

**THE RELATIONSHIP BETWEEN EQUITY PRICES AND FINANCIAL
PERFORMANCE OF COMMERCIAL BANKS QUOTED ON THE
NAIROBI SECURITIES EXCHANGE**

BY

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DECLARATION

I hereby certify this research project proposal as my original work and it has not been presented for examination in any other institution of higher learning.

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ABSTRACT

This study sought to establish the relationship between equity prices and financial performance of commercial banks quoted at the Nairobi Securities Exchange. A number of firm valuation models in finance use different financial performance measures to arrive at the firm value. These include the income approach (capitalisation of earnings) and the dividend approach (Gordon's Dividend Model). This study included both earnings per share and dividend per share as independent variables of measuring financial performance. Additionally bank specific ratios of core capital to risk weighted assets and liquidity ratio were included as independent variables. Commercial banks in Kenya have continued to register impressive financial performance and this study set to determine whether this has had an impact on their share prices.

The population of the study was all banks listed continuously at the NSE during the period 2007 to 2011. There were a total of 8 banks as two did not meet the requirement of being continuously listed through the study period.

Pearson correlation coefficient showed a strong positive relationship between share prices and earnings per share, dividend per share and liquidity. However, the relationship between share prices and core capital to total risk weighted assets ratio was negative and weak. Multiple regression analysis showed that all performance measures had a positive relationship with shares prices. However, only the relationship between share price and dividend per share was found to be statistically significant.

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LIST OF ABBREVIATIONS

APV – Adjusted Present Value

BSD – Bank Supervision Department

CAMEL – Capital Adequacy, Asset Quality, Management, Earnings & Liquidity

CBK – Central Bank of Kenya

CRSP – Centre for Research in Security Prices

GDP – Gross Domestic Product

IFC – International Finance Corporation

ISE – Istanbul Stock Exchange

KBA- Kenya Bankers Association

NSE – Nairobi Securities Exchange

NYSE – New York Stock Exchange

NASI – NSE All Share Index

UAE – United Arab Emirates

WACC – Weighted Average Cost of Capital

CHAPTER ONE

INTRODUCTION

1.1 Background To The Study

1.1.1 Equity Pricing

In an efficient capital market security prices adjust rapidly to the arrival of new information and therefore the current prices of securities reflect all information on the security. An informational efficient market is one in which information is rapidly disseminated and reflected in prices. In the financial market the maximum price that investors are willing to pay for a financial asset is the current value of future cash payments that are discounted at a higher rate to compensate for uncertainty in the cash flow projections (Fama, 1970).

According to Bodie (2009) fundamental analysis uses earning and dividend prospects of the firm, expectations of future interest rates, and risk evaluation of the firm to determine stock prices. It focuses on the determinants of the underlying value of the firm such as current profitability and growth prospects. It represents an attempt to determine the present value of all payments a stock holder will receive from each share of stock. Fundamental analysts usually start with the study of past earnings and an examination of company statements of financial position. They supplement this with further detailed economic analysis, ordinarily including an evaluation of the quality of the firm's management and the industry prospect. If the value exceeds the stock price, the fundamental analyst would recommend purchase of the stock.

1.1.2 Financial Performance Measurement

Financial performance is a subjective measure of how well a firm uses its assets from its primary mode of business to generate revenue. This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Hales, 2005). Since their inception, companies have used various yardsticks for measuring and reporting financial performance. The two main items used to measure financial performance are the firm's market

share within the particular industry in which it operates and its profitability. Profitability is then used to measure the company return on capital employed hence value to its shareholders. Accountants and economists have derived and used various financial ratios to assess company financial performance. These ratios mainly involve the company liquidity – cashflow liquidity ratio, debt management – financial leverage index, asset management – return on total assets, profitability – cash flow margin and finally return on investment – dividend yield. (Brealy, 2003)

Traditionally, the financial performance of banks and other financial institutions has been measured using a combination of conventional accounting measures and risk and return measured. Further analysis of financial performance has used methodologies such as financial ratio analysis, benchmarking, measuring performance against budget or a combination of these (Barnett & Salomon, 2006). Financial statements published usually include a variety of financial ratios designed to give an indication of the institution's performance. As with any method of analysis designed to measure financial performance, there are limitations and imperfections associated with the used of financial ratios, particularly the use of very few ratios in isolation. The other measure used for financial performance is CAMEL, acronym for the five components of a bank's condition that are assessed. These are: capital adequacy, asset quality, management quality, earnings and liquidity. A sixth component, banks sensitivity to market risk was added in 1997 hence the new acronym CAMELS. The rating scale is from 1 (best) to 5 (worst). Capital adequacy, earnings and liquidity are the key dimensions of measuring performance in commercial banks. Ratings are assigned for each component in addition to the overall rating of a bank's financial performance. (Jose, 1999)

1.1.3 Equity Prices vs Financial Performance

Information content of earnings is an important issue for investors. Various valuation models arrive at the equity price base on different aspects of financial performance. The earnings approach estimates the value of common stock based on size, degree of certainty and the rate of growth of corporate earnings per share whereas in the dividend approach the present worth of a common stock is the sum of its discounted future cash receipts in the form of dividends and cash proceeds from its eventual sale (Bauman 1965).

1.1.4 Commercial Banks in Kenya

Commercial banks in Kenya have registered robust financial performance in recent years. It is noteworthy that the financial sector is developing faster than the overall economy. It grew by 9% in 2010 and 7.8% in 2011 while the economy grew by 5.8% and 4.4% in 2010 and 2011 respectively. This has been driven by infrastructure that has enabled financial inclusion. The growth of micro deposit accounts (accounts with average deposit balances of Sh100,000 and below) has been a critical contributor to the development and deepening of the banking sector. (CBK Quarterly Report June 2012).

As at 30 June 2012 the banking industry comprised 43 commercial banks, 1 mortgage finance company, 6 deposit taking microfinance institutions, 5 representative offices of foreign banks, 115 foreign exchange bureaus and 2 credit reference bureaus. Out of the 43 banks 30 are locally owned and 13 are foreign owned. The locally owned financial institutions comprise 3 banks with significant shareholding by the Government and State Corporations, 27 commercial banks and 1 mortgage finance institution. Foreign owned banks are those with more than 50% foreign ownership. The banking industry is regulated by the Central Bank of Kenya (CBK) which was formed in 1966 under the Central Bank Act. The core mandate of the CBK's Bank Supervision Department (BSD) is to foster liquidity, solvency and proper functioning of a stable market-based financial system. This mandate is aimed at promoting and maintaining the safety, soundness and integrity of the banking system. This is undertaken through the implementation of policies and standards that are in line with international best practice for bank supervision and regulation.

The Kenya Bankers Association (KBA) is a self regulating association of all banks in Kenya. Its main roles include to promote and develop in Kenya sound and progressive banking principles, practices and conventions and to contribute to the developments of banking, to manage the public relations aspects of banking as a service industry, to maintain continuous communications in industrial relations and to maintain close co-ordination and liaison with the Central Bank of Kenya, financial institutions, the Chamber of Commerce, management or educational institutes, universities, Federation of Kenya Employers, and such other organizations for realizing the objects and purposes of the Association.

1.1.5 Nairobi Securities Exchange

In 1954 the Nairobi Securities Exchange was constituted as a voluntary association of stockbrokers registered under the Societies Act. 1988 saw the first privatization through the NSE, of the successful sale of a 20% government stake in Kenya Commercial Bank. The sale left the Government of Kenya and affiliated institutions retaining 80% ownership of the bank. Notably, on February 18, 1994 the NSE 20-Share Index recorded an all-record high of 5030 points. The NSE was rated by the International Finance Corporation (IFC) as the best performing market in the world with a return of 179% in dollar terms. The NSE also moved to more spacious premises at the Nation Centre in July 1994, setting up a computerized delivery and settlement system (DASS). For the first time since the formation of the Nairobi Stock Exchange, the number of stockbrokers increased with the licensing of 8 new brokers.

In 1996, the largest share issue in the history of NSE, the privatization of Kenya Airways, came to the market. In September 2006 live trading on the automated trading systems of the Nairobi Stock Exchange was implemented. In July 2007 NSE reviewed the Index and announced the companies that would constitute the NSE Share Index. The review of the NSE 20 share index was aimed at ensuring it is a true barometer of the market. 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.

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 to evolve into a full service securities exchange which supports trading, clearing and settlement of equities, debt, derivatives and other associated instruments. In November 2011 the FTSE NSE Kenya 15 and FTSE NSE Kenya 25 Indices were launched. The launch of the indices was the result of an extensive market consultation process with local asset owners and fund managers and reflects the growing interest in new domestic investment and diversification opportunities in the East African region.

1.2 Statement Of The Problem

Financial performance of firms is an important issue for investors. Fundamental analysts estimate equity prices based on current earnings and growth prospects (Bodie, 2009). Financial performance of commercial banks is more so important given the crucial role played by banks as deposit takers and financial intermediaries in the economy.

Al Tamimi (2007) performed a study on factors determining equity prices in the United Arab Emirates (UAE) Stock Market. He discovered that the firm's fundamental factors exercise the most significant impact on stock prices. There was a strong and positive impact of earnings per share on the UAE stock prices. The estimated coefficients of money supply and Gross Domestic Product were positive but statistically insignificant. Yilmaz and Gulay (2006) examined the effects of cash dividend payments on stock returns and trading volumes in the stock market in the Istanbul Stock Exchange (ISE). They found that cash dividends influence prices and trading volumes in different ways before, at, and after payment. Balke and Wohar (2006) showed that data have difficulty distinguishing a stock price decomposition in which expectations of future real dividend growth is a primary determinant of stock price movements from one in which expectations of future excess returns are a primary determinant. The data could not distinguish between these very different decompositions because movements in the price-dividend ratio are very persistent whereas neither real dividend growth nor excess returns are.

Wanjohi (2007) studied the relationship between the stock market prices, sales turnover, profit before tax and dividends. The study showed that the relationship between the stock market prices and sales turnover, profit before tax as well as dividends is uneven from one year to the other and where there is a relationship it is not significant. Mwangi (2011) studied the relationship between dividend policy and value of the firms quoted at the NSE. The research established that dividend per share had a positive effect on companies listed at the NSE. Mohamed (2010) studied the relationship between dividends per share and firm value for companies listed at the NSE. The study concluded that there was no significant relationship in all sectors as some were significant while others were not.

This study will seek to establish the relationship between equity prices and overall financial performance of commercial banks measured by earnings per share, dividend per share, core

capital and liquidity. This is different from previous local studies which have only focused on how dividend policy affects share prices at the Nairobi Securities Exchange.

1.3 Objective Of The Study

The objective of the study is to establish the relationship between equity prices and financial performance of commercial banks in Kenya.

1.4 Significance Of The Study

Both local and foreign investors may use this empirical study to make investment decisions by analysing financial performance in the banking industry.

Management of banks will obtain useful information on how reported earnings and other financial performance measures affect their equity prices at the NSE.

Investment advisors and Fund Managers can use the study in advisory and investment decision making.

Central Bank as a major policy maker, will obtain knowledge of the banking sector dynamics and the responses that are appropriate; it will therefore obtain guidance from this study in designing appropriate policies that will regulate the sector.

This study shall provide information to potential and current scholars on the impact of financial performance on the equity prices of commercial banks in Kenya. The study will also provide and identify areas for further study on research by recommending any existing knowledge gaps to be filled by future researchers.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

A number of theories have been advanced on the pricing of equity. These include firm valuation theories, the tax preference theory and the efficient market hypothesis.

2.2 Theoretical Framework

2.2.1 Firm Valuation Theories

2.2.1.1 Discounted Valuation Models

These models assign a value to the firm that equals the present value of expected future accounting measures based on all currently available information. Discounted cash flow methodologies are developed to analyse values in light of a firm's future earnings. These valuation methods consider firm earnings for a number of forecasted years into the future. The earnings are discounted back to the present value that is the value of future earnings in today's dollar (Penman, 1998)

2.2.1.2 Free Cash flow Model

This model assumes that the firm's value equals the present value of cash flows from all projects in its operations. Free cash flow is the difference between cash flow from operations and cash investments. It is the cash available to debt and stockholders after investments. (Copeland et al 2000) Modigliani and Miller in their seminal paper described the firms market value being equal to the present value of the cash flows it generates regardless of the capital structure it chooses. They made assumptions that the markets were efficient and there were no taxes. This gave rise to two alternative discount rates for project and firm valuations; the weighted average cost of capital (WACC) and adjusted present value (APV).

2.2.1.3 Discounted Residual Income Model

This is an accrual accounting model where the central concept is the residual income, a measure of accounting income in excess of the normal/required return on capital employed. The Residual Income Model shows that firm value can be split into two components; an accounting measure of the capital invested and a measure of the present value of future residual income defined as present value of future discounted cash flows not captured by the current book value. If a firm earns future accounting income at a rate exactly equal to its cost of firm capital, the present value of future residual income is zero. (Ohlson, 1995)

2.2.1.4 Dividend Discount Model

This model assumes that a stock's fundamental value can be defined as the present value of its expected future dividends based on currently available information. (Gordon, 1962)

Gordon proposed the dividend growth model which is summarised as follows:

$$P = \frac{D \times (1 + g)}{K - g}$$

where D – is the dividend paid

g- is the expected growth rate in perpetuity

P- price of equity

K – is the required rate of return for equity investors

In order to estimate the value of the firm the price of equity is multiplied by the total number of shares in the firm.

2.2.2 Tax Preference Theory

This theory was advanced by Litzenberger and Ramaswamy in 1979 who noted that the tax rate on dividend is higher than the rate on capital gain. (In Kenya capital gains are not taxed). A firm that pays dividend will therefore have a lower value since shareholders will pay taxes on this dividend. Under this theory, investors prefer companies that retain earnings and thus provide returns in the form of lower-taxed capital gains rather than higher-taxed dividends. When the effective rate of tax on dividend income is higher than the tax on capital gains, some

shareholders, because of their personal tax positions, may prefer a high retention/low payout policy. Therefore a firm that pays no dividend has the highest value.

2.2.3 Efficient Market Hypothesis

According to Fama (1970) an efficient capital market is one in which security prices adjust rapidly to the arrival of new information and, therefore the current prices of securities reflect all information about the security. An informational efficient market is one in which information is rapidly disseminated and reflected in prices. A market in which price always fully reflect available information is called efficient. In the financial market the maximum price that investor are willing to pay for a financial asset is actually the current value of future cash payments that are discounted at a higher rate to compensate for the uncertainty in the cash flow projections. Therefore what investors are trading is information as a commodity in financial market for the future cash flows and information about the degree of certainty. He presented the efficient market theory in terms of a fair game model, contending that investors can be confident that a current market price fully reflects all available information about a security and the reflected return based upon this price is consistent with risk. Fama divided the overall efficient capital market hypothesis and the empirical tests of the hypothesis into three sub-hypothesis namely:

Weak form - in which the information set is just historical prices, required rate of return, trading volume data etc. The hypothesis assumes that current market prices already reflect all past returns and any other security market information, this hypothesis implies that past rates of return and other historical market data should have no relationship with future rates of return. Therefore, this hypothesis contends that one should gain little from using any trading rule that decides whether to buy or sell a security based on past rate of return or any other past security market data. (Reilly, 2007)

Semi-strong form - considers both historical prices and publicly available information such as announcement of annual earnings, stock splits, price-to-earnings ratio, dividend yield, news about the economy and political environment etc. This hypothesis implies that investors who base their decision on any important new information after it is public should not derive above average risk-adjusted profits from their transactions, considering the cost of trading because the security price already reflects all such new public information. (Mishkin, 2007)

Strong form - stipulates that private information or insider information is quickly incorporated by market prices and therefore cannot be used to reap abnormal trading profits. It contends that stock prices fully reflect all information from public and private sources. This means that no group of investors has monopolistic access to information relevant to the formation of prices. The strong form EMH encompasses both the weak- form and the semi strong form EMH. Further, the strong form EMH extends the assumption of efficient markets, in which prices adjust rapidly to the release of new public information, to assume perfect markets. Under perfect markets all information is cost free and available to everyone at the same time. (Reilly, 2007)

2.3 Review Of Empirical Studies

Wanjohi (2007) studied the relationship between the stock market prices, sales turnover, profit before tax and dividends from year 2000 to 2004 for all companies listed in Nairobi Securities Exchange (NSE). The objective of the study was to evaluate the relationship between the stock market return, sales turnover, profit before tax and dividends. Cross sectional research design was used in the study. Data was collected over a specified duration of time for both dependent and independent variables concurrently. The population consisted of all companies listed at NSE before year 2000 and had published their financial statements from January 2000 to December 2004. All the 48 companies listed in the NSE were included to increase precision. Cross tabulation was used to analyze the data. Descriptive statistics and time series analysis was used to describe the performance of the companies over the study period. The study showed that the relationship between the stock market prices and sales turnover, profit before tax as well as dividends is uneven from one year to the other and where there is a relationship it is not significant.

Mohamed (2010) studied the relationship between dividends per share and firm value for companies listed at the NSE for the period 2005 – 2009. Out of a total of 55 listed companies a sample of 25 firms that were continuously listed over the study period and constantly paid dividends was selected. Multiple regression analysis was used to ascertain best fitted model for predicting the dividend per share impact on share price. To determine the proportion of explained variation in the dependent variable, the coefficient of determination (R^2) was worked out. The significance of R^2 was tested with the help of the F Value. The results showed that overall for firms quoted at the NSE the impact of dividend per share is stronger than that of

retained earnings per share when dividend per share and retained earnings per share are the only two explanatory variables. However, the relationship was not established in all sectors and the conclusion was that the announcement of expected dividend of the firms listed at NSE does not play an important role in the determination of firm value in all industries.

Mwangi (2011) studied the relationship between dividend policy and value of the firms quoted at the Nairobi Stock Exchange. The sample comprised 46 quoted companies for the period 2005-2009. Data was collected from secondary sources including the NSE Handbook and companies' financial statements. Simple linear regression analysis between dividend per share and the value of the firm for the entire period of the study was done. The value of the firm was obtained as the total assets obtained from the financial statements of the companies. Tests of significance were used to determine whether the results were significant. The research established that dividend per share had a positive effect on companies listed at the NSE. Companies that had high average dividend per share for the study period had corresponding high value as measured by its total assets.

Maina (2009) did an empirical investigation on stock returns reaction around earnings announcement for quoted companies at the NSE. The population was 48 listed companies in the period 2002-2006. A sample of 30 companies from the Main Investment Market Segment was selected. Event study methodology based on the market model of Sharpe (1964) was used to eliminate market wide elements and volume changes. Descriptive statistics used were the mean, Ordinary Least Square (OLS) regression analysis and t-statistic at 5% significance level to analyse data collected on daily closing share prices and trading volume of sampled companies at the NSE. The study found that there was a strong tendency for stock returns to steadily increase over fifteen days before announcement day, shoot up just before announcement day and then resume their upward drift after announcement day.

Ondigo (1995) studied the information content of annual reports for 18 blue chip companies listed at the NSE. The focus was on the behavior of share prices before and after the release of annual earnings reports. The study concluded that on average, the annual reports of the sampled companies had no information content during the period of the study.

Bitok (2004) studied the effect of dividend policy on firm value for firms quoted at NSE with pay-out ratio as the only variable for the period 1998-2003. The sample consisted of all firms consistently quoted at NSE for the six year period. The data collected was analysed using simple linear regression analysis. The significance of each independent variable was tested at a confidence level of 95%. The findings were that there is a relationship between dividend payout and the value of the firm.

Nura (2000) on his study on impact of dividend payments on shareholder wealth sought to establish whether there was a relationship between dividend paid and the share prices. He found that dividend payment had significant impact on shareholders wealth.

Al Tamimi (2007) performed a study on factors determining stock prices in the United Arab Emirates Stock Market. The study sought to investigate the main factors determining stock prices in the UAE stock markets. The data covered the period from 1990 to 2005. The sample consisted of 17 companies based on the availability of the data for that period. Al Tamimi identified company fundamental factors (performance of the company, a change in board of directors, appointment of new management, and the creation of new assets, dividends, earnings), and external factors (government rules and regulations, inflation, and other economic conditions, investor behavior, market conditions, money supply, competition, uncontrolled natural or environmental circumstances) as influencers of asset prices. He developed a simple regression model to measure the coefficients of correlation between the independent and dependent variables.

$$SP = f(\text{EPS, DPS, OL, GDP, CPI, INT, MS})$$

Where, SP: Stock price; EPS: Earnings per share; DPS: Dividend per share; OL: Oil price; GDP: Gross domestic product; CPI: Consumer price index; INT: Interest rate and MS: Money supply. He discovered that the firm's fundamental factors exercise the most significant impact on stock prices. Results indicated a strong and positive impact of EPS on the UAE stock prices. The estimated coefficients of money supply and GDP were, as expected, positive but statistically

insignificant. Moreover, the estimated coefficients of consumer price index and interest rate were as expected negative and statistically significant at the 1 percent level in the case of consumer price index, but statistically insignificant in the case of interest rate.

Somoye et al (2009) examined the extent to which some "information factors" or market indices affect the stock price. A model defined by Al-Tamimi (2007) was used to regress the variables (stock prices, earnings per share, gross domestic product, lending interest rate and foreign exchange rate) after testing for multicollinearity among the independent variables. The earnings per share and dividend per share of twelve companies listed on the Nigerian Stock Exchange (NSE) and (average) annual GDP, crude oil price, lending interest rate, inflation rate and foreign exchange rate were used and analysed for effect on the stock price. The period covered by the data is year 2001 to 2007. The choice of the companies and period used for the data gathering depend on availability of data. All the variables had positive correlation to stock prices with the exception of lending interest rate and foreign exchange rate.

Balke & Wohar (2006) showed that data have difficulty distinguishing a stock price decomposition in which expectations of future real dividend growth is a primary determinant of stock price movements from one in which expectations of future excess returns are a primary determinant. The data could not distinguish between these very different decompositions because movements in the price-dividend ratio are very persistent whereas neither real dividend growth nor excess returns are; most of the information about low-frequency movements in dividend growth and excess returns is contained in stock prices and not the series themselves. They further showed that this inability to identify the source of stock price movements is not solely due to poor power and size properties of their statistical procedure, nor did it appear to be due to the presence of a rational bubble.

Auerbach & Hasset (2006) performed a study on effect of dividend tax cuts on equity prices. The evidence from the study rejected the view that taxes are irrelevant. Among firms that pay dividends and rarely issue shares, the main impact of the tax reduction appeared to have been to boost share prices and encourage other activities, such as dividend payment, rather than to reduce the cost of capital. For firms that were yet to pay dividends and those likely to issue new shares, the effect was more complex. Firms expecting to issue new shares may well have experienced

some reduction in their cost of finance and hence an investment stimulus, consistent with the traditional view of dividend taxation.

Yilmaz & Gulay (2006) examined the effects of cash dividend payments on stock returns and trading volumes in the stock market in the Istanbul Stock Exchange (ISE) from 1995 to 2003. They found that prices start to rise a few sessions before cash dividend payments, and on the ex-dividend day, they fall less than do dividend payments, finally decreasing in the sessions following the payment. Trading volume shows a considerable upward shift before the payment date and, interestingly, is stable after. Thus, cash dividends influence prices and trading volumes in different ways before, at, and after payment, providing some profitable active trading strategy opportunities around the ex dividend day. The findings support price-volume reaction discussions on the dividend payment date and the significant effect of cash dividends on the stock market.

Jones and Litzenberg (1970) studied the relationship between quarterly earnings and intermediate price trends. They postulated that changes in the beliefs of market professionals concerning the intrinsic worth of equity would cause gradual price adjustments over time, thereby generating intermediate stock price trends. These price adjustments would be gradual over time rather than instantaneous since changes in the beliefs of market professionals concerning the fundamental value of a security would be gradually disseminated to the general investing public through advisory services, stock brokers, etc. In such a market, annual earnings reports would not be expected to materially change the beliefs of market professionals because three-fourths of their informational content was already published in the form of quarterly earnings report. However, a quarterly earnings report that is significantly higher than market professionals anticipated from the firm's historical earnings trend would be expected to cause upward revisions in their beliefs concerning the fundamental worth of the firm's common equity. The increased interest of professional investors in the firm's common stock would cause positive adjustments in the market price of the firm's common stock.

Two samples of stocks were available for the purpose of this study. The first sample of 510 companies covered the period 1962-1965, and the second sample of 618 companies was for the years 1964-1967. Quarterly earnings per share were calculated for each company from the

available variables. Straight lines were fitted to the quarterly earnings per share for each firm for consecutive overlapping eight quarter periods. The results lent support to the hypothesis that the stock market was not as perfect as some proponents of the random walk theory had claimed. That is, the market may not adjust instantaneously and correctly for every item of information that becomes available. Information available to the public in the form of quarterly earnings reports did not seem to be fully discounted by the market at the time it became available.

May (1971) sought to establish whether quarterly earnings announcements had a significant effect on stock prices and whether there was significant difference between the influence on investors on quarterly and annual earnings announcements. The approach of the study was to infer from measured price changes, immediately following earnings announcements, the relative effects of quarterly earnings announcements on investors' expectation. A sample of 105 firms listed at the American Stock Exchange was selected with a study period of 1964-1968. The standard of comparison used in this study to gauge the significance of response to quarterly earnings announcements was the average price response for all weeks of the year, excluding weeks of earnings announcements. Other weeks in the year may experience bits of information that can by chance have a significant effect on investor expectations. But every week of a quarterly earnings announcement may be considered to have a bit of new information. On the average, then, price changes should tend to be greater in the weeks of quarterly earnings announcements than in other weeks of the year. The average weekly residual price changes, R_{jt} , free of estimated effects of market-wide influence were obtained for each firm excluding the weeks of earnings announcement. The average weekly residual price for the weeks of the announcement was computed and a ratio of the average weekly residual income in non-announcement weeks to the average weekly residual price for announcement weeks was computed. For each firm, the ratio measures the average relationship between the price change in the week of the announcement and the average weekly price change that the firm experiences throughout the study period. If there were nothing unusual about the price changes in weeks of quarterly earnings announcements for individual firms, then these ratios would have an expected value of 1.0, the average of the ratios of all other weeks. Using the z statistic to test for significance the researcher found that investor response to quarterly announcements was significant. The other finding was that that relative price-change responses to quarterly earnings

are not significantly less than responses to annual earnings leading to the conclusion that investors may be unaware of, or unable to take account of, the difference in quality (reliability) of quarterly and annual accounting data.

Diamond (1967) performed a study on possible differential impact of dividends and retained earnings on per share price of common stock in 1961 and 1962. The focus of the study was on the market value of a dollar of retained earnings against the market value of a dollar of retained earnings. He argued that the beta coefficients for dividends and retained earnings used in earlier studies were biased in favour of a dividend effect. A sample of 255 firms from eight industries was selected and a modified regression model used. The results were that the market had slight preference for a dollar of retained earnings for firms in industries with a moderate to bright growth potential, while in more mature industries a dollar of dividends continued to be preferred by the market.

Patell (1976) tested the hypothesised information content of management earnings forecasts through the examination of the common stock price behaviour which accompanied the voluntary disclosure of 336 forecasts of annual earnings per share during the years 1963-67. The market model of Sharpe (1964) and Lintner (1965) was used to eliminate market wide elements of price change. Ordinary least squares regression and time series regression were used to estimate coefficients of the model. The results indicated that forecasts disclosures were accompanied by significant price adjustments, from which inference may be drawn that either the data presented in the management forecast, the act of voluntary disclosure, or both, convey information to investors.

Ball and Brown (1968) examined the behaviour of stock returns within 12 months up to earnings announcement for 8 year period between 1957 and 1965. They intended to determine the time and information content of accounting numbers. They selected 261 companies from the NYSE and classified them into 2 groups for each year of study that is companies whose earnings increased and decreased. They noted that the stock returns of firms whose earnings decreased had negative abnormal returns of 11.3% while firms whose earnings increased had a positive abnormal return of 5.6%. They concluded that the year's income numbers capture 50% or more of the information about firms' availability during a year.

Easton (1985) studied the relationship between accounting earnings and security valuation. A sample of 391 companies from the Centre for Research in Security Prices (CRSP) index was used for the period 1962-1980. The study was on the relation between accounting earnings and future dividend realizations, and between security price and future dividend realizations. Dividends were chosen as the valued future attribute for two reasons: (i) authoritative accounting statements explicitly identify future cash receipts as the variable about which accounting data should provide information and (ii) the risk-adjusted dividend capitalization formula is a widely used theoretical construct relating future benefits from equity investment to security price. The empirical tests were based on cross-sectional regression of the present value of the future dividend stream (calculated according to risk-adjusted dividend capitalization formula) on security price. The results demonstrate a strong valuation link between security price and the present value of future dividends. The empirical results showed that accounting earnings were a good predictor of the future stream of cash receipts from equity investment and that there was a strong correlation between security price and the present value of future cash receipts. Considered together, these results provided empirical evidence of the framework that explains the contemporaneous association between accounting earnings and security price.

2.4 Summary and Conclusion

There have been many studies done on the information content of earnings and the impact on equity prices. Some were event studies which focus on reaction of stock prices over a certain limited period such as 15 days before and after earnings announcement while others were on the premise that reaction to earnings announcement was gradual as earnings results were first interpreted by investment analysts/advisors and then their analysis was gradually disseminated to investors. Local studies have been done mainly on the relationship between dividend policy/dividend payout and equity prices at the NSE. Conflicting results were obtained regardless of the mode of study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter articulates the research methodology and covers research design, population, data collection tools and data analysis techniques. All these were employed in efforts to realise the research objectives. They were carefully chosen to ensure accuracy, reliability and get the desired results.

3.2 Research Design

Descriptive statistics were used to quantitatively describe the main features of the data collected. This is because descriptive statistics aim to simply describe what the data shows unlike inferential statistics which try to reach conclusions about a population from a sample. Correlation analysis and regression analysis were used to analyse the data. The data was collected on all the banks quoted at the Nairobi Securities Exchange but the results were not taken to apply to other companies quoted at the NSE.

3.3 Population Of The Study

The target population for this research was all the commercial banks listed at the Nairobi Securities Exchange (NSE). Currently, there are 10 commercial banks quoted at the NSE and these are Barclays Bank, CFC Stanbic Bank, Diamond Trust Bank, Equity Bank, Housing Finance Company Ltd, Kenya Commercial Bank, National Bank of Kenya, NIC Bank, Standard Chartered Bank and The Co-operative Bank of Kenya.

3.4 Data Collection

Secondary data was used for this study. Secondary data can be defined as data collected by others, not specifically for the research question at hand. The data was collected from published annual financial reports by the respective banks for the five year period of 2007-2011 and supplemented by the annual Banking Survey publication on the banking sector. A period of 5 years was chosen as was deemed to be enough to establish a trend.

3.5 Data Analysis

The data collected was systematically organized in a manner to facilitate analysis. The data was analysed using the Data Analysis Tool in Microsoft Excel 2007.

Pearsons correlation coefficient was first used to determine if the data had a linear relationship. The r indicated whether this relationship was positive or negative and also whether the relationship was weak or strong.

A multiple regression model was used for it allows simultaneous investigation of the effect of two or more variables. The model established the relationship between equity prices and the financial performance of the banking industry and the equity price. Financial performance was measured in terms of earnings per share, dividend per share, core capital and liquidity. This is consistent with the CAMEL rating system widely used in the banking industry worldwide. The F-test was used to test the overall statistical significance of the model. The equation representing the algebraic expression of the analytic model applied is as follows:

$$SP = \alpha + \beta_1EPS + \beta_2DPS + \beta_3CC + \beta_4L$$

Where:

- SP = Share Price (Dependent variable)
- α = Regression constant
- β = Coefficient of correlation
- EPS = Earnings per Share
- DPS = Dividend per Share
- CC = Core Capital to Total Risk Weighted Assets
- L = Liquidity Ratio

The dependent variable was the equity price of commercial banks whereas the independent variables were the financial four performance measures of the commercial banks. The share prices at the end of every year were obtained from the NSE. The financial performance measures were obtained from the financial statements of the banks and comprised earnings per share, dividend per share, core capital to total risk weighted assets and liquidity ratio. Below is a detailed explanation of each financial measure:

Earnings Per Share (EPS) – This is the basic earnings per share computed as the profit attributable to ordinary shareholders divided by the weighted average number of ordinary shares outstanding during the year.

Dividend Per Share (DPS) – This is the dividend declared/proposed divided by the weighted average number of ordinary shares outstanding during the year.

Core Capital/Total Risk Weighted Assets – This is a regulatory ratio based on guidelines issued by Basel Committee on Banking Supervision and implemented by the Central Bank of Kenya for supervisory purposes. The Core Capital is also referred to as Tier 1 Capital comprising share capital, share premium, retained earnings after deduction of goodwill and intangible assets, and other regulatory adjustments relating to items that are included in equity but are treated differently for capital adequacy purposes. Risk Weighted Assets are arrived at using a framework of four weights applied to both on-balance sheet assets and off-balance sheet items to reflect the relative risk of each asset. The statutory minimum limit of Core Capital/Total Risk Weighted Assets is 8%. The ratio will be obtained from the annual financial statements of the commercial banks as at the end of each year from 2007 – 2011.

Liquidity Ratio – This is the ratio of net liquid assets to deposit liabilities. Liquid assets comprise cash and balances with Central Bank of Kenya, net loans and advances with banks, treasury bonds and bills and net balances with banks abroad. Deposit liabilities comprise deposits from customers and other liabilities that have matured or maturing within 91 days. The Central Bank of Kenya requires banks to keep a statutory minimum ratio of 20% of liquid assets to all its deposit liabilities. The ratio will be obtained from the annual financial statements of the commercial banks as at the end of each year from 2007 – 2011.

CHAPTER FOUR

DATA ANALYSIS AND INTREPRETATION OF RESULTS

4.1 Introduction

The objective of this study was to establish whether there is a significant relationship between equity prices and financial performance of commercial banks quoted at the NSE. Financial performance of 8 commercial banks was reviewed for a period of five years from 2007 to 2011. The population of the study comprised all banks that were continuously listed at the NSE for the five year period.

The research was based on a multiple regression model. Pearson product moment coefficient was used to establish whether there was a linear relationship between the variables. Analysis was done using MS Excel 2007 spreadsheet software.

The expectation of the study was that better financial performance proxied by earnings per share, dividend per share, core capital to total risk weighted assets and liquidity ratio would lead to higher share prices.

4.2 Summary Of Descriptive Statistics Of The Variables

Table 1

	Earnings Per Share	Dividend Per Share	Core Capital/Risk Assets	Liquidity Ratio
Minimum	0.64	0	0.12	0.2
Maximum	19.75	13.5	0.46	0.77
Mean	5.31	2.31	0.22	0.37
Median	3.66	1.1	0.18	0.34
Standard Deviation	5.05	3.54	0.09	0.11
Kurtosis	1.69	3.88	0.15	2.58
Skewness	1.60	2.27	1.08	2.00

The descriptive statistics in Table 1 only quantitatively describe the main features of the data collected. The statistics are supplemented by more incisive quantitative analysis of correlation and multiple regression analysis.

4.3 Correlation Analysis

The Pearson correlation coefficient was used to measure the strength of the linear association between the variables. Basically, a Pearson product-moment correlation attempts to draw a line of best fit through the data of two variables, and the Pearson correlation coefficient, r , indicates how far away all these data points are to this line of best fit. The Pearson correlation coefficient, r , can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association, that is, as the value of one variable increases so does the value of the other variable. A value less than 0 indicates a negative association, that is, as the value of one variable increases the value of the other variable decreases. The correlation matrix below is an important indicator that tests the linear relationship between the variables.

Table 2

	Share Price	Earnings Per Share	Dividend Per Share	Core Capital/Risk Weighted Assets	Liquidity Ratio
Share Price	1				
Earnings Per Share	0.5528	1			
Dividend Per Share	0.6519	0.8145	1		
Core Capital/Risk Assets	-0.0864	-0.3221	-0.3423	1	
Liquidity Ratio	0.5169	0.3424	0.4572	0.2362	1

The correlation matrix provides insight into which of the independent variables are related to price. Dividend per share has the highest and positive linear relationship with an r of 0.6519. Earnings per share and liquidity ratio were also positive and relatively strong with an r of 0.5528 and 0.5169 respectively. There is a weak negative correlation between share price and core capital to total risk weighted assets of with an r of -0.0864.

Correlation between share price and each of the four independent variables is expressed diagrammatically through scatter diagrams as follows.

Figure 1 – Scatter diagram of the relationship between Share Price and EPS

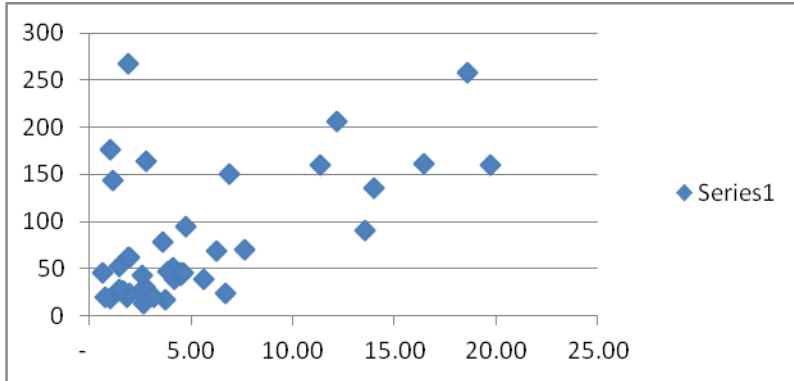


Figure 2 - Scatter diagram of the relationship between Share Price and DPS

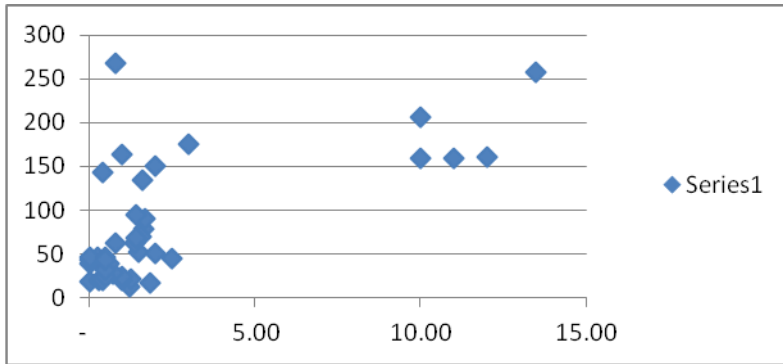


Figure 3 - Scatter diagram of the relationship between Share Price and Core Capital to Risk Weighted Assets Ratio

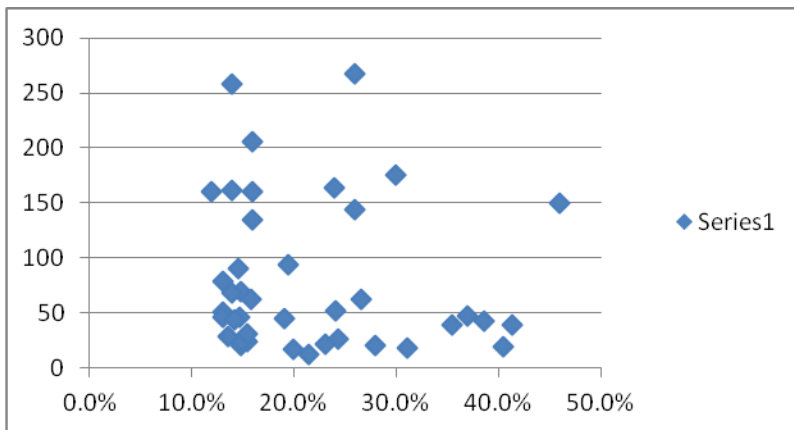
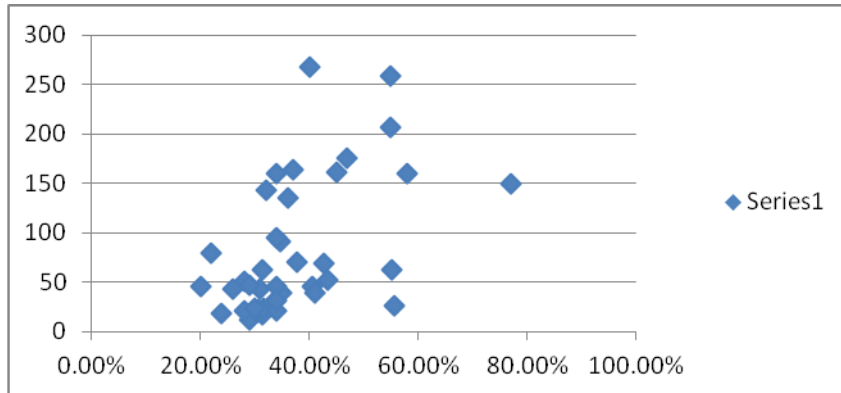


Figure 4 - Scatter diagram of the relationship between Share Price and Liquidity ratio



4.4 Multiple Regression Analysis

4.4.1 Yearly Regression

Regression was first done individually for each year of the study period and below are the results:

Table 3 – Year 2011

R square	0.533134		
ANOVA F- Statistic	0.856456		
	Coefficient	t-statistic	P-Value
Earnings Per Share	5.072644	0.500795	0.492595
Dividend Per Share	4.476706	0.347129	0.65095
Core Capital to Risk Assets	161.5378	0.174924	0.751419
Liquidity Ratio	544.8606	0.876413	0.872279

Table 4 – Year 2010

R square	0.37600		
ANOVA F- Statistic	0.451925		
	Coefficient	t-statistic	P-Value
Earnings Per Share	2.006013	0.137166	0.7924
Dividend Per Share	12.93663	0.594297	0.89959
Core Capital to Risk Assets	55.86554	0.065609	0.59415
Liquidity Ratio	-93.329	-0.16158	0.95182

Table 5 – Year 2009

R square	0.508678351		
ANOVA F- Value	0.776495		
	Coefficient	t-statistic	P-Value
Earnings Per Share	-6.036094156	-0.42667	0.769209
Dividend Per Share	13.75792915	0.892537	0.698389
Core Capital to Risk Assets	109.9235526	0.401918	0.437865
Liquidity Ratio	312.8709943	0.502934	0.714665

Table 6 – Year 2008

R square	0.83272		
ANOVA F- Value	3.733509		
	Coefficient	t-statistic	P-Value
Earnings Per Share	-7.98711	-1.13908	0.418281
Dividend Per Share	6.876921	0.652136	0.337392
Core Capital to Risk Assets	-22.2965	-0.15961	0.560823
Liquidity Ratio	461.1801	1.786515	0.883326

Table 7 – Year 2007

R square	0.949584		
ANOVA F- Value	14.12636		
	Coefficient	t-statistic	P-Value
Earnings Per Share	15.3318	1.322375	0.526555
Dividend Per Share	-3.73798	-0.27455	0.277821
Core Capital to Risk Assets	-139.985	-0.75073	0.801482
Liquidity Ratio	124.6376	1.504788	0.507337

4.4.2 Overall Regression

Multiple regression analysis was done for all the years combined from 2007 to 2011. Table 8 below shows the regression results:

Table 8

<i>Regression Statistics</i>					
Multiple R		0.699715443			
R Square		0.489601702			
Adjusted R Square		0.431270468			
Standard Error		51.89054967			
Observations		40			
<i>ANOVA</i>					
		<i>df</i>	<i>SS</i>	<i>MS</i>	<i>Significance F</i>
Regression		4	90402.05186	22600.51	8.393474
Residual		35	94242.02008	2692.629	0.000074
Total		39	184644.0719		
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	
Intercept	-12.754	32.893	-0.3877	0.7006	
EPS	1.2748	2.8472	0.4477	0.6571	
DPS	9.1933	4.5071	2.0397	0.0490	
CC	33.0134	107.5404	0.307	0.7607	
L	155.5031	92.7701	1.6762	0.1026	

4.5 Summary and Interpretation of Findings

The correlation results show that dividend per share has the highest and positive linear relationship with an r of 0.6519. Earnings per share and liquidity ratio were also positive and relatively strong with an r of 0.5528 and 0.5169 respectively.

In regression analysis in 2011 the R Square indicated that 53.3% variation in share prices was explained by variation in earnings per share, dividend per share, core capital to risk weighted assets and liquidity. The relationship between share price and all the financial performance measures was positive as evidenced by the positive coefficients.

In the year 2010 37.6% of the variation in share price was explained by variation in earnings per share, dividend per share, core capital to risk weighted assets and liquidity as indicated by the R Square. The relationship between share price and the financial performance measures other than liquidity was positive as evidenced by the positive coefficients.

In the year 2009 50.9% of the variation in share price was explained by variation in earnings per share, dividend per share, core capital to risk weighted assets and liquidity. The relationship between share price and the financial performance measures other than earnings per share was positive as evidenced by the positive coefficients.

In the year 2008 83.3% of the variation in share price was explained by variation in earnings per share, dividend per share, core capital to risk weighted assets and liquidity. The relationship between share price and dividend per share and liquidity was positive whereas it was negative against earnings per share and core capital to total risk weighted assets.

In the year 2007 95% of the variation in share price was explained by variation in earnings per share, dividend per share, core capital to risk weighted assets and liquidity. The relationship between share price and earnings per share and liquidity was positive whereas it was negative against dividend per share and core capital to total risk weighted assets.

In all individual years the four independent variables of earnings per share, dividend per share, core capital to risk weighted assets and liquidity ratio did not have a statistically significant relationship with share price as shown by the high P-values. P-values indicate the likelihood that

the relationship occurred by chance. Also the t-statistic for all the independent variables was low for the individual years showing that the relationship was insignificant.

In the overall regression results the R Square indicates that 48.96% of variation in share price is explained by the variation in the independent variables of earnings per share, dividend per share, core capital to total risk weighted assets and the liquidity ratio. The equation of the model is as shown below:

$$Y = -12.754 + 1.27EPS + 9.19DPS + 33.01CC + 155.50L$$

The coefficients are all positive which shows that all financial performance measures have a positive relationship with share price. The overall model is statistically significant since F-Statistic is 8.39. However, among the individual financial performance measures only dividend per share has a significant relationship as evidenced by the P-Value for dividend per share which was 0.049 indicating that only 4.5% of the relationship occurred by chance. Also the dividend per share had high t-statistic of 2.0397 indicating the relationship was significant.

In the regression equation an increase in earnings per share by 1 leads to an increase in share price by 1.27 holding the other independent variables constant whereas with an increase in dividend per share by 1 the share price changes by 9.19. Change in core capital to risk weighted assets by 100% causes a change of 33% in share price whereas change in liquidity ratio by 100% causes a change of 15.5% in share price all other independent variable held constant.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This study sought to establish the relationship between equity prices and financial performance of listed commercial banks. The financial performance measures used were earnings per share, dividend per share, core capital to risk weighted assets and liquidity ratio.

Correlation analysis established that there was relatively strong and positive linear relationship between earnings per share, dividend per share, liquidity ratios and share price all with a Pearson correlation coefficient of above 0.50. However, the relationship between share price and core capital to risk weighted assets was weak and negative with an r of -0.0864. Correlation analysis was used to test the strength of the variables in the regression model.

Regression analysis results on a year to year basis had conflicting results indicating uneven relationship between share price and the financial performance measures. All four performance measures had a positive relationship with share price in the year 2011. The four financial performance measures changed their relationship from positive to negative at some point going backwards to year 2007. However, none of the yearly regression results showed significant relationship between share price and the four financial performance measures.

Overall regression results showed that there was positive relationship between share price and earnings per share, dividend per share, core capital to risk weighted assets and liquidity ratio. However out of these measures only dividend per share had a statistically significant relationship with share price. This suggests that investors at the NSE prefer commercial banks that pay a higher dividend. This is consistent with a study done by Mwangi (2011) which established that dividend per share had a positive effect on the value of companies listed at the NSE. Conversely, a study done by Wanjohi (2007) concluded that the relationship between share prices and profit before tax, turnover and dividends was uneven from year to year and where there was a relationship it was not significant.

5.2 Conclusion

There is a positive relationship between share price and financial performance. However, using multiple regression analysis only the relationship between share price and dividend per share was found to be statistically significant. This suggests that banking sector investors at the Nairobi Securities Exchange use dividends per share in arriving at the price of the shares. This is consistent with previous studies done on effect of dividend policy on share prices at the Nairobi Securities Exchange such as Bitok (2004) who found that there was a relationship between dividend payout and the value of the firm and Nura (2000) on his study on impact of dividend payments on shareholder wealth found that dividend payment had significant impact on share price.

The other financial measures of earnings per share, core capital to risk weighted assets and liquidity ratio did not have a significant relationship with share price. A study done by Wanjohi (2007) concluded that the relationship between share prices and profit before tax, turnover and dividends was uneven from year to year and where there was a relationship it was not significant.

There was no significant relationship between earnings per share and share prices. This suggests that investor of the banking sector at the NSE prefer firms that have distributed earnings in the form of dividends rather than retained earnings. This is consistent with a study by Diamond (1967) who found that for mature industries, the market had a preference for dividend over retained earnings.

Core capital to risk weighted assets did not have a significant relationship with share price. Liquidity ratio also did not have a significant relationship with share price. This suggests that banking sector investors do not incorporate banking ratios to arrive at the share price. Although the statutory minimum of core capital to risk weighted assets is 12% each bank has its own composition of assets leading to varying ratios but above the statutory minimum. The statutory minimum for liquidity ratio is 20% but each bank has its own combination of liquid assets and deposit liabilities leading to varying ratios across banks but above the statutory minimum.

5.3 Policy Recommendations

The results suggest that investors of commercial bank shares at the NSE only take into account dividend per share to arrive at the share price and could be ignorant of bank specific financial performance ratios such as core capital to risk weighted assets and liquidity ratio. The Central Bank of Kenya may conduct research on the extent of use of the banking ratios by investors and depositors in decision making and consider educating them on the importance of the ratios and how to use them. The research may focus on the use of CAMEL rating system by banking sector investors and the general public who make deposits in commercial banks. It may look at Capital Adequacy to gauge the extent of use and understanding of capital adequacy ratios and the different levels of capital including Tier I and Tier II Capital. Use of measures of Asset Quality such as non performing loans to gross loans may be investigated. Finally the use of liquidity ratio may be assessed.

The management of commercial banks may review their dividend policies as this study has established that dividend per share has a significant effect on the share price. Other financial performance measures including earnings per share were found not to have a significant effect on share prices. This indicates that distributed earnings are preferred by banking sector investors over retained earnings. Some banks had constant dividend payouts while other varied from year to year.

The Capital Markets Authority may review the efficiency of the Nairobi Securities Exchange. Share prices would be expected to have a significant relationship with the financial performance of the commercial banks including earnings per share. However, this study found that out of four financial performance measures only dividend per share had a significant relationship with share price. Further research may be done in all sectors of the NSE to establish if it is efficient and make recommendations for improvements.

5.4 Limitations Of The Study

The data used was only for end of year figures. Commercial banks publish quarterly reports which could be used progressively by investors for decision making such that by the end of the year reaction has already been made to the quarterly figures.

The study is based on the assumption that information is disseminated instantly at the NSE which may not necessarily hold.

The study was confined to the Nairobi Securities Exchange yet Kenyan banks operate subsidiaries in other countries within the region.

There were only four financial performance measures used but there are other measures that could be used.

5.5 Suggestions For Further Research

A similar study may be done using quarterly data. This is because information content of quarterly reports may be reflected in share prices as it is announced.

A study using other financial measures may be conducted. Other bank specific financial ratios such as core capital to deposits ratio, non performing loans to gross loans and advances may be used.

Since only 49% of variation in share price is explained by the financial performance measures used further studies may be done to explain the 51% variation.

The study may be expanded to the East African region where Kenyan banks operate subsidiaries. Comparison may thus be done with stock exchanges in Uganda and Tanzania.

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APPENDIX I

Commercial Banks Listed At NSE

	Name
1	Barclays Bank Kenya Limited
2	CFC Stanbic Bank Limited
3	Co-operative Bank Limited
4	Diamond Trust Bank
5	Equity Bank
6	HFCK
7	Kenya Commercial Bank
8	National Bank of Kenya
9	NIC Bank
10	Standard Chartered Bank

APPENDIX II

Five Year Financial Data

	As at 31st December	2011	2010	2009	2008	2007
1	Barclays Bank					
	Share Price	*52.2	62.5	45	50.5	79
	EPS	1.49	1.95	4.49	4.09	3.60
	DPS	1.50	1.36	2.50	2.00	1.65
	Core Capital/Total Risk Weighted Assets	24.1%	26.6%	19.1%	13.10%	13.03%
	Liquidity Ratio	43.30%	55.10%	40.50%	28.20%	22%
2	Diamond Trust Bank					
	Share Price	90.5	135	70	68.5	94.5
	EPS	13.58	14.01	7.67	6.28	4.72
	DPS	1.70	1.60	1.55	1.40	1.40
	Core Capital/Total Risk Weighted Assets	14.60%	16.00%	14.80%	14.00%	19.50%
	Liquidity Ratio	34.80%	36.20%	37.80%	42.80%	34.00%
3	Equity Bank					
	Share Price	**164	**267.5	**143.5	176	150
	EPS	2.79	1.93	1.14	1.06	6.88
	DPS	1	0.8	0.4	3	2
	Core Capital/Total Risk Weighted Assets	24%	26%	26%	30%	46%
	Liquidity Ratio	37%	40%	32%	47%	77%

APPENDIX II

	As at 31st December	2011	2010	2009	2008	2007
4	HFCK					
	Share Price	12.4	26.5	18	19.4	45.75
	EPS	2.7	1.65	1.02	0.79	0.64
	DPS	1.2	0.70	0	0.30	0.25
	Core Capital/Total Risk Weighted Assets	21.42%	24.37%	31.08%	40.52%	13.12%
	Liquidity Ratio	29.10%	55.73%	23.90%	30.40%	20%
5	Kenya Commercial Bank					
	Share Price	16.85	21.75	20.5	23.5	28.5
	EPS	3.72	2.76	1.84	1.97	1.47
	DPS	1.85	1.25	1.00	1.00	0.7
	Core Capital/Total Risk Weighted Assets	19.90%	23.10%	14.80%	15.50%	13.60%
	Liquidity Ratio	31.30%	30.74%	28.13%	31.60%	33.30%
6	National Bank of Kenya					
	Share Price	20.25	38.75	39	43	46.75
	EPS	3.19	4.18	5.61	4.5	3.89
	DPS	0.40	0.60	0	0	0
	Core Capital/Total Risk Weighted Assets	27.93%	35.50%	41.30%	38.60%	37.00%
	Liquidity Ratio	34%	41%	35%	31%	29%
7	NIC Bank					
	Share Price	24	46	31.25	43.5	62.5
	EPS	6.72	4.6	2.75	2.63	1.89
	DPS	0.5	0.5	0.5	0.5	0.8
	Core Capital/Total Risk Weighted Assets	14.98%	14.64%	15.48%	14.21%	15.84%
	Liquidity Ratio	30%	34%	34%	26%	31.50%
8	Standard Chartered Bank					
	Share Price	160	258	161	160	206
	EPS	19.75	18.58	16.45	11.34	12.14
	DPS	11	13.50	12.00	10	10
	Core Capital/Total Risk Weighted Assets	12%	14%	14%	16%	16%
	Liquidity Ratio	34%	55%	45%	58%	55%

*The share price has been adjusted to reflect a share split of 1:4 in 2011.

** The share price has been adjusted to reflect a share split of 1:10 in 2009