

**EFFECT OF SELECTED FIRM CHARACTERISTICS ON THE STOCK
PRICES OF FIRMS LISTED AT THE NAIROBI SECURITIES
EXCHANGE, KENYA**

WANDERA JUSTUS O.

D61/5931/2017

**A PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF
MASTERS OF BUSINESS ADMINISTRATION, SCHOOL OF
BUSINESS UNIVERSITY OF NAIROBI**

2019

DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the University of Nairobi for academic credit.

Signed: _____ Date: _____

Name: Wandera Justus

REG No: D61/5931/2017

This research project report has been submitted for examination with my approval.

University Supervisor: -

Signed: _____ Date: _____

Dr. Winnie Nyamute

Senior Lecturer, Department of Finance and Accounting,

School of Business,

University of Nairobi.

ACKNOWLEDGEMENTS

First and Foremost, I would like to give thanks to the Almighty God for blessing me with the health that enabled me to complete this project.

I would also like to express my sincere gratitude to my supervisor, Dr. Winnie Nyamute for her insights and exemplary guidance in undertaking this research project.

Lastly, I would like to appreciate the support of my family, friends and colleagues who helped me maintain focus throughout my MBA program.

DEDICATION

I dedicate this thesis to my loving parents **Mr. Martin Nakhone** and Mrs. **Prisca Kubebea** for their sacrifice throughout my studies.

ABSTRACT

Trading at the Nairobi Securities Exchange has seen stock prices sink to lower to levels over the last five years. This has raised question amongst practitioners and researchers on the actual determinants of stock prices. Existing studies from different stock markets covering different periods of time have given varying results on factors determining stock prices. In Kenya, studies on factors influencing stock prices have approached this issue from descriptive perspective devoid of inferential statistics rigour. In addition, these studies have zeroed in on macroeconomics factors with very little focus on firm-specific factors. As a result there is still little knowledge on how firm specific factors effect stock prices. It is against this backdrop that this study sought to examine the effect of firm specific factors on stock prices of firms listed at the NSE. The study was guided by the fundamental and Random Walk theories. Secondary panel data for 27 cross-sections for the period between 2014 and 2018 was used. Data on stock prices were collected from NSE while data on explaining variables were collected from the websites of respective firms. The study employed correlational research design. The population of the study consisted of firms listed on the All-Share Index. Secondary data was collected using a specially designed data collection sheet. Panel regression enabled the researcher to establish fixed and random effects. At 5% significance level and ($F=256.51$ and $p<0.000$), the model estimate fits the data as expected. R^2 of .5967 mean that 59.67% of the total variation in the stock prices of NSE firms is accounted for by the model. Stock price is the dependent variable and EPS, DPS and BVPS are the explaining factors. EPS and DPS are statistically significant while BVPS is not statistically significant. The study revealed that earnings per share and divided per share have a positive effect on stock prices at the NSE. The remaining factor namely book value per share had insignificant effect. The findings of the present study are particularly useful for investors and fund managers as they can watch out for these significant factors while analysing stock returns and predicting future prices.

TABLE OF CONTENT

DECLARATION.....	ii
ACKNOWLEDGEMENTS	iii
DEDICATION.....	iv
ABSTRACT.....	v
LIST OF ABBREVIATIONS.....	ix
LIST OF TABLES	x
LIST OF FIGURES	xi
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.1.1 Firm Characteristics	2
1.1.2 Stock Prices	3
1.1.3 Firm Characteristics and Stock Prices.....	4
1.1.4 The Nairobi Securities Exchange.....	5
1.2 Research Problem.....	6
1.3 Objective of the study.....	9
1.4 Value of the study.....	9
CHAPTER TWO: LITERATURE REVIEW.....	11
2.1 Introduction	11
2.2 Theoretical Framework	11
2.2.1 Fundamental Theory	11
2.2.2 Random Walk Theory.....	12
2.2.3 Market Efficiency Theory.....	13

2.3	Determinants of Stock Prices.....	14
2.4	Empirical Review.....	15
2.5	Conceptual Framework.....	19
2.6	Summary of Literature Review.....	20
CHAPTER THREE: RESEARCH METHODOLOGY		21
3.1	Introduction	21
3.2	Research Design.....	21
3.3	Population.....	21
3.4	Data Collection.....	21
3.5	Data Analysis	22
3.6	Diagnostic Tests	22
	3.6.1 Descriptive Statistics.....	22
	3.6.2 Correlation Analysis	23
3.7	Model Estimation.....	23
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION		24
4.1	Introduction	24
4.2	Descriptive Statistics.....	24
4.3	Correlation Analysis.....	26
4.4	Panel Regression Analysis and Hypotheses Testing	28
	4.4.1 Pooled OLS	28
	4.4.2 Fixed Effects OLS	29
	4.4.3 Random Effects OLS	31
	4.4.4 The Choice Model	32

4.4.4.1 The Correlated Random effects-Hausman test:.....	32
4.4.4.2 The Wald test.....	32
4.5 Interpretation of Findings and Discussion of Results.....	33
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	35
5.1 Introduction	35
5.2 Summary of Findings.....	35
5.3 Conclusions and Recommendations	35
5.5 Suggestions for Further Research.....	36
REFERENCES.....	38
APPENDICES.....	42
APPENDIX I: NSE ALL SHARE INDEX FIRMS.....	42
APPENDIX 2: ANNUAL DATA.....	46

LIST OF ABBREVIATIONS

- ADF -Augmented Dickey-Fuller Test
- ASEA -African Stock Exchanges Association
- BVPS - Book Value per Share
- DPS -Dividend per Share
- EPS -Earnings per share
- NSE -Nairobi Securities Exchange
- OLS -Ordinary Least-Squares Method
- VIF -Variance Inflation Factor

LIST OF TABLES

Table 4.1: Descriptive Statistics	26
Table 4.2: Correlation Analysis Results	28
Table 4.3: Pooled OLS.....	29
Table 4.4: Fixed OLS.....	30
Table 4.5: Random Effects Results	31
Table 4.6: Hausman test results.....	32
Table 4.7: The Wald Test Results	33

LIST OF FIGURES

Figure -1.1: Conceptual Framework.....	19
--	----

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Researchers agree that the stock market is very crucial for the economy. For instant, Islam and Dooty (2015) posit that stock market intermediates savers and investors; Bhattarai (2014) noted that stock market provides capital to finance investments of firms seeking to expand; while Ghimire and Mishra (2018) portends that stock market helps in expansion of production and trade within an economy, thereby creating industries and production activities (Uddin, Rahman & Hossain, 2013). Stock market is therefore of immense interest to researchers, practitioners and other stakeholders. One of the main variables that affect investment in the market of stocks is the stock prices. Gill et al., (2012) records that stock price is the most is the most significant signals that investors use to decide whether to invest or not invest in the stock market. Singh (2018) added that stock price is an indicator of firm performance and that only the stock price is used to determine shareholders wealth. A firm's stock price changes depending on the firm's performance and the performance of the economy in totality (Singh, 2018). In literature, many theories are available to explain the movement in the stock prices.

This Study on stock prices is anchored on fundamental theory (1948). Fundamental theory hypothesizes that stock prices are strongly influenced by certain fundamental factors such as firm-specific, industry relevant and macroeconomics factors. Random Walk Theory (Malkiel, 1973) provides additional key foundation to anchor this study by advancing a postulation that stock prices movements are independent in that past stock prices there is no relationship

between the past or future stock prices do not influence current stock prices. This means that future stock prices cannot be predicted by past stock prices. In addition, Market Efficiency Theory (Fama, 1970) further underpins this study by emphasizing that the current stock prices usually near their intrinsic values because of rational investors.

1.1.1 Firm Characteristics

According to Dioha, Ahmed and Okpanachi (2018), firm characteristics are variables that are mostly determined by the actions of management of a firm. Different scholars have identified various firm-specific variables. For instance, Ayuba, Balago and Dagwom (2018) identified firm size, dividend per share and earnings per share. In addition, some of the general variables considered are dividend payout, total equity, and the structure of a firm's capital and book value which at times measures the size of a firm (Singh, 2018). This study attempts to study the effect of firm characteristics on stock prices at the Nairobi securities exchange. The choices of these variables are informed by the gaps in literature. Therefore, firm characteristics of interest for this study are earnings per share (EPS), book value per share (BVPS) and dividend per share (DPS).

One of the independent variables identified is EPS. EPS show how a firm is performing in terms of profitability (Bhattarai, 2014). Researchers such as Malhotra and Tandon (2013), Almunani (2014), Jatui, et al., (2014) agree that EPS is measured as a firm's profit divided by the outstanding shares of its common stock. The second explanatory variable is BVPS. BVPS is also considered as net assets for every share because it gives the amount of assets a firm owns for every equity

share. BVPS, which represents the book value of the company, is calculated as the total equity divided by the number of shares outstanding (Al-Deehani, 2005). The final variable is the dividend for every share (DPS). DPS which measures the amount that the company has paid out for every share held. According to Geetha and Swaaminathan (2015), DPS is measured as the total dividend divided by the number of shares outstanding.

1.1.2 Stock Prices

When publicly traded companies issue shares of stock to investors, each of those shares is assigned a monetary value, or price. Stock prices can go up or down depending on different factors. The opening stock price of a company is established when the company goes through an initial public offering (IPO). According to Long (2017), a stock is evidence that confirms lawful rights of the owners of assets. Typically, a stock is an instrument used for long term financing. Stock is considered to be very effective tool in creating large amounts of capital outlays that are used to finance a firm's productive activities and further investments.

Extant researchers such as Piotroski and Roulstone (2004), and Bhattarai (2014), stock prices traded at the stock market are never constant but keep on fluctuating due to price mechanism of buying and selling. Because of the constant changes in stock prices, Bhattarai noted that it is not easy to decide on opening or closing stock price as a real measure of stock prices. However, going by existing literature, researchers have always settled on closing stock prices. It is with this

justification that this study will measure stock prices as closing prices of stocks at the end of the trading day of the firms.

1.1.3 Firm Characteristics and Stock Prices

Extant literature indicates variations in stock prices usually depend on information related to the firm and the market as a whole. Bhattarai (2014) noted that fluctuation in stock prices could occur as a result of supply and demand interactions. Factors explaining increase or decrease in stock prices can be categorised as technical factors, firm-specific factors and market sentiments. Uddin et al., (2013) identified firm specific factors such as dividend per share, book value per share, earnings per share and price earnings ratio. In addition, Sharma (2011) identified firm performance as a determinant of stock prices. Thus, Bhattarai (2014) emphasizes that it is very vital to understand how different firm-specific factors relate with a firm's stock price so as to enable investors make informed investment decision that will improve their returns on investment.

Theoretically, higher earnings per share will in most instances results in a higher stock price. According to existing researches by Malhotra and Tandon (2013), Almumani (2014), Jatui, et al., (2014) and (Bhattarai, 2014), earnings per share affects stock prices positively. In addition, Duy, Hau and Dang (2017) noted that, the higher EPS shows that a firm has capacity to pay higher dividends and as a result, its stock price is likely to increase. From the foregoing, EPS is an important metric in examining firm specific determinants of stock price.

Dividend payment is paid to shareholders from realised profits as a token reward for their investments in the firm's equity. Chen (2019) posits that dividend paid per share has an impact on a firm's stock price. According to Geetha and Swaaminathan (2015), DPS has a positive and significant effect on stock price of a firm. Dividend payment can be measured in many ways; for instant dividend per share. Geetha and Swaaminathan elucidate that DPS forms the portion of profit after paying tax per share held that management of a firm distributes to shareholders for their investment in the firm's equity and that DPS affects stock prices positively. In this study, dividend will be measured using dividend per share as informed by previous literature.

Another important firm-specific factor is the BVPS which is measured as the equity accessible to common shareholders divided by the number of outstanding shares. According to Chan (2019), BVPS usually characterizes the smallest value of a firm's equity. According to Ghimire and Mishra (2018), BVPS is also regarded as net asset value per share since it accounts for the amount of assets which the firm holds on behalf of each equity share. Increasing BVPS is touted to directly affect share prices.

1.1.4 The Nairobi Securities Exchange

The Nairobi Securities Exchange (NSE) initially referred to as Nairobi Stock Exchange was established in 1954. The NSE is a member of the African Stock Exchanges Associations (ASEA). NSE ranks fourth in Africa in terms of trading volumes. But in terms of market capitalization compared to gross domestic product, NSE ranks fifth in Africa. NSE has collaborated with the Uganda

Securities Exchange and the Dar Es Salaam Stock Exchange to carry out cross-listing of various stocks, (NSE Handbook, 2008).

By definition, “The NSE ALL Share Index is a price weight index calculated as a mean of all firms at the NSE” (NSE, 2018). The ALL-share index is used to track the performance of the NSE equities (shares) market. In order to be included in the NSE 20-share index, trading activity measures such as market capitalization, volume of stock traded, firms liquidity and stock turnover in the ratio 4:3:2:1 respectively. Moreover, a firm must have 20% of its stocks quoted at the NSE with minimum market capitalization of about USD 200,000 with higher profitability and show that the firm has been paying dividends (NSE, 2018).

Existing reports (Kenyan Wall Street, 2018) indicates that trading the stock performance recorded worst performance in 2018 with highest performance being 2015. Majority of stockshave been on the negative since the year began except Barclays Bank has gained by more than 10 per cent over the period. Over the last few years, the NSE has been bearish; as a result, investor confidence has been extremely low. Over this period, investors have lost a lot of investments as they wait market to correct (Amboko, 2019). This has led to foreign investor withdrawals while the local investors are staying on the sidelines.

1.2 Research Problem

The NSE has several indices; the All-share index; the 20-share index, the 25-share index, the Kenyan government bond index and the pan African index. These NSE indices are often valuable in many different ways to investors despite the fact that

the stock market is usually more vibrant than the indices suggest. For instant, the NSE provides past performance of stocks of interest which provides investors with more information on the stock of interest. Secondly, stock market provides a comparative measure of stock performance thereby enabling investors to make informed decision. The third use of stock market indices is to make future forecasts. A study on past performance of stock indices is of great importance since investors can predict future stock movements. For instant, rising EPS usually leads to a rise in the stock price implying that EPS have a positive relationship with stock price. In addition, DPS is touted to positively affect stock prices. Moreover, literature portends that increasing BVPS to directly affect share prices.

In 2018, trading at the Nairobi Securities Exchange has seen the benchmark “NSE 20 Share Index” sinking lower to levels last seen in March 2009. The index, which is a benchmark for Kenya’s top 20 listed blue-chip counters, sunk by more than 24 per cent in the year 2018. Analysis of the 20 share index reveals that all the constituents of the NSE 20 index were on the negative for the better part of 2018 except Barclays Bank which gained than 10 per cent over the period. A firm’s stock price fluctuates depending on the firm’s performance and how the economy performs in aggregate (Singh, 2018). A bear market where stock prices are falling is synonymous with underperforming economy where firms record dismal profits. Over the last few years, firms listed under the 20 share index have posted positive results which are expected to drive up the stock prices. However, the reverse occurred with all the constituents of the NSE 20 index recording declining stock prices for the better part of 2018. This has raised question amongst

practitioners and researchers on the relationship between firm characteristics and stock prices.

Existing studies from different stock markets covering different periods of time have given varying results on factors determining stock prices. For instant, different measures of dividend has been established to influence stock prices however, empirical evidence has reported mixed results. For instant, Bhattarai (2014) and Singh (2018) recorded that dividend payout ratio had insignificant effect on stock prices, while Şebnem and Vuran (2012) reported a negative effect. Gregoriou et al. (2015) found out that dividend per share has a positive effect on stock prices while Srinivasan (2012) records a negative effect while Obeidat (2009) reported a positive effect.

On whether earnings per share affects stock prices, literature is mixed. One strand of literature portends that share price positively affects stock prices. For instance, Bhattarai (2014) in Nepal established that earnings per share have a strong positive effect on stock prices. Similar findings were reported by Raithatha and Bapat (2007) on Indian stock market; Obeidat (2009) in Abu Dhabi; Uddin et al., (2013) Dhaka stock exchange, while Ghimire and Mishra (2018) reported that earnings per share have minimum influence on the stock price in Nepal. The other strands of evidence show that the influence of earnings per share is insignificant. For example, Gregoriou et al. (2015) in a study on targeting telecommunication firms both in developed and developing countries.

Several studies have evaluated the effect of book value of equity per share on share prices. A study conducted by Sharma (2011) indicated that book value of equity per share had significant and positive effect on stock prices in India a result similar to Avdalović and Milenković (2017) in Serbia. In the existing literature, findings are mixed on the effect of firm-specific factors on stock prices. In addition, extant studies have focused on stock prices of different firms from the same industries making a generalization difficult. Moreover, very few studies are based on developing economies. Since most of them are very fragile, Nairobi Securities Exchange provides a perfect context to carry out this study. Therefore, the question of the study was; what is the effect of selected firm-specific factors on stock prices at the Nairobi Securities Exchange?

1.3 Objective of the study

To examine the effect of selected firm characteristics on stock prices at the Nairobi Securities Exchange.

1.4 Value of the study

Management of firms listed at the NSE may find the findings of this study useful as it provides evidence on the effect of selected firm characteristics on stock prices. This information will enable them increase value for investors. In addition, to the Capital Market Authority and NSE (policy makers); the study findings is of great benefit in formulation and implementation of policies related to share pricing as well as regulating of stock exchange trading.

The findings assist firms and individuals (investors) in understanding the factors that affect share prices and they are better informed on how to gauge their investment options while banks and other financial institutions will be able to offer better financial advice and products to investors who seek funding to finance share purchases. In addition, scholars and researchers may find this study useful if they wish to use the findings as a basis for current and further research on the subject.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In this chapter, theories underpinning this study are discussed. In addition, factors affecting stock prices are presented and empirical literature are also reviewed. The chapter ends by summarizing gaps identified in literature and a presentation of the conceptual framework that will guide the study.

2.2 Theoretical Framework

In this section, theories supporting the study are discussed.

2.2.1 Fundamental Theory

This theory was proposed by Arthur (1948). According to this theory, there are certain fundamental factors that affect stock prices. These influences are usually categorised as Firm-specific factors, Industry factors and Macroeconomic factors. This implies that at any given period, a firm's stock price may be affected by one or a combination of many of these factors and therefore each stock has its inherent value.

Considering this theory, a stock may be over-priced or under-priced when compared to its inherent value. It is a general practice from the stock market to sell over priced stocks at the earliest opportunity because their price will fall when their true inherent values are known; on the other hand, stock that are under-priced are bought immediately as they are bound to rise once investors learn of their true inherent values. Therefore, evaluation of stocks based on fundamental changes

enables stock investors to find the overpriced and under-priced stocks. As such, these firm-specific variables affect stock prices.

One of the reason researchers find this theory advantageous is that it makes no assumptions in its application thereby enabling analysis of relevant variables only. On the contrary, it suffers a major limitation with regard to inaccurate information that firms avail for analysis. Moreover, given that random events affect stock prices, fundamental theory cannot predict these random events.

2.2.2 Random Walk Theory

This theory was coined by Burton Malkiel (1973), it is based on the assumption that consecutive stock prices are independent of each other. It postulates that stock price movements are independent; and that stock price does not depend on its present or future prices. This implies that stock price movement cannot be predicted from its past values. In addition, following changes in stock prices of individual stocks are independent and stock prices only oscillates randomly around their inherent values.

The theory of random walk further presupposes that stock markets are efficient with all information available to investors and that competition amongst investors determines the future stock prices. this implies that current stock prices takes into consideration the stock market information of past, the present and the future making the prevailing stock price a good estimator of its inherent value. However, inherent stock prices may change depending on the information that is generated by the firm characteristics.

2.2.3 Market Efficiency Theory

Market efficiency theory was proposed by Fama (1970) stock prices always reflect their intrinsic values otherwise known as fair values. This implies that in an efficient market, there are neither overpriced nor underpriced stocks. According to Barasa (2014) this theory indicates that the stock market is rational and the stock prices it provides are correct. This implies that the prevailing stock prices are always near their inherent values. However, anomalies observed in the stock markets provide a challenge for this argument.

Stock market efficiency is presented in three different categories- the weak form, the semi-strong form and the strong form depending on the information available to investors (Akkurt, et al., 2010). Bodie et al. (2007) posit that in the weak form of market efficiency occurs when historical market data such as past prices of a stock are contained in the current stock price. Dixon et al (1992) noted that this claim of weak form of market efficiency has been proved with the empirical findings of researchers who studied the random walk theory, meaning that price changes are usually independent from each other.

The Semi-strong form of efficiency occurs when current stock price factors in past stock prices and all information that is available to the public concerning the fundamental variables such as expected earnings, declared dividends, any announcement on stock splits, the composition of balance sheet, management status and accounting practices. When all these information are reflected on the current stock price, then the market is efficiency is considered semi-strong. This means that any investor cannot make abnormal profits by exploiting the

fundamental data available for the market. In the strong form of market efficiency, stock prices include all information available plus the private information. In such a situation, Akkurt, et al. (2010) noted that stock prices are considered fair and no investor can beat the market.

2.3 Determinants of Stock Prices

There are several factors taunted to influence stock prices. These include economic, social legal and political factors. Firstly, just like any business, stock market is strongly influenced by policies and regulations of the market. Any policy change that occurs especially during sensitive economic times may decrease or increase stock prices. In addition, a country's political atmosphere greatly influences the stock market.

Besides, macroeconomic factors also influence stock prices. For instant, exchange rate influences the stock prices from two different sides: the financial environment and the from business activities, specifically, from import activities. Additionally, exchange rates impact stock prices. When foreign capital is invested in the stock market, any increase in exchange rates will cause panic amongst foreign investors which will in turn lead to mass withdrawal. The quick withdrawal of foreign capital from the stock market will result into decrease in stock prices which will in turn result into increase in interest rates.

Furthermore, inflation, which is defined as the loss of money value, also affects stock prices. Inflation affects individuals' savings and capital gains. Runaway inflation will cause production activities to decline and prevents future growth of

firms and innovative activities. Inflation above acceptable levels is a reflection of sluggish economy which often results into high interest rates, this cause drop in profitability and consequently a drop in stock pieces.

2.4 Empirical Review

Determinants of stock prices have attracted a large body of empirical works. Different scholars have sought to find out how fundamental factors correlate with stock prices. Depending on the scope and period of study, their findings have been mixed. This section therefore reviews some of these studies.

Obeidat (2009) in a study in Abu Dhabi securities exchange sought to find out the effect of EPS, DPS, and BVPS on stock market prices. The researcher analysed time series data in a simple linear regression model base on t-tests, while multiple linear regression model was used to test the f-test. The researcher recorded a significant influence of EPS and BVPS on stock prices in the Abu Dhabi Securities Market. On the contrary the study found no significant effect of dividend per share on stock prices.

Sharma (2011) in India investigated whether stock prices are influenced by BVPS, DPS and EPS. The researcher collected quantitative data on variables of interest for the period 1993-2009. Sharma employed a backward elimination procedure of regression analysis. In his results, the researcher showed that EPS, DPS and BVPS strongly determine stock prices in India with DPS and EPS being the strongest determinants. The researcher concluded that his results support dividend policy and made a suggestion to firms to pay dividends regularly.

Srinivasan (2012) in a similar study in India sought to investigate factors that fundamentally influence stock prices. These results corroborate with those of Sharma (2011), that DPS negatively influence stock prices in a significant way. While EPS was found to positively affect stock prices. Further findings of this study revealed that BVPS has positive effect on stock prices of some firms and negative effects on stock prices of other firms.

Malhotra and Tandon (2013) did a study to establish variables that affect stock prices at the National Stock Exchange (NSE) of 100 companies in India. Time series data was collected from 95 companies for the period between 2007 and 2012. In a linear regression model, the result of the analysis showed that BVPS and EPS had a significant positive effect on stock prices while DPS had significant negative effects on stock prices.

Almumani (2014) in Amman studied whether firm-specific factors influence stock prices at the Amman Stock Exchange. The researcher employed time series data for the period between 2005 and 2011. Using a multiple linear regression model, the study revealed that EPS significantly influence stock prices positively. In addition, BVPS also had a significant inverse relationship with stock prices. Concerning DPS, the researcher records an insignificant relationship with stock prices.

In Bahrain, Sharif, Purohit and Pillai (2015) determined factors influencing stock prices of 41 firms whose stocks are traded at the Bahrain Stock Exchange. The empirical findings reveal a positive and significant relationship between book value

per share and share prices suggesting that these factor act as an active determinant in shaping the market price of stocks. Concerning effect of dividend per share on stock prices, their results corroborated that of Malhotra and Tandon (2013). In their conclusion Sharif et al (2015) records that firms pay dividends to attract different kinds of shareholders.

Gregoriou (2015) carried out an analysis of determinants touted to determine stock prices of telecommunications firms. Panel data from 160 countries and 45 firms, covering the time period from 2000 to 2011 was used. Variables of interest were identified from firm-specific financial and non-financial factors and analyzed. The results revealed that earnings per share had insignificant effect on market share prices. In addition, book value per share and dividends per share had a significant effect on market share prices.

Jayaraman¹ and Ramaratnam (2017) studied the impact of Earnings per Share on Share Price of select Indian public sectors banks. In their study, data for five years from March 2013 to march 2017 were considered. In order to achieve the study objectives, the researchers employed Statistical tools like Mean, Standard deviation, co-efficient of variation, Oneway ANOVA and Simple Linear Regression. The analysis revealed a significant and positive relationship between Earnings per Share and Market Value of Shares. This study concluded that earnings per share hold its impact on the market value of share.

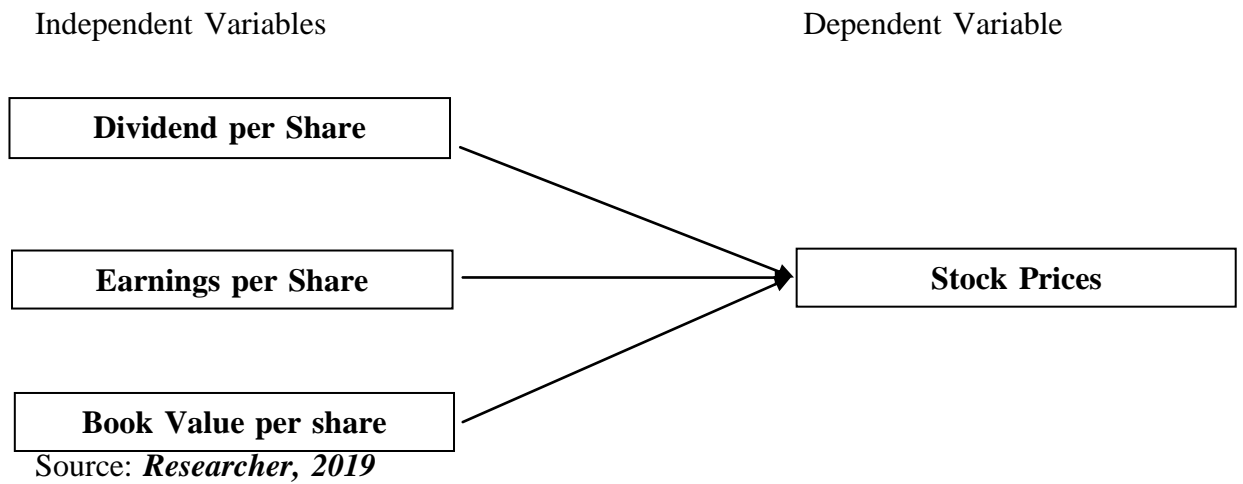
Singh (2018) in Oman studied causes of stock prices changes of non-financial firms listed at the Muscat securities exchange. Singh used closing yearly stock prices

for the period 2011-2016. The variables of choice were stock prices as the explained variable and logarithms of DPS, EPS and Firm size as the explaining variables. Using random effect in panel data analysis, the researcher found out that EPS and the lag-1 of stock prices are the only significant explaining variable and their relationship with stock prices were positive. On the other hand, DPS and firm size were established to have insignificant effects.

2.5 Conceptual Framework

The following conceptual framework (Figure 1) was developed to test the effect of these firm characteristics on the Stock price of listed firms at the NSE.

Figure -1.1: Conceptual Framework



2.6 Summary of Literature Review

Most studies on determinants of stock prices have used time series or cross sectional data while few have used panel data. These studies have employed the predictable regression analysis seeking to establish whether the quantitative data fits random or fixed effects. This practice has the potential of ignoring time series properties, making results difficult to generalise. In addition, results from these studies have been mixed necessitating the need for further empirical investigation.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methods of research adopted for this study. It begins with introduction to the chapter; thereafter research design is elaborated. The rest of the chapter are organised as follows; population of the study, data collection and finally data analysis.

3.2 Research Design

This study employed correlational research design to establish how the selected firm-specific factors affect stock prices at the NSE. Correlational research design determined the effect of selected firms' characteristics on stock prices at the Nairobi securities exchange. Correlational research design is based on the assumption that; if the relationship is statistically significant, then one variable can be used to predict the other (Mugenda, 2008).

3.3 Population

The population for this study included all the listed companies at the Nairobi Securities Exchange. The list of study population is presented in appendix 1.

3.4 Data Collection

Flick (2009) defines data collection as the process of gathering and measuring relevant information for the study. That the information collected must be able to answer the research questions prompting the study.

Quantitative data of on stock prices were obtained from Nairobi Securities Exchange, while data on independent variables were obtained from respective firms' website. Data was collected using a specially design data collection sheet. For this study, data was obtained for the period between January 2010 and January, 2019.

3.5 Data Analysis

Analysis of data in this study was based on econometric methodology of panel regression which was meant to test the effects of explaining variables on explained variables while giving fixed and random effects. The main benefit of panel regression analysis is that it enabled the researcher to establish fixed effects and random effects of the panel data. The following panel equation was employed for this study:

$$SP_{i,t} = \alpha_i + \beta_{1,i}DPS_{i,t} + \beta_{2i}EPS_{i,t} + \beta_{3i}BVPS_{i,t} + \varepsilon_i$$

(3.1)

Where: $i = 1, 2, 3, \dots, n$; is number of firms;

$t = 1, 2, 3, \dots, T$; is the time period;

β 's are the slope coefficients;

α_i is the member specific intercept.

3.6 Diagnostic Tests

3.6.1 Descriptive Statistics

Before data analysis, descriptive statistics was performed. Statistics was used to describe basic features of the data in the study.

3.6.2 Correlation Analysis

Correlation analysis was done to determine the strength and direction of association.

3.7 Model Estimation

The regression model was estimated using the pooled ordinary least squares method.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This section outlines the findings of the study and their interpretation. The chapter provides results on the descriptive statistics, correlation analysis, regression results and discussion of findings in relation to the study objectives.

4.2 Descriptive Statistics

Descriptive statistics provided measures of central tendencies of Mean and Median. In addition, measures of dispersion such as standard deviation and measures of distribution.

Analysis of the data revealed that mean stock price was Ksh. 95.88, with a minimum share price of Ksh 4.10 and a maximum share price of Ksh 842.10. Stock prices had a deviation of 166.94 between them indicating a wide spread between stock prices. In addition Stock prices did not depict normally distribution given the Jarque Berra value of 585.39 and p value of 0.00. Moreover, stock price distribution appeared to be skewed to the right (+2.87) depicting a lognormal distribution and kurtosis coefficient (11.24) of share price distribution is *leptokurtic* indicating that probability mass is concentrated around the mean.

Analysis of descriptive statistics for explaining variables were also carried out. The results revealed that mean earnings per share was Ksh. 8.42, with a minimum earnings per share of Ksh 0.10 and a maximum earnings per share of Ksh 54.26.

Earnings per share had a deviation of 12.31 between them indicating a moderate spread between earnings per share. In addition earnings per share did not depict normally distribution given the Jarque Berra value of 222.96 and p value of 0.00. Moreover, earnings per share distribution appeared to be skewed to the right (+2.28) depicting a lognormal distribution and kurtosis coefficient (7.39) of earnings per share distribution is *leptokurtic* indicating that probability mass is concentrated around the mean.

In addition, the results revealed that mean dividend per share was Ksh. 4.46, with a minimum dividend per share of Ksh 0.10 and maximum dividend per share of Ksh 46.00. Dividend per share had a deviation of 7.96 between them indicating a wide spread between. In addition dividend per share paid to shareholders by firms at the Nairobi securities exchange did not indicate a normal distribution given the high Jarque Berra value of 914.05 and p value of 0.00. Moreover, dividend per share distribution appeared to be skewed to the right (+3.14) depicting a lognormal distribution and kurtosis coefficient (14.24) of dividend per share distribution is *leptokurtic* indicating that probability mass is concentrated around the mean.

Finally, analysis of data on book value per share revealed that mean book value per share was Ksh. 203.07, with a minimum book value per share of Ksh 4.98 and maximum book value per share of Ksh 3,097. Book value per share had the highest standard deviation of 565.18 between them indicating a huge spread. In addition shareholders claim per share did not depict a normal distribution given the high Jarque Berra value of 1363.74 and p value of 0.00. Moreover, book value per share distribution appeared to be skewed to the right (+3.77) depicting a lognormal

distribution and kurtosis coefficient (16.63) of dividend per share distribution is *leptokurtic* indicating that probability mass is concentrated around the mean.

Given the fact that all the variables were not normally distributed, it implied that they were log-normal. Therefore, analysis of ordinary least squares was carried out on the logarithm of the observations in order to make the distribution normal. (See table 4.1)

Table 4.1: Descriptive Statistics

	PRICE	EPS	DPS	BVPS
Mean	95.88444	8.421504	4.462273	203.0742
Median	27.20000	3.550000	1.000000	34.56000
Maximum	842.1000	54.26000	46.00000	3097.000
Minimum	4.100000	0.100000	0.100000	4.980000
Std. Dev.	166.9234	12.31523	7.961515	565.1895
Skewness	2.878604	2.285790	3.149184	3.770301
Kurtosis	11.42167	7.397101	14.24824	16.62287
Jarque-Bera Probability	585.3932 0.000000	222.9625 0.000000	914.0581 0.000000	1363.743 0.000000
Sum	12944.40	1120.060	589.0200	27415.01
Sum Sq. Dev.	3733697.	20019.78	8303.530	42804853
Observations	135	133	132	135

4.3 Correlation Analysis

Ordinary least squares regression is based on linearity of variables. In order to establish if the variables of interest were linearly associated, a correlation analysis was carried out and the results were as indicated in table 4.2. The results indicated a strong positive association between stock prices and EPS with a correlation coefficient of +0.85. Stock prices and dividend per share have a strong positive association with the correlation of +0.87. However, there was a weak positive association between stock prices and book value per share with a correlation coefficient of + 0.027. (See Table 4.2).

Table 4.2: Correlation Analysis Results

Correlation t-Statistic	PRICE	EPS	DPS	BVPS
PRICE	1.000000 -----			
EPS	0.849161 18.26166	1.000000 -----		
DPS	0.872912 20.32145	0.758619 13.22455	1.000000 -----	
BVPS	0.027183 0.308850	0.077207 0.879526	0.089054 1.015494	1.000000 -----

4.4 Panel Regression Analysis and Hypotheses Testing

Parameter estimation in the regression analysis with cross section and time series data was done by estimating the least squares method. Panel regression analysis was done to determine best linear parameter estimates. Unlike the usual regression, panel data regression went through the precise estimation modelling steps of pooled least squares regression, fixed effects and random effects.

4.4.1 Pooled OLS

Pooled ordinary least squares are linear regression devoid of fixed effects and random effects. Pooled least squares presuppose an invariable intercept and gradients despite the consequences of firm and moments in time. This study adopted a panel data consisting of 27 companies over 5 years, the fundamental design is that stock price is influenced by EPS, DPS, and BVPS. The pooled OLS hypothesizes that the intercepts and gradients across firms and years are not different. Fitting the pooled regression model, we have;

Table 4.3: Pooled OLS

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.148498	0.124825	25.22322	0.0000
LOG(EPS)	0.190986	0.049385	3.867298	0.0001
LOG(DPS)	0.586905	0.045719	12.83724	0.0000
LOG(BVPS)	-0.014113	0.028494	-0.495307	0.6206
R-squared	0.596759	Mean dependent var		3.586439

At 5% significance level and ($F=256.51$ and $p<0.000$), the model estimate fits the data as expected. R^2 of .5967 mean that 59.67% of the total variation in the stock prices of NSE firms is accounted for by the model. Stock price is the dependent variable and EPS, DPS and BVPS are the explaining factors. EPS and DPS are statistically significant while BVPS is not statistically significant. The regression equation is,

$$STOCKPRICE = 3.1485 + 0.1910EPS + 0.5870DPS + 0.0141BVPS$$

While this estimated model robustly conforms to the data, individual firm or year may have different initial share price. Explicitly, a firm is likely to have its individual opening share price, its individual constant coefficient, which is considerably dissimilar to other firms at the NSE. In this case a test for fixed effect was necessary to be carried out.

4.4.2 Fixed Effects OLS

Fixed effects were examined. Table 4.4 presents the result of the analysis.

Table 4.4: Fixed OLS

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.892480	0.511179	7.614711	0.0000
LOG(EPS)	0.155521	0.056545	2.750376	0.0071
LOG(DPS)	-0.035491	0.072653	-0.488501	0.6263
LOG(BVPS)	-0.129965	0.130013	-0.999632	0.3199
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.959019	Mean dependent var	3.586439	
Adjusted R-squared	0.947252	S.D. dependent var	1.343988	
S.E. of regression	0.308672	Akaike info criterion	0.684861	
Sum squared resid	9.623100	Schwarz criterion	1.343304	
Log likelihood	-14.85842	Hannan-Quinn criter.	0.952416	
F-statistic	81.50235	Durbin-Watson stat	1.120024	
Prob(F-statistic)	0.000000			

From the face value, fixed effects model better than the pooled OLS model in 4.2.

The sum of squared error declined from 378.75 to 9.59; R^2 improved from .5967 to .9591. The y-intercept 3.8413 signifies the mean effect of all 27 firms. The F-statistic (78.25) ($p < 0.0000$) implies that individual intercepts have no significant difference. EPS is statistically significant while BVPS and DPS are not statistically significant. The regression equation is,

$$STOCKPRICE = 3.8413 + 0.1552EPS - 0.0354DPS - 0.1299BVPS$$

4.4.3 Random Effects OLS

This model examined how firms or/and years affect error variances. Table 4.5 presents the result of this analysis

Table 4.5: Random Effects Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.128313	0.373847	8.367890	0.0000
LOG(EPS)	0.193832	0.054667	3.545685	0.0005
LOG(DPS)	0.109496	0.066531	1.645791	0.1023
LOG(BVPS)	0.041212	0.086890	0.474304	0.6361
Effects Specification				
			S.D.	Rho
Cross-section random			0.810085	0.8732
Idiosyncratic random			0.308672	0.1268

The coefficient takes account of both the within-firm and between firm effects. ;from the result above, random effects characterize the mean effect of independent variables over stock prices when explaining variables varies over the years and between firms by one unit. The random effect model assumed that there is a difference of intercept for each individual and the intercept is a random variable. So in the random effect model there are two residual components. The first is the residual as a whole where the residual is a combination of cross section and time series. The second residual is an individual residual which is a random characteristic of the i-th unit observation and remains at all times. The regression equation is,

$$STOCKPRICE = 3.1283 + 0.1938EPS - 0.1094DPS - 0.0412BVPS$$

4.4.4 The Choice Model

Panel data analysis reported significant pooled, fixed and random effects; a choice on the most appropriate model was made based on the Correlated Random effects-Hausman test and the Wald test.

4.4.4.1 The Correlated Random effects-Hausman test:

This test was used to determine the right model between the fixed effects and the random effects.

Table 4.6: Hausman test results

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	27.089292	3	0.0000

Hausman test is a statistical test to select whether the most appropriate Fixed Effect or Random Effect model is used. If Result: H0: Select RE ($p > 0.05$) H1: Select FE ($p < 0.05$). from the above results, THE probability value here is 0.0000 which is less than 5% thereby the study rejected the null hypothesis and concluded that the fixed effects model is appropriate.

4.4.4.2 The Wald test

In order to determine the right model between the fixed effect model and the Pooled OLS regression model, the Wald test was adopted. If Result: H0: Select Pooled OLS ($p > 0.05$) H1: Select Fixed Effect ($p < 0.05$). From the below results, the probability value here is 0.4994 which is more than 5% thereby the study failed to reject the null hypothesis and concluded that the pooled old model is appropriate.

Table 4.7: The Wald Test Results

Wald Test:
Equation: Untitled

Test Statistic	Value	df	Probability
t-statistic	-0.677891	100	0.4994
F-statistic	0.459537	(1, 100)	0.4994
Chi-square	0.459537	1	0.4978

4.5 Interpretation of Findings and Discussion of Results

Given the test results above, the findings of this study were based on the pooled OLS estimates in table 4.3. the findings indicate that earnings per share and dividend per share have a statistically significant effect on stock prices at the Nairobi securities exchange while book value per share have no statistically significant effect on stock prices at the Nairobi Securities Exchange.

The objective of this study was to examine the effect of earnings per share on stock prices at the NSE. From the pooled OLS results above, earnings per share have a statistically significant effect on stock prices. Specifically, this result showed that, 1% increase in earnings per share will cause a 0.19% increase in stock prices. This finding implies that, ceteris paribus, when a firm increases its annual profits there will be an invariable positive improvement in the stock prices of listed firms. This outcome is consistent with the findings of Sharma (2011), Srinivasan (2012), Tandon (2013), Uddin et al (2013), Almunani (2014) Jayaraman and Ramaratnam (2017) who established that EPS has a it has a main effect on prices of stocks.

Similarly, DPS emerges as the most statistically significant variable. Practical results presented in table 4.3 demonstrate a statistically significant direct effect of

DPS on Stock prices. This finding illustrates that holding other variables constant, as a firm's DPS increases assuming by 1%, normally, share price of that firm will rise by 0.5870%. This finding is supported by a higher t-value of 12.8372 and a $P < 0.05$. Noticeably, this result corroborates that of Şebnem and Bengü (2012) and Gregoriou (2015) where the results indicated that dividend per share significantly influenced the market value of share prices but contradicts that of Obeidat (2010) who recorded a negative effect and Almunani (2014) who reported insignificant effect. The remaining factor namely book value per share is the insignificant factor as per the analysis and therefore has no effect on stock prices at the NSE.

Thus, the study revealed that increasing dividends and improving firm profits are likely to improve the market price of the stocks at NSE. This suggests that upward adjustment in these variables would lead to an increase in market price of the shares. The coefficient of the variable book value per share exhibits a positive relationship with the market price of the share however the result is insignificant at 5% level. This result is consistent with the findings of Baskin (1989) and Okafor and Mgbame (2011). This result implies that the investors are moved by the dividend decision of the company.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusion and recommendation of the study. The chapter is divided into various sections. Section 5.1 presents the introduction; section 5.2 provides summary of findings; section 5.3 presents the conclusion and recommendations of the study, section 5.4 presents limitations of the study and finally, section 5.5 provides suggestions for further research. .

5.2 Summary of Findings

This study examined the effects of EPS, DPS, and BVPS on stock prices of firms listed on NSE all share index. The study used secondary data obtained from the NSE. Annual panel data for the period 2014-2018 were used. Based on correlational research design, pooled ordinary least squares were used to examine the effects of EPS, DPS, and BVPS on stock prices. Statistical package Eviews V10 was used to analyse the panel data.

Descriptive statistics showed that variables were log-normally distributed. Correlation coefficient established a strong positive association between stock price and earnings per share and a strong positive association between stock price and dividends per share variables except book value per share that returned a weak positive association.

5.3 Conclusions and Recommendations

This study concludes that EPS have a positive effect on stock prices. EPS is an indicator of a firm's profitability. The higher a company's earnings per share, the

more profitable it is considered and the higher a company's share price will be. DVP has a positive effect on stock prices. Given the above results, the study recommends that Investors and fund managers take into account these firm specific factors as they forecast stock prices and returns. In addition, the findings of this study are particularly useful to company chief executive officers as they are now able to understand the firm specific factors that affect their stock prices as they add shareholder value.

5.4 Limitation of the Study

One of the limitations for this study was the inadequacy of cross-sectional data. This is because majority of the firms had no complete data on independent variables and therefore only 27 firms were included in the study which could limit generalization.

Lack of adequate data narrowed the study period to five years, a factor that the researcher believes could have limited the study given the time series element in panel data. Moreover, given the fact that this study was done within a strict timeline, there was not enough time to interrogate the data and apply other superior data analysis methods therefore quality of the research would have been better had time not been a limiting factor.

This study employed panel data which suffers the problem of incomplete account of the population of interest and sample selection problems. In addition, data was analysed using pooled ordinary least squares which does not discriminate between

various cross-sectional units and thus may be blamed for camouflaging the uniqueness (described as heterogeneity) existing within each cross-sectional unit.

Finally, one advantage of operationalization of variables is specificity. However, operationalization of book value per share involved interpretation and a narrowing down from broad which often is less generally agreed to specification.

5.5 Suggestions for Further Research

One of the limitations for this study was the inadequacy of cross-sectional data. This study recommends a further study that covers more cross-sections and a longer period of as opposed to the five years covered in this study.

To overcome the problem of OLS panel data analysis, this study suggest that further studies should employ methods of analysis such as maximum likelihood as this will overcome the problems pooled OLS.

Moreover, this study suggests that further studies with no strict timelines be carried out so that all aspects of data analysis can be interrogated to give more clear results.

Finally, one advantage of operationalization of variables is specificity. The researcher recommends a specific research to be carried out to make the findings more operational.

REFERENCES

- Al-Deehani, T. M. (2005). The determinants of stock prices in the Kuwait Stock Exchange: An Extreme Bound Analysis. *Journal of Investment Management and Financial Innovations*, 2(3), 16-24.
- Almumani, M. A. (2014). Determinants of equity share prices of the listed banks in Amman stock exchange: Quantitative approach. *International Journal of Business and Social Science*, 5(1), 91-104.
- Amboko, J. (2019). What market watchers miss in bull, bear dance, *Business Daily*, Monday, February 18, 2019.
- Ayuba, Balago and Dagwom (2018). Effects of Firm Level Attributes on Stock Returns in Nigeria. *Journal of Accounting, Finance and Auditing Studies*, 7(4), 122-131
- Benjamin Graham, et al. *Security Analysis*, (4th Edn.), New York: Me Graw-Hill, 1962.
- Bhattarai (2017). Determinants of share price of Nepalese commercial banks. *Economic Journal of Development Issues*, 17 (1-2), 187-198.
- Broby, D. P. (2007). *A Guide to Equity Index Construction*, Risk Books.
- Dharmendra Singh (2018). Stock Price Determinants: Empirical Evidence from Muscat Securities Market, Oman. <http://dx.doi.org/10.5772/intechopen.77343>
- Dioha, Ahmed and Okpanachi (2018). Effect of Firm Characteristics on Profitability of Listed Consumer Goods Companies in Nigeria. *Journal of Accounting, Finance and Auditing Studies*, 4 (2), 14-31.
- Duy et al (2017). Determinants of Stock Prices of Joint - Stock Companies in Industrial Sector Listed On Hcm City Stock Exchange. *International Journal of Advanced Engineering Research and Science* 4(4).

- Fama EF, Schwert GW. Asset returns and inflation. *Journal of Financial Economics*. 1977; 5(2), 115-146.
- Fama, E. F. (1965b). Random Walks in Stock Market Prices”, *Financial Analysts Journal*, 21(5), 55-59.
- Fama, E. F. (2000). *Short-Term Interest Rates as Predictors of Inflation; the Debt Market*. Cheltenham: Elgar.
- Ghimire& Mishra (2018). Determinants of Stock Price in Nepalese Market. The *International Research Journal of Management Science* 3 (1).
- Gill, A., Biger, N., & Mathur, N. (2012). Determinants of Equity Share Prices: Evidence from American Firms. *International Research Journal of Finance and Economics*, 4(90), 176- 191.
- Gordon, M. J. (1959). Dividends, earnings, and stock prices. *The Review of Economics and Statistics*; 41(2), 99-105.
- Gregoriou A, Healy J, Gupta J. (2015). Determinants of telecommunication stock prices. *Journal of Economic Studies*; 42(4), 534-548. DOI: <https://doi.org/10.1108/JES-06-2013-0080>.
- Gregoriou A, Healy J, Gupta J. Determinants of telecommunication stock prices. *Journal of Economic Studies*, 42(4), 534-548.
- Gujarati, D. N., Porter, D. C., Gunasekar, S. (2012). *Basic Econometrics*. 5th Edition, Tata McGraw-Hill Education private Ltd., New Delhi, 784.
- Ibrahim Obeidat M. The internal financial determinants of common stock market price: Evidence from Abu Dhabi securities market. *Journal of Economic and Administrative Sciences*, 25(1), 21-46.

- Islam, M. S. & Dooty, E. N. (2015). Determinants of Stock Price Movements: Evidence from Chittagong Stock Exchange, Bangladesh. *Journal of Economics and Business Research*, 21(2), 117-133.
- Jatoi, M.Z., Shabir, G., Hamad, N., Iqbal N. & Muhammad, K. (2014). A Regression impact of earning per share on market value of share: A case study cement industry of Pakistan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(4), 221-227.
- Khan, M., & Amanullah (2012). Determinants of share prices at Karachi stock exchange. *International Journal of Business & Management Studies*, 4(4), 1309-1347.
- Long, H. L. (2017). Determinants of stock prices of joint-stock companies in industrial sector listed on HCM city stock exchange. *International Journal of Advanced Engineering Research and Science*, 4(4), 22-29.
- Malhotra, N., & Tandon, K. (2013). Determinants of stock prices: Empirical evidence from NSE 100 companies. IRACST- *International Journal of Research in Management & Technology* 3(3), 86-95.
- Mogambi, M. N. (2019). The Effectiveness of the NSE 20-Share Index in Representing the Overall Market Performance at the Nairobi Securities Exchange. *MBA Project Report, Department of Finance and accounting, University of Nairobi*
- Mwanyasi, R. (2019). Recent stock falls at the NSE signal time to buy cheaper, *Business Daily*, Tuesday, March 26, 2019.
- Nirmala, P.S., Sanju, P. S. & Ramachandran, M. (2011). Determinants of share prices in India. *Journal of Emerging Trends in Economics and Management Science*, 2(2), 124-130.

- Oseni E. (2009). Determinants of Equity Prices in the Stock Markets.
- Sebnem E, Vuran B. (2012). Factors affecting stock returns of firms quoted in ISE market. *International Journal of Business and Social Research*; 2(1), 109-122
- Sharma, S. (2011). Determinants of equity share prices in India. *Journal of Arts, Science & Commerce*, 2(4), 51-60.
- Srinivasan, P. (2012). Determinants of Equity Share Prices in India: A Panel Data Approach. *The Romanian Economic Journal*, 15(46).
- Uddin, M. B. (2009). Determinants of market price of stock: A study on bank leasing and insurance. *Journal of Emerging Trends in Economics and Management Sciences* 2(2), 124-130.

APPENDICES

APPENDIX I: NSE ALL SHARE INDEX FIRMS

SECURITIES
AGRICULTURAL
Eaagads Ltd Ord 1.25 AIM
Kakuzi Plc Ord.5.00
Kapchorua Tea Co. Ltd Ord Ord 5.00 AIM
The Limuru Tea Co. Plc Ord 20.00AIMS
Sasini Plc Ord 1.00
Williamson Tea Kenya Ltd Ord 5.00 AIM
AUTOMOBILES & ACCESSORIES
Car & General (K) Ltd Ord 5.00
BANKING
Barclays Bank of Kenya Ltd Ord 0.50
BK Group Plc Ord 0.80
Diamond Trust Bank Kenya Ltd Ord 4.00
Equity Group Holdings Plc Ord 0.50
HF Group Plc Ord 5.00
I&M Holdings Plc Ord 1.00
KCB Group Plc Ord 1.00
National Bank of Kenya Ltd Ord 5.00
NIC Group Plc Ord 5.00
Stanbic Holdings Plc ord.5.00
Standard Chartered Bank Kenya Ltd Ord 5.00
The Co-operative Bank of Kenya Ltd Ord 1.00

COMMERCIAL AND SERVICES
Atlas African Industries Ltd GEMS
Deacons (East Africa) Plc Ord 2.50AIMS
Eveready East Africa Ltd Ord.1.00
Express Kenya Ltd Ord 5.00 AIMS
Kenya Airways Ltd Ord 5.00
Longhorn Publishers Plc Ord 1.00AIMS
Nairobi Business Ventures Ltd Ord. 1.00 GEMS
Nation Media Group Ltd Ord. 2.50
Sameer Africa Plc Ord 5.00
Standard Group Plc Ord 5.00
TPS Eastern Africa Ltd Ord 1.00
Uchumi Supermarket Plc Ord 5.00
WPP Scangroup Plc Ord 1.00
CONSTRUCTION & ALLIED
ARM Cement Plc Ord 1.00
Bamburi Cement Ltd Ord 5.00
Crown Paints Kenya Plc Ord 5.00
E.A.Cables Ltd Ord 0.50
E.A.Portland Cement Co. Ltd Ord 5.00
ENERGY & PETROLEUM
KenGen Co. Plc Ord. 2.50
KenolKobil Ltd Ord 0.05
Kenya Power & Lighting Co Ltd Ord 2.50
Kenya Power & Lighting Co Ltd 4%

Kenya Power & Lighting Co Ltd 7%
Total Kenya Ltd Ord 5.00
Umeme Ltd Ord 0.50
INSURANCE
Britam Holdings Plc Ord 0.10
CIC Insurance Group Ltd ord.1.00
Jubilee Holdings Ltd Ord 5.00
Kenya Re Insurance Corporation Ltd Ord 2.50
Liberty Kenya Holdings Ltd Ord.1.00
Sanlam Kenya Plc Ord 5.00
INVESTMENT
Centum Investment Co Plc Ord 0.50
Home Afrika Ltd Ord 1.00
Kurwitu Ventures Ltd Ord 100.00
Olympia Capital Holdings ltd Ord 5.00
Trans-Century Plc Ord 0.50AIMS
INVESTMENT SERVICES
Nairobi Securities Exchange Plc Ord 4.00
MANUFACTURING & ALLIED
B.O.C Kenya Plc Ord 5.00
British American Tobacco Kenya Plc Ord 10.00
Carbacid Investments Ltd Ord 1.00
East African Breweries Ltd Ord 2.00
Flame Tree Group Holdings Ltd Ord 0.825

Kenya Orchards Ltd Ord 5.00 AIM
Mumias Sugar Co. Ltd Ord 2.00
Unga Group Ltd Ord 5.00
TELECOMMUNICATION
Safaricom Plc Ord 0.05
REAL ESTATE INVESTMENT TRUST
STANLIB FAHARI I-REIT
EXCHANGE TRADED FUNDS
NEW GOLD ETF

Source: *NSE,2019.*

APPENDIX 2: ANNUAL DATA

YEAR	FIRM	PRICE	EPS	DPS	BVPS
2014	KCB	51.8	5.63	2.00	25.00
2015	KCB	51.5	6.49	2.00	26.86
2016	KCB	33.9	6.43	3.00	31.50
2017	KCB	36.7	6.43	3.00	34.56
2018	KCB	44.5	7.83	3.50	37.07
2014	COOP	15.7	1.69	0.5	12.28
2015	COOP	16.4	2.4	0.8	14.12
2016	COOP	13.0	2.6	0.8	17.36
2017	COOP	14.1	1.99	0.8	19.99
2018	COOP	16.6	2.18	0.8	20.26
2014	SAF	12.6	0.57	0.57	2,280.00
2015	SAF	15.6	0.64	0.8	2,606.00
2016	SAF	18.2	0.76	0.95	2,918.00
2017	SAF	22.8	0.97	1.21	2,687.00
2018	SAF	27.2	1.1	1.38	3,097.00

2014	EABL	282.8	8.22	5.5	44.76
2015	EABL	294.2	11.32	7.5	47.68
2016	EABL	272.8	12.2	12	51.43
2017	EABL	241.8	9.71	7.5	56.49
2018	EABL	217.1	7.19	7.5	57.48
2014	STANCHART	285.0	29.89	17	1,331.00
2015	STANCHART	249.8	17.97	17	1,330.00
2016	STANCHART	192.0	25.85	20	1,438.00
2017	STANCHART	210.4	19.64	17	1,473.00
2018	STANCHART	201.7	23.09	19	1,504.00
2014	BBK	16.9	1.54	1.00	7.06
2015	BBK	14.7	1.55	1.00	7.31
2016	BBK	10.1	1.36	1.00	7.80
2017	BBK	9.2	1.23	1.00	8.02
2018	BBK	11.4	1.32	1.10	7.99
2014	BAT	727.1	42.55	42.5	8.13
2015	BAT	793.2	49.76	46	8.85

2016	BAT	842.1	42.34	39.5	8.80
2017	BAT	827.2	33.36	22.5	7.84
2018	BAT	667.8	40.85	31.5	9.31
2014	STANBIC	119.8	32.12	11.23	98.32
2015	STANBIC	103.7	27.54	11.34	104.25
2016	STANBIC	79.5	25.94	12.31	111.58
2017	STANBIC	73.6	10.90	5.25	158.66
2018	STANBIC	90.8	15.88	5.80	164.66
2014	BAMBURI	172.1	9.8	12.0	80.22
2015	BAMBURI	157.9	14	13.0	81.83
2016	BAMBURI	172.5	14.44	12.0	82.15
2017	BAMBURI	172.4	4.54	4.0	91.46
2018	BAMBURI	165.6	2.45	10	92.18
2014	NATION	305.0	13.1	10	46.64
2015	NATION	199.2	11.8	10	47.63
2016	NATION	138.2	8.9	10	46.29
2017	NATION	104.6	6.9	10	43.44

2018	NATION	89.1	7	0.50	46.62
2014	SCAN	15.6	1.5	0.50	22.55
2015	SCAN	16.3	1.12	0.50	22.71
2016	SCAN	19.1	1.12	0.75	23.25
2017	SCAN	25.2	1.2	1.00	23.66
2018	SCAN	22.1	1.37	0.2	22.41
2014	KENOL	9.1	0.74	0.1	4.98
2015	KENOL	9.0	1.37	0.3	5.82
2016	KENOL	11.4	1.64	0.3	6.71
2017	KENOL	14.1	1.67	0.3	7.62
2018	KENOL	17.5	1.56	0.3	8.11
2014	KENGEN	10.2	1.29	0.4	11.63
2015	KENGEN	8.6	5.24	0.65	21.47
2016	KENGEN	6.5	3.07	0.35	26.14
2017	KENGEN	7.8	1.37	0.4	27.73
2018	KENGEN	7.5	1.2	0.38	28.83
2014	KPLC	14.7	3.58	0.2	27.75
2015	KPLC	16.0	3.81	0.2	31.46
2016	KPLC		3.69	0.5	

		9.8			32.78
2017	KPLC	8.5	3.72	0.5	35.82
2018	KPLC	6.1	0.98	0.5	32.88
2014	KENYA RE	4.6	4.48	0.7	28.56
2015	KENYA RE	4.6	5.1	0.75	31.33
2016	KENYA RE	5.1	4.7	0.8	34.48
2017	KENYA RE	5.0	5.11	0.85	38.86
2018	KENYA RE	4.2	3.25	0.45	40.53
2014	JUBILEE	316.1	43.71	7.5	257
2015	JUBILEE	457.7	42.68	7.5	318
2016	JUBILEE	428.5	50.00	8.5	357
2017	JUBILEE	450.3	54.26	8	421
2018	JUBILEE	478.3	52.52	8	468
2014	CENTUM	48.5	4.54		30.48
2015	CENTUM	55.2	10.45		39.85
2016	CENTUM	41.7	11.75	1	51.89
2017	CENTUM	39.1	10.93	1.2	56.08

2018	CENTUM	36.1	3.96	1.2	57.85
2014	BRITAM	23.0	1.31	0.3	11.34
2015	BRITAM	20.3		0.3	9.35
2016	BRITAM	11.7	1.26	0.3	9.22
2017	BRITAM	12.7	0.26	0.35	10.44
2018	BRITAM	12.3	0.92	0.35	11.03
2014	CROWN	33.3	0.83	1.75	25
2015	CROWN	56.4	0.43	0.6	29
2016	CROWN	48.0	1.85	0.6	33
2017	CROWN	64.8	3.14	0.6	38
2018	CROWN	78.7	2.58	0.6	30
2014	CAR & GEN	42.4	6.57	0.6	71
2015	CAR & GEN	43.8	2.22	0.6	76
2016	CAR & GEN	32.7	2.22	0.6	81
2017	CAR & GEN	19.0	1.71	0.6	84
2018	CAR & GEN	21.2	5.35	0.8	90
2014	TOTAL	19.2	2.26	0.70	26
2015	TOTAL	22.3	2.57	0.77	28

2016	TOTAL	15.1	3.55	1.06	31
2017	TOTAL	12.0	4.35	1.30	34
2018	TOTAL	13.1	3.67	1.30	36
2014	SASINI	39.0	0.1	0.25	53
2015	SASINI	31.8	4.27	1.25	59
2016	SASINI	21.1	3.39	1.5	61
2017	SASINI	25.1	1.52	1	50
2018	SASINI	29.0	1.3	1	50
2014	HF	82.4	4.21	0.75	28
2015	HF	72.3	3.43	1.3	46
2016	HF	39.8	2.59	0.5	49
2017	HF	26.5	0.36	0.35	49
2018	HF	24.5			45
2014	LONGHORN	32.3	1.62	1.2	7.36
2015	LONGHORN	42.4	0.7	0.15	6.44
2016	LONGHORN	34.8	0.66	0.35	16.08
2017	LONGHORN	30.4	0.49	0.3	16.03
2018	LONGHORN	38.8	0.67	0.42	17.63
2014	UNGA		3.65	0.9	62

		29.6			
2015	UNGA	18.5	5.27	1	25
2016	UNGA	14.5	4.32	1	27
2017	UNGA	13.0	0.49	1	124
2018	UNGA	11.3	6.72	1	131
2014	STD GROUP	9.4	2.57	0.5	27
2015	STD GROUP	7.8	2.95	0.4	23
2016	STD GROUP	21.2	2.14	0.4	25
2017	STD GROUP	31.3	3.32	0.4	23
2018	STD GROUP	29.2	2.41	0.6	24
2014	BOC	23.5	11.76	5.2	87
2015	BOC	14.3	7.61	5.2	86
2016	BOC	5.9	6.47	5.2	84
2017	BOC	6.6	2.02	5.2	81
2018	BOC	4.1	3.36	5.2	76