

## Accrual Accounting and Share Price of Listed Companies in the Consumer Goods Sector

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### ABSTRACT

*This study examined the association between accrual accounting information and share price of companies listed in the Nigerian Stock Exchange under the consumer goods sector. The study adopted market price per share (MPS) as proxy for share price and the dependent variable while book value per share (BPS) and Earnings per share (EPS) where the accrual accounting data used as the independent variables. Secondary data was collected through content analysis of the published annual financial statements of six randomly selected companies in the consumer goods sector from 2008 to 2017. The study employed descriptive statistics and linear regression analysis for data analysis. The results of the study revealed that book value per share (BPS) has no significant effect on market price per share while market price per share (MPS) is significantly affected by earnings per share (EPS). The study recommended among others that companies should adopt policies that will ensure that book values of assets and liabilities are accurate and reliable.*

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*Keywords: accrual accounting, book value per share, earnings per share, market price per share.*

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### INTRODUCTION

The primary objective of financial statement is to provide financial information to a large range of users to enable them make relevant economic decision. As such, listed companies use financial statements as one of their major tools for communicating accounting information to their shareholders and the general public at large (Nassar, Uwuigbe, Uwuigbe & Abuwa, 2014).

The usual basis of preparing financial statements is the accrual accounting basis. Under this basis, the statement of financial position provides information about the assets, liabilities and net book values of companies while the statement of profit or loss and other comprehensive income provide information on the financial performance and earnings of the firm. These information are required by present and prospective investors in the valuation of firms and in making vital investment decisions (Oyerinde, 2011).

A lot of studies have been carried out on the value relevance of accrual accounting in the valuation of firms and yet there is no generally accepted opinion or agreement on the subject area. This study is therefore aimed at investigating empirically, the value of relevance of accrual accounting on the valuation of firms. The specific objectives of the study were to examine the relationship between book value per share and market price per share and ascertain the relationship between earnings

per share and market price per share. These specific objectives formed the basis of the research questions addressed and hypothesis tested in the study.

## **REVIEW OF RELATED LITERATURE**

### **Conceptual Review**

#### **Accrual Accounting**

Accrual accounting measures the performance and position of a company by recognizing economic events regardless of when cash transaction occurs. The general idea is that economic events are recognized by matching revenues to expenses at the time in which the transaction occurs rather than when payment is made or received. This method allows the current cash inflows or outflows to be combined with future expected cash inflows or outflows to give a more accurate picture of a company's current financial position and performance.

The published financial statements prepared on accrual basis are all purpose statements which produce quantitative information about the performance, progress and position of the business. These financial statements are provided primarily for shareholders to enable them make informed judgment and decisions. According to Scott (2003), accounting information is value relevant if it leads investors to uphold or change their beliefs and actions, and in order to be relevant accounting information must among others, get to the users on time.

#### **Book Value Per Share (BPS)**

Book value per share compares the amount of stockholders' equity to the number of shares outstanding. If the market value per share is lower than the book value per share, then the stock price may be undervalued. Thus this measure is a possible indicator of the value of a company's stock and is usually used by investors who are evaluating the price of a company's shares.

If book value per share is calculated with just ordinary shares in the denominator, then it results in a measure of the amount that an ordinary shareholders would receive upon liquidation of the company.

The formula for book value per share is to subtract preferred shares from shareholders' equity and divide by the average number of shares outstanding.

#### **Earnings Per Share (EPS)**

Earnings per share is the amount of current period earning or profit or loss attributable to a unit of ordinary share. Earnings per share of a business performance as the net income figure takes into account both the results of the company's operations and the effect of financing (Seetharaman & Raj, 2011) There are two arguments regarding the predictive power of earnings per share on share prices. One group argues that share prices go up and down as this can be observed in a situation when there is good news or higher earnings per share reports, the share price of the company goes up, but if there is bad news, the price goes down. In contrast, the other group argues that earnings per share cannot be used to determine the market price of shares (Umar & Musa, 2013).

## **THEORETICAL FRAMEWORK**

### **Ohlson Clean Surplus Theory**

This study is anchored on the Ohlson Clean Surplus Theory. The Ohlson Clean Surplus theory is also known as the residual income valuation model (RIVM). The theory postulates that the market value of the firm can be expressed in terms of balance sheet and income statement components (Scott, 2003). The Ohlson Clean Surplus theory specifies the predictive power of accounting variables such as book values and earnings over share prices. Ohlson (1995) advocates that as long as forecasts of book values and earnings follow clean surplus theory, share prices should be

determined by book values and discounted future abnormal earnings. Based on the ideas of Ohlson (1995), a model was developed to express the market value of a firm security as a function of its book value of shareholders equity and its current level of earnings (King & Langli, 1998).

$$MPS = f(BV, EPS)$$

Where MPS represents market price per share, BV represent book value per share and EPS represents earnings per share.

In order to examine the relationship between value relevance of financial statement and share prices of firms a modified Edwards Bell Ohlson (EBO) equation was adopted by Maska (2001) as follows:

$$SP = B_0 + B_1 BVPS + B_2 EPS + e$$

Where SP is the share prices of firms, BVPS represents book value per share, EPS denotes earnings per share,  $B_0$  represent the interact,  $B_1$  and  $B_2$  represent the coefficient of the predictive variables while e denotes the error term of the equation.

## Empirical Review

Using data obtained from Excel Financial Company Analysis over the period 1988 to 2005, covering firms listed in the London Stock Exchange, Aleksanyan (2007) found that for firms that trade at a premium to book value, earnings and book values has no significant relationship to the market value of the firm. But for firm trading at a discount to book value, earnings and book values have no significant relationship to the market value of the firm.

Nwaobia, Ogundajo and Kwarba (2016) conducted a study on value relevance of accounting information and share prices using ordinary least square and ANOVA test and found that there was no significant difference of accounting information prior to and after the adoption of IFRS. They finally concluded that financial information from SAS or IFRS has no significant influence on the firm's value.

Eriabie and Egbidi (2016) in their study on accounting information and share prices in the food and beverage sub-sectors of the Nigerian Stock exchange used the Ohlson (1995) model and the multiple regression method. Form their findings, market price per share is positively and significantly related to both book value per share while earnings per share is not significantly related to market price per share.

Omokhudu and Ibadan (2015) carried out a study on the value relevance of accounting information using the ordinary least square and dynamic model estimation. The study found that earnings, cash flows and dividends were statistically and significantly related to the firm value but that book value has no significant relationship with the firm value.

## METHODOLOGY

### Research Design

The research design employed in this study is the ex-post facto research design. The ex-post facto determines the cause-effect relationship among variables.

### Population of The Study

The population of the study consists of the twenty-one (21) consumer goods companies listed in the Nigerian Stock Exchange from 2008 to 31<sup>st</sup> December, 2017.

### Sample Size and Sampling Method

The sample size of this study consists of six (6) listed consumer goods companies. These are seven-up Nigeria Plc, Flour Mills Nigeria Plc, Nestle Nigeria Plc, Nigerian Bottling Company Ltd,

Cadbury Nigeria Plc and Union Dicon Salt, Plc. The study used simple random sampling technique to select the six companies.

### Data Sources and Variables

This study made use of secondary data extracted from published annual financial statements of the selected companies from 2008 to 2017.

The variables for this study are market price per share (MPS) used as the dependent variable and proxy for valuation; while book value per share (BPS) and earnings per share (EPS) are adopted as the independent variables representing dimensions of accrual accounting information.

### Techniques of Data Analysis

The ten years data collected from each of the six companies making a total of sixty (60) observations for each of the variables are analysed with the aid of the statistical package for social sciences (SPSS) version 20 using descriptive statistics and multiple regression analysis.

### Model Specification

For the purpose of this study, the following model was adopted:

$$MPS = f(BPS, EPS).$$

This is expressed in equation form as follows:

$$MPS = a_0 + a_1BPS + a_2EPS + e$$

Where MPS = market price per share

$a_0$  = Constant or intercept (i.e. the value of MPS when other variables are equal to 0.

$a_1$  = Coefficient of book value per share (BPS)

$a_2$  = Coefficient of earnings per share (EPS)

e= error term of the equation

## DATA ANALYSIS AND DISCUSSION OF FINDINGS

**Table 1: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
BPS	60	1.74	20.13	6.9123	4.02748
EPS	60	.35	7.52	2.2040	1.67858
MPS	60	1.67	150.00	19.7538	24.04560
Valid N (listwise)	60				

### Source: SPSS Output (2019)

From table 1, each of the variables has 60 observations representing 10 years data for 6 companies. BPS and EPS have minimum values of 1.74 and 0.35 respectively and maximum values of 20.13 and 7.52 respectively. While the dependent variable, MPS has a minimum value of 1.67 and a maximum value of 150.

BPS and EPS have mean values of 6.91 and 2.20 respectively and standard deviations of 4.03 and 1.63 respectively. While MPS has a mean of 19.75 and a standard deviation of 24.05. This show that the dependent variable MPS has a higher risk of variability than the independent variables. BPS and EPS.

### Results of Data Analysis Used For Test of Hypotheses

1.  $H_{O1}$ : Book Value per share (BPS) has no significant effect on market price per share (MPS).
2.  $H_{O2}$ : Market price per share (MPS) is not significantly affected by earnings per share (EPS).

**Decision Rule:**

Accept the null hypothesis (HO) if the P. value of t statistics is greater than the P. value tabulated at 0.05 level of significance, otherwise reject the null hypothesis (HO) and accept the alternate hypothesis (H1).

**Table 2: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.759 <sup>a</sup>	.591	.577	15.63700	1.356

**Source: SPSS Output (2019)**

From table 2, the coefficient of correlation (R) of the regression is 0.769. This shows that there is a positive correlation between the dependent variable. Market price per share (MPS) and the independent variables- book value per share (BPS) and earnings per share (EPS). The coefficient of determination ( $R^2$ ) is 0.591. This shows that the independent variables, BPS and EPS account for 59.1% of the change or variability of the dependent variable MPS. This fact is closely supported by the adjusted  $R^2$  of 0.577, which indicates that changes in the independent variables BPS and EPS account for 57.7% of the changes in the dependent variable MPS.

THE Durbin Watson statistics of 1.358 is less than 2. This indicates that the independent variables and the dependent variable are positively autocorrelated.

**Table 3: Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1.658	4.603		.360	.720	-7.559	10.875
1. EPS	-.921	.510	-.154	-1.806	.076	-1.943	-100
EPS	11.100	1.224	.775	9.067	.000	8.649	13.552

**Source: SPSS Output (2019)**

The coefficient table shows the level of significance by which the market price per share (MPS) is being affected by each of the independent variables - book value per share (BPS) and earnings per share (EPS). These coefficient values were used in testing each of the hypotheses.

**Test of Hypothesis One**

HO<sub>1</sub>: Book value per share (BPS) has no significant effect on market price per share (MPS).

The P-value of the t-statistics for book value per share (BPS) is 0.076. This is slightly greater than 0.05. The study therefore accept the null hypothesis that book value per share (BPS) has no significant effect on market price per share (MPS).

**Test of Hypothesis Two**

HO<sub>2</sub>: Market price per share (MPS) is not significantly affected by earnings per share (EPS).

The P-Value for earnings per share (EPS) is 0.000. This value is less than 0.05. The study therefore reject the null hypothesis and conclude that market price per share (MPS) is significantly affected by earnings per share (EPS).

## **Discussion of Findings**

This study investigated the association between accrual accounting and share price of selected companies for the periods of 2008 to 2017. The independent variables used to represent accrual accounting are book value per share (BPS) and earnings per share (EPS) while valuation is measured by market price per share (MPS).

### **Hypothesis HO<sub>1</sub>**

The P-Value for book value per share (BPS) is 0.076 which is slightly higher than 0.05. This revealed that book value per share (EPS) has no significant effect on market price per share (MPS). The result of this finding is in line with the findings of Omokhudu and Ibadan (2015). However it contradicted that of the findings of Eriabie and Egbide (2016).

### **Hypothesis HO<sub>2</sub>**

The P-Value for earnings per share (EPS) is 0.000 which is lesser than 0.05. With this result the null hypothesis is rejected while the alternate hypothesis is accepted that the market price per share (MPS) is significantly affected by earnings per share (EPS). This result agrees with the findings of Olubukola et al (2016). This is however in contrast with the findings of Akadakpo and Mgbame (2018).

## **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

The summary of the findings of this study is as follows:

1. Book value per share (BPS) has no significant effect on market price per share (MPS).
2. Market price per share (MPS) is significantly affected by earnings per share (EPS).

### **Conclusion**

This study was designed to examine accrual accounting and share price of companies. The study obtained relevant data from published annual financial statements from the year 2008 to 2017 from selected consumer goods companies. The study revealed that the effect of book value per share (BPS) on market price per share (MPS) is insignificant, while the market price per share is significantly affected by earnings per share (EPS).

With the above, the study concludes that accrual accounting is significantly related to the valuation of companies; but that earnings per share (EPS) is more relevant than book- value per share (BPS) in the valuation of companies.

### **Recommendations**

Based on the findings of the study and the conclusion, the following recommendations are made:

1. Companies should adopt accounting policies that will ensure that the book values of assets and liabilities are accurate and reliable.
2. Appropriate measures should be put in place to ensure total compliance with international financial reporting standards (IFRS) in the preparation and presentation of financial statements.
3. The Nigerian Stock Exchange should undergo further development and advancement to facilitate market efficiency and value relevance of accounting informatio

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