

Influence of Earnings Per Share (EPS) on Equity Share Investment of Listed Companies in Nigeria

Ibrahim Adamu Saleh (PhD)

ibrahimadamusaleh3@gmail.com, +234803397758, +2348036525276

Department of Business Administration
Federal University of Kashere, Gombe State

Abdullahi Umar (PhD)

abdumar20@yahoo.com, +2348160035337

Department of Business Administration & Management
Abubakar Tatari Ali Polytechnic, Bauchi.

Salihu Adam Jidda

maijiddah@gmail.com +2348066738811

Department of Business Administration
Federal University of Kashere, Gombe State

Abstract

This study examined the influence of earnings per share on equity share investment of listed companies in Nigeria. Survey and ex-factor research designs were used in the study, hence both primary and secondary methods of data collection were utilized. The population comprises of 192 listed companies on the Nigerian Stock Exchange and 225 registered and active brokerage firms while sample selection was based on stratified sampling technique. Primary data was from the direct responses of the Stock Brokers, Investment Advisers and Portfolio Managers, while the secondary data was from the listed companies' annual reports and Nigerian Stock Exchange Market Statistics for the period of 10 years (2010-2019). The primary data was analyzed using descriptive statistics; mean percentage and standard deviation, while the secondary data was analyzed with panel model using inferential statistics. The finding revealed that a significant relationship exists between earnings per share and equity share investment in the listed companies in Nigeria. Earnings per share have a very high correlation coefficient with equity share investment, which means earnings per share significantly influence equity share investment of the listed companies in Nigeria. The study recommends that, all listed companies in Nigeria should prepare and disclose adequate information regarding earnings per share on the financial indicators used for investment decisions alongside with the mandatory financial statements.

Keywords: Earning per share, Equity share investment, Stock brokers, Investment advisers, Portfolio managers

Introduction

Investment in general terms can be seen as the commitment of funds for a period of time in order to earn a rate of return that will compensate the investor for the time during which the funds are invested and for the uncertainty involved. Investment decision is an exchange

between current spending and deferred spending so as to enjoy greater benefit in future (Reilly & Brown, 2006). Sultana and Pardhasaradh (2012) claim that investing in equity shares is like investing into ownership of a company, which no other investment instrument can give. Unlike any other investment instrument that either gives fixed income or meager returns and no ownership, equity investment gives an opportunity to become a part of the company's ownership and also gives regular returns on investment in terms of dividend income or appreciation in share price. Investing in equity also allows an investor to enjoy the flexibility of staying invested as long as he/she wish to, take advantage of the price movements and thus utilize the liquidity. Equity share investors are the primary and major capital providers in listed companies in Nigeria and they are the owners of the firm.

An equity share investment generally refers to the buying and holding stock or shares on a stock market by individuals and firms in anticipation of income from dividends and capital gains, as the value of the stock rises (Okechukwu, 2004). For a firm to grow, it requires an investment on its capital. Equity share is the source of capital to a firm as it can go a long way in financing its assets, in addition to other sources, such as debt financing. Hence, equity share is the most important essential element for the growth of a firm (Mathew & Odularu, 2009).

Earnings per Share (EPS) is an important financial measure which indicates the profitability of a company. It is calculated by dividing the company's net income with its total number of outstanding shares. It is a tool that market participants use frequently to gauge the profitability of a company before buying its shares. It is the portion of a company's profit that is allocated to every individual share of the stock. It is a term that is of much importance to investors and people who trade in the stock market. The higher the earnings per share of a company, the better is its profitability.

The significance of share investment in stock market growth can best be appreciated by examining how well accounting information numbers such as earnings explain or impact on equity investment decisions. Research indicates that earnings per share is a factor that is "priced" in the securities market (Blume & Husic, 1973). Oshodin and Mgbame (2014) opined that EPS information is the most considered by investors when deciding the equity share investment despite the fact that share price and the financial information in one company is more value relevant compare to the financial information disclosed by others.

It has been claimed in the literature that accounting information disclosed in firms' financial statements is the main factor that most investors considered when making equity share investment decisions (Eleke & Opoku, 2013; Wang, et al., 2013). Babalola (2012) in his

study, significance of accounting information on corporate values of firms in Nigeria, claims that earnings per share plays an important role in reflecting investment in the equity share of listed companies in Nigeria.

Non-availability of information on the association of earnings per share with/and its influence on equity share investment in listed companies in Nigeria is a problem to investors in making equity share investment decisions (Olugbega & Atanda, 2014). This is because equity share investors rely on accounting information when making investment decisions (Babalola, 2012; Eleke & Opoku, 2013). Similarly, the need for information on the relationship between equity share investment and EPS that could aid potential, existing and foreign investors in making equity share investment decisions has been a great hindrance to: equity share investment in the Nigerian listed companies. Further, the identification and selection of viable firms/sectors in which equity share investors invest in and flows of foreign direct investment to Nigeria is another problem. This situation has stifled the growth of listed companies and the pace of economic growth in Nigeria. Goddy (2010) claims that the investors in Nigeria have suffered untold hardship due to lack of regular and reliable accounting information on the relationship between EPS and equity share investment of the Nigeria listed companies.

From the foregoing, there is a gap in the literature for a study on the influence of EPS on equity share investment. The current study was initiated to fill this identified gap in the literature. Therefore, the paper examined the influence of EPS on equity share investment of listed companies in Nigeria. Accordingly, the paper hypothesized that:

Ho: There is no significant relationship between earnings per share and the equity share investment of listed companies in Nigeria.

The paper is structured into the foregoing introduction, the next section is literature review and conceptual framework, followed by methodology, results and discussion, and lastly conclusion and recommendations.

Literature Review and Conceptual Framework

The simple theory of economics states that the price of a product is usually determined by the forces of demand and supply for the product. In the stock market, the price of a share is normally determined by the forces of demand and supply for the share. Base on the literature, it is evident that the accounting information influences investors' decision making. Investment in equity share is usually influenced by accounting information variables. From the literature, it has been argued that accounting information plays a significant role in determining investors' equity investment decisions. Gunathilaka (2014) who examined the equity investment decision process of retail investors in Sri Lanka identified accounting

information as the most significant factor influencing equity share investment selection in Sri Lanka. Wang, et al. (2013) believe stock investment cannot be done without accounting information. Sharma (2011) submits that in the stock market, several factors may influence the investors' decisions to invest in a company's share, but the main factor that investors normally consider when making decision to buy or sell a share of a company is the firm financial accounting information. Wang, et al. (2013) also claim that in stock market, many factors can change the stock price, such as financial policy, monetary policy, industrial policy, foreign trade policy and other macro-economic factors, financial information, investors' expectation, market supervision and other internal factors, but among these factors, financial accounting information is the main factor that most investors usually consider. An understanding of the effect of various financial accounting information variables on equity investors' investment decisions is very much helpful to investors and other users of financial accounting information, as it will help them in taking various important decisions. Previous researchers have examined the effect of some important financial accounting information variables in their studies (Neringa, 2002; Babalola, 2012; Srinivasan, 2012; Shehzad & Ismail, 2014). Most of the literature selected the earnings per share (EPS), book value per share (BVPS), return on equity (ROE) ratio, and cash flow from operation (CFO) among others as the information variables affecting the investors' equity share investment decisions. With a view to facilitating better understanding of the study, the conceptual framework is set out below:

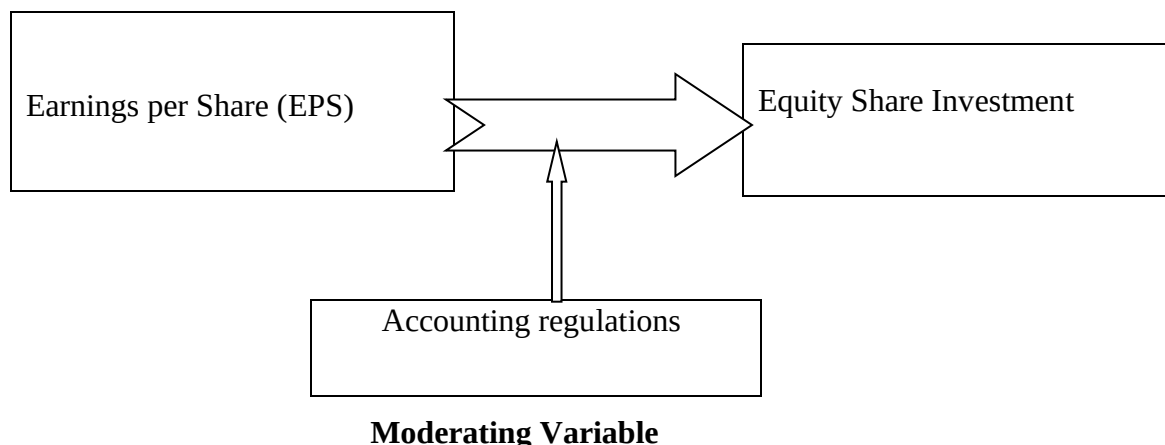


Figure 1: Conceptual Framework

Source: Authors Design, 2021.

Empirical Review

Gunathilaka (2014) examined the equity investment decision process of retail investors in Sri Lanka. The study gathered opinions using a five-point Likert scale survey questionnaire. The analysis of 168 responses indicate that the firm's perceived value is the most influencing factor in equity selection. The study identifies accounting information, as the most significant factor influencing equity share investment selection in Sri Lanka.

Oshodin and Mgbame (2014) carried out a comparative study of value relevance of financial information in the Nigeria banking and petroleum sectors. The study adopted multiple regression analysis for the analysis of the data and the Ordinary Least Square method for estimation. The regression results revealed that EPS information is the most considered by investors when deciding the equity share investment. Mahmoudi, Shirkavand, and Salari (2011) examined investors' reactions to the announcement of earnings in the Tehran Stock Exchange in Iran. This study investigated the overreaction and under reaction of investors towards positive and negative earnings announcement dividing the sample into two groups. The first group contains firms which increased their EPS more than 5% rather than the previous EPS announcements. Group 2 contains firms which decreased their EPS more than 5% in comparison to the latest announcements. The results indicated that there is a statistically significant market reaction on the EPS announcement day. Earnings increases induce a significant positive equity share investors' reaction, whereas earning decreases bring about a significant negative equity share investors' reaction.

Mgbame and Ikhatua (2013) examined whether or not book value per share, dividend per share and earnings per share have a sign effect on stock volatility in Nigeria. The results of the study show that the release of information on book values, earnings per share and dividend per share was related to stock volatility, indicating that financial information can lead to changes in equity share investment. Seetharaman and Raj (2011) evaluated the impact of EPS on the stock prices of Public Bank Berhad, a listed bank in Malaysia. The aim of the study was to investigate whether there is any correlation between Public Bank Berhad's EPS and its stock price for a relatively long time period of 19 years. The result revealed that there is a very strong positive correlation between Public Bank Berhad's EPS and its stock prices. In particular, the study showed that there is a significant impact of earnings announcement on Public Bank Berhad's stock prices.

Badruzaman (2020) examined the impact of earnings per share and return on equity on stock price using a survey 57 issuers on the Nikkei 225 Index in 2018. The results show that earnings per share and return on equity affect the stock price of 67.3% and partially earnings

per share has a positive effect on stock prices, while return on equity has a negative effect on stock prices. Comparatively, the findings revealed that EPS has the biggest and significant influence on stock prices which eventually influence equity share capital. Hongkong (2017) attempted to find the effect of earnings per share and return on equity on stock price of 10 Indonesian listed banks. Data were drawn from financial statements for the period 2006 to 2009. The study discovered that EPS and ROE variables partially affect stock prices.

Theoretical Framework

Theories of financial accounting consider such things as people's behavior and/or people's needs as regards financial accounting information, or the reasons why people within organizations might elect to supply particular information to particular stakeholder groups (Deegan, 2006). There are many theories that relates to equity share investment and earnings per share. Such theories in most cases talked about financial information. These theories include among others: The Decision Usefulness theory of accounting, the Signaling Accounting Information Theory, the Theory of Equity Share Investment, the Fundamental Analysis Theory of Equity Share Investment, and the Technical Analysis Theory of Equity Share Investment

However, this paper was anchored on the decision usefulness theory of accounting. The decision usefulness theory of accounting information first appeared in the American Accounting Association (AAA) monograph in 1966. The decision usefulness approach to accounting theory takes the view that if it is not theoretically possible to prepare correct financial statement, at least, it is essential to make historical cost-based statement more useful (AAA Monograph, 1966). International Financial Reporting Standards (IFRS, 2007) further reinforced the decision usefulness theory of accounting information in its framework by stating that the objective of financial statements is to provide information about the financial position, performance and changes in financial position of an entity that is useful to a wide range of users in making economic decisions.

This paper underpinned the decision usefulness theory of accounting information because the theory gives more emphasis on the ability of financial statement to provide information required by the most significant stakeholders of users of the financial reporting. The most important stakeholders in the firm are the stockholders (investors). One of the significant information required by the investors is earnings on each of the shares invested.

Methodology

The study made use of survey and ex-post facto research designs. The study population comprises of all the 192 listed companies on the Nigerian Stock Exchange as at 2020 (The

Nigerian Stock Exchange, African Markets, 2020). The study populations for the survey research were Stockbrokers, Investment Advisers and Portfolio Managers in two hundred and twenty-five registered stock brokerage firms in Nigeria as at 2020 (The Nigerian Stock Exchange, African Markets, 2020). The views of institutional and individual investors about earnings per share and equity share investment were obtained from the respondents. A sample of 58 listed companies were selected from the population of 192 using stratified and random sampling techniques. The strata comprised of: financial service sector, manufacturing sector and general service sector as shown in Table 1.

Table 1: Study Population and Sample

Sector	Number of Companies	Samples
Manufacturing	74	22
General Services	66	20
Financial	52	16
Total	192	58

Source: Field Survey, 2021.

For the selection of samples of stock brokerage firms and respondents from the firms, random sampling and purposive sampling techniques were used to select 204 respondents from 68 firms. The study makes use of both primary and secondary sources of data. Primary data were collected using questionnaire and secondary data from the listed companies' annual reports and Nigerian Stock Exchange Market Statistics for ten years period (2011-2020).

The independent variable of the study is earnings per share (EPS) measured as Net Profit after Tax – Preference Dividend /Number of outstanding shares (Malhotra & Tandon, 2013). The dependent variable is the units of equity share investment and is measured by the natural logarithm of the number of shares.

The primary data was analyzed using descriptive statistics: mean, percentages and standard deviation while the secondary data was analyzed using panel model. The study employed random effects panel model for modeling and analysis of variance (ANOVA) of the relationship between earnings per share and equity share investment in the companies listed on Nigerian Stock Exchange.

The OLS regression model of the study is specified as follows:

$$ESI_{it} = \beta_0 + \beta_1 EPS_{it} + \varepsilon_{it} \quad (1)$$

Where; ESI = Equity Share Investment, EPS = Earnings Per Share, β_0 = model intercept, β_1 = regression coefficient, it = Firm and Time, and ε = Error term of the model.

Results and Discussion

The study sampled 204 respondents from 68 stock brokerage firms. From the 204 questionnaires administered, 180 were duly completed and returned while 24 were not returned. This means that the analysis of primary data was based on 88% response rate.

Table 2 presents the questionnaire responses generated from the study respondents.

Table 2: Stock Brokers Reponses on the Relation between Earnings per Share and Equity Share Investment

Statements	SD	D	N	A	SA	Total	Mean	S. D
There is a relationship between earnings per share disclosed in a firm's financial statement and equity share investment in the firm.	0 (0.0)	0 (0.0)	23 (12.8)	65 (36.1)	92 (51.1)	180 (100)	4.38	0.70
Earnings per share are useful in equity share investment decision making.	0 0.0%	0 0.0%	31 17.2%	86 47.8%	63 35.0%	180 100%	4.18	0.79
Earnings per share determine equity share investment	0 0.0%	0 0.0%	41 22.8%	87 48.3%	52 28.9%	180 100%	4.06	0.72
Regular and consistent improvement in earnings per share disclosed by a firm influence equity share investment	0 0.0%	0 0.0%	45 25.0%	97 53.9%	38 21.1%	180 100%	3.96	0.68
Timely and regular announcement of earnings per share enhance equity share investment decision making.	0 0.0%	0 0.0%	38 21.1%	82 45.6%	60 33.3%	180 100%	4.12	0.73

Note: Figures in parenthesis are percentage

Source: Field Survey, 2021.

Table 2 shows that 87.2% (36.1% and 51.1%) of the respondents agree to the fact that there exists a relationship between earnings per share disclosed in a firm's financial statements and equity share investment in the firm. Besides, 12.8% of the respondents were neutral while no respondent disagreed or strongly disagreed. It is evident from the majority position that equity share investors used earnings per share to evaluate equity share investment decisions in listed companies in Nigeria. These findings are in support of the assertion that earnings increases induce a significant positive equity share investors' reaction whereas earning

decreases bring about a significant negative equity share investors' reaction (Mahmoudi, et al., 2011).

The statement on whether earnings per share are useful in equity share investment decision in Table 2 shows that a significant percentage, 82.8% (47.8% and 35.0%) of the respondents agree to the fact that earnings per share are useful in equity share investment decision making. However, 17.2% of the respondents were neutral while no respondent either disagreed or strongly disagreed on the matter. Since the majority of the respondents (82.8%) were in the affirmative, it implies that equity share investors use earnings per share to form opinion on equity share investment in a firm. The finding is in conformity with the findings by Mgbame and Ikhatua (2013).

The study examined the influence of earnings per share on equity share investment in listed companies in Nigeria. Table 2 indicates that 77.2% (48.3% and 28.9%) agree to the fact that earnings per share determine equity share investment in listed companies in Nigeria. On the other hand, 22.8% of the respondents were neutral and no respondent disagreed or strongly disagreed on the matter. Based on the majority (77.2%) of the respondent's opinion, it could be infer that a large number of investors considered earnings per share as valuable basis for equity share investment decision making. This finding is consistent with the position by Oshodin and Mgbame (2014) who opined that earnings per share information are the most considered by investors when deciding equity share investment.

Table 2 indicates that regular and consistent improvements in earnings per share disclosed by firms influence equity share investment as a substantial percentage of the total respondents; 75% (53.9% and 21.1%) agree on the matter. On the other hand, 25% of the respondents were neutral and none of the respondents disagreed or strongly disagreed. This finding points out that a greater majority of equity share investors placed a high premium on regular and consistent improvement in earnings per share disclosed by firms when investing in the equity share of firms. This finding demonstrates that once a company starts earning attractive sum, the equity share will have more and more demand which will result in increase in market value of the equity.

The last question of the study included on the questionnaire was designed to ascertain if timely and regular announcement of earnings per share enhance equity share investment decision making in listed companies in Nigeria. Table 2 shows that majority, 78.9% (45.6% and 33.3%) of respondents were in agreement that timely and regular announcement of earnings per share enhance equity share investment decision making. However, 21.1% of the respondents were neutral while no respondent disagreed or strongly disagreed on the matter.

This finding corresponds to the finding by Mahmoudi, et al., (2011) who claim that there is a statistically significant market reaction to timely and regular announcement of earnings per share.

The mean and standard deviation scores on a scale of one to five for all the factors tested under earnings per share as shown in Table 2 range from 3.96-4.38. This shows that almost all respondents were in support that the earnings per share influences equity share investment decision in Nigerian listed firms. The standard deviations of the factors were between 0.68 and 0.73. This suggests that there is no wide variability in the opinions of the respondents on the various factors under earnings per share.

To corroborate the findings from the primary data, data extracted from the secondary source was also analyzed. Table 3 presents the summary OLS regression results.

Table 3: Summary Regression Results

Variable	Coefficient	t-statistics	p-value
CONSTANT	7.609	20.904	0.000
EPS	0.905	8.469	0.000
R ²	0.918		
F-Statistics	6470.839		
P-value	0.000		
Obs	580		

Source: Authors Computation, 2021.

Table 3 shows the regression model R² of 0.918 which suggests that 91.8% of variation in the equity share investment is explained by earnings per share. Only 8.2% of the variation in equity share investment is attributable to other variables not captured in the study model. The F-statistics of 6470.839 which has an associated p-value of 0.000 which is less than the 0.05 level of significance further confirms that the model is fit.

Table 3 indicates that EPS has a coefficient of 0.905 meaning that it is positively related with equity share investment. In other words, a unit increase in EPS will result to 0.905 increase in equity share investment of the sample listed companies in Nigeria. The coefficient of 0.905 which has a p-value of 0.000 which is less than the 0.05 level of significance is basis to concluded that EPS has a positive and significant relationship with equity share investment of listed companies in Nigeria.

This finding is in conformity with the findings of Shehzad and Ismail (2014). This result does not only corroborate the questionnaire response but is a clear indication that companies that are able to record high EPS will experience higher equity share investment as the high EPS is a signal to investors of good performance.

Conclusion and Recommendations

This study examined the relationship between EPS and equity share investment of listed companies in Nigeria. The results from the data analysis provides basis to concluded that earnings per share and equity share investment are strongly correlated. Higher EPS is a driver for higher equity share investment. Essentially earnings per share has significant influence on equity share investment decisions in listed companies in Nigeria.

Based on the findings, it is recommended that the management of listed companies in Nigeria should, alongside with the mandatory financial statements, prepare and disclose adequate information regarding earnings per share on the financial accounting indicators used for investment decisions. This will provide clearer information about the operating and financial performances of companies to equity share investors.

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