



AN EVALUATION OF FACTORS INFLUENCING SHARE PRICE

BEHAVIOUR OF COMMERCIAL BANKS LISTED IN THE NAIROBI

SECURITIES EXCHANGE

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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

sustains economic growth (Nwude, 2004). 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.

According to Fama (1970) as cited in Almunani (2004), a stock market is said to be efficient if current securities' prices reflect all available information. 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. Fundamental Analysis evaluates the intrinsic value of the company and compares it to the stock price (Jones 2004). 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 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 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. 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 (Joseph 2011). The aforesaid contributions of Commercial Banks to the economy necessitated the need to carry out research on the selected factors influencing share prices of the Commercial Banks listed in the NSE.

Nairobi Securities Exchange (NSE)

Nairobi Securities Exchange (NSE) was constituted in 1954 as a voluntary association of stockbrokers registered under the Societies Act (Ngugi, 2005). 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 20-share 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).

Problem Statement

A person or entity invests in equity shares of companies for a number of reasons. It may be for safety cushion, cyclical cash needs, investment for a return, investment for influence, or purchase for control. Whatever the reason might be, an investor undertakes thorough financial evaluation of the available options before deciding to invest in stocks of a particular company. A stock price in an efficient market provides investors with a good measure of any firm's performance and its value. Understanding the impact of various fundamental variables on stock price is therefore very important to investors since that will help them make profitable investment decisions (Srinivasan, 2013).

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. So, it is becoming important for commercial banks to measure the value they create for their shareholders. Keeping track of the value created year-on-year enables companies to evaluate past decisions and make decisions that will improve shareholder value (Skousen et al., 2007). 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.

Although, several prior empirical studies have been done in developed economies such as Khan & Amanullah (2012) in Karachi Stock Exchange index of Pakistan, Al-Shubiri (2010) in 14 commercial banks of Amman Stock Exchange and Irmala, Sanju and Ramachandran (2011) in the Indian market, not much studies have been done in developing countries like Kenya hence the need to carry out research in 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. All of these facts have undoubtedly created a gap. Also the need by investors and commercial banks to know and understand the fundamental variables that affect the behavior of stock price necessitated the researcher to evaluate the factors influencing the behavior of share prices of commercial banks listed in the NSE. The researcher majored in only four factors which are: dividend per share, financial leverage, book value per share and interest rates.

Purpose of the Study

The purpose of this study was to evaluate the selected factors influencing the behavior of share prices of commercial bank listed in the Nairobi Securities Exchange.

1.5 Objectives of the Study

- a) To ascertain whether dividend per share influence the behavior of share prices of commercial banks listed in the Nairobi Securities Exchange.
- b) To ascertain whether financial leverage influence the behavior of share prices of commercial banks listed in the Nairobi Securities Exchange.
- c) To ascertain whether book value per share influence the behavior of share prices of commercial banks listed in the Nairobi Securities Exchange.
- d) To ascertain whether interest rates influence the behavior of share prices of commercial banks listed in the Nairobi Securities Exchange.

Research Hypothesis

- a) H_{01} ; Dividend per share has no influence on the behavior of share prices of commercial banks listed in the Nairobi Securities Exchange.
- b) H_{02} ; financial leverage has no influence on the behavior of share prices of commercial banks listed in the Nairobi Securities Exchange.
- c) H_{03} ; Book value per share has no influence on the behavior of share prices of commercial banks listed in the Nairobi Securities Exchange.
- d) H_{04} ; Interest rates has no influence on the behavior of share prices of commercial banks listed in the Nairobi Securities Exchange.

Literature Review

Theoretical Framework

The study is underpinned by the Efficient Market Hypothesis Theory postulated by Fama (1970) which advocates for the efficiency of the financial market in terms of the information, news, or communication involved. According to Fama (1970) as quoted in Karz (2012), efficiency is distinguished in three different forms: Strong-form where Information (public, personal, even confidential) contributes to stock pricing and, therefore, does not enable investors to achieve a competitive advantage in investing processes. Semi-strong for where Stock prices reflect public financial information (announcements of listed companies, balanced sheets, assets etc.) Weak efficiency where all past stock prices are integrated in current prices therefore, they cannot be used for future predictions.

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 and Brown, 2006).

Efficient market hypothesis hold that any new information about a firm is incorporated into share prices rapidly and rationally with respect to the direction and magnitude of the

share price movement. Security prices tend to fluctuate randomly around their intrinsic values, and fully reflect the latest available information in the market (Reilly and Brown, 2006). The stock prices of banks listed in the Nairobi Securities Exchange are assumed to operate in an efficient market where all the information on dividends per share financial leverage, book value per share and interest rates are reflected in the stock prices. This theory can be elaborated through the conceptual framework shown on figure 1

An Overview of Behaviour of Share Prices in the NSE

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. 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. 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. If most people start buying then prices move up and if people start selling prices go down (Aduda & Chemarum, 2010).

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 and 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 and 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 and 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 and 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 and 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 average market price per share for commercial banks listed in 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

Dividend per Share

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 divided 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 et al., 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 increase share value and the dividend irrelevance hypothesis assumes that dividends have no effect on share value (Nizar, Michael and Pillai, 2010). Graham and Dodd (1934), 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.

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" (cited in Frankfurter et al., 2002, p.414).

Tax-effect hypothesis 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, Michael Rafferty and Rekha Pillai, 2010). Baker et al. (2002a) however surveyed the managers of 630 NASDAQ firms and found weak or no support for the tax-preference theory.

Financial Leverage

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. 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 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 (Ishola Rufus Akintoye, 2008).

Myers (1977) as quoted in by Zhe Zhang and Jie Cai 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 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. Myers (1977) as quoted in by Zhe

Zhang and Jie Cai 2010 found a negative relation between the annual change in leverage and the current-year and next-year stock returns.

Book Value per Share

Stern Stewart and Co., (2012), 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 Stern Stewart, 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 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.

Interest Rates

Interest rates are determined by monetary policy of a country according to its economic situation. High interest rate will prevent capital outflows, hinder economic growth and, consequently, hurt the economy as interest rates is one of the most important factors affecting directly the growth of an economy. Interest rate fluctuations have a significant influence on the companies through several channels. First, interest rate rise increase the interest expense of highly leveraged companies, thus reducing cash flows available for future dividends with the consequent negative impact on share prices. Second, interest rate fluctuations have an impact on the market value of financial assets and liabilities held by firms. Third, changes in interest rates may impact upon the level of real activity in the economy in the short to medium term, and this affects equity prices by altering the expectations of future cash flows (Soto, Ferrer, & González 2005).

The relationships between stock market returns and interest rate has been examined by researchers. Reilly et al., (2007) reports a significant negative effect of changes in market interest rates on stock returns of both financial and non-financial companies. While Adam and Tweneboah (2008) find the relationship between stock prices and interest rates to be negative and statistically significant on Ghana stock market. Abugri (2008), find that the responses of stock returns to interest rate is negative and significant in Brazil, Argentina, and Chile, but the response of returns in Mexico to interest rates appears to be insignificant in explaining the movement of returns. The studies by Reilly et al., (2007); Adam and Tweneboah (2008) and Abugri (2008), supports the arguments given by Martínez, Lapeña and Sotos, (2009) where they argued that high interest rates have a negative effect on share prices.

Conceptual Framework

The relationship that exists between the dependent variable (market price per share) and the independent variables (factors affecting share prices of Commercial Banks in the Nairobi Securities Exchange) of the study can be explained by Figure: 2.1. For purpose of this study, factors affecting share prices of Commercial Banks in the Nairobi Securities Exchange are dividends per share, financial leverage, book value per share and interest rates.

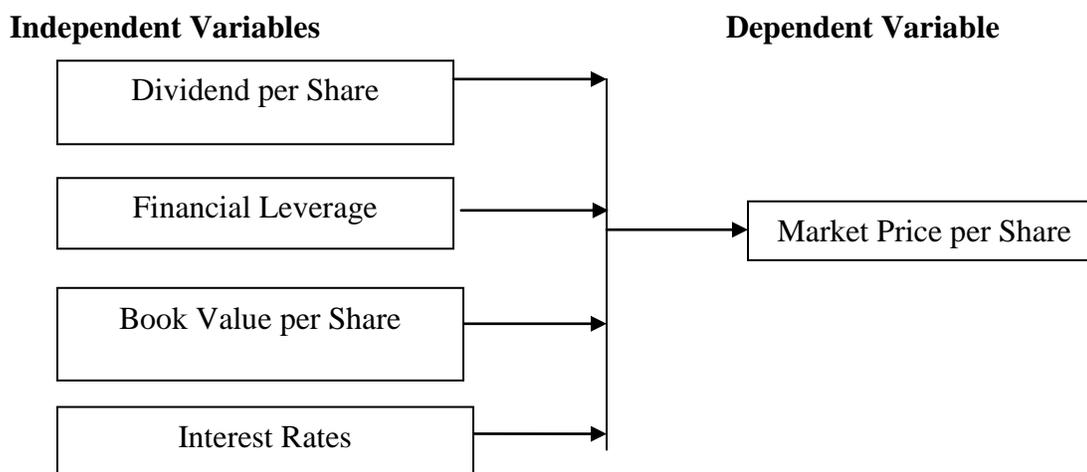


Figure 2.1 Conceptual Framework

Source: Own Conceptualization

Research Methodology

Longitudinal design was used to track changes over time and relate them to the variables to explain why the changes occurred. Kombo and Tromp (2006), notes that, longitudinal research involves collecting data from the same sample of individuals or organizations, on more than one occasion. This justified the reason why the researcher used longitudinal research design since the data on share prices, interest rates and financial data of the listed commercial bank was collected in the same banks over a period of 2009-2013.

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).

This study utilized secondary data of the listed commercial banks which included the financial data and the share prices in the market and commercial banks weighted average lending rate as a measure of interest rate. 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 data collection sheet from published accounts of 2009, 2010, 2011, 2012 and 2013 of the banks.

Pearson correlation analysis was used measure the linear association between the independent variables: dividend per share, financial leverage, book value per share and interest rates with the dependent variable: share price behavior of Commercial Banks function. Values of the correlation coefficient are always between -1 and +1. A correlation coefficient of +1 indicates that the variables are perfectly related in a positive linear sense; a correlation coefficient of -1 indicates that the two variables are perfectly

related negatively. Linear sense and a correlation coefficient of 0 indicate that there is no linear relationship between the two variables (Kothari, 2005).

Simple linear regression analysis was used to analyze, the effect of each independent variables on the dependent variable

The simple linear regression model is defined as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where

Y=Share price behavior of commercial Banks

β_0 = Intercept

$\beta_1 - \beta_4$ = slopes co-efficient representing the influences of the association of Independent variables over the dependent variable

X_1 =dividend per share

X_2 =financial leverage

X_3 =book value per share

X_4 =interest rates

e =Error Term or residual

It should be noted that $\beta_1, \beta_2, \beta_3, \beta_4$ represents the independent contribution of each independent variable to the overall model where β_0 represents the intercept of the Linear Model.

Results and Discussion

The averages of data on market price per share, financial leverage, book value per share, and dividend per share from 2009 to 2013 of the listed commercial banks were used. The average interest rates were calculated by getting the average of the average lending rates of commercial.

Table 1 Mean of each variable for the ten commercial banks listed in the NSE

Variable	2009	2010	2011	2012	2013
Average Market Price Per Share	46.988	61.06	58.054	46.007	69.542
Book Value	24.752	31.764	33.746	44.31	44.466
Dividend Per Share	1.34	1.96	1.956	2.262	2.529
Financial Leverage	84.14%	84.77%	86.65%	84.86%	84.53%
Interest Rates	14.80%	14.36%	15.05%	19.65%	17.31%

Source: Researcher, 2015

Correlation Analysis

On the correlation of the study variables the researcher conducted a Pearson correlation as shown in table 4.2. From the findings on the correlation analysis between the dependent variable (market price per share) and the independent variables (dividend per share, financial leverage, book value per share and interest rates), 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. There was a weak positive correlation between market price per share and book value per share as shown by a correlation coefficient of(r= 0.265, p> 0.05) which is not statistically significant at 95% confidence level .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 a strong positive relationship between dividend per share, with market price per share of commercial banks listed in the NSE and a weak positive relationship between financial leverage and book value per share with market price per share of commercial banks listed in the NSE. However the correlation of average interest rates with market price per share could not be computed since the value was constant for all the commercial banks listed in the NSE thus was not used for further analysis and removed from the regression model.

Table 2 Correlation Matrix

		<u>MPS</u>	<u>IR</u>	<u>BV</u>	<u>FL</u>	<u>DPS</u>
MPS	Pearson Correlation	1	. ^a	.265	.186	.867 ^{**}
	Sig. (2-tailed)		.	.460	.606	.001
	N	10	1	10	10	10
IR	Pearson Correlation	. ^a	. ^a	. ^a	. ^a	. ^a
	Sig. (2-tailed)
	N	1	1	1	1	1
BV	Pearson Correlation	.265	. ^a	1	.037	-.158
	Sig. (2-tailed)	.460	.		.919	.663
	N	10	1	10	10	10
FL	Pearson Correlation	.186	. ^a	.037	1	.089
	Sig. (2-tailed)	.606	.	.919		.806
	N	10	1	10	10	10
DPS	Pearson Correlation	.867 ^{**}	. ^a	-.158	.089	1

Sig. (2-tailed)	.001	.	.663	.806	
N	10	1	10	10	10

Regression Analysis

The three independent variables were regressed against the dependent variable on a simple linear regression analysis. Model summary table below shows the coefficient of determination (R^2) which explains the percentage of variation in commercial banks' market price per share

3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.962 ^a	.925	.888	.43311

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

From the table above, the regression model containing financial leverage, book value, dividend per share as the predictor variables explains 92.5% of the variation in market price per share of commercial banks listed in the NSE. The remainder (7.5%) can be explained by other factors not included in the model.

The table below displays the ANOVA results that test the significance of the R^2 for the model.

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

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

Dependent Variable: average market price per share.

An F statistics of 24.754 as shown in table 4.3 above 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.

The ability of each individual independent variable to predict the dependent variable was addressed below based on the model coefficients in Table 4.5 below. 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 in the NSE.

Table 5 Model Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	-1.439	.927		-1.552	.172
	Average Dividend Per Share	.992	.122	.924	8.133	.000
	Average Book Value	.456	.127	.407	3.598	.011
	Average Financial Leverage	.278	.351	.089	.790	.460

The model that was used by the study was;

$$MPPS = a + b_1DPS + b_2BVS + b_3FL + e$$

Where:

MPPS=Market Price per Share

DPS=Dividend per Share

BVS= Book Value per Share

FL=Financial Leverage

From the data in the table the established regression equation was;

$$MPPS = -1.439 + 0.992DPS + 0.456BVPS + 0.278FL$$

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.

Testing Hypothesis

The first hypothesis was, H_{01} : dividend per share has no influence on the behavior of share prices of commercial banks listed in the Nairobi Securities Exchange. 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; H_1 ; There is a significant positive relationship between dividend per share and market price per share of commercial banks listed in the NSE.

The second hypothesis was H_{02} ; financial leverage has no influence on the behavior of share prices of commercial banks listed in 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 in the Nairobi Securities Exchange was not rejected.

The third hypothesis was H_{03} ; book value per share has no influence on the behavior of share prices of commercial banks listed in the Nairobi Securities Exchange. 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; H_3 ; There is a significant positive relationship between book value per share and market price per share of commercial banks listed in the NSE.

The fourth hypothesis was H_{04} ; interest rates have no influence on the behavior of share prices of commercial banks listed in the Nairobi Securities Exchange. This hypothesis was not tested since the value was constant for all the commercial banks listed in the NSE hence could not find its coefficients.

Conclusion

According to the research results, dividend per share influence the behavior of share prices of commercial banks listed in 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 in the NSE, where a unit increase in dividend per share led to a 0.992 increase in market price per share. The correlation analysis findings indicated a strong positive relationship between dividend per share and market price per share. The correlation coefficient was 0.867. The study rejected the null hypothesis that dividend per share has no influence on the behavior of share prices of commercial banks listed in the NSE. This findings support those of the Al- Shubiri (2010), Khan and Amanullah (2012) and Sanjeet Sharma (2011) that dividend per share have a strong positive

relationship with market price per share. However the study does not support the findings by Kihara (2011) who found that dividend per share have an effect on share prices.

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 influence market price per share of commercial banks listed in the NSE where a unit increase in financial leverage led to a 0.278 increase in market price per share. The correlation analysis findings indicated a weak positive relationship between financial leverage and market price per share. The correlation coefficient is 0.186. The study accepted the null hypothesis that financial leverage has no influence on the behavior of share prices of commercial banks listed in the NSE. These findings are inconsistent with those of Myers Dimitrov and Jain (2008), Hilcher, and Szilagyi (2008), Parsons and Titman (2007) and Ahn, Denis (2006) who found a negative relation between the annual change in financial leverage and the market price per share and Syed Atif Ali 2012; Khan & Amanullah (2012); who found that financial leverage have a positive relationship with market price per share.

According to the research results, book value per share influence the behavior of share prices of commercial banks listed in 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 in the NSE, where a unit increase in book value per share led to a 0.456 increase in market price per share. The correlation analysis findings indicated a weak positive relationship between book value per share and market price per share. The correlation coefficient is 0.265. 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 Al- Shubiri (2010), Khan and Amanullah (2012) and Sanjeet Sharma (2011) that book value per share have a weak positive relationship with market price per share but did not support Al- Shubiri (2010) and Sanjeet Sharma (2011); who found that book value per share have a significant impact on the stock prices.

References

Abugri, B. (2008). *Empirical relationship between macroeconomic volatility and stock returns: Evidence from Latin American markets*", *International Review of Financial Analysis*, Vol.17, Issue 2,pp.396.

- Aduda, J., and Chemarum, C. (2010). "Market Reaction to Stocks Splits: Empirical Evidence from the Nairobi Stock Exchange" *African Journal of Business & Management (AJBUMA)*, vol. 1, pp. 165-184.
- .AL- Shubiri, F. (2010) *Analysis the Determinants of Market Stock Price Movements: An Empirical Study of Jordanian Commercial Banks*, *International Journal of Business & Management*.
- Dimitrov, V., Jain, P.C., (2008). *The value-relevance of changes in financial leverage beyond growth in assets and GAAP earnings*. *Journal of Accounting, Auditing, and Finance*, 191-222.
- .Gompers, Paul A., Joy L. Ishii, and Andrew Metrick. (2003). *Corporate Governance and Equity Prices*.
- Fama,F. (1970) *Efficient Capital Markets: A Review of Theory and Empirical Work*, *The Journal of Finance*.; 25(2); Published by: Blackwell Publishing for the American Finance Association Stable .
- Frankfurter, George M., and Bob G. Wood, Jr., (2002). *Dividend Policy Theories and Their Empirical Tests*, *International Review of Financial Analysis* 11, 111-138.
- Kihara, D. G. (2011). *The relationship between dividend announcement and return on investment*. Unpublished MBA project, University of Nairobi.
- Kurihara, (2006). *The Relationship between Exchange Rate and Stock Prices during the Quantitative Easing Policy in Japan*. *International Journal of Business*.11 (4):375-386.
- Irmala, P., Sanju S., & Ramachandran, M.(2011) *Determinants of Share Prices in India*, *Journal of Emerging Trends in Economics and Management Sciences* (2): 124-130.
- Jones,C.. *Investment analysis and management*. New York :John Willey and Sons;2004.
- Karz, G., (2012). *The Efficient Market Hypothesis and Random Walk Theory* <http://www.investorhome.com/emh.htm> (accessed 24/08/2014).
- .Kombo, D. K. & Tromp, D. L. A (2006). *Proposal and Thesis Writing*. Nairobi. Paulines Publications.
- Lease, (2000). *Dividend Policy: It's Impact on Firm Value* (Harvard Business School Press, Boston, Massachusetts).
- Miller, M., & Modigliani, F. (1961). *Dividend Policy, Growth, and the Valuation of Shares*. *Journal of Business*(34), 411-433.
- Myers, S.C., (1977). *Determinants of corporate borrowing*. *Journal of Financial Economics* 5, 147-175.
- Nairobi Securities Exchange (NSE) website, www.nse.co.ke
- Nazir, M. S., Nawaz, M. M., Anwar, W., & Ahmed, F. (2010). *Determinants of stock price volatility in Karachi stock exchange: The mediating role of corporate dividend*
- Nwude, C. (2004). *Basic Principles of Financial Management-A first Course (Second ed.)*. Enugu-Cover Design, Film Set, Arrangement and Printing.
- Reilly, F. K., Wright, D.J., & Johnson, R.R. (2007). *Analysis of the interest rate sensitivity of common stocks*. *Journal of Portfolio Management*, 33, 85-107.
- Sharma, Sanjeet. (2011), "Day of Week Effect: Evidences from Indian Stock Market", *Indian Journal of Commerce & Management Studies*, Vol. II, No. 6, pp.25-30.
- Soto, G.M., Ferrer, R., & González, C. (2005). *Determinants of interest rate exposure of Spanish non-financial firms*. *European Review of Economics and Finance*, 4, 55-71.

Srinivasan, P. (2013) *Determinants of Equity Share Prices in India: A Panel Data Approach*, the Romanian Economic Journal. 46: 205-228. Available at <http://www.rejournal.eu/Portals/0/JE%2046/Srinivasan.pdf>

Stern Stewart and Co. (2012). *Intellectual Property: Stern Stewart and Co.* Retrieved March 9, 2014, from Stern Stewart and Co.: www.sternstewart.com

Thenmozhi M. (2000) *Market Value Added and Share Price Behavior An Empirical Study Of of BSE Sensex companies.*

Zhe Zhang and Jie Cai (2010). *Leverage change, debt overhang, and stock prices.* Drexel University and Singapore Management University.

APPENDICES

Appendix 1: 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					