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# FINANCIAL MARKET INSTITUTIONS INDICES: PERCEPTIONS AND TRENDS IN NIGERIAN ECONOMIC GROWTH

*Peters O. Ibadin and Francis K. Emeni*

## **Abstract**

This paper empirically looks at the impact of financial market institutions indices on the economic development in Nigeria. Critical analyses were made, using ordinary least square regression analysis to test the directional relationships between economic development variables and financial market institutions in Nigeria. A major finding in the research work points out that financial market institutions positively influence all sectors of the economy. In the light of this finding, it is recommended, in the face of global financial melt-down, that government and participants in the capital market activities should foster a culture of securities innovation and development that would play an increasingly large role in deepening the market through the evaluation of risk-return configuration for issuers, investors and the perception on the direction of the capital markets operations in Nigeria.

## **Introduction**

The financial market is a market of financial assets and liabilities of various maturities. It consists of institutions, instruments, rules and regulations which guide the mobilization of funds from the surplus units of the economy to the deficit units (CBN, 2006). Conventionally, financial markets can be divided into money and capital markets. Money market deals in short-term funds (less than one year of maturity), while the capital market caters for longer-term needs of both borrowers and lenders (more than one year of maturity).

✓ The financial market globally is an avenue through which funds are attracted into any economy. Until recently, it has been an unpopular source of funds in Nigeria. Osaze (2004) traced the cause of this to the economic instability and the low yields to investors in capital market instruments and government's overbearing presence in economic matters. Furthermore, it cannot be downplayed that the small and medium-scale enterprises which remain the engine growth in the economy, source their funds through loans and bank overdraft. This accounts for the relative shallowness of Nigerian financial market when compared with its contemporaries within and outside the African continent as reflected in its market capitalization and all shares index before the emergence of the policy of banking consolidation (Zeply, 2004). ✓

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Amadasun (2000) observed that the Nigerian Financial System(NFS),the global financial melt-down notwithstanding, is a product of morbid growth and development;Amadasun's(2000) position hinges on the seeming failure to create indigenous oriented institutional structures and mechanism to fast track Nigeria's economic growth and development. It has been observed that the morbid growth in the Nigerian economy reflects the further overriding dominance of the short-term money market over the long-term capital market (Olusola, 2003).

This paper identifies the paradigms of the Financial Market Institutions(FMIs) and determines their economic impact on Nigeria. To this end, the paper sets out to :

- i) Find out the relationship existing between the financial market institutions and economic growth.
- ii) Identify the relationship existing between such indices as, equity capitalization and banking habits/ banking reforms and their joint impact on economic growth.

### **Literature Review**

It is an assertion that any country's financial system is responsible for regulating the financial environment of the economy. It determines the types, amounts of funds to be issued, cost of funds as well as the uses to which these funds are to be put. According to Anyanwu (1993), the financial market consists of institutions, agents, brokers and intermediaries who transacts purchases and sales of securities. It includes contracts and communication networks that form an external visible financial structure that link the persons and institutions operating in the financial market.

Writers, like Mckinnon (1973); Levine and Zervos (1996), demonstrated the link between the financial market sector and economic development indicators. McKinnon (1973) demonstrated that appropriate configuration of the financial market enhances the pace of economic growth and development. Within the financial market spectrum of an economy, there are strong theoretical justifications for the role of stock market in economic growth. It is argued that stock market liquidity plays crucial role in the process of economic growth and development (Levine and Zervos, 1996).Many investments that promote economic growth and development are long-run, far longer than most savers are willing to commit their capital. In a recent cross-country study, Levine and Zervos (1996) documented a strong empirical association between stock market development and long-run economic growth. In Nigeria,the existence of Nigeria Stock Exchange entails a number of benefits for the Nigerian economy. These benefits are in line with general role of stock markets in the development process (Claessens,Dascupta and Glen, 1993). The mere presence of a stock market in a country boosts the international investment climate of the country as it raises the chances of additional local financing for both foreign and loan direct investment.

It is the belief held as a universal truth, that the economic development of any country entails a transformation of that country's economy so that it operates

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at an increasing higher level of output and satisfaction of needs. As evidence from our recent history in Nigeria that short-term growth, fuelled by short-term volatile funds, is not necessarily economic development. Economic developments should recognizably have permanent impact on the economy. Financing such transformation also requires financing that, in maturity, approximates the period of the desired transformation. If the period is a long-term, then the ideal financial mode must be long-term. Here lies the critical relevance of the capital market to the economic development of Nigeria or indeed any nation. Financing economic development in any nation cannot but respect the truth in the dictum that investment is equal to savings.

#### **Conceptual Evaluation of Financial Market Institutions**

The financial market institution in any economy is the fulcrum or pivotal point on which the fortune of that economy turns. The importance of a properly functioning financial market cannot be overemphasized. It provides the wherewithal for its growth and development programmes and serves as an indicator of the economy's liquidity and general performance. A subset of financial market institution is the capital market that is a market for long-term funds. It is a sub-set of the financial market institution and represents the intricate intermediation functions of a network of individuals, institutions and financial instruments between the users and providers of long-term funds. In other words, it is that segment of the financial system through which long-term funds are mobilized and channeled into productive investments by the issue of equities and interest-bearing securities.

The capital market facilitates capital formation and accelerates economic development, through the functions of resources mobilization and allocation. This engenders societal well-being. According to Zephy (2004), financial market institution creates an avenue for the participation of the populace in the corporate sector of an economy through the ownership of securities. It has been argued that the economic strength of a nation may be measured by the value of its accumulated wealth and the rate at which it grows through savings and investment (Zephy (2004)). This was tacitly corroborated by Amadasun (2000). In his argument, Amadasun (2000) posited that some economic units spend more during a given period of time than they earn while other economic units spend less on current consumption than they earn. As a result, some mechanism is needed to facilitate the transfer of savings from those economic units with a savings surplus to those with a savings deficit hence, the need for an intermediation as a stock market. Ogiri (1986) that found out that capital market constitutes a vital organ of our modern socio-economic system which is characterized by large scale production requiring huge capital. Alile and Anao (1986) described the stock exchange market as an institution which brings efficient allocation of available capital funds to the end users in the economy.

### **Perspectives of Financial Markets from Nigeria**

In the view of Okigbo (1981), the Nigerian Capital Market plays important roles in mobilizing funds and resources needed for development and offers the institutional forum for implementing its policies of stabilization, monetary control regulation of the banking system. Okigbo (1981) believed that the Nigerian financial institutions, through the capital market, play important roles in mobilizing funds and resources needed for development.

There are principally two segments of the financial markets in Nigeria. They are broadly differentiated by the tenure of funds in each market. The money market is at the short end, providing funds to those with demand for a period not exceeding one year. The instruments used in money market include treasury bills, certificates of deposit, municipal notes, CBN securities, inter bank instruments commercial papers, bankers acceptance and other short term bank credit facilities (i.e. loans and overdraft). Institutions that are peculiar to this market include commercial banks and financial intermediaries.

The Nigeria capital market segment is responsible for mobilizing and channeling long-term funds into productive investments, such as fixed assets. The market, in essence, brings together surplus and deficit economic units. A long term fund is held for a minimum of five years or in perpetuity. The instruments used in the capital market include long-term loans, preference stock, ordinary shares, federal government bonds and industrial loans, and debentures. The capital market is a complex institution and mechanism through which intermediate funds are made available. These institutions include stock exchange, stock registrars, issuing houses, stockbrokers and underwriters and the Security and Exchange commission (Osaze, 2004)

### **Evaluation of Economic Growth Indices:**

#### **Market Capitalization**

Market capitalization represents the aggregate value of a company stock or shares. It relates to the market value of all ordinary shares of companies listed on the Nigeria Stock Exchange (NSE). It is the current market value of the company's ordinary shares. By extension, equity capitalization represents the aggregate values of ordinary shares of all quoted companies which is a part-projection of the worth of the economy. According to Okereke-Onyiuke (2007), price appreciations by equities of companies, consequent upon macro economic stability, explain in large part the growth of the market capitalization, and in consequence, the economy. It is however asserted that such market capitalization only reflects a proportion of the value of securities offered for trading.

#### **Banking Reform/Habits**

Soludo (2006) observed that reforms in the banking industry is an ingredient for the success of any economy. He contended that given international finance, the new capital base for all banks and further reforms of consolidation



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and a higher propensity for investment purposes will launch the Nigerian economy into the world map. According to Ogubunka (2005), banking reform in any economy plays a pivotal role in promoting economic growth through the process of financial intermediation. Such reform, according to Ogubunka (2005), in the area of mobilization of pooling individual savings, provides more efficient allocation of savings into investment than the individual savers can possibly accomplish. This flow of savings into investment ensures that more goods and services can be produced, thus increasing and enhancing economic growth

On account of the aforementioned discussions, the following hypotheses were considered for testing:

- H<sub>1</sub>: Equity capitalization is positively related to economic growth
- H<sub>2</sub>: Banking reform/ habits is positively related to economic growth
- H<sub>3</sub>: The joint reaction of equity capitalization and banking reform/ habits is positively related to economic growth.

#### **Model Specification and Methodology**

Regression model was used to explain the relationship between financial market institutions and economic development indicators: models include :

- (i)  $edgro = \alpha_1 + \alpha_2 eqt + u_t$
- (ii)  $edgro = \alpha_1 + \alpha_2 brh + u_t$
- (iii)  $edgro = \beta_1 + \beta_2 eqt + \beta_3 brh + u_t$ ;

where  $\alpha_2 > 0$  and  $\beta_2$  and  $\beta_3 > 0$

edgro=economic growth ;eqt = market capitalization (proxied by equity capitalization) ;brh=banking reform/habit;u<sub>t</sub>=error term .

The research design was an ex-post-facto survey in which the researcher did not have control of the explanatory variables and the relationships. The population of the study comprised the twenty-five(25) recapitalized banks, including the nine Stock Exchanges in Nigeria. The choice of Benin to locate the banks and the branch of Nigerian Stock Exchange(NSE) was made through the non-probability sampling technique, and necessitated by two reasons: (1) The high concentration and presence of all the recapitalized banks (2) and the convenience of the researcher. The banks were randomized and the selection of a sample size of eight(8) banks, including the NSE emerged while the branch of the NSE in Benin was selected through the non-probability sampling technique. The whole process of selection was intended to minimize the pitfalls of sample bias. However, the sampling procedure was designed to illustrate the effect of financial market institutions and economic growth. It was also designed to draw up a relationship between the financial market institutions and economic growth.

Basically, for this work, the researcher employed the primary data. Primary data for this study were collected through questionnaires designed along the thought of the objectives of the study. These questionnaires were administered to staff of the banks and members of the Exchange to elicit their responses.

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**Data Analysis**

The Ordinary Least Square (OLS) results for eight (8) of the banks, including the NSE are revealed in the tables below:

**Table 1: Computer Estimate of the Ordinary Least Square(OLS) for Testing Hypothesis 1**

Regressor	Coefficient	Standard Error	t-ratio
Intercept	1.36	0.98	1.39
Eq	0.81	0.12	6.63

$edgro = 1.36 + 0.81eq$   
(1.39) (6.63);  
 $R^2 = 0.89$ ;  
F- statistic (2, 5) = 20.6;  
D.W-Statistic = 1.79

From table 1, the value of  $R^2$ , which is 0.89, showed that about 89% of the systematic variations in economic growth can be explained by the equity capitalization of companies. While the remaining 11% is explained by the error term. It shows a good fit. The F-statistics of 20.6 is high, passing the significance test at the 5% level when compared with the table value of 5.79. This shows that there is a significant linear and direct relationship between economic growth and equity capitalization. It also means that the model is appropriate; with equity capitalization passes the apriori sign, showing that there is a positive relationship between equity capitalization and economic growth. The t-value of 6.6 is highly significant, thereby passing the significance test at the 5% level. This again emphasizes that equity capitalization of the company is a major determinant variable that influences the behaviour of economic growth of the nation. Simply interpreted, a unit increase in equity will lead to about 0.8 units rise in economic growth

**Table 2: Computer Estimate of the Ordinary Least Square(OLS) for Testing Hypothesis 2**

Regressor	Coefficient	Standard Error	t-ratio
Intercept	1.66	0.89	1.85
Brh	0.77	0.12	6.67

$edgro = 1.66 + 0.77brh$   
(1.88) (6.67) (The t-ratios are reported in parentheses)  
 $R^2 = 0.88$ ;  
F- statistic (1, 6) = 44.2;  
D.W-Statistic = 1.41

From table 2, the value of  $R^2$ , which is 0.88, shows that about 88% of the systematic variations in economic growth can be explained by the banking reform/habits. The remaining 12% in the variation is explained by the error term.

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It shows a good fit. The F-statistics of 44.2 is high, passing the significance test at the 5% level when compared with the table value . This shows that there is a significant positive relationship between economic growth and banking reform/habit. It also means that the model is appropriate; with banking reform/habit passing the apriori sign, showing that there is a positive relationship between economic growth and banking reform/habits. The t-value of 6.6 is highly significant, thereby passing the significance test. at the .5% level. This again emphasizes that banking reform/habit is a major determinant variable that influences the behaviour of economic growth.

**Table 3: Computer Estimate of the Ordinary Least Square (OLS) for Testing Hypothesis 3**

Regressor	Coefficient	Standard Error	t-ratio
Intercept	-2.47	2.47	-1.0
eqt	0.70	0.36	1.96
Brh	0.59	0.28	2.09

$$\text{edgro} = -2.47 + 0.70\text{eqt} + 0.59 \text{ brh}$$

$$(-1.00) \quad (1.96) \quad (2.09)$$

$R^2 = 0.80;$   
 $F\text{-statistics } (4,3) = 2.96;$   
 $D.W.\text{statistic} = 1.63$

Data in table 3 shows that the relationship between equity capitalization(eqt) and economic growth(edgro).is positive and significant at  $p < .05$ . Banking reform/habits is positive and significant at  $p < .05$ .But the positive relationship of banking reform/habit with economic growth is not as significant as that between the equity capitalization(eqt) and economic growth(edgro).However,the joint reaction of the two variables on economic growth is robust.  $R^2$  has a value of 0.80,indicating that about 80% of the variation in the dependent variable, economic growth, is explained by both the equity capitalization and banking reform/habits.The remaining 20% of the variation is explained by the error term or other unexplained factors.Again the  $R^2$  which is a measure of the overall goodness of fit in the analysis is high. The value of F-statistic of 2.96 indicates that the combined effect of equity capitalization and banking reform/habit explained the significant amount of the variation.But the independent variables of equity capitalization and banking reform/habits pass their apriori signs, of positive relationship with edgro.

The Durblin-Watson test of statistic (1.63) tests the serial or autocorrelation in the measured variables used .

**Summary of Findings**

This paper ascertains the impact of financial market institutions indices on the economic growth. The findings pointedly indicate:

- i that there is a positive relationship between equity capitalization and economic growth .
- ii that there is a positive relationship between banking reform/ habit and economic growth.
- iii that the joint reaction of equity capitalization and banking reform/ habit is positively related to economic growth

### **Discussion of Findings**

Discussion of findings will be in the line of thought highlighted in the summary of findings and compared with what is in literature

Equity capitalization of the Nigerian financial institutions has been found to grow the economy. This is true as equity has a positive relationship with economic growth. This agrees with the previous findings (Mckinnon, 1973; Levine and Zervos, 1996; Okereke-Onyiuke (2007)

In addition, banking reform/ habit has a positive impact on economic growth. The long-run positive impact of banking reform/habits on economic growth frees a lot of opportunities for investments. Consolidation in the banking sectors significantly deepens the market capitalization of the Nigeria Stock Exchange. Previous findings by Ogubunka (2005) and Soludo (2006) are confirmed by this study.

Equity capitalisation and banking reform/ habits jointly drive economic growth. The joint reactions of these variables were seen to contribute to national growth. This finding was supported by Claessens, Dascupta and Glen (1993) and Amadasun (2000).

### **Conclusion and Remarks**

This paper attempted to link financial market institutions with economic growth. As expected, the variables, statistically tested, were found to contribute towards economic growth. To deepen the activities of the markets, it is suggested that these variables should be policy-driven, it is expected that the reform of the financial system and the far-reaching consolidation beyond the 2004 consolidation in the banking sector should be taken as a matter of urgent national importance. To this end, every relevant segment in the financial system, is enjoined to embrace the reform while the banks are encouraged to brace up for the possible access of investible fund that will result from the system. It is however proposed that continuous and far-reaching reforms and transformation in the financial market institutions is required if the gains in the consolidation exercise can be sustained.

There are however daunting challenges posed by the current global financial melt-down coupled with the task of globalizing the Nigerian financial market institutions. There is no doubt that the future of the financial market lies in the globalization of the operations of the Nigerian financial market institution, the financial melt-down notwithstanding. This may be via the creation and adoption of financial market rules, standards and operational platforms in line

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with developed markets' operational platforms in listing, trading, clearing and creating real time confirmation of security transactions. To this end the players of the financial market institutions and other stakeholders must be provoked by, and tasked on, the challenges ahead. The achievement of stability in the financial market institutions is fundamental to the maintenance of macroeconomic stability, which is a precondition for economic growth (Aderibegbe,2004).The time to act is now.

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**Appendix I**

Exact AR(1) Inverse Interpolation Method Converged after 5 iterations

\*\*\*\*\*  
\*\*\*\*\*

Dependent variable is edgro

8 observation used for estimation from 1 to 8

\*\*\*\*\*  
\*\*\*\*\*

Regressor	Coefficient	Standard Error
	T-Ratio [Prob]	
Inpt	1,3565	.97806
	1.3869[.215]	
Eq	.81298	.12263
	6.6296[.001]	
*****		
*****		
R-Squared	.89159	R-Bar-Squared
	.84822	
S.E. of Regression	.52321	F-Stat. F(2, 5)
	20.5596[.004]	
Mean of Dependent Variable	7.5000	S.D. of Dependent Variable
	1.3430	
Residual Sum of Squares	1.3687	Equation Log-likelihood
	-4.3371	
AKaike Info. Criterion	-7.3371	Schwarz Bayesian Criterion
	7.4563	
Dw-Statistics	1.7864	
*****		
*****		

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Parameters of the Autoregressive Error Specification

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$$U = .30207*U(-1)+E$$

$$( .89625) [.411]$$

T-ratio(s) based on asymptotic standard errors in brackets

Log-likelihood ratio test of AR(1) versus OLS CH-SQ(1) =

$$.67752 [.410]$$

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\*\*\*\*\*

**Appendix II**

Exact AR(2) Newton-Raphson Iterative Method Converged after 9 iterations

\*\*\*\*\*

\*\*\*\*\*

Dependent variable is edgro

8 observation used for estimation from 1 to 8

\*\*\*\*\*

\*\*\*\*\*

Regressor	Coefficient	Standard Error
inpt	-2.4711	2.4653
1.0024[.362]		
reform	.69992	.35640
1.9639[.107]		
Bankhab	.59412	.28450
2.0883[.091]		

\*\*\*\*\*

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R-Squared	.79799	R-Bar-Squared
.52865		
S.E. of Regression	.98943	F-Stat. F(4, 3)
2.9628[.199]		
Mean of Dependent Variable	7.2625	S.D. of Dependent Variable
1.4412		
Residual Sum of Squares	2.9369	Equation Log-likelihood
-7.6415		
AKaike Info. Criterion	-12.6415	Schwarz Bayesian Criterion
-12.8401		
Dw-Statistics	1.6325	

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**Parameters of the Autoregressive Error Specification**

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\*\*\*\*\*

$$U = .56504*U(-1) + -.43955*U(-2) + E$$

$$( 1.7793 ) [ .173 ] ( -1.3841 ) ( .260 )$$

T-ratio(s) based on asymptotic standard errors in brackets

Log-likelihood ratio test of AR(1) versus OLS CHI-SQ(1) =

$$.85731 [ .354 ]$$

Log-likelihood ratio test of AR(2) versus AR(1) CHI-SQ(1) = 1.8787 [ .170 ]

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