**Research article** 

# AN EMPIRICAL ANALYSIS OF THE IMPACT OF SHARE PRICING ON THE PERFORMANCE OF THE NIGERIAN STOCK MARKET

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#### ABSTRACT

The role of the capital market is to mobilize long-term fund to be channeled towards industrial development. Despite the relative dynamism and vitality observed in the evolution of the Nigerian capital market, empirical literature however suggests that the efficiency at effectiveness of the market in promoting industrial development may be greatly limited as evidenced by the low level of the contribution of the industrial sector to overall market capitalization. This study is to ascertain the impact of share pricing on the performance of the Nigerian Stock Market. The method of data analysis used in this study is the time series analysis and the multiple regression analysis technique adopted. In order to examine and evaluate share prices and the performance of the Nigerian economy, the researcher concentrated on the regulatory and supervisory frame work, which is measured by; All share index, market capitalization, Gross Domestic product (GDP), pricing mechanisms and on site examination of trading activities in the Nigerian Stock Exchange (NSE). The study examine the activities of the Nigerian stock Exchange with respect to share prince and the performance of the Nigerian economy between 1990 – 2010 by the use of notable stock market capitalization was found to be positive. While its relationship (value of share with Gross Domestic Product had less significance. This suggests that for a significant growth, the focus of government policy should be on measures to promote growth in the stock market. **Copyright © IJEBF, all rights reserved.** 

KEYWORDS: SHARE PRICING, STOCK MARKET, FINANCE, NIGERIA.

### **INTRODUCTION**

The mobilization of resources for national development has long been the central focus of development economists (Eshiet, 2007). According to Soyode (1990), sustainable growth and development can be achieved if funds are effectively mobilized and allocated to ventures that will enable businesses and the economy harness their human, material and management resources for optimal output.

Every economy of the world has a set of macroeconomic goals and well designed policies that guide them in the achievement of their macroeconomic stability and normalcy to the overall economy. Hence, economic growth is needed as it guarantees the achievement of other macroeconomic goals such as the reduction in the number of unemployed persons, price stability, favourable balance of payment, etc. In a bid to ensure the achievement of a reasonable level of economic growth, the stock market was established to promote efficiency in capital formation and allocation. Stock market enables governments and industries to raise long-term capital to finance new projects, expand and modernize industrial and commercial concerns (Aigbokan, 1995).

Funds are needed for the smooth running of a business. If capital resources are not provided to different economic sectors especially industries where demand is growing and which are capable of increasing productivity, the rate of expansion of the economy often suffers. A unique benefit of the stock market to corporate organizations is the provision of long-term, non-debt financing capital. Through the issuance of investment securities, companies acquire huge capital for development. This fund helps companies to avoid debt servicing, thus improving corporate debt to equity ratio.

Investment in securities has been viewed by different scholars as a veritable tool for capital formation {Okafor, 1993; Okereke, 1997; Onoh, 1999; Sharpe, 1985}. Sharpe (1985) defined securities as legal representation of the right to receive prospective future benefit under stated conditions. In another definition, Francis (1986) opined that it is a document that evidenced specific claims on a stream of income form a particular asset.

In Nigeria, the Security Act of 1993 as amended in the year 2000 defines a security as an investment contract. It has been interpreted by court decisions to mean an agreement in the form of a contract or transaction whereby a person invest money in a corporate enterprise and has the right to expect profit solely from the efforts of other parties (Patrick,2007).

In offering these securities for sale to the public, Ekpenyong (2004) posited that appropriate pricing of securities should be employed as this will induce the public to invest. Pricing mechanism also enable investors to determine their investment decisions. The exercise of share pricing is important in order to avoid undervaluation of securities. Where the securities of companies are overvalued, the issuing house may end up not being able to mobilize sufficient funds especially if the issue is not underwritten. Also, where the securities are undervalued, the issuing house will end up raising less money than would have been the case had the securities been appropriately valued. In either case, the issuing house ends up at a loss. This definitely scare investors confidence in the market, hence the need for care, skill and judgment in the pricing of a security.

### LITERATURE REVIEW

Finance plays a major role in investment and industrialization of any economy. The Nigerian capital market was established to provide funds to the different sectors of the economy to facilitate economic growth and development. Although the Nigerian capital market has shown tremendous growth since its establishment in 1961, the market is yet to achieve the vibrancy and depth in the secondary markets as compared to industrialized economies in Europe, America and the emerging Asian markets (Ekpenyong , 1994). Onoh (2002) outlined the factors that are responsible for the slow of the Nigerian stock market and classified it as follows; inadequate savings for investment, inadequacy of tradable market instruments, political and economic instability and lack of foreign investors, lack of market transparency among others.

This downward trend in the performance of the Nigerian stock market is primarily caused by low per capita income, which implies that people are living below the poverty line, poor saving culture, harsh macroeconomic environment, inflation, double taxation etc. Similarly, the main instrument traded at the stock markets which are government and industrial/equity stock are grossly inadequate in volume, value and in the deals to serve as an active exchange. This inadequacy, according to Segun (2008), comes as a result of the demand and supply of those securities which makes it difficult to trade. Political instability also scares away foreign investment since frequent changes in government brings with it changes in policy thrust, especially economic policies, thus creating problem to the market. Insider trading also poses a serious threat to the success of the market as it raises question mark on the credibility and transparency of the exchange market which in the long run causes ill growth to the market.

### PRICING MECHANISM OF INVESTMENT SECURITIES

Investment securities are investment by which organizations and companies collect from the surplus economic unit in the economy for the purpose of investing such funds to accelerate the pace of capital formation, economic growth

and development (Richmond, 2003). Adequate pricing of securities traded in the exchange is needed as it gives both the issuer and the investors a measure of the worth and the market value of their assets. Ekpenyong (2004) posited that appropriate pricing of securities is an inducement for the public to invest. Pricing mechanism helps the investors to determine their investment decisions. Pricing of securities also enable the issuing house to avoid undervaluation of their securities. Where the securities of companies are overvalued, the issuing house may end up not being able to mobilize sufficient funds especially if the issue is not underwritten. Similarly, where the securities are undervalued, the issuing house will end up raising less money than would have been the case had the securities been appropriately valued. In either case, the issuing house ends up at a loss. This definitely scares investors' confidence in the market, hence the need for care,skill and judgement in the pricing of security. Ezirim (2004) opined that the analysis of security is undertaken using three approaches or mechanism which are fundamental, technical and the efficient market approach.

# FUNDAMENTAL APPROACH

In the fundamental approach to security analysis, the price of a security reflects the market composite opinion of the securities earning potential. This approach is primarily concerned with the evaluation of the worth of the securities and it examines the underpriced and overpriced securities. It also seeks to forecast the future price and investors' performance.

Sharpe (1985) opined that the fundamental approach assumes that the price of the securities is determined by a rational process, and that there are true values for company's securities, as well as the fact that these values are based on the economic value of the company .For example, the prospective earning of the company, in the case of shares. The fundamentalist also employ such tools of analysis as probabilities forecasting, geometric models, and input-output analysis apart from the financial statement analysis. In the financial analysis, the estimated price is compared to the actual market price to know if the stock is overvalued or undervalued.

# **TECHNICAL APPROACH**

The technical approach is mostly concerned with selecting the good buying and selling points of securities unlike the fundamental approach which undertakes a systematic evaluation of the securities. Such buying and selling point is often read from the movement of the market when activities are booming and active (bullish) and they are dull and on the downward slide (Ahmed, 2009). In the process of achieving its objectives, the technical analysis uses charts and mechanical strategy rule (Ezirim, 2004).this approach considers past security price performance to predict what the future trend would be. Proponents of the technical approach do not believe in the true value of a security, as according to them, there is no such thing as inherent value (Eshiet, 2007).They argue that security prices are what they are only because of what buyers and sellers expect them to be and as such the price of a security represents a consensus view.

# **EFFICIENT MARKET APPROACH**

This mechanism was established on the premises of the existence of an efficient market wherein prices of securities do adjust so quickly to any new information about the security. Accordingly, the price of a security is an embodiment of all relevant information available to the market regarding that security, and any change in asset price (Ahmed, 2009; Okafor, 1993, Ezirim, 2004).

### PRICING OF SECURITIES AT THE NIGERIAN STOCK EXCHANGE

According to Ekpenyong (2006), share price valuation on the Nigerian Stock Exchange could be traced from two periods. These are; the pre-deregulation pricing period and the post-deregulation. The pre-deregulation occurred before the introduction of the Securities and Exchange Commission Act, Cap 406, 1990(section 6(h), (1) and (23). During this period the Nigerian capital market was largely deregulated. The government in promulgating the Securities and Exchange Commission (No. 7) of 1979 established with effect from 1978, the Securities and Exchange Commission (SEC). One of the major function of SEC was the determination of prices, timing and sales of shares on the stock market. In developed and mature capital market, price of securities are determined by issuing

houses in response to the forces of demand and supply. But in Nigeria, despite the criticisms leveled against the approach used, the methods are seen as biased and in favour of the profit maximizing objectives of the owners of the business applying for quotation and economic development needs of the nation (Eshiet, 2007).

#### SECURITY PRICING IN THE PRE-DEREGULATION PERIOD

During this period, the Securities and Exchange Commission adopted the maintenance profit basis method and the net asset basis method for the pricing of assets. Ekpenyong (2004) opined that this method capitalized on the average profit of the company and the expected rate of return in the industry and divides the figures thus computed by the number of shares to obtain the unit price of shares. However, this method had problems because the estimate of maintenance profit was usually calculated from historical earning figures. Whichever way this method is used, either by taking the average of the earning over a five year period or the weighted average (which attaches greater weight to recent earnings), the outcome is still based on historical data and past performance. The net asset value method seeks to determine the price of shares by dividing the net asset (excluding fictitious and intangible assets) of the company by the number of equity shares issued. However, where the intangible assets such as patent or copyright have a marketable value, they are included in before arriving at the new asset value (Eshiet, 2007). The commission uses the information available in the balance sheet after excluding the fictitious asset such as goodwill, adverse balance on profit and loss not yet written off. The commission in adopting this approach had always been skeptical about revaluation. Revaluation neither enhances the value of the asset to the business nor in any way improve its profitability by the mere fact that the book had been raised (Anyanwu, 1993). Consequently, when companies revalue their assets, the commission usually discounts such surplus resulting from the revaluation on a graduated basis (Ekpenyong, 2004).

#### SECURITY PRICING IN THE POST DEREGULATION PERIOD

One of the radical changes made by the Securities and Exchange Commission Act Cap 400 of 1990 regarding the operation of the Nigerian Stock Exchange is the transfer of pricing of shares in the primary market from the Securities and Exchange Commission (SEC) to the issuing house/broker. The Commission, in a bid to sanitize and regulate the capital market issued guidelines for the operation of their activities. These include;

(i)All issuing house were expected to familiarize themselves with the Nigerian Accounting Standard Board (NASM).

(ii) Issuing house were not expected to use pricing method, in particular accounting method (such as inflation accounting) that are not in Nigeria at the moment without obtaining prior approval from the SEC.

(iii) Where revaluation of asset had been carried out by a company, such revaluation exercise are expected to have been done by competent professionals who are members of estate surveyors and values, etc.

(iv) Issuing house should state clearly the method of valuation used in determining the offer price of equity.

(v) All the relevant provisions of the guidelines issued from time to time by the productivity, Price and Income Board has to be adhered to. And in particular the one dealing either in the treatment of revaluation must be within current legal framework (Onoh,2004).

The pricing of securities at the Nigerian Stock Exchange exist in different levels in the primary market. Onoh (2002) opined that the issuing houses calculate the prices of new securities following the pricing guidelines approved for new issues by the Securities and Exchange Commission. The price per share of a new issue is calculated by an issuing house for approval or for adjustment. At the secondary market, price of securities are determined by the market forces. While some brokers are dangling different price for a particular security on the one hand, another group of brokers are offering different prices for the same security on the other hand, at an equilibrium point of demand and supply for the security.

Because there were a few hundreds of securities traded on the exchange, the simple method of trading referred to as the "call over" system was used by the Nigerian Stock Exchange until 1998 when the automated trading system which replaced the call over system was introduced. Under the call over system, exchange dealers will gather on the floor of the exchange on a trading day and at a specific time for the call over conducted by a designated official of the exchange. During the call over session, the clerk will call out the name of each stock for the benefit of the dealers. Price offered and bidded for the interested dealers as each stock is announced. (Akpan , 2009).Here,the principle of sell 'high' or 'low' applies at the exchange. The higher price also called the offer price or the asked price is the price which the dealer will sell the stock in question, while the lower price refers to the price which the

dealer normally does not indicate whether he had the stock or not, or whether he was selling or buying. The "offering and bidding" will continue for each stock until business acceptable "bid price" and recorded on electronic price board for the particular stock at that transaction day. Only "round lot" or "full lot" transaction which meet the minimum quantity of shares as defined by the exchange are not recorded, even when the transaction generates a price change different from that of the "round lot" transaction of the same stock. Akpan (2009) opined that the round lot transaction normally in most exchanges involves not less than 100 shares. A transaction which involves more than 500 units of a stock is called "parcel deal". Certain quantity of parcel has to be referred to the Security and Exchange Commission for securing and for price evaluation in order to protect the interest of the investing public (Ekpenyong, 2004).

#### FACTORS AFFECTING SHARE PRICES IN THE STOCK EXCHANGE MARKET

Although the Nigerian stock market is growing, it is however, characterized by complexities. The complexities arise from trends in globalization and increased variety of new instruments being traded such as; equity, option, derivatives of various forms, index features, etc. However, the central of stock exchanges the world over is the maintenance of efficient market with the attendant benefit of economic growth (Alilie, 1997). Many factors affect the share price in the stock exchange. These factors include; the market sentiment, the performance of the various industries, earning result, etc. (Eshiet, 2007). Ekpenyong (2004) opined that the price of the stock of a company is affected most of the time by the general market direction during recessions. In a bullish market, the stock prices of most of the companies traded in the exchange tend to rise and in the bear market, the stock will fall. The performance also plays in part in determining the stock price of the company. Most of the time, the stock price of the traded company in the same industry will move in tandem with each other. This is due to the market conditions which generally affect the companies in the same industry. There are however some exceptions the above, the stock price of a company tend to benefit from a piece of bad news of its competitors if the companies are competing for the same level target market. The primary objective of a business is to maximize profit, therefore investors and traders always access a company based on the earning per share and revenue and its future earning potential. In Nigeria, companies generally report the earning results quarterly or yearly. Companies that achieve good results expect a boost in its share price and one that delivers poorly shall see a beating in its share price (Eshiet ,2004). Sometimes, apart from reporting the earning per share and the revenue for the past quarter, a company may also issue guidance (expected value) for the EPS and revenue in the coming years. This is also closely monitored by investors and is an important factor that will affect the company's stock price.

# THE ROLES OF STOCK MARKET IN THE ECONOMIC DEVELOPMENT AND GROWTH OF NIGERIA

The importance of the stock market to national development cannot be overemphasized. Onyiuke (2000) opined that equity financing remains one of the cheapest and flexible sources of finance from the capital market and serves as a critical element in the development and growth of the economy. As economies develop, more funds are needed to meet the rapid expansion. The stock market serves as a veritable tool for the mobilization and allocation of savings among competing users which are critical to the growth and efficiency of the economy. The stock market has helped the Nigerian economy through the mobilization of saving s from the surplus economic unit and concurrently allocated it to the firms with relatively high prospect of after an assessment of the rate of returns and level of risk. The importance of this function is that capital resources are channeled by the mechanism of the forces of demand and supply to those firms with relatively high and increasingly productivity (Ekpenyong ,2004). This enhances economic expansion and growth. The stock market also helps in the growth of the economy by creation of liquity. Liquid equity market makes available savings for profitable investment that require long term commitment of capital. As asserted by Smith and Stan (1996), without liquid capital market there would be no industrial revolution. More so, the establishment of the stock market has help promote entrepreneurial spirit in the country. As funds at the exchange are mobilized, they are channeled into businesses which emanates from ideas generated by entrepreneurs who may have the required volume of funds to realize such dream. Through the operation of the exchange, profitable business ideas are promptly realized. The stock market helps in wealth redistribution and poverty reduction among other benefits. The importance of this function is that capital resources are channeled by the mechanism of the forces of demand and supply to those firms with relatively high and increasing productivity. This enhances economic expansion and growth. The stock market also helps in the growth of Nigeria economy by

creation of liquidity. Liquid Equity market makes available savings for profitable investment that require long-term commitment of capital. As asserted by Smith and Stan (1996), without liquid capital market there would be no industrial revolution.

Again, the establishment of the stock market has help promote entrepreneurial spirit in the country. As funds at the exchange are mobilized, they are channeled into businesses who may not necessarily have the required volume of funds to realize such business dream. With the operation of the exchange, profitable business ideas are promptly realizable.

Moreover, the stock market helps in wealth redistribution and poverty reduction. Being the mother of the capital market, the exchange promotes income redistribution as listed companies pay salaries, wages and poverty is reduced.

The stock market plays a good role in the Nigerian economy by protecting investors' interest. As a principle, the exchange protects investors interest through the investor protection fund (IPF) established by the securities and exchange commission (SEC), Degree no. 45 of 1999., the decree helps protect investors agains fraud nad insider abuse.

### CHALLENGES OF THE NIGERIAN CAPITAL MARKET

Finance plays a major role in investment and industrialization of any economy. Therefore, the Nigerian capital market was established to provide funds to the different sectors of the economy. Although, the Nigerian capital market has shown tremendous growth since it was established in 1961, the market is yet to achieve the vibrancy and depth in the secondary markets as compared to industrialized economies like Europe, America and the emerging Asia market. According to Onoh (2002), many factor are responsible for the slow growth, and they can be broadly classified as follows; inadequate savings fore investment, inadequacy of tradable market instrument, political/ economic instability and lack of foreign investors, lack of market transparency among others. This is caused by the low per capita income, which means people are living below poverty line. Poor saving culture, harsh macro-economic environment, inflation, double taxation. Similarly, the main instrument traded at the NSEM are government stock and industrial/equity stock. In volume, value and in deals, they are grossly. In adequate to served as active exchange. The inadequacy also comes as a result of the demand and supply of these securities which makes it difficult to trade. Political instability scares away foreign investment because frequent changes in government brings with it changes in policy thrust, especially economic policies. This has result to problem to the market. Insider dealing has put a strong question mark on the credibility of the NSEM. Insider abuses cause lack of market transparency which by extension causes ill-growth to the market.

### METHODOLOGY

#### **Research area**

This study is structured to access the activities of the Nigerian Stock Exchange Market (NSEM) with respect to share pricing and the performance of the Nigerian economy. They research work examines the volume of shares traded on the exchange and its impact on the Nigerian economy. The research area is Nigeria.

#### Sources of data

Data used in this research study were obtained from secondary sources. The Sources include text books, Central Bank of Nigeria (CBN) statistical bulletin, CBN Annual report and statement of Account report journal, finance journal and newspaper.

#### Method of data collection

Based on the nature of the study, desk research method was utilized. It involves sourcing data from secondary sources such as the Central Bank of Nigeria (CBN) statistical bulletin, stock exchange reports and other sources will be used for data collection.

#### Technique of data analysis

The method of data analysis used in this study is the time series analysis and the multiple regression analysis technique adopted. Time series is a set of observations taken at specific times, usually at equal intervals. Mathematically, a time series is defined by the values.

 $Y = X_1, X_2, X_3, - - - xn$ . Where y is a function of time symbolized by y = f(X), Spiegel and Stephens (1999)

The Data collected for this study will be presented in tables of time series and the component movements of value of shares, government stock, industrial bonds, equities. (Measured in millions of naira) described to identify its characteristics. In examining the hypotheses, the multiple regression method of analysis will be adopted.

#### Model formulation and specification

In order to examine and evaluate share prices and the performance of the Nigerian economy, the researcher will concentrate on the regulatory and supervisory frame work, which is measured by; All share index, market capitalization, Gross Domestic product (GDP), pricing mechanisms and on site examination of trading activities in the Nigerian Stock Exchange (NSE). These, of course, are major variables whose effects will be tested on the performance of the Nigerian economy. Economic performance, as used here, will be measured by the reciprocal of the volume of shares traded on the exchange. The sum of market capitalization and GDP are the dependent variable while Economic performance which acts as dependent variable is a function of all share index. Regulatory and supervisory frame work, pricing mechanisms which are all independent variables. The multiple regression analysis will be used as a tool to test the relationship between the specified dependent and independent variables. The multiple regression models is given as.

 $Y = b_1 X_1 + b_2 X_2 + \dots + b_n X_n$ 

For specification of the Models an din order to achieve the purpose of the study, the hypotheses are restated below:

#### Hypothesis one

Ho: The value of shares traded on the Nigerian stock exchange does not affect the market capitalization.
 H1: The value of shares traded on the Nigerian stock exchange do affect the market capitalization.
 The equation for the model is given as:

 $MKC = a_0 + a_1 X_1 + a_2 X A_2 + ut$ 

 $MKC = a_0 + a_1 G_s + a_2 IB + a_3 EQ + a_4 ASI + ut$ 

MKC = Market capitalization

- Gs = Government Securities
- IB = Industrial bonds
- EQ = Equities
- ASI = All shares Index
- ao = Regression Constant
- a1, a2, a3, a4 = Slope of the independent variable
- Ut = error term

Hypothesis Two:

H<sub>0</sub>: The value of shares traded on the Nigerian stock market does not affect economics performance.

H<sub>i</sub>: The value of shares traded on the Nigeria stock market do affect economic performance.

The equation for the model is given as:

 $GDP = a_0 + a_1 x_1 + a_2 x_2 + ut$ 

 $GDP = a_0 + a_1 MKC + a_2 1B + a_3 GS + a_4 EQ + ut.$ 

Where:

GDP = Gross Domestic product

- MKC = Market Capitalization
- IB = Industrial Bond

GS = Government Securities

EQ = Equities

#### Other data analysis technique

adjusted  $R^2$  is the proportion of variation in the dependent variable (y) that can be explained by the predicator in the regression model. It is used when the independent variables are more than one to show the percentage of total variation of the dependent variable that can be explained by the independent variable.

The higher the  $R^2$ , the greater the percentage of the variation of the dependent variable explained by the regression plan. That is, the better the "goodness of fit" of the regression plan. The formular for calculating adjusted  $R^2$  given as:

 $R^{2} = 1 - (1 - R^{2})^{n-1}$ (n-p-1)

Where: n = sample size

p = Total number of regression in the linear model (but not counting the constant size)

F – ratio is used to test the overall significance of the regression. This implies testing the null hypothesis against the alternative hypothesis to determine their significance and also establish the relationship between them.

The formular for calculating F- ratio is given as:

 $F - ratio = \frac{R^{2/k-1}}{(1 - R^2)/n-k}$ where: k - 1 = The degree of freedom N = The number of sample K = The number of explanatory parameters.

In statistics, the Durbib Waston Statistics is a test statistic used to detect the presence of autocorrelation (a relationship between values separated from each other by a given time in residuals (prediction errors) from a regression analysis. It involves testing the null hypothesis (Ho) against the alternative hypothesis (H1).

It also stipulates that the errors in a regression model follow a process with a unit root against the alternative hypothesis, that the errors follow a stationary first order auto regression. If e, is the residual associated with the observation at time t, then the test statistics is

dw  $= \sum_{t=1}^{T} 2 (et - et - 1)^{2} \sum_{t=1}^{T} 1 e^{2} t$ 

where T is the number of observation since dw is approximately equal to 2 (1 - r), where r is the sample auto correlation of the residuals, dw = 2 indicates no auto correlation. The value of dw always lies between O and 4. if Durbin Waston statistic is substantially less than 2, there is evidence of positive serial correlation.

As a rough rule of thumb, if Durbin Waston is less than 1.0, there may be cause for alarm. Small values of d indicate successive error terms are on average, close in value to one another, or positively correlated. If d>2 successive error terms are, on average, much different in value to one another. i.e.negatively correlated. In regression, this can imply an underestimation of the level of statistical significance.

The t-statistic is a measure of how extreme a statistical estimate is. it is computed by subtracting the hypothesized value from the statistical estimate and the dividing by the estimate standard error. In many but not all situation, the hypothesized value would be zero. Thus, the hypothesized value is reasonable when the t- statistic is close to Zero. Alternatively, the hypothesized value is not large enough when the t – statistic is positively large. When the hypothesized value is too large when the t statistic is large negative. To formalize this approach, there is need to compare the t- statistic to a percentile form the t- distribution. The t- statistic is sometimes also referred to as a t-test, t- ratio, or Wald Statistic, since the statistics are positively large. This gives some indication that the deficit is greater than the hypothesized value of Zero P – Value is the level of marginal significance within a statistical hypothesis representing the probability of the occurrence of a given event. The p – value is used as an alternative rejection point to provide the smallest level of significance at which the null hypothesis would be rejected. The smaller the p – value, the stronger the evidence favour of alternate hypothesis.

# DATA PRESENTATION ANALYSIS AND INTERPRETATION

#### Data presentation

In this chapter, the researcher presents the Data, made analysis and interpreted the Data that were collected for the study. The data were collected from secondary sources and are analyzed here with the use of multiple regression models. This chapter is divided into four sections including data presentation, data analysis, hypotheses testing and discussion of findings. The data are presented in the table below.

**TABLE 4.1:** Analysis of the Relationship between Gross Domestic product, Market Capitalization, Government Securities, Industrial bonds, Equities and all shares index

Obs	GDP	МКС	GS	IB	QE	ASI
1990	267550.0	16.30000	3.400000	0.800000	12.10000	513.8000
1991	265379.1	23.10000	3.300000	1.400000	18.40000	783.0000
1992	271365.5	31.20000	3.200000	1.800000	26.40000	1107.600
1993	274833.3	47.50000	3.600000	2.100000	41.80000	1543.800
1994	275450.6	66.30000	3.200000	2.100000	61.00000	2205.000
1995	281407.4	180.4000	3.200000	2.100000	175.1000	5092.200
1996	293745.4	285.8000	3.000000	3.000000	279.8000	6992.100
1997	302022.5	281.9000	2.800000	2.800000	276.3000	6440.500
1998	310890.0	262.6000	2.700000	3.100000	256.8000	5672.700
1999	312183.5	300.0000	2.400000	3.100000	294.5000	5266.400
2000	329178.7	472.3000	2.100000	4.100000	466.1000	8111.000
2001	356994.3	662.5000	8.300000	5.800000	648.4000	10963.10
2002	433203.5	764.9000	12.70000	3.500000	748.7000	12137.70
2003	477533.0	1359.300	25.20000	8.400000	1325.700	20128.90
2004	527576.0	2112.500	178,1000	7.900000	1926.500	23844.50
2005	561931.4	2900.100	365.5000	11.10000	2523.500	24085.80
2006	565821.6	5121.000	888.9000	3.500000	4228.600	33189.30
2007	634251.1	13294.60	2976.600	17.00000	10301.00	57990.20
2008	672202.6	9562.000	2530.000	45.90000	6987.500	31450.78
2009	718977.3	7030.800	1930.300	108.5000	4992.00	20827.17
2010	775525.7	9918.200	1725.200	280.4000	7922.600	24770.52

Source: CBN Statistical bulletin 2011

### Data analysis

Table; 4.1 reveals the growth in the number of listed securities at the Nigerian stock Exchange between 1990 and 2000. in the period in question, government securities began what appeared to be irreversible decline. The number of listed government securities declined irreversibly, while the number of listed private sector securities grew significantly. The number of listed private sector securities grew significantly. The number of listed private sector securities grew significantly. The number of listed private sector securities grew significantly. The number of listed private sector securities grew significantly. The number of listed industrial bonds grew from 80 in 1990 to 101 in 2005 but slumped to 50 in 2006 because of enterprises preference for equities, offer by rights, and offer for sale and preference shares as channels for raising capital at the market. The number of listed shares rose from 175 in 1995 to 748 in 2002. after holding on to that level till 2008 with successive increases, the number dropped significantly to 4,992 in 2009, and only to rise slightly to 7,922 in 2010, but nevertheless has been on a fluctuation plan ever since.

The Nigerian stock exchange, all shares index percentage change between 1990 - 2010 is another important indicator of the NSE activities. From the table, it is seen that the NSE all share index frog lead from 513.8 in 1990 to 6440.5 in 1997 dropping to 5266.4 in 1999 as a result of delisting and political crisis.

GDP in the table shows that activity in various sectors of the economy have experience remarkable growth since 1990 – 2006. With the performance in the number of deals, value of shares traded (equities) at the exchange; the economy has been relatively satisfactory. Between 2007 and 2008, the value of shares traded at the capital market does not reflect an increase in the GDP growth rate. Capital generated was not used up effectively for adequate turnover. Consequently, upon in the above, an inference can be drawn that the GDP growth rate will grow in a slow pace if funds are directed to viable ventures that will promote the growth of the economy.

#### **Test of hypothesis**

The study is designed to examine the effect of value of shares on the performance of the Nigerian economy. To establish this relationship other capital market variables are considered. While the value of equity is used as a proxy of the share pricing, other variables considered are industrial bond, government security and market capitalization. The effect of the value of shares on market capitalization is also considered with side the effect of other variables mentioned above, and all share index.

Hypothesis one

This hypothesis is restated thus:

There is no relationship between the value of shares traded on the Nigerian stock exchange and market capitalization.

The model used in investigating the relationship between the values of equity, given other capital market indicators as indicated in the model and market capitalization is shown below.

 $MKC = a_O + a_1 Gs + a_2 1B + a_3 EQ + a_4 AS1 + ut$ 

This model was transformed to natural logarithm to possibly eliminate or diminish the effect of hetero scedasticity errors due to uncalled magnitude of data used in the analysis. Thus the transformed model is presented as:  $Lnmkc = a_0 + a_1 LnGs + a_2 Ln1B + a_3 LnEQ + a_4 LnAS1 + UT$ 

The result of the ordinary least square multiple regression analysis is represented below.

#### Table 2:

Dependent Variable: LOG(MKC)					
Method: Least Squares					
Date: 02/27/12 Time: 00:43					
Sample: 1990 2010					
Included observations: 21					
Variable	Coefficient	Std. Error	t-statistic	Prob	
С	1.258263	0.239209	5.260103	0.0001	
LOG(GS)	0.053376	0.006219	8.583127	0.0000	
LOG(IB)	-0.021343	0.013652	-1.563361	0.1375	
LOG(EQ)	1.090183	0.044699	24.38955	0.0000	
LOG(ASI)	-0.204163	0.053691	-3.802528	0.0000	
R- squared Adjusted	0.999839	Mean dependent var S.D		6.313855	
R- squared S.E of regression sum	0.999799	dependent var Akaike info	2.086044		
squared resid Log likelihood Durbin-	0.029739	criterion Schwarz criterion		-3.988489	
Watson stat	0.014150	F-statistics Prob (F-	-3.739793		
	46.87913	statistics)		24834.85	
	1.690096			0.000000	

Source: Filed work 2012

Lnmkc =1.25 + 0.05 LnGs - 0.02 Ln1B + 1.09LnEQ-0.2LnAs1

t-statistics =  $5.26\ 8.58\ (1.56)\ 24.38\ (3.8)$ 

 $R^2 = 0.9$ , Adjusted  $R^2 = 0.9$ , S.E = 0.02

f-statistic = 24834, Prob (f-statistic) = 0.000000

The model adopted to examine the hypothesis is a good fit. This is shown by the coefficient of determination (Adjusted  $R^2$ ) which is 99%. This implies that 99% of variation in the market capitalization is explained by LNGS, LNIB, LNEQ, LNASI. F statistic is 24834 which shows that the model is statistically significant. This infers that all the explanatory variables simultaneously and jointly influenced the variations in MKC. The model also represents the Durbin Waston statistic of approximately 1.7 this indicates that the model is free from auto- correlation and that the model can Be relied upon.

Log of government security has a weak but positive coefficient of 0.05 and a corresponding t-statistic of 8.58. the critical value of t-alpha at 5% level of significant in explaining LNMKC.

However, the log of industrial bond has a negative coefficient of 0.02 and a negative t-statistic of 1.56 which is not significant in explaining LNMKC.

Log of EQ, the proxy for share pricing yields a positive coefficient of 1.09 and a t-statistic of 24 which is positively significant in explaining market capitalization. All shares index adversely affected market capitalization from the above analysis. We can conclude that the hypothesis that the value of shares traded in the Nigerian stock exchange does not affect market capitalization be rejected affects market capitalization form the above analysis.

We can conclude that the hypothesis that the value of shares traded on the Nigerian stock exchange does not affect market capitalization be rejected.

#### Hypothesis two

The hypothesis that the value of shares traded on the Nigerian stock exchange does not affect economic performance is examined with the use of the model stated below.

 $LnGDP = b_0 + b_1 LnMKC + b_2Ln1B + b_3LnGs + b_4 LnEQ + ut$ The summary of the result of this examination is presented below as:

#### Table 3

Dependent Variable: LOG(MKC)					
Method: Least Squares					
Date: 02/27/12 Time: 00:43					
Sample: 1990 2010					
Included observations: 21					
Variable	Coefficient	Std. Error	t-statistic	Prob	
С	12.30231	0.160740	76.53562	0.0000	
LOG(MKC)	-0.284944	0.413064	-0.689831	0.5002	
LOG(GS)	0.045953	0.021247	2.162789	0.0460	
LOG(IB)	0.094110	0.030091	-3.127508	0.0065	
LOG(EQ)	0.323138	0.381240	0.847597	0.4092	
R- squared Adjusted	0.974514	Mean dependent var S.D		12.88979	
R- squared S.E of regression sum	0.968142	dependent var Akaike info		0.379830	
squared resid Log likelihood Durbin-	0.067795	criterion Schwarz criterion		-2.340406	
Watson stat	0.073538	F-statistics Prob (F-		-2.091710	
	29.57426	statistics)		152.9481	
	1.115525			0.0000000	

Source: Filed work 2012

LnGDP = 12.3 -	- 0.28LNmk	c + 0.04 Ln1B + 0.0	9LnGS + 0.32 L	.nEQ
t- Statistic = 76	(0.68)	2.16	3.12	0.84
std Error0.16	0.	4 0.0	3 0.	.03 0.38

 $R^2 = 0.9$ , Adjusted  $R^2 = 0.9$ , F-Statistic = 152.

Prob (f-statistic) = 0.0000000

Except for the log of market capitalization with a negative coefficient, all the explanatory variables have weak coefficients. However, the industrial bonds and government securities are statistically significant, since they yield t-statistics of 2.16 and 3.12 respectively. There are individually higher than the critical value of t- alpha at 95 level of confidence which is equal to 1.72.

Other independent variables have t-statistics lower than the t-alpha

The goodness of fit of the model is not in doubt with the  $R^2$  equals 97% and the F- statistics of 152 greater than F- alpha = 2.96 obtained from F- distribution at 5% level of significance.

Given that n = 21, the numerator degree of freedom (df) at k = 4 and the denominator degree of freedom (df) = n + (k-1) = 16.

Therefore, the hypothesis that there is no significant relationship between the value of shares and economic performance be rejected. Our confidence in the model is reinforced by the prob (F-statistic) of 0.0000000 which is lower than 0.05 level of confidence.

#### **DISCUSSIONS OF FINDINGS**

In the course of this research study, secondary data which were sourced from various publications of central bank of Nigeria (CBN), statistical bulletin, Annual Report and NSE report. From the forgone analysis, it was discovered that the activity in the Nigerian stock exchange has experience remarkable growth, for instance given a 1% increase in government securities will invariably lead to a 0.05% increase in the market capitalization, and the total output of the countries Gross Domestic product has been improving despite the credit crunch in the market.

The relative importance in the performance was engineered by the infrastructural innovation in the sector, sound economic policies, government incentives and support.

On the whole of the two variables in equation one, value of shares traded on the Nigerian stock Exchange and its market capitalization, it shows that there is a significant relationship between the two variables. Thus an increase in the value of shares, example EQ or GS leads to an increase in the market capitalization as indicated earlier.

However, there was a less relationship between the value of shares traded on the Nigerian stock Exchange and the country's GDP. This can be traced from a number of factors ranging from distortions in trading guidelines, insider dealings and manipulation, and other malpractices. This is why inspite of the large volume of securities traded on the exchange, the economy has not really fared better. The result shows that within the period reviewed, there was an increase in the value of shares traded on the exchange but having less impact on the total output of the Nigeria economy.

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### **Summary:**

The research study examines share pricing and the performance of the Nigerian economy between the period 1990 to 2010. the undertake the study, the researcher had readily stated the research hypothesis based on the major objectives of the study.

To emphasize on the subject matter, chapter two unveil relevant literature relating to the work and chapter three presents the sources of data of which secondary sources (example CBN statistical bulletin and journals) were contacted. Based on the data collected during the research work, regression analysis was used to statistically treat confirm the following.

- (a) The exits positive relationship between values of shares traded on the Nigerian stock exchange and its market capitalization.
- (b) There is less significant relationship between the value of shares traded on the exchange and the Gross Domestic product of the country.

This result is a reflection of the structural rigidities prevailing in the economy which makes the stock market more of an appendage of the government institution rather than a market driven by efficiency through the inter play of the

forces of demand and supply. This is even more pronounced in the non chalant reactions of the stock market index to shocks in the economy contrary to what is obtainable in the development economies.

Again, the government policy of recapitalization offers commercial banks the opportunity of increasing their capital base to  $\frac{1}{25}$  billion. The policy resulted to merger and acquisition, liquidation of some banks. Etc. Although this is crucial to the growth of the economy, veritable sources of funds are therefore jeopardized.

The policy instability and the enabling environment was not conducive and this partly affected the activities of the market and its contribution to the country's Gross Domestic Product.

The results of the research study invariably shows the some serious policy issues will have to be put in place to promote stock market development and stimulate Economic growth.

#### Conclusion

That the stock market promotes Economic growth is not in doubt. It serves as an important mechanism for effective and efficient mobilization and allocation of savings, a crucial function, for an economy desirous of growth. The study attempted to examine the activities of the Nigerian stock Exchange with respect to share prince and the performance of the Nigerian economy between 1990 – 2010 by the use of notable stock market development indicators, the relationship between value of shares traded on the Nigerian stock Exchange and its market capitalization was found to be positive. While its relationship (value of share with Gross Domestic Product had less significance. This suggests that for a significant growth, the focus of government policy should be on measures to promote growth in the stock market. The Nigerian stock market has a bright prospect given the recent policy of government (recapitalization) direction especially the measures or factors that hither to hamper its effective and efficient functioning. Also, the improvement in the infrastructural facilities in the market in line with what is obtained in the developed market and also the present democratic dispensation will all work individually and jointly to propel the prospect of the stock market.

#### Recommendation

The findings from this study raised some policy issues and recommendations which will reinforce link between the stock market and economic growth in Nigeria.

- (1) As a first step, given that the stock market operates in a macro-economic environment, it is therefore necessary that the environment must be an enabling one to realize its full potentials.
- (2) The demand for the services of the stock market is a derived demand, with the existence of a positive relationship between values of shares on the exchange and its market capitalization it is pertinent to recommend that there should be a sustained effort to stimulate productivity in both the public and private sectors,
- (3) The determination of stock price should be deregulated. Market forces should be allowed to operate without hindrance. Interference in security pricing is inimical to the growth of the market.
- (4) The stock market is known as a relatively cheap source of funds when compared to the money market and other sources. The cost of raising funds in the Nigerian market is however regarded to be high. There should be a down ward review of the cost, so as to enhance its competitiveness' and improve the attractiveness as a major source of raising funds.
- (5) Given the present political dispensation, as the tiers of government should be encouraged to fund their realistic developmental programmes through the stock market. This will serve as a lead way to freeing the resources that may be in other sphere of the economy.
- (6) The federal government should beam its anticorruption search light on the capital market.
- (7) Securities and Exchange Commission should continue to encourage the development of rain agencies as a strategy for inspiring confidence and integrity management practice.
- (8) Thought the recent legislation on the stock market have been hailed in many quarters as one of the best thing to happen in the stock market in recent times, there are still some gray areas. For instance, the removal of the double taxation effects on the returns removal of the double taxation effects on the returns of the investors in the stock market must be effected if the market is to develop as envisaged.

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