EFFECTS OF DIVIDEND POLICY ON STOCK PRICES FOR BANKS LISTED AT THE NAIROBI SECURITIES EXCHANGE

BY

PATRICK M. MUSEMBI

D61/87848/2016

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS ADMINISTRATION, UNIVERSITY OF NAIROBI.

2018

DECLARATION

This research project is my original work and has not been presented for any degree award in any other university.

Signed……………………….. Date………………………

PATRICK M. MUSEMBI

D61/87848/2016

Supervisor's Declaration

The project has been approved with my authority as University supervisor.

Signed……………………… … Date………………………

Supervisor: Mr. Martin Odipo

ACKNOWLEDGEMENTS

I'm grateful to the Heavenly Father for the opportunity to undertake MBA at the University of Nairobi. I would also like to thank my supervisor, Mr. Odipo for his invaluable guidance throughout the study.

I'm grateful to my wife Faith Wanza and my children Paul Muinde and Susan Muinde for their support and understanding throughout the entire postgraduate study period at the University. You are wonderful souls.

Finally, I wish to thank the University of Nairobi for the flexible MBA program

DEDICATION

I dedicate this research project to my late dad Mr. Julius Musembi, my mum Mrs. Susan Musembi who encouraged me to pursue education for it is power. Special dedication goes to my Elder Sister, Winfred Ndinda for her support during my studies in High School and Undergraduate studies. Indeed your sacrifice was not in vain.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ANOVA – Analysis of Variance

CMA – Capital Markets Authority

DE – Debt to Equity Ratio

DPR – Dividend Payout Ratio

IFC – International Finance Corporation

LSE- London Stock Exchange

MM - Modigliani & Miller

MP – Market Price

NSE - Nairobi Securities Exchange

NYSE - New York Stock Exchange

OLS – Ordinary Least Squares

PE – Price to Earnings Ratio

REPS - Retained Earnings Per Share

ROA – Return on Assets

SPSS - Statistical Package for Social Science

UK – United Kingdom

USA – United States of America

ABSTRACT

Dividend policy is a strategy used by a company to determine the amount and timing of dividend payments. The dividend policy adopted by an organization is one of the important issues in corporate finance as it may have an impact on the firm's value and shareholder wealth. The research study is an attempt to analyze the effect of dividend policy on shareholder wealth of eight banks listed and traded at the Nairobi Securities' Exchange (NSE). For the purpose of this study the financial data from the period 2013-14 to 2017-18 of the eight banks would be used. The data would be analyzed using statistical tools such as multiple regression technique, t test, the coefficient of determination (R^2) and F-Value. The dependent Variable used is Market Value of shares to be regressed against the independent variables: - Dividend per share, Return On Assets which is a proxy for profitability and Leverage measured by Debt- Equity Ratio. The results of the data analysis will determine whether there is a significant effect of dividend policy on the share price of the eight listed Banks. The study is limited to a time period of 5 years and eight banks listed at NSE.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Dividend policy is an important aspect of corporate finance. According to studies by John Linter (1956), dividend policy involves the distribution of incomes of corporations among dividends, retained earnings and taxes. A dividend decision will involve deciding on how much income to distribute or retain. Many studies have been done by scholars but still it appears that a consensus has not been arrived at on the effect of dividend policy adopted by a firm on the market price of its shares. Modigliani and Miller (1961), argued that when a firm is making returns it is irrelevant whether the returns to shareholders are in terms of present dividends or capital gains hence the dividend irrelevance theory.

The shareholder could earn by selling more shares or obtain more shares by buying from the market. A good number of studies on the contrary still support the relevance of the dividend policy. Linter (1956) in his study shows the importance of dividend policy by illustrating that shareholders prefer a smooth flow of dividends. The Gordon Model (1959) illustrates that the market price of a share and the firms dividend rate are related hence the importance of the dividend policy adopted.

The best dividend policy is argued by different scholars to be the one that enables shareholders maximize their wealth and increases the firms' market price of shares. Still there exists no consensus on the contribution of dividend policy to the market price of shares. Dividend policy remains an important tool in wealth maximization, Baker & Kent (2009).

It is also a requirement by the CMA for companies that intend to be quoted at the NSE to devise a clear dividend policy (Kenya Gazette Supplement No. 40, 2002). This requirement makes it necessary for the management to focus on dividend policy.

1.1.1 Dividends and Stock Prices

Dividends are paid by corporations to their shareholders either as profit distributions or from past retained earnings. Corporation earnings are ploughed back to business as either retained earnings or paid as dividends or both in either cash or stock. If the company has a dividend re investment plan, the dividends are paid by issuance of further shares. There follows that the relationship between dividend payment and retained earnings is inverse i.e. the more dividends you pay the lesser the proportion left for retained earnings and vice versa. Shareholders are paid dividends proportionate to their shareholding to compensate them for assuming the risk of investment and also for time value of money compensation.

Dividend payment decision is a core financial decision that has far outreaching implications on the firm's value and future performance. It involves either retaining more funds for reinvestment or distributing profits inform of dividends. According to Watts (1973), dividends sign al a very important information that is used by market players to forecast the firm's future performance.

Al-Malkawi (2005), contents that due to scarcity and unreliability of financial data, market players could not reliably predict future market performance of firms hence dividend policy was a convenient tool that expressed the management take on the expected future performance.

1.1.2 Stock Prices

The market price of a share is the price at which a unit of a saleable stock of a given company is retailing at the securities exchange. In the security market, different securities are offered for sale and these include stocks, bonds and options. The

1.1.3 Forms of Dividend Payment

Dividends may be paid in cash through electronic funds transfer, cheque, or printed money. Cash payment is the most common type of dividend payment in practice. The income in form of cash dividend is usually taxed at source for most countries but at preferential rates to encourage investment. The dividend distribution amount is proportional to a shareholders holding. Another form of dividend is the script or stock dividend. This dividend is issued inform of bonus shares proportionate to one's shareholding. The dividends issued in stock form are not eligible for taxation except upon transfer through sales.

1.1.4 Dividends and Share Prices

The efficient market hypothesis, advocates that the price of shares in an efficient market incorporates all available information. Allen Bradley and Myers (2011) contend that in an efficient market can't beat the market all the time and earn above normal returns. The price of shares is commensurate with the value of the shares and is a fair investment for future expected cash flows discounted by a relevant cost of capital. Dividend payment, according to signaling theory, Watts (1973), signifies certain information to the public.

Miller and Modigliani (MM, 1961)) argues that in absence of taxes, transaction costs and other market imperfection, the dividend policy doesn't affect the value of the firm.

Dividend payment is affected by a number of factors. These include: - Financial leverage, profitability, and firm size and growth opportunities. A number of studies have been done which show that profitability and dividend payment have a positive relationship. According to Gugler & Yurtoglu (2003), financial leverage and dividend payment is negatively related since high leverage implies high cost of doing business and hence reduced profits for dividend payment. Kumar and Mohan (1975) argue that the market price of shares is affected by both the actions of the firm to retain earnings or pay dividends. High growth companies require more cash/ retained earnings for reinvestment or expansion of activities hence low levels of dividend payment. Low growth companies will share their profits since no pressure for expansion.

Okafor and Mgbame (2011) illustrated that dividend yield and market price changes are positively correlated while dividend payout ratio and stock price changes are negatively correlated.

Hussainey, et al. (2011) illustrates that a positive correlation exists between dividend yield and stock price changes of stocks and that stock prices and dividend payout ratio are negatively correlated.

In conclusion, most researchers demonstrated that dividend payment and stock prices are significantly related. Zhou and Ruland (2006) and Pandey (2004)) demonstrated that an increase in dividends increases the investors' confidence.

1.1.5 Nairobi Securities Exchange

Initially, stocks were not availed for sale at a formal place of business like the various stock exchange we have at the present. All this was done on a gen tle man's agreement between the various parties. The Nairobi Stock Exchange was set up in 1953 and it is then that it was recognized by the London Stock Exchange as a stock market. At this time, the east African community comprised of Kenya, Uganda and Tanganyika and were the main players at the exchange. With the fall out of the East African Community in 1977, the free movement of capital between the three states was restricted and led to the deregistration of the Uganda and Tanganyika firms from the NSE.

To date the Nairobi Securities exchange deals with different securities from different sectors and thus offers investors the ability to quickly sell their securities and raise capital. The stock market also provides market information to its stakeholders. The NSE is governed by regulations from the Capital Markets Authority formed in 1990. This has improved transparency in the activities of NSE and improved the flow of information amongst market participants. The activities of the participants are also regulated hence a peaceful coexistence by promoting order and efficiency in the market.

1.2 Research Problem

Nairobi securities exchange has faced market price fluctuation of investments and this has been due to capital flight among other factors. The banking sector is adversely affected by the capping of interest rates in Kenya by the Minister of Finance through an act of parliament. Due to this uncertainty, it has been a challenge for investors to determine the most viable investments to invest in. We sought to examine whether the dividend policy is a leading factor in influencing the market price of shares among other intervening variables.

Since studies by Linter (1956) and Fama (1968), dividend policy has been the subject of study by many researchers and corporate professionals. Despite the many theories and empirical studies around the subject, there has never been a consensus in regard to the relevance of corporate dividend policy in determining market price of shares. Market share price is of importance to potential and existing investors as will be used by prospective investors to decide how much money to pay for an investment without loss of value.

Various theories have been put in place that support dividend relevance theory as well as the Modigliani & Miller (1961) theory on dividend irrelevance. The literature about dividend policy grows day by day even though black (1976) concludes dividend policy is complicated with various unanswered concerns that cant can't be easily addressed. It is in this regard that the researcher will use data collected from the 8 banks listed at the Nairobi Securities Exchange to establish the relationship between dividend policy and market price of stocks.

1.3 Objective of the Study

1.3.1 Main Objective

The main objective of the study is to establish the relationship between dividend policy and market price of stocks of banks quoted at the NSE.

1.3.2 Specific Objectives

To achieve the major objective of the study, the researcher narrowed down to specific objectives. These include

1. To establish the relationship between market price of shares and dividend payout Ratio of firms quoted at NSE

2. To establish the relationship between market price of shares and financial leverage of firms quoted at NSE

3. To establish the relationship between market price of shares and profitability i.e. Return on Assets of firms quoted at NSE

1.4 Value of the Study

Investors in the stock exchange are willing to know what dividend policies will enable them maximize their returns. By establishing the relationship between dividend policy and market prices of shares, the investors will get to understand the effect of their actions as regards to their dividend policy adopted and hence adopt the best strategy to maximize their returns. The information obtained will also enrich past academic studies on the subject matter as this seems to be one of the controversial topics of study where up to date there is no consensus as regard to relevance of dividend policy especially after the Modigliani and Miller (1961) studies on the dividend irrelevance theory.

The information provided will also be used by research economists in financial capital budgeting analysis. Finance managers will also use the information provided to formulate dividend policies for wealth and market price optimization.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

2.1.1 Modigliani and Miller

The Modigliani and Miller theory is divided in to three parts, i.e. Modigliani & Miller 1958, 1961 & 1963. Modigliani & Miller (1958) established that the market value of a firm is not influenced by its degree of leverage. The second part, Modigliani & Miller (1961), Postulates that the financial structure of a firm doesn't affect its value especially in absence of taxes, bankruptcy costs, agency costs and asymmetric information.

The third part, Modigliani & Miller (1963) argues that the value of the firm is not affected by the dividend policy of the firm hence the dividend irrelevance theory.

Modigliani and Miller (1963) argues that of importance to the shareholders is the firm's performance, whether the returns are distributed as dividends or reinvested is not of significance to the value of the firm. The theory holds in absence of taxes. However, where tax is involved, the debt interest is tax allowable hence the firm's value increases proportionately to amount of debt issued ceteris paribus due to tax savings.

2.1.2 Bird in Hand Theory

This is a theory that was developed by Gordon (1963) and Lintner (1964) as a response to the Modigliani & Miller irrelevance of dividends theory which argues that investors are indifferent to whether investment proceeds are from profit distributions or capital appreciation

The theory acknowledges investor preference of dividends over future capital appreciations due to future uncertainties on the appreciation. As the saying goes, "a bird in hand is worth ten in the bush" so is investors preference of dividends over uncertain higher future returns.

2.1.3 Tax preference theory

The theory was done by Litzenberger and Ramaswamy. Where taxation is involved, payment of dividends attracts more taxation in comparison to taxation on capital gains. Since taxation on capital gains is lower, investors would reinvest to avoid paying high taxes which encourages investment. Secondly, tax on capital gains is not due until the transfer date. They further argued that if a stock holder dies, tax on capital appreciation is forfeited. Beneficiaries will value them at base costs and avoid paying tax on capital appreciation since there is none.

2.1.4 Clientele Effect Theory

According to this theory, investors have different needs for either dividends or capital gains. Different groups or clientele of stock holders are attracted to different investment firms which match to their dividend needs.

Al-Malkawi (2008) contends that at early development stages of a firm, the requirement for funds is normally high hence most of the funds will be retained for reinvestment. Firms at maturity growth stage will have no need for more funds for reinvestment and will distribute their earnings to their clientele. These firms offer investment opportunities to shareholders who rely on the dividend payment to cater for their bills.

Al-Malkawi (2008) argues that the different clientele are either influenced by transaction costs or taxation. Investors in high income brackets prefer investments which pay little or no dividends and benefit from the future capital appreciations while those in lower income brackets prefer regular dividend payment investments.

2.1.5 Signaling Theory

MM argued that companies are reluctant to reduce dividends and hence do not raise unless they anticipate higher returns in future. Thus a higher than expected dividend signals to investors that the management forecasts a higher future return. Conversely, a reduced dividend payment signals that the management forecasts reduced future returns. According to MM, investors acknowledge that management of firms signals certain information by paying or not paying dividends.

2.1.6 Agency Costs Theory

An agency relationship exists in situations where an agent acts on behalf of the principal. To ensure that the principles interests are taken care of and that the agent doesn't act in contravention of the principals expectations, the principal incurs monitoring costs. The principal remunerates the agent for services rendered. These costs arise to solve the problem of conflict of interest between the shareholders and the management. Jensen and Meckling (1976) argues that in capital structure decisions, the cost of equity which is leveraged can be reduced in order for investors to reduce the agency costs, thus increasing the firm's market value. Financial leverage can be used to reduce the agency costs.

2.2 Determinants of share prices

Collins (1975) for Banks in US identifies net profit, operating earnings, dividend and book value as determinants of share prices. Several scholar have also researched deeper to identify the factors influencing share prices.

Sunde and Sanderson (2009) established determinants of share prices to be corporate earnings, market liquidity and Stability, availability of Substitutes, and Government policy. Macroeconomic fundamentals such as interest rates and inflation, investor sentiments and technical influences such as ranking of counters were found to be of influence. Enow and Brijlal (2016) established that DPS, EPS, and PE affect share price.

Uddin (2009) in his study found that except Philiphine, the other countries studied, there interest rates were significantly negatively related with share prices or changes of interest rate with changes of share price or both.

Sunde & Sanderson (2009) reviewed on factors that influence share prices in Zimbabwe Market. These factors were found to be corporate earnings, management, lawsuits, mergers and takeovers, market liquidity and stability, availability of substitutes, government policy, macroeconomic fundamentals, investor sentiments, technical influences, and analyst report as factors influencing share price. Nirmala, Sanju, and Ramachandra (2011) identified dividend, profitability, price earnings ratio, and leverage as possible determinants of share prices. All these research findings and many more are consistent with one another and seem to complement each other

2.3 Empirical Review

Many studies have been undertaken in an attempt to explain the relationship between dividend policy and market price of shares. There seems to be no consensus on the subject matter especially after the Modigliani and Miller (1961) study on dividend irrelevance theory.

Gordon (1963) takes a different perspective on the matter by arguing on dividend irrelevance theory, whether investors' returns are as a result of capital gains or from profit distributions. Baker and Powell (2012) on a study on Dividend policy in Indonesia: Survey evidence from executives shows that Indonesia managers consider expected future earnings and their stability to be crucial in dividend policy determination. In their results they show that the value of the firm is influence by the dividend policy using theories like signaling theory.

The Gordon Model (1959) illustrates that the share price and the firms dividend rate are related hence the importance of the dividend policy adopted. AL-Malkawi (2010) on a study on dividend policy theories demonstrated that the Miller and Modigliani (1961) theory was true by showing that dividend policy of a firm is inferior to its investment policy hence its significant contribution to its value. Baker and Powell (1999) researched on effects of dividend policy on firm's value and established that dividend policy determines to a greater extent the firm's value and its cost of capital. Ndeto (2014) Researched on relationship between dividend payout ratio and the value of the firm for firms listed at the Nairobi Securities Exchange and found that there is a positive significant relationship between dividend payout Ratios and value of the firm for firms listed at the NSE.

The literature about dividend policy grows day by day even though Black (1976) portrays a complicated image of the dividend policy which appears more complicated the more we look at it.

2.3.1 Conceptual Framework

The framework comprises of independent and dependent variables. In this case the response variable is the market price of shares. The predictor variables are the dividend payout Ratio, Return on assets and market leverage which all contribute to the market price of shares but in different proportions. In this regard we seek to analyze the relationship between the two variables.

Figure 2.1: Conceptual frame work

Independent variables   **Dependent Variable**

| Return on Assets |
| Dividend Pay Out Ratio | → | Market price of shares |
| Debt –Equity ratio |
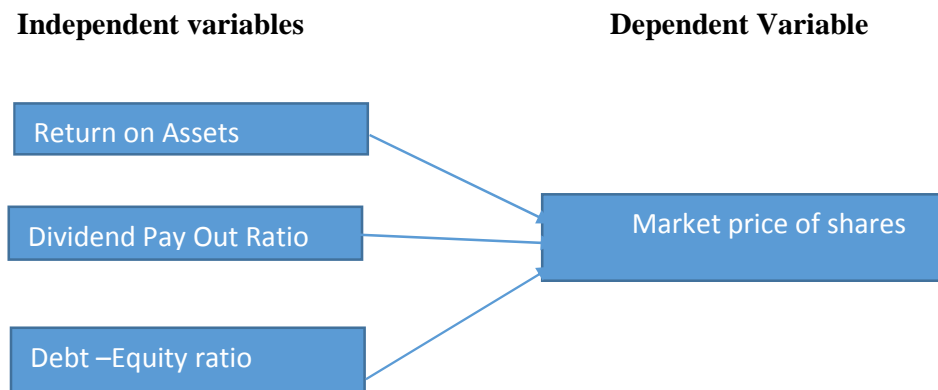
2.3.2 Research Gap

Dividend policy is one of the widely studied topic by scholars. Despite this, there has never been an agreement on the effects of dividend policy on market price of stocks, the studies narrow down two positions, i.e. dividend relevance and dividend irrelevance. In undertaking the study of effects of dividend policy on market price of banks listed at the NSE, the researcher will be enriching the available knowledge on the past studies and also identify any discrepancies that might arise.

2.4 Summary of Literature Review

To understand the dividend puzzle as put forth by Black (1976), many studies have been undertaken by scholars. The theories on dividend policy can be classified in to two, those that support the dividend relevance theory and those against it. Modigliani and Miller (1961), argued that shareholders don't care whether the returns are as a result of capital gains or dividend payment.

On the contrary, there are theories in support of the dividend relevance theory. These include the signaling theory, the bird in hand theory, Tax preference theory, the clientele effect and agency costs theory. The bird in hand advocates that investors have preference for immediate dividends in comparison to future uncertain capital appreciation.

Clientele effect demonstrates that different clientele have different needs hence each will be attracted to a company with a dividend policy that satisfies its desires hence the dividend policy relevance. Signaling theory argues that investor's reaction to dividend announcements do not necessarily mean that investors have preference for dividends over retained earnings but rather indicate that there is a signal in dividend announcements hence price movements. This makes the dividend policy relevant as it signals a certain information to the public. Dividend policy is also relevant in cases where clientele has different tax preference; whether to pay tax now or in the future, and different tax brackets are available for dividend earnings and capital gains hence the relevance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter is structured around research design, target population, data collection and Analysis.

3.2 Research Design

The Research design in this case refers to the methods and procedures to be adopted in data collection and analysis. It is a framework to be adopted to organize the data collection and analysis in a logical way. According to Cooper and Schindler (2003) a descriptive study is concerned with finding out the what, where and how of a phenomenon.

In this study, the researcher chose to use descriptive statistics. This method will help us describe, explain and validate the findings of the research. Descriptive research design is deemed appropriate since we seek to analyze in depth the relationship between the dependent variable i.e. the market price of shares and each of the independent variables. The multiple least squares regression method will be adopted by the researcher to achieve the objectives of the study hypothesis.

3.3 Population

The study is carried out on eight banks quoted at the Nairobi Security Exchange. All of the banks under my study are spread out throughout the country with branches in different towns. The banks under my study are Equity, KCB, Barclays, Cooperative and Standard Chartered.

3.4 Data Collection

This researcher will use secondary data for the purpose of the study. Data was collected from the banks (Equity, KCB, Barclays, Cooperative and Standard Chartered,) public websites declared financial results, Capital Markets Authority Website and Nairobi Securities Exchange website. The data is Market prices of shares of the listed banks for each of the years from 2013/2014-2017/2018, Dividend Pay Out Ratio as per financial statements of the respective years, Return on Net Assets for each of the years and Debt Equity Ratios for each of the financial years, for the Eight listed banks for the five years (2013-14, 2014-15, 2015-16, 2016-17 and (2017-18) under study.

3.4.1 Definition and measurement of variables

The study investigates the effects of dividend policy on share price of banks quoted at the Nairobi Securities exchange using yearly financial data for the financial years 2013/2014 to 2017/2018. The involved variables are as illustrated below

Table 3.1 Variable Definition

Type	Variable	Transformation and measure	Variable description
Dependent variable	Market price of shares	nation and measure MP_{it}	Market Price of the stocks of the Listed bank in the year of study
Independent variables	Dividend Pay Out Ratio	TP_{it} DPR_{it}	Dividend Pay Out Ratio during the year under study
	Profitability	PR_{it} Dividend during the study ROA_{it} Return on measured	Return on Net Assets as measured by profits after tax and depreciation divided by total assets
	Leverage	mea tax divi DE_{it} This Rati	This is the Debt Equity Ratio of the firm as reported in the yearly financial results

3.5 Data Analysis

The study involves use of a multiple regression model with three independent variables under consideration. The three independent variables will then be regressed against the market share price at a 5% level of significance. ANOVA and F-test will be done on the results. Correlation analysis will determine the relationship between the variables. Correlation coefficient will be used to measure the degree or magnitude of relationship between dividends and share prices

3.5.1 Empirical Model

Multiple linear regression Model is the most commonly used model for making predictions. We assume that there is a continuous random variable called the dependent variable which in this case is the market price of shares. The independent variables are the Dividend Payout Ratio, the Return on Assets, which is a proxy for profitability, and Debt Equity Ratio, which is a measure for leverage.

Below is the Model

$$MPS_{it} = \beta 1 DPR_{it} + \beta 2 ROA_{it} + \beta 3 DE_{it} + e_{it}$$

Where

$MPS = Market\ price\ of\ shares$

$DPR = Dividend\ Payout\ Ratio$

$ROA = Return\ on\ Assets$

$DE = Debt\ Equity\ Ratio\ and$

$e_i = the\ error\ term$

$i = represents\ the\ firm$

$t = is\ number\ of\ observations\ over\ time$

$\beta 1, \beta 2\ and\ \beta 3\ are\ the\ coefficients\ for\ specific\ independent\ var\ variables$

3.6 Diagnostic Tests

To check the suitability of the model under consideration, the researcher will use ordinary least squares to test for

- Homoscedasticity- homogeneity of variance

- Normality- whether the variables are normally distributed

- Multi- Colinearity- whether there are serial or multi correlations between the variables

CHAPTER FOUR

DATA ANALYSIS

4.0 Introduction

This chapter revolves around inspection, cleaning ad modeling the collected data to discover useful information that will be used to make meaningful conclusions. The analysis is divided in to several parts and these include:-Descriptive statistics, Diagnostic tests, Reliability tests, Regression analysis, and Correlation tests.

4.1 Reliability tests

The researcher places the reliability of the study results on the reliability of the model in use. To ensure reliability of the results from the analysis, he chose to ensure the reliability of the model to be used.

The Cronbach's Alpha is used to test the internal consistency of the set of variable used. An Alpha of 0.7 is acceptable.

Table 4.1: Reliability Statistics

cronbach's Alpha	N of Items
0.73	4

The model alpha is 0.73 hence the model is reliable.

4.2 Descriptive statistics

These include tests of mean, variance, and standard deviation

Table 4.2: Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
Share Price	5	13.67	260.04	372.58	74.52	104.50	10921.27
Return On Assets	5	.03	.05	.18	0.036	0.01	0.00
Debt/Equity Ratio	5	4.78	5.56	25.66	5.13	0.32	0.10
Dividend Payout Ratio	5	.32	.58	2.30	0.46	0.11	0.01
Valid N (listwise)							

Source: Table is derived from the population data compiled for the study

The researcher used five observations from all the variables under study. The market share price was found to have a mean of 74.52 and a standard deviation of 104.50. Return on assets had a mean of 0.036 and a standard deviation of 0.01 while the variance was zero

Debt Equity ratio had a mean of 5.13 and a standard deviation of 0.32 while the variance was 0.10. The dividend payout ratio from the five observations had a mean of 0.46 and a standard deviation of 0.11 while the variance was 0.01

4.3 Diagnostic tests.

These are tests carried out to establish whether the underlying assumptions hold. These assumptions are normality, multi-collinearity and homoscedasticity.

4.3.1 Multi collinearity tests

Multi-collinearity is a situation where there is a strong correlation between the independent variables. In cases where the independent variables are highly correlated, it will be a challenge to identify the major contributors to the relationship with the dependent variable.

The researcher calculated the VIF using SPSS as tabulated below. Since the VIF value obtained was less than 5, the researcher concluded that there were no un acceptable multi-collinearity symptoms.

Table 4.3 : Coefficients

Model		Collinearity Statistics	
		Tolerance	VIF
	ROA	.790	1.265
1	DE	.783	1.276
	DPR	.933	1.071

a. Dependent Variable: MPS

Source: Table is derived from the population data compiled for the study

The researcher concluded that at 95% confidence level, there was no evidence of unacceptable collinearity between the independent variables that could significantly affect the relationship between the dependent variable and independent variables

4.4 Correlation Analysis

The researcher chose to use bivariate Pearson correlation. This was an attempt to establish the linear relationship between the dependent and each of the independent variables. The result is normally between -1 and +1. It can be best understood by looking at a scatter plot. The results of the correlation matrix are tabulated below.

Table 4.4: Correlations of the Model

		MPS	ROA	DE	DPR
MPS	Pearson Correlation	1			
DE	Pearson Correlation	-.27	1		
ROA	Pearson Correlation	-.46	.44	1	
DPR	Pearson Correlation	.44	-.21	-.23	1

 Source: Table is derived from the population data compiled for the study

The findings above show a positive correlation (+0.44) between market share price and dividend payout ratio. A negative correlation (-0.46) exists between return on assets and market price. There is also a negative correlation (-0.27) between debt equity ratio and market price.

From the above results, an increase in dividend payout ratio leads to an increase in the market share price and vice versa. Also a decrease in return on assets and a decrease in debt equity ratio leads to an increase in market share price.

4.5 Regression Analysis

Regression results of the whole market

Below is the Model

$$MPSit = \beta 1DPRit + \beta 2ROAit + \beta 3DEit + eit$$

Where

$MPS = Market\ price\ of\ shares$

$DPR = Dividend\ Payout\ Ratio$

$ROA = Return\ on\ Assets$

$DE = Debt\ Equity\ Ratio\ and$

$ei = the\ error\ term$

$i = represents\ the\ firm$

$t = is\ number\ of\ observations\ over\ time$

$\beta 1, \beta 2\ and\ \beta 3\ are\ the\ coefficients\ for\ specific\ independent\ var variables$

Table 4.5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.577[a]	.333	-1.670	170.74813

Predictors: (Constant), DPR, DE, ROA

Source: Table is derived from the population data compiled for the study

24

4.6 Analysis of Variance

Table 4.6: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14530.185	3	4843.395	.166	.909[b]
	Residual	29154.925	1	29154.925		
	Total	43685.110	4			

a. Dependent Variable: MPS

b. Predictors: (Constant), DPR, DE, ROA

Source: Table is derived from the population data compiled for the study

From table 4.8, the p value is 0.9 an implication that correlation between independent and dependent variables exists.

An F- value of 0.166 implies variability between groups divided by within group variability. When F ratio is large, it implies more variation between groups than within groups caused by the independent variables

Table 4.7: Distribution of Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	551.87	1566.23		.352	.784
	ROA	-498.01	10735.84	-.043	-.046	.970
	DE	-119.93	304.147	-.364	-.394	.761
	DPR	339.22	825.810	.347	.411	.752

a. Dependent Variable: MPS

Source: Table is derived from the population data compiled for the study

From the above regression model,

$$MPSit = \beta1DPRit + \beta2ROAit + \beta3DEit + eit$$

MPS= 551.87+339.22DPR-119.93DE-498.01ROA

Constant = 551.87;

The interpretation is that if debt equity ratio, return on assets and dividend payout ratio were zero, the market price of the share would be 551.87

The regression coefficient for market share price and return on assets is -498.01 implying a negative relationship

The regression coefficient for Debt equity ratio and market share price is -119.93 implying a negative relationship exists

The relationship between market share price and dividend payout ratio is 339.2 implying a positive relationship exists

4.6.1 Test of hypothesis using z test.

The main objective of the study is to establish the relationship between dividend policy and market price of stocks of banks quoted at the NSE.

4.6.2 Test of Specific Objectives

To test whether the relationships between the variables was statistically significant, the researcher used Z test.

If Z calculated > Z critical, you reject the null hypothesis. The significance of the coefficients of the independent variables is established. At 95% confidence interval the value of Z lies between -1.96 and + 1.96.

The researcher formulated the below hypothesis

H0: There is no statistically significant relationship between market price of shares and dividend payout Ratio of firms quoted at NSE

H1: There is no statistically significant relationship between market price of shares and financial leverage of firms quoted at NSE

H2: There is no statistically significant relationship between market price of shares and profitability i.e. Return on Assets of firms quoted at NSE

Table 4.8: Z score

ZMPS	ZROA	ZDE	ZDPR
1.77527	-0.67082	-0.79463	0.84108
-0.58223	-0.67082	-0.00631	1.12145
-0.54807	-0.67082	0.56129	-1.30835
-0.34559	1.56525	1.34961	-0.09345
-0.29937	0.44721	-1.10996	-0.56072

Source: Table is derived from the population data compiled for the study

All the z- scores from the above table are positive for Return on assets, debt equity ratio and dividend payout ratio which implies that they are above the group mean. The results are also within the range -1.96 and +1.96 hence we do not reject the null hypothesis. We conclude that there was no statistically significant relationship between market share price, return on assets, debt equity ratio and dividend payout ratio for the period 2013-2017 for the firms listed at NSE.

4.7 Discussion of Findings

From the above results, it is evident that a positive relationship (+0.44) exists between dividend payout ratio and market share price. This implies that an increase in dividend payout ratio leads to an increase in market share price and vice versa.

Investors would thus be interested in investing their funds in firms that offer dividends. This is consistent with the bird in hand theory that suggests investors prefer dividends other than uncertain future gains from capital appreciation. The results are consistent with the bird in hand theory that was developed by Gordon (1963) and Lintner (1964)

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter summarizes the findings in chapter four According to the study objectives. The conclusions and recommendations are also made. The researcher also shares his limitations during the research period

5.1 Summary of Findings

The researcher on the study sought to establish the effects of dividend policy of stock prices for banks listed at the Nairobi Securities Exchange. In particular the researcher narrowed down to a population of five banks and data was collected for the period 2013 to 2017 for analysis.

Dividend policy formulation is a core financial problem as it has to decide between the ploughing back of profits in to business and distribution of the earnings as dividends. Either way, a decision has to be made between ploughing back and distribution. The action undertaken will affect the actions of investors regarding which firms to invest in.

To satisfy the needs of clientele in search of dividend income, the firms will choose to distribute the earnings as dividends. Those who are in search of capital gains will be attracted to firms that plough back profits and hence benefit from the future capital gains.

Firms will also distribute earnings to signal information on the firm's future performance. This action will likely influence the actions of investors on which stocks to hold and which ones to sell.

From the above, dividend policy remains an important tool hence its importance

Our results from NSE show a positive correlation (+0.44) between dividend payout ratio and market price of shares. This shows that an increase in dividend payout ratio tends to increase the market price of the stock in question which is in consistent with past studies on the relationship between market price of shares and dividend payout ratio.

The results also show a negative correlation (-0.27) between market price of shares and debt equity ratio. This is because shareholders tend to move away from highly leveraged firms. The market price of shares and return on assets is negatively correlated (-0.46) which is inconsistent with past studies

From the regression model used, debt equity ratio, dividend payout ratio and return on assets account for 57.7% of the market price variations. Unexplained variations in the model account for 42.3% of total variations.

5.2 Conclusion

From the above results, we concluded that different dividend policies have different effects on the clientele. A firm will adopt a dividend policy which is responsive to its needs and at the same time appealing to the specific target clientele.

To attract investors who prefer dividends, firms will pay dividends. To attract clientele in search of capital gains, the firm will retain its profitability as retained earnings for plough back in to the business and its investors will gain from capital appreciation.

A positive correlation exists between dividend payout and market price of shares while a negative correlation exists between debt equity ratio and market price of shares. Return on assets was also found to be negatively correlated which may be attributed to the fact that more inefficient resources may affect the overall return on assets. Debt equity ratio, dividend payout ratio and return on assets account for 57.7% of the effects of the dividends on stocks of banks listed at the NSE.

5.3 Recommendations

The study found out that debt equity ratio, dividend payout ratio and return on assets account for only 57.7% of the effects of dividend policy on stocks of banks listed at NSE. The researcher recommends further studies in the field to be undertaken that account for the remaining 42.7%

Return on assets was also found to be negatively correlated with market price. The researcher recommends further studies to specifically research on effects of asset increase to the overall performance of the firm. The research would seek to establish whether increased assets imply improved stock prices.

5.4 Limitations of the Study

The study was limited to 5 years which are usually a performance cycle common at the NSE due to the political climate post and pre-election period. This period may be too short to generalize the performance of banks listed at NSE that are subject to variations over time. A sample of five banks listed at the NSE is also too small to generalize the performance of all banks quoted at the NSE

REFERENCES

AL-Malkawi , H. (2010). "Dividend policy: A review of theories and empirical evidence". *https://research gate.net > publication*

Al-Malkawi, H. (2005). "Determinants of Corporate Dividend Policy in Jordan. An application of the Tobit Model". *Journal of Economic & Administrative Sciences Vol. 23, No. 2, pp.44 70.*

Al-Malkawi, H. (2010). "Dividend policy: A review of theories and empirical evidence". *Euro Journals, Inc.2010.*

Alves, H. (2015) "Determinants of Share Price and Share Liquidity: An, Analysis using a SEM Model". *Procedia Economics and Finance. Vol.25, 2015, pages 318-331.*

Baker, H.K. (2009). "Dividends and Dividend Policy". *https://www.researchgate.net* Black, F. (1976). "The Dividend Puzzle". *The Journal of Portfolio Management*

ENOW, S.T and BRIJLAL, P (2016). "Determinants of Share prices: the case study of firms listed on Johannesburg Stock Exchange". *Journal of Accounting and Management*

Fama, E. F. (1968). "Risk, Return and Equilibrium". *Journal of the American Statistical Association (December), pp.1132-1161*

Gordon, M.J. (1959)."Dividends, Earnings and Stock prices". *The Review of Economics and Statistics. Vol. 41, No. 2*

Gugler. K. & YurtogluB.B. (2003). "Corporate Governance and Dividend Payout Policy in Germany". *European Economic Review, Vol.47, issue4, 731-758*

Hussainey, B. (2011). "Dividend Policy and Share Price Volatility in Kenya". *Research Journal of Finance and Accounting Vol.4, No.6*

Jensen, M.C. and Meckling, W.H. (1976). "Theory of the firm: Managerial behavior, agency costs and ownership structure" *Journal of Financial economics Vol. 3 Issue 4, Oct 1976, Pages 305-360*

Kumar, S. and Mohan, M. (1975). "Growth Stocks and Corporate Capital Structure Theory". *Journal of Finance/ Volume 30, Issue 2*

Linter, J. (1956). "Distribution of Incomes of Corporations among Dividends, Retained Earnings and Taxes." *American Economic Review (May), pp. 97-113*

Litzenberger, R. H. and Ramaswamy, K. (1982). *The Journal of Finance.Vol.37, No.2*

Mbaka, M (2010). An empirical study in to the applicability of dividendsignaling theory at the NSE. *Unpublished MBA Project, UON, Kenya.*

Modigliani and Miller (1961). "Dividend policy, growth, and the valuation of shares". *The Journal of Business, 34(4), 411-433.*

Nirmala, P.S, Sanju, P.S and Ramachandra, M. (2011). "Determinants of Share prices in India". *Journal of emerging trends in Economics and management Sciences (JETEMS) 2(2):124-130*

Okafor, C.A. and Mgbame, C.O. (2011)." Dividend Policy and Share Price Volatility in Nigeria". *International Journal of Academic Research in Accounting and Finance and Management Sciences. Vol.3, No.2, April 2013, pp.15-22*

Pandey, M. (2004). "Capital Structure, Profitability and Market Structure". Evidence from Malaysia. *I.M Pandey, Page 78-90*

Sunde, T and Sanderson, A. (2009). "A Review of Determinants of Share Prices". *Journal of Social Science 5(3): 188-192*

Titan, A.G. (2011). "The efficient market hypothesis: Review of specialized Literature and Empirical Research". *Procedia Economics and Finance. Vol. 32, 2015, pages 442-449*

Uddin, M.G S. (2009) "Relationship between interest rate and stock price: Empirical Evidence from Developed and Developing Countries". *International Journal of Business and Management*

Watts, R. (1973). "Information Content of Dividends". *The Journal of Business, 1973, Vol, 46 Issue 2, 191-211*

Zhou, P. and Ruland, W. (2006). "Dividend Payout and Future Earnings Growth". *Financial Analysts Journal 62(3):58-69*

APPENDICES

APPENDIX 1: COMPANIES LISTED AT THE NSE

Source: http://www.nse.co.ke, 20th November 2018

1   A.Baumann & Co Ltd

2   ARM Cement Ltd

3   Atlas African Industries Ltd

4   B.O.C Kenya Ltd

5   Bamburi Cement Ltd

6   Barclays Bank of Kenya Ltd

7   Britam Holdings Ltd

8   British American Tobacco Kenya Ltd

9   Car & General (K) Ltd

10 Carbacid Investments Ltd

11 Centum Investment Co Ltd

12 CFC Stanbic of Kenya Holdings Ltd

13 CIC Insurance Group Ltd

14 Crown Paints Kenya Ltd

15 Diamond Trust Bank Kenya Ltd

16 E.A.Cables Ltd

17 E.A.Portland Cement Co. Ltd

18 Eaagads Ltd

19 East African Breweries Ltd

20 Equity Group Holdings Ltd

21 Eveready East Africa Ltd

22 Express Kenya Ltd

23 Flame Tree Group Holdings Ltd

24 Home Afrika Ltd

25 Housing Finance Group Ltd

26 Hutchings Biemer Ltd

27 I&M Holdings Ltd

28 Jubilee Holdings Ltd

29 Kakuzi Ltd

30 Kapchorua Tea Co. Ltd

31 KCB Group Ltd

32 KenGen Co. Ltd

33 KenolKobil Ltd

34 Kenya Airways Ltd

35 Kenya Orchards Ltd

36 Kenya Power & Lighting Co Ltd

37 Kenya Re Insurance Corporation Ltd

38 Kurwitu Ventures Ltd

39 Liberty Kenya Holdings Ltd

40 Longhorn Publishers Ltd

41 Marshalls (E.A.) Ltd

42 Mumias Sugar Co. Ltd

43 Nairobi Business Ventures Ltd

44 Nairobi Securities Exchange Ltd

45 Nation Media Group Ltd

46 National Bank of Kenya Ltd

47 NIC Group PLC

48 Olympia Capital Holdings Ltd

49 Pan Africa Insurance Holdings Ltd

50 Safaricom Ltd

51 Sameer Africa Ltd

52 Sasini Ltd

53 Standard Chartered Bank Kenya Ltd

54 Standard Group Ltd

55 The Co-operative Bank of Kenya Ltd

56 The Limuru Tea Co. Ltd

57 Total Kenya Ltd

58 TPS Eastern Africa Ltd

59 Uchumi Supermarket Ltd

60 Umeme Ltd

61 Unga Group Ltd

62 Williamson Tea Kenya Ltd

63 Trans-Century Ltd

64 WPP Scan group Ltd