchange and various publications of Central Bank of Nigeria. The data are Market Capitalization (MCAP), All Share Price Index (ASI) and Volume of Transaction (VTRN), while Real Gross Domestic Product (RGDP) is used as a proxy for economic performance.

Model Specification

Vector Autoregressive (VAR) model considered appropriate in forecasting was used for testing causality (weak exogeneity) and studying the effects of capital market shocks through impulse response characterization and forecast error variance decomposition. This study therefore estimated a Vector Autoregressive (VAR) model to trace the interactions of capital market and economic growth in Nigeria, using VARs with sound theoretical foundation is proved to be appropriate for analysis as this (Apere and Karimo, 2015).

Here we shall look at the endogenous form of our model, which is used to capture the interactions of capital market and Nigerian economic performance.

RGDP = f (MCAP, ASI, VTRN)... (3.1)

To make equation (3.1) fit for empirical verification, we transform it into an econometric equation which is;
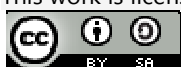
$LnR\text{GDP} = \lambda_0 + \lambda_1 Ln\text{MCAP} + \lambda_2 Ln\text{ASI} + \lambda_3 Ln\text{VTRN} + \varepsilon_t$...(3.2)

The generalized VAR model is specified as:

$Y_t = \mu + \delta_1 y_{t-1} + \delta_2 y_{t-2} + \ldots + \delta_k y_{t-k} + \epsilon_t$ ………………………………………......................... (3.3)
Where the $\epsilon_t = (\epsilon_{1t}, \ldots, \epsilon_{kt})'$ form a sequence of independently identically distributed random K vector with zero mean vector. Thus, the ϵ's are serially uncorrelated but may be contemporaneously correlated. y_t is a column vector of four variables, that is y_t = [RGDP, MCAP, ASI and VTRN]' modeled in terms of its past values. A_i are k x k matrix of coefficients to be estimated, μ is a k x 1 vector of constants and ϵ_t is a vector of white noise processes. Where the covariance matrix Ω is assumed to be positive definite.

Results and Discussion

When a non-stationary time series is regressed on another or other non-stationary time series, the result sometimes a is spurious. Thus, to determine the stationarity of the variables employed in this study, we first conducted the unit root test, this is because time series are often trending and are therefore non-stationary and to avoid estimating a spurious regression both the Phillip-Perron unit root test and the Augmented Dickey-Fuller unit root test were adopted in this study.

Variable	Level	First Difference	Second Difference	Critical value@5%	Lag(s)	Model	Order of integration
RGDP	-0.435610	-2.897962	-7.299199***	-3.580623	1	Trend & Intercept	I(2)
MCAP	-1.550708	-12.07712***		-3.574244	1	Trend & Intercept	I(1)
ASI	-1.105498	-5.733228***		-3.574244	1	Trend & Intercept	I(1)
VTRN	-3.458881	-14.67795***		-3.574244	1	Trend & Intercept	I(1)

Table 1a: Phillip-Perron Unit Root Test
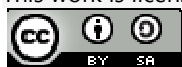
Table 1b: Augmented Dickey-Fuller Unit Root Test

RGDP	-0.996182	-2.918709	-6.311321***	-3.580623	1	Trend & Intercept	I(2)
MCAP	-1.726560	-5.629038***		-3.580623	1	Trend & Intercept	I(1)
ASI	-1.105498	-5.671390***		-3.568379	1	Trend & Intercept	I(1)
VTRN	-3.509593	-5.433691***		-3.580623	1	Trend & Intercept	I(1)

Source: Author's computation

Note: *(**) *** denotes statistically significant at 1%, 5% and 10% level respectively

From the results obtained in ***table 1a and 1b*** (Augmented Dickey-Fuller Phillips-Perron and Augmented Dickey-Fuller unit root test) above, RGDP, MCAP, ASI and VTRN are all non-stationary level, but became stationary at their first difference, with the exception of RGDP which became stationary after differencing it for the second time (second Difference), thus agrees with the fact that most macroeconomic variables are stationary at their first difference. This result indicates that the variables are stationary and are fit for analysis. The trace statisticand Max-Eigen statistic of the cointegrating result indicates four (4) Co-integrating equations at 0.05 critical value. This shows that the variables are co-integrated. That is, there exists a long-run or equilibrium relationship among the variables employed in the model (***see Appendix***).

In the first row, (***see Figure 1***) internal shock on real gross domestic product shows a positive and significant response in the time period. Expectedly, the response of real domestic product to market capitalization was positive and significant. On the second-row shock on market capitalization shows a negative response to real gross domestic product and later positive and did not die out in the long run. While market capitalization response to all share price index was positive, the response of market capitalization to total volume of transaction was negative at the second and third periods, but became positive from the fourth and fifth periods and steady over the long run. The result obtained from the response of all share price index to real gross domestic product; showed that all share price index responds positively to shocks in real gross domestic product.

Also, shocks on all share price index negatively affected volume of transaction. Total volume of transaction response to market capitalization shows positive and became negative over the third and fourth period but became positive over the fifth period and steady over the long run in the long-run. Total volume of transaction response to real gross domestic product, was negative over the first through the third forecasting period and became positive from the fourth period and did not die out in the long-run. Similarly, all share price index negative over the first forecasting period and became positive from the second period and steady over the long run.

Table 2: Structural Variance Decomposition

Period	RGDP	MCAP	ASI	VTRN
Shock to RGDP explained by innovations in:				
1	100.0000	0.000000	0.000000	0.000000
5	71.64611	20.09813	8.620725	9.136282
10	40.83053	30.61914	13.37374	15.27758
Shock to MCAP explained by innovations in:				
1	17.95843	82.04157	0.000000	0.000000
5	57.39154	35.14499	4.988586	2.474888
10	44.55474	32.20577	11.45692	11.68258
Shock to ASI explained by innovations in:				
1	36.79735	0.667317	63.53534	0.000000
5	63.93429	7.756735	27.15462	1.154363
10	47.10508	23.53182	18.6049	10.75813
Shock to VTRN explained by innovations in:				
1	0.558436	32.32057	2039393	46.72706
5	12.65506	43.50817	13.49299	17.34378
10	36.13267	35.19967	13.48858	15.17909

Cholesky Ordering: Ln(RGDP) Ln(MCAP) Ln(ASI)   Ln(VTRN)

Source: Author's computation.

The results of the Structural Variance Decomposition (SVD) are given in ***table 2***. The prime interest of this discussion is the shocks to real GDP explained by innovation in the Nigeria capital market instruments. It can be deduced that 20.0% and 30.0% of the variation in real gross domestic product are explained by innovations in market capitalization of the Nigeria capital market, while 8.63% and 13.37% of the variation in real gross domestic product are explained by innovations in all share price index, and 9.13% and 15.27% of the variation in real gross domestic product are explained by innovations in total volume of trade in the Nigeria stock market in the fifth and tenth periods respectively.

This implies that as market capitalization, all share price index and total volume of transaction increase, more shocks occur on real gross domestic product; thus market capitalization impacts positively on economic growth to a large extent. Further, 57.39% and 44.55% variation in market capitalization are explained by real gross domestic product in the fifth and tenth periods
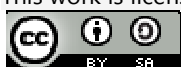
respectively and 4.98% and 11.45% of the variation in market capitalization are explained by innovations in all share price index, and 2.47% and 11.68% of the variation in market capitalization are explained by innovations in total volume of trade in the Nigeria stock market in the fifth and tenth periods respectively.

Similarly, 63.93% and 47.10% variation in all share price index are explained by real gross domestic product in the fifth and tenth periods respectively and 7.75% and 18.60% of the variation in all share price index is explained by innovations in real gross domestic product in the fifth and tenth periods respectively. Also 1.15% and 10.75% of the variation in all share price index is explained by innovations in total volume of trade in the Nigeria stock market in the fifth and tenth periods respectively. Thus, all share price index is marginally affected by innovations in market capitalization and total volume of trade in the Nigeria stock market, but reasonably affected by innovations in real gross domestic product; this is obvious in the results of its structural variance decomposition.

The responses of total volume of trade in the Nigeria capital market explained by innovation in real gross domestic product are 12.65% and 36.13% in the fifth and tenth periods respectively. This shows that about 36% of the variation in total volume of trade in the Nigeria capital market growth could be attributed to real gross domestic changes and 43.50% and 35.19%of the variation in all total volume of trade in the Nigeria stock market are explained by innovations in market capitalization in the fifth and tenth periods respectively. Also 13.49% of the variation in total volume of trade in the Nigeria stock market is explained by innovations in all share price index.

Conclusion and Recommendations

This research is aimed at determining the relationship between capital market and economic growth in Nigeria using structural vector autoregressive model analysis to test the relationship. By using some notable capital market development indicators, the relationship between capital market and economic growth was found to be positive. Empirically, the impulsion response result of this study shows that the response of real domestic product to market capitalization was positive and significant. On the second-row shock on market capitalization shows a negative response to real gross domestic product and later positive and did not die out in the long run. All share price index responds positively to real gross domestic products. Total volume of transaction response to real gross domestic product was negative over the first through the third forecasting period and became positive from the fourth period and did not die out in the long-run.

The variance decomposition result shows that as market capitalization, all share price index and total volume of transaction increase, more shocks occur on real gross domestic product; thus capital market impacts on economic growth to a large extent. This study therefore concludes that

the capital market impact on economic growth via market capitalization, all share index, value of transaction and total listing of equity and government stock. As it was observed, market capitalization, government stock and value of transaction are important capital market variables that are capable of influencing economic growth in Nigeria. This study therefore recommends that the Nigerian government should strictly implement policy directed towards ending laws which hinder the effective functioning of the Nigeria capital market. Similarly, there is the need for effective and favourable macroeconomic environment to facilitate the stock market to influence remarkable growth in the economy of Nigeria.

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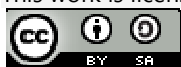
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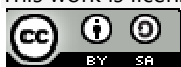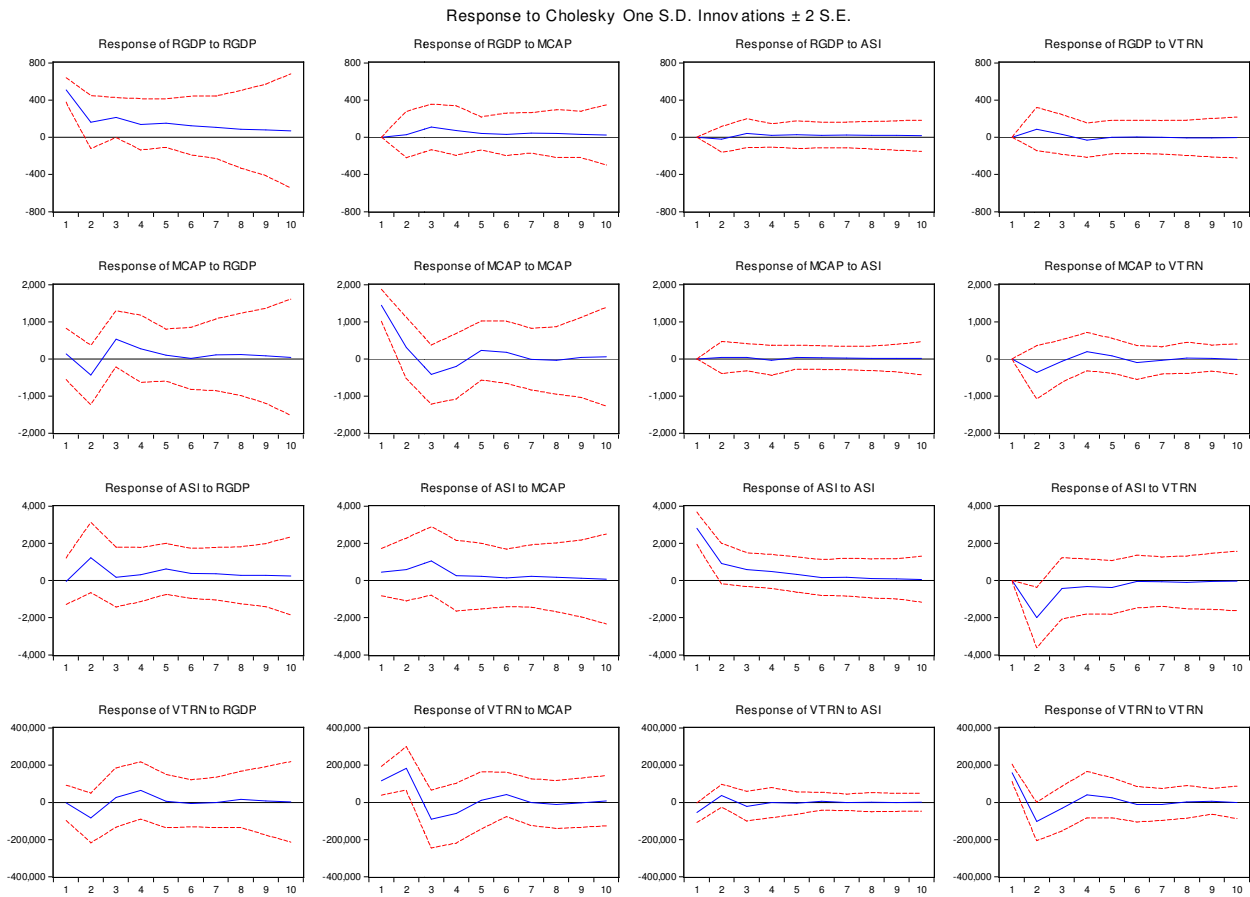
Figure 1

Response to Cholesky One S.D. Innovations ± 2 S.E.

Appendix I

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.943379	171.3246	47.85613	0.0000
At most 1 *	0.838607	90.92624	29.79707	0.0000
At most 2 *	0.704183	39.85663	15.49471	0.0000
At most 3 *	0.185708	5.752217	3.841466	0.0165

Trace test indicates 4 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 *	0.943379	80.39839	27.58434	0.0000
At most 1 *	0.838607	51.06961	21.13162	0.0000
At most 2 *	0.704183	34.10441	14.26460	0.0000
At most 3 *	0.185708	5.752217	3.841466	0.0165

Max-eigenvalue test indicates 4 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Source: Author's computation

Appendix II

Real gross domestic product, all share price index, Volume of transaction and market capitalization

YEAR	RGDP	ASI	VTRN	MCAP
1985	14,953.91	18612.7	316.6	6.6
1986	15,237.99	22693.2	497.9	6.8
1987	15,263.93	23179.9	382.4	8.2
1988	16,215.37	24611.9	850.3	10
1989	17,294.68	23499.4	610.3	12.8
1990	19,305.63	23525.6	225.4	16.3
1991	19,199.06	23888.8	242.1	23.1
1992	19,620.19	52681.8	491.7	31.2
1993	19,927.99	42800	804.4	47.5
1994	19,979.12	38952	985.9	66.3
1995	20,353.20	38207.1	1838.8	180.4
1996	21,177.92	42962.9	6979.6	285.8
1997	21,789.10	45377.7	10330.5	281.9
1998	22,332.87	53875.6	13571.1	262.6
1999	22,449.41	58832.3	14072	300
2000	23,688.28	56546	28153.1	472.3
2001	25,267.54	61988.6	57683.8	662.5
2002	28,957.71	63222.3	59406.7	764.9
2003	31,709.45	61391	120402.6	1359.3
2004	35,020.55	67173.8	225820	2112.5
2005	37,474.95	74595.9	262935.8	2900.1
2006	39,995.50	63339.6	470253.4	5120.9
2007	42,922.41	64589.3	1076020.4	13181.7
2008	46,012.52	76150	1679143.7	9563
2009	49,856.10	81483.3	685717.3	7030.8
2010	54,612.26	75816.1	799911	9918.2
2011	57,511.04	84842.7	638925.7	10275.3
2012	59,929.89	96838.6	808991.4	14800.9
2013	63,218.72	108010.8	2350875.7	19077.4
2014	67,152.79	114865.1	1334783.1	16875.1
2015	69,023.93	135787.2	961221.5	17003.4
2016	67,931.24	17,494.1	N/A	16185.729
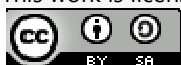
Author's Profile

Dr ThankGod Apere is a Senior Lecturer in the Department of Economics, Niger Delta University, Nigeria. His areas of specialization and research interest include Monetary Economics, Public Finance, Entrepreneurship Studies and Research Methodology. He has written several books and articles in national and international journals. He has also attended conferences in Nigeria, Kenya, USA, UK, UAE, France and Switzerland. Just recently in December, 2017 his paper titled ''The Implications of Financial Innovations on Money Demand in Nigeria was awarded the ISER Excellent Paper for the category of best presenter and best content at the ISER International Conference held in Zurich, Switzerland. Dr Apere is a licensed manager and a Fellow of the Institute of Chartered Economists of Nigeria among several other professional bodies.