# Stock Price Movements and the Value of Firms in Nigeria: Theoretical and Empirical Realities

Uduak Bernard Ubom, Ph.D<sup>1</sup>, Emmanuel Ikpe Michael<sup>2</sup>, Sunny Okon Akpan<sup>3</sup> Department of Banking and Finance, University of Uyo, Akwa Ibom State, Nigeria

**Abstract:** This study investigates Stock Price Movements and the Value of firms in Nigeria using secondary data research design and pooled data study approach. Five firms were selected for the study between 2005 and 2015. Data were analysed using Ordinary Least Square (OLS) regression technique. Variables used were Shareholders' Fund (dependent variable), Earnings Per Share, Dividend Per Share, and Return on Shareholders' Funds. EPS shows a positive and significant relationship at Mobil Oil Nig Plc; a positive but non-significant relationship at Niger Insurance, Oando and Flour Mills and a negative and significant relationship at GTBank Plc at 5 percent significance level. DPS shows positively significant relationship at Flour Mills and positively non-significant relationship at GTBank Plc, but a negative relationship across the firms evaluated. Variance Inflation Factor was used to test the model for multicollinearity. Conclusively, firms' value is a function of events and developments in the firms and the environment. The researcher recommends that government and supervisory agencies should intensify efforts towards enhancing products qualities, strict adherence to code of corporate governance and sound and friendly business environments to enhance higher firm's value.

Keywords: Earnings Per Share, Return on Shareholders' Funds, Variance Inflation Factor

## I. Introduction

Stock prices like prices of every other commodity or product is prone to upward and downward movements. The unpredictable nature of the security prices is, in fact, a logical and necessary consequence of efficient capital markets (Pandey, 2014)[1]. Efficient Capital Market implies a well-informed, properly functioning capital market. Stock price determination is based on the thought of two schools – the technicians and the fundamentalists. Technicians estimate security price movements based on past price and volume movements (CFA Institute, 2010)[2]. According to Bodie (1998 and 2009)[3][4], technical analysis is essentially the search for recurrent and predictable patterns in stock prices. According to them, technical analysts are sometimes called chartists because they study records or charts of past stock prices, hoping to find patterns they can exploit to make profit. Technical analysts use a variety of charting techniques. The most popular ones seem to be the Dow Theory, bar and line charts, the point and figure chart, the moving average line, and the relative strength line.

According to Fischer (2003)[5], Hirt (2003)[6], CFA Institute (2010)[2] and Akinsulire (2011)[7] fundamentalists forecast stock prices on the basis of economic, industry, and company statistics. The principal decision variables ultimately take the form of earnings and dividends. The fundamentalists make a judgement of the stock's value with a risk-return framework based upon earning power and the economic environment. Fundamental analysis depends on variables internal to the company, and the corporate financial statements are one way of measuring fundamental value and risk. Financial statement analysis should be combined with economic and industry analysis before a final judgement is made to purchase or sell a specific security.

Also, according to Oxford Advanced Learner's Dictionary[8], value means how much something is worth in money or other goods for which it can be exchanged. In business we are familiar with the word 'Net Worth', which means excess of assets over liabilities. The value of a business is equal to the present value of all future (free) cash flows using the after-tax Weighted Average Cost of Capital (WACC) as the discount rate (BookBoon. Com, 2008)[9].

Pandey, 2014[1] posits that 'value is what an asset is worth today in terms of its potential benefits'. Accordingly, the present value is the most valid and true concept of value. There are many other concepts of value that are used for different purposes. They include; Book value, Replacement value, Liquidation value, Going concern value and Market value (Pandey, 2014)[1].

"Generally, we want to value a company in order to determine the value of its shares or of its equity capital. Broadly speaking, there are two methods for valuing equity capital, the direct method and the indirect method. In the direct method, obviously, we value equity capital directly using Price Earnings (P/E) ratio and Dividend Discount Model (DDM). In the indirect method, we first value the firm as a whole (what we call "enterprise" or "firm" value), then subtract the value of net debt" (Vernimmen, 2005)[10]. In addition, there

are two basic approaches, independent of whether the method is "direct" or "indirect". The fundamental approach of valuing either: a stream of dividends, this is the Dividend Discount Model (DDM); or free cash flows, this is the Discounted Cash Flow (DCF) method. This approach attempts to determine the company's intrinsic value, in accordance with financial theory, by discounting cash flows to their present value using the required rate of return.

The movement of prices in the stock market is among a few phenomena that have cut across the boundaries of academic disciplines and have cumulative research evidence spanning almost a century (Lee, 2001)[1]. Today the field of financial market research seems to be at the exciting stage of "crisis" as past results are being questioned and new solutions are being proposed. There seems to be growing dissatisfaction among academic researchers with the body of literature developed on the assumption of market efficiency of the capital market. Keynesian ideologies on speculative market phenomena are being resurrected to explain the volatile nature of the capital market while only time will tell whether or not the present crisis will lead to a revolution in thought and development of a coherent theory of capital market behaviour. In recent times, the inherent dynamics and high volatility of emerging market like Nigeria have been mirrored profoundly in the gyration of stock prices on the floor of the Nigerian Stock Exchange. The market has exhibited a vagary of movements that have culminated into returns diminutions and capital depreciations across all sectors (Abosede and Oseni, 2011)[2]. But as activities in the capital market continue to nosedive and selling pressures remain high, a section of market participants has attributed the trend to panic and non-availability of accounting information while another camp of analysts opined that exogenous variables (non-accounting information) sparked off by government's loose monetary policies is the formidable cause. However, there are several factors in share price determination in the capital market; these factors are either accounting or non-accounting information (Khanagha, 2011; Cheng, Shamsher, and Annuar, 2008)[3][4].

Historically, market data have always prevailed over accounting data when it comes to identifying the factors that affect stock prices (Glezakos, Mylonakis and Kafouros, 2012)[5]. They further opined that in the latest years, an increasing number of empirical studies indicated that the financial statements of enterprises contain certain parameters that play a critical role in the course of their respective equities in the capital market. This finding was not unexpected since after 2000 the International Accounting Standards (IAS) was improved and established across the world. Therefore, the information offered to all users of accounting information and investors are now more accurate and enlightening than ever before especially with the transition to International Financial Reporting Standards (IFRS) by many countries of the world. Hendriksen and Van-Breda, (1992)[6] asserted that the main reason for which accounting information is generated is to facilitate decision making. However, for financial reporting to be effective, among other requirements, it must be relevant, complete and reliable. These qualitative characteristics require that the information must not be unfair nor has predisposition of favouring one party over the others. Accounting information should therefore give a decision maker the capacity to predict future actions. It should also increase the knowledge of the users to identify similarities and differences in the information provided. Therefore, reliable accounting information can be described as an essential pre-requisite for capital market growth. Based on the "engine of economic growth" potential of the capital market, developed nations do not toy with their capital markets and financial reporting.

The issue that the paper is investigating is a general one. That is, stock price movements and the value of firms in Nigeria. It becomes general because from the point of view of the technicians and fundamentalists, stock price movements can be traced to the past, the economy, the industry and/or the company itself. Meanwhile, Efficient Market Hypothesis (EMH) holds that stock prices reflect all available information in the market and that no one can overtake the market to earn abnormal return. Already, there is a dilemma as to which school to follow. The researcher at this point intends to analyse, in line with some empirical works available, how stock price movements affect the value of some listed companies in Nigeria using some company specific variables. It is clear that these variables are not the same for all the companies studied, the reason being that some psychological or subjective factors including quality of management, company's reputation/goodwill, industry of operation, quality of product and other risk factors and determinants vary from company to company.

The main and sole objective of this paper is to analyse the theoretical and empirical realities of stock price movements and the value of five (5) listed companies in Nigeria. The firms are; Niger Insurance Plc, Oando, Flour Mills of Nigeria, Mobil Oil Nigeria Plc, and GTBank Plc.

This paper is meant to establish if there is any relationship between stock price movements and firms' value in Nigeria. Therefore, the hypothesis to be tested is hereby stated in the null form: There is no significant relationship between stock price movements and firms' value in Nigeria.

This study is organised into five sections – introduction; literature review; methodology; results and discussion and conclusion and recommendations

## **II.** Literature Review

In this section, existing literature on stock price movements and the value of firms will be examined under theoretical, conceptual and empirical literature.

### 2.1 Theoretical Review

Here, theories of share values and the Efficient Market Hypothesis (EMH) will be discussed. There are three basic theories of how shares are valued on the stock market. They are:

- i) The Traditional Theory also known as The Fundamental Theory
- ii) The Technical Theory also known as The Chartist Theory, and
- iii) The Random Walk Theory (Akinsulire, 2011)[7].

#### 2.1.1 The Traditional/Fundamental Theory:

The theory states that, at any point in time a share has an intrinsic value which is the discounted present value of the expected future cash receipts from the share.

 $Mv = \frac{d}{Ke}$  where dividend is expected to be constant

Mv =

 $\frac{do (1+g)}{Ke-g}$  where there is growth in dividend

Where: Mv = Market price of share

- d/do = dividend payable
- g = growth rate
- Ke = shareholders cost of capital

The expectation of future receipts may relate to:

- i) Past results of the company
- ii) Ratio analysis of the latest published accounts.
- iii) Future plans or expectations of the company, possibly as a result of published statements (e.g. the company's reports).
- iv) Influences affecting the economy or industry as a whole.

As investors expectations about future earnings change, the intrinsic value of the shares, and therefore their market price, moves up or down.

### 2.1.2 The Technical/Chartist Theory:

This states that future patterns of share prices are repetition of the same pattern of price movements which has occurred in the past. That is, historical price patterns are repeated in the future. The proponents of this theory believe that share prices/values can be measured in the following ways:

- i) Primary trends shows the upward or downward movement of share prices over a year or more.
- ii) Secondary trends show the fluctuations over about a month.
- iii) Tertiary trends shows fluctuations over a period of days.

Chartists do not attempt to explain the justification of this theory, except by pointing to the empirical evidence of its correctness.

i) 2.1.3 Random Walk Theory: William F. Sharpe, Michael Jensen and Eugene Fama – the protagonists of this theory, believe that the new market price of a share relates to expectations about the future (thereby arguing against technical theory but consistent with fundamental theorists) but that investors will have different ideas about the future expectations of a business. New information affecting these expectations arises at random intervals, and because investors react to it in different ways, the new share price may be any of a number of possible new values. Share values may deviate around an intrinsic value, but they will not equal an intrinsic value (Akinsulire, 2011)[7].

### 2.2 Conceptual Review

Here, the concept of share or equity values and enterprise value will be considered. Share values include the concept of Book Value, Replacement Value, Liquidation value, Going Concern Value and Market Value.

**2.2.1 Book Value:** Book value is an accounting concept. Assets are recorded at historical cost, and they are depreciated over years. Book value may include intangible assets at acquisition cost minus amortized value. The book value of debt is stated at the outstanding amount. The different between the book values of asset and liabilities is equal to shareholders' funds or net worth. Book value per share is determined as net worth divided by the number of shares outstanding. Book value reflects historical cost, rather than value.

**2.2.2 Replacement Value:** Replacement value is the amount that a company would be required to spend if it were to replace its existing assets in the current condition. It is difficult to find cost of assets currently being used by the company. Replacement value is also likely to ignore the benefits of intangibles and the utility of existing assets. It is also known as substantial value.

**2.2.3 Liquidation Value:** Liquidation value is the amount that a company could realise if it sold its assets, after having terminated its business. It would not include the value of intangibles since the operation of the company are assumed to cease. Liquidation value is generally a minimum value which a company might accept it sold its business.

**2.2.4 Going Concern Value:** Going concern value is the amount that a company could realize if it sold its business as an operating business. Going concern value would always be higher than the liquidation value, since it reflects the future value of assets and value of intangibles.

**2.2.5 Market Value:** Market value of an asset or a security is the current price at the asset or the security is being sold or bought in the market. Market value per share is expected to be higher than the book value per share for profitable, growing firms. A number of factors influence the market value per share and therefore, it shows wide fluctuations. What is important is the long-term trend in the market value per share. In ideal situation, where the capital markets are efficient and in equilibrium, market value should be equal to present (or intrinsic) value of a share.

**2.2.6 Enterprise Value:** As operating assets are financed by equity and net debt (which are accounting concepts), a company's enterprise value will consist of the market value of net debt and the market value of equity (which are financial concepts).

Enterprise value = Value of net debt + Equity value Important.

Enterprise value is sometimes confused with equity value. Equity value is the enterprise value remaining for shareholders after creditors have been paid. To avoid confusion, remember that enterprise value is the sum of equity value and net debt value. We refer to the market value of operating assets (industrial and commercial) as "enterprise value", which is the sum of the market value of equity (i.e., the company's market capitalisation if it is publicly traded) and the market value of net debt. Enterprise value and firm value are synonyms.

### 2.3 Empirical Review

This segment examines empirical works undertaken by other researchers in the area of price movements and firm or enterprise value.

Malaolu, Ogbubor and Orji (2013)[7] examined the macroeconomic determinants of stock price movements in Nigeria using detailed econometric framework in order to provide the foundation for evidencebased policies. Both the long-run and short run dynamic relationships between the stock price movement and the macroeconomic variables were analyzed with time series data that spanned from 1985 to 2010 using the Engle-Granger two-step co-integration test. We established that there is no co-integration between the variables, indicating the absence of long run relationship. Results of the regression indicate that the monetary policy variables (real exchange rate, real interest rate and money supply) as well as political instability are not the determinants of stock price movements in Nigeria; however, inflation was found to be a major determinant of stock price movements. The study recommends that the monetary authorities (that is the Central Bank of Nigeria, CBN) and policy makers should pay attention to changes in money supply and inflation in view of their sensitivity to stock price movements in Nigeria.

McConnel and Servaes (1990)[8] investigated the relation between Tobin's Q and the structure of equity ownership for a sample of 1,173 firms for 1976 and 1,093 firms for 1986. They found a significant curvilinear relation between Q and the fraction of common stock owned by corporate insiders. The curve sloped upward until insider ownership reaches approximately 40% to 50% and then sloped slightly downward. They also found a significant positive relation between Q and the fraction of shares owned by institutional investors. The results are consistent with the hypothesis that corporate value is a function of the structure of equity ownership.

Akinde (2015)[9] examined the link between series of stock market fundamental and the proxy of real national development in Nigeria. Time series data collected from the fact book of Nigerian Stock Exchange and Central Banks of Nigeria's Statistical Bulletin from 1980-2013 were used. He used Error Correction Model and carried out Granger Causality test. He established a significant positive relationship between the explanatory variables and explained variable at 5% confidence interval. He recommended that government should take the issue of eliminating corruption, and particularly insiders' abuse related cases and that corporate governance issues in the market should be taken seriously in order to ensure that the market becomes more productive and represents real agent of economic development like it is in the stock market of developed nations of the world.

Lawal and Okinola (2012)[10] examined stock prices, stock market operations and economic growth in Nigeria using time series from 1980-2010 with the adoption of granger causality modelling to test the direction

of granger relationship among the variables. Augmented Dickey Fuller methodology was adopted to test for the stationary of the data used and Error Correction Modelling was adopted. The study showed that the present value of stock price adjust rapidly to changes in interest rate, inflation rate, exchange rate, broad money supply, gross domestic product, market capitalisation and volume of transaction of the Nigeria stock exchange. The lagged value of Error correction model given as 23.9% indicates a feedback of or an adjustment of 23.9% from the previous period disequilibrium of the present level of stock price in the determination of causality between the past level of stock price and the present and past level of the explanatory variables. The study concluded that the activities of the stock market are statistically significant with the stock prices and economic growth. They recommended that stock prices should be monitored as to prevent volatility in the prices which could drastically affects the performance of the stock exchange market.

Inyiama & Nwoha (2014)[11] examined the relationship between macroeconomic variables and the movement of share prices in Nigeria brewery industry, with emphasis on Nigeria Breweries Plc; the largest beer producing brewery firm in Nigeria. The level of association of the variables was validated using the ordinary least squares method, modeled in form of multiple regression. Granger causality method was applied to examine the causality relationship among the variables in the short run. Augmented Dickey- Fuller (ADF) test was conducted on all the variables, complemented with the Phillips-Perron's (PP) test for unit root to check for data serial correlation. All the variables except interest rate had the data series differenced at second difference as a result of their unit root issues. Interest rate was however differenced at level and intercept. The result indicated a positive but insignificant relationship between share price and inflationary rate, real GDP and exchange rate while a negative and insignificant relationship was found between share price and interest rate as only 13% of the variables are positive but largely weak. Granger causality test revealed no causal relationship between share price and interest rate in the short run. They recommended that macroeconomic variables should be seriously considered in setting monetary and fiscal policies because of its multiplier effect on the economy.

Islam, Khan, Choudhury & Adnan (2014)[12] attempted to provide empirical evidence on how EPS affect the share price movement. They collected and analyzed 22 scheduled banks 110 firms year data and found that share price does not move as fast as the EPS move. They also further found that the share price movement depends on micro and macro economic factors on the economy. We suggest that investors must consider other factors as well as EPS in order to invest in the security market.

Mbutor (2010)[13] in order to probe the global economic crisis of 2008, in the face of so many macroeconomic maladjustments unfolded in the Nigerian economy; studied empirically to find answers to these questions. The vector auto regression (VAR) methodology was applied, treating the data series for temporal properties unit roots and co-integration. The impulse response function and the analysis of variance were used to filter the effects of the included variables on bank loans, while the Engel Granger causality confirmed the lines of causation among exchange rate volatility, equity prices and bank loans. Preliminary evidence show that exchange rate volatility and equity price fluctuations affected the behaviour of banks in Nigeria but that the effects were insignificant and that the fluctuation of the stock index caused the naira to depreciate and there was no reverse causality. Changes in bank loans also led to equity price fluctuations and again, there was no evidence of reverse causality.

Oloidi and Bolade (2015)[14] analyzed the major variables that determine the equity share price of listed companies on the Nigerian Stock Exchange [NSE] publication as at 2011/2012 edition. Eighty companies were examined. The quoted price of the shares on 4th January 2011 was estimated by other explanatory variables. OLS regression technique was used to analyse cross-sectional data. Findings revealed that the previous year share price significantly and positively influenced equity share price at  $\alpha$ =0.000 and earnings per share was negatively significant at  $\alpha$ =0.05. Also revealed was that dividend per share positively and significantly influenced equity share price at  $\alpha$ =0.014. The combined three variables explained the variation in equity share at an adjusted R – square value of 0.969. This showed that about 97 percent of the determinants of equity share price had been explained by these three explanatory variables.

According to Stephen & Okoro (2014)[15], Stock prices serve as the basis for the assessment of whether a firm is breaking even or not. These prices are relevant metrics of returns to stakeholders, therefore the value attached to them matters so much to both existing and prospective investors in the capital market. In view of the above, they examined by a means of robust analysis, factors that determine stock price movement in Nigeria for the period 2001 – 2011. They sourced data from the financial statements of 99 listed firms in the Nigerian Stock Exchange. The analysis of the data sourced was done with the Ordinary Least Square (OLS) method. The results suggest that earnings per share, book value per share and dividend cover serve as factors in the determination of stock prices. They recommended that government and policy makers in Nigeria should implement more stringent rules, backed up by legislations that will enhance the information reported in the financial statements of firms listed on the Nigeria Stock Exchange as well as compelling listed firms to adopt

IFRS. Also, that the accounting information reported in the capital market should constantly reposition itself in response to changing expectations. This implies that it should be viewed as an open system and in other words, feedback both from within and outside its environment should drive the constant repositioning of accounting information.

### **III.** Methodology

The study adopts secondary data research design. It uses descriptive and inferential approach to report the results of the study. Data used for the study are secondary in nature and were obtained from various editions of annual reports and accounts of the five (5) companies studied between 2005 and 2015 and the Nigerian Stock Exchange 2012/2013 FactBook[11]. The companies studied were; Niger Insurance, Oando, Flour Mills Company of Nigeria, Mobil Oil Nigeria Plc, and GTBank Plc. They were selected because they were the only companies with the required data coupled with the timing of the study and mainly because of non-uniformity in the preparation of financial statements. The researcher observed that because of the intention to make some information secret, some companies financial reports do not provide information that would enhance the computation of some inexplicit statistics.

### 3.1 Model Specification

The study employs the Ordinary Least Square (OLS) regression technique to analyse the relationship between firm value proxied with shareholders funds and stock price movements. The following model was specified to assess the relationship. In the model, Shareholders' Funds or otherwise called Equity is expressed as a function of Earnings Per Share (EPS), Dividend Per Share (DPS) and Return on Shareholders' funds (ROSHF).

The functional form of the model is: SHF = f (EPS, DPS, ROS)

| 7 | = f (EPS, | DPS, | ROSHF) |
|---|-----------|------|--------|
|   | (+)       | (+)  | (+)    |

| Where SHF      | = Shareholders' Funds    |
|----------------|--------------------------|
| EPS            | = Earnings per Share     |
| DPS            | = Dividend per Share     |
| ROSHF = Return | n on Shareholders' Funds |
|                |                          |

The econometric model for the research is set explicitly as follows:

| $SHF = B_0 + B_1EF$ | $PS + \beta_2 DPS + \beta_3 ROSHF + \mu$ |
|---------------------|--|
| ßo                  | <sub>=</sub> Constant                    |
| $\beta_1 EPS$       | = Earnings per Share                     |
| $\beta_2 DPS$       | = Dividend per Share                     |
| ₿₃ROSHF             | = Return on Shareholders' Funds          |
| μ                   | = Error term                             |

A Priori Expectations: The operators/signs in parentheses represent a priori expectations about the coefficients of the variable above it.

### 3.2 Model Diagnosis/Diagnostic Tests

Model diagnosis is the process of analysing the quality of the model constructed by determining how well the specified model fits the data gathered (Groebner, Shannon, Fry & Smith, 2011)[12]. In order to attain this, a careful approach to selecting the independent variables is adopted. A general rule is if the correlation between two independent variables is between -0.70 and 0.70 there likely is not a problem using both of the independent variables. A more precise test is to use the variance inflation factor (VIF). The value of VIF is found as follows:

$$VIF = \underbrace{1}{1 - Rj^2}$$

The term  $Rj^2$  refers to the coefficient of determination where the selected independent variable is used as dependent variable and the remaining independent variables are used as independent variables.

### 3.3 Decision Rule

A general rule is if the correlation between two independent variables is between -0.70 and 0.70 there likely is not a problem using both of the independent variables (Groebner et al, 2011)[12]. A VIF greater than 10 is considered unsatisfactory, indicating that the independent variable should be removed from the analysis (Lind, Marchal and Wathen, 2010)[13].

| Table 4.1: Data Used For The Study |                                |            |        |          |  |
|------------------------------------|--------------------------------|------------|--------|----------|--|
|                                    | NIGER INSURANCE PLC            |            |        |          |  |
|                                    | SHF                            | EPS        | DPS    | ROSHF    |  |
| 2005                               | 5,487,465.00                   | 11.00      | 12.00  | 5.10     |  |
| 2006                               | 6,383,566.00                   | 12.53      | 15.00  | 9.02     |  |
| 2007                               | 5,622,942.00                   | (2.92)     | 5.00   | 11.63    |  |
| 2008                               | 1,975,413.00                   | (51.85)    | 5.00   | (7.71)   |  |
| 2009                               | 4,432,632.00                   | (43.21)    | 5.00   | (50.83)  |  |
| 2010                               | 2,976,216.00                   | (2.27)     | -      | (3.99)   |  |
| 2011                               | 5,266,951.00                   | 8.00       | 2.50   | 43.80    |  |
| 2012                               | 7,086,967.00                   | 6.07       | 2.50   | 6.63     |  |
| 2013                               | 7,881,587.00                   | 7.75       | 2.50   | 7.61     |  |
| 2014                               | 7,945,647.00                   | 6.96       | 3.50   | 6.78     |  |
| 2015                               | 8,225,282.00                   | 7.35       | 3.50   | 6.92     |  |
|                                    | OANDO                          |            |        |          |  |
|                                    | SHF                            | EPS        | DPS    | ROSHF    |  |
| 2005                               | 21,190,995.00                  | 240.00     | 312.00 | 6.49     |  |
| 2006                               | 22,113,920.00                  | 411.00     | 250.00 | 10.64    |  |
| 2007                               | 44,713,575.00                  | 751.00     | 362.00 | 5.97     |  |
| 2008                               | 33,218,522.00                  | 922.00     | 600.00 | 19.10    |  |
| 2009                               | 35,079,844.00                  | 1,132.00   | 300.00 | 13.29    |  |
| 2010                               | 58,020,896.00                  | 829.00     | 300.00 | 9.31     |  |
| 2011                               | 55,557,777.00                  | 162.00     | 300.00 | 2.47     |  |
| 2012                               | 57,454,856.00                  | 126.00     | 239.00 | 7.62     |  |
| 2013                               | 106,089,751.00                 | 23.00      | 30.00  | 2.22     |  |
| 2014                               | 28,302,230.00                  | (2,076.00) | 30.00  | (361.81) |  |
|                                    | FLOUR MILLS OF NIG PLC         | 550        | 550    | DOGUE    |  |
| 2005                               | SHF                            | EPS        | DPS    | ROSHF    |  |
| 2005                               | 5,261,612.00                   | 141.00     | 112.00 | 33.07    |  |
| 2006                               | 10,770,073.00                  | 112.00     | 85.00  | 12.11    |  |
| 2007                               | 13,785,283.00                  | 259.00     | 120.00 | 21.87    |  |
| 2008                               | 21,951,793.00                  | 278.00     | 100.00 | 19.70    |  |
| 2009                               | 22,000,239.00                  | 795        | 30.00  | 10.80    |  |
| 2010                               | 55,564,765.00<br>42,062,788,00 | 527        | 200.00 | 37.79    |  |
| 2011                               | 70 405 468 00                  | 251        | 200.00 | 24.00    |  |
| 2012                               | 02 601 111 00                  | 272        | 200.00 | 0.11     |  |
| 2013                               | 92,001,111.00                  | /38        | 200.00 | 9.11     |  |
| 2014                               | 96,545,111.00                  | 92.00      | 210.00 | 2.81     |  |
| 2013                               | MOBIL OIL NIG PLC              | 92.00      | 210.00 | 2.01     |  |
|                                    | SHE                            | FPS        | DPS    | ROSHE    |  |
| 2005                               | 3 305 081 00                   | 1.008.00   | 910.00 | 73 30    |  |
| 2005                               | 2 833 678 00                   | 714.00     | 714.00 | 60.56    |  |
| 2000                               | 2 248 348 00                   | 471.00     | 470.00 | 50.31    |  |
| 2008                               | 2 837 062 00                   | 622.00     | 500.00 | 60.58    |  |
| 2009                               | 4 176 545 00                   | 946.00     | 700.00 | 68.05    |  |
| 2010                               | 5 958 683 00                   | 1293       | 960.00 | 65.21    |  |
| 2011                               | 4 497 588 00                   | 1249       | -      | 90.76    |  |
| 2012                               | 6,589.968.00                   | 856        | 500.00 | 43.68    |  |
| 2012                               | 9.537.631.00                   | 965        | 600.00 | 36.50    |  |
| 2014                               | 13,549,450.00                  | 1773       | 660.00 | 47.18    |  |
| 2015                               | 15,363,401.00                  | 1351       | -      | 31.72    |  |
| -                                  | GTBANK PLC                     |            |        |          |  |
|                                    | SHF                            | EPS        | DPS    | ROSHF    |  |
| 2005                               | 36,168,036.00                  |            |        | 14.74    |  |
| 2006                               | 40,645,542.00                  | 145.00     | 70.00  | 21.35    |  |
| 2007                               | 47,433,188.00                  | 163.00     | 103.00 | 27.43    |  |
| 2008                               | 161,053,064.00                 | 185.00     | 70.00  | 17.43    |  |
| 2009                               | 188,475,788.00                 | 127.00     | 100.00 | 12.65    |  |
| 2010                               | 205,167,807.00                 | 163.00     | 100.00 | 17.80    |  |
| 2011                               | 235,911,423.00                 | 177.00     | 100.00 | 21.61    |  |
| 2012                               | 286,539,451.00                 | 2.90       | 100.00 | 29.76    |  |
| 2013                               | 324,289,258.00                 | 2.91       | 100.00 | 26.38    |  |
| 2014                               | 359,912,076.00                 | 3.03       | 100.00 | 24.78    |  |
| 2015                               | 405,608,348.00                 | 3.35       | 100.00 | 23.25    |  |

# IV. Results And Discussion

|                            | R - Squared |          |             |               |            |
|----------------------------|-------------|----------|-------------|---------------|------------|
| VARIABLES                  | NIGER       | OANDO    | FLOUR MILLS | MOBIL OIL NIG | GTBANK PLC |
|                            | INSURANCE   |          |             | PLC           |            |
| EPS with other variables   | 0.955261    | 0.564670 | 0.643682    | 0.467444      | 0.377385   |
| VIF                        | 22.35186303 | 2.297108 | 2.806482    | 1.877737      | 1.606129   |
| DPS with other variables   | 0.958306    | 0.558287 | 0.509142    | 0.692920      | 0.174139   |
| VIF                        | 23.98426632 | 2.263913 | 2.037249    | 3.25648       | 1.210858   |
| ROSHF with other variables | 0.488762    | 0.679031 | 0.455468    | 0.602313      | 0.326654   |
| VIF                        | 1.956036132 | 3.115566 | 1.836439    | 2.51454       | 1.485121   |

 Table 4.2: Computed Coefficient of Determination (R<sup>2</sup>) for Independent Variables And Variance Inflation

 Factor (VIF)

Source: Students Computed Results

 Table 4.3 below shows summary of the regression results for the model estimated for the different companies

| VARIABLES          | NIGER     | OANDO     | FLOUR MILLS | MOBIL OIL | GTBANK PLC |
|--------------------|-----------|-----------|-------------|-----------|------------|
|                    | INSURANCE |           | OF NIG PLC  | NIG PLC   |            |
| С                  | 6155528.  | 83144300  | 15689907    | 7389877.  | 3.19E+08   |
| EPS                | 448422.7  | 2993.249  | 22732.06    | 8185.656  | -1320334.  |
| DPS                | -353722.0 | -93452.86 | 423626.0    | -1812.744 | 2227428.   |
| ROSHF              | -80184.82 | -997886.0 | -2228798.   | -149118.8 | -7868049   |
| R-SQUARED          | 0.767520  | 0.439138  | 0.918687    | 0.983692  | 0.737742   |
| ADJ R <sup>2</sup> | 0.535039  | 0.102621  | 0.883839    | 0.973907  | 0.606613   |
| F – Stat           | 3.301441  | 1.304952  | 26.36242    | 100.5321  | 5.626075   |
| PROB.              | 0.176416  | 0.369792  | 0.000345    | 0.000069  | 0.035348   |
| D-W                | 1.787546  | 1.116895  | 2.226110    | 2.747593  | 2.099552   |
| AIC                | 30.37902  | 37.17758  | 35.82306    | 29.77693  | 39.44768   |
| SIC                | 30.34812  | 37.26523  | 35.96775    | 29.86459  | 39.56871   |

Source: Computed Results of Eviews 3

In line with the general rule which says that if the correlation between two independent variables is between -0.70 and 0.70 there likely is not a problem of multicollinearity, it becomes evident that using VIF, there is no problem of multicollinearity among the variables chosen for the research except at Niger Insurance where EPS and DPS exhibited multicollinearity. This, the researcher believes is due to the nature of figures generated from that firm. With these results, it therefore means that the model constructed fits the data used for the research.

Three variables each were used to analyse the relationship between stock price movements and the firm's value surrogated with shareholders' funds. Determinants of stock prices used in the study are earnings per share, dividend per share and return on shareholders' funds. From table 4.3 above, the coefficient of determination (R-Squared) which indicates the explanatory power of the independent variables is 76.75% at Niger Insurance, 43.91% at Oando, 91.87% at Flour Mills, 98.34% at Mobil Oil and 73.77% at GTBank Plc. It is quite clear here that R<sup>2</sup> is least (below 50%) at Oando.

Earnings per share shows a positive and significant relationship at Mobil Oil Nig Plc; a positive but not significant relationship at Niger Insurance, Oando and Flour Mills and a negative and significant relationship at GTBank Plc at 5 percent level of significance. This negative relationship violates the a priori expectation which gave it a positive relationship but is supported by Oloidi (2015)[13].

Dividend per share shows positively significant relationship at Flour Mills and positively insignificant relationship at GTBank Plc. Oloidi (2015)[13] collaborates this position. It shows a negatively insignificant relationship at Niger Insurance, Oando, and Mobil Oil Nig. Plc. The negative relationship contradicts the a priori expectation of the study which put it at positive. However, dividend per share only shows a significant relationship with Flour Mills Plc at 5 percent significance with P-Value of 0.0035.

Return on Shareholders' Funds showed a negative relationship throughout the five companies evaluated. This completely contradicts the a priori expectation of the study. Meanwhile, it shows a significant relationship with Flour Mills and Mobil Oil Nig. Plc.

Durbin-Watson statistic of 1.787546 at Niger Insurance; 2.226110 at Flour Mills and 2.099552 at GTBank Plc suggests the absence of serial correlation while that of Oando (1.116895) and Mobil Oil (2.747593) suggest either too few or too many variables in the model. Meanwhile, using VIF, there is no problem of multicollinearity among the variables chosen for the research except at Niger Insurance where EPS and DPS exhibited multicollinearity and that was traced to the data gathered from that firm.

#### V. Conclusion And Recommendations

This study empirically investigates Stock Price Movements and the Value of Firms in Nigeria with bias to their theoretical and empirical realities. This is a pooled data study as the study has both time series and cross section data characteristics. Five firms comprising two from financial services sector - Niger Insurance & GTBank Plc, two from Oil and Gas downstream sector - Oando and Mobil Oil Nig Plc and one from manufacturing sector - Flour Mills Nig Plc were studied. Data for the period spanning 2005 & 2014 for Oando and 2005 & 2015 for Niger Insurance, Flour Mills Nig Plc, Mobil Oil Nig Plc and GTBank Plc were used.

It becomes empirically and theoretically evident that stock price movements influence the value of the firm. Besides, stock price trend and fundamentals in addition to macroeconomic and psychological factors influence the value of a firm.

The researcher recommends that government and supervisory agencies should intensify efforts towards enhancing products qualities, strict adherence to code of corporate governance and sound and friendly business environments in order to win confidence of investors thereby enhancing positive stock price movements and consequently, a higher firm's value.

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