

FINANCIAL OPENNESS, FOREIGN PORTFOLIO INVESTMENT AND STOCK MARKET DEVELOPMENT IN NIGERIA

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ABSTRACT

This study examines the relationship between financial openness, FPI and SMD in Nigeria for the period 1986 to 2018). The study employed the Vector Cointegration and Error Correction techniques (VECM) in its empirical analysis. The results from the empirical analysis indicate that the perceived benefits of foreign portfolio investment have not been realized in Nigeria. Specifically, the study reveal that financial openness does not significantly impact the development of the Nigerian Capital Market. Either in the short run and in the long run. On the other hand, while financial openness has little impact on capital market performance, it however has a very strong impact on capital market liquidity in Nigeria. Variations in market liquidity are largely explained by the level of financial openness in the country. Foreign portfolio investment (FPI) does not significantly impact market capitalization. In the short run, foreign portfolio investment (FPI) inflows significantly impact capital market liquidity in Nigeria. Financial openness is strongly exogenous in Nigeria. This implies that capital market factors do not determine the level or direction of financial openness in Nigeria, rather, factors beyond the market tend to determine the extent of financial openness in the country. Study recommends among others that, inflows of FPI should be controlled and based on internal developments or factors within the capital market such as high liquidity or structural depth of the market and not on investor-determined factors that are usually extraneous to the characteristics of the capital market. For instance, demutualization of the Nigerian stock market could imply more confidence by foreign investors regarding the efficiency of the market. This will help to limit rapid reversal of investment from the market when there are problems from outside the market.

Keywords: Financial Openness, Foreign Portfolio Investment, Stock Market Development, Econometric and Statistical Methods.

JEL Classification: F41, G11, N2, C1.

1. INTRODUCTION

Financial openness (FO) is the readiness of any country to implement liberalized policies regarding business and trading with other countries in international trade. It often entails complete withdrawal of control and regulations by state on ownership of the means of production and encouragement of private sector participation. It shows the level of a country's participation in the global trading system.

Financial markets globalization leading to international financial integration of stock markets has positively impacted and accelerated the rate of capital markets development in African emerging markets and Nigeria inclusive (Olotu & Jegbefume, 2011). These developments according to Olotu and Jegbefume (2011) were reinforced by the demand for long-term financing by the private sectors as well as the willingness of governments to provide the institutional frameworks needed for the effective and efficient regulation of the capital markets. Till date, pension funds administrators, insurance companies and investment houses remain the major players in the Nigerian capital market. However, their contributions are insufficient to mop-up the all needed liquidity for the market and investors. Hence, the need to attract other investors such as foreign portfolio investors (FPI) into the Nigerian domestic stock market. Even though that FPI is a short term investment (investment in equity shares that can easily be withdrawn from at any time), it has however become an integral aspect of the global economy over the past few decades, as well as a relevant source of fund for investment (Ukeje & Akpan, 2007).

The process by which financial openness (FO), foreign portfolio investment (FPI) can influence stock market development (SMD) is that they increase the quantum of available financial assets which help to deepen and widen trading activities in the stock market, as well as improve domestic financial allocative efficiency. This equally aligns with Obstfeld (1994) view that is encourages risk diversification among countries in such a way that they are still able to sustain better returns on investments. On their part, Galindo, Schianterelli and Weiss (2007) agreed that both liberalization and foreign portfolio investment enhances country's investment portfolio by expanding total investible instrument in the stock market, and in turn, addressed short falls in domestic funds available to government for handling issues related to development and the people' overall standard of living.

Several studies like Singh (1993, 1997), Stiglitz (2000), Erol (2000), Khanna (2002) and Pazarhoglu and Gulay (2007) argue that openness of a nation financial system encourages more inflow of capital. They added that foreign portfolio investment unlike the FDI can encourage financial resources to flow from the more developed economies with low expected returns to the less developed (capital-scarce economies), where expected returns are high. However, the studies of Gabel (1995), World Bank (2001), Delice, (2002). Parthapratim (2006), Oztekin and Eratas (2009) concluded otherwise. In spite of the increased inflows of foreign portfolio investments to emerging economies of Africa, Nigeria inclusive, they are still characterized by so many challenges such as low per capita income, high level of unemployment and a consistent fall gross domestic product growth rate; which

ordinarily, and given enormous theoretical prepositions in this regard, foreign portfolio investment are expected to resolve all these. It is still not clear how financial openness and foreign portfolio investment can be effectively used to foster rapid stock market development. Hence, the need to empirically test the relationship between financial openness, foreign portfolio investment and stock market development in the Nigerian context. Therefore, the specific objectives of this study are to: (i) determine the relationship between financial openness and stock market development in Nigeria, and (ii) examine the relationship between foreign portfolio investment and stock market development in Nigeria.

The other sections of this paper is arranged as follows; in section two we have review of literature, section three is the methodology, section four is on data analysis and results, section five contains conclusion and recommendations.

2. LITERATURE REVIEW

2.1. CONCEPT OF FINANCIAL OPENNESS

Financial openness is the readiness of any country to implement liberalized policies regarding business and trading with other countries in international trade. It often entails complete withdrawal of control and regulations by state on ownership of the means of production and encouragement of private sector participation. It shows the level of a country's participation in the global trading system and its relationship with other countries of the world (Kannan, 2010).

Kaminsky and Schmukler (2003) see financial openness as a complete deregulation of a country's financial system to global financial flows: but to Johnston and Sundararajan (1999), it is an operational reforms policy aimed at opening up the entire financial system with a view to having market-oriented system that would assured rapid economic growth, banking sector development and enhancement of quality of institutions at the end of the day (Bekaert, Harvey & Lundblad, 2011).

2.2. CONCEPT OF FOREIGN PORTFOLIO

According to Baghebo and Apere (2014), foreign portfolio investment (FPI) Deals with movement and transfer of capital and financial assets across national borders. It usually happens when investors either buy shares/own substantial parts of the firms so established. Under foreign portfolio arrangement, capital flow between individuals and countries looking for highest level of returns are obtainable (ERP, 2006; Aggarwal, Klapper & Wysocki, 2003).

2.3. FINANCIAL OPENNESS AND STOCK MARKET DEVELOPMENT

The relationship between financial openness and stock market development could either be positive and negative in nature. For instance, it has the ability to correctly predict a country's long run economic growth, capital accumulation as well

as the level of productive capacity (King & Levine, 1993). It enhances rapid socio-economic growth through efficient capital allocation (Beck & Levine, 2004). Financial openness of a nation has the ability to further broaden and enhance markets liquidity that will eventually increase profit incentives, lower costs of transaction and eventually minimize information costs, encourage corporate governance issue as well as promote efficient management of risk and portfolio diversification (Levine, 1997; Levine & Zervos, 1998). According to the studies of McKinnon (1973), Shaw (1973), Fry (1997) government policies and programmes that result in financial repression hinders growth. Any country where the banking sector and stock markets operate domestically, will definitely fail to participate in the global financial community. However, when a country opens up its financial system to global trade and capital inflows, it is obvious that its financial market will further be developed.

The negative side of financial openness on the growth and development of the domestic stock market is usually based on currency crises and large financial booms (Kaminsky and Schmukler, 2003). Arguing along this line, Frenkel, Razin and Sadka (1991) and Webb (1992) submitted that political costs is a major set-back to financial openness in that it does not take into consideration the issue of capital and policy of taxation of a country. They argued that investors will invest more in countries with low tax rate than those in higher tax brackets. Hence, liberalizing your financial system suggests losing grip of major monetary policies that will in turn serve as a major threat to country's sovereignty as well as a conduit for massive capital flight.

2.4. FOREIGN PORTFOLIO INVESTMENT (FPI) AND STOCK MARKET DEVELOPMENT (SMD)

The relationship that exist between FPI and SMD is such that is very crucial which made Bekaert and Harvey (1998) to state that the current performance of a stock market is an important factor to attracting foreign portfolio investment in a country. A country's capital market is always approximately regarded as the face of its economy. When there is an increase in the activities of stock market, market integrity and confidence is guaranteed coupled with high rate of returns, foreign portfolio investors will be attracted to transfer their hard earned money to invest in the domestic market. With the coming in of the foreign investors, the domestic stock market activities or liquidity increases (Levine, 1997).

According to the studies of Bekaert and Harvey (1998), Frootetal (2001), Gordon and Gupta (2003), developing countries equity market returns is the most positive and influencing factors affecting portfolio investment, where capital flows were also influenced by previous returns. While the above submission aligns with those of Easterly, Islam and Stiglitz (2001); Culha (2006) argues that improvement in economic fundamentals is often observed in a country's stock market index. Hence, with FPI and stock market development, inflock of more foreign investment will in turn strengthened banking sector (Agbloyor, Abor, Adjasi & Yawson, 2013).

2.5. THEORY OF FINANCIAL MARKET DEVELOPMENT

The use of foreign flow of capital and stock market creation eventually evolved into a new theory of development, which postulates that foreign investors should have access to “well-regulated” financial markets which would provide the “surest path” to economic development (World Development Report, 2000). Thus, firms in less developed economies should enjoy direct access to private capital from the more developed economies, thereby preventing these huge capital meant for enhancing indigenous entrepreneurial potential and the overall growth of the economy from getting into the hands of corrupt and dubious political leaders who do not mean well for the wellbeing of the people. Instead of depending on the weak domestic capital accumulation, equity could either be issued to foreign investor or borrow from them to bridge the financing deficit to effectively fast tract economic growth and development. Also, the price system moderate stock market activities and at the same time provide relevant information which eventually guides investment decisions of investors and managers. Thus, investors’ benefits are closely tied to the expected growth rates which are unachievable in developed markets where higher risks and high returns are involved.

2.6. EMPIRICAL LITERATURE

Several studies have been carried out on the relationship between financial openness, foreign portfolio investment and stock market development in Nigeria and other parts of the globe. For example, the study of Huang (2007) on 35 emerging economies with respect to financial openness and financial sector development for a period of 28 years (1976 to 2003), generally indicate that financial openness positively affect stock markets development.

Pham (2010) employs the Pedroni co-integration technique to analyse 29 Countries from Asian Continent for 15 years (1994 to 2008) and; the empirical results revealed that trade openness causally impact financial development, vice versa. The study of Osinubi and Amaghionyeodiwe (2010) empirically investigate the same relationship in the Nigeria context for a period of 36 years (1970 to 2005). The results from the analysis revealed that economic growth was significantly impacted by FPI and DIG in Nigeria. In another related study, Ajao (2012) empirically investigated the nexus between foreign capital flows, financial openness and stock market development in Nigeria for the period 1981 to 2009. The study established that stock market development is highly influenced by foreign capital flows and financial openness. However, mixed finding was established between net capital flows, financial openness and stock market development

Alajekwu, Ezeabasili and Nzotta (2013) study in Nigeria using the cointegration econometric analysis established strong positive link between trade openness and market developments; but proved otherwise with respect to economic growth.

Oluwole (2014) examines the hypothesized relationship between globalization and stock market growth in Nigeria. Using the OLS, the empirical results reveal that globalization through trade openness/liberalization and financial integration significantly and positively influence SMD in Nigeria.

In the Nigeria context, Ogbuagu and Ewubare (2014) empirically examine the dynamic effects of capital flow shocks upon stock market developments. They employed the Vector Auto-regression Model and Granger - Causality Wald Test, their empirical analysis. The results from the analysis reveal that Net portfolio investment, among other inflows, does not granger cause Market Capitalization in the Nigeria context.

In a related study by Ifeakachukwu (2015) for a period of 28 years (1986 to 2013), employed the ECM where the empirical results showed significant positive relationship between market capitalization value trade and foreign portfolio investment. However, the result proved otherwise in the case of FDI in Nigeria.

Afag, Khan and Hashmi (2017) carried out a study as to the extent to which stock market performance and inflation rate affect FPI in China for the period 2007 to 2015. Using the ARDL, the study revealed that a significant positive relationship between stock market performance and FPI; however, inflation rate was negative related to FPI.

Agu, Ogu and Ezeanyejì (2019) employed the OLS and ARDL to analyse the impact of foreign portfolio investment on stock market returns in Nigeria for the period 1986 to 2017. The empirical results revealed that FPI has significant positive impact on stock market return in the short run but rather prove otherwise in the long run result.

Oyerinde (2019) examined the impact of FPI on the stock market in Nigeria for the period 1980 to 2014. Employing the cointegration econometric analysis, the empirical findings indicate that in the long run, FPI significantly impact stock market development. Also, GDP, exchange rate and inflation rate significantly influenced foreign capital flow to Nigeria.

Akporien and Umoffiong (2020) carried out a study on FDI and stock market performance Nigeria over the period 2000 to 2019. The empirical findings demonstrated a significant between trade openness, volume of trade and FDI. The finding also revealed an insignificant positive relationship between stock price and FDI.

Other related studies in this regard includes Ekeocha (2008), Anayochukwu (2012), Hsu (2013) and Abdallah (2016) among others.

3. METHODOLOGY AND MODEL SPECIFICATION

The study uses the longitudinal survey (ex-post facto) research design, and the sample size consists of the aggregate inflows of FPI into the economy through the stock market over a period of 33 years (1986 to 2018).

3.1. MODEL SPECIFICATION

This model is anchored on Solow-Swan (1956) model, which applied the vector error correction methodology by introducing first, the baseline VAR model from which the VECM evolves; and a standard reduced-form of VAR model representation is expressed as follows:

$$DV_t = \alpha_{0i} + \sum \beta_{ij} \Delta V_{t-1} + \Phi ECM_{it} + U_{it} \quad (3.1)$$

Where:

DV_t represents the vector of endogenous variables, α is a vector of constants, β_{ij} denotes the matrices of autoregressive coefficients, ΦECM_{it} is the error correction model and U_{it} is a vector of white noise. According to Anguyo (2008) “identification of the structural shocks is achieved through appropriate ordering of the variables of interest and applying Cholesky decomposition to the variance covariance matrix of the reduced form residuals U_{it} .”

Thus, in this current study, the econometric form of the vector of the endogenous variables is stated as follow:

$$V_t = \alpha_0 + \alpha_1 FOI_t + \alpha_2 FPI_t + \alpha_3 MCAP/GDP_t + \alpha_4 MLIQ_t + \alpha_5 EXRT_t + U_{it} \quad (3.2)$$

Where:

FOI = Financial Openness Index (Proxied by ratio of foreign financial assets plus foreign financial liabilities to gross domestic products (GDP))

FPI = Foreign Portfolio Investment

MCAP/GDP_t = The Ratio of Market Capitalization to Gross Domestic Products (Proxy for Stock Market Development)

MLIQ = Market Liquidity (measured as the ratio of value traded in the market to the overall market capitalisation)

EXRT = Change in Exchange Rate

U_{it} = The Error term

Appriori signs are: $\alpha_1, \alpha_2, \alpha_3, \alpha_4 > 0; \alpha_5 < 0$.

The ordering of the VECM model is based on the rationalization that the financial openness and foreign portfolio investment variables are taken as exogenously determined in the model and that exchange rate (the pass-through variable) responds to foreign portfolio investment with a lag. The overall effect of

these movements is reflected on market liquidity and eventually on stock prices. The VECM is therefore specified in its general empirical form as:

$$\Delta FOI_t = \alpha_{i0} + \sum_{i=j}^k \beta_i \Delta FOI_{t-1} + \sum_{i=j}^k \phi_i \Delta Z_{t-1} + \sum \delta ECM_{t-1} + \varepsilon_{it} \quad (3.3)$$

$$\Delta FPI_t = \alpha_{i0} + \sum_{i=j}^k \beta_i \Delta FPI_{t-1} + \sum_{i=j}^k \phi_i \Delta Z_{t-1} + \sum \delta ECM_{t-1} + \varepsilon_{it} \quad (3.4)$$

$$\Delta EXRT_t = \alpha_{i0} + \sum_{i=j}^k \beta_i \Delta EXRT_{t-1} + \sum_{i=j}^k \phi_i \Delta Z_{t-1} + \sum \delta ECM_{t-1} + \varepsilon_{it} \quad (3.5)$$

$$\Delta MLIQ_t = \alpha_{i0} + \sum_{i=j}^k \beta_i \Delta MLIQ_{t-1} + \sum_{i=j}^k \phi_i \Delta Z_{t-1} + \sum \delta ECM_{t-1} + \varepsilon_{it} \quad (3.6)$$

$$\Delta SMD_t = \alpha_{i0} + \sum_{i=j}^k \beta_i \Delta SMD_{t-1} + \sum_{i=j}^k \phi_i \Delta Z_{t-1} + \sum \delta ECM_{t-1} + \varepsilon_{it} \quad (3.7)$$

Where, α_{i0} is the coefficient of autonomous variables, ECM is error correction mechanism, δ is the coefficient of ECM and other variables are as earlier defined.

3.2. METHOD OF DATA ANALYSIS

The Vector Error Correction Model (VECM) technique which has the ability to interpret long term and short-term equations is used for the estimation of the data. In practice, one needs to determine the number of cointegrating relationships. Therefore, in conducting the VECM analysis, the following separate stages such as unit root testing, cointegration analysis and the Vector Error Correction Modelling (VECM) are usually followed.

3.3. SOURCES OF DATA

As it relates to the analysis of this study, the data used in this study are annual time series data for the period 1986 to 2018. The data are sourced from the CBN Statistical Bulletin (2018) and the African Development Bank (Several Statistics for African Countries, 2018).

4. DATA ANALYSIS AND INTERPRETATION OF RESULTS

The empirical analysis of data is carried out in this section using statistical and econometric analysis of VAR methodology are conducted in order to provide a robust outcome

4.1. CORRELATION ANALYSIS

The correlation test result for the variables is reported in table 4.1 below. Surprisingly, a quite weak correlation exists between financial openness index (FOPs) and foreign portfolio investment (FPI). Though the correlation is positive, suggesting that both variables move in the same direction, the relationship is not significant (judging from the t-value). Thus, it shows that financial openness may not necessarily suggest larger inflow of FPI into the country. For the capital market indicators, it can be seen that both market liquidity (MLIQ) and market capitalization to GDP ratio have negative correlation with both FOI and FPI. This indicates that larger financial openness and more FPI inflows correspond to undesirable performance of the capital market in Nigeria. Exchange rate, on the other hand is negatively correlated with financial openness and FPI inflow, but positively and significantly correlated with the two capital market indicators (MGDP). Thus, better naira exchange rate regime tends to correspond with better market performance in the country.

Table 4.1: Correlation Matrix

Correlation					
t-Statistic	FOI	FPI	MGDP	MLIQ	EXRT
FOPN2	1.00000				

FPI	0.0855	1.0000			
	0.4622	-----			
MGDP	-0.1908	-0.0523	1.0000		
	-1.0468	-0.2823	-----		
MLIQ	-0.2329	-0.2698	0.6290	1.0000	
	-1.2900	-1.5089	4.3580	-----	
EXRT	-0.2866	-0.4362	0.5579	0.7115	1.0000
	-1.6112	-2.6109	3.6205	5.4533	-----

Source: Author's Computation 2019.

4.2. UNIT ROOT TESTS

The Augmented Dickey Fuller (ADF) test for unit root test in levels and first differences is are presented in table 4.2. The results of the test indicate that each of the variables (except FPI) possesses ADF values that are less than the 95 percent critical values for the levels series. For the first differences however, the ADF value for each of the variables is greater than the critical value. Generally, most of variables are stationary only after first differencing, implying that they are mostly I[1]. This implies possession of unit roots among the variables.

Table 4.2: Unit Root Test for Variables

Variable	ADF Test		Order of integration
	Levels	First Difference	Levels
FOI	-1.54	-4.85*	I[1]
FPI	-5.31*	-5.04*	I[0]
MGDP	-2.16	-6.68*	I[1]
MLIQ	-2.21	-3.67*	I[1]
EXRT	0.01	-4.96*	I[1]

Source: Author’s Computation, 2019. Note: * significant at 5 percent

The results from the multivariate cointegration test are presented in Table 4.3 below. As can be seen from the table, the data series shows that the Trace test statistic indicates there is at least two cointegrating vectors among the relationships, while the λ -max test suggests at least one cointegrating vector. Therefore, the hypothesis of no cointegration among the variables is rejected. The results show that a long run relationship actually exists among the variables used in the study. Based on this, the use of an error correction analysis method is appropriate in the analysis. It is on this basis that the appropriate estimation technique used is the Vector Error Correction Mechanism (VECM) approach.

Table 4.3: Multivariate Cointegration Test Results

“Hypothesized No. of CE(s)	Trace Statistic	0.05 Critical Value	Prob.**	Hypothesized No. of CE(s)	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	90.23732	69.81889	0.0005	None *	40.21069	33.87687	0.0077
At most 1 *	50.02664	47.85613	0.0308	At most 1	26.28587	27.58434	0.0726
At most 2	23.74076	29.79707	0.2116	At most 2	15.21951	21.13162	0.2738
At most 3	8.521248	15.49471	0.4115	At most 3	7.468569	14.26460	0.4353
At most 4	1.052679	3.841466	0.3049	At most 4	1.052679	3.841466	0.3049

Source: Author’s Computation, 2019. *(**) denotes rejection of the hypothesis at 5% (1%) significance level.

4.3. VECM RESULT

The vector error correction model (VECM) results which is used for the man analysis of the study is presented in table 4.4. Indeed, the coefficients of log FPI and market capitalization rate (in column 2 and 3) are both positive and significant in the standardized long run estimation. The results thus show that these variables respond positively to financial openness. Dynamically, financial openness tends to cause long run increases in both FPI inflow and market capitalization rate. The coefficient of market liquidity (in column 4) is however negative and shows that the response of liquidity to financial openness is inverse. Moreover, the coefficient on the ECT (α) is significant only for FPI (in column 2) and is actually negative for MGDG and MLIQ (in columns 3 and 4). Thus, each of the variables will adjust to any deviation from the long run equilibrium that may occur in the short term. The goodness of fit for the short run results are generally low, except for the market liquidity equation.

Table 4.4: Long Run Coefficients of the VECM

	<i>Financial open</i>	<i>FPI</i>	<i>Mkt Cap rate</i>	<i>Market liquidity</i>
<i>coefficients of the error correction term (ECT) – long run results</i>	1	0.002	0.045	-0.173
	-	2.86	13.79	-23.33
<i>Equations of the system:</i>				
<i>Dependent variable</i>	Δfoi	Δfpi	$\Delta mgdp$	$\Delta mliq$
<i>Coefficient on the ECT (α)</i>	-1.24	-1315*	15.49	6.78
	(-1.5)	(-1.89)	-0.83	-1.63
R^2	0.26	0.57	0.2	0.89
F	0.52	1.97	0.37	11.82
<i>“LM test for autocorrelation of the system: p-value = 0.615</i>				
<i>Doornik-Hansen test for normality of the system”: p-value = 0.757</i>				

Source: Author’s Computations, 2019.

The results for the short run VECM estimates are presented in Table 4.5. For the short run VECM results, several interesting transmission patterns emerge from the examination of Table 4.5. For the financial openness equation, the result shows that none of the variables has a strong significant impact on it. This implies that financial openness is strongly exogenous in Nigeria. Apparently, the financial sector in the country does not effectively account for the pattern, level or direction of financial openness that occurs in the country. This generally poses a strong issue for consideration since it can easily lead to financial fragility in the Nigerian markets. For the FPI equation (in column 2), market to GDP ratio, market liquidity and exchange rate have significant short run effects. The results show that MGDG has

positive impact on FPI inflow both in the first and second lags (with t. stat. of 2.16* and 3.27* in column 2). This suggests that the level of development of the capital market is a strong factor in determining the inflows of FPI in Nigeria. Market liquidity however has a negative short run impact on FPI (with t.stat. of -2.71* also in column 2), while the second lag of RXRT has a positive effect (see column 2 with t. stat of 2.01*). This suggests that impressive exchange rate regimes tend to stimulate FPI inflows to Nigeria. For the market development indicators (in column 4), the result shows that short run movements in FOI or FPI do not have significant impacts on MGDG while the impact on MLIQ (see column 5) only comes from FPI inflows (with t. stat of -2.07*). This shows that financial openness and FPI inflows tend to affect liquidity in the capital market, but the effect on overall market development is weak.

Table 4.5: Short Run Dynamics based on the VECM

	Financial open	FPI	Mkt Cap rate	Market liquidity
D(FOI(-1))	1.12	11475.7	-15.55	-2.30
	1.61	[1.95]	-0.99	-0.65
D(FOI(-2))	0.53	5357	-1.75	-0.38
	1.25	[1.51]	-0.18	-0.17
D(FPI(-1))	-0.273	-0.54	0.674	-4.35
	-0.65	-1.53	0.07	-2.07*
D(FPI(-2))	0.43	-0.01	4.48	1.36
	1.02	-0.02	0.471	0.63
D(MGDG(-1))	0.07	893.1	-0.96	0.05
	1.48	2.16*	-0.86	0.18
D(MGDG(-2))	0.02	768.1	-0.70	0.07
	0.80	3.27*	-1.12	0.49
D(MLIQ(-1))	-0.09	-1699.3	1.65	0.11
	-1.21	-2.71*	0.98	0.28
D(MLIQ(-2))	-0.04	1.15	0.08	0.00
	-1.18	0.01	0.12	0.02
D(EXRT(-1))	0.00	37.21	-0.14	-0.04
	-0.28	0.57	-0.83	-1.07
D(EXRT(-2))	0.01	131.9	-0.13	0.01
	1.69	2.01*	-0.71	0.14
CointEq1	-1.24 (-1.5)	-1315(-1.89)	15.49(0.83)	6.78 (1.63)
R-squared	0.26	0.57	0.20	0.89
F-statistic	0.52	1.97	0.37	11.82

Source: Author's Computations, 2019.

The responses of the two market development indicators to a one standard deviation shock to each of the other variables are shown in figure 4.2 below. It can be seen that the response of MGDG to FOI is rather weak and does not show any explicit movements over the period. Similar response is seen from the shock to FPI. For the MLIQ charts however, the shock to either FOI or FPI led to strong fluctuations in MLIQ for a long time. These results suggest that financial openness and FPI inflows have stronger effects on market liquidity than on the overall performance of the market.

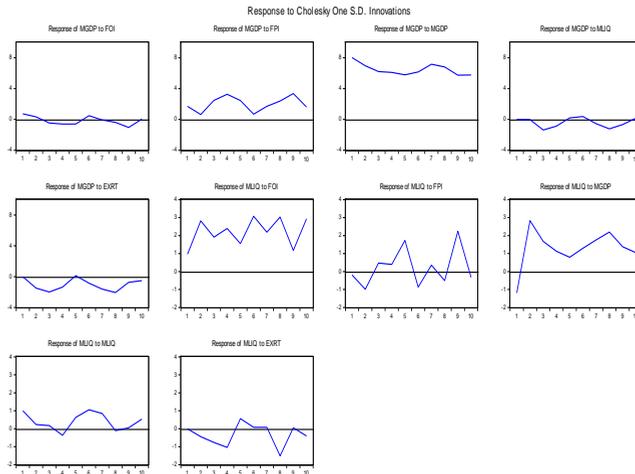


Figure: 4.1

5. CONCLUSION AND RECOMMENDATIONS

The contribution of the capital market to resource mobilization and investment directions in modern economies has become essential. This has led to quite a lot of analysis with regard to fostering improvement in the growth and development of the market, especially emerging ones like Nigeria. Clearly, stock market development is a complex and long-term process which requires a lot of work and policy discipline.

From this study, a major lesson is that financial openness regimes should not be pursued as an overriding in Nigeria. This could be catastrophic to the capital market and render the financial sector unpredictable. Even when financial openness is a major choice for certain reasons, the need for strong and quality institutional involvements is critical. Uncoordinated regimes of financial openness hurt the financial markets and could be the precursor for deeper financial sector problems in a country (Obadan & Adegboye, 2016).

Policy Recommendations

Flowing from the findings of this study, the following specific recommendations are made for policy implementation:

First, the inflows of foreign capital must be taken as a serious issue in the Nigerian capital market. There must be policy measure to ensure that inflows are coordinated into the Nigerian market. As a result of the thinness of the capital market, which is often susceptible to manipulations, large foreign resource flows may lead to equity bubbles. The use of guided capital controls may be advisable at this point.

Secondly, in order to effectively guide the country's financial openness strategy, the government and regulators focus on the right choice of investment instruments within an acceptable period. This will go a long way to reduce high incidence of capital flight.

Finally, inflows of FPI should be controlled to be based on internal factors such as high liquidity or structural depth within the capital market and not on investor-determined factors that are usually extraneous to the characteristics of the capital market. For example, demutualization of the Nigerian stock market could imply more confidence by foreign investors regarding the efficiency of the market. This will help to limit rapid reversal of investment from the market when there are problems from outside the market.

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