THE EFFECT OF RETAINED EARNINGS ON THE RETURNS OF FIRMS
LISTED AT THE NAIROBI SECURITIES EXCHANGE

BY:

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DECLARATION

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

Signed: __________________________ Date: __________________

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This research project has been submitted for examination with my approval as the University Supervisor:-

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I acknowledge the Almighty God for His invaluable support and provision.
DEDICATION

I dedicate this work to my wife Trizah and to our little son Aviel.
# TABLE OF CONTENTS

DECLARATION ........................................................................................................ ii

ACKNOWLEDGEMENTS ...................................................................................... iii

DEDICATION ........................................................................................................ iv

LIST OF TABLES .................................................................................................. viii

LIST OF ABBREVIATIONS .................................................................................. ix

ABSTRACT ........................................................................................................... x

CHAPTER ONE: INTRODUCTION .............................................................................. 1

1.1 Background of the Study ..................................................................................... 1

1.1.1 Retained Earnings ......................................................................................... 2

1.1.2 Stock Returns ................................................................................................. 3

1.1.3 Effect of Retained Earnings on Stock Returns ............................................... 4

1.1.4 Nairobi Securities Exchange ......................................................................... 6

1.2 Research Problem ............................................................................................... 7

1.3 Objective of the Study ....................................................................................... 8

1.4 Value of the Study ............................................................................................. 9

CHAPTER TWO: LITERATURE REVIEW ................................................................. 10

2.1 Introduction ..................................................................................................... 10

2.2 Theoretical Review .......................................................................................... 10

2.2.1 Agency Theory .............................................................................................. 11

2.2.2 Dividend Relevance Theory ........................................................................ 12

2.2.3 Dividend Irrelevance Theory ....................................................................... 14

2.3 Determinants of Stock Returns ........................................................................ 16
5.3 Conclusion.................................................................................................................................42
5.4 Policy Recommendations...........................................................................................................43
5.5 Limitations of the Study.............................................................................................................44
5.6 Suggestions for Further Research..............................................................................................45
REFERENCES .....................................................................................................................................47
APPENDICES .....................................................................................................................................52
LIST OF TABLE

Table 4.1 Model Relationship Statistics Summary .......................................................... 31
Table 4.2: Analysis of Variance ...................................................................................... 332
Table 4.3: Model Coefficients ......................................................................................... 33
Table 4.4 Model Relationship Statistics Summary ......................................................... 34
Table 4.5: Analysis of Variance ...................................................................................... 35
Table 4.6: Model Coefficients ......................................................................................... 36
## LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BVPS</td>
<td>Book Value per Share</td>
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<tr>
<td>CMA</td>
<td>Capital Markets Authority</td>
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<td>FISD</td>
<td>Financial Times Services Division</td>
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<td>FTSE</td>
<td>Financial Times and Stock Exchange</td>
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<td>NAV</td>
<td>Net asset value</td>
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<td>NSE</td>
<td>Nairobi Securities Exchange</td>
</tr>
<tr>
<td>RORE</td>
<td>Return on Retained Earnings</td>
</tr>
<tr>
<td>SIIA</td>
<td>Software and Information Industry Association</td>
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<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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ABSTRACT

This study sought to establish the effect of retained earnings on stock return of the companies listed at the Nairobi Securities Exchange. The study followed a descriptive study design and used secondary data obtained from Nairobi Securities Exchange and the listed company’s annual reports for the period 2009 to 2013. The data was summarized through excel spreadsheets and analyzed using Statistical Package for Social Sciences. Regression analysis was conducted to obtain coefficient of determination (R), Correlation Coefficient (R-Square), P-value and F-tests statistics to measure the possibility of a relationship between the two variables. The analysis involved a regression of stock returns against retained earnings alone, and then another regression involving retained earnings and three more variables; Dividend Yield, Net Asset Value per share, Price to Book Value acting as the control variables. When stock returns were regressed against retained earnings the study established that; R, R-Square, P-Value and F-test statics were 0.054, 0.003, 0.361, and 0.838 respectively. With R and R-Square being 0.054 and 0.003 the results revealed that there is no relationship between the two variables. The regression analysis involving inclusion of the three control variables established that R, R-Square, P-Value and F-test statics was 0.282, 0.079, 0.000, and 6.042 respectively. With R and R-Square being 0.282 and 0.079 the results revealed that there is a very weak relationship between the variables. Further, the results revealed that a simple linear regression model describing the relationship between stock returns and retained earnings was statistically insignificant since the obtained P-Value was 0.361. Also, the results revealed that the Multiple Linear Regression model which included the control variables was statistically significant since the obtained P-value was 0.000. The obtained F-test statistic supported the stance by the P-value. Nonetheless, in both cases, the results revealed that there exists a very weak and insignificant relationship between retained earnings and stock returns and the relationship is inverse since the coefficient corresponding to retained earnings in the model was always negative. Also, P-value corresponding to retained earnings in the model was 0.812; which was larger than 0.05 indicating that Retained Earnings was an insignificant predictor of Stock Returns. Therefore, the study established that there is a very weak (insignificant) inverse relationship between retained earnings and stock returns. The study concluded that retention of earnings is irrelevant in influencing the amount of stock returns earned by of the investors of NSE listed firms. Furthermore, their relationship is insignificant and inverse. The study recommends that the corporate organizations need not retain unnecessarily too much earnings as it inversely influences the investors’ stock returns. They should retain earnings only when there are investment projects with a positive net present value. Also, the study recommends that capital markets authority and the NSE should put emphasis on the stance; that the NSE listed companies should endeavor to create shareholder value in all their decisions including on earnings retentions. That is, the NSE listed firms should retain earnings only when the organization has projects with a positive net present value.
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Business organizations exist to create value for their stakeholders who include; shareholders, investors, customers, employees, suppliers, and potential investors (Ball, 2013). Pursuant to agency theory Adams (1994) postulates that the conflict between the principal and the agent should be minimized by reconciling their different tolerances for risk. Ideally, the management should pursue business endeavors that maximize the wealth of the important stakeholder – the shareholders, but in socially responsible manner (Hobson, William, & Venkatachalam, 2012). To this end, Khan et al. (2013) posits that relevant support including reasonable financial capital is essential.

Revenue retentions also called retained earnings or retained surplus refer to the portion of a company's profit that is kept for reinvestment into the business or for debt payments, instead of being paid out as dividends to shareholders (Chasan, 2012). Burgstahler & Dichev (1997) noted that, due to the fact that only few options are available for raising capital, most executives generally prefer cash from operations as a major source of capital for re-investment and firms’ growth. Consequently, some organizations prefer to retain more earnings and plow it back into operations especially when they have viable investment opportunities (Campbell, 2012).

Whereas some investors may not be pleased if their organization increased amounts of earnings retentions, Ball (2013) postulates that earnings are a component of the corporation’s net-worth and
To this end, earning retentions can be utilized to create value for the shareholders (Hobson et al, 2012). However, Burgstahler & Dichev (1997) posited that misapplication of capital when a manager notes that they have a lot of cash at disposal may arise; which would instead destroy value.

1.1.1 Retained Earnings

For the purpose of this study, retentions refers to the part of trading profits which is not distributed in the form of dividends but is retained by directors for future expansion of the company (Dinayak, 2014). Campbell (2012), notes that the prime idea behind earnings retention is that the more the company retains the faster it has chances for growth. Retained earnings are usually recorded under shareholders' equity on the balance sheet (Dinayak, 2014). Also related with periodically retained earnings is the accumulated retained earnings, which are computed by adding net income to (or subtracting any net losses from) beginning retained earnings and subtracting any dividends paid to shareholders (Dinayak, 2014).

Also, retained earnings can be expressed as a ratio, commonly known as retention ratio of plowback ratio. The retention ratio is also known as the retention rate of an organization (Orwel, 2010). Regarding earnings retentions Chasan (2012), stated that there is always a conflict in determining the ratio or earning to be retained. While the managers of the company want a higher earnings retention ratio, the shareholders of the company would think otherwise, as the higher the plowback ratio the more uncertain their control over their shares and finances are.
Notably, retentions are a sacrifice made by equity shareholders. According to Orwel (2010) they are internal sources of finance available to an organization and have got many advantages. As internal source, retained earnings are readily available for use. Also, retentions are cheaper than external equity, do not cause ownership dilution, and have got a positive connotation as the stakeholders perceive that the company has potential investment opportunities. However, they have demerits in that retained earnings is a limited source of financing, and the fact that they have a high opportunity cost since they are a foregone dividend by equity holders (Chasan, 2012).

1.1.2 Stock Returns

Strong (2009) defines a stock return as a profit obtained from an investment on a stock security. On the other hand, Hodrick (1991) defines stock performance as a measure of the returns on shares over a period of time. He notes that the period over which stock returns are measured is chosen based on personal preferences, but portfolio managers usually measure stock performance on daily, weekly, monthly and yearly basis. Stock performance as measured through stock returns includes two separate components: capital gains or losses and dividends (Khan et al, 2013). Edmans et al (2007) stated that the capital gains or losses are the result of stock price movements. A gain occurs when the stock price increases while a loss occurs when the stock price decreases while the dividends are often paid by companies out of the company profits to the shareholders. Adding the capital dividend of the year to the capital gain/loss during the year gives the total return for the stock to the investor (Hodrick, 1991).
Common terms in relation to stock return are relative and absolute stock performance. According to Maghyereh & Al-Zoubi (2006) relative stock performance measure stock performance relative to a market benchmark or an industry benchmark, while absolute stock performance measures stock performance without comparison to any other market or portfolio. Strong (2009) advances that the latter measure does not care if a stock outperformed or underperformed a market; all that matters is that our stock performed well or not. Also, investors who are inclined to the latter measure more than the former tend to dislike risk more than an average investor.

Other concepts related to stock returns are total stock return and total stock return cash amount. Total stock return includes an appreciation in the price plus any dividends paid, divided by the original price of the stock as computed by the formula; \( \frac{d_1 + P_1 - P_0}{P_0} \), while total stock return cash amount is computed as; \( d_1 + P_1 - P_0 \) where \( P_0 \) is initial stock price, \( P_1 \) the ending of period stock price, and \( d_1 \) is the dividend issued during the period.

1.1.3 Effect of Retained Earnings on Stock Returns

Notably, the aforementioned formulas employed in computing the stock returns or stock performance includes both the stock prices at the beginning and end of period as well as the stock dividends issued over the period. Elsewhere, retained earnings have been defined as a foregone dividend (Ball, 2013). According to Campbell (2012) retained earnings ultimately come back to the equity shares in the form of enhanced dividend or capital gains.
A study by Kanwal (2012) established that Stock Dividend have a significant positive relation to stock market prices and significantly explicates the variations in the stock prices of chemical and pharmaceutical sector of Pakistan while Retention Ratio and Return on Equity have the negative insignificant relation with stock prices. In his study on Impact of Retained Earnings on Share Price, Beisland (2014) determined that there is positive relation between retained earnings and stock price.

However, according to a study by Khan & Zulfiqar (2012), there is no significant relation between historical accounting numbers such as earnings and stock returns. However, Edmans et al. (2007) postulates that shareholders who invest in stocks expect that high earnings retention ratio will increase the growth of their company as well as the stock prices. Failure to grow revenues makes the investors to might not think that there are any advantages of earnings retentions (Ball, 2013).

On the other hand, Khan & Zulfiqar (2012) states that growth of a company is not only influenced by earnings retention but, because of other sectors of the company. Furthermore, the dividend the dividend irrelevant theory - postulation that the dividend policy of a firm does not affect the net return of an investor assuming that unpaid dividends are reinvested by the company to generate more profits and higher stock returns (Choi, Kim, & Lee, 2011). In addition, Edmans et al. (2007) posits that, investors prefer to have a higher retention ratio in a fast growing business, and lower retention ratio in a slower growing business.
1.1.4 Nairobi Securities Exchange

The Nairobi Securities Exchange, formally Nairobi Stock Exchange was constituted in 1954 as a voluntary association of stock brokers in the European community and was registered under Societies Act. Since then the market has undergone tremendous transformations. At the heart of the Exchange is market liquidity improvement through innovations fostering ethical practices amongst listed companies (Mwaniki, 2014). The exchange requires that the officers of the listed companies – led by the boards of directors, make optimal decisions that can enhance the welfare of the shareholders (Ngugi, 2003). Barako (2007) noted that the Kenyan government legislative bodies have made numeral legislations and reforms aiming to transform the exchange to be the vehicle to mobilize domestic savings and to attract foreign capital investments.

Since dividend policy of a firm is a critical financial decision Barako (2007) posits that boards should make optimal decisions regarding how they allocate both the periodically obtained earnings and the accumulated retained earnings. To this end, publicly quoted companies are obliged to publish their audited financial reports at the end of every financial year (CMA, 2011). Since the year 2008, the exchange has greatly emphasized on corporate governance with some participants punished for fauluting the acceptable market regulations. Amongst NSE’s recent advancements is its 2011 launch of the FTSE NSE Kenya 15 and FTSE NSE Kenya 25 Indices, as a result of extensive market consultations with local asset owners and fund managers. The launch of the indices reveals the interest of growth into the domestic investment and diversification opportunities in the East African region. Also, the exchange became a member of
Financial Times Services Division (FISD) of the Software and Information Industry Association (SIIA) in March 2012. Providing the indices its website helps the investors with current information of reliable indication of the Kenyan equity market’s performance during trading hours.

1.2 Research Problem

Dividend policy refers to the set of guidelines a company uses to decide how much of its earnings should be paid out to shareholders (Chasan, 2012). The choice of dividend payout is one of the key financial decisions of corporate managers. Burgstahler & Dichev (1997) explains that whether an organization employs residual approach—payment of dividends only after all project capital requirements have been met, stability dividend policy—predictable dividends set at a fraction of annual earnings, or a hybrid of the two, the choice has an implication to the wealth of the shareholders. According to Baker (2009) if investors have to pay higher taxes on dividends than in capital gains, then firms that pay dividends should have a higher cost of equity than firms that retain more earnings. Moreover, less retention (higher pay out) reduces uncertainty hence higher stock prices and greater stock returns (Fama & French, 1992).

With the Nairobi Securities Exchange hoping to spur economic development in the era of a government which desires to revamp the exchange’s capabilities to attain greater participation in economic development, a closer look into the actions of boards of the listed companies regarding allocations of obtained and accumulated earnings is essential. According to Campbell (2012) retained earnings ultimately come back to the equity shares in the form of enhanced dividend or capital gains. Also, with the CMA increased
emphasis on tightening corporate governance regulations amongst the publicly listed companies, it is critical to establish the effect of earnings retention on stock returns of the listed companies.

Khan et al. (2013) conducted an empirical study and established that variation in capital structure and retained earnings does affect the stock returns of Pakistani textile industry. In his MBA thesis, Ngunjiri (2012) noted that dividend policy does not have significant impact on the share price volatility at NSE. Ramadhan (2013) found that bonus issue announcements led to statistically significant positive abnormal returns around announcement dates. Mohamed (2010) concludes that there is a weak positive correlation between dividend payout ratios with future earnings of companies though the relationship is low.

Elsewhere, Kanwal (2012) established that Stock Dividend have a significant positive relationship with stock market prices in context of Pakistan Stock Exchange. Notably, there exists scanty information on the effect of retentions especially on stock returns; that have not been well articulated under several studies and reports published at least within the context of Kenyan NSE listed companies. The question that really begs, and is the subject of this study is; what is the effect of retained earnings on the stock returns of the NSE listed firms?

**1.3 Objective of the Study**

To establish the effect of retained earnings on the stock returns of firms listed at the Nairobi Securities Exchange.
1.4 Value of the Study

The findings of this study can help the investors and managers of companies on the empirical relationship between earnings retentions on stock returns of the listed companies. Company executives and investors can therefore make informed choices in relation to retention of earnings. To the stock traders, the research can help them to determine how to action on a firm’s earnings retentions. Also, this study can contribute to the body of literatures on the effect of earnings retention on stock returns. To this end, future researchers can draw literatures from the study.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter collates literatures from past researchers and scholars on the effect of earnings retentions on stock performance. The chapter examines the concepts and theories on earnings distribution, particularly in relation to the relationship and the effects of retained earnings on stock performance. By considering the work from diverse past authors, the chapter shapes the theoretical and the conceptual framework of the study on the effect of retentions on stock performance of firms listed in the NSE.

2.2 Theoretical Review

According to Lincoln (2014) financial managers may take dividend decisions as long-term financing or as short-term wealth maximizing decision. If as long-term financing, a firm pays dividend only when it does not have profitable investment opportunities and uses the dividends as a source of finance. Although, a firm can also pay dividends and raise an equal amount by the issue of shares, this does not make much sense. On the other hand, if dividend decision is taken for wealth maximization, payment of current dividend is seen as an important shareholder wealth maximizer since it has a positive impact on the share price. So to maximize the price per share, the firm pays more and more dividends and retains less.
2.2.1 Agency Theory

Generally, an agency is a relationship between two parties, where one is a principal and the other is an agent who represents the principal in transactions with a third parties (Li, 2011). Agency theory concerns the relationship between a principal (shareholder) and an agent of the principal (company's managers) in business (Kulkarni, 1988). In the relationship, the principal delegates the work to the hired agent who performs the work on behalf of the principal. The underlying view is that whereas the shareholders would wish the managers to offer their expertise with utmost honesty, solely for the benefit of the shareholders, the executives may engage in affairs that can enhance their tenure or/and their pay packages and other benefits (Li, 2011).

The theory has witnessed numeral studies and evaluations from scholars and professionals. Most studies have sought to establish how the goals and objectives of the principal and agent are not in conflict (agency problem) through reconciliation of the agent and principal’s different tolerance to risk (Kathleen, 1989). Namazi (2013), postulates that the optimal solution lies between the extremes of where executive compensation is tied to performance, but some monitoring is essential. In addition to monitoring, Pepper & Gore (2013) adds that mechanisms that encourage managers to act in shareholders' interests such as: performance-based incentive plans, direct intervention by shareholders, threat of firing, and the threat of takeover can be a plus.

However, Barker (2005) hypothesized that the standing debate over the primacy of structure or agency in shaping human behavior cannot be ignored. While the structure is the recurrent patterned arrangements which influence or limit the choices and
opportunities available, agency is evaluated in relation to the capacity of individuals to act independently and to make their own free choices (Barker, 2005). The structure of agency relationship between shareholders – who want maximum returns from their investment in a particular, stock vis-a-vis company executives, who want job security with good working environment and promising pay packages, is indeed critical (Kathleen, 1989). It is worth noting that decisions on dividend policy of an organization are bestowed upon company executives and a company’s dividend policy affects earnings retention. Furthermore, some empirical literatures link retained earnings with stock performance (Ball, 2013).

2.2.2 Dividend Relevance Theory

The two main dividend relevance theories are attributed to Walter and Gordon. Their models reveal that dividends paid by the firms are viewed positively both by the investors and the firms. Retaining more earnings, hence non-payment of dividends increases a company’s uncertainty, while payment of dividends reduces the uncertainty amongst shareholders hence the earnings of the firm can be discounted at a lower discounting rate \( K_e \) increasing the value of the firm hence the stock prices.

In Walter Model, Walter (1956) contends that choice of dividend policies almost always affects the value of a firm. His model indicates the importance of the relationship between a firm’s internal rate of return (\( r \)) and its cost of capital (\( k \)) in determining the dividend policy that will maximize shareholders’ wealth. Walter expresses market price per share \( MPS \) as \( P = (DPS/k) + (r[EPS - DPS]/k)/k \) where DPS is the dividends per
share, \( r \) is the company’s internal rate of return, EPS is the company’s earnings per share, and \( k \) is the company’s cost of capital.

However, the theory has couple of criticisms. First, the model can only be applicable for a firm where retained earnings are the only source of financing, adding new equity or debts collapses the formula. Also, the model assumes that the firm’s internal rate of return \( (r) \) and its cost of capital \( (k) \) are constant. Further, all the attained earnings are either distributed as dividend or reinvested internally immediately. To this end, the valuation mixes dividend policy with investment policy of the firm. Moreover, although the values of EPS and DPS can change, the model holds that the beginning earnings and dividends must never change, and that the firm has a very long or infinite life. Finally, the model would collapse at a point where \( r = k \).

Another model in support of relevance theory is Gordon’s (1959) model. The theory suggests that investors would prefer current dividends and that there is direct relationship between a firm's dividend policy and its market value. The dividend relevance theory suggests that investors are risk averse and would rather have dividends today (“bird-in-the-hand”) than possible future capital gains owing share price appreciations in future. In his model, Gordon proposes that a firm’s dividend policy affects its share prices. Therefore, according to this theory, an optimal dividend policy which can ensure maximization of shareholder wealth should be determined. Although many empirical studies do not support dividend relevance theory Kothari (1988) notes that actions of market participants suggest that there is some connection between dividend policy, and share price and the value of firm.
The assumptions of Gordon model are similar to those of Walter apart from the fact that the product of retention ratio and the rate of return give the growth rate of the firm \( g \). Also, the cost of capital \( k_e \) should be constant and greater than growth rate, \( k_e > g \). In his model, Gordon advanced that investors are risk averse and believe that incomes from dividends are certain rather than incomes from future capital gains (Pujari, 2014). Due to the uncertainty element of future gains from share price increase. Therefore, they estimate the predicted value of future capital gains using higher rate of return; when retention rate increases, investors require a higher discounting rate (Pujari, 2014). Gordon expresses stock price as,

\[
P = \frac{E(1 - b)}{k_e - br}
\]

Where; \( P \) is the market price of the stock, \( E \) is the earnings per share, \( b \) is the retention ration (1-payout ratio), \( r \) is the rate of return of firm’s investments, \( k_e \) is the cost of equity, and \( b_r \) is the growth rate of the firm \( (g) \). Therefore the model shows a relationship between payout ratio, rate of return, cost of capital and the market price of the share. Notably, the ideas behind the models by Walter and Gordon are similar and they clearly state the relationship between dividend policies and market value of the firm (Pujari, 2014).

### 2.2.3 Dividend Irrelevance Theory

Famously known as Modigliani and Miller’s (1961) hypothesis, the dividend irrelevance theory was advanced by Modigliani and Miller in a famous seminal paper in 1961 postulates that the dividend policy of a firm has no effect on the wealth of shareholders. In their submission, MM theorized that neither the price of firm's stock nor its cost of capital
is affected by its dividend policy. Accordingly, MM postulates that only a firm's ability to earn money, and riskiness of its activity can have an impact on the value of the company.

To this end, MM advanced that apart from the company’s investment policy which affects a company’s earnings, whatever the amount of dividends issued or earnings retentions, cannot affect the value of a firm. Accordingly, MM hypothesis is a proposition that investors are not concerned with a company's dividend policy since they can sell a portion of their portfolio of equities if they need cash. Rather, they are indifferent between returns from dividends or returns from capital gains. However, MM approach can work under certain conditions; no taxation, no transaction costs, and no flotation costs. Also, firms and investors have an identical lending and borrowing rates, and have equal information.

Eugene (1992) notes that organizations that pay high dividends, generally experience less price appreciation. According to MM approach, the sum total of capital gains and dividends is the same whether the company pays more dividends or retains more to earn stock returns through capital gains. Hence an investor is indifferent. If the dividends are too small, an investor can sell a portion of his stock to get cash, and vice versa. MM theory argues that concludes that even assumption of perfect certainty is dropped, and uncertainty considered, dividend policy continues to be irrelevant. However, some empirical studies by different authors have established that dividends are relevant under conditions of uncertainty.

In MM model, the returns from a stock are expressed as;
\[ R_t = \frac{\text{Dividends} + \text{Capital gains (Loss)}}{\text{Beginning of period Share price}} \]

\[ R_t = \frac{D_1 + (P_1 - P_0)}{P_0} \]

Where; \( R_t \) represent the stock return, \( D_1 \) is the dividend for the period, \( P_1 \) is the stock price at the end of the period, while \( P_0 \) is the stock price at the end of the period.

### 2.3 Determinants of Stock Returns

Determinants of stock returns refer to factors that determine the amount of stock returns that an organization obtains for the investors. According to theory and literatures, these factors include; company's profitability which is determined by investing in positive returns generating projects and assets. Other factors that affect firms’ stock returns include its utilization of the retained earnings, as well as macro-economic variables such as inflation and interest rates.

#### 2.3.1 Retained Earnings

Retained earnings refer to the portion of the net income that is retained by an organization rather than distributed to shareholders as dividends (Chasan, 2012). The purpose is for the company to reinvest the earnings into business opportunities that an organization has. It is an important internal financing which an organization obtains at least possible cost (Mohamed, 2010). Both theory and literatures have revealed that retained earnings later add to shareholder’s wealth. As the management plows back the
retained earned into capital projects and in purchase of return generating assets, more earnings are created which in turn causes a rise in stock prices (Baker, 2009).

A ratio called return on retained earnings (RORE) shows how well the profits of the previous year were reinvested (Poker, 2011). It is expressed as a percentage. A high percentage would indicate that a company would be better off reinvesting into the business, whereas a low one would show that paying out dividends may be in the best interests of the company. In making their decisions, investors should look for organizations with high return on retained earnings (RORE) that is reinvested regularly.

2.3.2 Net Assets Value

Assets refer to properties owned by a company and have value and can be converted into cash or can be used to generate cash or used to meet debts and the related commitments (Sullivan & Steven, 2003). Assets include; cash and cash equivalents, real property, personal property, and investments such as stocks securities, annuities, bonds, as well as cash value of life insurance policies, mutual funds, pensions, and retirement plans. Net assets value of an organization can be expressed as net assets per unit. Net asset value (NAV) is the value of a fund's asset less the value of its liabilities per unit.

For fund managers, asset value per share is the price at which shares in that fund can be bought and sold. For publicly traded companies, investors can use asset value per share to compare the price of the company's stock to the underlying value of the company's stock. Significant differences between these two numbers can indicate a prudent time to buy or sell (Burgstahler & Dichev, 1997). According to Sullivan & Steven (2003) the asset value of a company can be taken as the value of the firm, and companies with larger net asset
value are considered to be better positioned to make profits by utilizing the strength of assets held. Furthermore, assets are bought to increase the value of a firm or benefit the firm's operations. Notably, asset should generate cash flows, regardless of whether it's a company's manufacturing equipment or an individual's rental apartment.

2.3.3 Price to Book Value

The Price to Book ratio compares the market's valuation of a company to the value of that company as indicated on its financial statements (Murray & Block, 1989). The ratio is calculated by dividing price per share by the book value of equity. Book value of equity is the difference between the book value of assets (such as cash, accounts receivable, inventory, equipment, etc.) and the book value of liabilities (such as loans, accounts payable, mortgages, etc.) divided by the number of outstanding equity shares as per the balance sheet (Sullivan & Steven, 2003).

In other words, book value of equity is the equivalent value of the leftover assets; the worth of the firm belonging to equity holders after paying off all the debts if the company is liquidated (Murray & Block, 1989). Book value is an important measurement as it measures what the investors really own in the company. When divided by the number of shares gives the value of the ownership per share. It is this value that is divided by the price per share.

According to Murray & Block (1989) the price per book ratio is frequently associated with value investing. A low Price to Book ratio could mean that the stock is undervalued. However, it could also mean that something is fundamentally wrong with the company.
As with most ratios, this ratio varies by industry. This ratio also gives some idea of whether an investor paying too much for what would be left if the company went bankrupt immediately. To this end, price to book value could influence investors’ decision to buy stocks of a company. Furthermore Book Value per Share is a good baseline value for a stock.

While it's not technically the same thing as the liquidation value of the shares, it is a proxy for it (Murray & Block, 1989). In many cases, stocks can and do trade at or below book value. If the company's balance sheet is not upside-down and its business is not broken, a low price/BVPS ratio can be a good indicator of undervaluation. Notably, book value and BVPS do not consider the future prospects of the firm - they are only snapshots of the common equity claim at any given point in time. A going concern is whether a company should always trade at a price/BVPS ratio in excess of 1 times if the market properly reflects the future prospects of the corporation and the upside potential of the stock (Murray & Block, 1989).

2.3.4 Dividend Yield

A dividend is a payment made by an organization to shareholders out of their excess earnings (Hackbarth & Johnson, 2011). It's usually expressed as a per-share amount. When one compares companies' dividends, dividend yield or simply the yield is used. Dividend yield is the dividend amount divided by the stock price. It shows the percentage of the share purchaser’s purchase price – the investment in the company – the return obtained as dividends. In the absence of any capital gains, the dividend yield is the return on investment for a stock (Cohen, 2002).
Dividend yield is a financial ratio that shows how much a company pays out in dividends each year relative to its share price. It is measured by dividing the dividend amount issued for the period over the stock price; preferably the price at the beginning of the period (Cohen, 2002). It is a way to measure how much cash flow shareholders do get for each dollar invested in an equity position. Investors who require a minimum stream of cash flow from their investment portfolio can secure this cash flow by investing in stocks paying relatively high, stable dividend yields to supplement their income (Cohen, 2002).

According to Cohen (2002), Net Assets Value, Price to Book Value, and Dividend Yield are related to stock returns owing to signaling process associated with these ratios. Their values convey information on expected profits for the company. Studies provide a proof to the notion that the forward-looking equity risk premium is the expected dividend yield (Baker, 2009). Cohen (2002) explains that the dividend puzzle in relation to the observed decline in both, the dividend yield and the forward-looking equity risk premium.

2.4 Empirical Review

Different authors have researched on the relationship between stock returns and dividend policy of the firm. Some have studied the effect of payout ratio, while others have studied retained earnings, and yet others the dividend policy in general. Baker (2009) noted that organizations that pay more dividends and still experience steady rise in stock price are very attractive to investors and usually have higher stock returns for their investors. Chasan (2012) posits that stock returns are a function of dividends paid by a company and stock capitalization. Also, theory and some literatures have shown that stock returns are affected by factors that affect stock prices, though indirectly (Ball, 2013).
2.4.1 International Evidence

Iram (2010) studied the impact of Dividend Policy on Shareholders Wealth amongst the listed Indian companies and established that shareholder’s wealth is greatly influenced mainly by five variables such as Growth in sales, Improvement of Profit Margin, Capital Investment Decisions (both working capital and fixed capital), Capital Structure Decisions, Cost of Capital, Dividend on Equity, Interest on Debt.

Kanwal (2012) conducted a study on the effects of dividends on stock prices of Pakistan listed chemical and pharmaceutical companies and established that Cash Dividend, Retention Ratio and Return on Equity has significant positive relation with stock market prices and significantly explains the variations in the stock prices of chemical and pharmaceutical sector of Pakistan. Also, he noted that Earnings per Share and Stock Dividends have negative insignificant relation with stock prices.

Also, Mohammad et al. (2012) studied the impact of dividend policy on share price volatility in the Malaysian market showed significant negative relationship between share price volatility with two main measurements of dividend policy which are dividend yield and dividend payout. In their study Mohammad et al. (2012) concludes that dividend yield and size have most impact on share price volatility amongst stock price predictor variables.

In his study published in International Research Journal of Finance and Economics, Khan & Zulfiqar (2012) the impact of retained and distributed earnings on future profitability
and stock returns in Pakistan and established a weak positive relationship between a firm’s dividend policy and stock performance.

2.4.2 Local Evidence

Murekefu & Ouma (2012) studied the relationship between dividend payout and firm performance of NSE listed companies and established a strong positive relationship between dividend payout and stock performance. They concluded that dividend policy is relevant and that managers should devote adequate time and effort to determine a dividend policy that can enhance firm performance and shareholder value.

Ngunjiri (2012) studied the relationship between Dividend Payout Policies and Stock price Volatility for companies listed at Nairobi Securities Exchange and noted that dividend policy does not have significant impact on the share price volatility at NSE.

Also, Omete (2013) investigated the effects of firms’ earning per share, Dividend per share and Price to earnings ratio are relevant to explaining the variation in the stock price of the firm in Kenya and concluded that there is a significant relationship between earnings per share, dividend per share, price to earnings ratio and the stock price at the beginning of the stock market period.

Further, Odiero (2013) studied the effect of growth of earnings and stock prices on the price - earnings ratio of firms listed at the Nairobi Securities Exchange and established an insignificant relationship between accumulated earnings and stock prices.
2.5 Summary of Literature Review

Both theory and empirical literatures are in agreement that business managers either take dividend decisions as long-term financing or as wealth maximizing decisions. However, some theories and empirical literatures contend that a dividend policy of a firm can affect shareholder wealth, while others hold that dividend theory does not matter. For instance, Walter (1956) model postulates that choice of dividend policies almost always affects the value of a firm. Similarly, Gordon’s (1959) model theory suggests that investors would prefer current dividends and that there is direct relationship between a firm's dividend policy and its market value.

On the other hand, Modigliani and Miller’s (1961) hypothesis as advanced in a famous seminal paper in1961 hypothesizes that the dividend policy of a firm has no effect on the wealth of shareholders. They posited that neither the price of firm's stock nor its cost of capital is affected by firm’s dividend policy; only a firm's ability to earn money and riskiness of its activity can have an impact on the value of the company.

Also, some empirical studies by past researchers have confirmed that there is a relationship between retained earnings and investor’s stock returns, while others have confirmed otherwise. Baker (2009) and Chasan (2012) established that there is that pay more dividends and still experience steady rise in stock price are very attractive to investors and usually have higher stock returns for their investors. Kanwal (2012) established a positive relationship between stock market prices and dividend issued amongst Pakistan chemical and pharmaceutical sector. On the other hand, Mohammad et
al.(2012) showed a significant negative impact of dividend policy on share price volatility in the Malaysian market.

Murekefu & Ouma (2012) established a strong relationship between dividend payout and firm performance of NSE listed companies. However, Ngunjiri (2012) noted that dividend policy does not have significant impact on the share price volatility at NSE.

In conclusion, while some theories postulate that there is a relationship between dividend policy and stock returns, others are opposed of this proposition. Also, some empirical studies have revealed a positive strong relationship between dividend policy and stock returns. Yet, others established either a weak relationship, others a negative relationship and others established an insignificant relationship between the two variables. Also, most studies focused on dividend payout and not earnings retentions. Also, most literatures exist on the effect of dividend payout on stock prices and not stock returns.
CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter provides the methods and procedures employed to conduct the study. The chapter describes the research design, population, and methods to be used to collect the data and to analyze the same so as to meet the objectives of the study.

3.2 Research Design

Sekaran & Bougie (2010) defines research design as a systematic arrangement of the measures, factors and the tools applied in the collection and analysis of data in order to achieve the objectives of a study in the most efficient and effective way. Kothari (2004) advances that a research design directs the researcher in that it provides him or her with guidelines on how to collect, to analyse and interpret the data in a coherent manner.

This study followed a descriptive research design as the study sought to determine the causal relationship between earnings retentions and stock performance of NSE listed firms. A descriptive study design can be used to find out the present state of affairs (Saunders, Thornhill, & Lew, 2009) in relation to the effect of earnings retentions on stock performance.

Furthermore, the descriptive study design is preferred since it is suitable and is applicable in researches to be carried out within little time and with lean cost constraints (Mugenda & Mugenda, 2003). Moreover, it is dependable, valid and generalizable in this research since it is appropriate for the purpose of data collection and analysis, because it is
appropriate regardless of whether the data is qualitative or quantitative (Sekaran & Bougie, 2010).

### 3.3 Population

According to Mugenda&Mugenda (2003) a population is a sum total of all the items considered under a study. Bryman& Bell (2007) posits that a population is the totality of the individuals and objects from which a scientifically generalizable inference can be achieved. This research was a census study targeting the 61 companies listed at the Nairobi Securities Exchange as at July 1st 2014 as shown in appendix 1.

### 3.4 Data Collection

This study used secondary data. Secondary data is the data that is already available having been collected in the past by other parties other than the researcher for the purpose of their current study (Mugenda&Mugenda, 2003). It has the advantages of being readily available, hence easy to obtain saving time and monitory resource.

However, it is criticized for likelihood of being obsolete. For the purpose of this study, secondary data was the only applicable option since the study sought to establish the relationship between stock returns and retained earnings; which could only be possible by studying past data. This could only be possible by analyzing the trends and the relationship between the variable which could be established by studying secondary data.

The required data sets were the stock prices, periodic dividends, and retained earnings for each of the 61 NSE listed companies for the period between 2009 and 2013. The data was
obtained from Nairobi Securities Exchange. The impact of out-datedness could not arise because the data considered spanned within the last 5 years between 2009 and 2013.

The obtained data (dividends for the period and the beginning and end of period stock prices) were used to compute the stock returns – the dependent variable for each company for the last five years. The independent variable – periodic retained earnings divided by the annual income for the period, was also obtained from company annual reports. The study used the annual reports summaries compiled by Nairobi Securities Exchange handbook 2014. The handbook contained annual report summaries for the NSE listed companies for the period between 2009 and 2013.

3.5 Data Analysis

After collection the data was summarized and organized in excel spreadsheets. Then the data was copy pasted to Statistical Package for Social Science (SPSS) version 20 for a regression analysis. The analysis sought to establish the strength and the direction of the relationship between the retained earnings and stock returns – both measured in shillings. The analysis established the regression model depicting the relationship, ANOVA, and relevant statistics. The findings from the analysis were organized, summarized and presented using tables and used to answer the study questions.

3.5.1 Analytical Model

For the purpose of this study, stock returns is the dependent variable and will be calculated by adding the dividend for the period plus capital gain; \( \frac{D_1+(P_1-P_0)}{P_0} \), the measured in Kenya shillings, where \((P_0)\) is the initial stock price, and \((P_1)\) is the ending of
period stock price, and \((D_1)\) is the total cash dividend. Stock returns will be denoted as \((R_t)\) in the analytical model. Also, the earnings retentions for each period were obtained and denoted as \(x_1\). Also, the study included 3 more variables (Net Asset Value per share, Price to Book Value, and Dividend Yield) as control variables in the model. Consequently, the study analytical model which included control variables expressed the relationship between the variables as follows;

\[
R_t = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \epsilon
\]

Where; \(R_t\) Returns of a Stock;

\(x_1=\) Retained Earnings for the period divided by Net Profit for the period

\(\beta_0=\) is the y intercepted of the model,

Parameter(\(\beta_1, \beta_2, \beta_3, \) and \(\beta_4\)) show the rate of change of the dependent variable \((R_t)\) when the respective independent variable \((x)\) varies. It also indicates the nature of the relationship and as well as it amount of and the direction of the change in \((R_t)\) associated with a unit change in \(X\).

\(\epsilon=\) normally distributed error term,

\((X_2)=\) Net Asset Value per share – a control Variable,

\((X_3)=\) Price to Book Value – a control Variable, and

\((X_4)=\) Dividend Yield – a control Variable.
3.5.2 Test of Significance

This study sought to establish the relationship between retained earnings and stock returns of the NSE listed companies. The study used inferential statistics such as the Pearson Product Moment - correlation coefficient (R-Square) and the coefficient of determination (R) to test the relationship and the strength of the relationship of the data set. Also, P value which is the estimated probability of rejecting the null hypothesis (H0) of a study question when the hypothesis is actually true was estimated and used to reveal the significance of the independent variable (retained earnings) in the model; as well as to support the evidence by (R) and R – Square. In addition, F-test statistic was used to reinforce the correctness of the study conclusions.
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research objective and research methodology. The study sought to establish the effect of retained earnings on the stock returns of firms listed at the Nairobi securities exchange.

The study targeted the 61 companies listed at the NSE as of July 1st 2014. Amongst the target 61 listed companies, four were not included in the analysis including; CMC Holdings Ltd, Hutching Biemer Ltd, A. Baumann & Co Ltd, and Home Africa. CMC had been suspended from trading their stocks at NSE market in 2010 due to management wrangles. Hutching Biemer Ltd and A. Baumann & Co Ltd were very inactive while Home Africa was new in the market having been listed in the year 2012. Consequently, the analysis composed the 57 actively trading companies, and involved data for a period of 5 years.

4.2 Data Analysis and Presentation

In order to establish the relationship between the dependent variable and the independent variables, the dependent variable (Stock Return) was regressed against the independent variable (Retained Earnings) simultaneously with the control variables (Net Asset Value per share, Price to Book Value and Dividend Yield) to control for a lot of variables that could severely influence the study results once if omitted. However, the analysis involved regressing the dependent variable with independent variable without any control
variables. Firstly, regression was done without the control variables, and then with the three control variables; Net Asset Value per share, Price to Book Value and Dividend Yield.

The analysis was undertaken at 5% confident level. The criteria for comparing whether the predictor variables were significant in the model was done by relating the corresponding probability value obtained and $\alpha = 0.05$. If the probability value was less than $\alpha$ then the predictor variable was significant; otherwise it was not. Also, F – table statistic was compared with the one obtained from the regression analysis. If the one from the table was smaller than the computed value from the regression analysis, the variable was significant in predicting/causing a change on the dependent variable. Else, the variable was insignificant in the model.

4.2.1 Regression Analysis Excluding the Control Variables

The study sought to establish the effect of retained earnings on stock returns without including any control variable. The model inferential statistics R and R – Square are summarized in table 4.1 below.

Table 4.1 Model Relationship Statistics Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.054 ( ^a )</td>
<td>.003</td>
<td>-.001</td>
<td>2.1336706</td>
<td>.361</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Retained Earnings for the year/Net Income for the Period
b. Dependent Variable: Stock Returns

Source: Research Findings
The study results revealed that there is no relationship between retained earnings and stock returns of the firms listed at the NSE as depicted by coefficient of determination $R^2$ of 0.054 and a Correlation Coefficient $R^2$ – Square of 0.003. This means that a change in retained earning does not influence any change on the stock returns of the NSE listed companies.

The study conducted an Analysis of Variance, in order to test the significance of the model and the findings were as shown in table 4.2 below:

**Table 4.2: Analysis of Variance**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3.814</td>
<td>1</td>
<td>3.814</td>
<td>.838</td>
<td>.361</td>
</tr>
<tr>
<td>Residual</td>
<td>1288.372</td>
<td>283</td>
<td>4.553</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1292.185</td>
<td>284</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Stock Returns
b. Predictors: (Constant), Retained Earnings for the year/Net Income for the Period

**Source: Research Findings**

From the ANOVA results, the probability value of 0.361 was obtained implying that the regression model was insignificant in predicting the relationship between Stock Returns and Retained Earnings since it was greater than $\alpha = 0.05$. By use of the F-table tabulations, the $F_{283;1;0.05}$ was 254.3 which was greater than $F_{critical} = 0.838$ determined through analysis and shown in table 4.2 above indicating that the model was insignificant.
The study sought to establish the model depicting the contribution of retained earnings on the returns of the listed companies. The results are shown in table 4.3 below;

Table 4.3: Model Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.673</td>
<td>.255</td>
<td>2.637</td>
<td>.009</td>
</tr>
<tr>
<td>Retained Earnings for the year/Net Income for the Period</td>
<td>-0.344</td>
<td>-0.376</td>
<td>-0.915</td>
<td>.361</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Stock Returns

Source: Research Findings

The study established that the model depicting the relationship between stock returns and retained earnings without retained earnings can be expressed as; Stock Returns = 0.673 – 0.344x₁, where x₁ is the retained earnings. With the coefficient/slope being negative, the findings depict an inverse causation between retained earnings and stock returns. However, since the P-Value result equal to 0.361; which is greater than the accepted threshold of α =0.05, the findings reveal that the effect of changes in retained earnings on stock returns of the NSE listed companies is insignificant.

4.2.2 Regression Analysis Including the Control Variables

The study sought to establish the relationship between the retained earnings and stock returns while controlling for variances by including some control variables. The
researcher regressed the Stock Returns against Retained Earnings alongside the three control variables Dividend Yield, Net Asset Value per share and Price to Book Value and established the findings as shown in table 4.4 below:

**Table 4.4 Model Relationship Statistics Summary**

<table>
<thead>
<tr>
<th>Model Summary&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Dividend Yield, Net Asset Value per share, Price to Book Value, Retained Earnings for the year/Net Income for the Period  
b. Dependent Variable: Stock Returns

**Source: Research Findings**

The analysis findings shown that there is a very weak relationship between retained earnings and stock returns of the firms listed at the NSE as depicted by coefficient of determination R of 0.282 (as compared to 0.054 when no control variables were included) and a Correlation Coefficient R – Square of 0.079 (as compared to 0.003 when no control variable was included) in the regression analysis.

Consequently, since the inclusion of control variables; Dividend Yield, Net Asset Value per share, Price to Book Value improved the strength of the relationship between the dependent and the predictor variables, the study results reveal that there is a weak relationship between stock returns and Retained Earnings, Dividend Yield, Net Asset Value per share and Price to Book Value, as evidenced by a rise in R-Square from 0.003 to 0.079. Nonetheless, the relationship was very weak.
Also, the study conducted an analysis of Variance, in order to test the significance of the model. The findings were as shown in table 4.5 below;

**Table 4.5: Analysis of Variance**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>102.673</td>
<td>4</td>
<td>25.668</td>
<td>6.042</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>1189.512</td>
<td>280</td>
<td>4.248</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1292.185</td>
<td>284</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Stock Returns  
b. Predictors: (Constant), Dividend Yield, Net Asset Value per share, Price to Book Value, Retained Earnings for the year/Net Income for the Period

**Source: Research Findings**

From the ANOVA results, the probability value of .000b was obtained implying that the regression model was significant hence appropriate in predicting the relationship between Stock Returns and the predictor variable since it was less than \( \alpha = 0.05 \). By use of the F-table tabulations, the F\( _{280;4;0.05} \) was 5.63 which was less than the F-critical = 6.042 determined through the analysis as shown in table 4.5 above indicating that the model was significant.

The study sought to establish the model depicting the contribution of retained earnings as well as the control variables on the returns of the NSE listed companies. The analysis results are shown in table 4.6 below;
<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.169</td>
<td>.282</td>
<td>.600</td>
<td>.549</td>
</tr>
<tr>
<td>Retained Earnings for the year/Net Income for the Period</td>
<td>-.088</td>
<td>.369</td>
<td>-.014</td>
<td>-.237</td>
</tr>
<tr>
<td>Net Asset Value per share</td>
<td>-.001</td>
<td>.002</td>
<td>-.039</td>
<td>-.673</td>
</tr>
<tr>
<td>Price to Book Value</td>
<td>-.022</td>
<td>.026</td>
<td>-.048</td>
<td>-.835</td>
</tr>
<tr>
<td>Dividend Yield</td>
<td>10.948</td>
<td>2.367</td>
<td>.268</td>
<td>4.625</td>
</tr>
</tbody>
</table>

*Dependent Variable: Stock Returns*

**Source: Research Findings**

The regression analysis results indicated the relationship between stock returns and the predictor variables can be expressed using the following regression equation:

\[ R_t = 0.169 - 0.088x_1 - 0.001x_2 - 0.026x_3 + 10.948x_4 + \epsilon \]

Where: \( x_1 = \text{Retained Earnings for the year/Net Income for the Period} \), \( x_2 = \text{Net Asset Value per share} \), \( x_3 = \text{Price to Book Value} \), and \( x_4 = \text{Dividend Yield} \)

From the regression model obtained above, holding all the other factors constant, the stock returns for a company as measured by Kshs. would be 0.169. A unit increase/decrease in Retained Earnings for year divided by the Total Income for the period would decrease/increase stock returns by Ksh. 0.088 during the period. Conversely, the regression analysis results reveal that retained earnings are insignificant...
predictor variable in influencing stock returns of a company as depicted by a P-Value equal to 0.812 which is greater than $\alpha = 0.05$.

4.6 Interpretation of the Findings

Stock returns of an investment are an important indicator of the effectiveness of the management of a company in using the assets in the company to create wealth for the shareholders (Chasan, 2012). The sought to establish whether dividend policy and specifically the earnings retentions do influence the stock returns of a company. This study used coefficient of determination and correlation coefficient as well as P-value and F-tests statistics to measure the possibility of a relationship. The study regressed the dependent variable against the predictor variable alone, and then with three control variables; Dividend Yield, Net Asset Value per share, Price to Book Value.

When regressed against the predictor variable (retained earnings/Net Income for the period alone), the regression analysis produced established $R$, $R$-Square, P-Value and F-test statics were 0.054, 0.003, 0.361, and 0.838 respectively. With Coefficient of determination $R$ being equal to 0.054, and $R$-Square being 0.003, the regression results reveal that there is no (or extremely very weak) relationship between the stock returns and the retained earnings. The regression results established a simple linear model; Stock Returns $= 0.673 - 0.344x_1$ which shows that the extremely weak relationship established above between two variables above is inverse as shown by $\beta_1$ being negative (-0.344).

Also, with the P-Value being 0.361; which is greater than 0.05, the results show that the linear model involving stock returns and retained earnings is insignificant in defining the
relationship between the two variables. Furthermore, with the F-critical obtained from the model being 0.838 being less that the F-table tabulations obtained at $F_{283;1;0.05}$ which was 254.3 the findings indicate that the model involving the two variables was insignificant.

When the stock returns is regressed against retained earnings together with control variables Dividend Yield, Net Asset Value per share, Price to Book Value, the analysis established that $R$, $R^2$, P-Value and F-test statics were 0.282, 0.079, 0.000, and 6.042 respectively. With $R$ and $R^2$ being 0.282 and 0.079 the results reveal that there is weak (almost negligible) relationship between retained earnings and the stock returns of the NSE listed companies.

With P-value being 0.000, the results imply that the regression model involving the stock returns against retained earnings together with the control variables Dividend Yield, Net Asset Value per share, Price to Book Value is statistically significant and appropriate in describing the relationship between the variables. Also, with the $F_{280; 4; 0.05}$ being 5.63 which is less than the F-critical = 6.042 determined through the analysis the regression results indicate that the regression model was statistically significant.

Further, the study established that the relationship between stock returns and retained earnings as well as the control variables can be described using the model; Stock Returns;

$$R_i = 0.169 - 0.088x_1 - 0.001x_2 - 0.026x_3 + 10.948x_4 + \hat{e}$$

Where; $x_1$ = Retained Earnings for the year/Net Income for the Period, $x_2$ = Net Asset Value per share, $x_3$ = Price to Book Value, and $x_4$ = Dividend Yield. With the $\beta 1$ being
negative (that is -0.088) the regression analysis depicts an inverse relationship where a unit change in $x_1$ – retained earnings for the period divided by net income for that period causes a change in stock returns by 0.088 in the opposite direction. However, the P-Value corresponding to retained earnings in the model was 0.812; which is larger than 0.05 indicating that Retained Earnings is an insignificant predictor of Stock Returns for the NSE listed companies as described by the model.

The results of the study were consistent with the conclusions of Mohammad et al.(2012) who studied the impact of dividend policy on share price volatility in the Malaysian market showed significant negative relationship between share price volatility with two main measurements of dividend policy which included dividend yield and dividend payout. Also, the results concurred with the conclusions of Ngunjiri (2012) who noted that dividend policy does not have significant impact on the share price volatility at NSE.

However, the findings contradicted with the conclusions of Kanwal (2012) who established that Cash Dividend and Retention Ratio have a significant positive relation with stock market prices and significantly explain the variations in the stock prices of chemical and pharmaceutical sector of Pakistan. Also, the study results contradicted the posits of Khan & Zulfiqar (2012) who noted that the impact of retained and distributed earnings on future profitability and stock returns in Pakistan and established a weak positive relationship between a firm’s dividend policy and stock performance. The discrepancy in the findings may have been contributed by the variation in the markets where the study was conducted.
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This study sought to establish the effect of retained earnings on stock returns of the companies listed at the Nairobi Securities Exchange. This chapter summarizes the methods employed to collect and to analyze the findings of the study. It also provides the conclusions and recommendations in relation to the study findings.

5.2 Summary

The study sought to establish whether dividend policy and specifically whether earnings retentions do influence the stock returns of a company. The study followed a descriptive design and used secondary data obtained from Nairobi Securities Exchange and the listed company’s annual reports for the period 2009 to 2013. The data was summarized through excel spreadsheets and analyzed using Statistical Package for Social Sciences.

This study used coefficient of determination and correlation coefficient as well as P-value and F-tests statistics to measure the possibility of a relationship between the variables. The study regressed the dependent variable against the predictor variable alone, and then with three control variables; Dividend Yield, Net Asset Value per share, Price to Book Value and established R, R-Square, P-Value, and F-Test statistics.

When regressed against the predictor variable (retained earnings/Net Income for the period) alone, the regression analysis produced established R, R-Square, P-Value and F-
test statics were 0.054, 0.003, 0.361, and 0.838 respectively. With Coefficient of determination R being equal to 0.054, and R-Square being 0.003, the regression results reveal that there is no (or extremely very weak) relationship between the stock returns and the retained earnings. The established simple linear model had a negative coefficient β1 (-0.344) depicting an inverse relationship.

Also, with the P-Value being 0.361; which is greater than 0.05, the results show that the linear model involving stock returns and retained earnings is insignificant in defining the relationship between the two variables. Furthermore, with the F-critical obtained from the model being 0.838 being less that the F-table tabulations obtained at F,283; 1; 0.05 which was 254.3 the findings indicate that the model involving the two variables was insignificant.

When the stock returns was regressed against retained earnings together with control variables; Dividend Yield, Net Asset Value per share, Price to Book Value, the results established that R, R-Square, P-Value and F-test statics were 0.282, 0.079, 0.000, and 6.042 respectively. With R and R-Square being 0.282 and 0.079 the results revealed that there is weak (almost negligible) relationship between retained earnings and the stock returns of the NSE listed companies.

With P-value being 0.000, the results implied that the regression model involving the stock returns against retained earnings together with the control variables was statistically significant and appropriate in describing the relationship between the variables. Also, with the F,280; 4; 0.05being 5.63 which is less than the F-critical = 6.042 as determined
through the analysis, the regression results indicated that the regression model was statistically significant.

Further, the study established that the relationship between stock returns and retained earnings (including the control variables) had the coefficient ($\beta_1$) corresponding to $x_1$ was negative (-0.088) which depicted an inverse relationship. Hence, a change in retained earnings would cause a change in stock returns by Ksh. 0.088 in the opposite direction. However, the P-Value corresponding to retained earnings in the model was 0.812; which is larger than 0.05 indicating that Retained Earnings is an insignificant predictor of Stock Returns as per the developed model.

5.3 Conclusion

This study established that there is very weak (almost negligible) relationship between earnings retentions and the stock returns; which was established to be inverse. Consequently, the study concludes that there is a very weak, inverse insignificant relationship between retained earnings and stock returns.

The findings contradict the views of Campbell (2012) who posits that retained earnings ultimately come back to the equity shares in the form of enhanced dividend or capital gains. The study results further contradicts the findings of Khan et al. (2013) who empirically proved that variation in retained earnings does affect the stock returns of Pakistani textile industry.

The study agrees with the conclusions of Ngunjiri (2012) who noted that dividend policy does not have significant impact on the share price volatility at NSE. Also, the study
concur with the findings of Mohamed (2010) and Kanwal (2012) who concludes that there is a weak positive correlation between dividend payout ratios with future earnings of companies though the relationship is very low. The study agrees with the view that the relationship between stock returns has a positive relationship with dividend payout, since it established that retained earnings have an inverse relationship with stock returns.

5.4 Policy Recommendations

The study has established that earnings retention has an inverse (insignificant) relationship with stock returns of a company. To this end, the study recommends that it is not necessary to retain huge quantities of the obtained earnings because organizations should implement dividend policies that have a positive contribution to the shareholders.

The study recommends that corporate managers should endeavor to pay as much dividends as the company can since retentions do not increase investor returns. Although the established relationship was weak, it was negative.

Also, the study recommends that corporate leaders should judiciously manage the company’s earnings. The company should only retain when sure there are investment opportunities with a positive net present value (NPV). This requires that the managers should carry a succinct analysis of the available projects to ensure maximum returns are attained by investing in the most appropriate projects.

Further, the study recommends that corporate leaders should ensure that retained earnings should be utilized for investments purposes (not merely for operations related purposes) because operations may not give as much returns as would investments into projects.
To the investors, the study recommends that they should invest in organizations which pay more dividends in current periods instead of those that pay less. This should be the case because organizations which retain more seem to create less return for the investors at least as per the findings of this study.

To the regulators, the study recommends that Capital Markets Authority (CMA) should make or/and apply stringent regulations that curtail organizations retentions only to a certain maximum. Also, the authority should be emphatic that the listed companies should endeavor to create shareholder value in all their decisions especially as regards management of the obtained income.

5.5 Limitations of the Study

The study utilized secondary data, which had already been obtained and was in the public domain, unlike the primary data which is first-hand information. Possible errors in the process of measurement or/and accounting may have been impounded into the research.

Also, the errors in the data on prices as researcher as provided by the NSE well as during the process of stock returns computation by the would possibly be impounded in the study results. However, since the study used many companies for a period of 5 years, the effect of possible errors from the data cannot affect the results fundamentally.

Also, the researcher conducted the study within a short study period which may not have allowed the researcher to consider more variables and to measure more phenomenon related to the study variables such as; those relating to the relationship between the variables across different markets and times to establish the impact of the retained
earnings on future stock returns. However, the researcher gave the study maximum time and attention by allocating more time to the study so as to complete within time and to produce top quality paper.

Additionally, the fact that the researcher had to conduct the study in conjunction with official duty at place of work, the researcher was overwhelmed and may have failed to note some intricate details and phenomena concerning the study variables. However, the researcher ensured to get a third party to proof-read the document on his behalf. Furthermore, the researcher was guided by the University’s resourceful team of academic professionals including supervisor, moderator and discussion session panelists who made objective critique to ensure top quality academic paper.

5.6 Suggestions for Further Studies

This study recommends that further study should be conducted on the impact of earnings retentions on future stock returns. This is necessary since there is possibility that retained earnings would impact future stock returns if the retained earnings are invested in projects with a positive NPV.

Also, further studies should focus on the impact of retained earnings on other variables such as future return on equity or/and dividend amounts. This would help arrive at conclusions relating to whether current period retentions do influence the ability of the company to make more returns or/and to pay more dividends to the shareholders.

Further, the researcher recommends that a comparative study can be carried out to establish whether retained earnings in other markets have similar effect on stock returns.
or otherwise. The results of such studies are essential for comparison purposes as they can provide experience from elsewhere and provide concrete facts upon which reliable conclusions can be made in relation to the study variables.

Also, the study recommends that future studies should be conducted to find out the relevant regulatory and policy issues that regulator and corporate organizations should adopt to ensure that the listed companies maximize the wealth of the shareholders in all their decisions.
REFERENCES


APPENDICES

Appendix I: NSE Listed Companies as at July 1st, 2014

1  Eaagads Ltd Ord  
2  KakuziOrd  
3  Kapchorua Tea Co. Ltd OrdOrd  
4  Limuru Tea Co. Ltd Ord  
5  Rea Vipingo Plantations Ltd Ord  
6  Sasini Ltd Ord  
7  Williamson Tea Kenya Ltd Ord  
8  Car and General (K) Ltd Ord  
9  CMC Holdings Ltd Ord  
10  Marshalls (E.A.) Ltd Ord  
11  Sameer Africa Ltd Ord  
12  Barclays Bank Ltd Ord  
13  CFC Stanbic Holdings Ltd ord  
14  Diamond Trust Bank Kenya Ltd  
15  Equity Bank Ltd Ord  
16  Housing Finance Co Ltd Ord  
17  I&M Holdings Ltd Ord  
18  Kenya Commercial Bank Ltd Ord  
19  National Bank of Kenya Ltd Ord  
20  NIC Bank Ltd 0rd  
21  Standard Chartered Bank Ltd Ord  
22  The Co-operative Bank of Kenya Ltd Ord  
23  Express Ltd Ord  
24  Hutchings Biemer Ltd Ord  
25  Kenya Airways Ltd Ord  
26  Longhorn Kenya Ltd  
27  Nation Media Group Ord  
28  Scangroup Ltd Ord  
29  Standard Group Ltd Ord  
30  TPS Eastern Africa (Serena) Ltd Ord  
31  Uchumi Supermarket Ltd Ord  
32  Athi River Mining Ord  
33  Bamburi Cement Ltd Ord  
34  Crown Berger Ltd Ord  
35  E.A.Cables Ltd Ord  
36  E.A.Portland Cement Ltd  
37  KenGen Ltd Ord  
38  KenolKobil Ltd Ord  
39  Kenya Power & Lighting Co Ltd  
40  Total Kenya Ltd Ord  
41  Umeme Ltd Ord  
42  British-American Investments Company  
43  Liberty Kenya Holdings Ltd  
44  CIC Insurance Group Ltd Ord  
45  Jubilee Holdings Ltd Ord  
46  Kenya Re-Insurance Corporation Ltd Ord  
47  Pan Africa Insurance Holdings Ltd 0rd  
48  Centum Investment Co Ltd Ord  
49  Olympia Capital Holdings ltd Ord  
50  Trans-Century Ltd  
51  A.Baumann CO Ltd Ord  
52  B.O.C Kenya Ltd Ord  
53  British American Tobacco Kenya Ltd Ord  
54  Carbacid Investments Ltd Ord  
55  East African Breweries Ltd Ord  
56  Eveready East Africa Ltd Ord  
57  Kenya Orchards Ltd Ord  
58  Mumias Sugar Co. Ltd Ord  
59  Unga Group Ltd Ord  
60  Safaricom Ltd Ord  
61  Home Afrika Ltd Ord

Source: Nairobi Securities Exchange
# Appendix II: Data Collection Form

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