The Extent of Relationship between Stock Market Capitalization and Performance on the Nigerian Economy

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Abstract

This paper examines the extent of relationship between stock market capitalization and performance on the Nigerian economy. Problems identified include the difficulty experienced in raising needed capital to finance key sectors of the Nigerian economy; the stock market is shallow in addition to low activities etc. The objectives included primarily to determine the extent of relationship between stock market capitalization and performance on the Nigerian economy, to access the effect of stock market capitalization and make policy recommendations. Hypothesis tested was that, there is no significant relationship between stock market capitalization and the performance of the Nigerian economy (1988-2008). Data was collected from secondary sources and was analyzed using multiple regression statistics. From the findings, results showed that there is a strong relationship between stock market capitalization and performance on the Nigerian economy with 91 percent (91%) degree of relationship. 1988 was identified as significant, as the year which marks the entrance of equity stocks in the capital market and by 2007, market capitalization hits №13 trillion. The paper is presented in five sections: - (1) Introduction which includes statement of the problem, Objectives and hypothesis. (2) Brief selected literature review (3) Model and Methodology. (4) Data Presentation, Discussion and Findings. (5) Conclusion and policy recommendations. The paper concluded that, when the stock market is reasonably traded by public and private sectors with protected legal frameworks, the Nigerian economy will be more expanded for high growth. It was recommended among others, that the Federal Government of Nigeria should set up a stimulus account to boost the stock market and to enforce Degree No. 45 of 1999 for the establishment of the Commodity Exchange Market

Keywords: Stock market, Nigerian Stock Exchange, Market Capitalization, Performance of the Nigerian Economy, Securities.

1. Introduction

The stock or capital market is a specialized market the world over. It is the market that drives the Nigerian economy, where securities and other long-term instruments for investments, like project financing, debt instruments are traded using the Nigerian Stock Exchange (NSE) as the market place. The market instruments used in the market for trading include- shares and stocks, bonds, debentures, and other long-term financial assets that are sold and bought. The participants in the Nigerian Stock market comprises of - the Nigerian Stock Exchange (NSE), the Central Bank of Nigeria (CBN), Commercial Banks, Stock Brokers/Dealers, Discount Houses, Development and special financial institutions, institutional investors as well as private investors.

The Stock Market Capitalization can be defined as the total worth of securities of quoted companies in the Nigerian capital market. Yasmin and Yusuf (2009) in their own contribution defined market capitalization as "A measurement of corporate size". It can also be referred to as the value of a company, reflecting the number of outstanding stocks multiplied by the number of current stock price. The number of outstanding stocks in the other hand can as well be described as the stocks currently held by investors including restricted ones which are owned by the companies sponsors/subscribers to the memorandum. Moreso, it is the total amount of funds used in financing a firm's balance sheet and it is calculated in value of units of shares which is one of the financial development indicators.

The Nigerian economy has on-going growth of development vis-a-vis the Nigerian Stock Market, which came to its peak at the period of recapitalization of the banking industry in 2004 (Soludo's Central Bank of Nigerian (CBN) led administration). The recapitalization reform floated the stock market with billions of banking stocks, and the market for the first time heats its peak with over thirteen trillion naira (\$13.09) as stock market capitalization.

The decline in market capitalization in 2007 as a result of the low level of activities in the Nigerian Stock Market arising from financial meltdown, that blew every facet of the global economies, provoked the desire to inquire into the extent of relationship between stock market capitalization and performance of Nigerian economy. According to Ezeabasili (2009), for the past two decades, the value of stock listed in the world stock markets had risen from 4.7 trillion Dollars in 1980 to over 40.0 trillion Dollars in 2006 and the emerging market value increased from less than four percent (4%) to seven percent (7%) within the same period.

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By comparison, the performance of the Nigeria Stock market and its capitalization with other world stock markets using All-share index and the Dow-Jone representing the world markets and the New York stock market index in particular for the year ended 2003 showed that out of 98 world economics, Nigeria was ranked 31st representing 55 percent (55%), while Bulgaria came 1st representing over 200.1 percent (200.1%), and 98th position representing 73.9percent (73.9%), (Vuitton 2009). Similarly at the continental level (Africa), the Nigeria stock market lost its first position to Kenya's stock market by finishing fifth in the financial year with a gain of 18.9 percent (18.9%) behind Kenya with a gain of 36.5 percent (36.5%) respectively. Also during this period, the South Africa stock market with the largest size has a market capitalization of approximately 957 billion US. Dollars, while Egyptian Stock market was adjudged the most innovative in Africa, within the period under consideration.

2. Statement of the Problem

The Nigeria capital market is the market where stock exchange hands between the issuing companies and the prospective investors. The needed funds are to increase capacity utilization, production, consumption of goods and services, employment opportunities and standard of living in such a given economy.

However, based on the high expectation, it turns out to become very difficult to raise the needed funds from the stock market through the Nigeria Stock Exchange (NSE) to finance the desired projects to expand economic development. This scenario prevails as a result of the shallowness of the stock market capitalization which is one of the indicators often used as a measure of market size (i.e the total values of all listed securities). Furthermore, the problem of low stock market capitalization continued to decline occasioned by the low volume of stocks/ securities traded in the Exchange when compared with other Exchanges mostly in the developed countries. Besides, it is noted that medium scale entrepreneurs are unable to raise capital market is still very low in its activities due to ignorance on the side of the investing and general public. Furthermore, the problem of infrastructural development in the Nigeria capital market is not helping matters as well. A country with over 156 million people, scattered in 36 states including the Federal Capital Territory, Abuja (July 2006 census estimate) with a total land mark of 910,768 square kilometers, has only a total of 14 Stock Exchanges with epileptic electricity supply, coupled with low level of awareness of the activities of the stock market in particular. Based on the above, as earlier stated the study seeks to examine the extent of the relationship between the stock market capitalization and performance on the Nigerian economy.

3. Objectives of the Study

The primary objective of this study is to determine the extent of relationship of stock market capitalization and performance on the Nigerian economy. Other objectives include:

- 1. To assess the attendants effect of stock market capitalization on the performance of Nigerian economy.
- 2. To recommend possible strategies for solving the problems affecting the relationship of stock market capitalization and performance on the Nigerian economy.

Hypothesis: There is no significant relationship between stock market capitalization and the performance of the Nigerian economy between 1988 to 2008.

4. Brief Selected Literature Review

The Lagos Stock Exchange was incorporated on 15th September, 1960 having met the required incorporated conditions then. However, the establishment processes continued until 5th June, 1961 when its door was formally opened for business transactions. The Lagos Stock Exchange was renamed the Nigerian Stock Exchange (NSE in 1977) following the recommendations of Okigbo Panel Report on financial system Review Committee of 1976. Olowe (2008) described Stock Exchange as an organized market where listed securities such as stocks, bonds, debentures and derivatives are traded. It is a privately sponsored institution, limited by guarantee, and its the establishment of the Federal Government of Nigeria (FGN).

Just like any other Exchanges around the globe, the Nigerian Stock Exchange (NSE) is a pool for raising long term funds for productive and financial investments in the economy which stimulates industrial growth with other functions. Moses (2004) enumerates these functions to include;

- i. To make capital available for domestic firms both at the primary and secondary markets in order to promote new investment and greater contributions to the nation's gross domestic product (GDP).
- ii. To attract portfolio investment from foreign investors who are always in the market searching for higher returns on their investment.
- iii. To mobilize domestic savings by offering wider range of alternative saving channels to savers, and

iv. To facilitate unloading of governments shares in privatized companies under privatization program. Onoh (2002) and Olowe (2008) in their contributions admitted that the stock market is the hub of the Nigerian capital market. It is a market where companies listed in the Nigerian Stock Exchange offer their stocks thereby creating surplus funds for corporate investors, governments and others to raise capital for projects and for both new issues and trading with existing stocks. The Nigerian Stock Market is basically for long-term funds unlike the money market which is for short-term funds. It is also classified into two, primary and secondary markets. The former is concerned with new issues of shares, debentures and others which can be done through public or offer for subscription, private placement, offer by introduction, and right issue. The later on the other hand is concerned with resale or repurchase of shares and bonds previously acquired from new issue.

5. Growth of the Nigerian Stock Market

The growth and development in the capital market can be traced to two dimensions. First the period of private sector securities (equities, performance shares, and debentures) which out- numbered the governments' dominated securities. The second dimension was the privatization of public enterprise in 1988 (ten years after private placement). Within this decade, many Nigerian enterprises had started quotation in the Nigerian Stock Exchange. By comparison, with the developed markets around the globe, the Nigerian market is an emerging one compared with the United State of America's market which has a composite price movement of 65actively traded stocks, consisting of 30 industrial stocks, 20 transportation stocks, and 15 utilities stocks respectively. (NSE FACTBOOK VARIOUS ISSUES)

Olugunde et al (2006) had argued that for any stock market to perform the functions for which it was established, such market must be efficient in its operational character. Fisher and Jordan (2009) in support of this position, based on the Efficient Market Hypothesis (EMH) is of the view that today's price should reflect all current information, as the best estimate for tomorrow's present price value. In effect, the stock market is efficient if the depth of activities in relation to turnover of securities traded in the market is high, both in volume and value occasioned by long-term judgment. Ikoku (2009) concluded by saying that stocks are perpetuities as such stock markets are better judged over a long-run.

6. Performance of Stock Market on the Nigerian Economy

Ikoku (2009), Udom (2009), and Umoren (2007) in their studies have discovered that from independence in 1960 to 1987, the Nigerian Stock Market had been dominated by government securities and industrial stocks as there was no trading on equity stocks whatsoever. Based on that, equity trading as a proportion of total market capitalization and proportion of gross domestic product (GDP) all amounted to zero. From 1988, the market commenced trading on equities in addition to existed governments stocks and industrial loans at the floor of the Nigerian Stock Exchange.

Also, the Nigerian economy after independence in 1960 have had a truncated history. Between 1960 to 1970, gross domestic product (GDP) grew at an average of 3.1 percent annually. Similarly, during the oil boom of 1970 to 1978, the gross domestic product again recorded a significant growth as it doubles the previous period by 100 percent to close at 6.2 percent annually too (Federal office of statistic 2009). More so, from 1988 to 1998, aftermath of the structural adjustment program (SAP) in 1986 and the economic liberalization from 1994, the gross domestic product declined in growth from its peak of 6.2 percent to 4.2 percent. (FOS 209)

In 1988, Nigerian capital market picked up again when the Federal Government in her budget presentation announced the removal of capital gained tax as a relief of chargeable assets from shares and stocks of every description. This development encouraged more investments in the stock market and the resulting effect was an up-shoot of market capitalization (Udom, 2010) Arising from above, the performance of the Nigerian economy improved remarkably, and was attributed to widening of the stock market. This induced both local and foreign investors due to removal of restriction on ownership of assets, reduction of foreign exchange rate as well relaxing other controls and rigidities in the system.

TABLE 1: THE NIGERIAN STOCK EXCHANGE (NSE) OPERATIONAL HIGHLIGHTS FOR THE
PERIOD 1988-2008

Variable s/ Periods	Market Capitaliz ation N b	Shares Traded Units(m)	Value Traded N- m	Daily Average Volume Units(m)	Daily Average Value (N) m	Listed Securities	The All-Share Index(as at year end)	No. of Brooking Firms	No. of Listed compani es
1988	10.0	260	251	N/A	N/A	188	233.6	43	102
1989	12.9	675	654	"	"	198	325.3	61	111
1990	16.4	248	306	"	"	217	513.8	82	131
1991	23.1	177	235	"	"	239	783.0	170	142
1992	31.3	262	492	**	"	251	1,107.6	140	153
1993	46.8	473	662	1.9	2.7	272	1,543.8	140	174
1994	65.5	524	986	2.1	3.9	276	2,205.0	140	177
1995	171.1	397	1,839 b	1.6	7.4	276	5,092.2	162	181
1996	258.6	882	7,100 b	3.5	28.4	276	6,992.1	162	183
1997	292.0	1,300 b	11,100 b	5.3	44.3	264	6,440.5	217	182
1998	263.3	2,100 b	13,600 b	8.4	54.3	264	5,672.8	226	186
TOTAL	1,097.3 t	5,676 b	35,283 b	22.8	141.0	1,628	27,946.4		1,083
	1,191.0t	7298b	37,221b			2,721	30,909.7	1541	1722
1999	299.9 b	3.9 b	14.100 b	15.6	55.7	268	5,266.4	226	196
2000	478.6 b	5.0 b	28.200 b	19.9	112.2	260	8,111.0	187	195
2001	662.6 b	5.9 b	57.600 b	24.1	230.0	261	10,963.1	226	194
2002	763.9 b	6.6 b	60.300 b	26.4	237.2	258	12,137.7	226	195
2003	1,356 t	13.3 b	120.700 b	53.2	474.8	265	20,128.9	240	200
2004	2,112 t	19.2 b	225.820 b	75.0	882.1	276	23,844.5	229	207
2005	2,900 t	26.7 b	262.900 b	107.6	1,060.0 b	285	24,085.8	239	214
2006	5,120 t	36.7 b	470.300 b	150.9	1,940.0 b	293	33,189.3	240	202
2007	13,295 t	138.1 b	2,100 t	570.6	8,620.0 b	309	57,990.2	240	212
2008	9,560 t	193.1 b	2,400 t	775.7	9,550.0 b	299	31,450.8	257	213
TOTAL	36,548 t	448.5 b	5,739,92 t	1,819.0 b	23.162 b	2,774	227,167.7	2,310	2,028

Source: NSE Annual Report & Accounts and Factbooks (1985-1990 and 2005 & 2009) issues **7. Model and Methodology**

This study was carried out to determine the extent of relationship between stock market capitalization and performance on the Nigerian economy. The performance of the Nigerian economy is considered as a function of several stock market variables. The dependent variables is the performance of Nigerian economy while the independent variables are lead by stock market capitalization, volume of shares traded, value of share traded, Nigerian Stock Exchange (NSE), All-share index, and number of institutions.

Multiple regression analysis was used to examine the extent of relation between the two variables used. The variables of interest with respect to stock market capitalization and performance of stock market capitalization and performance of Nigerian economy are presented in an equation as follows:

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + b_5 x_5 + e_1$$

Where Y = the performance of the Nigerian economy

- a = constant term (other characteristic variable(s))
- b_1 b_5 = regression coefficients
- x_1 = stock market capitalization
- x_2 = volume of stock traded
- $x_3 =$ value of stock traded
- $x_4 = NSE$ All-share index
- $x_5 =$ number of institutions
- $e_1 = Error term$

The linear model as the leading equation used was based on the performance of the coefficients of multiple determinations and the number of significant variables. The justification for the use of regression equation for the study lies in the fact that it is a prediction method which assumes a cause effect between variables. In other words, regression analysis identifies the relationship between variables in the form of an equation in which one can predict one variable (dependent) on the basis of another (independent) variable(s).

8. Data Presentation, Discussion and Findings

8.1 Data Presentation:

Serial No./Year	Period	Government Stocks	Industrial Loans	Equities Stocks &SSM	Total
0	1988	51	35	102	188
1	1989	47	40	111	198
2	1990	43	43	131	217
3	1991	40	57	142	239
4	1992	36	62	153	251
5	1993	37	71	174	282
6	1994	35	64	177	276
7	1995	28	67	181	276
8	1996	24	69	183	276
9	1997	22	60	182	264
10	1998	19	59	186	264
Total		331	592	1,620	2,543
		•		· · ·	
11	1999	15	58	196	269
12	2000	12	53	195	260
13	2001	11	56	194	261
14	2002	10	53	195	258
15	2003	14	51	199	264
16	2004	17	52	207	276
17	2005	23	50	214	287
18	2006	45	47	202	294
19	2007	51	47	212	310
20	2008	40	46	213	299
TOTAL		238	513	2,027	2,778

 TABLE 2: Growth in the number of listed securities for the period of 1988 - 2008

Sources: NSE Factbook various issues

RESULTS OF REGREESION ANALYSIS (DOUBLE LOG FORM)

Variables B		Std. Error	T.Cal	Sig.
Constant	23,415.163	6,322.094	6.105	0.000
Market Capitalization	0.229	0.009	0.010	0.001
Volume of stock traded	7.309	3.142	2.121	0.100
Volume of stock traded	23.427	34.131	8.151	0.124
NSE-All-Share Index	224.760	101.210	11.950	0.198
Number of listed companies	1.496	0.212	0.102	0.010
R^2	0.913			
F-ratio	69.240			

This section focuses on the result of the presentation and analysis of data collected and collated. Based on the analyses and testing of hypothesis in connection with data obtained mainly from the secondary sources, it reveals that there is a strong relationship as per the performance of the Nigerian economy as a result of the positive coefficient of the various market indicators which are anchored by stock market capitalization. The regression results showed a high regression square (R-square) value of 0.913 or 91 percent. Based on this, the hypothesis was rejected in favour of the alternative as it tends to portray that a marginal increase in market indicator(s) will also bring about a marginal positive performance on the Nigerian economy. Even though government stocks and industrial loans dominated the Nigerian stock market after its inception without the participation of equity stocks; the Nigerian stock market was still doing fine in the continent and can be relatively compared with other stock markets in the world. The year 1988 marks the entrance of equity stocks in the stock market with 102 stocks traded as a proportion of total market capitalization of 0.0624 which is a little above 6 percent. After this period, the stock market capitalization was fluctuating until 2007 when it reached its peak recording over №13.00

Trillion as a result of the influx of the banking stocks in the system. The result also showed that the Nigerian stock market cannot be pushed aside both at the international and the local levels as its All-share index can be compared favourably with that of the developed economies around the globe as viewed by Lowe (1998).

9. Conclusion

From the findings, results showed that, there is strong relationship measured above ninety-one percent (91%) between stock market capitalization and the performance of the Nigerian economy. As such the recapitalization exercise in the financial system as measured, has stimulated growth in the economy, causing the market to respond to the forces of demand and supply. Arising from such performance, the Nigerian stock market is one of the strongest in Africa and also the best emerging market in the world. Therefore with protected legal frame work, the stock market is capable of stimulating expanded economy for economic growth and development.

10. Policy Recommendations

- 1. For the stock market capitalization to achieve better performance to regain its 2007 glory, when for the first time market capitalization hit over № 13 trillion; the federal government should set up a stimulus account to boost up the market, so that the stock broker and stakeholders can access the funds, for more investment.
- 2. More innovative formal looking regulations and reforms should be enforced in the sub-sector. Besides proactive supervision, modified legal framework and institutional drivers of growth and development should be given rightful attention.
- 3. The federal government of Nigeria should use its power to enforce decree no. 45 of 1999 for the establishment of other stock exchange like the commodity exchange to compliment the effort of the stock exchange.

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