



Effects of Internal and External Factors on Stock Returns of Large Size Firms in Nigeria

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Abstract

This study examines impacts of internal and external factors on stock returns of large size firms in Nigeria. Developing economies have diverse institutional and structural features when compared with advanced economies or markets. It is therefore, germane to investigate how stock returns in Nigeria behave to the combine effects of internal and external factors. The study examines the combine effects of market to book value (MBV) per share ratio, firm size, P/E ratio, management quality, firm age, interest rate, inflation, and money supply on stock returns of selected large size firms in Nigeria between 2007 and 2016. The study adopts ex-post facto as its research design. Top 25 quoted large size firms by market capitalization constitutes the population of the study. Twenty-one (21) companies that meet selection criteria forms the sample size. It uses secondary data from the CBN and NSE as well as published annual accounts. It deploys Panel data regression for the data analysis. The results indicate significant negative effects between inflation, money supply, interest rate, and stock returns of large size firms in Nigeria, while insignificant negative effect is revealed between management quality, MBV per share ratio, and stock returns in Nigeria. A further result indicates significant positive effect between firm size, firm age and stock returns in Nigeria. However, an insignificant positive effect is revealed between P/E ratio and stock returns of large size firms in Nigeria. The study recommends among others, more surveillance by the apex regulator in Nigeria (SEC), paying more attention to ratios like P/E and MBV, keeping abreast of technological changes and innovations by Board and Management of companies, enhancing corporate values through reasonable level of operating expenses; taking note of systematic risks as a result of inflation, interest rate and money supply; and intensifying capital market sensitization campaigns by the Securities and Exchange Commission. The paper adds to the existing body of knowledge on the effects of internal and external factors on stock returns of large size firms in Nigeria.

Keywords: Firm size, P/E ratio, MBV ratio per share, management quality, firm age, interest rate, inflation, money supply and stock returns

1. Introduction

Stock returns can vary because they depend on movements in stock prices, which are in turn dependent on several factors. These factors can be either internal or external. The internal factors are firm size, debt/equity financing, MBV ratio, dividend per share, firm age, P/E ratio, and EPS. Others include firm's riskiness, premium growth, interest coverage, loss ratio, profitability and dividend yield (Kazeem, 2015; Anderson, 2016). The external factors include interest rate, money supply, oil prices, GDP, inflation rate, foreign reserve, and output production (Maku & Atanda, 2010; Gatuhi, Gekara & Muturi, 2015). This study measures variation in stock returns that is occasioned by both internal and external variables. However, Nigeria as a developing market has diverse institutional and structural features from developed stock markets. This study, therefore examines the combine effects of internal and external factors on stock returns of large size firms in Nigeria. Considerable studies have been carried out on the effects of firm level (internal) attributes on one hand, and macroeconomic factors on the other hand, on stock returns both in developing and developed markets/economies with mixed results (Fama & French, 1992; Pandey, 2001; Chandra, 2004; Chambers, 2013; Sofie & Alexender, 2015 and Anderson, 2016). A common phenomenon in the

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studies is that firm level attributes and macroeconomic factors were not combined in one study. This implies that the contribution of the two in relation to the effect of the other on stock returns of a firm was ignored. Considering the role macroeconomic factors play in promoting growth, ensuring price stability, stabilizing long-term interest rates and the real exchange rates as well as preventing financial crises, the importance of combining macroeconomic factors with firm level attributes in one study is too big to be ignored. In spite of the combined importance of these variables, previous and most recent studies in the area have failed to take steps to measure these effects of firm level characteristics and macroeconomic factors on stock returns of large size firms.

In Nigeria, the areas of firm level attributes and macroeconomic factors as well as their effects on stock returns have attracted a lot of interest by researchers. Many researchers tried to study the effect of either firm level attributes or macroeconomic factors on stock returns of firms in Nigeria (Amadi & Odubo, 2002; Osamwonyi, 2003; Uwubanmwen & Obayagbona, 2012; Umar & Musa, 2013; Olowoniyi & Ojenike, 2013; Kazeem, 2015). The studies however, suffered two limitations. First, as the case with other foreign-based studies in this area, the Nigerian-based studies ignored the importance of combining both firm level attributes and macroeconomic factors in examining their effect on stock returns of quoted firms. Second, the studies focused on consumer goods and financial sectors, leaving out large size firms in spite of their contributions to national growth and development. Also, previous studies' periods in Nigeria form a gap in scope. See studies of, Uwubanmwen and Obayagbona (2012), Bala and Idris (2015), and Kazeem (2015). The study periods by these researchers can be termed not too recent due to many reforms. For example, the introduction of new corporate governance codes, adoption of IFRSs, changes in Central Bank of Nigeria (CBN) monetary policy and rise in public debt profile rates have taken place that might make earlier findings ineffectual. In consequence, this study therefore, covers 2007 to 2016 and makes it one of the recent in Nigeria. This study is of significance in the following ways: first, it will add to the existing body of knowledge. Second, it will provide policy directions for policy makers in Nigeria. Finally, it will guide market operators in advisory services and provides answers to the following research questions:

- Q1: What is the effect of firm size on stock returns in Nigeria?
- Q2: What is the effect of market to book value per share on stock returns in Nigeria?
- Q3: What is the effect of price to earnings ratio on stock returns in Nigeria?
- Q4: What is the effect of firm age on stock returns in Nigeria?
- Q5: What is the effect of management quality on stock returns in Nigeria?
- Q6: What is the effect of inflation rate on stock returns in Nigeria?
- Q7: What is the effect of interest rate on stock returns in Nigeria?
- Q8: What is the effect of money supply on stock returns in Nigeria?

The following sections are ordered as Section 2: presentation of review of related literature; Section 3: research methodology; Section 4: results and discussions; and Section 5: summary and conclusion.

2. Literature Review

2.1 Firm Size and Stock Returns

Rahmani, Sheri and Tajvidi (2006) using both multivariable and univariable models, study the association between internal (accounting) and external (market) variables and returns on the stock market using pooled data that were cross-sectional between 1997 and 2003. The result reveals that size (market capitalization) and returns on the stock market have statistical significant positive impact/relationship. In a single variable model, hypotheses two-seven reveals that firm size and returns of common stocks have more stable relationship when assessed with other factors/variables. However, more variables should have been added. The use of one explanatory variable may not be representative for investment decisions. We need to add more explanatory variables and replicate the same study in Nigeria to ascertain position. Tripathi (2009) examines fundamentals of company and equity returns in India from 1997 – 2007. The four company fundamentals investigated are book to market ratio, P/E ratio, debt to equity ratio and market capitalization. The study also investigates whether the inclusion of any of these fundamentals can explain better cross sectional variations in equity returns in India higher than the CAPM. The study finds that market capitalization has negative and statistical significance relationship with equity returns in India. However, this study suffers from a major limitation. The study only gave credence to variables such as book to market ratio, P/E ratio, debt to equity ratio and market capitalization. Attention was not given to external variables such as real GDP, government debt/GDP ratio, consumer price index, and so on. These would have better explained their combined impact of stock returns of firms listed in India stock exchange.

Tudor (2010) examines the descriptive ability of returns of common stocks on firm size, financial leverage, market beta, book to market equity, and return on assets, earnings to price ratio, and investment returns from 2002-2008 in the Romanian stock market. Two way fixed effect multiple regression is employed. The results show that size of firm and

returns on the stock market have negative relationship. Additionally, the study further notices that over the whole period, market capitalization has the most impact in detailing difference in returns on the common stocks. However, this study suffers from a major limitation. The study only gave credence to variables such as firm size, book to market equity, financial leverage, return on assets, P/E ratio and investment returns. Attention was not given to external variables such as output production, exchange rate, money supply, consumer price index, and so on. These would have better explained their combined effect on stock returns of firms listed in Romanian stock market.

H_{o1}: Firm size has no significant impact on stock returns of large size firms in Nigeria.

2.2 Market-to-Book Value Ratio and Stock Returns

Roll (1995) displays the same leaning in Indonesia where the results showed/revealed that high Market-to-Book stocks (growth) earns inferior returns than low ratio of Market-to-Book (value) stocks, though the variation linking the two classes (growth and value) is not statistically or materially significant. However, investors would also be concerned on the impact of external variables on stock returns. The study can also be updated and using the capital market in Nigeria. The coefficient of determination from the above study was low. This study will bridge some gaps if more variables (external and internal) are added. Loughran (1997) assesses the seasonality effect of Market-to-Book ratio between 1963 and 1995. The study reveals that high market/book value (growth) stocks have lower returns in January than low market/book (value) stocks. The study explains that if we exclude January from the sample, cross-sectional difference in market returns cannot be elucidated by Market-to-Book and size for three largest size quintiles. This according to him explains or accounts for 90% and more of total market capitalization, from 1963 – 1995.

Dhatt Kim and Mukherji (1999) use the Russell 2000 index which is the measure of how well small-size stocks perform in the USA. The study investigates explanatory variables of sales-to-price, book-to-market, market value of equity and debt-equity from 1982 to 1992 for nonfinancial companies quoted on the Korea Stock Exchange (KSE) using multiple regression models. The study obtains data as compiled by the PACAP Research Center, United States of America (U.S.A). They argue that the investing community tends to earn stock returns that are higher as they engage in the purchase of value stocks, that is, stocks with low ratios of Market/Book value. The study finds that price-to-sales ratio has more predictive power than ratio of market-to-book value for small-size firms' stocks. Gonence and Karan (2003) assemble and sum up reasons why high Market to Book (growth) stocks earn lower stock returns than low Market to Book (value) stocks as follows: that by using the overreaction hypothesis, "investing community reacts excessively to stock performance and given that the overreaction allocate unreasonably high values to strong firms that have low B/M (high Market-to-Book) and unreasonably low values to weak firms that have high B/M (low Market-to-Book). When the overreaction is addressed, strong/big firms have low returns on the stock market and weak/small firms have high returns on the average." (Daniel & Titman, 1997; Debondt & Thaler, 1987; Shapiro & Lakonishok, 1984; Haugen, 1995).

H_{o2}: Market to book value per share ratio has no significant impact on stock returns of large size firms in Nigeria.

2.3 Price-to-Earnings Ratio and Stock Returns

Panu, Peng, and Dennis (2007) explore the link between firm characteristics and stock return. The study investigates the impact of the following independent variables on stock return – market to book value ratio, size, and price to earnings ratio. The findings indicates that price to earnings ratio and stock return have positive relationship. The study concludes that market to book value ratio has more predictive ability for stock returns. However, the firm level characteristics and macroeconomic factors are not combined in the study. This implies that the contribution of the two in relationship to the effect of the other on stock returns of a firm is ignored. Considering the role macroeconomic factors play in promoting growth, ensuring price stability, stabilizing long-term interest rates and the real exchange rates as well as preventing financial crises, the importance of combining these macroeconomic factors with firm attributes in one study is too big to be ignored. Vorek (2009) carries out a research using data of corporations on the Czech stock market between 1997 and 2007. Company fundamentals used are price to earnings ratio, price to sales ratio, price/cash flow ratio and price/book value ratio. Employing regression analysis, the study establishes that between 1 and 3 years (short run), low price/earnings investments yielded superior returns when compared to corporations with high price/earnings ratio. He concluded that in the long run, ratio of P/E is not a good measurement of future returns. However, the pre and post diagnostic tests were not carried out by the study to confirm the robustness or otherwise of the results.

Osano (2010) examines the extent of explanatory power of price/earnings and price/book value in predicting share returns in the future. The study uses firms on the Nairobi Stock Exchange (NSE) from 1998 – 2002. The main thrust of the study is firms which had superior/higher price/earnings and price/book ratios and those that had inferior/lower

price/earnings and price/book ratio during -the study period. The study did not consider corporations with median price/earnings and price/book ratios. T-tests and coefficient of variation were used to verify whether there was significant connection between stock returns for the two portfolio sets (low and high price/earnings and price/book firms). The findings indicates that firms that have low price/earnings and price/book ratios achieved superior returns when compared to firms with high price/earnings and price/book ratios. The study finds that firms with low price/earnings and price/book ratios have more predictive abilities than high price/earnings and price/book ratios. Pettersen (2011) investigates corporations quoted in Stockholm Stock Exchange from 2000 – 2009. The study computed portfolio return for every year for 10 years, using Jensen index to adjust for risk. The findings show that deploying the price/earnings ratio can result to abnormal returns. However, like other foreign-based studies, firm level characteristics and macroeconomic factors were not combined in one study. This implies that the contribution of the two in relationship to the effect of the other on stock returns of a firm is ignored. Considering the role macroeconomic factors play in promoting growth, ensuring price stability, stabilizing long-term interest rates and the real exchange rates as well as preventing financial crises, the importance of combining these macroeconomic factors with firm attributes in one study is too big to be ignored.

H03: Price to earnings ratio has no significant impact on stock returns of large size firms in Nigeria.

2.4 Firm Age and Stock Returns

Matemilola, Bany-Ariffin, Nassir and Azman-Saini (2017) investigate the effects of firm age on the association between stock returns and debt for the study period 2008 to 2012. The study uses panel data of firms listed on Bursa Malaysia. The system generalized method of moment (system-GMM) is used for the analysis of data. The result indicates that firm age has a direct positive effect on stock returns. The result further confirms that as firms grow older and to maximize shareholders' returns, they deploy their experience and knowledge to make effective capital structure decisions. However, this study was conducted in Malaysia and up to 2012. There is need to update this up to 2016 and in Nigeria. Also, there are more internal variables that could explain stock returns. This study suffers from inclusion of only one independent variable. Uwaleke and Akwe (2018) explore the effects of price-to-book value and P/E ratios on stock market returns of consumer goods companies in Nigeria. The study includes firm age as a control variable. The study uses multiple panel regression to analyze data collected between 2007 and 2016. The study finds that price-to-book value per share and firm age have significant negative impact on stock returns of firms in Nigeria; while P/E ratio have significant positive effect on stock returns in Nigeria. However, the study ought to have considered more variables (internal and external) that explain stock returns in Nigeria. Considering the role macroeconomic factors play in promoting growth, ensuring price stability, stabilizing interest rates and the exchange rates as well as preventing financial crises, the importance of adding these macroeconomic factors with firm attributes in one study cannot be overemphasized.

H04: Firm age has no significant impact on stock returns of large size firms in Nigeria.

2.5 Management Quality and Stock Returns

Rjoub, Civcir and Resatoglu (2017) explore the correlation between stock returns for Turkish banks and a set of internal and external variables for the period between 1995 and 2015. The set of internal variables the study investigate include asset quality, capital adequacy, management quality, earning, size and liquidity, while the external variables include interest rate, industrial production, exchange, rate, inflation rate, and money supply. The study utilizes a fixed panel data analysis and Dumitrescu and Hurlin panel Granger causality test for data analysis. The findings show that earning, size, asset quality, money supply, management quality and interest rate have significant relationship with stock returns. The study further indicate that exchange rate, industrial production, capital adequacy, and asset quality are not significantly related to stock return of Turkish banks. The study use panel regression analysis as well as combined impact of micro and macro variables on stock return of Banks in Turkey. However, this study with a set of modified micro and macroeconomic variables and 2016 data needs to be replicated in Nigeria with a view to ascertaining the combined effect using the Nigerian perspective.

H05: Management quality has no significant impact on stock returns of large size firms in Nigeria.

2.6 Interest Rate and Stock Returns

Garba (2014) explores the influence of macroeconomic variables on returns of common stocks of quoted manufacturing firms in Nigeria. The independent variables use include interest rate, inflation rate, gross national income and exchange rate with data collected between 1991 and 2013. The study uses multiple regressions to analyze the impact between the variables. The findings reveal that none of the macroeconomic variables has significant effect on stock returns of firms listed on the Nigerian Stock Exchange. However, the study suffers from three major limitations. First, although the study is conducted in Nigeria and multiple regressions used, there was no evidence that post diagnostic tests were carried out. Secondly, the time covered in the study needs to be updated since the study was limited to 2013. Therefore, making it up to 2016 is essential. Thirdly, the study also failed to include other internal financial indicators since performance of stock market is generally considered to be reflective of both financial and economic conditions of a country. The combined effect of these variables require empirical investigation, especially in Nigeria being one of the emerging markets. Gatuhi, Gekara and Muturi (2015) examine the effects

of money supply, exchange rate, interest rates, and inflation rate, on stock market returns at the Nairobi Stock Exchange (NSE) from 2004 to 2014. The study uses regression analysis to examine the effect of the macroeconomic variables on stock returns of firms listed in the Agricultural sector of the NSE. The study reveals positive influences of interest rate, exchange rate, and money supply on the stock returns in Agricultural sector. A negative influence is revealed between inflation rate and stock returns of firms listed in the Agricultural sector of the NSE. However, a major defect of this study is in its failure to include other internal financial indicators since performance of stock market is generally considered to be reflective of economic conditions of a country. The study also failed to examine the effects between the variables. Investors and/or policy market maybe interested not only on the relationship but also on the effects between variables.

Mugambi and Okech (2016) explore the Nairobi Securities Exchange (NSE) with respect to macroeconomic factors and their impacts on stock returns using the study period from 2000 to 2015. The explanatory variables include GDP, exchange rate, inflation, and interest rate. The time series data obtains from the Central Bank of Kenya were analyzed using the OLS fixed effects model. The empirical findings indicates that exchange rate, interest rate, and inflation have significant impact on stock returns in NSE, while an insignificant effect was revealed between GDP and stock returns. However, the study had an adjusted coefficient of determination of 22%. This could be as a result of non-inclusion of key internal and external factors, performance of stock market is generally considered to be reflective of economic conditions of a country. Again, the use of OLS does not explain cross sectional as well as individual effects of sample. Subing, Kusumah and Gusni (2017) examine the combined impact of micro and macroeconomic factors on stock returns of firms in Indonesia. The independent variables of interest include return on assets, price earnings ratio, systematic risk, interest rates, inflation, and oil prices with data between 2008 and 2015. The study utilizes panel data regression methods and finds that return on assets, price earnings ratio, and oil prices have a positive effect on stock returns, while inflation rate has a negative influence on stock returns. Further empirical result indicates that interest rate and systematic risk do not impact stock returns in Indonesia. The study use panel regression analysis as well as combined effect of micro and macro variables on stock return of Banks in Turkey. However, this study with a set of modified micro and macroeconomic variables and 2016 data needs to be replicated in Nigeria with a view to ascertaining the combined effect using the Nigerian perspective. More micro and macroeconomic variables that explain stock return needs to be added to ascertain position.

H06: Interest rate has no significant impact on stock returns of large size firms in Nigeria.

2.7 Inflation Rate and Stock Returns

Nijam, Ismail and Musthafa (2015) examine the connection between macroeconomic variables and performance of stock markets in Sri Lanka. Independent variables such as GDP, inflation, balance of payment, interest rate, and exchange rate for the period between 1980 and 2012 are tested. The study utilizes the Ordinary Least Square (OLS) to examine regression model. The study finds that GDP, exchange rate and interest rate have positive and significant impact on stock returns in Sri Lanka, while inflation has negative significant impact on stock returns. A further finding shows that balance of payment has insignificant effect on stock market performance in Sri Lanka. However, the study used OLS which does not capture both cross sectional and individual effects of firms. Also, panel data can be useful in tackling some shortcomings of time series data. Utami, Hartoyo and Maulana (2015) examine the impact of some factors on behavior of stock returns in Indonesia Stock Exchange (IDX)'s construction sub-sector between 2010 and 2014. The internal factors are debt-equity, quick ratio, return on equity, earnings per share and price earnings ratio. The external factors include exchange rate, inflation rate, interest rate, and Presidential Regulation. The study utilizes panel data regression to investigate the effect between the variables. The findings reveal that all internal factors have significant negative impact on stock returns. Further findings show that interest and inflation rate have significant negative effects on stock returns. Exchange rate has significant positive influence, while presidential regulation has not significant impact on stock returns. The study use panel regression analysis as well as combined effect of micro and macro variables on stock return of construction subsector in Indonesia. However, this study with a set of modified micro and macro variables and 2016 data needs to be replicated in Nigeria with a view to ascertaining the combined effect using the Nigerian perspective.

Amtiran, Indiastuti, Nidar and Masyita (2017) investigate the effect of inflation rate, GDP, interest rate and exchange rate on stock returns of manufacturing companies listed in Indonesia Stock Exchange (ISE) between January 2007 and 2014. The study uses OLS to analyze the data collected. The findings shows that GDP, interest and exchange rates have positive correlation with stock returns, while inflation has negative relationship with stock returns of firms listed on ISE. The use of OLS to analyze the data was inappropriate. This is because since OLS is concerned with minimizing the sum of the squared error and considering the size of GDP vis-à-vis other variables of study, the effect on stock returns could be disproportionate. Also, the OLS does not seem to explain the individualistic effects of the listed manufacturing firms in ISE. Khalid and Khan (2017) empirically investigate the effects of exchange rates, inflation rates and interest and interest rates on performance of stock market in Pakistan using the annual time series data from 1991 to 2017 periods. The study employs the econometric

techniques of ARDL. The empirical results reveals negative significant effect of interest rate on the market index, while the exchange and inflation rates have positive effect on stock market volatility in the long-run. However, the study only captured monetary rates. Other macroeconomic variables like government expenditure, GDP savings, real GDP, ratio of government borrowing to GDP among others have been studied and found to influence stock market returns.

Ho7: Inflation rate has no significant effects on stock returns of quoted equity firms in Nigeria.

2.8 Money Supply and Stock Returns

Ali (2013) investigates the influence market oriented indicators and macroeconomic indicators on stock returns in Dhaka Stock Exchange (DSE) between July 1986 and December 2010. Market oriented indicators use by the study include price to earnings, dividend yield, market capitalization, earnings per share, and trading volume. Macroeconomic indicators use by the study include foreign exchange reserve, consumer price index, foreign exchange rate, interest rate, export receipt, import payment, per capita gross domestic product, industrial production index, broad money supply, investment at current market price, foreign remittances, national income deflator, and total domestic credit. The study utilizes multivariate time series regression analysis, Johansen's cointegration test, Toda-Yamamoto Granger causality test and Vector Error Correction Model (VECM) for data analysis. The findings reveal that market capitalization, import payment, have significant and positive relationship on stock returns, while dividend yield, earnings per share, trading volume, consumer price index, export receipt, foreign exchange reserve, industrial production, and total domestic credit have insignificant and positive effect on stock returns. Further results indicate that price to earnings multiples, foreign exchange rate, per capita GDP, aggregate investment, national income deflator, foreign remittance have significant and negative relationship with stock returns, while deposit interest rate, money supply have insignificant and negative relationship with stock returns. However, this study with a set of modified micro and macroeconomic variables and 2016 data needs to be replicated in Nigeria with a view to ascertaining position.

Nisha (2015) investigates the relationship between interest rate, exchange rate, gold price, money supply and stock market returns in India. The study used Vector Auto Regression (VAR) to analyze the monthly time series data collected between January 2010 and December 2015. The study finds a considerable effect of gold price, interest rate, exchange rate and money supply on stock returns of firms listed on the Bombay Stock Exchange (BSE). However, like other foreign-based studies, this study suffers from a major limitation. The effect of firm level characteristics and macroeconomic factors were not combined in the study. This implies that the contribution of the two in relationship to the effect of the other on stock returns of firms quoted on BSE was ignored. Considering the role of firm level characteristics play in enhancing the value of firm, the importance of combining these macroeconomic factors with firm attributes in one study is too big to be ignored. Ntshangase, Mingiri and Palesa (2016) empirically explore the relationship between macroeconomic variables and stock market in South African between 1994 and 2012. The independent variables of interest are interest rate, inflation, money supply, exchange rate and government expenditure. The study uses the restricted VAR model and Johansen cointegration test to analyze the connection between the variables. The study finds an existence of a long-run relationship between the macroeconomic indicators and the stock market in South Africa. However, the study fails to analyze the impact as well as its significance of each independent variable on the stock market in South Africa. Also, the study fails to capture some key fiscal policy variables. This would have helped users of this study find other exogenous variables that also affect stock returns in South Africa.

Okoro (2017) investigates the influence of macroeconomic factors on performance of stock market in Nigeria from 1986 to 2015. The study used GDP, money supply, interest rate, exchange rate and inflation rate as proxies for the independent variables. The study employs the Ordinary Least Square (OLS) regression for data analysis. The results indicates that macroeconomic factors on stock market performance in Nigeria from 1986 to 2015. The study uses GDP, money supply, interest rate, exchange rate and inflation rate do not have predictive abilities on stock market performance in Nigeria. This study suffer from three limitations among others. First, study of this nature in Nigeria should have included impact of government spending as well as ratio of public debt to GDP. This is against the backdrop of increased national budget, its impact on the economy, particularly, the capital market needs to be investigated. Also, the increase debt profile in recent time calls for an empirical investigation to ascertain position. Second, the study failed to include other internal financial indicators since performance of stock market is generally viewed as reflective of economic conditions of a country. Third, the study did not mention specific macroeconomic factors that are considered more relevant than others in influencing stock returns in Nigeria.

Ho8: Money supply has no significant impact on stock returns of large size firms in Nigeria.

3. Research Methods

The study adopts ex-post facto as its research design. The twenty-five (25) top firms based on equity market capitalization as at year end of 2016 is the study population. These firms represent about ninety (90) percent of the market capitalization during the review period (2016). In selecting these firms, particular attention was given to firms that meet certain criteria.

- i. The EPS for any 4 consecutive years was not negative or zero during the study period;
- ii. Shareholders' funds were not eroded for more than 3 consecutive years during the period of study.
- iii. The company must have data with respect to stock prices during the study period.
- iv. The sample firm must have existed throughout the study period.
- v. The company must have prepared its financial statements using Naira, and
- vi. The company was quoted by the NSE as at December 31, 2016.

Purposive sampling technique is adopted by the study with a sample period of 10 years; 2007 – 2016. The justification is because of data availability, reliability, verifiability and sufficiency. Due to the nature of this study, secondary data were used. The study relied mainly on the Nigerian Stock Exchange (NSE) and the Central Bank of Nigeria (CBN) data sources as well as the published annual accounts of the affected companies. The study uses panel regression analysis with the econometric model to measure the effects between variables is stated below in line with the objectives:

$$SR_{it} = \beta_0 + \beta_1 \ln MC_{it} + \beta_2 PE_{it} + \beta_3 MBV_{it} + \beta_4 Age_{it} + \beta_5 MQ_{it} + \beta_6 INT_t + \beta_7 INF_t + \beta_8 \ln MSt + \mu_{it}$$

Where:

- SR_{it} : All-Share Index (ASI) of the NSE;
 $\ln MC_{it}$: Natural log market capitalization
 PE_{it} : Ratio of price/earnings in time t;
 MBV_{it} : Market/book value per share in time t;
 Age_{it} : Number of years between year of incorporation and current year;
 MQ_{it} : Ratio of non-interest expense to total assets in time t;
 INT_t : Domestic interest rate in time t;
 INF_t : Domestic inflation rate in time t;
 $\ln MSt$: Natural logarithm of money supply in time t;
 β_0 : The constant;
 $\beta_1 - \beta_8$: The regressors coefficient;
 μ_{it} : The error term;
 i : The cross-sectional dimension;
 t : The time series effect.

Table 1: Measurements of Variables

Variables	Measurements	Expected Sign	Reference
SR	NSE Index	N/A	Tripathi and Seth (2014), Ntshangase, Mingiri and Palesa (2016), Khalid and Khan (2017)
LnMC	Natural logarithm of number of outstanding common shares of the corporation at year end multiplied by price of each stock at same financial yearend.	+	Gallizo and Salvador (2006), Tripathi, (2009), Bala and Idris (2015)
MBV	Ratio of Market-to-Book Value per share	+	Uwubanmwen and Obayagbona (2012), Zaremba and Konieczka (2014), Ltaifa and Khoufi (2016)
PE	Ratio of Price-to-Earnings per share	+	Osano (2010), Mburu (2014)
Earnings	Net profit after tax	N/A	Githinji (2011), Arslan and Zaman (2014), Kumar (2017).
Firm Age	number of years between year of incorporation and current year	+	Uwaleke and Akwe (2018), Matemilola, Bany-Ariffin, Nassir and Azman-Saini (2017)
MQ	Ratio of Non-interest expense to total assets	-	Roman and Danuletiu (2013)
INT	Domestic Interest rate	-	Tripathi and Seth (2014), Ouma and Muriu (2014), Nijam, Ismail & Musthafa (2015)
INF	Domestic Inflation rate	-	Amtiran, Indiastuti, Nidar and Masyita (2017), Okoro (2017)

4. Results

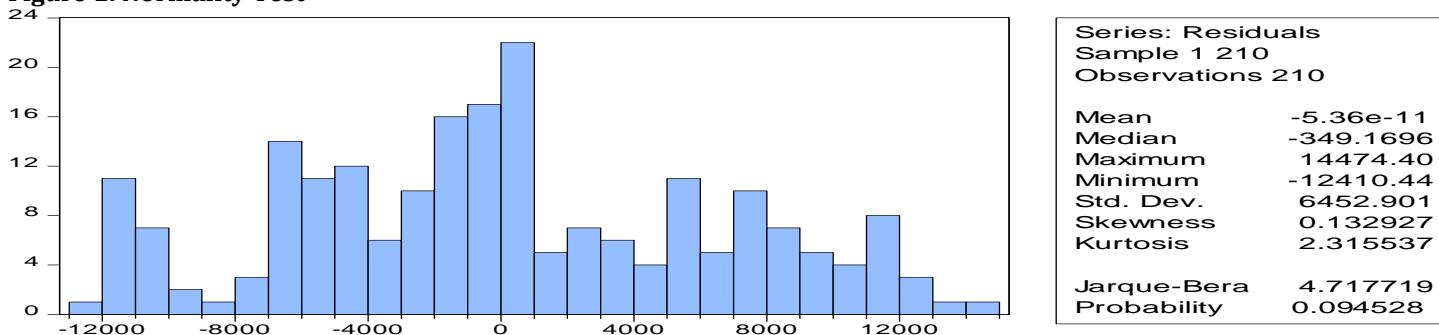
This section examines the summary statistics between the variables. The summary statistics and correlation matrix are presented below.

Table 2: Descriptive Statistics Results

	AGE	INFL	INT	LNCAP	LNMS	MBV	PE	MQ	SR
Mean	45.64	10.75	16.845	25.772	9.417	5.4561	21.309	0.154	31495.34
Median	46.00	11.19	16.819	25.703	9.4731	3.0495	15.064	0.112	28058.82
Maximum	122.00	15.7	18.991	28.948	9.9808	33.841	246.31	0.650	58669.43
Minimum	2.000	5.386	15.135	22.844	8.5424	0.2249	-62.04	0.001	20664.03
Std. Dev.	25.92	2.894	0.944	1.1189	0.4164	6.0858	27.274	0.126	10821.25

Table 2 shows the summary of descriptive statistics of the explained and explanatory variables. The variables are as stated in Tables 1 and 2. Table 2 shows a mean of 31.495.34 during the period of study for the NSE ASI.

Figure 1: Normality Test



The JB test reveals a p-value of 9.5%, which is greater than 5%. This implies that the residuals are all normally distributed. The result is corroborated with the bell shape evidence in the histogram table.

Table 3 Correlation Matrix

Variables	SR	LNCAP	M_BV	PE	AGE	MQ	INFL	INT	LNMS
SR	1.0000								
LNCAP	0.0989	1.0000							
M_BV	0.2065	0.2161	1.0000						
PE	0.1181	0.1004	0.3520	1.0000					
AGE	-0.033	-0.0796	0.2330	0.1001	1.0000				
MQ	-0.004	-0.2412	0.4910	0.0065	0.4298	1.0000			
INFL	-0.760	-0.0936	-0.1710	-0.0370	0.0255	-0.0055	1.0000		
INT	-0.184	-0.0308	-0.0820	0.0013	-0.005	0.0234	0.1900	1.0000	
LNMS	-0.477	0.1522	-0.149	0.0214	0.1080	-0.1003	0.359	-0.0300	1.0000

Table 3 depicts the degree and direction of the association between each pair of variables being analyzed. A correlation coefficient with negative sign reveals that there is an opposite or inverse relationship between the two variables. The matrix reveals a negative correlation relationship between money supply, interest rate, inflation rate, management quality, firm age and stock returns; whilst a positive correlation is revealed between M_BV per share, firm size and stock returns in Nigeria.

Table 4: Hausman Specification Test

Correlated Random Effects - Hausman Test
 Equation: Untitled
 Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	198.688300	8	0.0000

** WARNING: estimated cross-section random effects variance is zero.

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LNMCAP	1573.201234	511.958673	302629.927915	0.0537
M_BV	-59.484164	50.190785	9644.816234	0.2641
PE	6.164232	34.059697	64.588025	0.0005
AGE	8192.661868	7.922464	352097.620768	0.0000
MQ	-3978.433418	-3742.572926	20056379.593282	0.9580
INFL	-1243.832488	-2397.663910	6896.301913	0.0000
INT	-986.625284	-742.083584	2171.915036	0.0000
LNMS	-65339.468794	-6797.636075	17752626.284272	0.0000

The Hausman Specification Test shows that Random Effect Model is not appropriate. This is because of the chi-square and p-values of 198.688 and 0.0000 respectively. The p-value is less than 5%. The study carries out fixed effect panel regression to determine the combined impacts of internal and external factors on stock returns of large size firms in Nigeria. The summary of the panel fixed effect regression is shown below:

Table 5: Panel Regression (Fixed Effect Model)

Variables	Fixed Effect Panel Regression		
	Coefficients	T-values	P-values
Constant	263103.04	13.13804	0.0000
LnMCAP	1573.201	2.430425	0.0161
M_BV	-59.48416	-0.481420	0.6308
PE	6.164232	0.399425	0.6901
AGE	8192.662	13.80275	0.0000
MQ	-3978.433	-0.693999	0.4886
INFL	-1243.832	-13.47719	0.0000
INT	-986.6253	-2.707952	0.0074
LnMS	-65339.47	-15.16558	0.0000
R ²	0.830486	-	-
Adjusted R ²	0.804262	-	-
F-Stat	31.66987	-	0.0000

The regression line of $SR = 263103.4 + 1573.20\ln MCAP - 59.48M_BV + 6.16PE + 8192.66AGE - 3978.43MQ - 1243.83INFL - 986.62INT - 65339.47\ln MS$ in Table 4.5 shows that stock returns of large size firms in Nigeria decreases with increase in ratio of market to book value (M_BV), management quality (MQ), inflation rate (INFL), interest rate (INT) and money supply (LnMS). However, stock returns increase with increases in firm size (LnMCAP), price to earnings ratio (PE), and firm age (AGE). The probability values indicate significant negative effects between inflation, interest rate, money supply and stock returns of large size firms in Nigeria, while insignificant negative effect is revealed between ratio of MBV per share, management quality and stock returns in Nigeria. A more regression result shows significant positive effect between firm age, firm size and stock returns in Nigeria. However, an insignificant positive effect is shown between P/E ratio and stock returns of large size firms in Nigeria at 5% level of significance. The coefficient shows that about 83% of changes in stock returns of large size firms in Nigeria is described by internal and external factors. The remaining 17% is determined by the residual. The overall result shows fitness of the model with F-statistic and a p-value of 31.6699 and 0.0000 respectively. In testing research hypotheses formulated, the study depends on results presented in table 5. The null hypothesis is accepted if the probability value is greater than 0.05, otherwise accept the alternative hypothesis. The study examines the effects of internal and external factors on stock returns of large size firms in Nigeria. Based on the probability values in table 5, the study rejects the null hypothesis for hypotheses 1, 4, 6, 7 and 8 that firm size, firm age, inflation, interest rate and money supply have no significant effect on stock returns in Nigeria. Similarly and based on probability values of 0.6308, 0.6901 and 0.4886, the study accepts the null hypotheses 2, 3 and 5 that ratio of market to book value, price to earnings ratio and management quality respectively have no significant effects on stock returns of large size firms in Nigeria. The study carries out various diagnostic tests to

ascertain the appropriateness of the model as well as the robustness of the results. The summary of the post diagnostic tests is presented in Table 6.

Table 6: Summary of Post Diagnostic Tests

	Statistics	P-values
Breusch-Pagan-Godfrey Test	8.285175	0.4061
Mean Variance Inflation Factors	1.390399	-

From Table 6, the result of the post diagnostic tests shows absence of heteroscedasticity. The p-value and level of significance figures reveal evidence to reject the hypothesis that the residuals are not homoskedastic and the model is good. The multicollinearity test shows a mean VIF of 1.3904. From the result therefore, there is absence of multicollinearity.

5. Discussion, Conclusion And Recommendations

5.1 Discussion of Findings

The R² value of 83% shows that changes in returns of large size firms' stocks in Nigeria are determined by internal and external factors whilst the remaining 17% is explained by the residual. The overall result shows fitness of the model with F-statistic and a p-value of 31.6699 and 0.0000 respectively. Empirical evidence from the above results indicate that a significant positive impact exists between firm size and stock returns of large size firms in Nigeria. This implies that stock returns of large size in Nigeria increases as market capitalization rise. This may be due to preference for large-size firms by both foreign and local, as well as institutional and retail investors. Their preference could be that larger firms have more robust enterprise risk management framework, good company fundamentals and outlook, sound corporate governance practices as well as strong management policies and procedures. The result agrees with findings of Rahmani, Sheri and Tajvidi (2006) and disagrees with the finding of Uwubanmwen and Obayagbona (2012).

Additionally, In addition, the study reveals that the ratio of MBV per share has insignificant negative effect on stock returns of large size firms in Nigeria. The combined effect's empirical evidence implies that, decrease in the ratio of MBV per share increases stock returns of firms in small proportion. The result agrees with findings of Dhatt Kim and Mukherji (1999) and disagrees with the findings of Tahir, Sabir, Alam and Ismail (2013). Also, firm age is found to be positively related to stock returns of large size firms in Nigeria with statistical significance. It suffices to say that as firm age increases, stock returns in Nigeria also increase. This finding does not support the conventional business life cycles of introduction, growth, maturity and decline, where profits start to decline at certain point in time. This implies that quoted firms in Nigeria keep abreast with technological changes, new and product innovation among others, which make them earn superior returns even as they grow older. These strides maybe as a result of efficient management team. The result agrees with the findings of Matemilola, Bany-Ariffin, Nassir and Azman-Saini (2017); and disagrees with the finding of Uwaleke and Akwe (2018).

Further empirical result reveals that management has insignificant negative impact on stock returns of large size firms in Nigeria. This implies that as selling, administrative, personnel and other operating expenses increase, stock returns of firms in Nigeria decreases but not in large proportion. High operating expenses affects corporate profitability, future cash flow of business and dividend payable to shareholders. This means that for maximization of shareholders' wealth, operating expenses must be kept at a reasonable level. The result of this finding disagrees with that of Rjoub, Civcir and Resatoglu (2017).

The study also finds a significant negative effect of inflation rate on stock returns of large size firms in Nigeria. This implies that stock returns of large size firms in Nigeria declines with increase in inflation rate as proxied by consumer price index. A rise in inflation rate rises the living cost and shifts productive resources to consumption. This gives rise to a reduction in demand for financial instruments (particularly, ordinary shares), which in turn brings about decrease in the stocks volume traded. Also, inflation in Nigeria has been on the increase, which comes with tightening monetary policies by the Central Bank of Nigeria. This in turn pushes upward the nominal risk-free rate and increases the discount rate which give rise to decrease of present value of cash flows. The result agrees with the findings of Amtiran, Indiastuti, Nidar and Masyita (2017) and disagrees with the findings of Khalid and Khan (2017).

Furthermore, the study also finds a significant negative impact of interest on stock returns large size firms in Nigeria. This implies that stock returns decreases with increase in domestic interest rate. High interest rate leads to increase in borrowing cost and a decrease in economic activities. These impacts negatively on corporate profit, business' future cash flow and dividend to shareholders. A rise in domestic interest rate has led to depressed corporate profits in Nigeria over the years. This has negative consequence for discount rate applied to equity investors. The result agrees with the findings of Mugambi and Okech (2016) and disagrees with that of Subing, Kusumah and Gusni (2017).

Finally, evidence from regression results indicate a significant negative impact of money supply on stock returns of large size firms in Nigeria. This implies that stock returns in Nigeria decreases with increase in money supply. There is a consensus

that growth in money supply, except supported by increase in output of goods and services, may lead to inflation in the economy. In consequence, as investors move their investment and/or portfolios from to real assets, stock returns move downwards. The implication of negative relationship in Nigeria could mean that domestic investors tend to invest their financial resources more on physical assets, perhaps due to lack of financial literacy, and confidence in the capital market. The result agrees with the findings of Nisha (2015) and disagrees with that of Okoro (2017).

5.2 Summary and Conclusion

The objective of the study was to determine the effects of internal and external factors on stock returns of large size firms in Nigeria. The study uses ex-post facto research design and purposive sampling was adopted to determine the sample size. Twenty-one firms were selected having met the eligibility criteria. The firms selected have available and consistent data during the estimation period. The study uses panel data of large size firms in Nigeria for the period between 2007 and 2016. The study uses firm size, MBV per share, and P/E ratio as representatives for internal financial factors; firm age and management quality as proxies for internal non-financial factors; inflation, interest rate and money supply as the independent variables; while the NSE All-Share Index as a proxy for stock returns being the outcome variable. The study utilizes secondary data from three sources. First, data regarding internal financial and non-financial factors were sourced from the sampled companies' Annual financial statements and the Nigerian Stock Exchange (NSE) database. Second, data with respect to external factors were sourced from the 2016 edition of the CBN Statistical Bulletin. Third, data regarding the explained variable were sourced from the NSE website (www.nse.com.ng).

In this study, descriptive statistics were used to describe the behavior and/or distribution of the data. Normality test was carried out for each of the models to determine the normality or otherwise of the residuals. The study used correlation matrix to analyze the magnitude and direction of the relationship between each pair of variables. Panel regression analyses (Fixed and Random Effects model) were used with the aid of Eviews 10 Student Version (SV) to examine the effects of internal and external factors with respect to firm size, MBV per share, P/E ratio, management quality, firm age, interest rate, inflation, and money supply on stock returns as measured by the NSE ASI. To avoid making wrong inferences, the results were validated using various post diagnostic tests to ascertain the appropriateness of the model as well as the robustness of the results. The diagnostic tests reveal absence of heteroscedasticity, and multicollinearity for all the models. The R² value of 83% shows that changes in stock returns of large size firms in Nigeria are determined by internal and external factors whilst the remaining 17% is explained by the residual. The overall result shows fitness of the model with F-statistic and a p-value of 31.6699 and 0.0000 respectively.

The panel regression results indicate significant negative effects between inflation, interest rate, money supply and stock returns of large size firms in Nigeria, while insignificant negative effect is revealed between ratio of MBV per share, management quality and stock returns in Nigeria. Other regression result shows significant and positive impact between firm size, firm age and stock returns in Nigeria. However, an insignificant positive effect is shown between P/E ratio and stock returns of large size firms in Nigeria at 5% level of significance. Following the regression results, the study rejects the null hypotheses that inflation, interest rate, money supply, firm size and firm age do not have significant effects on stock returns in Nigeria. The study also accepts the null hypotheses that ratio of MBV per share, management quality and P/E ratio do not have significant effects on stock returns in Nigeria.

5.3 Recommendations

The following recommendations emerged from findings of the study:

The apex regulator of the Nigerian capital market (SEC) should carefully monitor large size firms. This can reduce cases of insider trading, market manipulations, among others. The investors should carefully use MBV ratio to as one of the measures of assessing stock prices of large size firms, as this can explain stock returns in Nigeria. The investors may also consider companies with low P/E ratios as these companies may above average ratios. The Board and Management team of companies should keep abreast of developments, innovations and technological changes in the environment within which they operate. This will make companies earn superior returns and maintain profitability even as they grow old.

The Board and Management should also ensure that operating expenses are kept at minimum levels (efficiency of the expenditure not the volume). This enhances management quality and efficiency, corporate profitability, business' future cash flow, firm value and dividend payable to shareholders. The Investment advisers and investors in Nigeria should take cognizance of systematic risks usually exposed by inflation, interest rate and money supply when constructing portfolios and diversification strategies. Government can also encourage domestic production of goods and services and diversification of the economy. This has the capacity to reduce inflation rate, stimulate growth and economy activities, particularly in the capital market. The Central Bank of Nigeria should try as much as possible to reduce the anchor rate (Monetary Policy Rate) thereby reducing the cost of borrowing by quoted companies in Nigeria. The reduction in the domestic interest rate can increase corporate profitability and enhance firm value. The Securities and Exchange Commission should intensify her capital market

development mandate through sensitization campaigns on the gains of investing in the capital market as well as putting measures in place that will engender investors' confidence in Nigeria. This is against the background that investors in Nigeria do not invest in the capital market in spite of increase in economic activities and money supply in the economy.

References:

- Amadi, S. N., & Odubo, T. D. (2002). Macroeconomic variables and stock prices: Causality analysis. *The Nigeria Journal of Economic and Management Studies*, 4(1&2), 29-41.
- Amtiran, P. Y., Indiastuti, R., Nidar, S. R., & Masyita, D. (2017). Macroeconomic factors and stock returns in APT framework. *International Journal of Economics and Management*, 11(1), 97-206.
- Anderson, M. (2016). *The effects of leverage on stock returns*. Lund University, School of Economics and Management.
- Arslan, M., & Zaman, R. (2014). Impact of dividend yield and price earnings ratio on stock returns: A study of non-financial listed firms of Pakistan. *Research Journal of Finance and Accounting*, 5, 68-74.
- Bala, H., & Idris, I. (2015). Firm's specific characteristics and stock market returns (evidence from listed food and beverages firms in Nigeria). *Research Journal of Finance and Accounting*, 6(16), 188-200.
- Capaul, C., Rowley, I., & Sharp, W. F. (1993). International value and growth stock returns. *Financial Analysts Journal*, 49, 27-35.
- Chandra, P. (2004). *Investment analysis and portfolio management*. New Delhi: McGraw-Hill.
- Chambers, N., Sezgin, F. H., & Karaaslan, B. (2013). An analysis of the effect of capital structure and the beta coefficient on stock returns: A case study of the Istanbul stock exchange's manufacturing industry. *International Journal of Business and Social Science*, 4(7).
- Daniel, K., & Titman, S. (1997). Evidence on the characteristics of cross sectional variation in stock returns. *Journal of Finance*, 52, 1-33.
- DeBondt, W. F. M., & Thaler, R. H. (1987). Further evidence on investor overreaction and stock market seasonality. *Journal of Finance*, 47.
- Dhatt, Kim & Mukherji (1999). The value premium for small-capitalization stocks. *Financial Analysts Journal*, 55(5), 60-68.
- Fama, E. F., & French, K. (1992). The cross-section of expected stock returns. *Journal of Finance*, 47, 427-465.
- Gatuhi, S., Gekara, M., & Muturi, D. (2015). Effect of macroeconomic environment on stock returns of firms in the agricultural sector in Kenya. *International Journal of Management & Business Studies*, 5(3), 9-23.
- Garba, A. (2014). Impact of macroeconomic factors on common stock returns: A study of listed manufacturing firms in Nigeria. *European Journal of Business Management*, 6(13), 140-150.
- Gallizo, J., & Salvador, M. (2006). Share prices and accounting variables: a hierarchical Bayesian analysis. *Review of Accounting and Finance*, 5(3), 268-278.
- Githinji, G. G. (2011). *Relationship between price earnings ratio and share prices of companies listed on the Nairobi stock exchange*. Unpublished work, University of Nairobi.
- Haugen, R., (1995). *The new finance: the case against efficient market*. Prentice Hall, Englewood Cliffs.
- Kazeem, H. S. (2015). *Firm specific characteristics and financial performance of listed insurance firms in Nigeria*. Unpublished M.Sc. Dissertation.
- Kumar, P. (2017). Impact of earning per share and price earnings ratio on market price of share: a study of auto sector in India. *International Journal of Research*, 5, 113-118.
- Loughran, T. (1997). Book-to-market across firm size, exchange, and seasonality: Is there an effect? *Journal of Financial and Quantitative Analysis*, 32(3), 249-268.
- Ltaifa, M. B., & Khoufi, W. (2016). Book to market and size as determinants of stock returns of banks: An empirical investigation from MENA Countries. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6, 142-160.
- Maku, O. E., & Atanda, A. A. (2010) Determinants of stock market performance in Nigeria: Long run analysis. *Journal of Management and Organizational Behaviour*, 1(3), 1-16.
- Mburu, T. M. (2014). *The relationship between price earnings ratio and stock return for firms quoted in Nairobi securities exchange*. Unpublished MBA Dissertation.
- Mugambi, M., & Okech, T. C. (2016). Effect of macroeconomic variables on stock returns of listed commercial banks in Kenya. *International Journal of Economics, Commerce and Management*, 4(6), 390-418.
- Nijam, H. M., Ismail, S. M. M., & Musthafa, A. M. M. (2015). The impact of macro-economic variables on stock market performance: evidence from Sri Lanka. *Journal of Emerging Trends in Economics and Management Science*, 6(2), 151-157.
- Nisha, N. (2015). Impact of macroeconomic variables on stock returns: evidence from Bombay. *Journal of Investment and Management*, 4(5), 162-170.

- Ntshangase, K., Mingiri, K. F., & Palesa, M. M. (2016). The interaction between the stock market and macroeconomic policy variables in South Africa. *Journal of Economics*, 7(1), 1-10.
- Olowoniyi, A. O., & Ojenike, J. O. (2013). Capital structure and stock returns in Nigeria: a panel co-integration approach. *International Journal of Applied Economics and Finance*, 4(5), 162-170.
- Osano, J. A. (2010). *An evaluation of price to earnings and price to book values as predictors of stock returns of firms listed at the Nairobi stock exchange (NSE)*. University of Nairobi, Nairobi.
- Osamwonyi, I. O. (2003). Forecasting as a tool for securities analysis. A paper presented at a three-day workshop on introduction to securities analysis, organized by Securities and Exchange Commission, Lagos August 17.
- Okoro, C. O. (2017). Macroeconomic factors and stock market performance: evidence from Nigeria. *International Journal of Social Sciences and Humanities Reviews*, 7(1), 1-9.
- Ouma, W. N., & Muriu, P. (2014). The impact of macroeconomic variables on stock market returns in Kenya. *International Journal of Business and Commerce*, 3(11), 1-31.
- Pandey, I. M. (2001). The expected stock returns of Malaysian firms: a panel data analysis. *IIMA Working Paper*, 8(1).
- Panu, C., Peng, C., & Dennis, P. (2007). Firm characteristics and stock return. *International DSI/Asia and Pacific DSI*, 5(4), 49-62.
- Pettersen, A. (2011). *An investment strategy based on P/E ratios: How does one make abnormal returns by taking advantage of the price per earnings effect, and does such an effect exist on the Stockholm stock exchange during the period 2000-2009?* Published work, Spring University, Sweden.
- Rjoub, H., Civcir, I., & Resatoglu, N. G. (2017). Micro and macroeconomic determinants of stock prices: the case of Turkish banking sector. *Romanian Journal of Economic Forecasting*, 20(1), 150-166.
- Roman, A., & Danuletiu, A. E. (2013). An empirical analysis of the determinants of bank profitability in Romania. *Annales Universitatis Apulensis Series Oeconomica*, 15(2), 580-593.
- Rahmani, A., Sheri, S., & Tajvidi, E. (2006). *Accounting variables, market variables and stock returns in emerging markets: case of Iran*. Allameh Tabatabai University, Tehran, Iran.
- Shapiro, A., & Lakonishok, J. (1984). Stock returns, beta, variance and size: an empirical analysis. *Financial Analysts Journal*, 40 (36).
- Sofie, B., & Alexender, B. (2014). *Capital structure and stock returns – a study of the Swedish large cap companies*. Unpublished PhD Dissertation.
- Subing, H. J. T., Kusumah, R. W. R., & Gusni (2017). An empirical analysis of internal and external factors of stock pricing: evidence from Indonesia. *Problems and Perspectives in Management*, 15(4), 178-187.
- Tripathi, V. (2009). Company fundamentals and equity returns in India. India Council of Social Science Research.
- Tripathi, V., & Seth, R. (2014). Stock market performance and macroeconomic factors: the study of Indian equity market. *Global Business Review*, 15(2), 291-316.
- Tudor, C. (2010). *Firms specific factors as predictors of future returns for Romanian common stock: Empirical evidence*. International business and Economics Department, Academy of Economics Studies from Bucharest, Romania.
- Umar, M. S., & Musa, T. B. (2013). Stock prices and firm earning per share in Nigeria. *JORIND*, 11(2), 187-912.
- Uwaleke, U. J., & Akwe, J. A. (2018). Effects of price-to-book value and price-to-earnings ratios on stock market returns of consumer goods companies in Nigeria. *Bingham University Journal of Accounting and Business*, 1(3), 269-280.
- Uwubanmwen, A. E., & Obayagbona, J. (2012). Company fundamentals and returns in the Nigerian stock exchange. *JORIND*, 10(2).
- Utami, W. R., Hartoyo, S., & Maulana, N. A. (2015). The Effect of internal and external factors on stock Return: empirical evidence from the Indonesian construction subsector. *Asian Journal of Business and Management*, 3(5), 370-377.
- Vorek, M. (2009). *Does high price earnings predict future falls of stock price?* Working paper, University of Economics in Prague, Czech Republic.
- Zaremba, A., & Konieczka, P. (2014). *The Relations between momentum, value, size and liquidity factors and stock returns on the Polish market*. Optimum Studia Ekonomiczne NR.