

**THE INFLUENCE OF SELECTED FACTORS ON THE BEHAVIOUR OF SHARE
PRICES OF COMMERCIAL BANKS LISTED AT THE NAIROBI SECURITIES
EXCHANGE**

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**A Thesis Submitted to the Graduate School in Partial Fulfillment of the Requirements
for the Masters in Business Administration of Egerton University.**

EGERTON UNIVERSITY

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DECLARATION AND RECOMMENDATION

Declaration


This thesis is my original work and has not been presented in this university or any other for the award of degree.

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Recommendation

This thesis has been submitted with my approval as the University Supervisor.

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DEDICATION

I dedicate this thesis to the Almighty God and to my family, Kipkurui Arap Chepkwony, Charles Keter, Amariah Cheptoo and Nesae Cherop who gave me inspiration and encouragement

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I would like to express my gratitude and thanks to those who have helped and contributed with their efforts to improve my research project. First, I am deeply thankful to God for giving me the ability to do this thesis. I also thank Egerton University for giving me the opportunity to expand my academic knowledge. I thank my supervisor Dr. Kalui, for his assistance, availability, suggestions, attention to detail and inspiration during the research process. I owe special thanks to my father Kipkurui Arap Chepkwony for his inspiration during both research process and the course work and also the financial support he accorded to me in the course of my work.

ABSTRACT

The factors affecting the price of an equity share can be viewed from the macro and micro economic perspectives. These factors will affect the demand and supply of a stock in the market which in turn will affect the price of the stock. The purpose of the study was to determine the influence of selected factors on the behavior of share prices of commercial banks listed at the Nairobi Securities Exchange (NSE). Specifically, the study determined the influence of dividend per share on the behavior of share prices of commercial banks listed at NSE; the influence of financial leverage on the behavior of share prices of commercial banks listed at NSE and the influence of book value per share on the behavior of share prices of commercial banks listed at NSE. The study used a descriptive research design, where secondary data was in the form of published financial statements of the eleven commercial banks listed at NSE and the daily share prices of the commercial banks which are normally given in the NSE website. Statistical Packages for Social Sciences (SPSS) was used to facilitate the analysis and interpretation of data and the results obtained was presented using tables, bar charts and line graphs for easy of interpretation. The correlation results indicated that there was a strong positive relationship between dividend per share with market price per share of commercial banks listed at the NSE; a relatively strong positive relationship between book value per share with market price per share of commercial banks listed at the NSE and a weak positive relationship between financial leverage with market price per share of commercial banks listed at the NSE. The regression analysis and test of hypothesis showed that dividend per share and book value per share had a significant effect while financial leverage had no significant effect on the market price per share of commercial banks. The study recommends that commercial banks should structure and implement strategies aimed at improving profitability which in turn increases the amount of dividends paid out to the shareholders and increase in book value per share thus improving shareholders value and the image of the bank through better market share prices. Capital market authority, NSE and the government should formulate and implement policies related to dividends payout by companies listed in the NSE so as to encourage investments and spur economic growth. The investors on the other hand should make informed decisions on which Commercial Banks to invest on based on the level of dividends they pay out to its shareholders and the value of shareholders' funds which affects the book value per share. They should invest in banks that pay out high dividends and have high book value per share. Further research should focus on the limitations of this study since numerous expansions of this research are possible.

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LIST OF ABBREVIATIONS

NSE:	Nairobi Securities Exchange
CBK:	Central Bank of Kenya
NPLs:	Non Performing Loans
GDP:	Gross Domestic Product
CSE:	Colombia Stock Exchange
FDI:	Foreign Direct Investment
TEH:	Tax Effect Hypothesis
NASDAQ:	National Association of Securities Dealers Automated Quotation
EPS:	Earnings per Share
NPV:	Net Present Value
MVAPS:	Market Value Added per Share
EMH:	Efficient Market Hypothesis
NSE:	Nairobi Securities Exchange
CBK:	Central Bank of Kenya
MPPS:	Market Price per Share
DPS:	Dividend per Share
BVPS:	Book Value per Share
FL:	Financial Leverage
SD:	Standard Deviation

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter discusses the background of the study, the problem statement, the purpose of the study, the objectives of the study, research hypothesis, and significance of the study limitations and scope of the study.

1.2 Background of the study

The capital market is a market for securities, where business enterprises and governments can raise long-term funds. The capital market, which includes the stock market and the bond market, plays a vital role in economic prosperity that fosters capital formation and sustains economic growth (Gompers, Ishii & Metrick, 2009). Stock markets are more than a place to trade securities; they operate as a facilitator between savers and users of capital by means of pooling of funds, sharing risk, and transferring wealth. Stock is the evidence of ownership after investor has invested certain amount of money in a company. An investor can either invests in the stock of a company that is listing its shares for the very first time or can buy shares that are already listed in the stock market. Kurihara (2006) found that stock markets are essential for economic growth as they ensure the flow of resources to the most productive investment opportunities.

Stock prices change in stock markets on a daily basis. Moreover, during certain times of the year, it is easy to notice that stock prices appreciate every morning, and this may take place many times in one day for some stocks (Almumani, 2014). The factors affecting the price of an equity share can therefore be viewed from the macro and micro economic perspectives. Macro-economic factors include government rules and regulations, inflation, and other economic conditions, investor behavior, market conditions, money supply, competition, uncontrolled natural or environmental circumstances directly affecting the production of the company and politics (Frankfurter & Wood, 2002). The micro economic factors are those factors that are unique to a specific company. Company fundamental factors influencing stock prices might include performance of the company, a change in board of directors, appointment of new management, and the creation of new assets and dividends earnings (Gompers, Ishii & Metrick, 2003). The mentioned factors will affect demand and supply of a stock in the market which in turn will affect the price of the stock. In an efficient market,

stock prices would be analyzed by Technical Analysis or Fundamental Analysis. Technical analysis evaluates the stock price movement and predicts the future stock price based on historical data of stock price (Hussainey, Oscar and Chijoke, 2011). Fundamental Analysis evaluates the intrinsic value of the company and compares it to the stock price (Khadjeh, Aghabozorgi, Ying & Ling, 2014). The comparison of these analyses will give insight to the investor whether the stock price is undervalued or overvalued and it will assist the investor in making the decision.

In Kenya, shares of listed companies are traded in the Nairobi Securities exchange. Share prices change in the Nairobi Securities Exchange (NSE) on a daily basis and for some shares the change may take place many times in one day. The listed companies are categorized according to the sectors of the economy that they serve. The categorization has created eleven sectors into which the listed companies are put, which are Agricultural, Automobiles & Accessories, Banking, Commercial & Services, Construction & Allied, Energy & Petroleum, Insurance, Investment, Manufacturing & Allied Telecommunication & Technology and Growth Enterprise Market Segment and currently Investment Services (NSE 2014). Listed companies that trade in the NSE are required by the Capital Markets Authority to file their audited accounts.

The study however focused on the Banking sector which comprises of eleven listed commercial banks since the banking sector is the key sector that has the greatest effect on the country's economy. The commercial banks in the country play a major role in the development of the country by making available funds for development to the business community (Sohail & Hussain, 2009). Their intermediation function entails taking deposits from those with funds in excess of their current needs and advancing the same to those in need of finance for economic development. The banking sector therefore is an important factor to the financial stability of the economy. The eleven commercial banks listed on the NSE are the major players in the banking sector as opined by Khadjeh et al. (2014). The aforesaid contributions of Commercial Banks to the economy necessitated the need to carry out research on the influence of the selected factors on the behavior share prices of the Commercial Banks listed at the NSE.

1.3 Problem Statement

EMH postulates that a market that is efficient is both internally and externally efficient; thus, the price assets at any point include all information on the asset, expected future cash flows and the uncertainty involved in investing in that security (Goetzmann & Rouwenhorst, 2008). According to Neal (2005), the Efficient Market Hypothesis (EMH) investors engage themselves in a game of chance and not skill, when they buy or sell securities. Therefore, it is impossible to out-perform the market as prices normally incorporate and reflect all relevant information in the market.

Several prior empirical studies on factors affecting the behavior of share prices have been done. Some of the studies include the ones done by Khan (2012) in Karachi Stock Exchange index of Pakistan, Ehrhardt and Brigham (2010) in 14 commercial banks of Amman Stock Exchange and Sanju, Nirmala and Ramachandran (2011) in the Indian market. On the other hand in Kenya, Omuchesi and Bosire (2014) found that introduction of the automated trading system did not affect volatility at the NSE. Barasa (2014) study revealed that the performance of the stock market was impacted by the supply of money and Gross Domestic Product (GDP) per capita. Gworo (2012) found that market capitalization and volatility of prices at the NSE had a weak correlation.

There is a lot of uncertainty to most investors because of technological innovation over the years as well as new free and open economic policies that have led to more investors seeking to buy shares in the stock markets (Gatua, 2013). Hence the need to understand the factors that affect share prices in the NSE. Besides, a significant number of the studies have not explored the particular variables under this study hence the need carry out this study to determine the influence of the selected factors on the behavior share prices of commercial banks listed at the NSE. The study majored in only three factors which are: dividend per share, financial leverage and book value per share.

1.4 Purpose of the Study

The purpose of this study was to determine the influence of selected factors on the behavior of share prices of commercial bank listed at the Nairobi Securities Exchange.

1.5 Objectives of the Study

- i. To determine the influence of dividend per share on the behavior of share prices of commercial banks listed at the Nairobi Securities Exchange.
- ii. To determine the influence of financial leverage on the behavior of share prices of commercial banks listed at the Nairobi Securities Exchange.
- iii. To determine the influence of book value per share on the behavior of share prices of commercial banks listed at the Nairobi Securities Exchange.

1.6 Research Hypothesis

Ho₁; Dividend per share has no influence on the behavior of share prices of commercial Banks listed at the Nairobi Securities Exchange.

Ho₂; Financial leverage has no influence on the behavior of share prices of commercial Banks listed at the Nairobi Securities Exchange.

Ho₃; Book value per share has no influence on the behavior of share prices of Commercial banks listed at the Nairobi Securities Exchange.

1.7 Justification and Significance of the Study

The study focused on the listed commercial banks since they play a major role in the development of the country by making available funds for development to the business community. Their intermediation function entails taking deposits from those with funds in excess of their current needs and advancing the same to those in need of finance for economic development. This study will be useful to the investors and the decision makers of commercial banks as it will give them new insights on the factors that influences share prices. The Commercial Banks will be able to structure and implement strategies aimed at improving profitability in an informed manner and avoid obvious pitfalls thus improving shareholders value and the image of the bank through better market share prices. The investors on the other hand will be able to make informed decisions on which Commercial Banks to invest on. The study findings will also be of great benefit to policy makers.

It will help CMA and NSE in formulation and implementation of policies related to share pricing as well as regulating of stock exchange trading. The government on the other hand will also be informed on how to make policies, rules and regulations regarding trading rules that will help protect investors so as to encourage investments and spur economic growth. The outcome of the study will also significantly advance the frontier of knowledge and add to

the existing academic literature. The results of the study shall inspire other researchers to investigate further areas that are not covered in this study.

1.8 Scope of the Study

This research attempted to determine the influence of dividend per share, financial leverage and book value per share on the behavior of share prices of commercial banks listed at the Nairobi Securities Exchange. It was done between March to December 2014. The study was conducted in eleven commercial banks listed at the NSE since they are a representative of other commercial banks and have a bigger asset base. Secondary data from the company's financial statements and share prices from the NSE website was used. The researcher used financial data and stock prices for a period of five years that is from 2009 to 2013.

1.9 Limitations of the study

The study encountered various limitations that hindered access to information. The main limitation of study was the inability to include more organizations that are listed in the NSE by focusing on commercial banks. The study could cover more institutions across all sectors so as to provide a more broad based analysis though the listed commercial banks possess key parameters to be investigated. Although there are other data collection methods; the study used secondary data only to gather data since the data was available in the NSE and the data would give objective results because it would be collected from the source.

1.10 Assumptions of the Study

The study assumed that the data collection and analysis tools would provide the most reliable sets of information to give a valid inference of the factors influencing the behavior of share prices of commercial banks listed in the NSE. The study ensured that the data would be collected from the source so as to provide valid and reliable data and the data collected would be analyzed using both regression and correlation analysis so as to avoid any inconsistencies.

1.11 Definition of Operational Terms

Market Price per Share: This was operationalized as the value a shareholder gets from each share price invested in the commercial banks. This was measured by dividing total daily market price per share of the entire year by 364 days.

Dividend per Share: This was operationalized as the amount of dividend that a stockholder will receive for each share of stock held in the commercial banks. This was measured as a ratio of total dividends and total shares.

Financial Leverage: This was operationalized as the extent to which commercial banks use borrowed money. This was measured as the ratio of total debt and total assets.

Book Value per Share: This was operationalized as a financial measure that represents a per share assessment of the minimum value of a commercial bank's equity. This was measured as a ratio of all shareholders funds and total shares of the commercial bank.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter contains literature on the Nairobi Securities Exchange and commercial banks in Kenya; an overview of behavior of share prices in the NSE; factors influencing the behavior of share prices of commercial banks listed at the NSE which are dividend per share, financial leverage and book value per share; theoretical framework, empirical literature; conceptual framework and summary and gaps to be filled by the study.

2.2 Nairobi Securities Exchange (NSE)

Nairobi Securities Exchange was constituted in 1954 as a voluntary association of stockbrokers registered under the Societies Act (Ngugi & Njiru, 2005). The first privatization in the NSE was through a successful sale of a 20% government stake in Kenyan 1988 which saw the Government of Kenya and its affiliate institutions retain about 80% of ownership (NSE, 2011). The NSE moved to more spacious premises at the Nation Centre in July 1994, setting up a computerized delivery and settlement system (DASS). In February 2007 NSE upgraded its website to enhance easy and faster access of accurate, factual and timely trading information. The upgraded website was used to boost data vending business. In July 2007, NSE reviewed the Index and announced the companies that would constitute the NSE Share Index. The aim of reviewing the NSE 20share index was to ensure that it is a true barometer of the market.

A Wide Area Network platform was implemented in 2007 which eradicated the need for brokers to send their dealers to the trading floor to conduct business. Trading was mainly conducted from the brokers' offices through the Wide Area Network. In 2008, the NSE All Share Index (NASI) was introduced as an alternative index. Its measure is an overall indicator of market performance. The Index incorporates all the traded shares of the day. Its attention is therefore on the overall market capitalization rather than the price movements of select counters (NSE 2014). In July 2011, the Nairobi Stock Exchange Limited changed its name to the Nairobi Securities Exchange Limited. The change of name reflected the strategic plan of the Nairobi Securities Exchange of evolving into a full service securities exchange which supports trading, clearing and settlement of equities, debt, derivatives and other associated instruments, (NSE 2014).

2.3 Commercial Banks

The Banking industry in Kenya is governed by the Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the CBK. The CBK, which falls under the Ministry of Finance docket, is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. During the quarter ended 30th June, 2014, the sector comprised 43 commercial banks, 1 mortgage finance company, 9 microfinance banks, 8 representative offices of foreign banks, 97 foreign exchange bureaus, 5 money remittance providers and 2 credit reference bureaus (CBK, 2014).

The banking sector's aggregate balance sheet grew by 5.3 percent from Ksh. 2.82 trillion in March 2014 to Ksh. 2.97 trillion in June 2014. The sector's gross loans and advances increased from Ksh. 1.69 trillion in March 2014 to Ksh. 1.78 trillion in June 2014, translating to a growth of 5.3 percent. Deposits were the main source of funding for the banking sector, accounting for 72.3 percent of total funding liabilities. The deposit base grew by 5.4 percent from Ksh. 2.04 trillion in March 2014 to Ksh. 2.15 trillion in June 2014 supported by branch expansion, remittances, receipts from exports and increased use of alternative delivery channels of banking services such as agency banking model. The number of bank deposit accounts increased from 23.8 million in March 2014 to 25.3 million in June 2014 representing a growth of 1.5 million accounts or 6.3 percent. The banking sector registered improved capital levels in June 2014 with total capital increasing by 2.3 percent from Ksh. 426.6 billion in March 2014 to Ksh. 436.6 billion in June 2014, whereas shareholders' funds increased by 1.3 percent from Ksh. 453.6 billion in March 2014 to Ksh. 459.4 billion in June 2014. The value of gross non-performing loans increased by 6.9 percent from Ksh. 95.1 billion in March 2014 to Ksh. 101.7 billion in June 2014. The quality of assets, measured as a proportion of net non-performing loans to gross loans declined from 2.0 percent to 2.1 percent over the same period. Similarly the sector recorded an increase in the ratio of gross NPLs to gross loans from 5.6 percent in March 2014 to 5.7 percent in June 2014. The spill-over effects of high lending interest rates and challenges in the business environment contributed to increase in Non-performing loans (NPLs). However, banks continue to deploy enhanced appraisal standards to mitigate credit risk. During the 2nd quarter of 2014, the sector recorded Ksh. 37.61 billion pre-tax profits, which was an increase of 12.5 percent from Ksh. 33.42 billion registered in the quarter ending March 2014 (CBK, 2014).

2.4 Behaviour of Share Prices at the NSE

Over the five year period of 2009 to 2013 under study, the stock market in Kenya changed over the years due to macro and micro economic factors which in turn affected the behavior of the share prices of the listed commercial Banks. As at 31st December 2009, the NSE 20 Share Index dropped by 7.8 per cent from 3,521 points, to close at 3,247 points in December 2009. The average share price of listed companies also decreased by 31% from Ksh.66.1 in 2008 to Ksh.45.34 in 2009(Economic Survey 2010 & NSE, 2009). The decrease was mainly attributed to lose of investor confidence in the market when the Nyaga Stock Brokers collapsed in 2008 thus sending investors to panic in the market.As at 31st December 2010 NSE 20- share index increased to 4433 points compared to 3,247 points in 2009. The average share price of commercial banks also increased from 45.34 in 2009 to 61.06 in 2010. The stock market improved its performance due to reduced energy price which resulted in a stable inflation rate throughout the year (Economic Survey 2011 & NSE, 2010).

In 2011 NSE 20-Share Index dropped by 27.7 per cent to 3,205 points in December 2011 and the average share price of commercial banks also dropped by 34% from 61.06 in 2010 to 40.57 in 2011. The market performed poorly due to high inflation and the “twin crises” comprising the ripple effects of the global financial crisis and the euro-zone crisis which affected the level of investments in the market (Economic Survey 2012 & NSE, 2011). In 2012, the NSE 20-share index recorded a 29.0 per cent growth from 3,205 points in 2011 to 4,133 points. The average share price of the listed commercial banks also recorded a 56% growth from 54.48 in 2012 to 85.15 in 2013 (Economic Survey 2014 & NSE, 2013). The good performance was attributed to stable inflation and a stable shilling which encouraged more foreign investors to invest in the market.

As at 31st December 2013, the Nairobi Stock Exchange 20-share index recorded a 19.2 per cent growth from 4,133 points in 2012 to 4,927 points in 2013. The average share price of the listed commercial banks also recorded a 56% growth from 54.48 in 2012 to 85.15 in 2013 (Economic Survey 2014 & NSE, 2013). The positive change was attributed to peaceful conclusion of the March 2013 general elections which increased the investor confidence in Kenyan market thus increased investments in the stock market.

Table 2.1.
NSE 20 Share index and MPS for commercial banks listed at the NSE

Year	NSE 20 Index	Average market price per share	Average market price change
2009	3,247	45.34	31%
2010	4,433	61.06	35%
2011	3,204	40.57	34%
2012	4,133	54.48	34%
2013	4,927	85.15	56%

Source: (Kenya Bureau of Statistics, 2014)

2.4.1 Dividend per Share and Behavior of Share Prices

Dividends are payments made by a corporation to its shareholder members in proportion to their shareholding in the company. It is the portion of corporate profits paid out to stockholders. The dividend policy refers to the practice that management follows in making dividend payout decisions or, in other words, the size and pattern of cash distributions over time to shareholders. Dividend yield is the sum of all the annual cash dividends paid to common stock holders divide by the average market value of the stock in the year. Announcement date is the date on which the Board of Directors meets and declares the dividend. Ex-dividend Date is the date that the value of the firm's common shares would reflect the dividend payment (Lease, John, Kalay, Loewenstein & Sarig, 2000).

The three main contradictory theories of dividends are 'bird-in-the- hand' theory, the tax-preference argument and dividend irrelevance hypothesis theory. 'Bird-in-the- hand' theory states that a high dividend increases the share value; the tax-preference theory argues that low dividends increases share value and the dividend irrelevance hypothesis assumes that dividends have no effect on share value (Stringham & Currott, 2015). Macaulay (2015), for instance supported the bird in hand theory and argued that "the sole purpose for the existence of the corporation is to pay dividends", and firms that pay higher dividends must sell their shares at higher prices (p.202).

Miller and Modigliani's (1961) however, demonstrated that under certain assumptions about perfect capital markets, dividend policy would be irrelevant. Given that in a perfect market dividend policy has no effect on either the price of a firm's stock or its cost of capital,

shareholders wealth is not affected by the dividend decision and therefore they would be indifferent between dividends and capital gains. The reason for their indifference is that shareholder wealth is affected by the income generated by the investment decisions a firm makes, not by how it distributes that income. They stated that “given a firm’s investment policy, the dividend payout policy it chooses to follow will affect neither the current price of its shares nor the total returns to shareholders” (Miller & Modigliani’s, 1961: p.414). Petram (2014) did a study of the Zimbabwe’s firms and found out that there is no significant change in share price due to dividend announcement. Thus, their findings support dividend irrelevance theory.

Tax-effect hypothesis (TEH) is based on a simple proposition that many investors are faced with dividends being taxed at a higher rate than capital gains. In addition, dividends are taxed immediately, while taxes on capital gains are deferred until the gains are actually realized. Therefore, the TEH suggests that taxable investors will demand superior pre-tax returns from stocks that pay a large proportion of their income in the form of highly taxed dividends (Al-Malkawi, Rafferty & Pillai, 2010). Baker, Powell and Veit (2002) however surveyed the managers of 630 NASDAQ firms and found weak or no support for the tax-preference theory.

Nazir, Nawaz, Anwar and Ahmed (2010) did a research of 17 banks in Pakistan and found out that there is a definite relationship between stock prices and dividend policy. Their findings also revealed that there was a negative relationship between dividend payout and share prices. On the contrary, according to the research done by Hong (2015), there is no significant impact of dividend announcement on share prices in Pakistan. Further, data of 45 non-financial firms were taken by Annette (2015) and the research findings showed that share price was positively affected by dividend payout ratio which supports bird in hand theory and reject the dividend irrelevance theory. They further revealed that the share price is insignificantly affected by profit after tax, retention ratio, and dividend per share, whereas, it is positively affected by Earning per share and negatively affected by return on equity. Tracy (2016) did another study of 50 firms and found out that there was a significant negative association of stock price volatility and dividend policy, whereas stock price volatility was positively affected by asset growth and Earnings per share. Akbar and Baig (2010) considered the sample of 79 companies listed at Karachi Stock Exchange to study the effect of dividend announcement on stock prices for the period of 2004 to 2007. The study showed

that the announcements of dividends either cash dividend or stock dividend or both have positive effect on stock prices. Docking and Koch (2005) also established that there is a direct relationship between dividend announcement and equity price behavior. Data of 500 Indians' firms were done by Goetzmann and Rouwenhorst (2005) found out that stock prices were significantly affected by the dividend retention ratio; size and debt to equity ratio. Nazir et al. (2010) did another study of 73 firms in Pakistan to examine the relationship between dividend policy and stock prices. A strong relation was proved between dividend policy and prices of stock in Pakistan. Goetzmann and Rouwenhorst (2008) did a study of United Kingdom firms. A positive result was identified between dividend payout and dividend yield whereas, a negative result was identified between dividend payout and stock prices in their study. Their results also proved that stock prices were also affected by firm size, earning and debt ratio.

Preda (2009) did a research and found out that there was a substantial relation of stock price volatility and dividend policy in Kenya. Olweny and Kimani (2012), in his research found a significant relationship between unexpected dividend announcements and abnormal stock returns on shares of companies listed in the NSE. On the contrary, Kihara (2011) carried out a study on the relationship between dividend announcement and return on investment for firms listed in the NSE and concluded that there was no significant relationship between dividend announcements and abnormal returns. The findings by Akbar and Baig (2010); Olweny and Kimani (2012); Docking and Koch (2005) showed that dividend policy have an effect on share prices but Kihara (2011) found that there is no significant relationship between dividend announcements and abnormal returns.

Mian and Musarat (2010) conducted a research to study the impact of company dividend payment policy on share price instability. They used a sample of 73 firms for the period of six years from 2003-2008. They used regression analysis model to examine the effect of dividend policy on stock price and found out that dividend policy has a strong effect on share price volatility. Nazir, Nawaz, Anwar, and Ahmed (2010) also studied the effect of dividend policy on stock prices. Results of their study showed that dividend payout and dividend yield have significant effect on stock prices.

Mohammed (2010) in her study titled the relationship between dividend per share and firm value done between 2005 and 2009 found out that for firms quoted at the NSE, the effect of

dividend per share on firm value is strong than that of retained earnings per share. Tversky and Kahneman (2013) conducted another study whose findings showed that there was correlation between dividend policies and share prices. During the study, it was realized that dividend policies of companies impacted the market value of shares even in the perfect capital market. The study also suggested that shareholders may prefer present dividend instead of future capital gains. This is because future business situations are uncertain even in perfect capital markets.

Mbaka (2010) did an empirical study on the applicability of dividend signaling theory at the NSE between 2003 to 2007 and established that dividend announcements by companies cause some reaction in market prices and returns depending on the information contained in the announcement. Dividend announcements had positive effects for companies with increasing dividends while it had negative reactions for 22 companies with decreasing dividends. Companies with no change in dividends were found to have mixed reactions towards dividend announcements.

Goetzmann and Rouwenhorst (2008) also studied the impact of dividend policy on stock prices. The study showed a positive relationship between dividend yield and stock price changes and negative relationship between dividend payout ratio and stock price changes. Chhetri (2008) also revealed that there is a positive relationship between dividends and stock prices. On the contrary, Bitok (2004) in his study on the effect of dividend policy on the value of the firm quoted in the NSE over the period 1998 to 2004 found that there is a weak relationship between the dividend payout ratio and the value of the firm. The findings by Mian and Musarat (2010); Nazir, Nawaz, Anwar, and Ahmed (2010); Chhetri (2008) showed that dividend policy have an effect on share prices but Bitok (2004) found that there is a weak relationship between the dividend payout ratio and the value of the firm.

2.4.2 Financial Leverage and behavior of Share Prices

The choice of capital structure is one of the most important decisions managers face, and a change in leverage ratio can affect a firm's financing capacity, risk, cost of capital, investment and strategic decisions, and ultimately shareholder wealth. When financial leverage is used there are two different outcomes, either positive maximizing the profit or negative minimization. The firm is exposed to risk because of high debt levels which should be repaid at a cost (Taleb, 2013). Firms utilize financial leverage so that they can experience

a return on investment. Excessive use of debt can be a risk to a company if not well managed. Leverage ratios can be affected by many factors such as security issuance, share repurchase, earnings accumulation, use or provision of trade credit, payment or use of existing credit lines, and dividend payment. Financial leverage increases the earnings per share (EPS) when the economic conditions are favorable and depresses the EPS when they are unfavorable. Also, firm's financial leverage increases the rate of return on the common stock equity since a greater proportion of debt, increases the risk of the stockholder. Therefore a company should look for an optimal capital structure where it can minimize the firm's cost of capital and maximize its return (Akintoye, 2008).

Mandelbrot and Hudson (2010) supported the negative effect of leverage change on stock prices in his theory, the debt overhang theory. This theory predicts that higher leverage increases the probability of a firm forgoing positive Net Present Value (NPV) projects in the future, because in some states, the payoff from these investments to shareholder, after fulfilling debt obligations, is lower than the initial investment shareholders have to outlay. This under-investment reduces the growth option value of a firm. Thus, an increase in the leverage ratio can result in a lower stock price, all other factors held constant. In a related study,

Dimitrov and Jain (2008) found a negative relation between the annual change in leverage and the current-year and next-year stock returns. They also found a negative relation between the leverage change and future earnings and argued that a firm may increase its borrowing when the underlying performance is expected to deteriorate. They concluded that the leverage change contains value-relevant information about future stock returns. Cai and Zhang (2011) did a study in the United States stock market and observed that the change in leverage ratio affect negatively on the stock price. The study suggested that the change in leverage gives market participants signals concerning the value of the stock. Stock returns calculated on a monthly basis data obtained from CRSP were used in the sample that spanned from 1975 to 2002. All financial firms were excluded from the study.

According to Cutler, Poterba and Summers (1991) companies that uses leverage has to demonstrate that it can handle the risks which come with carrying debt. This can be a very crucial point to consider when deciding when to get additional finance. In Europe, the research by Artikis and Nifora (2011) did an analysis on impact of leverage on stock returns

performing on all companies and also on industry selection. They did an analysis on 12 financial companies for a period of 15 years and found that leverage presents a strong positive and statistically significant relationship with stock returns. Dimitrov and Jain (2008) reported negative effect on leverage and stock returns. The conclusions were that a change in leverage is statistically significantly to a firm. Also changes in leverage ratios depicted a negative relation to future adjusted returns of which the results were robust for controlling for risk measures given by book-market, size and beta. Hasanzadeh (2013) did a study on the effects of Leverage on Future stocks in the Tehran stock exchange. The analysis was done from 2005 to 2008 and took book value ratio as a variable to analyze data and test hypothesis. Findings showed that leverage does not affect future stock value of the firm. The other aspect of financial leverage that can affect stock returns is the financial distress arising from default risks. When a firm has high leverage, a further increase in its leverage ratio can materially increase the likelihood of default and its expected cost. If the default risk is priced, a significant increase in the leverage leads to a higher expected future return (discount rate) and hence an immediate price drops (Ahn, Dennis & Denis 2006).

Financial distress can also be costly to customers and workers, and can spike actions from competitors. This reduces the competitiveness of the firm in its product market and may reduce firm value (Parsons & Titman 2007). In Kenya, Buigut (2013) focused on a study of capital structure and how it affects the share prices in the NSE. They looked at effects of debt, equity and gearing ratio on share price by using MM theorem to base their study on. The final results indicated that debt, equity and gearing ratio are significant to share prices for the manufacturing sector. Also, gearing ratio and debt were found to positively affecting share prices. Parsons and Titman (2007) supported Ahn, Denis and Denis, (2006) views that there is a negative relation between distress risk and future stock returns

2.4.3 Book Value per Share and behavior of Share Prices

Alexander, Dhumale and Eatwell (2016), stated that book value of equity refers to all equity equivalent items like reserves, retained earnings and provisions. In other words, in this context, all the items that are not debt (interest bearing or non-interest bearing) are classified as equity. According to Alexander et al. (2016), if the total market value of a company is more than the amount of capital invested in it, the company has managed to create shareholder value. If the market value is less than capital invested, the company has destroyed shareholder value. The book value per share performance measure seems to be a

very strong measure influencing share prices and hence attempt should be taken by companies to improve it so as to improve the stock prices. As far as investors are concerned book value per share is an important measure which should be considered while making their stock market decisions compared to the other traditional measures of performance. Hence, companies and investors should change their mindset and focus on book value per share for assessing the corporate performance (Thenmozhi, 2000). Whether a company succeeds in creating MVA (Market Value Added) to its shareholders or not, depends on its rate of return. If a company's rate of return exceeds its cost of capital, the company will sell on the stock market with premium thus increasing the market price of stock.

2.5 Theoretical Framework

This section contains the theories on the factors influencing the behavior of share prices of commercial banks listed at the NSE. They include: Random Walk Theory, Efficient Market Hypothesis Theory and Signaling Effect Theory. The theories will be important for the current study since it provides information on the involvement of all stakeholders in acquisition of data concerning an organization's forecasts and recital, which will enable them to make right decisions with regard to which commercial banks to invest in.

2.5.1 The Random Walk Theory

The theory was advocated by Fama and French (2004) in the journal on stock market prices. In his finding he advocated that market and securities prices are random and not influenced by past events. The random walk theory developed the proposition that previous stock prices cannot be used to predict the expected future prices (Levine, 2007). Godwin (2010) while studying on the applicability of the random walk theory on the Nigeria Stock Exchange proved that the theory applies in a weak form of market efficiency. Also a study by Anyumba (2010) concluded that NSE follows a random walk under the weak form of market efficiency.

In Statistical terms, the price changes in a period are not related to the price changes in the successive periods. However, Fama and French (2004) on their studies on dividend yields and expected stock returns established that the power of dividend yields to forecast stock returns increases with time. In a longer period of time the dividend yield is a good predictor of stock market returns. This theory will be relevant for the current study in that the researcher will be able to ascertain the trend in which changes in the stock prices follow over

a period of time. As a result the researcher can be able to determine the prices of stock at a specified duration of time.

2.5.2 Efficient Market Hypothesis Theory

This theory is postulated by Fama and French (2004) which advocates for the efficiency of the financial market in terms of the information, news, or communication involved. For a capital market to be termed as efficient several assumptions are made. First, an important premise of an efficient market requires that a large number of profit maximization participants analyze and value securities, independent of the other. The second assumption is that new information regarding securities comes to the market in a fashion, and the timing of one announcement is generally independent of others. The third assumption is profit maximizing investors adjust security prices rapidly to reflect the effect of new information (Reilly, Wright & Johnson, 2007).

According to Neal (2005), these analyses enable the investors to achieve returns greater than those that could be obtained by holding a randomly selected portfolio of individual stocks with comparable risk. However, under the Efficient Market Hypothesis, investors engage themselves in a game of chance and not skill, at any time of them buying and selling securities. Therefore, it is, however, impossible to out-perform the market as prices normally incorporates and reflects all relevant information in the market.

According to Fama and French (2004) as quoted in Karz (2012), efficiency is distinguished in three different forms: Strong-form; Semi-strong and weak efficiency. The inefficiency in the emerging markets is caused by of lack of development and implication on the policy choices. Neal (2005), using three successively stronger tests of random walk, showed that equity markets in Ghana and Zimbabwe, were not weak-form efficient; Botswana passed only the first test, namely the partial autocorrelation function test, implying that future price changes were uncorrelated with past price changes but the variance of past prices could be used to predict future volatility. The results obtained from implementing a test of evolving efficiency over the period 1990-2001 by Zhang and Wu (2009) illustrated that the JSE was weak-form efficient. Dickinson and Muragu (2006) in their paper, Market efficiency in Developing countries, a case of the Nairobi Stock Exchange, extends evidence on the efficiency of the stock markets in the developing countries using data from the NSE and also addressing some

methodological issues. They found out that small markets such as the NSE provided twenty one empirical results consistent with weak-form efficiency.

2.5.2.1 Weak form of the EMH

The weak form reflects the situation where a movement in stock prices follows a random path. Current stock price movements are independent of past price movements. This means that, all information contained in past trading volume, prices of stock, and the rates of return are already reflected in the current stock prices. Thus, the past data on stock and market are of no use in predicting future price changes. The random nature of stock price movements, on the other hand, means that any attempt to study past prices moving in order to detect mispriced stock and to gain above-average profits will fail. Thus one cannot gain from using information that everybody else in the market has known (Goetzmann & Rouwenhorst, 2008).

2.5.2.2 Semi-strong form of the EMH

The semi-strong form of the EMH states that the current stock prices not only reflect all past price movement but also all publicly available information (Fama & French, 2004). Examples of public information are data reported in a company's financial statements, earnings and dividend announcements, and so forth. This information will then be available at random intervals, and are quickly absorbed by the market. Therefore, investors who practice fundamental analysis by studying relevant reports and announcements with the attempt to make above-average returns on a consistent basis would be disappointed as the stock prices have already reflected such new public information. EMH postulates that a market that is efficient is both internally and externally efficient; thus, the price assets at any point include all information on the asset, expected future cash flows and the uncertainty involved in investing in that security (Goetzmann & Rouwenhorst, 2008).

2.5.2.3 Strong-form of the EMH

The strong-form of the EMH is the strongest version, which states that current stock prices reflect all pertinent information, both public and private or inside information (Fama & French, 2004). The current stock price reflects all true or intrinsic value of the share and thus, the stock would be fairly priced in the stock market. Thus, there is no opportunity for investors to have exclusive access to information relevant to stock prices. The stronger-form of EMH states that even corporate insiders within a corporation would find it impossible to

systematically gain abnormal returns from inside information. Such information includes detailed information about the financial state and major strategies of the firm, alongside the tactical decisions the company makes that may not be available to shareholders. EMH applies rationality to asset pricing in the markets. Prices of all securities include all available information since in an efficient financial market, opportunities for abnormal profits are eliminated (Lucas, 2018). The logic of EMH premise is that information flows fluently and immediately get included in the current share prices such that tomorrow's price changes are only affected by information that emerges tomorrow (Neal, 2005).

2.5.3 Signaling Hypothesis

The signaling theory was first proposed by Brennan and Copeland in 1988 as stated by Aduda and Chemarum (2010). The theory states that the price of a company's stocks usually changes when the dividend payments changes. The signaling hypothesis suggests that an announcement of dividends payments conveys new information to the market (Beckmann, 2017). Ramiro and Agustín (2017) discovered that signals have the effect of sensitizing the market and therefore indirectly affect consumer preference. According to the authors, smooth dividend payments over time made by a company to its shareholders may influence the share prices of a company. An increase in the dividends indicates that the managers expect higher cash flows in the future.

Khadjeh, Aghabozorgi, Ying and Ling (2014) studied the effect of announcement of quarterly earnings surprises on stock price's risk adjusted rate of return for 50 randomly selected firms. The study analyzed 11,183 observations using standard risk adjusted event study. They found out that when a firm announces positive surprise earnings, investors see it as a positive signal about the firm's future thus causing an increase in the firm's stock price. This study's results suggested that a positive surprise earnings announcement sends a positive signal about the profitability and future success of a firm. As a result, stock prices increases and market reacts quickly to available information.

Aduda and Chemarum (2011) tested the investor rationality for companies listed at the NSE. They tested the investors' rationality and overreaction to news and performance of companies listed at the NSE as an anomaly that has been proven in other markets. The study concluded that investors indeed overreact to both bad and good news. Confirming that investors are irrational and make decisions based on some biases. The research is based on the assumptions

that outside investors have imperfect information regarding the company's future cash flows and capital gains. Another important assumption is that dividends are taxed at a higher rate compared to capital gains. Christoffersen and Diebold (2006) argues that under these circumstances even though there is a tax disadvantage for dividends, companies would choose to pay dividends in order to send positive signals to shareholders and outside investors. Many researchers have been conducted in order to test if the signaling theory applies in the real world and there exist different opinions regarding the applicability of the signaling theory.

Azoff (1994) provided empirical evidence in favor of the signaling theory. The author argues that an increase of dividend payments tends to increase the shareholders wealth. Many investors will be tempted to invest in the company's shares and hence improving on the stock price and the ultimate market value of the firm as the company will be seen to be making continual positive earnings/income (even if this is not the case). According to Jackson (2001), investors use dividends as a signal about the firm's future prospects. These findings were established in their study on the signaling hypothesis by examining the displacement properties of dividends. This brings the findings into a local/Kenyan perspective.

2.6 Empirical Literature

A previous study by Udegbumam and Eriki (2001) of the Nigerian capital market showed that inflation is inversely correlated to stock market price behavior. Barsky and DeLong (2005) also measured the influences of macroeconomic indicator on the stock market in Standard & Poors (S&P 500). The result showed that the Gross Domestic Product (GDP) has a significant correlation with the stock price but unemployment and inflation have no significant correlation with the stock price.

Menike (2006) researched the effects on stock prices of Sri Lankan stock market caused by macroeconomic variables. He collected monthly time series of data from the period of September 1991 to December 2002 on variables like exchange rate, money supply, interest rate, inflation rate and Stock Prices of Colombo Stock Exchange (CSE). The results of the study revealed that most of the firms reported high explanatory power of macroeconomic variables in determining stock prices. Inflation rate and Exchange rate were negatively affecting the stock prices in CSE. Researcher further found out that increasing interest rate on TBills were causing fall in stock prices because the investors switch towards treasury

securities. Al-Tamimi, Alwan and Abdel (2011) also defined a model to regress gross domestic product, foreign exchange rate, lending interest rate, and inflation rate against the stock price. The multi-correlation test revealed very strong correlation between gross domestic product, foreign exchange rate, lending interest rate, and inflation rate with stock price. All the variables had strong positive correlation with stock prices apart from the interest rate and foreign exchange rate, which had strong negative correlation with stock prices. Udegbonam and Eriki (2001), Menike (2006) and Al-Tamimi et al. (2011) found contradictory results on the effect of inflation on stock prices but they agreed on the effect of interest rates, gross domestic product and exchange rates whereby they found a negative relationship between stock prices and the mentioned variables.

Adam and Tweneboah (2008) researched stock prices in Ghana on data from 1991 to 2006. They used T-bill rates as measures of interest rates, consumer price index as measure of inflation rate, inward foreign direct investment, and exchange rate as macroeconomic factor. After applying different available models of correlation, regression, and integration they concluded that the exchange rate, a macroeconomic factor, has long run relationship between the stock prices of Ghana. While the inflation rate, FDI and interest rates are the key determinants of stock prices in Ghana. The authors investigated the relationship between macroeconomic variables and stock prices in Lahore stock exchange. The results showed that industrial production index, exchange rate, money supply, and stock returns have positive effects, but inflation had a negative impact on share price. In studying the impact of Real Gross Domestic Product, inflation and interest rates on stock prices of quoted companies in Nigeria, Daferighe and Aje (2009) concluded that inflation and interest rates are negatively correlated with stock prices.

Asaolu and Ogunmuyiwa (2011) investigated the impact of macroeconomic variables on Average Share Price of Nigerian Stock Market. For this purpose they collected the yearly data from the period of 1986 to 2007 on External Debt, Inflation Rate, Fiscal Deficit, Exchange Rate, Foreign Capital Inflow, Investment, Industrial Output, Inflation Rate and Average Stock Price. The study found that a weak relationship exist between Average Stock Price and macroeconomic variables of Nigeria and found that Average Stock Price was not a leading indicator of macroeconomic indicator of Nigerian economy but a long run relationship exist between Average Stock Price and macroeconomic variables for the period under study. The findings by George Tweneboah and Anokye (2008); Daferighe and Aje

(2009) and Asaolu and Ogunmuyiwa (2011) on the inflation rate, and interest rates are consistent since they all found that the two variables had a negative relationship with stock prices.

Ali (2012) investigated the relationship and the impact of company's internal factors on the stock prices by taking 6 years data from 7 different sectors of business and these sectors included 35 companies. According to their regression results return on equity have insignificant impact on share prices but net profit margin, current ratio and total asset turnover have significant impact on share price.

Khan (2012) investigated the different determinants of share prices and the relationship of these determinants with the share prices of Karachi Stock Exchange index of Pakistan. He used five quantitative determinants, namely Book to Market ratio, Price Earnings ratio, Dividend, Gross Domestic Product, and Interest Rate. He used data for the period (2000-2009) of 34 companies from 34 sectors of Karachi Stock Exchange. He found that all the factors selected had a positive and significant relationship with share prices except interest rate and Book to Market ratio which had a negative relationship. Ehrhardt and Bringham (2010) also investigated the relationship of microeconomic factors with the stock price by using Simple and Multiple regression analysis of 14 commercial banks of Amman Stock Exchange, for the period of 2005 -2008. The study found highly positive significant relationship between market price of stock and net asset value per share and market price of stock and dividend percentage.

Sharma (2011) examined the empirical relationship between equity share prices and explanatory variables such as: book value per share, dividend per share, earning per share, for the period 1993-1994 to 2008-2009. The results revealed that earning per share, dividend per share, and book value per share has significant impact on the market price of share. Furthermore, results of study indicated that dividend per share and earnings per share are the strongest determinants of market price, so the results of the study supports liberal dividend policy and suggests companies to pay regular dividends. Sanju, Nirmala and Ramachandran (2011) focused on identifying the determinants of share prices in the Indian market. The study used panel data pertaining to three sectors viz., auto, healthcare, and public sector undertakings over the period 2000-2009 and used ordinary least squares method. The results indicated that the variables; dividend, price-earnings ratio and leverage are significant

determinants of share prices for all the sectors under consideration and profitability is found to influence share prices only in the case of auto sector. Profilet (2013) also researched on the factors that affect stock prices volatility by using regression technique to check the relationship between these variables. The findings showed that dividend yield has a positive strong relationship with share price volatility while on the other hand firm size has negative correlation.

Eita (2011) in investigating the macroeconomic determinants of stock market prices in Namibia used an estimation equation using time series properties of variables and concluded that stock market prices in Namibia were determined by economic activity, interest rates, inflation, money supply and exchange rates. The period under study was 1998 to 2009 and two measures of stock market development were used namely; market capitalization to GDP and the Namibian stock exchange overall index. A positive relationship existed between stock prices on one hand and money supply and economic activity on the other hand while inflation and interest rates had a negative relationship with stock prices. Uwuigbe, Olusegun and Godswill (2012) examined the determinants of share prices in the Nigerian stock exchange market. Using the judgmental sampling technique, a total of 30 companies were selected and data of (2006 to 2010) collected from the stock exchange and the annual reports of the firms. The paper modeled the effects of financial performance, dividend payout and financial leverage on share price of listed firms by using regression analysis. The study concluded that financial performance and dividend payout had a significant positive relation with share prices while financial leverage had significant negative influence on the market value of share prices in Nigeria.

The research by Ali 2012; Khan (2012); Sharma (2011); Sanju, Nirmala and Ramachandran (2011) and Profilet (2013) mainly majored on the effect of companies' internal factors on stock prices and they found that net profit margin, current ratio, total asset turnover and book to market ratio have a significant impact on the stock prices; dividend yield, price-earnings ratio and leverage have a positive relationship but firm's size has a negative relationship with stock price and return on equity has no significant impact on stock price. This study will therefore focus on only three factors that affect share prices of commercial banks listed at the NSE which are; dividend per share, financial leverage and book value per share.

2.7 Summary and Gaps to be filled by the Study

Udegbunam and Eriki (2001), Menike (2006) and Al-Tamimi et al. (2011) found contradictory results on the effect of inflation on stock prices but they agreed on the effect of interest rates, gross domestic product and exchange rates whereby they found a negative relationship between stock prices and the mentioned variables. The findings by George Tweneboah and Anokye (2008); Daferighe and Aje (2009) and Asaolu and Ogunmuyiwa (2011) however on the inflation rate, and interest rates are consistent since they all found that the two variables had a negative relationship.

The research by Ali 2012; Khan (2012); Sharma (2011); Sanju, Nirmala and Ramachandran (2011) and Profilet (2013) found that net profit margin, current ratio, total asset turnover and book to market ratio have a significant impact on the stock prices; dividend yield, price-earnings ratio and leverage have a positive relationship but firm's size has a negative relationship with stock price and return on equity has no significant impact on stock price.

The findings by Akbar and Baig (2010); Olweny and Kimani (2012); and Docking and Koch (2005) showed that dividend policy have an effect on share prices but Kihara (2011) found that there is no significant relationship between dividend announcements and abnormal returns. The findings by Mian and Musarat (2010); Nazir, Nawaz, Anwar, and Ahmed (2010); Chhetri (2008) also showed that dividend policy have an effect on share prices but Bitok (2004) found that there is a weak relationship between the dividend payout ratio and the value of the firm.

Mandelbrot and Hudson (2010) and Dimitrov and Jain (2008) found a negative relation between the annual change in leverage and the current-year and next-year stock returns. Chhetri (2008) on the other hand supported Parsons and Titman (2007) and Ahn, Denis and Denis (2006) views that there is a negative relation between distress risk and future stock returns. However, Vassalou and Xing (2004) found different evidence in relation to default risks and expected stock returns where he documented higher next-month returns for stocks with higher default likelihood. The studies by Reilly et al. (2007); Adam and Tweneboah (2008) and Abugri (2008), supports the arguments given by Alexander et al. (2016) where they argued that high interest rates have a negative effect on share prices. Finally, Thenmozhi (2000) showed that Book Value per share have an effect on companies share prices.

Nevertheless, while several prior empirical studies from developed economies have shed light on the effect of dividends yields, financial leverage, and book value per share and interest rates on the share price of firms, the same is not true in developing economies like Kenya. In addition, findings from prior studies indicate that share price determination is a very much diverse and conflicting area of finance. Every aspect of this phenomenon has a disagreement. In Kenya, there is no sufficient literature to explain the contextual features of dividends yields, financial leverage, and book value per share and interest rates on share prices of Commercial Banks. All of these facts have undoubtedly created a gap.

2.8 Conceptual Framework

The study is underpinned by the Efficient Market Hypothesis Theory postulated by Fama and French (2004) which advocates for the efficiency of the financial market in terms of the information, news, or communication involved. The NSE is a semi strong form because the prices reflect both the past and the current publicly available information. When the financial statements of the company are announced, they are normally reflected in the share prices of the companies. In view of this, the study seeks to determine the influence of the selected factors on the behavior of share prices of commercial banks listed at the Nairobi Securities Exchange.

The study objectives were to determine the influence of DPS on market price per share; the influence of financial leverage on market price per share and the influence of book value per share on market price per share. The conceptual framework explains these relations. From the study it was conceptualized that there is a relation between dividend per share with market price per share; financial leverage with market price per share and book value per share with market price per share. Objective one was to determine the influence of dividend per share on the behavior of share prices of commercial banks listed at the NSE. This indicated by Ho₁. Objective two was to determine the influence of financial leverage on the behavior of share prices of commercial banks listed at the NSE. This indicated by Ho₂. Objective three was to determine the influence of book value per share on the behavior of share prices of commercial banks listed at the NSE. This indicated by Ho₃.

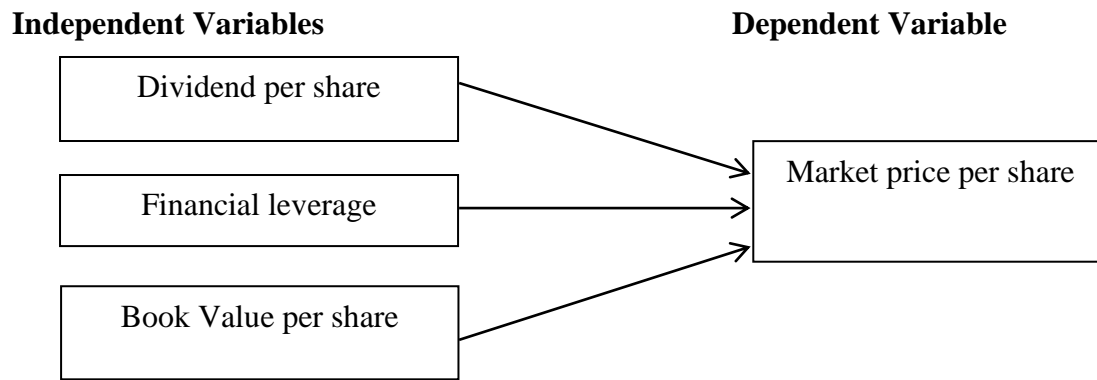


Figure 1: Conceptual Framework explaining the relationship between DPS, FL, BVPS and MPS

(Source: Reviewed Literature, 2013)

Share price is the ruling price of shares on the trading floor of the exchange at a given time. The market price per share is equal to the total market value of the company, divided by the number of shares. Share prices were available at stock exchange website in daily, monthly and quarterly basis. The study used data on daily basis which was converted into yearly by taking the average of 365 days of commercial bank listed. The behavior of share prices will be shown by how it fluctuates when the independent variables changes. It will either positively increase or negatively decrease depending on the effect of the independent variable on the market price by share.

Dividend per share is total dividends divide by total shares. It expected that share price will fluctuate based on the proposed or declared dividend per share of commercial banks. When high dividends are given to the shareholders the market price per share is expected to increase due to high demand that will be created by high dividends given to shareholders. Akbar & Baig (2010) in his study showed that the announcements of dividends have positive effect on stock prices. Financial leverage is total debt divide by total assets. Total debt arises from bank loans, bonds and results from the deposits made by customers of the banks. Total assets include; advances to customers, cash and bank balances; investments and fixed assets. High financial leverage is expected to reduce the market price per share due to high financial distress arising from default risks (Ahn, Denis & Denis 2006).

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter describes and justifies the research design that was used for the study. It also describes the population, data collection instruments as well as data collection procedures, data analysis and presentation, the analytical model and the ethical issues.

3.2 Research Design

Research design refers to the way the study is designed, that is, the method used to carry out research. The study used a descriptive research design. Descriptive research design was used because it gave an in-depth analysis of the study and a description of state of affairs as it exists (Kothari, 2004). Besides, the design was appropriate for this study since it involved collecting data in order to test hypotheses or answer questions concerning the current status of the variables with no manipulation (Mugenda & Mugenda, 2003). This design was used by Barsky and DeLong (2005) and Menike (2006) in their studies.

3.3 Target Population

Borg and Gall, (2007) describe a population as all the elements that meet certain criteria for inclusion in a study and it consists of all members of a real or hypothetical set of people, events or objects from which a researcher wishes to generalize the results of their research. The researcher used judgmental sampling technique. A sampling frame of ten commercial banks listed at NSE was used with the discriminating criterion being that one of the commercial banks was listed in the NSE in 2013 so could not get data for 2009 2010, 2011 and 2012. They represented 90 percent of the total population (11 listed commercial banks at the stock exchange excluding the one that was listed in 2013).

3.4 Data Collection Instruments

This study utilized secondary data of the listed commercial banks which included the financial data and the share prices in the market. Secondary data was used because it would give a more objective result since it gave figures which are not based on opinions and assumptions but on real facts.

Secondary data was gathered by use of a secondary data collection sheet (Appendix I). The financial performance indicators data was gathered from the published accounts of 2009, 2010, 2011, 2012 and 2013 of the banks. The data that was derived from the audited accounts information is dividend per share, financial leverage and book value per share. The market price per share of commercial Banks was collected from the NSE website for the year 2009, 2010, 2011, 2012 and 2013.

3.5 Data Analysis and Presentation

After data was collected, it was input in an excel spreadsheet and dividend per share, book value per share, financial leverage and market price per share for all the five years and all the listed commercial banks were calculated and presented in tables. The data was then coded using a range of I to 5 and exported to SPSS (Statistical Package for Social Sciences) computer software for analysis. The objectives captured in the Likert scale were discussed using the mean, standard deviation and correlation coefficient while the relationship was established through simple regression analysis.

The simple regression model is defined as follows;

$$MPPS = a + b_1DPS + b_2BVPS + b_3FL + e$$

Where:

MPPS=Market Price per Share

DPS=Dividend per Share

BVPS=Book Value per Share

FL=Financial Leverage

The hypothesis was tested using t-test statistic because the target population size was less than 30. The p-value for each t-test was used to make conclusions on whether to fail to reject or reject the null hypotheses. The benchmark for this study to reject or to a fail to reject the null hypothesis is a level of significance of 5 percent. If the p-value is less than five percent the null hypothesis was rejected and the alternate hypothesis was not rejected. Also if the p-value was greater than 5 percent the null hypothesis was not rejected and the alternate hypothesis was rejected.

3.6 Data Validity and Reliability

Validity concerns what an instrument measures, and how well it does so. Reliability concerns the faith that one can have in the data obtained from the use of an instrument, that is, the degree to which any measuring tool controls for random error. For all secondary data, a detailed assessment of reliability and validity involve an appraisal of methods used to collect data (Creswell, 2012). This study utilized secondary data of the listed commercial banks which included the audited financial statements which were found in the NSE website and various banks' website; share prices in the market which were found in the NSE website and commercial banks weighted average lending rate from CBK website as a measure of interest rate. Secondary data gave a more valid and reliable result since it gave figures which are not based on opinions and assumptions but on real facts. Data validity and reliability was enhanced by collecting data from the source and from the audited financial statements. The financial statements used for the audit must have been in compliance with International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), thus the audited accounts used were reliable.

CHAPTER FOUR

RESULTS

4.1 Introduction

This chapter deals with data analysis and interpretation of results from descriptive statistics, correlation analysis and regression analysis and diagnostic tests. Data on market price per share were obtained from the Nairobi Stock Exchange website while the data on financial leverage, book value per share, and dividend per share were obtained from the published audited financial statements of 2009,2010,2011,2012 and 2013 of commercial banks listed at the NSE. Results were presented in tables and graphs and the findings of the study were organized based on the specific objectives.

4.2 Descriptive Statistics

Descriptive statistics was used to analyze, present and interpret data. The mean and standard deviation of market price per share, dividend per share, financial leverage and book value per share were computed. First, the mean and standard deviation of each bank for the five years was computed then the overall mean for all banks for each year was computed and finally the overall standard deviation for the ten banks was computed. The results of the computation of standard deviation and mean are in table 4.1, 4.2, 4.3, and 4.4.

4.2.1 Market Price per Share

Table 4.1.

Market Price per Share of the Ten Listed Commercial Banks for 2009-2013

YEAR						MPS	
Company	2009	2010	2011	2012	2013	(Mean)	SD
Barclays Bank	45	62.5	13.05	15.75	17.6	30.78	21.92
CFC Stanbic	53.87	67.88	57.40	41.71	65.10	57.19	10.34
Diamond Trust Bank	67.19	97.23	118.21	100.95	163.75	109.46	35.47
Equity Bank	44.11	21.76	23.03	21.08	32.33	28.46	9.86
Housing Finance	18.00	26.5	12.4	15.45	31.5	20.77	7.97
KCB	20.5	21.75	16.85	29.75	47.25	27.22	12.15
NIC Bank	35.63	40.97	32.05	19.27	21.41	29.87	9.29
Standard Chartered	143.44	224.7	224.48	192.71	291.83	215.43	54.09
Co-op Bank of Kenya	8.28	14.41	16.18	12.34	16.01	13.44	3.27
NBK	35.63	40.97	32.05	19.27	21.41	29.87	9.29
Overall Mean	47.17	61.87	54.57	46.83	70.82	56.25	
Overall Standard Deviation							15.8

The study collected data on Market Price per Share as a dependent variable. Table 4.1 shows the Market Price per Share for each of the ten commercial banks in the NSE for the period 2009 to 2013. In Barclays Bank of Kenya Ltd, the MPS increased between 2009 and 2010 then decreased significantly between 2010 and 2011 then started increasing gradually. The highest was in 2010 at 62.5 with the lowest in 2011 at 13.05; the mean for the period was at 30.78 and the standard deviation was at 21.92. In CFC Stanbic Bank Ltd, the MPS increased between 2009 and 2010 then decreased between 2010 and 2012 then started increasing gradually. The highest was in 2010 at 67.88 with the lowest in 2012 at 41.71; the mean and standard deviation for the period were at 57.19 and 10.34 respectively. In Diamond Trust Bank Ltd, the MPS increased between 2009 and 2011; decreased between 2011 and 2012 and then increased in 2013 to its highest at 163.75 with the lowest in 2009 at 67.19; the mean was at 109.46 and standard deviation for the period at 35.47. In Equity Bank Ltd, the MPS was not stable. It decreased between 2009 and 2010; increased between 2010 and 2011; decreased between 2011 and 2012 and then increased between 2012 and 2013. The highest was in 2009

at 44.11 with the lowest in 2012 at 21.08; the mean was at 28.46 and standard deviation for the period at 9.86. In Housing Finance Ltd, the MPS increased between 2009 and 2010; decreased between 2010 and 2011 and then increased between 2011 and 2013 to its highest at 31.5 with the lowest in 2011 at 12.4; the mean was at 20.77 and standard deviation for the period was at 7.97. In Kenya Commercial Bank Ltd MPS decreased between 2009 and 2011; then increased between 2011 and 2013 to its highest at 47.25 with the lowest in 2011 at 16.85; the mean was at 27.22 and standard deviation for the period was at 12.15. In NIC bank Ltd, the MPS increased between 2009 and 2010; decreased between 2010 and 2012 and then increased between 2012 and 2013. The highest was in 2010 at 49.97 with the lowest in 2012 at 19.27; the mean was at 29.87 and standard deviation for the period was at 9.29. In Standard Chartered Bank Ltd, the MPS increased between 2009 and 2011; decreased between 2011 and 2012 and then increased between 2012 and 2013 to its highest at 291.83 with the lowest in 2009 at 143.44; the mean was at 215.43 and standard deviation for the period was at 54.09. In Cooperative Bank Ltd, the MPS increased between 2009 and 2011; decreased between 2011 and 2012 and then increased between 2012 and 2013. The lowest at was 8.28 in 2009 with the highest at 16.18 in 2011; the mean was at 13.14 and standard deviation for the period at 3.27. In National Bank of Kenya Ltd, the MPS increased between 2009 and 2010; decreased between 2010 and 2012 and then increased between 2012 and 2013. The lowest at was 21.41 in 2013 with the highest at 40.97 in 2010; the mean was at 29.87 and standard deviation for the period was at 9.29. The overall mean for market price per share was at 56.25 and the standard deviation was at 15.80 which indicated the high consistency and thus reliability of the variable.

4.2.2 Dividend per Share

Table 4.2.

Dividend per Share of the Ten Listed Commercial Banks for 2009-2013

YEAR	DPS						
Company	2009	2010	2011	2012	2013	(Mean)	SD
Barclays Bank of Kenya	2.50	4.70	1.50	1.00	0.70	2.08	1.62
CFC Stanbic Holdings	0.00	0.80	0.00	0.00	1.52	0.46	0.68
Diamond Trust Bank	1.55	1.60	1.70	2.56	2.10	1.90	0.43
Equity Bank	0.40	0.80	1.00	1.25	1.50	0.99	0.42
Housing Finance Bank	0.50	0.70	1.20	1.39	1.71	1.10	0.50
Kenya Commercial Bank	1.00	1.25	1.85	1.90	2.00	1.60	0.45
NIC Bank	0.25	0.25	0.41	1.09	0.00	0.40	0.42
Standard Chartered Bank	7.00	8.50	11.00	12.50	14.50	10.70	3.01
Co-operative Bank of Kenya	0.20	0.40	0.40	0.50	0.50	0.40	0.12
National Bank of Kenya	0.00	0.60	0.50	0.40	0.00	0.30	0.28
Overall Mean	1.34	1.96	1.96	2.26	2.45	1.99	
Overall Standard Deviation							0.88

Table 4.2 above shows the Dividend per Share for each of the ten commercial banks in the NSE for the period 2009 to 2013. In Barclays Bank of Kenya Ltd, DPS increased between 2009 and 2010 then decreased gradually to its lowest in 2013. The highest was in 2010 at 4.72 with the lowest in 2009 at 0.7; the mean for the period was at 2.08 and the standard deviation was at 1.62. CFC Stanbic Bank Ltd did not pay dividends in the year 2009, 2011 and 2012 but in 2010 it paid a DPS of 0.8 in 2010 and 1.52 in 2013; the mean for the period was at 0.46 and the standard deviation was at 0.68. In Diamond Trust Bank Ltd, DPS was maintained on the positive with the lowest in 2009 at 1.55 and the highest at 2.56 in 2012; the mean was at 1.9 and standard deviation for the period was at 0.43. In Equity Bank Ltd, DPS increased over the period with the lowest in 2009 at 0.4 and the highest at 1.5 in 2013; the mean was at 0.99 and standard deviation for the period at 0.42. In Housing Finance Ltd, DPS increased over the period with the lowest in 2009 at 0.5 and the highest at 1.71 in 2013; the mean was at 1.1 and standard deviation for the period at 0.5. In Kenya Commercial Bank Ltd, DPS increased over the period with the lowest in 2009 at 1 and the highest at 2 in 2013; the mean was at 1.6 and standard deviation for the period was at 0.45. In NIC bank Ltd, DPS

increased from 2009 to 2012 to its highest at 1.09. The bank did not pay dividends in 2013; the mean was at 0.4 and standard deviation for the period was at 0.42. In Standard Chartered Bank Ltd, DPS increased over the period with the lowest in 2009 at 7 and the highest at 14.5 in 2013; the mean was at 10.7 and standard deviation for the period was at 3.01. In Cooperative Bank Ltd, DPS increased over the period with the lowest in 2009 at 0.2 and the highest at 0.5 in 2013; the mean was at 0.4 and standard deviation for the period was at 0.12. In National Bank of Kenya Ltd, DPS decreased over the period to 0 in 2013. The highest was at 0.6 in 2010; the mean was at 0.3 and standard deviation for the period at 0.12. The overall mean for dividend per share was at 1.99 and the standard deviation was at 0.88 which indicated the high consistency and thus reliability of the variable.

4.2.3 Financial Leverage

Table 4.3.

Financial Leverage of the Ten Listed Commercial Banks for 2009-2013

YEAR						FL	
Company	2009	2010	2011	2012	2013	(Mean)	SD
Barclays Bank	85.00%	82.00%	83.00%	84.00%	84.00%	83.60%	1.14%
CFC Stanbic	84.07%	82.32%	87.13%	80.98%	82.04%	83.31%	2.41%
Diamond Trust	88.25%	88.04%	87.71%	86.25%	85.74%	87.20%	1.13%
Equity Bank	77.28%	80.98%	82.53%	82.35%	81.44%	80.92%	2.13%
Housing Finance	77.67%	85.46%	85.20%	88.60%	87.64%	84.91%	4.30%
KCB	88.31%	84.43%	86.59%	85.24%	83.79%	85.67%	1.81%
NIC Bank	85.89%	85.85%	91.30%	85.59%	85.49%	86.82%	2.51%
Stanchart	85.91%	85.76%	87.39%	84.26%	83.57%	85.38%	1.50%
Co-op Bank	85.28%	86.66%	87.20%	86.01%	83.94%	85.82%	1.27%
NBK	84.62%	83.46%	84.77%	84.42%	87.16%	84.89%	1.37%
Overall Mean	84.23%	84.50%	86.28%	84.77%	84.48%	84.85%	
Overall Standard Deviation							0.97%

Table 4.3 above shows the financial leverage for each of the ten commercial banks listed at the NSE for the period 2009 to 2013. In Barclays Bank of Kenya Ltd, financial leverage decreased between 2009 and 2010 then increased between 2010 and 2013 with the lowest at 82% in 2010 and the highest at 85% in 2009; the mean was at 83.60% and standard deviation

for the period at 1.14%. In CFC Stanbic Bank Ltd, financial leverage decreased between 2009 and 2010 to its lowest at 82.32% then increased between 2010 and 2011 to its highest at 87.13% then reduced between 2011 and 2012 then increased again between 2012 and 2013. The mean was at 83.31% and standard deviation for the period was at 2.41%.

In Diamond Trust Bank Ltd, financial leverage dropped over the period with the lowest at 86.25% in 2013 and the highest at 86.25% in 2009; the mean was at 87.20% and standard deviation for the period at 1.13%. In Housing Finance Ltd, financial leverage increased between 2009 and 2012 then decreased between 2012 and 2013 with the lowest at 77.67% in 2009 with the highest at 88.60% in 2012; the mean was at 84.91% and standard deviation for the period at 4.30%. In Kenya Commercial Bank Ltd, financial leverage reduced between 2009 and 2010 then increased between 2010 and 2011 then decreased between 2011 and 2013 with the lowest at 83.79% in 2013 and the highest at 88.31% in 2009; the mean was at 85.67% and standard deviation for the period at 1.81%.

In NIC Bank Ltd, financial leverage reduced between 2009 and 2010 then increased between 2010 and 2011 then decreased between 2011 and 2013 with the lowest at 85.49% in 2013 and the highest at 91.30% in 2011; the mean was at 86.82% and standard deviation for the period at 2.51%. In Standard Chartered Bank Ltd, financial leverage decreased between 2009 and 2010 then increased between 2010 and 2011 then decreased between 2011 and 2013 with the lowest at 83.57% in 2013 and the highest at 87.39% in 2011; the mean was at 85.38% and standard deviation for the period at 1.50%. In Standard Chartered Bank Ltd, financial leverage decreased between 2009 and 2010; increased between 2010 and 2011 then decreased between 2011 and 2013 with the lowest at 83.57% in 2013 and the highest at 87.39% in 2011; the mean was at 85.38% and standard deviation for the period at 1.50%. In Cooperative Bank of Kenya Ltd, financial leverage increased between 2009 and 2011; decreased between 2011 and 2013 with the lowest at 83.94% in 2013 and the highest at 87.20% in 2011; the mean was at 85.82% and standard deviation for the period at 1.27%. In National Bank of Kenya Ltd, financial leverage decreased between 2009 and 2010; increased between 2010 and 2011; decreased between 2011 and 2012 then increased between 2012 and 2013 with the lowest at 83.46% in 2010 and the highest at 87.16% in 2013; the mean was at 84.89% and standard deviation for the period at 1.37%. The overall mean for financial leverage was at 84.85% and the standard deviation was at 0.97% which indicated the high consistency and thus reliability of the variable.

4.2.4 Book Value per Share

Table 4.4.

Book Value per Share of the Ten Listed Commercial Banks for 2009-2013

YEAR						BVPS	
Company	2009	2010	2011	2012	2013	(Mean)	SD
Barclays Bank of Kenya	4.46	5.79	5.38	5.45	5.96	5.41	0.58
CFC Stanbic Holdings	71.07	79.78	70.63	99.54	82.02	80.61	11.74
Diamond Trust Bank	48.00	61.00	81.00	114.00	98.00	80.59	26.78
Equity Bank	6.19	7.35	9.26	11.59	13.92	9.66	3.14
Housing Finance Bank	17.21	18.51	19.81	21.11	23.87	20.10	2.56
KCB Bank	7.64	13.11	14.87	15.98	21.44	14.61	4.99
NIC Bank	16.99	20.93	21.97	31.47	32.36	24.74	6.81
Standard Chartered Bank	43.86	70.82	72.09	99.47	117.11	80.67	28.32
Co-op Bank of Kenya	3.86	4.89	5.11	7.11	7.52	5.70	1.56
National Bank of Kenya	28.24	35.46	37.34	37.38	42.46	36.18	5.14
Overall Mean	24.75	31.76	33.75	44.31	44.47	35.83	
Overall Standard Deviation							10.19

Table 4.4 above shows the Book Value per Share for each of the ten commercial banks at the NSE for the period 2009 to 2013. In Barclays Bank of Kenya Ltd, BVPS increased between 2009 and 2010; decreased in 2011 and then increased again between 2011 and 2013 with the lowest in 2009 at 4.46 and the highest at 5.96 in 2013. The mean for the period was at 5.41 and the standard deviation was at 0.58. In CFC Stanbic Bank Ltd BVPS increased between 2009 and 2010; decreased in 2011; increased in 2012 and then decreased in 2013 with the lowest in 2009 at 71.07 and the highest at 99.54 in 2012. The mean for the period was at 80.61 and the standard deviation was at 11.74. In Diamond Trust Bank Ltd, BVPS increased between 2009 and 2012 then decreased between 2012 and 2013 with the lowest in 2009 at 48 and the highest at 114 in 2012; the mean was at 80.59 and standard deviation for the period was at 26.78. In Equity Bank Ltd, BVPS increased over the period with the lowest in 2009 at 6.19 and the highest at 13.92 in 2013; the mean was at 9.66 and standard deviation for the period at 3.14. In Housing Finance Ltd, BVPS increased over the period with the lowest in 2009 at 17.21 and the highest at 23.87 in 2013; the mean was at 20.1 and standard deviation for the period at 2.56. In Kenya Commercial Bank Ltd, BVPS increased over the period with

the lowest in 2009 at 7.64 and the highest at 21.44 in 2013; the mean was at 14.61 and standard deviation for the period was at 4.99. In NIC bank Ltd, BVPS increased over the period with the lowest in 2009 at 16.99 and the highest at 32.36 in 2013; the mean was at 24.74 and standard deviation for the period was at 9.81. In Standard Chartered Bank Ltd, BVPS increased over the period with the lowest in 2009 at 43.86 and the highest at 117.11 in 2013; the mean was at 80.67 and standard deviation for the period was at 28.32. In Cooperative Bank Ltd, BVPS increased over the period with the lowest in 2009 at 3.86 and the highest at 7.52 in 2013; the mean was at 5.7 and standard deviation for the period was at 1.56. In National Bank of Kenya Ltd, BVPS increased over the period with the lowest in 2009 at 28.24 and the highest at 42.46 in 2013; the mean was at 36.18 and standard deviation for the period was at 5.14. The overall mean for book value per share was at 35.83 and the standard deviation was at 10.19 which indicated the high consistency and thus reliability of the variable.

4.3 Tests for Multicollinearity

A multicollinearity test was carried out to ensure that the independent variables did not have co-linearity amongst themselves. The existence of a high degree of association between independent variables is said to be a problem of multicollinearity which results into large standard errors of the coefficients of the affected. The variance inflation factors (VIF) and Tolerance were used to assess multicollinearity. The VIF, which stands for variance inflation factor, is $(1 / \text{tolerance})$ and as a rule of thumb, a variable whose VIF value is greater than 10 may merit further investigation.

Table 4.5. Tolerance and VIF Test of DPS, FL, BVPS AND MPS

Collinearity Statistics		
Model	Tolerance	VIF
1		
(Constant)		
Dividend per share	.741	1.350
Financial leverage	.757	1.321
Book value per share	.675	1.345

a. Dependent Variable: Market price per share

From the findings, the variable dividend per share had a tolerance of 0.741 and a VIF of 1.350, financial leverage had a tolerance of 0.757 and a VIF of 1.321 while book value per share had a tolerance of 0.675 and a VIF of 1.345. Since the tolerance for all the variables was more than 0.1 and the VIF was not more than 10 therefore there was no need of further investigations.

4.4 Tests for Normality

For normally distributed data, the observed values need to be spread along the straight diagonal line (line of fit). The observed values as in Q-Q plot tests in Figure 4.1-4.3 are spread very close to the straight line for all the variables of the study, showing that the data are normally distributed.

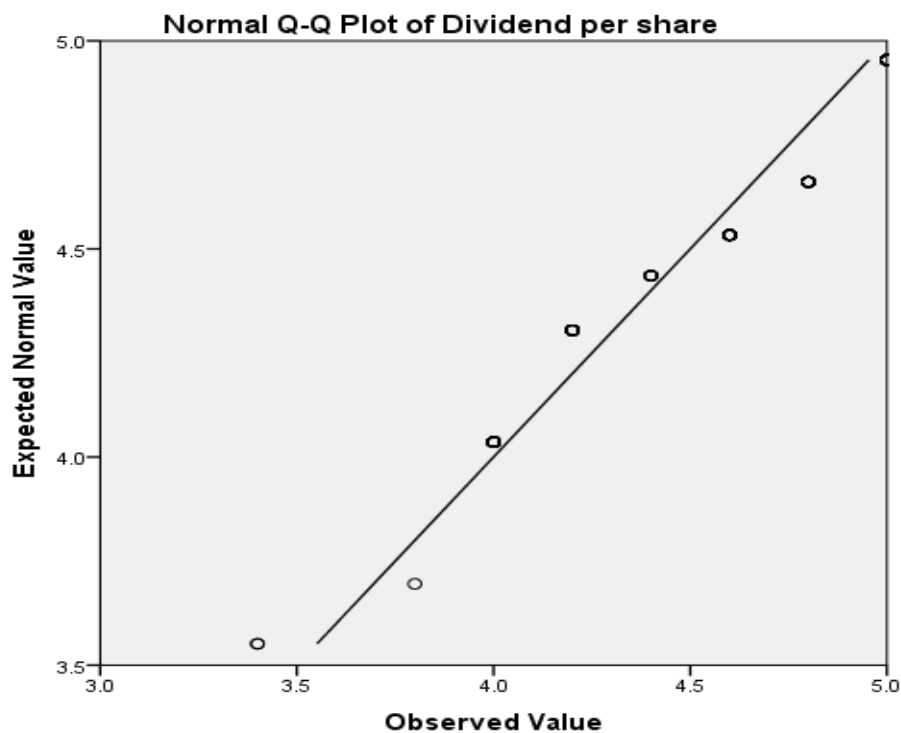


Figure 4. 1: Normality Test for dividend per share

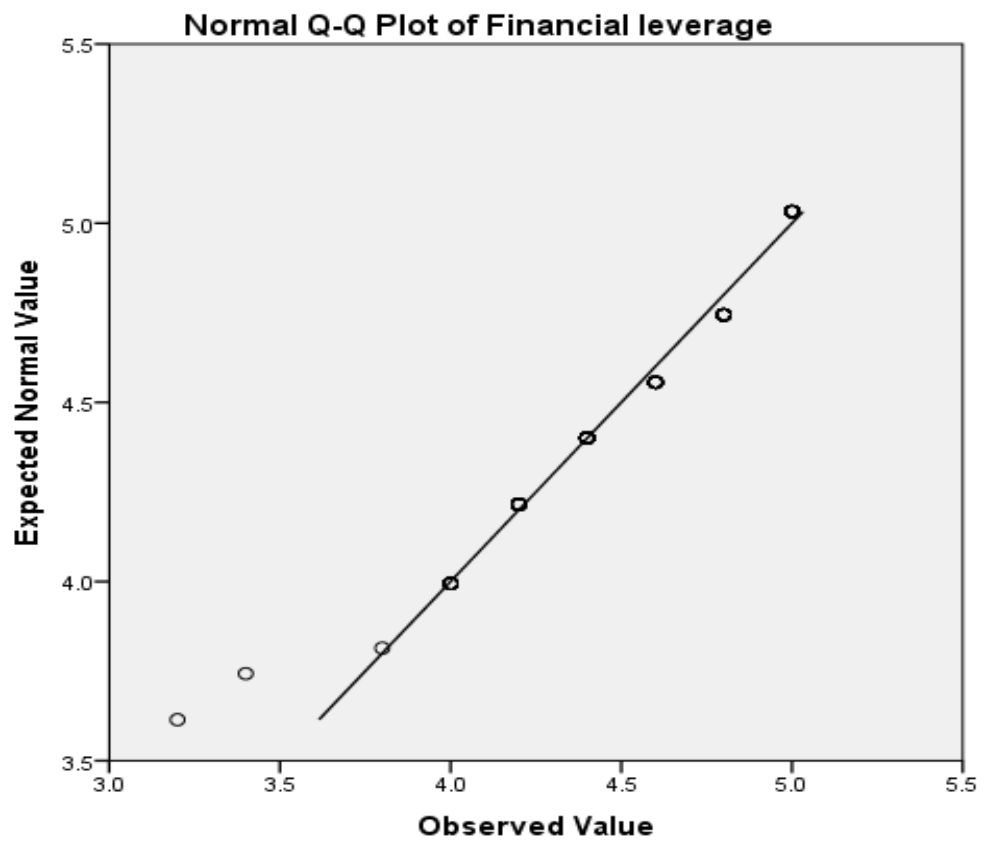


Figure 4. 2: Normality Test for financial leverage

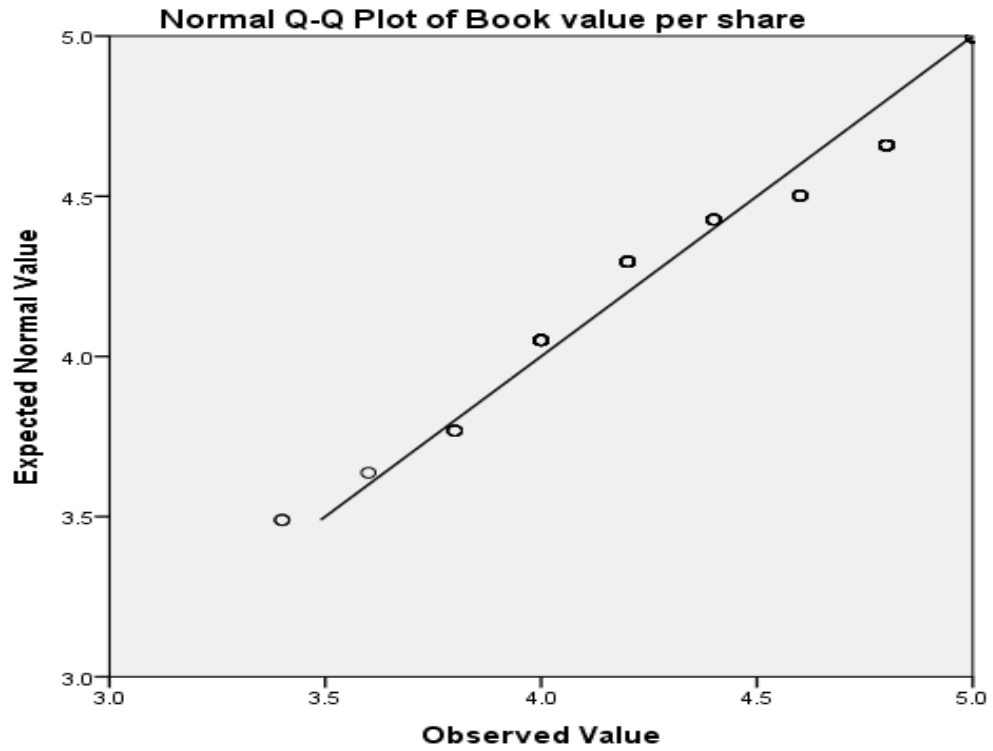


Figure 4. 3: Normality Test for book value per shares

Linear regression needs the relationship between the independent and dependent variables to be linear. It is also important to check for outliers since linear regression is sensitive to outlier effects. Linearity assumption was tested with histogram

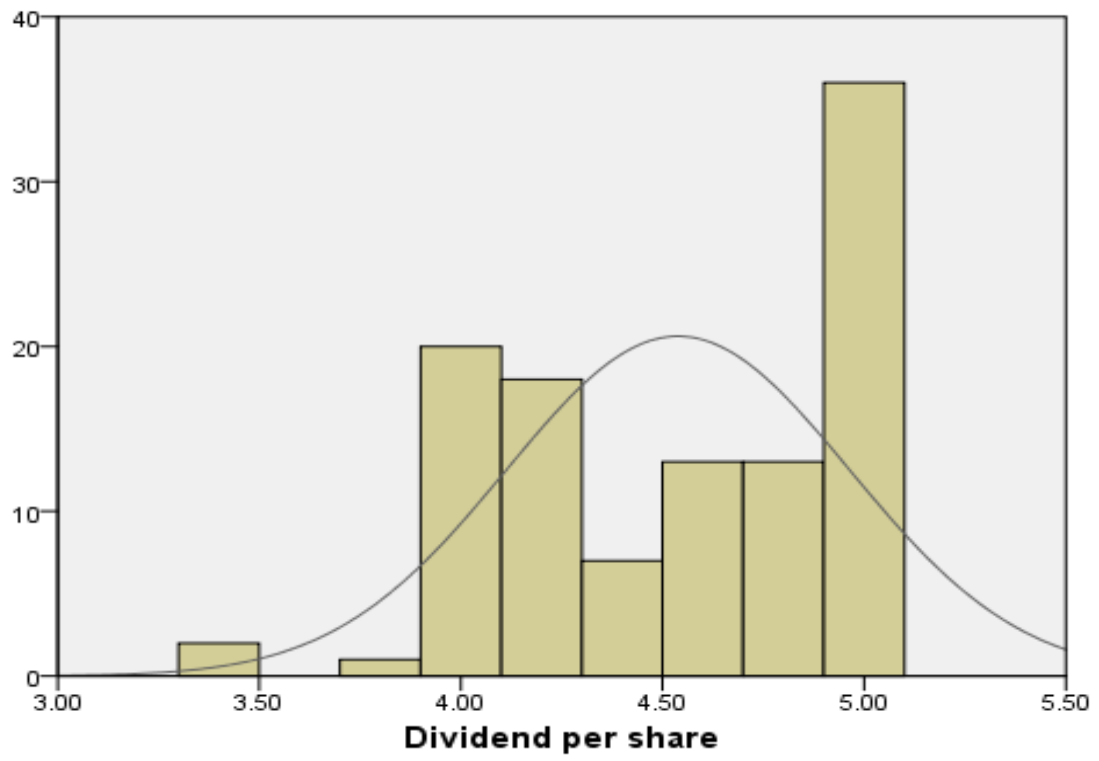


Figure 4. 4: Histogram showing Linearity of dividend per share

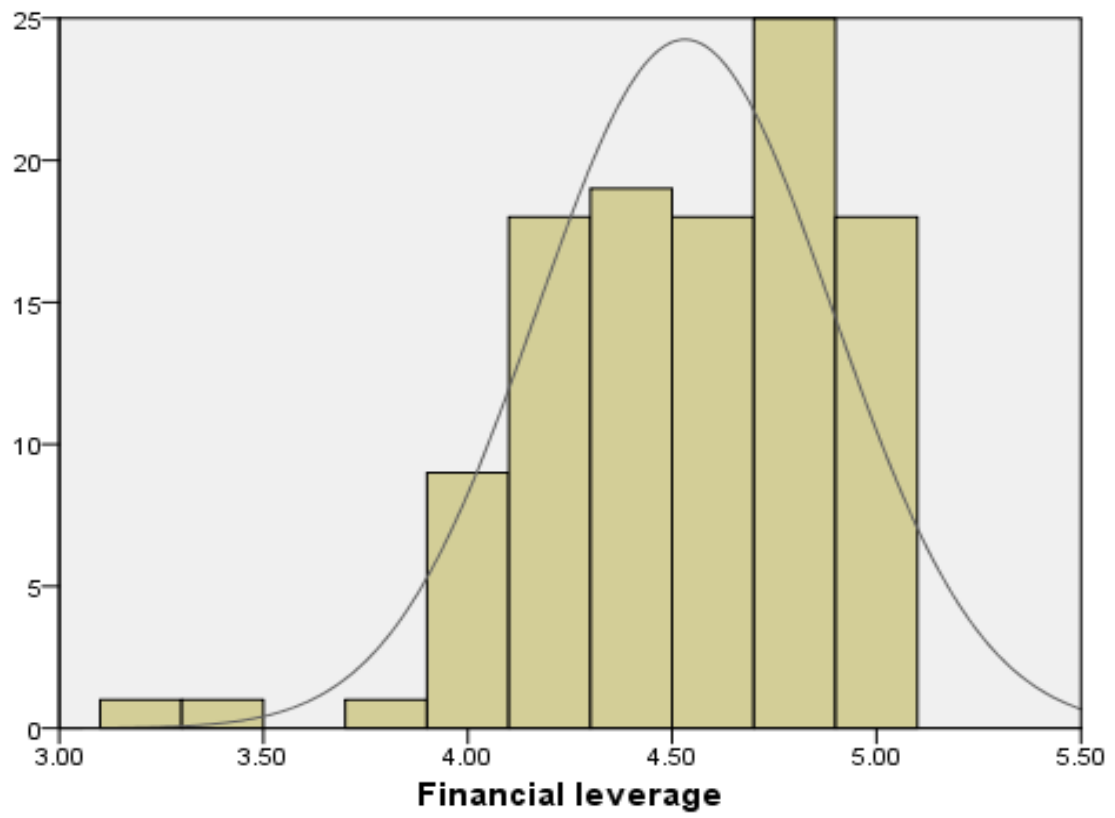


Figure 4. 5: Histogram showing linearity of financial leverage

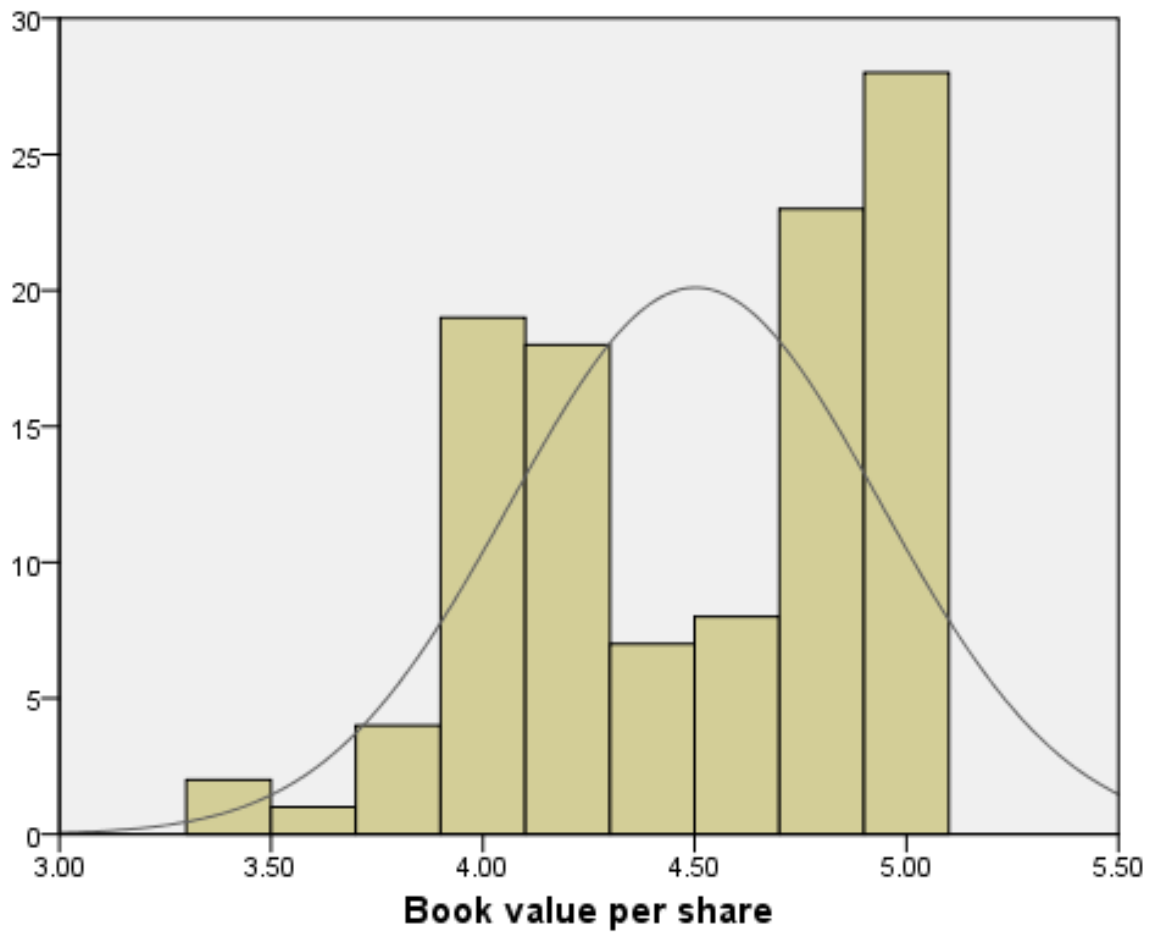


Figure 4 6: Histogram showing Linearity of book value per share

4.3. Correlation Analysis

Table 4.5.

Correlation Matrix between MPS, DPS, FL AND BVPS

		MPS	BV	FL	DPS
MPS	Pearson Correlation	1	0.265	0.186	.867*
	Sig. (2-tailed)		0.46	0.606	0.001
	N	10	10	10	10
BV	Pearson Correlation	0.465	1	0.037	-0.158
	Sig. (2-tailed)	0.011		0.919	0.663
	N	10	10	10	10
FL	Pearson Correlation	0.186	0.037	1	0.089
	Sig. (2-tailed)	0.606	0.919		0.806
	N	10	10	10	10
DPS	Pearson Correlation	.867*	-0.158	0.089	1
	Sig. (2-tailed)	0.001	0.663	0.806	
	N	10	10	10	10

*Correlation is significant at the 0.05 level (2 tailed)

On the correlation of the study variables the researcher conducted a Pearson correlation as shown in table 4.5. From the findings on the correlation analysis between the dependent variable (market price per share) and the independent variables (dividend per share, financial leverage and book value per share), the study found out that there was a strong positive correlation between market price per share and dividend per share shown by correlation coefficient of ($r= 0.867$, $p< 0.05$) which is statistically significant at 95% confidence level. This is an indication that there was a strong positive relationship between dividend per share and market price per share of commercial banks listed at the NSE. This findings support those of the Khan (2012) and Sharma (2011) who found out that dividend per share influences the behavior of share prices positively.

There was a weak positive correlation between market price per share and financial leverage with a correlation coefficient of ($r= 0.186$, $p> 0.05$) which is not statistically significant at 95% confidence level. This is an indication that there was no relationship between financial leverage with market price per share of commercial banks listed at the NSE. This findings

support those of Hasanzadeh (2013); who found that financial leverage does not affect market price per share. There was a positive correlation between market price per share and book value per share as shown by a correlation coefficient of ($r= 0.465$, $p< 0.05$) which is statistically significant at 95% confidence level. This is an indication that there was a weak positive relationship between book value per share and market price per share of commercial banks listed at the NSE. This findings support those of the Khan (2012) and Sharma (2011) who found out that book value per share have a weak positive relationship with market price per share.

4.4 Test of Hypotheses

This study had three objectives and three corresponding hypotheses. The hypotheses were tested using simple regression analysis. Regression analysis was used to determine the predictive power of dividend per share, financial leverage, and book value per share on market price per share of commercial banks listed at the Nairobi Stock Exchange. The results for the tests are disclosed below in table 4.6, 4.7 and 4.8.

Objective one was to determine the influence of dividend per share on the behavior of share prices of commercial banks listed at the Nairobi Securities Exchange. The study hypothesized that Dividend per share has no influence on the behavior of share prices of commercial banks listed at the Nairobi Securities Exchange. This was achieved by using simple regression analyses. The results are shown in table 4.6, 4.7 and 4.8.

Objective two was to determine the influence of financial leverage on the behavior of share prices of commercial banks listed at the Nairobi Securities Exchange. The study hypothesized that financial leverage has no influence on the behavior of share prices of commercial banks listed at the Nairobi Securities Exchange. This was achieved by using simple regression analyses. The results are shown in table 4.6, 4.7 and 4.8.

Objective three was to determine the influence of book value per share on the behavior of share prices of commercial banks listed at the Nairobi Securities Exchange. The study hypothesized that book value per share has no influence on the behavior of share prices of commercial banks listed at the Nairobi Securities Exchange. This was achieved by using simple regression analyses. The results are shown in table 4.6, 4.7 and 4.8

Table 4.6.**Model Summary of DPS, FL, and BVPS**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.962 ^a	0.925	0.888	0.43311

Predictors: (Constant), dividend per share, financial leverage, book value per share

Model summary table 4.6 shows the coefficient of determination (R^2) which explains the percentage of variation in commercial banks' market price per share. From the table below, the regression model containing dividend per share, financial leverage and book value per share, as the predictor variables explains 92.5% of the variation in market price per share of commercial banks listed at the NSE. The remainder (7.5%) can be explained by other factors not included in the model.

Table 4.7.**ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	13.930	3	4.643	24.754	.001 ^b
Residual	1.126	6	.188		
Total	15.056	9			

Predictors: (Constant), dividend per share, financial leverage, book value per share

Dependent Variable: market price per share.

The table 4.7 displays the ANOVA results that test the significance of the R^2 for the model. An F statistics of 24.754 as shown in table 4.7 has a P-value of 0.001. The P-value of 0.001 (Less than 0.05) implies that the regression model is significant at the 95% significance level. This means that the group of independent variables when used together reliably predicted the dependent variable therefore showed a significant statistical relationship. This however did not address the ability of any of the particular independent variables to predict the dependent variable.

Table 4.8.**Simple Regression Model Coefficients for DPS, BVPS and FL**

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	-1.439	0.927		-1.552	0.172
Dividend per Share	0.992	0.122	0.924	8.133	0.000
Book Value per share	0.456	0.127	0.407	3.598	0.011
Financial Leverage	0.278	0.351	0.089	0.79	0.460

Dependent Variable: MPS

The ability of each individual independent variable to predict the dependent variable was addressed above based on the model coefficients in Table 4.8. For independent variables which were not statistically significant, their coefficients were not significantly different from zero and were therefore removed from the equation. The predictor variables had significant positive relationship for dividend per share and book value per share with insignificant positive relationship for financial leverage with market price per share of commercial banks listed at the Nairobi Securities Exchange.

From the results of analysis in table 4.8, the regression equation is shown below;

$$MPS = -1.439 + 0.992DPS + 0.456BVPS + 0.278FL + e$$

From the above regression equation, it was revealed that dividend per share, book value per share and financial leverage to a constant zero, market price per share would stand at -1.439. A unit increase in dividend per share would lead to a 0.992 increase in market price per share of commercial banks, a unit increase in book value per share would lead to a 0.456 increase in market price per share of commercial banks and a unit increase in financial leverage would lead to a 0.278 increase in market price per share of commercial banks.

4.5 Discussion of Results

The hypothesis was tested using t-test statistic. This procedure was carried out against the null hypotheses enumerated in section 1.4 of chapter one. The p-value for each t-test was used to make conclusions on whether to fail to reject or reject the null hypotheses. The benchmark for this study to reject or to a fail to reject the null hypothesis is a level of

significance of 5 percent. If the p-value is less than five percent the null hypothesis was rejected and the alternate hypothesis was not rejected. Also if the p-value was greater than 5 percent the null hypothesis was not rejected and the alternate hypothesis was rejected.

H₀₁; dividend per share has no influence on the behavior of share prices of commercial banks listed at the NSE.

Hypothesis was tested at 5% significance level which was rejected since the p value=0.000 was less than 5% with $t=8.133$. The researcher therefore adopted an alternate hypothesis; H₁; dividend per share has a significant influence on the behavior of share prices of commercial banks listed at the NSE. This findings support those of Akbar & Baig (2010) who carried out a research on a sample of 79 companies listed at Karachi Stock Exchange to study the effect of dividends on stock prices for the period of 2004 to 2007. The study showed that the dividends have positive effect on stock prices.

H₀₂; financial leverage has no influence on the behavior of share prices of commercial banks listed at the NSE.

This hypothesis was tested at 5% significance level which was not rejected since the p value=0.460 was more than 5 % with $t=0.790$. Hence the null hypothesis that; financial leverage has no influence on the behavior of share prices of commercial banks listed at the NSE was not rejected. These findings are inconsistent with those of Myers Dimitrov and Jain (2008), Parsons and Titman (2007) and Ahn, Denis and Denis (2006) who found a negative relation between the annual change in financial leverage and the market price per share and Khan (2012); who found that financial leverage have a positive relationship with market price per share.

H₀₃; book value per share has no influence on the behavior of share prices of commercial banks listed at the NSE.

This hypothesis was tested at 5% significance level which was rejected since the p value=0.011 was less than 5% with $t=3.598$. The researcher therefore adopted an alternate hypothesis; H₃; book value per share has an influence on the behavior of share prices of commercial banks listed at the NSE. This findings support those of the Khan (2012) and Sharma (2011) who found out that book value per share have a weak positive relationship with market price per share.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter presents the summary and discussions of the findings of the study and it also gives the conclusions and recommendations of the study based on the objectives of the study. The purpose of this study was to determine the influence of the selected factors on the behavior of share prices of commercial banks listed at the NSE. Specifically, the study sought to determine the influence of dividend per share on the behavior of share prices of commercial banks listed at the NSE; to determine the influence of financial leverage on the behavior of share prices of commercial banks listed at the NSE and to determine the influence of book value per share on behavior of share prices of commercial banks listed at the NSE. A conclusion based on the findings was made with recommendations from the above objectives.

5.2 Summary of Findings

5.2.1 To determine the influence of dividend per share on the behavior of share prices of commercial banks listed at the NSE.

According to the research results, dividend per share influence the behavior of share prices of commercial banks listed at the NSE. The Regression Analysis results showed that at 5% level of significance, dividend per share influenced market price per share of commercial banks listed at the NSE, where a unit increase in dividend per share led to a 0.992 increase in market price per share. The study rejected the null hypothesis that dividend per share has no influence on the behavior of share prices of commercial banks listed at the NSE. This findings support those of the Khan (2012) and Sharma (2011) who found out that dividend per share influences the behavior of share prices positively.

5.2.2 To determine the influence of financial leverage on the behavior of share prices of commercial banks listed at the NSE.

According to the research results, financial leverage has an insignificant influence on the behavior of share prices of commercial banks listed in the NSE. The Regression Analysis results showed that at 5% level of significance, financial leverage did not significantly influence market price per share of commercial banks listed at the NSE where a unit increase in financial leverage led to only 0.278 increases in market price per share. The study accepted the null hypothesis that financial leverage has no influence on the behavior of share

prices of commercial banks listed at the NSE. These findings are inconsistent with those of Myers Dimitrov and Jain (2008), Parsons and Titman (2007) and Ahn, Denis and Denis (2006) who found a negative relation between the annual change in financial leverage and the market price per share and Khan (2012); who found that financial leverage have a positive relationship with market price per share.

5.2.3 To determine the influence of book value per share on the behavior of share prices of commercial banks listed at the NSE.

According to the research results, book value per share influence the behavior of share prices of commercial banks listed at the NSE. The Regression Analysis results showed that at 5% level of significance, book value per share influenced market price per share of commercial banks listed at the NSE, where a unit increase in book value per share led to a 0.456 increase in market price per share. The study rejected the null hypothesis that book value per share has no influence on the behavior of share prices of commercial banks listed in the NSE. This findings support those of the Khan (2012) and Sharma (2011) who found out that book value per share have a weak positive relationship with market price per share but did not support Sharma (2011); who found that book value per share have a significant impact on the stock prices.

5.3 Conclusion

Understanding the impact of various fundamental variables on stock price is very important to investors since that will help them make profitable investment decisions. On the other hand the commercial banks are facing increased global competition and for them to survive the intense competition, they have to focus their efforts on creating shareholder value. The banks therefore have to understand the impact of various fundamental variables on stock price so as to improve those variables thus increasing the shareholders' value.

The Regression Analysis results showed that at 5% level of significance, dividend per share influenced market price per share of commercial banks listed at the NSE, where a unit increase in dividend per share led to a 0.992 increase in market price per share; financial leverage has an insignificant influence on the behavior of share prices of commercial banks listed in the NSE where a unit increase in financial leverage led to only 0.278 increases in market price per share and book value per share influenced market price per share of commercial banks listed at the NSE, where a unit increase in book value per share led to a 0.456 increase in market price per share. The research therefore concluded that dividend per

share had a more significant influence on the behavior of share prices; book value per share had a moderate significant influence on the behavior of share prices and financial leverage did not significantly influence the behavior of share prices of commercial banks listed at the NSE. So the commercial banks should put more focus on improving dividends per share thus creating shareholders value. Alternatively, the investors should put more focus on dividends per share when making investment decisions.

5.4 Recommendations

Based on the research findings and conclusions drawn from this study, recommendations have been provided. The commercial banks should structure and implement strategies aimed at improving profitability which in turn increases the amount of dividends paid out to the shareholders because the amount of dividends paid out to shareholders has significant influence on the share prices of commercial banks. Commercial banks should also structure and implement strategies that increase their book value per share thus improving shareholders value and the image of the bank through better market share prices. On the other hand the banks should not put much emphasis on their financial leverage when making decisions on how to improve their market price per share since financial leverage do not significantly influence the behavior of share prices. The investors on the other hand should make informed decisions on which Commercial Banks to invest on based on the level of dividends they pay out to its shareholders and the value of shareholders' funds which affects the book value per share. They should invest in banks that pay out high dividends and have high book value per share. Capital market authority, Nairobi Securities Exchange and the government should formulate and implement policies related to dividends payout by companies listed in the NSE so as to encourage investments and spur economic growth.

5.5 Areas for Further Research

Further research should focus on the limitations of this study since numerous expansions of this research are possible. First, the study focused only on three macroeconomic factors. The features covered are important while other diverse variables such as the inflation rates and exchange rates could be examined to see its effect on market prices. Secondly, the firm of study was limited to commercial banks only which form part of the financial sector thus further studies could be done on other institutions in the private and public sector. In addition, further research can be extended to cover longer time period

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APPENDICES

Appendix I: Letter of Introduction

EGERTON UNIVERSITY,

FACULTY OF COMMERCE,

DEPARTMENT OF ACCOUNTING, FINANCE & MANAGEMENT SCIENCE,

P.O BOX 536- 20115

NAIROBI CAMPUS

DATE

TO: THE MANAGER

Dear Sir/Madam

RE: REQUEST FOR THE DATA COLLECTION

I am a student in Egerton University pursuing a master's degree in Finance. As a requirement of the Master's degree, I seek to conduct a research on the influence of selected factors on the behaviour of share prices of commercial banks listed at the Nairobi Securities Exchange

The information you give will be treated with utmost confidentiality and the results shall be for academic purposes only.

Your kind co-operation will be highly appreciated.

Yours faithfully,

Fancy Chepkwony

Appendix II: Data Collection Sheet

	2009	2010	2011	2012	2013
Average NSE- 20 Share Index as at 31 st December					
Average Market Price Per Share					
Dividend Per Share					
Total Debt					
Total Equity					
Total Shareholders' Funds					
Total Shares Issued					
Market Price Per Share as at 31 December					
Average Lending rates					

Appendix III: NSE Listed Commercial Banks as At December 31st 2013

Barclays Bank
CFC-Stanbic Holdings
Diamond Trust
Equity Bank
Housing Finance
I&M Holdings
KCB
National Bank
NIC Bank
Standard Chartered Bank
The Co-operative Bank of Kenya

Appendix IV: Publication

Scholarly Research Journal for Interdisciplinary Studies,

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AN EVALUATION OF FACTORS INFLUENCING SHARE PRICE

BEHAVIOUR OF COMMERCIAL BANKS LISTED IN THE NAIROBI

SECURITIES EXCHANGE

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Egerton University, Box 536 Njoro, Kenya

Abstract

The factors affecting the price of an equity share can be viewed from the macro and micro economic perspectives. These factors will affect the demand and supply of a stock in the market which in turn will affect the price of the stock. The purpose of the study was to evaluate selected factors influencing share price behavior of commercial banks listed in the NSE. The factors to be evaluated were dividend per share, financial leverage, book value per share and interest rates. The study utilized published financial statements of the listed commercial banks, the average lending rates charged by the banks to its customers as a measure of interest rates, and the daily share prices of the commercial banks. Statistical Packages for Social Sciences (SPSS) was used by the researcher to facilitate the analysis and interpretation of data and the results obtained was presented using tables for easy interpretation. The study used correlational and longitudinal research design. Significance of each independent variable and the hypothesis was tested using t-test statistic. The p-value for each t-test was used to make conclusions on whether to not reject or reject the null hypotheses. The benchmark for this study to reject or to accept the null hypothesis was a level of significance of 5 percent. The correlation results indicated that dividend per share had a strong positive correlation while book value per share and financial leverage had a weak positive correlation on market price per share of commercial banks. The regression analysis and test of hypothesis showed that dividend per share and book value per share had a significant effect while financial leverage had no significant effect on the market price per share of commercial banks. This study will be useful to the investors, the decision makers of commercial banks, the CMA and NSE Policy makers, the government and the scholars. The researcher recommends that further research can be extended to cover longer time periods, more firms and more macroeconomic variables.

Key words: Share Price Behavior, dividend per share, interest rates, leverage








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Background of the study

The capital market is a market for securities, where business enterprises and governments can raise long-term funds. The capital market, which includes the stock market and the bond market, plays a vital role in economic prosperity that fosters capital formation and

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Appendix V: Research Permit

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This is to Certify that Ms.. FANCY chepngetich CHEPKWONY of Egerton University, has been licensed to conduct research in Nairobi on the topic: THE INFLUENCE OF SELECTED FACTORS ON THE BEHAVIOUR OF SHARE PRICES OF COMMERCIAL BANKS LISTED AT THE NAIROBI SECURITIES EXCHANGE for the period ending : 02/March/2022.	
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