THE EFFECT OF CORPORATE TAXES ON INVESTMENT   DECISIONS OF COMPANIES LISTED AT THE NAIROBI   SECURITIES   EXCHANGE

BY

EVERLYNE ASINGWA OLIECH

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DECLARATION

This project is my original work and has not been submitted for a degree in any other university.

Signed .... Date ....

Everlyne Asingwa Oliech

Reg No: D61/73028/2012

This project has been submitted for examination with my approval as the University Supervisor.

Signed .... Date ....

Mr. Cyrus Iraya

Lecturer, School of Business,

University of Nairobi.

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My most sincere thanks to my Mom, brothers and sisters. Whom through their support I have reached this far. My God bless them abundantly.

DEDICATION

I dedicate this work to my Lord Jesus Christ who enabled me to begin and complete my studies and also my family for their support and encouragement to this far. May God bless them abundantly.

ABSTRACT

The Kenyan corporate income tax system provides investment incentives that vary across asset types. Do corporations investment choices respond to these differences and if so by how much? This research analyzes the effect of corporate income tax on investment decisions of companies listed at the NSE. While policy makers have made effort to impose more uniformity on corporate tax policies, no empirical study exists to quantify the extent to which corporate income tax have altered the structure of investment decisions. This is rather unfortunate because, as pointed out in Feldstein (1982) capital consists of many types of equipment and structures. The objective of this study is to establish the relationship between corporate taxes and investment decisions of the companies listed at the NSE.

Descriptive Research was used in this study which involved the analysis of quantitative data. The data was the financial statements of the companies listed at the NSE. It was a census study this means that data from the whole population was analyzed. Secondary data was collected from all the companies listed at the NSE from 2008 to 2012. Data analysis was done using the SSPS where the regression analysis, ANOVA and correlation coefficients were generated. T-test was done to prove the relevance of the study.

It was concluded that corporate tax affect investment decisions of the companies. All the corporate tax variables affect the depended variables. The depreciation tax shield has a very small negative value this implies that to a larger extend it reduce the corporate taxes amount and increase the amounts available for investment. The interest tax shield, After Tax cash flow and corporate tax all affect investment. Corporate tax is the highest in reducing the amounts available for investment. The overall effect of these tax incentives is therefore asset specific, depending on the characteristics of the physical asset and, to a lesser extent, the industry in which the asset is placed.

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ACRONYMS AND ABBREVIATIONS

CFA	-	Carry Forwards Available
CRSP	-	Center for Research in Securities Prices
CEO	-	Chief Executive Officer.
EBIT	-	Earnings Before Interest and Tax
ITC	-	Investment Tax Credit
KRA	-	Kenya Revenue Authority
NSE	-	Nairobi Securities Exchange.
PTCF	-	Pre Tax Cash Flow
U.S	-	United States
V.A.T	-	Value Added Tax

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

An efficient allocation of capital is the most important investment function in the modern times. It involves decisions to commit the firms fund to the long term assets. According to Pandey (1995) investment decisions are of considerable importance to the company since they tend to determine its value by influencing its growth. Investment decision is defined, as the company decision to invest its current funds most efficiently in the long term assets in anticipation of an expected flow of benefits over a series of years. However, investment decisions of companies are mostly fiscal weapon. Taxation is regarded as an indispensable measure towards any nation's development among the various sources of achieving economic goal of any nation precisely developing country like Kenya, corporate tax stands out as the most important in economic analysis. The question then is what is the concern of corporate taxation in investment decision of companies?

It is well understood that corporate taxation can distort investment plans by reducing the after-tax returns to new investment. A large literature, starting with Hall & Jorgensen (1967) has attempted to assess the empirical relevance of such distortions. However, there is another channel through which corporate taxes can affect investment that is largely unexplored. If financing frictions make raising external capital costly, a firm's investment may be constrained by the amount of cash flow it is able to generate internally.

Corporate taxes then could also impact investment by reducing the amount of cash flow a firm has available to invest. The research examined the effect of corporate taxes on investment decisions. Studying this effect is challenging because of two omitted variables problems. First, a firm's income tax is a function of it is profitability, which is likely to be correlated with its investment opportunity. Second, current period income tax is likely to be related to a firm's future marginal tax rate, which could also affect investment. So, while one could in principle simply examine the contemporaneous relationship between a firm's tax payments and its investments, it would be difficult to infer causality from this relationship (Pandey, 1995).

Hassert and Hubbard (1976) defined taxation as the compulsory levy by government through its various agencies on the income or consumption of its subjects. The ultimate justification for company income tax in investment decision is that investment decisions required special attention and cannot be satisfactory evaluated without considering tax implication. More so investment decision has a long term implication for the firms and can influence the firms risk complexion and are mostly irreversible decisions (Panedy, 1995). Consequently there are no companies that do not make investment decision at one time or the other which requires company taxation to be properly and effectively planned to achieve the companies' goals and objectives. It is based on these facts that the research is between company corporate income tax and investment decisions.

This research examined how corporate tax affects investment by reducing the cash flow a firm has available to invest in the current period. A sharp nonlinearity in the mapping

from pre-tax profitability to taxes created by the tax loss carry forward feature of the tax code to identify the cash flow effect of taxes. The results indicate that firms reduce investment when they pay more taxes, especially when unfavorable capital market conditions create a greater dependence of investment on internal sources of cash (Pandey, 1995).

1.1.1 Corporate Tax

Alworth and Arachi (2001) defined corporate tax as tax levied on corporations' profits. Corporations are legal entities separate from their owners. They may be taxed as if they were persons. A corporate tax is the equivalent of the income tax for natural persons. Corporate taxes vary from country to country in the US, they are levied at both the federal and state levels. Proponents of the corporate tax argue that it guards against excessive profits that may result from unethical or illegal corporate practices while opponents say that corporations simply pass on the tax to their customers. Most jurisdictions tax corporations on their income. Generally, this tax is imposed at a specific rate or range of rates on taxable income as defined within the system. Some systems have a separate body of law or separate provisions relating to corporate taxation. In such cases, the law may apply only to entities and not to individuals operating a trade. Such laws may differentiate between broad types of income earned by corporations and tax such types of income differently. However, most such systems tax all income of a corporation in the same manner (Hassert & Hubbard, 1976).

Most systems tax both domestic and foreign corporations. Often, domestic corporations are taxed on worldwide income while foreign corporations are taxed only on income from sources within the jurisdiction. Many jurisdictions imposing an income tax impose such tax on income from a permanent establishment within the jurisdiction. Corporations are also subject to property tax, payroll tax, withholding tax, excise tax, customs duties, V.A.T, and other common taxes, generally in the same manner as other tax payers. These, are different from corporate tax (Hasset & Hubbard, 1976). Corporation tax in Kenya is a form of income tax that is levied on companies. Resident companies are taxable at a rate of 30% of the year end income, while non - resident companies are taxable at a rate of 37.5% of the year end income (Kenya Revenue Authority, 2012).

1.1.2 Investment Decision

Investment decision is defined as the company decision to invest its current funds most efficiently in the long term assets in anticipation of an expected flow of benefits over a series of years. In finance, investment is the purchase of an asset or item with the hope that it will generate income or appreciate in the future and be sold at the higher price. It generally does not include deposits with a bank or similar institution. The term investment is usually used when referring to a long-term outlook. This is the opposite of trading or speculation, which are short-term practices involving a much higher degree of risk. Financial assets take many forms and can range from the ultra-safe low return government bonds to much higher risk higher reward international stocks (Verdugo, 2005).

Bringham and Besley (2000) identified several basic methods used by businesses to evaluate projects and to decide whether they should be accepted for inclusion in the capital budget. These methods are; Payback period, net present value and internal rate of return. A good investment strategy will diversify the portfolio according to the specified needs. The most famous and successful investor of all time is (Warren, 2013). In 2013, Warren was ranked as number two in the Forbes magazine for hundred list. Warren (2013) has advised in numerous articles and interviews that a good investment strategy is long term and choosing the right assets to invest in requires due diligence.

Investments are often made indirectly through intermediaries such as; pension funds, banks, brokers, and insurance companies. These institutions may pool money received from a large number of individuals into funds such as; investment trusts, unit trusts, to make large scale investments. Each individual investor then has an indirect or direct claim on the assets purchased, subject to charges levied by the intermediary which may be large and varied. It generally does not include deposits with a bank or similar institution. Investment usually involves diversification of assets in order to avoid unnecessary and unproductive risk (Kevin, 1984).

1.1.3 The Effects of Corporate Taxes on Investment Decisions

Decision makers must cope with the complexity of existing tax systems. They might be inclined to ignore complicated tax features and rely on statutory tax rates. Hence, they may make the wrong decisions with respect to taxes. The calculation and use of tax loss carry forwards and carry backwards. Permits corporations to carry losses backwards and

forwards in time to offset profits for the purpose of calculating taxable income. Income tax could capture information about investment opportunities or future marginal tax rates that is incremental to the information contained in pre tax cash flow. So it would be difficult to infer causality from the results of such a regression (Alworth & Arachi, 2001).

Carry forwards affect a profitable firm's cash flow by reducing its income taxes. Tax On Pre NOL Income is the amount of income tax that a firm would have paid in the current period if it had no net operating losses carried forward from prior periods with which can used to offset current period income. Further, definition is that tax savings is the amount by which the firm's current period tax bill is reduced by the application of any net operating losses carried forward from prior periods. Then income tax can be written as (Graham, 2003).

Income Tax = Tax On Pre NOL Income – Tax Savings

Investment = Tax Savings + After tax Cash flow + Error

Theories that explain about taxes and investment decisions include, the free cash flow theory which encourages managers to used debt in financing investments as use of debt will make them more prudent in choosing projects to invest on thus maximising the value of shareholders. Shareholders will also be sure that the organisation is under scrutiny of the financing institutions. Use of debt also results to less corporate tax paid because of interest paid on debt. Kaleckies (1971) explain that borrowing is very dangerous because it can lead to indebtedness which is very dangerous for an economy or business. Despite the fact that borrowing increase investment and the growth of the firm which results to

high profits and corporate tax reduction as a result of interest payment on debt (Hassett & Hubbard, 1998). The Capital Structure Theory – trade off model explains that in a world of corporate taxes where interest payments are tax deductible, it has long been recognized that the issuance of debt can enhance the value of the firm and that there is a limit on the amount of debt the firm can possibly use.

Hassett and Hubbard (1998) research examined the effect of corporate income taxes on the allocation of new capital investment in the U.S. economy. The study stated that corporate taxes distort the allocation of investment across capital classes. The other study looked at the effect of corporate taxes on investment and entrepreneurship. The study found out that there is a substantial adverse effect on investment and entrepreneurship. The local studies did not have a study that is comparing corporate taxes and investment decisions rather it looked at the variables differently linking them to other variables such as; Kipngetich (2011) did a study on the relationship between tax paid and level of investment. He looked at all the taxes that a company is subjected to. Nyale (2010) looked at the relationship between leverage & investment decision and Wairimu (2002) did a study on the empirical relationship between dividend and investment decisions, the studies are talking about corporate tax and investments separately linking them to other variables.

1.1.4 Nairobi Securities Exchange

Nairobi Stock Exchange was constituted in 1954 as a voluntary association of stockbrokers registered under the Societies Act. Since Africans and Asians were not

permitted to trade in securities, until after the attainment of independence in 1963, the business of dealing in shares was confined to the resident European community. At the dawn of independence, stock market activity slumped; due to uncertainty about the future of independent Kenya.1988 saw the first privatization through the NSE, of the successful sale of a 20% government stake in Kenya Commercial Bank. The sale left the Government of Kenya and affiliated institutions retaining 80% ownership of the bank (Https://www.nse.co.ke).

In 1996, the largest share issue in the history of NSE, the privatization of Kenya Airways, came to the market. On Monday 11th September 2006 live trading on the automated trading systems of the NSE was implemented. In July 2011, the Nairobi Stock Exchange Limited changed its name to the Nairobi Securities Exchange Limited. The change of name reflected the strategic plan of the Nairobi Securities Exchange to evolve into a full service securities exchange which supports trading, clearing and settlement of equities, debt, derivatives and other associated instruments. The Nairobi Securities Exchange comprises approximately 60 listed companies with a daily trading volume of over USD 5 million and a total market capitalization of approximately USD 15 billion (Https://www.nse.co.ke).

1.2. Research Problem

Verdugo (2005) defined investment as the purchase of an asset or item with the hope that it will generate income or appreciate in the future and be sold at a higher price. The term investment is usually used when referring to a long-term outlook. Investment decisions

are therefore what assets the company decides to invest on that will have optimal return to the shareholders capital. Alworth and Arachi (2001) defined corporate taxes as tax levied on corporations' profits, this is because corporations are treated as legal entities separate from their owners, and they are taxed as if they were persons. The corporation taxes can affect investment decisions of a company because it is the amount taken from the net profit of the company. This could be invested back to business to generate more profits to the company thus increasing the shareholders' value. Company business activities are surrounded by risks and uncertainties and such risk could lead to losses of money invested, losses of material in site and the causes of all these things could be having not made good decisions on how to invest.

International studies examined the effect of corporate income taxes on the allocation of new capital investment in the U.S. economy (Mackie, 2002). It was concluded that overall effect of these tax incentives is therefore asset specific, depending on the characteristics of the physical asset and to a lesser extent, the industry in which the asset is placed. The other study presented was done by (Berndt & Wood, 1975) the new cross-country evidence on the effects of corporate taxes on investment and entrepreneurship. In this study it was concluded that corporate taxes have a substantial adverse effect on investment and entrepreneurship (Pindyck, 1979). Locally Kipngetich (2011) did a study on the relationship between tax paid and the level of investment. It was concluded that there is a strong relationship between tax paid and investment made especially pronounced in the financial sector and agricultural sector. Nyale (2010) looked at the relationship between leverage and investment decision. It was concluded that there is a

very weak relationship between the level of leverage and the amount of money that a company can commit into investment. Wairimu (2002) did a study on the empirical relationship between dividend and investments decisions .It was concluded that there was a relationship between investment and dividend decisions.

With proper application of investment appraisal techniques, it could be found that taxation may have a role to play on successful growth of the company. While policy makers have made effort to impose more uniform corporate tax policies no empirical study exists to quantify the extent to which corporate income taxes have altered the structure of investment decisions. Measuring of the inter-asset distortion effect of the corporate income tax has received little attention despite the well-documented differences in the taxation of different capital assets (Mackie-mason, 1990). Asset substitution and the effect of tax incentives on the composition of new investment can be substantial and important for evaluating the efficiency and distributional effects of alternative tax policies. The research examined the effect of corporate income taxes on the allocation of new capital investment in the companies listed in the NSE. The corporate tax code offers a wide range of tax instruments to encourage business investment. While a reduction in the statutory corporate tax rate applies uniformly to all investment types, accelerated depreciation allowances are targeted tax incentives (Graham, 2003).

From both the local and international empirical evidence, no studies have been done on the effect of corporate tax on investment decisions in the Kenyan companies listed at the NSE. Except the one that looked at the effect of corporate taxes on the allocation of new

capital investment in the U.S. Kipngetich (2011) looked at all taxes while this research will focus on corporate taxes. It is against these backgrounds that the study seeks to establish a response to the dominant question what are the effects of corporate taxes on investment decisions of the companies listed in the Nairobi Securities Exchange.

1.3 Objective of the Study

To establish the relationship between corporate tax and investment decisions of the companies listed at the NSE.

1.4 Value of   the Study

The research looked at the effect of company income tax on investment decision of companies listed in the Nairobi Securities exchange. The research results are of fundamental importance to government both in planning and administration of company tax so as to create favorable investment climate in the economy. The results serve as a purpose to corporate organizations in policy formulation as taxes affects investment policies and decisions. It also helps management to reduce their tax liability legitimately and make good use of tax incentives to manage business.

In academics the study will be significance to future researchers since it will act as a source of information to the existing knowledge in the field of taxation and investment decisions. Future researchers will have ready and available literature from which they will review and form a basis of future studies.

For the existing theories the study helps to confirm or disapprove the theories that explain the relationship between corporate taxes and investment decisions. For example Kalecki (1971) theory of taxation stated that borrowing is very dangerous for the organization because it can lead to indebtedness which is a distress to the economy or business despite the fact that borrowing increases the level of investments in the company and reduces the corporate tax liability at the end of the year.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter summarizes literature on the topic under consideration: The impact of corporate taxes on investment decisions. This relates to work that had been done by other scholars. The chapter is organized as follows: Theories on investment decisions, measures of corporate taxes and investment, empirical studies and summary of literature review.

2.2 Theoretical Framework

The theories discussed below explain the effect of corporate taxes on investment decisions and how companies can gain on tax incentives.

2.2.1. The Free Cash Flow Theory

The free cash flow theory focuses on agency costs resulting from the separation of ownership and control. Managers have incentives to pursue activities that are not in the principal's interest reducing the profitability of the firm. Furthermore, if manager's compensation is linked to the growth of the firm, they may have an incentive to pursue above optimum growth policies. They also may prefer growth, if pecuniary and non-pecuniary benefits they can consume increases with the size of the firm. Some papers analyzed the link between managerial compensation and the firm size. Other research papers demonstrated that the elasticity between managerial compensation and the firm sales. Internal finances are preferred to external finances by managers as they can more

easily evade market scrutiny (Devereaux, & Schiantarelli,1990). Managers can limit the agency problems of free cash flow by issuing debt and paying the proceeds back to shareholders. This course of action will reduce the free cash flow available to the managers' discretion. If investors (shareholders) are acting rationally, they will diversify their portfolio by exchanging shares for bonds, resulting in a constant return on their investment portfolio. Leverage restricts the use of the internal finance generated by the firm, forcing the managers to use cash flow to meet their contractually specified interest obligations. Furthermore, managers' incentives to invest in negative NPV projects are reduced, as firms have a higher probability of going bankrupt (Jensen, 1978).

The free cash flow theory has very important implications on the effect of leverage on investment financing decisions. The free cash flow model implies that for an over-investor, an increase in leverage should lead to a reduction in unprofitable investment spending. Additional leverage does not significantly affect the overall level of internal funds, but rather tightens the control that improves the efficiency of investments because leverage (debt) will push out negative NPV projects (Jensen, 1978). Corporate tax at the end of the year is reduced by the interest amount paid buy the company as a result of debt, thus increasing the amounts available for investment.

2.2.2. The Capital Structure Theory- The Trade off Model

Onsumu (2003) notes that market imperfections in the Kenyan environment do not support the argument of Modgiliani and Miller explained below. Many theories of capital structure imply that other things remaining constant the incentive to use debt financing

increase with firm's marginal corporate tax rate due to tax deductibility of interest expense (Graham & Schallheim, 1998). In a world with corporate taxes, where interest payments are tax deductible, it has long been recognized that the issuance of debt can enhance the value of the firm and that there is a limit on the amount of debt the firm can possibly use. Determining an appropriate long-term source of finance is what the capital structure debate is all about. The task according to Brealy and Myers (1988) it is difficult for management and in their words "we cannot say that debt is better……better than equity in some cases, worse in others." The debate is on whether there exists an optimal capital structure which maximizes the value of the firm. The tradeoff model was developed from the Modigiliani and Miller (1958) theory of relevance on taxes to capital structure of a firm. Modigilliani and Miller (1958) argued that in a world with corporate taxes, firms should use 100% debt financing. They argued that the difference between the value of the levered and unlevered firms is the tax savings.

The Modgiliani and Miller (1958) theorem proposed by Franco Modgiliani and Merton Miller, form the basis for modern thinking on capital structure. Though it's generally viewed as a purely theoretical result since it assumes away many important factors in the capital structure decision, the theorem states that, in a perfect market, the value of a firm is unaffected by how that firm is financed Prior to the Modgiliani and Miller (1958) paper, the thinking was that there existed a single optimum capital structure for any given firm that maximizes shareholders value.

2.2.3 Kaleckies Theory of Taxation

Kalecki (1971) did a research on the effects of three taxes; tax imposed on wage goods, tax on capitalist income and capital tax. Assuming that, the proceeds of tax were spent on behalf of the unemployed. The tax imposed on wage goods had no effect. The demand of the dole receipts boosted spending as a whole but all the products raised their prices buy a sum equal to the tax, having no fears about losing market shares since "the tax is reckoned and Volarem at a constant rate for all kinds of wage goods Kalecki (1971) in short the tax did not bring about any increase in production but only in the prices of the goods taxed and a shift of purchasing power from those consuming wage goods to the dole receivers.

The effect of income tax on national income and employment were positive in the first instance. Kalecki demonstrated that in the face of a tax levied on income rather than goods, producers were declined to offload the tax on prices, since in this case there was a real risk of closing market shares. Thus the increased demand coming from dole receivers was satisfied by increasing production. In consequence the profits made by the capitalist as a class, rose by an amount, as Kalecki (1971) demonstrated, equaled to the reduction in income caused by the tax burden. Kalecki (1971) added that the positive effects of the tax might in part at least be hindered by the fact that the lenders were able to shift the tax into the entrepreneurs, with the result that the net profitability of investment was lowered and the inducement to invest was depressed.

The capital tax did not come up against this limitation Kalecki (1971) explained that the increased spending of the whole dole receivers generated the same positive effects to be seen with the capitalist income tax, but not the negative effects. The capital tax was not susceptible to being shifted from the lenders to the entrepreneurs since it was levied on all sorts of assets. "Indeed if somebody borrows money and builds a factory he does not increase his own capital by this action and does not pay a greater capital tax. And if he ventures his own means he also pays the same taxes he would if he abstained from investment. Thus the net profitability of investment is unaffected by capital taxation''.

Kalecki (1971) came to conclusion that the capital tax proved a perfectly valid means from the strictly economic point of view to increase national income and employment. It showed all the merits of financing the state expenditures by borrowing but it is distinguished from borrowing by the advantage of the state not becoming indebted. Its drawback lay elsewhere, it was perceived as striking at the very principle of private property, erroneous as the impression may be. It could be levied only if the fundamental principle upon which capitalistic production rests were susceptible of being modified.

2.3 Empirical Studies

Kipngetich (2012) did a study on the relationship between tax paid and level of investment for the quoted companies in Kenya. The population of the study was all companies listed in the NSE from the year 2006 to the year 2010. Data was analyzed using descriptive statistics. It was concluded that there is a relatively strong relationship

between tax paid and investment made especially pronounced in the financial sector and agricultural sector.

Nyale (2010) looked at the relationship between leverage and investment decision for companies listed in the NSE. An empirical research design was used. The population of the study constituted all the fifty two companies that are listed at the NSE whose shares are actively trading. A census survey was conducted and all the listed companies were considered in the study from 2005 to 2009. Linear regression model was used in data analysis. It was concluded that there is a very weak relationship between the level of leverage and the amount of money that a company can commit into investment.

Wairimu (2002) did a study on the empirical relationship between divided and investment decisions of firms quoted at the NSE. The population comprised of companies quoted at the NSE for twenty one years from 1981 to 2000. Linear regression model was used in data analysis. It was concluded that there was a relationship between investment and dividend decisions.

Rita and Shleifer (2009) presented a study on new cross-country evidence on the effects of corporate taxes on investment and entrepreneurship. Data was collected from price water house coopers accountants and tax lawyers in January 2005 and 2006. Selecting standardized business and fills out its tax return as well as provide supporting information and relevant tax schedules. Data used covered the tax system effective in fiscal year 2004. The sample consist of 85 countries covered by Djankove (2002) it includes 27

high income ,19 upper-middle income, 21 lower-middle income and 18 low income countries. In addition to 22 rich OECD countries, 10 are in East Asia, 17 are in Eastern Europe, 13 in Latin America, 6 in the Middle East, 14 in Africa and 3 in south Asia. It was concluded that corporate taxes have a substantial adverse effect on investment and entrepreneurship.

Mackie (1990) did a study on the effect of corporate income taxes on the allocation of new capital investment in the U.S. economy. Data was collected in investment shares, user costs of capital and real prices at the asset and industry level with data from the Bureau of Economic Analysis (BEA), Bureau of Labour Statistics (BLS). BEA capital flow tables show new capital investment in equipment, software and structures by industries that purchase or lease these capital goods and services in the US economy. The effect of corporate income tax on capital allocation is estimated using translong specification model the cost minimization has a two stage process .This is the most common form in the productivity literature. It was concluded from the research that corporate taxes distort the allocation of investment across capital classes.

2.4 Summary of Literature Review

Theories related to corporate tax and investment decisions include, the free cash flow theory, the capital structure theory (trade off Model) and Kileckies theory of taxation. Investment decisions on corporate depends on profits available after paying the corporate tax in addition to other source of funding that a company may deem suitable at that time to finance its investments. Reduction of corporate taxes increases the income available

for investment. Kaleckies theory of taxation stated that borrowing is very dangerous for the organization because it can lead to indebtedness which is very dangerous for an economy or business despite the fact that borrowing increases the level of investments in the company and reduces the corporate tax liability at the end of the year. The capital structure theory (Trade off Model) states that; In a world of corporate taxes where interest payments are tax deductible, it has long been recognized that the issuance of debt can enhance the value of the firm and that there is a limit on the amount of debt the firm can possibly use (Thorp, 2010). The free cash flow model implies that for an over-investor, an increase in leverage should lead to a reduction in unprofitable investment spending. This is because debt will push out negative NPV projects Jensen (1978) .The corporate tax at the end of the year is reduced by the amount of interest paid as a result of debt financing.

Locally Kipngetich (2011) did a study on the relationship between tax paid and the level of investment for the quoted companies in Kenya. Kipngetich (2011) looked at all the taxes available in the company while this study concentrated on corporate taxes Nyale (2010) looked at the relationship between leverage and investment decision for companies quoted at the NSE. It was concluded that there is a very weak relationship between the level of leverage and the amount of money that a company can commit into investment. Wairimu (2002) did a study on empirical relationship between dividend and investments decisions of quoted companies. It was concluded that there was a relationship between investment and dividend decisions.

The empirical studies examined the effect of corporate income taxes on the allocation of new capital investment in the U.S. economy Mackie, (1990). It was concluded that the overall effect of these tax incentives is therefore asset specific depending on the characteristics of the physical asset and to a lesser extent the industry in which the asset is placed. It is against the above background that this study seeks to establish a response to the question; what are the effects of corporate tax on investment decisions of the company.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter brings forth the way by which the research study was conducted. It is therefore organized in the following manner: Section 3.2 outline the research design, section 3.3 looks at the targeted population, section 3.4 considers the sample of the study, section 3.5 focuses on data collection, section 3.6 discusses the analysis of data and section 3.7 shows the model specification.

3.2 Research Design

Research design refers to the way the study is designed, that is the method used to carry out the research (Mugenda and Mugenda, 2003). Descriptive design was used in this study. Descriptive research is the investigation in which quantity data will be collected and analyzed in order to describe the specific phenomenon in its current trends, current events and linkages between different factors at the current time.

Further studies have also shown that descriptive research is preferred while conducting research studies. Descriptive research portrays an accurate profile of persons, events, or situations (Robson, 2002).

It has also been shown that surveys allow for collection of a large amount of data from a sizeable population in a highly economical way. It allows one to collect quantitative data, which is analyzed quantitatively using descriptive and inferential statistics (Saunders et. al 2007).

3.3 Target Population

The research was a census study focusing on companies listed at the Nairobi Securities Exchange between 2008 and 2012. There are 62 companies as at the month of September, 2013 listed at the NSE (See Appendix). The study was conducted in all the listed companies in order to establish the extent to which corporate taxes affect investment decisions in all sectors of the economy.

3.4 Data Collection

For the purpose of this research project, secondary data was obtained from different companies that are listed in the NSE. These multiple sources according to Yin (1994) and Stake (1995) allow the convergence of lines of inquiry and the triangulation of evidence. The study was focused on a particular context and described and analyzed one particular phenomenon richly and comprehensively. The secondary data collected were the financial statements from 2008 to 2012 of the listed companies. These data was used to establish the relationship between corporate tax and investment decisions in the listed companies.

3.5 Data Analysis

From the data that was collected, multiple regression analysis was used to establish the effect of corporate taxes on investment decisions over the stated period. Correlation analysis was done to establish whether there was malticollinearity on the variables of study. Data was presented using tables. This method of data presentation was preferred because it helps to explain quantitative data. The study was on the whole population hence it was not easy to come up with graphs.

3.5.1 Model Specification

The basic concern of the study was to establish the relationship between corporate tax and investment decisions. In principle one could attempt to estimate this effect by simply regressing measures of investment on measures of taxes paid. However, taxes paid are a function of profitability which is likely to be highly correlated with investment opportunities to be considered (Robson, 2002).

The concern of this study was to establish the relationship between the dependent variable which is represented as investment decisions and explanatory variables represented by corporate tax. Investment decisions representing the dependent variable for the study whilst corporate tax, depreciation tax shied, after tax cash flow, and interest tax shield represents dependent variables.

The general multiple regression model which the study adopted is provided below:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + E$$

Where;

Y= Investment was measured by growth in amounts of fixed assets net of depreciation and disposal done in each year. Growth for each year was calculated by the closing balance at the end of each year less opening balance at the beginning of the year this was divided by total assets at the end of the year.

X_1= Corporate tax which was measured by calculating tax paid each year divided by earnings before interest and tax.

X_2 = Depreciation tax shield which was measured using the depreciation charge each year multiplied by the corporate tax rate. This was divided by total value of assets.

X_3 = Control variable which was after tax cash flow this was measured by looking at profits made each year net of taxes. This was divided by sales.

X_4 = Interest tax shield which was measured using the interest payments on debt each year multiplied by the corporate tax rate. This was divided by total assets.

E = Error

A t-test was conducted to establish the significance of the independent variable (Corporate tax, Depreciation tax shield, After tax cash flow, and Interest tax shield) against the dependent variable (Investment decisions). It explained the relationship between the independent variable and the dependent variable. The significance of variables was observed at 95% confidence level whereby variables with a P value of 0.05 and below ware deemed significant while those with P values above 0.05 were deemed insignificant. ANOVA was conducted to test the appropriateness of the model (Peter, 2010).

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

In this chapter, the descriptive statistics of the study variables is discussed. The study involves data from 2008-2012 which discusses the empirical findings of the study and also gives a summary of the findings and interpretations with regard to the study objective. The objective of this study was to find out if there is a relationship between the dependent factor (Investment decision) and the independent factors which include; corporate tax, depreciation tax shield, after tax cash flow, interest tax shield of the firms listed in the NSE.

4.2 Descriptive Statistics

Table 4.1 Showing the minimum, maximum, mean, standard deviation and variance of the depended and independent variables

	Minimum Value	Maximum Value	Mean Values	Standard Deviation	Variance
Corporate tax (Shs)	9,830	752,087	99,790	133,696.981	17,874,882,718
After tax cash flow (Shs)	22,936.66667	1,754,870	134,873.3474	147,900.4	21,874,538,753
Interest tax shield (Shs)	3,284,119	5,927,347	4,274,138	43,884.3611	1,925,837,149
Depreciation tax shield (Shs)	32,206.47	833,047	116,029.1383	113,320.99	12,841,648,922
Investment (Shs)	-270,748	3,792,397	242,298.519	3,847,284.931	1,480,160,110,000

Source: NSE

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From the table above it can be seen that investment has the lowest minimum value of (-270,748) compared to other variables this implies that some companies are not investing at all because the amount generated is used to pay the tax hence they are left with nothing to invest back to the business. They may also have sold the assets to fund there working capital. The maximum value of investment is the second largest (3,792,397) and the variance for investment is the largest. This means that investment pattern of the listed companies is unpredictable and varies from one company to another. This would mean that investment depends on the industry in which the company is in and the source of funds to finance its investments.

Corporate tax also has a higher variation of (17,874,822,718) meaning that corporate tax submitted to the Kenya Revenue Authority at the end of the year varies from one company to another and this depends on the source of funds that are used to fund operations. Companies with large amounts of loans or those with large value of assets for example manufacturing industries reduces there taxes at the end of the year with interest tax shield and depreciation tax shield hence the variance. The industry in which the company operates is also a determining factor of the variations from the mean value. After tax Cash flow has the highest variance value of (21,874,538,753) this is because it depends on the amount of tax that the companies submit at the end of the year. Low values of after tax cash flow implies that high taxes were submitted hence the companies did not have the benefits of tax incentives.

4.3 Inferential Statistics

Data was analyzed using mean standard deviation and Variance. Mean value was calculated from the 56 companies that were consistently listed at the Nairobi Securities Exchange. The values were then analyzed by the SPSS to generate the variance, standard error and ANOVA. The data was also used to calculate deviations from the mean and the variance.

4.2.1 Correlation Analysis

Table 4.2 Showing the correlation between the dependent and the independence variable for the study

	Closing Total Assets	Opening Assets	Tax Paid	Earnings	Depreciation	Total Assets	Profit After I & T	Turnover
Closing Total Assets	1	0.6715	-0.1181	-0.0619	1	1	0.0796	0.0796
Opening Assets	0.6715	1	-0.0975	-0.0722	0.6715	0.6715	0.1543	0.1543
Tax Paid	-0.1181	-0.0975	1	0.5267	-0.1181	-0.1181	-0.0193	-0.0193
Earnings	-0.0619	-0.0722	0.5267	1	-0.0619	-0.0619	-0.0399	-0.0399
Depreciation	1	0.6715	-0.1181	-0.0619	1	1	0.0796	0.0796
Total Assets	1	0.6715	-0.1181	-0.0619	1	1	1	0.0796
Profit After I & T	0.07967	0.1543	-0.0193	-0.0399	0.0796	0.07967	1	0.0796
Turnover	0.07967	0.1543	-0.0193	-0.0399	0.0796	0.0796	1	1

Source: NSE Correlation is significant at the 0.5 level (2tailed test)

The correlation between two variables reflects the degree to which the variables are related. The most common measure of correlation is the Pearson Product Moment

Correlation (called Pearson's Correlation). Pearson's correlation reflects the degree of linear relationship between two variables. It ranges from +1 to -1. A correlation of +1 means that there is a perfect positive linear relationship between two variables whereas the correlation of -1 reflects a perfect negative correspondingly. The statistical correlation of 0.1181 shows a positive and weak relationship between closing total assets and Tax paid in the listed companies. When the variables are analyzed without changing them into rations it shows malticolliearity .This is to show the correlation is very weak between the variables. This is solved by getting ratios of the depended and in depended variables.

4.2.1 Regression Analysis

Table 4.3 Table showing the R adjusted and standard Error

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.809[a]	.655	.595	.0214399
a. Predictors: (Constant), Corporate_Tax, Depreciation Tax_shield, After_tax_cash_flow, Interest_tax_shield				

Source: Data from NSE

In terms of investments with a consideration on corporate tax, depreciation tax shield, after tax cash flow and interest tax shield, it is evident that for all the listed companies in the NSE involved in the study, 65.5% of the investment decisions is explained by the corporate tax factors. This shows that there is a relationship between the dependent and independent variables. The mean of the model is derived as 0.809 which is the square

root of the R square. The estimated standard error of the estimate is 2.1% which is a very small percentage   since the data used for the analysis was of the entire population.

4.3.1 Analysis of Variance

Table 4.4 Anova Analysis

ANOVA[b]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.644	4	.161	10.733	.021[a]
	Residual	.75	50	.015		
	Total	1.394	54			
a. Predictors: (Constant), Corporate_Tax, Depreciation_Tax_shield, After_tax_cash_flow, Interest_tax_shield						
b. Dependent Variable: Investments						

Source: NSE data

The analysis of variance (ANOVA) was used to test the significance of the regression model as pertains to significance in the differences in the means of the dependent and independent variables. The ANOVA test produced an f-value of 10.733 at 0.021 significance level (P<0.05) signifying significant relationship between the independent and dependent variables. We thus reject the null hypothesis and conclude that there is a linear relationship with corporate tax factors and investment decisions. It also shows that independent variables   predict the dependent variable. The regression model is lower than the residual model which means that the corporate tax accounts too much of the variability on the investment decisions. The significance level being below our threshold

of 0.05 confirms that the significance of corporate tax to investment decisions is high and confirmed by the F test.

4.4 Analysis of Co-efficient

Table 4.5 Co-efficient of the model

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	-.106	.118		-.899	.378
	Corporate_ tax	.021	.009	.379	2.286	.032
	Depreciation_tax_shield	-1.079	.364	-.512	-4.224	.632
	After_tax_cash_flow	.003	.018	.136	.023	.021
	Interest_tax_shield	.016	.061	.033	1.269	.013
a. Dependent Variable: Investments						

Source: NSE data

4.5 Model Summary and Interpretation

The study indicates that the corporate tax, depreciation tax shield, after tax cash flow, and interest tax shield had a significant impact on investment decisions. The depreciation tax shield of the companies had a negative relationship with investment decisions whereas the corporate taxes, after tax cash flow, and interest tax shield had a positive relationship. From the T- test at 95% level of significance, variables which have a P value of 0.05 and below have a positive relationship between the corporate tax of the companies and investment decisions of the companies. From the table above the negative value of

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depreciation tax shield indicate that the impact of depreciation tax shield on the investment decisions is very strong compared to other variables.

In the model, it can be seen that taking the independents variables value to be zero, the intercept will be   -106. A unit increase in corporate tax would lead to a 2.1 increase in total investment; a unit increase in tax would lead to a –10.79 increase in investment, a unit increase in investment would lead to 1.6 increases in interest tax shield and a unit increase in after tax cash flow would lead to 0.03 in investment.

$$Y= a+b_1X_1 +b_2X_2+b_3 X_3 + b_4X_4 + E$$

Investment decisions = -0.106 + 0.021(Corporate tax) X_1 -1.079(Depreciation tax shield)X_2+ 0.003(Control variable)X3 + 0.016(After tax cash flow)X_4

Where;

Y= Investment; measured by growth in amounts of fixed assets net of depreciation and disposal done in each year.

X_1= Corporate Tax; measured by calculating tax paid each year divided by earnings before interest and tax.

X_2 = Depreciation tax shield; measured using the depreciation charge each year multiplied by the corporate tax rate. This was divided by total value of assets.

X_3 = After tax cash flow; measured by looking at profits made each year net of taxes, divided by sales revenue.

X_4 = Interest tax shield; measured using the interest payments on debt each year multiplied by the corporate tax rate then divided by total assets.

E = Error

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter concludes the results of the study by giving the summary of the study. It talks about summary of the findings, what the research has concluded, policy recommendations, limitations of the study and suggestions for further research.

5.2 Summary

The objective of this study was to establish the relationship between corporate tax and investment decisions of the companies listed at the NSE. In addressing this relationship, a research question was postulated as to whether corporate tax impact investment decisions? From Table 4.5, significance level of 0.021 shows that the model is a strong predictor of the outcome, since it is below the threshold of 0.05. The positive relationship which exists between the dependent and independence variables for the study implies a direct and related link between the two variables.

The study engulfs corporate tax as a control variable in order to gather conclusive analysis about the interplay between and among variables that influence investment decisions. The results from the control variables explain how corporate tax is influenced by interest tax shield, after tax cash flows and depreciation tax shied. The depreciation tax shield of the companies had a negative value meaning very few companies take advantage of depreciation tax shield whereas the corporate tax, after tax cash flow, and interest tax shield had a positive value. From the T- test at 95% level of significance,

variables which have a P value of 0.05 and below have a positive relationship between the corporate tax of the companies and investment decisions. From the Table 4.5 above the negative value of depreciation tax shield indicate that the impact of depreciation tax shield on the investment decisions is very strong.

Corporate tax and investment decisions are the major factors that managers have to deal with when managing the company. Corporate tax is a requirement by the law that all companies must submit the taxes at the end of each year failure to which it will be subjected to penalties. A company must also make wise investment decisions to facilitate growth to enable shareholders value maximization. Thus the study gives an explanation to the effect of corporate tax and the investment decisions. The study will enable managers to understand the variables and be able to balance the effects thus maximizing the shareholders value.

5.3 Conclusion

There are different schools of thought on the relationship leading to the effect of corporate tax on investment decisions; other's talk about all the taxes that accompany submit to the Kenya Revenue Authority while others talk about how corporate tax affect investment and entrepreneurship the scolars found out that generally the corporate tax affect the company's performance in one way or the other. This is father made clear on this study which looked at corporate tax only ant its effect on investment decisions of companies listed at the NSE. All the corporate tax variables affect the investment decisions of the companies listed at the NSE. All the in depended variables affect the

depended variables this is to imply that corporate tax affect investment decisions of companies. The depreciation tax shield has a very small negative value, this implies that to a larger extend it reduces corporate tax amount and increase the money available for investment. The interest tax Shied; after tax cash flow, and corporate tax all affect investment. Corporate tax has a T value of 2.286 it is third highest in reducing the a mounts available for investment after interest tax shield.

For the listed companies to be able to make effective investment decisions they must be able to have enough capital or retained earnings to facilitate effective decision making. Companies would therefore be informed about the factors that reduce their liquidity hence the study of the effect of corporate tax being one of the major expenses of the listed companies and a requirement. Having the correct investment and tax policies in the company will lead to effective decision making hence the growth of the companies.

5.4 Policy Recommendation

Given the forward looking investment environment in Kenya, it is recommended that policy makers stress the importance of corporate tax and capital development. From my point of view, CEOs need to respond to each side accordingly to enable them achieve the objectives of the country and those of the shareholders. Very high corporate Taxes in the country affect the performance of the country in the sense that companies do not have enough retained earning's to undertake effective projects that will lead to the growth of the country and economic development. Executive management should provide

leadership, with oversight and input from the board of directors, towards enhancing more transparent policies in the organizations.

The company managers should be aware of the benefits of debt financing. So that when they want to invest on projects just need large sums of money, they fund it using loan from financial institutions so that they can take advantage of depreciation tax shield to reduce the tax liability at the end of the year. Companies that buy very large assets for example the manufacturing companies should take advantage of depreciation tax shield as the depreciation amount calculated each year is used to reduce the amount of tax liability at the end of the year thus making funds available for further investment. Small companies that are not qualified to take loan from financial institutions or do not have huge amounts invested on assets to take advantage of depreciation should use after tax cash flow to fund their investments or Equity as other sources' of financing will be too expensive to them which can lead to financial distress and eventually bank crafty. It's there for upon the CEO to establish the relevant method of financing investments of the companies depending on the company industry to reduces corporate tax liability and increase investments of the company.

5.5 Limitations of the Study

The interest of this study was to access the effects of corporate taxes on   investment decisions of the companies listed in the Nairobi Securities Exchange. It is clear that a study of this sort should   include both primary and secondary data collection of sizable number of economies if not all economies as the research population. However, time and

material resources did not make this feasible and for this reason the study is concentrated on the Kenyan economy and used secondary data only from the fifty seven companies that were consistently listed in the NSE, from 2008 to 2012 fiscal year.

This study used quantitative method, thus secondary data from the companies listed at the NSE was used to analyze the effects of corporate tax on investment decisions. The study gathered data relying on information from the above mentioned institutions. As a matter of fact, some companies manipulate the financial statements to achieve set objectives. Therefore, data collected might probably miss a fair view. Considering all these circumstances, this may therefore not give room for fair generalization of the findings. However, the validity of the findings emanating from the research cannot be compromised in spite of these limits

5.6 Suggestions for Further Research

Investment plays an important role in achieving growth and development in countries around the world especially for developing nations in which Kenya is not an exception. Therefore, it is important for intensive research to be carried out on investments and tax policies measuring different levels of investment and employing appropriate ways of deriving the utmost yield on the financing methods used in the organization. The focus of this study was to establish the relationship between corporate tax and investment decisions where we considered other factors such as depreciation tax shield, Interest tax shield, and after tax cash flow us a control variable. Further studies on this matter should consider variables such as tax policies, projects evaluation methods, investment tax credit and gross domestic product of a country. Furthermore primary data should be collected to

prove the secondary data to enable comparisons since financial statements of the listed companies are manipulated to keep the image of the company and comply with the listing requirements.

REFERENCES

Alworth J. and G. Arachi (2001), The effect of taxes on corporate financing decisions. *Brookings Papers on Economic Activity* 16(2),234-345.

Auerbach, Alan J., .Corporate Taxation in the United States. *Brookings Papers on Economic Activity*,14 (2), 451.514.

Auerbach, A. J. (1983). Corporate Taxation in the United State. *Brookings Papers on Economic Activity, 24,123-456.*

Auerbach, A & Kevin, H. (1992). Tax Policy and Business Fixed Investment in the United States. *Journal of Public Economics, 47(2) 451-514.*

Auerbach, A & M. Feldstein, L. (2002). *Handbook of Public Economic*(3rd ed) Amsterdam: North-Holland:Elsevier.

Auerbach, A. (1979). Wealth Maximization and the Cost of Capital. *Quarterly Journal of Economics* 93(3): 433-446.

Auerbach, A. (2002). Taxation and Corporate Financial Policy and Behavior Using Tax Reforms as Natural Experiments. *Brookings Papers on Economic Activity*, 25, 145-209.

Bittker, B.I. & Eustice, J. S.(1999). Federal income taxation of corporations and shareholders. Kahn & Lehman. *Corporate Income Taxation.*

Bringham, E. & Besley, S. (2000). Essentials of managerial finance, (12th ed). Philadelphia: Harcourt College Publishers.

Cummins, J. G., Kevin, A. H. & R. Glenn, H. (1994). A Reconsideration of Investment behaviour Using Tax Reforms as Natural Experiments. *Brookings paper on Economic Activity,* 25(2) 1-74.

Devereaux, M. & Schiantarelli, F.(1991). Investment, Financial Factors and Cash-flow: Evidence from the UK panel data. In Glenn Hubbard (editor): Asymmetric information, corporate finance and investment. University of Chicago Press, 1990.Disaggregate View,. Carnegie-Rochester Conference Series on Public Policy.

Djankov, S. L. & Andrei S.(2002). The regulation of entry. *Quarterly Journal of Economics* 117 (1),1-37.

Djankov, S.L. & Andrei S. (2003). Courts. *Quarterly Journal of Economics* ,118, 453-517.

Feldstein, M. (1982). *In action, tax rules and investment.* (2nd ed.) Some Econometric Evidence, Econo-metrica,

Graham J. R. (1996). Debt and the marginal tax rate. *Journal of Financial Economics,41, 41-73.*

Graham, L & Schallheim, k. (1998). *Principles of corporate finance*.(2nd Edition). Mcgraw Hill Book Co, New York.

Graham J. R. (1996). Proxies for the corporate marginal tax rate. *Journal of Financial Economics*, 42, 187-221.

Graham J. R. (2003). Taxes and corporate finance. *Review of Financial Studies*.

Gruber, J.& Joshua, R.(2007). How Elastic is the Corporate Income Tax Base. Cambridge University Press.

Hall, R.E. & Jorgenson, D.W. (1967). *Tax Policy and Investment.* (3rd ed.). Behaviour American Economics

Hall, R.E. & Dale, W. J. (1967). Tax policy and investment behavior. *American Economic Review.* 57(3) 391-414.

Hassert, K.A & Hubbard, R.G .(1976). Tax policy and investment Behaviour NBER *working Paper* 5683.

Hassert, K. A. & Hubbard, G. (1998).Are Investment Incentives Blunted by Changes in Prices of Capital Goods. International Finance.1(1) 103-125.

Hassert, & Kevin, A. (2008). *"Investment". In David R. Henderson. Concise Enclyclopedia of Economics* (2nd ed.). Indianapolis: Library of Economics and Liberty. ISBN .

Hassert, K. A. & Hubbard, R. G .*Tax Policy and Business Investmen*t. (3rd ed.). Handbook of public Economics, Elsevier.

Healy, J. C. & Schadewald, M. S. (2010). Multistate Corporate Tax Course. Boston

Jensen, M. (1987). *The free cash-flow theory of takeovers.* (2n ed.). In Browne, L., Rosengren, E. (editors): The Merger Boom, Federal Reserve Bank of Boston, Boston.

 Kaleckies, M. (1971). Selected essays on the Dynamics of the capitalist economy.1933-1970 Cambridge University press.

Kevin, H,(1986). Recent U.S. Investment Behavior and the Tax. Reform Act.

Kipngetich R. M. (2011). The relationship between tax paid and level of investment for the quoted companies in Kenya. MBA Project, University of Nairobi.

Laramie, A, J, & Mair, D. (2000). Dynamic theory of taxation; Integrating Kalecki into modern public finance Chaltenham U.K.elgar.

Macki J. K. (1990), Do taxes affect corporate financial decisions.

Martin Feldstein *Handbook of Public Economics*, Amsterdam: North-Holland.

Miller, M.(1977). Debt and taxes*. Journal of Finance*.32, 261-275. Relay

Modigliani, F. & Miller, M.(1958). *The cost of capital, corporate finance and the theory of Investment*(Vol.53) The American Review.

Modigliani, F& Miller, M.(1959). The cost of capital, corporate finance and the theory of investment. Rely. *The American Economic Review*. 3, 433-443.

Modigliani, F& Miller. M. (1963). Corporate income taxes and the cost of capital; A correlation. *The American Economic Re view* 53, 665-669.

Mugenda, O. M. & Mugenda, A. G., (2003). *Research methods; quantitative and qualitative Approaches*. Nairobi. Acts Press.

Nyale, Y. (2010). The relationship between leverage and investment decision for companies listed in the Nairobi Stock Exchange. University of Nairobi.

Onsumu, L.N. (2003). The relationship between debt financing and the value of firms quoted on the Nairobi Stock Exchange. Unpublished MBA project university of Nairobi.

Pandey, I. M. (1995). *Financial Management.* New Delhi: Vikas Publishing House.

Peter, F.(2010) Statistical Analysis Consulting. New Delthi

Rita, R. & Andrei, S. (2009).The regulation of entry. *Quarterly Journal of Economics* 118, 453-517.

Robson, C. (2002). *Real world research* (2nd ed.). A resource for social scientists and practitioner researchers. Oxford. Blackwell.

Saunders, M., Lewis, P. & Thornhill, A. (2007). Research methods for business students. (4th ed.).London: Prentice Hall.

Thorp, E. & Kelly (2013). Capital Growth Investment Criterion. World Scientific. ISBN 9789814293495.

Verdugo, A. R.(2005) .Tax Incentives and Business Investment: New Evidence from Mexico, MPRA Paper 2272, University Library of Munich, Germany.

Wairimu, S. M. (2002) . The empirical relationship between dividend and investment decisions of firms quoted at the Nairobi Stock exchange. University of Nairobi.

Warren, B. (2013) Forbes Magazine. Evidence from firms, International Tax and Public Finance.

APPENDIX 1: LIST OF COMPANIES LISTED AT NAIROBI SECURITY EXCHANGE AS AT DECEMBER, 2012

AGRICULTURE

1. Eaagads Limited

2. Kapchorua Tea Co. Limited

3. Kakuzi Limited

4. Limuru tea company limited

5. Rea vipingo Plantations Limited

6. Sasini limited

7. Williamson tea Kenya limited

COMMERCIAL AND SERVICES

8. Express limited

9. Kenya airways limited

10. Nation media Group limited

11. Standard group limited

12. TPS Eastern Africa (Serena) limited

13. Scan group limited

14. Uchumi supermarket limited

15. Hutchings Biermer limited

16. Longhorn Kenya limited

TELECOMUNICATION AND TECHNOLOGY

17. Access Kenya Group Limited

18. Safaricom Limited

AUTOMOBILE AND ACCESSORIES

19. Car and General Kenya limited

20. CMC Holdings limited

21. Sameer Africa limited

22. Marshalls (E.A) limited

BANKING

23. Barclays Bank limited

24. CFC Stanbic Holdings limited

25. I&M Holdings limited

26. Diamond Trust bank Kenya limited

27. Housing Finance Co limited

28. Kenya Commercial Bank limited

29. National bank of Kenya limited

30. NIC Bank limited

31. Standard Chartered bank limited

32. Equity Bank limited

33. The Co-operative Bank of Kenya limited

INSURANCE

34. Jubilee Holdings limited

35. Pan Africa Insurance Holdings limited

36. Pan Africa Insurance Holdings limited

37. Kenya Re-Insurance Corporation limited

 38. Liberty Kenya Holdings limited

39. British- American Investments Company (Kenya) limited

40. CIC Insurance Group limited

INVESTMENT

41.Olympia Capital Holdings limited

42.Centum Investment Co Limited

43.Trans-Century Limited

MANUFACTURING AND ALLIED

44.B.O.C Kenya Limited

45.A.Baumann CO Limited

46.British American Tobacco Kenya Limited

47.Carbacid Investments Limited

48.East African Breweries Limited

49.Mumias Sugar Co. Limited

50.Unga Group Limited

51.Eveready East Africa Limited

CONSTRUCTION AND ALLIED

52.Athi River Mining Limited

53.Bamburi Cement Limited

54.Crown Berger Limited

55.E.A.Cables Limited

56.E.A.Portland Cement Limited

ENERGY AND PETROLEUM

57.Kenol Kobil Limited

58. Total Kenya Limited

59. KenGen Ltd

60. Kenya Power & Lighting Co Limited

61. Umeme Limited

GROWTH ENTERPRISE MARKET SEGMENT

62. Home Afrika Limited