CAPITAL MARKET EFFICIENCY AND ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

The paper examines the impact of capital market efficiency, in the face of capital market reforms, on Nigeria’s economic growth. The methodology adopted is purely empirical, consisting of analysis of stylized facts on some of the indicators of capital market development, and multiple regression analysis with Ordinary Least Squares (OLS) estimation technique. The study’s findings show that while the capital market has witnessed some growth over the years, it is yet to contribute significantly to economic growth in Nigeria. The findings reveal that the market is characterized by narrowness and shallowness, illiquidity, dominance of government securities, and unnecessary government interference in the pricing of securities which impede its efficiency and adversely affect growth. The paper concludes with some recommendations, which among others, include: formulation of policies geared towards the reduction of the dominance and interference of government in the market, intensive awareness and orientation to individuals and companies on the need to invest in the capital market, and the provision of appropriate legal and regulatory framework to regulate the activities of participants in the market.


1. INTRODUCTION

The significance of capital market is well established. In any country, it constitutes one of the major pillars of long-term economic growth and development. This is due largely to the important role it plays in the mobilization of financial resources for long term investment through financial intermediation. The capital market is basically an aggregation of institutions and mechanism through which long-term funds are mobilized and channeled towards development purposes. It encompasses trading in both primary (new) issues and secondary (existing) issues of stock. The primary market is a market where new securities are issued. The mode of offer for the securities traded in this market includes, offer for subscription, right issues, offer for sales and private placement. The secondary market on the other hand, is a market for trading in existing securities. Securities are primarily of two types, namely, debt and equity.

These securities are the major instruments used to raise funds at the capital market.

The type of debt securities available on the Nigerian Stock Exchange (NSE) include: Federal Government Development Stock (GDS), industrial loans, preference stocks, bonds, etc. (Adelyemi, 1998). Equity securities on the other hand consist of ordinary shares (stocks) and preference shares (preferred stocks).

The capital market forms one of the two components of the financial market. The other component - the money market, has instruments which provide financial resources for short and medium term investment. These instruments include treasury bills, commercial papers, treasury certificate and bankers acceptances. The institutional framework of the money market in Nigeria has the Central Bank at the apex, as the regulatory and supervisory institution. Others are commercial banks, government agencies and pension funds. The money market instruments provide the mechanism for effective monetary policy formulation, implementation and management. The instruments are generally characterized by short-term maturity, high liquidity and reliability (Aiyi and Adelegan, 2005).

The capital market which is one of the components of the financial market essentially helps to mobilize funds for long-term investment. There by strengthening corporate financial structure and hence facilitates the vibrancy and buoyancy of the financial system. The Securities and Exchange Commission (SEC), the Nigerian Stock Exchange (NSE), the operators (example, stock brokers) and investors, constitute the institutional framework through which the capital market functions. The Securities and Exchange Commission (SEC) serves as the regulatory institution.

Thus a well developed and efficient capital market has a catalytic impact on growth in market oriented economies. This is sequel to the fact that capital markets have the ability to:

- Mobilize long-term savings for financing long term investments;
- Providing risk capital (equity) to entrepreneurs;
- Encourage broader ownership of firms;
- Improve efficiency of resource allocation through competitive pricing mechanism;
- Increase flow of funds to the domestic economy as international capital responds to the thriving stock market;
- Lower cost of equity capital for firms;
- Imposition of discipline on corporate managers.

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as share prices react to right and wrong decision; and firms’ investment decision; and
• Existence of mechanisms for appropriate pricing and hedging against risk (Popiel, 1990; Demirguc-Kunt and Levine, 1993; Emenuga, 1998).

In the light of the above expectations, the point of departure of this paper is to evaluate the level of development and efficiency of the Nigerian capital market and how it has impacted on Nigeria’s economic growth and development in the face of capital market reforms in Nigeria. For purposes of convenience and analytical lucidity, the paper is organized in the following sequence: Section 1 has been the introduction. Section 2 provides the theoretical framework and literature review. Section 3 presents an overview of capital market in Nigeria as well as the methodology employed in the study. In section 4, stylized facts on the indicators of capital market development and the study’s empirical results are presented and analyzed while section 5 summarizes and concludes the paper.

2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

The literature on capital market contains some theoretical explanation on the nexus between capital market and economic growth. It is argued that for capital market to contribute to economic growth and development of any nation, it presupposes that the market operates efficiently. To this end, the theoretical underpinning that is relevant to this study is the efficient market hypothesis (EMH) formalized by Fama (1965). According to the efficient market hypothesis (EMH), financial markets are “efficient” or prices on traded assets, example, stocks, bonds, or property, already reflect all known information and therefore are unbiased in the sense that they reflect the collective beliefs of all investors about future prospects. This implies that it is not possible to use past information to consistently and systematically predict current stock prices or returns level. In otherwords, past equity data do not contain any additional and meaningful information that is relevant for improving forecast accuracy. Against this background, it is exercises in futility, attempts by chartists, fundamentalists, and other stock brokers to develop trading rules to consistently beat the market (Nyang, 2003).

Recent tests of the efficient market hypothesis have relied on long-range dependence of equity returns (Lo, 1991). Past information has been found to be useful in improving forecast or predictive accuracy. This tends to invalidate the efficient market hypothesis. In developing countries, equity prices or returns would tend to exhibit long memory or long range dependence because of the shallowness and narrowness of their markets arising from immature regulatory and institutional arrangement (Nagayasu, 2003; Nyong 2003).

By and large, the efficient market hypothesis provides the most popular explanation of the dynamics of equity prices or returns. Where the market operates efficiently, confidence will be generated in the minds of the public, and investors will be willing to part with their hard earned funds and invest them in securities with the hope that at any point in time, they will be able to recoup their investment. But where the market is highly and unnecessarily speculative, investors will be discouraged from parting with their funds for fear of suffering a capital loss. If this is the case, economic development will be adversely affected in any given country. This is because if investors are not willing to invest in financial assets (shares, bonds, etc), it implies that firms cannot raise additional capital for expansion. Therefore efficiency of the capital market is a necessary condition for growth and development of any economy.

The capital market just like any other market performs three interrelated functions, namely, resource mobilization (through financial intermediation), pricing of financial assets (e.g. interest rates and the market price for risk i.e. risk free and risk adjusted prices for interest); and allocation of financial resources to the different sectors and firms within the sectors.

The mobilization function to a large extent depends on the efficiency of the market in pricing the securities and how transactions in buying and selling are. The pricing function to a very large extent depends on the efficiency of the information system so that securities will fully reflect all available and knowable information about firms and the economy.

From the foregoing, the pricing efficiency, which is dependent on efficient information system and which is the focus of the efficient market hypothesis, will ensure that resources are effectively mobilized and allocated. Thus the effectiveness of the market in carrying out its functions is normally appraised in terms of its efficiency in pricing the securities. It will not tantamount to an exaggeration in asserting that if the capital market is efficient in setting prices that fully reflect all available information then economic development will be achieved. Figure 1 below depicts the relationship between capital market efficiency and economic growth.
A number of studies have been carried out with different methodologies which confirm the significant role played by capital market in economic growth and development. Levine and Zervos (1996), in a cross-country study, documented a strong empirical relationship between stock market development and long-run economic growth. In like manner, other studies have argued that stock market liquidity plays crucial role in the process of economic growth. Studies in this category include those of (Mckinnon, 1973; Levine 1991; Bencivenga et al, 1996; Claessens, 1993; and Holstrom and Tirole, 1993).

On the other hand, the importance of capital market in the economic growth and development of a nation is seriously refuted by some scholars. In some extreme cases it is even argued that there is the possibility that a stock market may retard the growth process if it eases corporate take-over that turn out to be counter productive. It is also contended that there is the possibility that a liquid stock market may harm growth through its adverse effect on savings. Higher returns associated with stock market liquidity may result to income and substitution effect as there will be reduction in savings in preference to investment in securities. Moreover, reduced uncertainty surrounding investment, occasioned by improved stock market liquidity lowers demand for precautionary savings and hence reduces the savings rate. Studies in this line of reasoning include those of (Mayer, 1988; Shleifer and Summers, 1988; Morck et al, 1990; and Demirguc-Kunt and Levine, 1993).

In the same vein, Gabriel (2002) as cited by Nyong (2003), focused on the Romanian capital market and maintained that the market is inefficient and hence has not contributed to economic growth in Romania. He asserted that consequent upon the high level of uncertainty about the future, many potential investors stay out of the market, and prefer to deposit their funds in banks. Using Austria, Spain, Italy and Japan as cases studies, Cheung and Lai (1995) also established empirically a strong evidence of market inefficiency which is counter productive to growth.

In Nigeria, Ememuga (1998) is of the view that the stock market is illiquid. He blamed the illiquidity on the ownership structure in the Nigerian stock market in which holdings of the original direct investors and the public sector are normally not traded except for terminal divestment. He concluded that the Nigerian stock market is small and has few listed companies. Low market capitalization and low volume of transactions. He lauded the reforms so far made in the capital market in Nigeria but maintained that a lot still need to be done to improve the quality of the capital market with a view to making it more relevant for national development.

Anyi and Adelegan (2005), assessed the impact of capital market reforms in Nigeria using an incremental approach. They concluded that although the liberalization of capital market contributes to the growth of the Nigerian capital market, its impact to the economy at large is minimal.

The review of the studies above shows that there exist advantages and disadvantages in capital market development. Opinions are varied on the role of the capital market. Given this scenario, the role of the capital market in economic growth and development of any economy becomes an empirical question.

3. THE NIGERIAN CAPITAL MARKET: AN OVERVIEW

The Nigerian capital market evolved as a result of the establishment and incorporation of the Lagos Stock Exchange (LSE) in 1960 which became operational in June, 1961 following the promulgation of the Lagos Stock Exchange Act.

The regulatory body at inception was the capital issue commission which later metamorphosed into the Securities and Exchange Commission (SEC) in 1979, following the promulgation of SEC Decree No. 71 of 1979 amended in 1988 and in 1999 respectively. From 1979, the Securities and Exchange Commission (SEC)
became the regulatory organ for the Nigerian Capital Market, charged with the following responsibilities:

i. To promote investors’ interest and enhance their confidence in the capital market.

ii. To promote capital market growth and overall development in the country.

iii. To determine the price and timing of securities issued.

In the early years of the Lagos Stock Exchange (LSE), trading was poor due to sluggish capital formation (Ariyo and Adelagan, 2005). Consequent upon this, the Federal Government of Nigeria (FGN) in April 1976 set up a commission headed by Dr. Plus Okeibo to examine the structure and operations of the country’s financial system and make appropriate recommendations. The committee, among other things, recommended the decentralization of the exchange. This recommendation was fully implemented by the federal government, in furtherance with the implementation of the committee’s recommendations, the appellation of the Lagos Stock Exchange (LSE) was changed to Nigerian Stock Exchange (NSE) on 2nd December, 1977 with branches established in Lagos, Port Harcourt and Kaduna. Subsequently, the trading floors of NSE were increased to seven, located in Lagos, Port Harcourt, Kaduna, Kano, Ibadan, Onitsha and Abuja (NSE Fact book, 2004).

In 1998, the Abuja Stock Exchange was established and was later converted to a commodity exchange on August 9, 2001, as a market where commodities could be traded. Farmers, for example, would have a market where they can trade in future as well as get substantial capital support in the same way as companies source for funds in the capital market (Ariyo and Adelagan, 2005).

Since its inception, the Nigerian capital market has witnessed some reforms made by the federal government which have accelerated the growth of the market. More specifically, Nigerian capital market growth has been influenced by government patronage, legislations and policies. In the decades of the 1960s and 1970s, government patronage manifested in the floating of development stock to raise funds from the market. In the areas of legislation, government enacted laws to facilitate the proper functioning of the market. For example, Income Tax Management Act 1961 which required both the pension and provident funds to invest a sizeable proportion of their funds in government stock, the Trustee Investment Act of 1962 and the Insurance (Miscellaneous) Provisions Act of 1964 required trustees to invest in government stocks and quoted industrial securities, and insurers to invest a stipulated percentage of their risk premium in government securities (Odoko, 1998). Above all, the implementation of the Nigerian Enterprises Promotion Decree gave a big boost to the growth of the Nigerian Capital Market.

In 1986, Small/Medium-Scale industries were encouraged to seek quotation on the stock exchange with the introduction of the Second – tier Securities Market (SSM) which stipulated less stringent listing conditions for these small and medium – scale industries.

The introduction of the Structural Adjustment Programme (SAP) in 1986 also contributed to the growth of the Nigerian capital market as one of its classical trimmings privatization of public enterprises. Hence the privatization policy introduced by Babangida’s government was induced by the SAP. The main aim of government was to reduce its participation in the directly productive sectors of the economy, such that these sectors could achieve efficiency, effectiveness and viability. Consequently, Decree No 25 of 1988 unfolded in Nigeria privatization policy, legalizing commercialization and privatisation of public enterprises in the country. All the shares of the privatized enterprises were traded in the capital market, thus increasing the number of listed companies and shareholders.

Another innovation that enhanced the performance of the Nigerian Stock Exchange was introduced in 1997. Before this time, the delivery system on the Nigerian Stock Exchange was usually slow, sluggish, and cumbersome. For example, it took a considerable length of time, running up to several months before an investor received evidence of title for securities bought. This delay was attributed to a number of factors ranging from the system of registration, authentication, to slow postal system. But in 1997, the Nigerian Stock Exchange introduced the central settlement and clearing system that was expected to reduce the clearing days to five after transactions.

The promulgation of Decree No. 17 of 1995 was another notable reform made in the Nigerian capital market, as it integrated the Nigerian capital market with the global financial system. This solved the problem of transferring dividends and capital by foreign investors. The other visible lingering problems were equally addressed by 1998 budget. These are, reorganization of the securities and exchange commission, provision of infrastructure to facilitate the adoption of a screening-based trading system, establishment of an investment services tribunal to speedily try capital market disputes, to mention but a few.

3.1 METHODOLOGY

This study adopts an empirical analysis in evaluating the impact of the Nigerian capital market on Nigeria’s economic growth, in the face of capital market reforms in Nigeria. Multiple regression framework with OLS estimation method is used in the empirical analysis as well as trend analysis of stylized facts on some of the indicators of capital market development, to show the performance of the market. Ordinary Least Squares (OLS) estimation technique is specifically adopted because, among its linear class of estimators, it constitutes the best linear unbiased estimator (BLUE), in view of the fact that it has minimum variance, as postulated by Gauss Markov Theorem (Koutsoyannis, 1977). The data used in this study are basically time series secondary data of various sources. The regression analysis uses annual data between 1975 and 2005. This period was characterized by tremendous capital market reforms in Nigeria.

3.2 MODEL SPECIFICATION

The growth and development of capital market in Nigeria is a reflection of series of capital market reforms in the country over the years. On a general note, available evidence shows that there is a direct correlation between the level of development of a nation’s capital market and her overall socio-economic
development. This, however, presupposes that the market operates efficiently as postulated by the Efficient Market Hypothesis (EMH). The efficiency of the capital market is determined by a number of factors which among others include: how financial assets are priced (e.g., interest rates and market price for risk); the ease of transactions in buying and selling securities (liquidity); efficient information system; the size of the stock market (market capitalization) which is positively correlated with the ability to mobilize capital and diversify risks; number of listed equities and the level of money supply in the economy. The interrelationship of these factors ensures the efficiency of the capital market to mobilize and allocate resources for economic growth.

To this end, in consonance with the efficient market hypothesis as discussed in section 2, the following empirical model is specified:

\[
\text{GDP} = \alpha_0 + \alpha_1 \text{GDS} + \alpha_2 \text{TR} + \alpha_3 \text{MC} + \alpha_4 \text{M} + \alpha_5 \text{TT} + \mu. \quad (1)
\]

Where GDP = Gross Domestic Product (Proxy for economic growth)
GDS = Government Development Stock
TR = Interest Rate (determinant of share prices)
MC = Market Capitalization
M = Broad Money Supply
TT = Total Market Transaction
\mu = Stochastic Error Term

The following are a priori expectations of the coefficient of the model: \( \alpha_1, \alpha_2 < 0; \alpha_3, \alpha_5 > 0; \alpha_4 > 0. \)

The log transformation of the model is as follows:

\[
\log \text{GDP} = \log \alpha_0 + \alpha_1 \log \text{GDS} + \alpha_2 \log \text{TR} + \alpha_3 \log \text{MC} + \alpha_4 \log \text{M} + \alpha_5 \log \text{TT} + \mu. \quad (2)
\]

Where, the variables are as previously defined.

4. PRESENTATION AND ANALYSIS OF STYLISTED FACTS AND EMPIRICAL RESULTS

The growth of the Nigerian capital market can be assessed by examining the performances of some of the capital market indicators, such as market capitalization, number of listed companies, etc. Table 4.1 presents a comparative analysis of market capitalization for six emerging markets: Nigeria, Malaysia, Indonesia, Korea, Singapore, and South Africa, between 1990 and 1995. Market capitalization in Nigeria rose from $1.4 billion in 1990 to $2.0 billion in 1995. In Malaysia, it rose from $48.6 billion to $222.7 billion, within the same period. While in Indonesia, at the end of 1995 it was $66.6 billion up from $8.1 billion at the end of 1990. In Korea and Singapore, it rose from $110.6 billion and $34.3 billion in 1990 to $182.0 billion and $148.0 billion in 1995 respectively. In South Africa, at the end of 1990, it stood at $137.5 billion and rose to $280.5 billion at the end of 1995. In comparative terms, Nigeria has the lowest market capitalization for the period under review among the six emerging markets (See table 4.1).

**TABLE 4.1: MARKET CAPITALIZATION ($ BILLION) 1990 - 1995**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>1.4</td>
<td>1.9</td>
<td>1.2</td>
<td>1.0</td>
<td>2.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Malaysia</td>
<td>48.6</td>
<td>58.6</td>
<td>94.0</td>
<td>220.3</td>
<td>199.3</td>
<td>222.7</td>
</tr>
<tr>
<td>Indonesia</td>
<td>8.1</td>
<td>6.8</td>
<td>120.0</td>
<td>33.0</td>
<td>47.2</td>
<td>66.6</td>
</tr>
<tr>
<td>Korea</td>
<td>110.6</td>
<td>95.4</td>
<td>107.5</td>
<td>138.4</td>
<td>191.8</td>
<td>182.0</td>
</tr>
<tr>
<td>Singapore</td>
<td>34.3</td>
<td>47.6</td>
<td>48.8</td>
<td>132.7</td>
<td>134.5</td>
<td>148.0</td>
</tr>
<tr>
<td>South Africa</td>
<td>137.5</td>
<td>165.5</td>
<td>105.5</td>
<td>171.9</td>
<td>225.0</td>
<td>206.0</td>
</tr>
</tbody>
</table>

Sources: IFC - Emerging Stock Markets Fact book 1996 World Economic and Financial Surveys "Global Saving"

**TABLE 4.2: NUMBER OF LISTED DOMESTIC COMPANIES**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>131</td>
<td>142</td>
<td>163</td>
<td>174</td>
<td>177</td>
<td>181</td>
</tr>
<tr>
<td>Malaysia</td>
<td>282</td>
<td>321</td>
<td>369</td>
<td>410</td>
<td>478</td>
<td>529</td>
</tr>
<tr>
<td>Indonesia</td>
<td>125</td>
<td>141</td>
<td>155</td>
<td>174</td>
<td>216</td>
<td>238</td>
</tr>
<tr>
<td>Korea</td>
<td>669</td>
<td>686</td>
<td>688</td>
<td>693</td>
<td>699</td>
<td>721</td>
</tr>
<tr>
<td>Singapore</td>
<td>750</td>
<td>166</td>
<td>163</td>
<td>178</td>
<td>240</td>
<td>212</td>
</tr>
</tbody>
</table>


Table 4.2 shows the number of listed domestic companies in five emerging stock markets. Number of listed companies is another index for measuring the size of the Stock Market. The table indicates that the number of quoted or listed domestic companies in Nigeria in 1990 stood at 131 while the comparative figure for Indonesia in the same year was 125. But by 1994 and 1995, the number of listed domestic companies in Indonesia had risen to 216 and 238 respectively while the one for Nigeria only rose to 177 and 181. In all, table 4.2 shows that the growth in listed domestic companies in Nigeria is the slowest among all the other emerging markets examined. This observation is consistent with the World Bank position in 1993 that out of approximately 5,000 private companies employing more than ten persons in Nigeria, less than 100 were listed on the Nigerian Stock Exchange.

To adequately evaluate the size of the capital market in Nigeria, table 4.3 presents a disaggregated number of quoted securities and the total annual growth rate of the securities for the period, 1961 to 2004 with a view to examining the impact of capital market reforms.
for the period. The number of quoted equity securities rose from 3 in 1961 to 14 in 1971 and rose further to 42 in 1978. By 1994, the number stood at 177, up from 91 in 1980 and ultimately in 2004, listed equities increased to 207. Government stocks grew from 6 in 1961 to 32 in 1971 and 49 in 1978 in 1999, the number fell from 54 in 1980 to 15, and fell further to 12 in 2004, while industrial loans increased from 5 in 1965 to 8 in 1973. By 1993 it stood at 71, up from 12, in 1980 and in 2004 the number fell to 58.

On the other hand, the disaggregated securities (i.e., equities, government stocks and industrial loans) summed up to 5 in 1961 and increased to 52 in 1971. By 1980 the number of aggregate securities rose to 157, and in 1994 the number rose further to 276. But by the year 2000, aggregate securities fell to 260 and in 2002, the number fell further to 248, before it rose again to 277 in 2004. The analysis in table 4.3 shows that pibal market reforms as contained in the policy regimes of the indigenization Decree, 1972 and its amended versions; the Structural Adjustment

Programme (SAP), 1986; the Second Tier Securities Market (SSM), 1986; and the new industrial policy, 1989, impacted positively on the growth of the capital market even though the rate of growth had been marginal. However, the policy reforms of Nigerian Investment Promotion Commission Act, 1995 and Foreign Exchange (Miscellaneous) Decree, 1995 which were operational up to 2004 did not have significant impact on the growth of the capital market as the period was characterized by sluggish growth rate with some years having negative growth rates (see table 4.3). On the whole, the period 1981 to 2004 had an average growth rate for quoted securities of 17.0 percent (table 4.3).

On a general note, tables 4.1, 4.2 and 4.3 show that the Nigerian capital market has witnessed some growth over the years, but by international standards it is still very narrow and shallow. This observation is consistent with the assertion made by Nyong (2003) and Nagayasu (2003).

**TABLE 4.3 NUMBERS AND GROWTH RATE OF QUOTED SECURITIES IN THE NIGERIAN CAPITAL MARKET (1961 - 2004)**

<table>
<thead>
<tr>
<th>Policy Regimes</th>
<th>Year</th>
<th>Government Stock</th>
<th>Industrial Loans</th>
<th>Equities including (SSM)</th>
<th>Total</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre: Indigenization Policy (1961-1971)</td>
<td>1961</td>
<td>6</td>
<td>0</td>
<td>3</td>
<td>9</td>
<td>211.1</td>
</tr>
<tr>
<td></td>
<td>1965</td>
<td>17</td>
<td>5</td>
<td>8</td>
<td>18</td>
<td>85.7</td>
</tr>
<tr>
<td></td>
<td>1971</td>
<td>32</td>
<td>6</td>
<td>14</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Indignation Decree (1972-1983)</td>
<td>1973</td>
<td>38</td>
<td>8</td>
<td>25</td>
<td>71</td>
<td>36.5</td>
</tr>
<tr>
<td></td>
<td>1978</td>
<td>49</td>
<td>11</td>
<td>42</td>
<td>102</td>
<td>43.7</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td>54</td>
<td>12</td>
<td>91</td>
<td>157</td>
<td>53.9</td>
</tr>
<tr>
<td></td>
<td>1981</td>
<td>56</td>
<td>14</td>
<td>93</td>
<td>163</td>
<td>3.82</td>
</tr>
<tr>
<td></td>
<td>1982</td>
<td>57</td>
<td>18</td>
<td>93</td>
<td>168</td>
<td>2.07</td>
</tr>
<tr>
<td></td>
<td>1983</td>
<td>61</td>
<td>25</td>
<td>92</td>
<td>178</td>
<td>5.95</td>
</tr>
<tr>
<td></td>
<td>1984</td>
<td>56</td>
<td>27</td>
<td>92</td>
<td>175</td>
<td>1.69</td>
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<tr>
<td></td>
<td>1985</td>
<td>57</td>
<td>28</td>
<td>96</td>
<td>181</td>
<td>3.43</td>
</tr>
<tr>
<td>Sap era (1986)</td>
<td>1986</td>
<td>58</td>
<td>26</td>
<td>99</td>
<td>186</td>
<td>2.76</td>
</tr>
<tr>
<td>SSM* (1986)</td>
<td>1987</td>
<td>54</td>
<td>31</td>
<td>100</td>
<td>185</td>
<td>-0.54</td>
</tr>
<tr>
<td></td>
<td>1988</td>
<td>51</td>
<td>35</td>
<td>102</td>
<td>188</td>
<td>1.62</td>
</tr>
<tr>
<td></td>
<td>1990</td>
<td>43</td>
<td>43</td>
<td>131</td>
<td>217</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>1991</td>
<td>40</td>
<td>57</td>
<td>124</td>
<td>239</td>
<td>10.14</td>
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<tr>
<td></td>
<td>1992</td>
<td>36</td>
<td>62</td>
<td>153</td>
<td>251</td>
<td>5.02</td>
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<tr>
<td></td>
<td>1993</td>
<td>37</td>
<td>71</td>
<td>175</td>
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<td></td>
<td>1994</td>
<td>35</td>
<td>64</td>
<td>177</td>
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<td></td>
<td>1996</td>
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<td>69</td>
<td>183</td>
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</tr>
<tr>
<td></td>
<td>1997</td>
<td>22</td>
<td>60</td>
<td>182</td>
<td>264</td>
<td>-4.35</td>
</tr>
<tr>
<td></td>
<td>1998</td>
<td>19</td>
<td>59</td>
<td>186</td>
<td>264</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1999</td>
<td>15</td>
<td>58</td>
<td>195</td>
<td>268</td>
<td>1.52</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>12</td>
<td>53</td>
<td>195</td>
<td>260</td>
<td>2.99</td>
</tr>
<tr>
<td></td>
<td>2001</td>
<td>11</td>
<td>56</td>
<td>194</td>
<td>261</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>10</td>
<td>53</td>
<td>195</td>
<td>248</td>
<td>-4.98</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>9</td>
<td>58</td>
<td>200</td>
<td>285</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>12</td>
<td>58</td>
<td>207</td>
<td>277</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Average: 1981-2004 17.0

Note: From 1961 – 1979, selected years were used while from 1980 – 2004 all the years were included.

SSM = Second Tier Securities Market.

* = Second Tier Securities Market was introduced in 1986.
4.1 REGRESSION RESULTS AND ANALYSIS.

The summary of the regression results is presented in Table 4.4 as follows:

**Table 4.4: Estimates of the Relationship between Capital Market Efficiency and Economic Growth Dependent Variable: LNSGDP**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>COEFFICIENT</th>
<th>T-STATISTIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>11.9989</td>
<td>10.32035</td>
</tr>
<tr>
<td>LNM2</td>
<td>-0.182107</td>
<td>-1.577428</td>
</tr>
<tr>
<td>LNM3</td>
<td>0.514899</td>
<td>8.031631</td>
</tr>
<tr>
<td>LNMG0</td>
<td>-0.999489</td>
<td>-7.050558</td>
</tr>
<tr>
<td>LNTTR</td>
<td>0.019242</td>
<td>0.342325</td>
</tr>
<tr>
<td>ITR</td>
<td>0.102956</td>
<td>6.944213</td>
</tr>
</tbody>
</table>

Adjusted R-squared = 0.986288
F-Statistic = 432.5742 D.W = 1.203013

The results presented in Table 4.4 above, are consistent with economic a priori expectation. The coefficient of the log of money supply (LNM2) is negative. This indicates that the Nigerian economy has a low absorptive capacity. It shows that the economy is not resilient enough to absorb financial capital productively. An increase in money supply is expected to enhance growth if the economy is resilient and uses the excess money supply productively. The result is in line with the categorization of Nigeria and other underdeveloped countries by Nefedio (2006) as countries with low absorptive capacity, falling within the range of 0 – 40 percent, while countries with high absorptive capacity fall within the range of 65 - 100 percent. The negative sign of the coefficient of money supply, also buttresses the assertion made by Hagen (1969) that “financial capital is necessary but not sufficient to explain development”.

The coefficients of the log of market capitalization (LNM3) and total transactions in the Stock Market (LNTR) are all positive confirming the theoretical postulates that a large capital market size characterized by ease of buying and selling of securities (liquidity), has the tendency to enhance growth.

The coefficient of the log of government development stock (LNMG0) is negative, reinforcing the submission made by Ojo and Adewumi (1961) that the predominant role of government securities in the capital market poses some possible dangers, as the funds raised by the government may be diverted to unproductive expenditure with adverse effect on growth.

Interest rate variable (ITR), one of the major determinants of share prices, is positive. This tends to portray the fact that the Nigerian capital market may be speculative. When the interest rate is high, share prices are low and speculative investors will buy more shares with the hope of selling them when share prices are high as interest rate falls thereby making some capital gains. In the process, funds are raised to enhance growth.

The results show that market capitalization, government development stock and interest rate are important capital market variables that influence growth in Nigeria. These variables are statistically significant at the conventional 5 percent and 10 percent levels, respectively. While market capitalization and interest rate have positive impact on growth, government development stock retards growth. Total transactions and money supply variables are not statistically significant. First, the non statistical significance of these variables implies that the Nigerian capital market is illiquid. This agrees with Emenuga (1998) who maintained that the value of shares traded relative to total market capitalization, is very low in Nigeria. Second, money supply in Nigeria does not influence growth. This perhaps may be due to the non-buoyancy of the economy. The model is a good fit as 98.6 percent of variation in the dependent variable is explained by independent variables. The F-statistic indicates that the coefficient of determination, and indeed the overall model is statistically significant.

The Durbin Watson Statistic that tests for the existence or otherwise of serial or autocorrelation of successive error term shows that the test is inconclusive. Therefore we cannot say with certainty whether or not auto-correlation exists.

5. CONCLUDING REMARKS

This study has attempted to investigate the relationship between capital market efficiency and economic growth and development in Nigeria. The role of capital market in economic development attracted a lot of reforms to the market with a view to developing it and making it efficient to perform this all important role. The study’s findings show that while the capital market has witnessed some growth over the years, it is yet to position itself to contribute significantly to economic growth in Nigeria. Even though the size of the market has widened, by international standards its is still narrow and shallow. The market is also characterized by illiquidity, dominance of government securities and unnecessary government interference, in the pricing of securities which impede its efficiency and hence militates against growth.

Nigeria, as a developing country, has a very low absorptive capacity, financial capital cannot be absorbed productively to stimulate growth due largely to the non-buoyancy or resilience of the economy. This creates a research gap that needs to be filled by further research, to investigate whether the relationship between capital market efficiency and economic growth is unidirectional or bidirectional.

In the light of the foregoing, the study makes the following recommendations:
i. Policies should be directed towards reducing the dominance and unnecessary interference of government in the capital market.

ii. The economy should be private sector driven while government should only act as a regulator or facilitator if healthy growth in the capital market is to be achieved, to impact positively on economic growth. This is why capital market reforms that put in place the second-tier securities market to encourage the listing of indigenous firms, and the current renewed policy shift in favour of privatization of public enterprises are applauded.

iii. There should be an intensive awareness and orientation to individuals and companies on the advantages of investing in the capital market. This is geared towards increasing the number of quoted firms in the stock market and shareholders with the ultimate effect of increasing the market size.

iv. To solve the problem of illiquidity, there should be a policy that should bring about a complete reversal of the ownership structure in the Nigerian Stock Market in which holdings of the original direct investors and the public sector are normally not traded except for terminal divestment.

Finally, to ensure fair play and transparency, appropriate legal and regulatory framework should be put in place by the government to regulate the activities of participants in the market. In this respect, the establishment of the securities and Exchange Commission is seen as a welcome development.

REFERENCES


