INFLUENCE OF TAX INCENTIVES ON THE PERFORMANCE OF THE CAPITAL MARKETS IN KENYA

 \mathbf{BY}

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS AND ECONOMICS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE OF MASTER IN TAX ADMINISTRATION

MOI UNIVERSITY

DECLARATION

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This project is my original work and has	s not been presented for a degree in any other
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DEDICATION

This project is dedicated to my family for their continuous encouragement and support.

ACKNOWLEDGEMENT

I acknowledge my supervisors, Dr. Tobias Olweny and Dr. Jane Sang, for their immense guidance to ensure that I complete this project. I also acknowledge my lecturers and fellow students at the KESRA campus, from whose knowledge and support I benefited.

ABSTRACT

Capital markets in an economy play a substantial social value by facilitating efficient use of the economy's existing productive capacity and allocation of scarce capital, promoting the efficient division of available resources, and facilitating the allocation of risks. On this account, the Government of Kenya has over the years introduced various tax-based policy initiatives to support the growth of the capital markets. However, the prevailing studies have not established whether these tax incentives have made any influence to deepen the capital markets or have been revenue leakages. The main objective of this study was to investigate the influence of tax incentives introduced in the tax law and policy actions on the performance of the listed and over-the-counter capital markets in Kenya from 1990 to 2020. The specific objectives of the study were to assess the effect of equities tax incentives, establish the influence of debt tax incentives and evaluate the effect of trading incentives all on the performance of capital markets. The study was underpinned by several theories including efficient market hypothesis, information asymmetry theory, signalling theory, and optimal tax theory. The study employed an explanatory research design. It focused on select tax incentives in the capital markets from the year 1990 to 2020 and reviewed their influence on the performance of capital markets measured by trends in equity and bonds turnover. The study relied on secondary data obtained from the analysis of tax statutes, policy documents, and CMA periodic reports on capital markets' performance. The study relied on data from Kenya. The study findings indicated that equities tax incentives (β = -11.46910, P=0.0148), and debt tax incentives (β = -5.651615, P=0.0135) paradoxically had a negative and significant effect on capital market performance in the short run. Trading tax incentives did not have a statistically significant effect on capital market performance (P-value = 0.6060 > 0.05). The study concluded that equities tax incentives often serve as a signal for investors to stampede out of the markets, hence occasioning a negative and significant effect on capital markets performance in Kenya. The study recommendation was that the government need not employ the tax incentives associated with equities and debt capital markets such as corporation tax and withholding tax on interest because these incentives do not positively influence the overall performance of capital markets and maybe an opportunity loss on revenue collection. However, trading tax incentives influence the sustaining of market liquidity and ought to be sustained.

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OPERATIONAL DEFINITION OF TERMS

Accelerated depreciation

-Refers to depreciation at a faster schedule than available for the rest of the economy. It is calculated in different ways, including higher first-year depreciation allowances, or increased depreciation rates. Tax payments in nominal terms are unaffected, but their net present value is reduced and the liquidity of firms is improved (House & Shapiro, 2004).

Capital Markets -

This is a part of a financial system concerned with raising capital by dealing in shares, bonds, and other long-term investments. It includes the equity markets, bond markets, derivative markets, traded either through a securities exchange or on the over-the-counter markets (Capital Markets Act, 1989).

Effective Tax Rate -

This is the average rate at which an individual or corporation is taxed. The effective tax rate for individuals is the average rate at which their earned income is taxed, and the effective tax rate for a corporation is the average rate at which its pre-tax profits are taxed. The ratio is calculated by dividing income tax expense by earnings before interest and taxes (Noor, Fadzillah & Mastuki, 2010).

Tax Holiday -

Tax holiday refers to a temporary exemption of certain specified types of taxes such as corporate income tax. Often, administrative requirements are also waived, notably, the need to file tax returns. Partial tax holidays offer reduced obligations rather than full exemption (Bolnick, 2004).

Tax Incentive special arrangements – These includes incentives in the tax laws to attract, retain or increase investment in a particular sector, stimulate growth in specific areas and assist companies or individuals carrying on identified activities (Daude, Gutierrez & Melguizo, 2017

Reduced Tax Rates -

Reduction in a tax rate, typically the corporate income tax rate, to stimulate investment by governments. Corporate income tax in Kenya can be described as tax levied on a firm's profit at 30% annual rate (CMA, 2017).

ABBREVIATIONS AND ACRONYMS

CGT: Capital Gains Tax

CMA: Capital Markets Authority

EMH: Efficient Markets Hypothesis

ITA: Income Tax Act

NSE: Nairobi Securities Exchange

UNCTAD: United Nations Conference on Trade and Development

CHAPTER ONE

INTRODUCTION

This chapter includes the background, statement of the problem, statement of objectives, research hypothesis, the significance of the study, the scope of the study, and the chapter summary.

1.1 Background of the Study

1.1.1 Global Perspective

Capital markets refer to the place where funds are exchanged. The two core parts of the capital markets are the primary markets, where new securities are issued and sold, and the secondary markets, where previously issued securities are traded amongst investors. The benefits of capital markets include providing long-term capital through the mobilization of savings allowing greater participation of productive assets, easing the burden on the banking system, combining long-term investment with long-term capital, and serving as a gateway for foreign direct investment (CMA Master Plan, 2018).

The tax incentive is a unique provision in tax legislation designed to attract, retain, or expand investment in a particular industry, boost growth in specific disciplines, and assist businesses or individuals in carrying out specific activities (Daude, Gutierrez, and Melguizo, 2017). They are traditional mechanisms for attracting investors and directing certain economic activities to several important sectors of the economy (Kaplan, 2001). Feyitimi, Temitopeet, and others (2016) define tax incentives as provisions in the tax code that provide advantageous tax treatment for particular activities from time to time. UNCTAD offers tax incentives to encourage countries to participate in specific projects or sectors by lowering their tax burden (Zolt & Schil, 2015).

The explanation for providing incentives is to take advantage of opportunities, investments in which the system is seen as a barrier. In the initial phase of creating tax incentives for companies, the principles of simplicity, compliance, reliability, and stability are paramount. To optimize benefits, the state ensures that tax incentives are transparent and easily accessible. Furthermore, tax incentives must be long-term, effective, and have simple rules of application to ensure reliability and stability for companies (Bemani, 2014).

Examining the impact of tax incentives on corporate financial performance is a challenge for many researchers (Teraoui, Kaddour, Chichti & Rejeb, 2011). Faced with the challenge of global competitiveness, countries from different parts of the world have adopted proactive export promotion policies to adapt to the ever-changing business environment.

The practice of offering tax incentives to attract investors around the world began

during the industrial era and has been on the rise since then. In 1936, the state of Mississippi in the United States introduced tax-exempt bonds to attract business enterprises. The recessions of the 1980s compelled other American states to introduce more tax incentives to attract investment within their territories (Buss, 2001). By 1959, twenty-one other states had established similar corporations (Engen & Skinner, 1996). Ireland is billed as the most improved economy in Europe on account of its positioning as the investment destination and attractive tax incentives. In the early 1960s, the Irish economy had faced stagnation due to a lack of tax incentives to spur economic growth but the economy substantially improved when incentives were introduced. Since the late 80s, Ireland has recorded the fastest growth rate in Europe (Ricupero, 2000).

1.1.2 Africa Perspective

In the early 1990s, economists and politicians had high expectations of the prospects for the growth and development of internal capital markets in developing countries. However, despite significant policy reforms to stimulate the sector, growth is likely to be slower than expected as equity and bond markets in most emerging markets remain relatively illiquid and segmented, with trade and capitalization concentrated in a few firms (World Bank, 2017). Since the establishment of the World Trade Organization in 1995, countries have adopted the use of tax incentives to encourage exports while giving resident companies a competitive edge (Madani & Mas-Guix, 2011).

From a regional perspective, Mauritius is one of the success stories from the creation of a lenient tax regime, which is associated with the ballooning of foreign firms relocating and opening branches on the Island. Tax incentives encourage companies to invest in foreign companies because they allow these companies to increase their financial stability (Nuţă & Nut, 2012).

According to Arezki, Dupuy, and Gelb (2012), tax incentives are not given preference while deciding to invest in developing countries unlike the case of developed countries. The reason for this is majorly tax competition where countries compete to have the best tax policies to attract and retain FDI, resulting in disparities in tax rates between countries. This leads to illicit trade between countries like the case of East Africa where the disparity has brought about complicated processes.

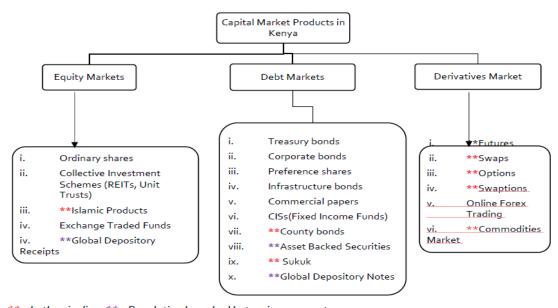
1.1.3 Kenyan Perspective

Kenya has made strides in developing her capital markets over the years. The 1986 Sessional Paper on Economic Governance for Renewed Growth assessed the importance of capital markets in achieving significant economic growth and

development in Kenya as a means to support the long-term savings needed to finance long-term investments (GOK, 1986).

A country's capital market develops over a longer period. Ngugi (2003) posits three stages in the stock market development process, which are characterized and separated by the institutional and policy environment's unique characteristics. The dominance of foreign investors in stock trading and spontaneous expansion characterized the initial phase. This is followed by a period of formalization, including the adoption of a self-regulatory framework, efforts aimed at increasing the participation of residents in stock trading. The final stage is the controlled policy regime in which the tax policy is applied. The predominant products in the Kenyan capital markets are debt, equities, and lately, derivative instruments have been introduced. Equity markets are dominant. Debt instruments have tended to be concentrated government-issued debt and limited corporate debt markets in many. Further, the country has floated Eurobonds (CMA,

2019). The general structure is illustrated below.



** - In the pipeline; ** - Regulation launched but no issuance yet

Figure 1.1: Structure of Kenyan capital markets

The NSE is the country's only stock exchange that deals with publicly traded securities. It includes fixed income and small-cap stocks, as well as cross-listed stocks from other countries. The CMA is Kenya's primary regulator of capital markets.

The success of the stock exchange market is measured over a 12-month index period, according to the Nairobi Securities Exchange (2013), utilizing market capitalization metrics (40 percent), traded shares (30 percent), number of transactions (20 percent), and turnover (10 percent). The index is only updated at the end of the day and focuses mostly on price fluctuations among the 20 companies chosen. It measures the performance of both market capitalization and market turnover.

Kenya, like many other developing countries, is actively providing fiscal incentives to promote capital markets as a means of boosting the economy (Krasniqi, 2013). The National Treasury has over the years been proposing tax measures to boost the Kenyan capital markets. For instance, the Finance Act, of 2019 introduced tax neutrality measures in taxation of an array of capital markets products such as green bonds (CMA Quarterly Report, 2019). The CMA has equally sought tax reforms for uptake of Real

Estate Investment Trusts and Collective Investment Securities (CIS) and further tax incentives for newly listed companies (CMA, 2018).

The Kenyan tax law has numerous incentives meant to encourage investors into the capital markets. There are numerous tax incentives including on all market segments of the capital markets ITA (1974). Tax incentives in capital markets and how they enhance market performance have yet to be thoroughly investigated. While some academics claim that such incentives improve stock market performance (IOSCO, 2012), others argue that incentives have little impact on stock market performance (Aregbeyen & Mbadiugha, 2011).

1.2 Statement of the Problem

Reduced corporate income tax rates, tax holidays, tax credits, and tax exemptions, among other tax incentives, are included in Kenya's tax code to encourage the development of the country's capital markets (CMA, 2019). Additionally, the National Treasury has in nearly every financial year been proposing tax incentives through the Finance Acts aiming at boosting the deepening of the capital markets in the country. These tax breaks have ranged from seeking to encourage the issue of basic securities like stocks and bonds to more sophisticated instruments like exchange-traded funds.

Ondabu, Muturi, Sifunjo (2016) have opined that where tax incentives are given and they do not generate the intended purpose, that amounts to wastage of public resources. As a result, it is prudent for a policymaker to determine whether it is necessary to provide tax incentives to an investor, or whether the investor would invest without them. If investors are not incentivized by such tax incentives, it merely constitutes windfall profits and opportunity loss on public revenue.

Hence, there is uncertainty about the impact of tax incentives on capital market developments. Research in this area has not been done extensively, with most studies focusing on narrow parameters such as the effect of tax incentives on listed issuers. Githaiga (2013) indicates that NSE performance improves even when tax incentives are removed and occasionally declines when tax incentives are raised. If this is the case, the suitability of further tax incentives for capital markets is misleading.

It is important to realize that when the government offers tax incentives and those incentives do not improve the performance of the markets that constitutes an opportunity loss for public funds. This research is intended to answer the question of whether tax incentives in the capital markets have an impact on the development of the markets.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of this study was to investigate the influence of tax incentives on the performance of capital markets in Kenya for the period 1990-2020.

1.3.2 Specific Objectives

This study was pegged on the following specific objectives:

- (a) To assess the effect of equities tax incentives on capital market performance in Kenya.
- (b) To establish the influence of debt tax incentives on capital market performance in Kenya.
- (c) To evaluate the effect of trading tax incentives on capital market performance in Kenya.

1.4 Research Hypothesis

 H_{01} : Equities tax incentives have no significant effect on capital market performance in Kenya.

H₀₂: Debt tax incentives have no significant effect on capital market performance in Kenya.

H₀₃: Trading tax incentives have a significant effect on capital market performance in Kenya.

1.5 Significance of the study

The study is important in informing the instituting of suitable taxation policy to spur activities in capital markets, while not adversely affecting revenue collection. The findings of the study may be used to inform a review of tax policy, allowing the government to determine if tax incentives are effective in steering people's and corporations' investment patterns toward the growth of capital markets.

The corporate entities may also benefit from the study for it offers them the basis for decision-making and policy formulation. The study further adds to the existing knowledge in the field of taxation and capital markets for the benefit of the general public.

For academics, this study complements the existing tax literature and provides a basis for future research and reference. These latest research articles will be available in libraries and on the Internet for policy analysts and researchers in general.

1.6 Scope of the Study

This study focused on tax incentives provided in the tax law and their influence on the equity capital markets, fixed incomes capital markets on regulated markets, and the

products issued in the over-the-counter markets. The key tax incentives included equities tax incentives, debt tax incentives, and trading tax incentives. The study employed a census technique and analyzed the tax incentives available in the tax laws that apply to the capital markets and analyzed their corresponding influence on the capital markets for the period 1990-2020. The study was anchored on the efficient market hypothesis theory, information asymmetry theory, signaling theory, and optimal tax theory.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides an overview of study concepts, including theoretical, empirical, and conceptual frameworks. There is also a review of related literature as well as research gaps that the study addressed.

2.2 Review of Study Concepts

2.2.1 Capital Market Performance

Capital markets play a substantial role in the development journey of countries. This is due to their role in mobilizing resources and encouraging international and domestic investment at home, contributing to growth and development. By accumulating savings, making the best use of investment resources, and attracting portfolio investments, a well-developed capital market puts the country on a path to long-term growth and development.

The process of growth and development in a developing country like Kenya necessitates long-term investment. No other financial institution is well-suited to play the job of the capital market. As a result, legislators and practitioners should be concerned about the status of the capital market, as well as the macroeconomic forces that drive it.

Market capitalization, stock market liquidity, the All-Stock Index (ASI), and turnover ratio, according to Daferighe and Charlie (2012), can be used to gauge stock market performance. Market capitalization, stock exchange liquidity, ASI, and turnover ratio all measure the size of the stock market, the ease with which investors may buy and sell securities, the stock market's performance, and the index's ability to compare

transaction costs and market liquidity ratings. However, for this strategy to improve, the macroeconomy as a whole must be perceived as stable and reliable.

Capital markets in emerging and emerging markets are often flat and volatile, resulting in stock returns that are extremely sensitive to economic changes. These characteristics emphasize the importance of macroeconomic factors in capital market development. As a result, the stock market's performance is influenced by the general macroeconomic climate. Stock prices and capital market performance are frequently mentioned in the literature as being dependent on the state of macroeconomic factors such as inflation, GDP growth, exchange rates, interest rates, and the money supply.

Investors believe macroeconomic factors influence capital market performance, according to Aldin et al. (2012). Given that capital markets account for the majority of a country's wealth and those macroeconomic variables play a role in their performance, it is empirically appropriate to investigate which macroeconomic variables influence capital market performance, particularly in a developing country like Nigeria, where this relationship is still poorly understood.

2.2.2 Equities Tax Incentives

The major tax incentives granted to investors by tax regulations in capital markets include preferential tax rates, tax cuts, and tax breaks (CMA, 2019). Fama (1998) examines a vast number of empirical works on "event studies," which seek to assess whether stock prices respond to information effectively. Earnings surprises, stock splits, dividend increases, mergers, new stock exchanges, IPOs, and government remarks on topics like tax matters are all examples of "events."

Fama (1998) found that overreacting to the information was common, and continuing an unusual return after the event was equally as common as returning after the event.

He points out that many "anomalies" in return only occur in very specific model contexts, and that the results tend to vanish when subjected to various models of predicted "normal" returns, risk adjustment methods, and statistical approaches. This suggests that the market will react in a similar way to the introduction or removal of tax incentives, news which will also be important information.

2.2.3 Debt Tax Incentives

Debt financing is favored in most corporate tax systems because of the tax deduction from interest payments. Interest payments on debt can be deducted from business income taxes. When the deduction is taken into account, the leveraged firm's worth equals the leveraged firm's value plus the tax hedge with the debt's value. The tax benefit is represented by this tax shield, which is equal to the amount owing multiplied by the corporate income tax. Therefore, theoretically, a firm can maximize its value by being 100% financed by debt (Modigliani & Miller, 1981).

Modigliani and Miller (1963) argue that companies should use debt because interest on debt is deductible. This protects the company from paying additional taxes and thus serves as an incentive for external financing. In addition to debt, asset depreciation and investment tax credits can also act as shields, which can result in tax savings, and are referred to in the literature as "Non-Debt Tax Shield" (NDTS). DeAngelo and Masulis (1980) suggest that NDTS can be viewed as a substitute for debt financing tax relief. As a result, firms with large NDTS are expected to use less leverage, indicating a negative relationship between NDTS and leverage.

The fact that a corporation issues debt indicates that it is confident in its capacity to repay it (Ross, 1977). On the other side, it could signal that the company is short on internal resources and relies on debt capital markets, which could lead to poor selection.

There will be too little credit in this instance, but there will also be an imbalance, with too little credit from excellent companies and too much credit from bad companies. Due to this unfavorable selection dilemma, Myers and Majluf (1984) and Myers (1984) developed the pecking order hypothesis, which idealizes that firms prefer internal equity to debt.

The usage of debt by enterprises varies greatly, according to Graham and Leary (2011). They show that highly leveraged enterprises are "much larger, older, have more physical assets, lower market-to-balance-sheet ratios, less variable revenue, higher marginal tax rates, and less intense research and 'Development' using data from Compustat's annual filings from 1974 to 2009. This is especially true for businesses with long-term debt. De Mooij (2011) goes on to illustrate that tax distortion helps corporations with a lot of credit and a lot of power.

2.2.4 Trading Tax Incentives

Liquidity is a crucial part of capital market growth since it allows the market to deepen and strengthen. Measures to promote liquidity are considered positive for the overall development of financial markets and are therefore an important goal for market regulators, exchanges, issuers, and investors (Bank for International Settlements (BIS), 2019). The use of tax incentives is one of the tools to encourage market liquidity and attract retail flows.

Transaction costs are one of the important determinants of investing in securities. Investors in NSE securities are looking for profit. However, transaction costs reduce profits. Transaction fees are the costs involved when two parties exchange property. These fees include commissions, taxes, and other fees. Tahar et al. (2005) argue that CGT contributes to a significant portion of transaction costs in the transfer of securities.

High transaction costs limit investment in securities by increasing portfolio rebalancing costs. Jones (2010). When transaction costs are low, investors are motivated to transfer their securities. Portfolio realignment has also improved due to lower transaction costs.

2.3 Theoretical Review

The main theories that underpin this study include the efficient market hypothesis, information asymmetry theory, prospects theory, and optimal tax theory.

2.3.1 Efficient Market Hypothesis Theory

The efficient market hypothesis was postulated by Fama (1970). (EMH). According to the argument, "beating the market" is impossible because financial markets are so efficient that existing stock prices always contain and represent all important information. According to EMH, a market is considered efficient in terms of a set of information when prices "fully reflect" that information and when prices are not affected by disclosing that information to all market participants. As a result, intelligent stock selection or market timing will not allow investors to outperform the broader market, and the only way for investors to earn higher returns is to purchase riskier assets.

Fama (1970) distinguished three types of EMH: the weak form, the semi-severe form, and the severe form. The weak form of the hypothesis is when all publicly known past information is represented in stock prices. The semi-strong variant of the argument claims that prices reflect previously accessible public information and those prices vary quickly to reflect new public information. The most extreme version of EMH says that prices reflect even secret or hidden inside information. EMH recognizes that the market is efficient, that a large number of investors analyze and evaluate profitable securities, that new information arrives in the market unrelated to other news and at random, that

stock prices adjust quickly to new information, and that stock prices must eventually reflect all available information. Over time, the EMH theory has changed.

Radner (1979) argues that given a finite number of alternative inputs, there is generally a rational expectation balance that reveals all inputs to all traders using a theoretical model of wealth trading. According to Grossman and Stiglitz (1980), a market can never be totally information efficient. Because information is costly, prices may not fully reflect the knowledge available; otherwise, investors who have spent time and money gathering and studying data will be left out. As a result, a fair market equilibrium model should provide some motivation to gather data (security analysis). Furthermore, according to Stiglitz (1981), resource allocation can be Pareto inefficient even in a supposedly competitive and "efficient" market.

Stock prices, according to Schiller (1981), swing too much to be justified by subsequent dividend changes, i.e. they exhibit excessive volatility. Marsh & Merton (1986) examined Shiller's (1981) variance methodology and concluded that it could not be used to evaluate the stock market rationality hypothesis. They also draw attention to the practical consequences of EMH rejection. Summers (1986) claims that many statistical tests of market efficiency have little power in detecting plausible forms of inefficiency, citing the fact that asset prices are much more volatile during stock trading hours than outside trading hours; and they conclude that the market generates its news as a result of trading personal data.

EMH is a result of the general equilibrium theory in the capital market, which is dominated by informed and rational agents, according to Ingersoll (1987). This approach is called into doubt by the behavioral market perspective. These findings raise the question of whether individuals may be rational in the sense that the usual general

equilibrium argument, which is frequently used to defend EMH, can be accepted. When there is imperfect competition, the efficient market hypothesis can fail, according to Lafont and Maskin (1990). They look for changes in weekly securities reports and reject the ones that aren't working. Harvey (1991) looked at the application of EMH and concluded that it should be impossible to outperform the entire market through intelligent stock selection or market timing and that the only method for investors to earn better returns is to invest in riskier assets. However, the theory has issues with the basic concept that market effectiveness can never be tested (proved or disproved).

Trading techniques that buy prior profits and sell past losses, according to Malkiel (1992), produce considerable unusual returns. He demonstrated that under the null hypothesis of serial independence, the patterns in the serial correlation estimates and the magnitudes reported in earlier investigations are expected. New evidence for market microstructure and stock return projections is provided by Huang and Stoll (1994). They discover that peer-selected stock portfolios do not consistently beat the market, demonstrating that value strategies outperform the market because they take advantage of investors' intrinsically poor conduct, not because they are necessarily more profitable.

Haugen (1995), in his book The New Finance: The Case Against Efficient Markets, emphasizes that short-term overreaction (causing price inertia) can lead to long-term reversal (if the market admits past mistakes). The second edition of Haugen's book was published in 1999, and it offers the case for inefficient markets while placing the efficient market paradigm at the opposite extreme of the spectrum of potential conditions. He criticizes EMH, claiming that the marginal advantages of a well-informed investor outweigh the expenses. Shiller's first issue of Irrational Exuberance was published in 2000, and it attacked EMH by demonstrating that markets have never

been explained in terms of corporate profits or dividends. Schiller looked at some of the most compelling historical evidence that markets are illogical and concluded that markets are irrational.

Malkien (2003) examines in detail the development of EMH theory by using empirical illustrations. He noted that there are instances in the history of the market where there is ample evidence that market prices cannot be determined by rational investors and psychological considerations inevitably play a dominant role. It also means that Internet stock pricing in the early 2000s can only be explained by irrational investor behavior and thus untenable trust inefficient markets.

Professional investment managers do not outperform their indices, according to Malkien (2005), and overall market prices appear to reflect all available information. Wilson and Marashdeh (2007) demonstrated that while cointegrated stock prices are not compatible with EMH in the short run, they are compatible in the long run. By eliminating arbitrage, short-term inefficiencies in the stock market are replaced by long-term efficiency.

Lee et al. (2010) looked at steady-state real stock prices for 32 industrialized and 26 developing nations from January 1999 to May 2007 and found the stock market to be inefficient. Increases in exchange-traded funds, according to Bogle (2016), will encourage overtrading and a short-term investment mentality. As a result of these market disruptions, so-called flash failures have caused huge changes in the value of these funds. As a result, it is in part due to the process of providing liquidity and market-making by dealers that the price of funds is consistent with the prices of the constituent securities.

Passive mutual funds climbed from 16.4 percent of assets under management in 2013 to 26 percent in 2018, according to Elton, Gruber, and de Souza (2019). This shift demonstrates that many investors are beginning to doubt the merits of active governance. The debate centers on whether active managers have pre-determined abilities, such as the capacity to choose better-performing equities properly while taking risk into account. The difficulty is that its abilities are difficult to determine in advance.

The reviewed literature indicates that the EMH theory has received mixed perceptions in its development. It strongly relates to the study variables, as it helped determine how responsive the capital markets are to new information including a provision on tax incentives in the tax laws. The theory explained the relationship between new information and overall market performance. It formed the basis to interrogate whether tax incentive is new information that would alter the efficiency of capital markets or whether such introduction is immaterial. The theory, therefore, underpinned the tax incentives concept in the study and provided a theoretical link between tax incentives and capital market performance.

2.3.2 The Information Asymmetry Theory

George Akerlof, Michael Spence, and Joseph Stiglitz originally develop the theory concerning information asymmetry. Initially, Akerlof (1970) developed the concept of information asymmetry by describing that car buyers have different information concerning used cars from sellers, thus encouraging sellers to sell them below the market prices.

Spence (1973) identified information asymmetry between employers and employees. Employers were not convinced of the productive capabilities of their employees, which trigger slow-paying job scenarios that ultimately lead to the inhibition of wage bargaining mechanisms in the labor market. Both Spence (1973) and Stiglitz describe that information asymmetry occurs when one party has more information than other parties' definition and this is consistent with Akerloff (1970).

Diamond and Verrechia (1991) illustrated using analytical and empirical research on the importance of information asymmetry in the capital markets. They illustrated that information asymmetry is not only associated with a company's market performance but also influences market stability. Market collapse occurs because outsiders refuse to trade with insiders because of high asymmetric information and insiders have more opportunities for hedging than outsiders, and this causes losses for outsiders.

Lesmond (2005) provides an alternative measurement of information asymmetry based on market microstructure by using the firm level of bid-ask spread as the basis for measuring liquidity. Under these conditions, the use of information asymmetry proxies based on market microstructure becomes less accurate. The remaining alternative is a proxy-based on market data, forecast analysts, and accounting. Researchers can obtain market data easily because this information is available to the public. However, the existence of zero transactions causes the market price does not to reflect the available information.

Ander-son et al. (2007) studied the information asymmetry in the realities of emerging markets and noted that they are characterized by non-synchronous trading, that is, securities traded passively, so there are trading days that contain zero trading volume. The market where shares are rarely traded is also referred to as a thin market. Because there are fewer transactions over a longer period, price discovery is not as efficient.

Fernando, et al. (2008) states that market collapse may occur because there is substantial information asymmetry concerning market fundamentals. He suggests that

bubbles in financial markets happen when information in the market is heterogeneous. It means that every trader has private information. Bursting bubbles that occur due to information asymmetry can cause a market collapse. Based on this concept, asymmetric information can be measured by using market liquidity. The simplest definition of liquidity is the ability to conduct transactions without significant costs. Kang and Zhang (2014) provide alternative solutions for measuring liquidity in emerging markets by combining ratios with the size of non-trading-frequency.

Recently, Alfaro et al. (2018) provide additional empirical evidence in a dynamic heterogeneous firm model with real and financial friction showing that adding financial friction to the uncertainty of stochastic volatility approximately doubles the negative effect of uncertainty on investment and attitudes. The number of shares traded in the capital market, the activity of securities issuers are influenced by many factors, some of which are coincidental, such as social and political events. In this case, they use incomplete information, which can sometimes be inappropriate. Regardless of how much information about the issuer and the market can be gathered to justify revamping the initial solution to fix it, we are likely to do better.

The information asymmetry theory in this study was instrumental in explaining that tax incentives are new information and if that information is not spread among the market participants, there may be information asymmetry. This is the foundation for the theory's importance in anchoring this research.

2.3.3 Signaling Theory

Spence (1973) developed a signaling theory using the labor market for modeling Educational signaling function. He noted that potential employers had no information about the quality of applicants. Therefore, candidates receive training to demonstrate

their qualities and reduce information asymmetry. This may be a reliable signal because low-quality applicants cannot withstand the rigors of higher education.

Kirmani and Rao (2000) take this theory further by describing the basic signal model by distinguishing between the two entities of a high-quality firm and a low-quality firm. Outsiders (investors, customers) may not be aware of a company's genuine quality, resulting in information asymmetry. They established through empirical modeling that signaling is a viable strategy for high-quality enterprises when they are motivated to signal but not for low-quality firms, resulting in a split balance.

Several examples have been constructed by financial economists to highlight this general link. They believe, for example, that hard debt (Ross, 1973) and dividends (Bhattacharya, 1979) are indicators of a firm's quality. Only high-quality enterprises, according to this concept, can afford to pay interest and dividends in the long run. Low-quality businesses, on the other hand, will not be able to refuse such payments. Therefore, the signal affects the perception of external observers (eg creditors, investors) about the quality of the company.

Many of the fundamental notions and constructions of signal theory have transcended the financial and economic literature as a result of this foundation (Riley, 2001). The signal and receiver device, as well as the signal itself, are the most important components. Countless people (investors, bondholders, etc.) may notice multiple, possibly conflicting messages issued by different parts of a corporation. The primary focus of the signal theory is on the intentional conveyance of positive information to convey positive organizational characteristics.

The role of signals in the IPO process was studied by Leland and Pyle (1977). The author demonstrates how organizations with strong prospects and a higher likelihood

of going public should constantly give unambiguous signals to the market; the owner must retain ownership of a major portion of the company. To be reliable, the signal must be too expensive for "bad companies" to imitate. If no signal is sent to the market, the asymmetric information will lead to an unfavorable IPO market decision.

For example, press releases function as signals (Carter, 2006), however, the media's coverage of these stories may be biased. External references, such as other receivers, can modify the link between signalers and receivers, according to Branzei et al. (2004). When another person interprets a signal in a certain manner, someone who is unsure of how to interpret the signal may use imitation as a decision-making technique (Sliwka, 2007). This can result in a range effect, in which the signal is perceived in an inexact manner (McNamara, Haleblian, & Dykes, 2008). Other warnings are also crucial since more truthful warnings improve signal dependability while more false alarms reduce signal reliability.

According to Joseph Stiglitz (2002), some people want to share information while others do not, but in both circumstances, the act of imparting information drives others to modify their behavior, which is why a lack of information has such a large impact.

The signaling theory is relevant in this study since it provides a basis for predicting how the capital markets would react to the signals by the government such as offering tax incentives. In particular, investors participating in the capital market, as well as issuers of securities, would interpret the incentives as a nudge to take markets actions including increased trading or issuance of securities and in determining whether to invest or divest holdings Fama and French (1993). Furthermore, the theory describes how investors behave in the real world as opposed to the ideal world, including how they behave when

tax incentives are implemented or not, thereby giving light to market performance causes.

2.3.4 Optimal Tax Theory

Ramsey (1927) and Mirrlees' (1971) seminal publications created the foundation of optimum control theory. According to the classic theory of optimum taxation, the tax system should be chosen to maximize the social welfare function while taking into consideration several restrictions. Social planners are typically treated as utilitarians in the literature on optimal taxation: the function of social welfare is based on the utility of persons in society.

Mirrlees (1971) uses the theory to discuss the best way to increase certain incomes, reduce inefficiencies, and distort through taxation distortion. A theoretical tax that avoids distortion and inefficiency is known as a neutral tax. If the taxpayer had to pick between two mutually exclusive economic ventures (investments) with the same pretax risk and before-return, the rational actor would choose the project with the lower tax or tax relief.

By developing a way to define the planner's problem that explicitly deals with unobserved heterogeneity among taxpayers, Mirrlees (1976) ushered in the second wave of optimum tax models. Individuals differ in their natural ability to earn revenue in the most basic form of the concept. Planners can track income, which is based on ability and effort, but they can't directly trackability or effort. When taxing the highly capable, policymakers prevent individuals from working as hard as they can to earn that money. The Mirrlees approach formalizes the fundamental efficiency-equivalence trade-offs that real governments face and has become the main paradigm for tax

theorists by recognizing unobserved variability, diminishing marginal utility, and stimulus effects.

Weinzierl (2008) reviewed the descriptive literature on the use of nonlinear social welfare functions with individual utilities and found that nonlinearities allow social planners to prefer a more even distribution of utilities. Several studies in this field, on the other hand, assume that social planners only consider average utility, meaning that the social welfare function is linear with individual utility. These distinctions are minor, and it is reasonable to consider social planning to be "linear" utilitarian in nature.

The tax system is generally appraised by changes in relative amounts, and changes in relative amounts induced by substitution effects are the subject of Lageman (2004) economic modeling. They demonstrate how complicated the tax system is and how unpredictable tax implications are. They demonstrate the necessity for multidisciplinary knowledge in this regard, as it will expand the conversation and improve perspectives centered on efficiency and equality.

The analytical framework of this theory, according to Barbosa and Siqueira (2008), is based on optimality criteria, the definition of preferences and welfare of economic agents, and modeling of efficiency and equitable impacts. The necessity to be specific about a government's intentions on the one hand, and the constraints of its operations on the other, is reflected in the employment of these instruments in current tax theory.

Piketty (2014) accepts the theory and proposes solutions based on liberalism but with social justice and individual liberty accords to ensure that democracies do not succumb to dizzying growth in inequality in a recently published book. He argues that inequality is a fundamental logical contradiction. On the other hand, the state has always

considered various collective funds as the main source of funding for existing structures and as a way to make projects and investments viable.

Villas-Bôas (2015) adds that there has been improvement in research examining tax policy to eliminate social inequality as a result of this more systematic and integrated study. This might lead to the concept of consumption tax selectivity, which states that fundamental items used by all citizens, particularly by the poor, must have lower taxes than surplus products, particularly by the poor. In actuality, the Diamond and Mirrlees model "is a continuation of the results that Ramsey found when investigating multi-actor economics," according to Silveira, Passos, and Guedes (2018). With this author's modeling, optimal taxation begins to involve a conflict between efficiency and equity.

According to Botelho and Abrantes (2018), a greater use of resources can go hand in hand with the quest for justice and social development, which is also consistent with the optimal taxation theory, which seeks social justice because taxes are linked to welfare. increased government action, which necessitates more public funding.

In other words, given the variables of income and taxes paid, the theory has been applied to income taxes to mathematically allow the wealthy to pay proportionately more taxes than the poor. As a result, the government should take steps to strengthen the taxation system's neutrality and ensure that the economy generates enough revenue to meet the government's distributive and distributional goals to maximize social welfare, i.e. fiscal policies that are cost-effective, politically feasible, and socially justifiable. The theory is relevant for this study it guides on appropriate rates and segments for income taxation, including on the capital markets. It outlines the behaviors of taxpayers when exposed to either form of tax.

2.4 Empirical Literature Review

The empirical literature that has been broadened to explain the relationship between tax incentives and capital market trends is examined in this part. The empirical literature was filtered according to the research objectives.

2.4.1 General Effects of Tax Incentives

As a policy aimed at stimulating economic growth and investment, the practice of offering tax incentives is almost universal. The extent and type of tax incentives are different in various countries depending on the economic structure of the country.

Grubert and Muti (2000) analyze why investors pick certain nations using data from the Bureau of Economic Analysis (BEA). Foreign direct investment has been investigated in 47 nations, including emerging countries. They discovered that domestic market-oriented investment is less responsive to changes in tax incentives than export-oriented investment.

Hassett and Hubbard (2002) look at how effective tax regimes are at encouraging investment in general. They discover that whereas tax reform increases consumer expenditure on capital investment by 1.0 percent, investment increases by 0.5-1.0 percent (with an elasticity of -0.5 to -1.0). This study is based on the company's microeconomic statistics. Taxes raise the cost of capital for consumers, therefore ongoing cost cuts should boost capital investment. Targeted incentives, on the other hand, are unlikely to cut the overall cost of capital.

Morisset (2003) discovered the polar opposite of the idea that tax advantages attract investment: in some situations, tax incentives lower a country's tax collections and encourage illicit corporate behavior in developing countries. In Tunisia, for example,

spending on tax incentives accounted for about 20 percent of total private investment in 2001.

According to Githaiga (2013), the effectiveness of NSEs improved even when tax incentives were reduced, and fell even when tax incentives were increased in some cases. According to the findings, there is no direct link between stock market incentives and stock market performance. If that's the case, then continuing to steer the NSE stock market with tax incentives is not a good idea. The incentive to invest in the stock market remains, although the results of this determination have not yet shown tangible results. It is important that when incentives are provided and they do not improve performance, it means a loss of public funds.

While some academics claim that incentives boost stock market performance in a positive way (IOSCO, 2012), others argue that incentives do not affect stock market performance (Aregbeyen & Mbadiugha, 2011). The researchers have not confirmed that the effect of investment incentives on stock market performance is what they are reporting. Researchers undertook this study to investigate the effect of investment incentives on the stock market performance of companies listed on the Nairobi Securities Exchange, motivated by the need to identify and clarify this persisting paradox.

Tirimba, Muturi, and Sifunjo (2016) investigated the impact of tax incentives on stock exchange counters. They discovered that tax incentives could help specific sectors of the economy enhance their performance. Tax benefits and exemptions, for example, may encourage them to list on an exchange. At the time of listing, a company is entitled to a tax deduction for a certain period based on the listed shares. According to Ahn &

Chuang (1999), this is believed to encourage positive stock market performance whenever incentives are given.

2.4.2 Equities Tax Incentives and Capital Market Performance

For companies cited by the NSE, Kipngetich (2011) investigates the relationship between taxes paid and the amount of investment. It employs descriptive statistics to examine data from 2006 to 2010. He concludes that there is a strong link between taxes paid and investments made, which is especially true in the financial sector.

Wairimu (2002) researched the empirical relationship between dividends and corporate investment decisions, which was cited by the NSE. It uses a linear regression model to evaluate data from companies listed on the NSE for 21 years, from 1981 to 2000. He also concluded that there is a strong link between investing decisions and dividends.

Oliech (2012) attempted to determine the influence of corporate taxation on NSE-listed businesses' investment decisions. It looks at the data from 2008 to 2012 and uses a t-test to see how significant the independent variables are. He discovered that there is a strong link between corporation taxation and investment decisions.

Githaiga (2013) investigates the effects of tax incentives on FDI inflows from NSE-listed companies. The survey gathers time-series investment statistics and tax incentives from a sample of ten firms that were listed on the NSE between 2008 and 2011. The data is primarily derived from secondary sources, with the annual accounts and audited annual accounts of the sample companies receiving the most attention. A correlation analysis was performed. The data is then studied to see if tax advantages affect recruiting FDI to NSE companies. The findings revealed a substantial link between friction levels and FDI inflows. Although there is a substantial link between

frictional allowances and FDI, a closer look at the percentage change in FDI inflows during the study period reveals that tax incentives have a minor impact on FDI inflows.

According to Githaiga (2013), the effectiveness of NSEs improved even when tax incentives were reduced, and fell even when tax incentives were increased in some cases. According to the findings, there is no direct link between stock market incentives and stock market performance. If so, then the feasibility of continuing to drive the NSE stock market is wrong. The incentive to invest in the stock market remains, although the results of this determination have not yet shown tangible results. It is important that when incentives are provided and they do not improve performance, it means a loss of public funds.

The influence of taxation on private investment in Kenya was investigated by Njuru, Ombuki, Wawire, and Okeri (2013). The vector autoregression technique was employed to meet the research goals. From 1964 to 2010, a time-series research design was used. VAT, income tax, and the establishment of the Kenya Tax Agency (KRA) were found to have a detrimental impact on private investment, whilst excise tax, import tax, and amnesty tax had a positive impact. has a favorable impact on private investment This study, on the other hand, looks at the effect of taxes on private investment in Kenya, whereas the current study looks at the influence of equity tax incentives on capital market performance.

During the 2010-2017 period, Oeta, Kiai, and Muchiri (2019) attempted to estimate the impact of tax evasion on the financial results of nine industrial firms listed on the Nairobi Stock Exchange. The link between factors was tested using panel data and a multiple linear regression model. The findings revealed that there was no statistically significant link between tax planning and the financial performance of NSE-listed

industrial firms. The findings revealed that capital intensity, research, and development costs, and business size were all positively connected to financial success, but not significantly so. In addition, the leverage ratio shows a negligible negative relationship to financial results. However, this study is a lapse because it focuses on tax avoidance on financial performance, unlike the current study which aims to assess tax incentives for stocks in the capital market.

Kuria, Omboi, and Achoki (2017) intended to see how capital grant incentives affected EPZ firm performance in Kenya. The research design for this study was descriptive and explanatory. Because the number of EPZ enterprises in Kenya is divided into four strata, this study adopts a stratified sample approach. The total number of firms included in this study was 86 EPZ entities registered in Kenya, according to the Export Processing Authority (EPZA). A census design was used in this investigation. Because the population of interest was tiny, the census study was approved. This study employed a sample size of all 86 registered EPZ firms. A questionnaire was used to obtain primary data. Secondary data was gathered from publicly traded companies, including ROA, the number and value of jobs produced, and the company's longevity. Secondary data is gathered from EPZ enterprises in Kenyan annual reports. The success of EPZ enterprises as compared to the tax incentives they have received over the last decade in this study. The data analysis in this survey is done with descriptive statistics and derived statistics. Frequency, percentage, mean, and standard deviation are examples of descriptive statistics, while correlation and regression analysis are examples of inferential statistics. The findings revealed that capital incentive tax incentives were favorably and significantly associated with EPZ company performance as evaluated by ROA, the number of jobs created, and length of stay at the 5% materiality criterion. The

study was conducted at the EPZ whose operation was different from that of the NSE, therefore it is necessary to carry out current research.

Kamau's (2020) goal was to see how tax incentives affected foreign direct investment inflows to Kenya. The survey is carried out at a macro level, evaluating tax incentives and foreign direct investment inflows into the country each year. Over ten years, secondary data was collected annually (2008 to 2017). An explanatory research design is used in this study. Statistical reasoning, particularly correlation and regression analysis, is also used by researchers. The relationship between tax incentives and foreign direct investment inflows was studied using a multiple linear regression model. The F-test and t-test were used to examine the significance of the overall model and individual parameters using the statistical package for social science version 22. The obtained data is subjected to diagnostic testing to ensure that it is reliable and stable enough for analysis. The R-squared value of 0.633 indicates that the four independent variables account for 63.3 percent of the variability in FDI flows to Kenya, while the remaining 36.7 percent is due to factors outside the scope of this study. The predictor variables and foreign direct investment inflows have a high association in this study (R = 0.796). The F-statistic for the analysis of variance (ANOVA) at a 5% significance level was 2160, which was below the crucial value, indicating that the model was not statistically significant. The study uncovers significant gaps, similar to what was done for foreign direct investment (FDI), but this time the focus is on capital market performance.

Timba, Muturi, and Sifunjo (2016) studied how tax incentives affect stock market performance. With a research population of 61 businesses listed on the NSE, this study used a descriptive research approach. A stratified random sample of 150 respondents was drawn from 30 companies listed on the NSE. To collect data for analysis, this study

used to collect data. The Cronbach model (alpha-) is used to examine the data's dependability in this investigation. Stata was used to examine the data (version 13). The data were subjected to correlation analysis, multiple linear regression analysis, bias, and excess testing. The hypothesis that tax incentives had little impact on investment, performance, and loss of NSE government income was tested using a t-test and an ANOVA test. According to the findings of this study, tax incentives have no impact on NSE performance. This study has a substantive gap as it examines tax incentives, whereas the current study examines tax incentives for equity capital market performance.

Aduda, Masila, and Onsongo (2012) attempted to investigate the factors that influence the development of the Nairobi stock market. The elements that determine the development of the NSI are modeled using secondary data from 2005 to 2009. Macroeconomic characteristics such as stock market liquidity, institutional quality, income per capita, domestic savings, and bank development are all essential, according to the regression results. On the Nairobi stock exchange, the determinant of stock market developments. The lack of a link between stock market movements and macroeconomic stability – inflation and private capital flows – is revealed through regression analysis. The findings also suggest that the quality of law and order institutions, as well as bureaucracy, democratic accountability, and corruption indices, are major drivers of stock market performance since they boost the profitability of external funding. The drivers of the development of the Nairobi stock market are the subject of this study, which has a significant gap.

2.4.3 Debt Tax Incentives and Capital Market Performance

Gurcharan (2010) looked into the factors that influence capital structure in four ASEAN countries: Malaysia, Indonesia, the Philippines, and Thailand. Aside from country-specific issues like stock market size, banking sector development, GDP growth rate, and inflation, the impact of insufficient tax protection, profitability, size, and expansion potential on capital structure decisions is investigated. The results for firm-specific characteristics reveal that profitability and growth potential are negatively connected with the ratio of market debt to total assets in all three nations, but that the correlation is statistically significant in all three. The Non-Debt Tax Shield hurts leverage ratios but is only statistically significant in one country. In the two countries, the indications for the size factor are significant and positive. The results of country-specific effects analysis show that stock market developments and GDP growth rates have a significant and negative effect on the market debt ratio to total assets.

The equity financing behavior of companies listed on the NSE was studied by Ngugi (2008). This study employs a modified static model for exchange and order bites and uses a sample of 22 enterprises from 1990 to 1999. Information asymmetry, debt-free tax protection, and infrastructure in local capital markets are the key factors of registered capitalist behavior in Kenya, according to him. However, Nyang'oro (2003) found different results in a comparative study based on a sample of 20 non-financial enterprises listed from 1993 to 2001. He found that tax rates were important in determining leverage, but with the wrong negative sign. The no-debt tax shield is not significant in explaining leverage.

Kamau (2018) is particularly interested in the impact of the effective tax rate on firm profitability, the relationship between the effective tax rate and long-term firm solvency, and the impact of the effective tax rate on firm equity performance. The

independent variables are described using a descriptive study methodology. The survey's target demographic includes seven agricultural companies that were listed on the Nairobi Securities Exchange as of December 31, 2015. Therefore, this survey is a five-year census survey covering the period from 2011 to 2015. The data collection method used in this study relies solely on data secondary, derived from the audited annual accounts of the agricultural company under consideration. Relevant secondary data from the seven registered farms were collected using a data collection tool. Data were analyzed and tabulated using Microsoft Excel to provide a clear picture of the survey results. Regression analysis is used to describe the degree of correlation between variables used in the study. This study analyzes the effect of effective tax rates on company profitability. This study finds that the effective tax rate has little correlation with return on equity and return on equity. However, while this study aims to demonstrate the relationship between tax incentives and capital market developments, it concentrates on the relationship between the effective tax rate and the firm's longterm solvency and the impact of the effective tax rate on the firm's stock performance. In Nairobi County, Onyango (2015) discovered the impact of tax incentives on the financial performance of five-star hotels. A quantitative descriptive design is used in this investigation. The population for this study comprises all seven five-star hotels in Nairobi's district. All seven five-star hotels were subjected to a questionnaire study. A perfect response rate was reached. Accountants from five-star hotels submitted the information. To investigate the relationship between tax incentives and the financial performance of five-star hotels in Nairobi County, the data were analyzed using multiple regression models. According to studies, changes in ID, IBD, and S&T affect the financial performance of five-star hotels by 89.5 percent. The regression results show a statistically significant positive link between W&T and the financial success of Nairobi District's five-star hotels. He also discovered a link between ID, IBD, and the financial success of Nairobi District's five-star hotels. As in the hotel industry, research reveals a conceptual gap, whereas the current study intends to investigate the relationship between tax incentives for loans and capital market performance.

Bitok, Bitok, Chenuos, and Kosgei (2014) investigate the elements that influence emerging market capital market growth and development. For this, both primary and secondary data are used. Questionnaires were distributed to NSI stakeholders to collect primary data. Investment bank managers, BNN employees, capital market regulators, the Ministry of Finance, economic planning, and the Central Bureau of Statistics were all used as key informants. Its target group consists of 53 companies listed on the New York Stock Exchange. The study population was sampled using a stratified random sample based on counter segmentation. A sample of 30 businesses is chosen. The derived statistical method is used to summarize the data. For this study, a descriptive research design was applied. The findings suggest that government policy reforms have had a significant impact on Kenya's capital market growth and development. The NSE has risen in recent years but at a slow rate. A robust regulatory and legislative framework, a favorable macroeconomic climate, investor education, and awareness, improved market infrastructure, and growing participation of foreign investors are all key factors driving the growth and development of ENS. This study, on the other hand, focuses on the factors that drive capital market growth and development, rather than the relationship between tax debt financing and capital market development.

Muli (2020) investigates the influence of capital gains tax on real estate performance in Mavoko City, Machakos County. The studied audience covers all 143 employees of 31 real estate enterprises operating in Mavoko and registered in relevant offices of the Machakos County Government in this study, which uses a descriptive research

approach. The data for this study was gathered by a questionnaire with an open and closed Likert scale. The coefficient of determination is a metric for determining how much of the variance in the dependent variable can be explained by the independent variable. With a 95 percent confidence level and a 5% significance level, ANOVA, T, and F tests were used to test the model's significance in quantifying the link between capital gains tax and real estate company efficiency in Mavoko Municipality, Machakos District. Capital gains and performance have a large positive association, while capital gains and outcomes have a modestly favorable link, according to this study. However, there was a strong negative association discovered between performance and the locking effect. It was found that the efficiency and capitalization effect had a negligible negative relationship. However, research is conducted on properties that differ in terms of how the capital market works and it's regulation.

Ngure (2018) examines tax incentives and their impact on the performance of several Kenyan manufacturing firms. A descriptive research design was used in this study. In 2016, the Kenya Manufacturers Association Directory included 725 manufacturing enterprises from all categories in the survey. A simple random sampling yielded a sample of 90 companies for the survey. This study makes use of panel data gathered through the use of a secondary data collection template. The poll was conducted in 2017 and data was collected between 2011 and 2016. The results of the poll suggest that the company's corporate tax incentives have the most favorable and significant impact on its performance. The findings also suggest that capital tax incentives have a positive and considerable impact on the performance of these industrial firms. The research was conducted in the manufacturing sector, in contrast to current research, this is not specific, namely substantive gaps.

2.4.4 Trading tax incentives and Capital Market Performance

YairListokin (2012) studied non-liquidity taxation in the United States with a focus on corporations. The predominance of securitization in the US and global economies may be explained in part by liquidity tax preferences, according to studies. While selling a single asset, such as a mortgage, is quite expensive, selling a package of securitized assets is usually far less expensive. The study warns, however, that if liquidity expenses aren't taxed, but higher profits on illiquid and unsecured assets are (and non-liquidity costs aren't entirely deductible), the assets will be over-guaranteed.

Changes in capital gains tax laws for retail investors, according to Porteba and Weisbenner (2001), can impact the incentives for institutional and retail investors to window up. They look at empirical evidence from 1963 to 1996 to show that if tax laws encourage taxable investors who accumulate losses at the start of the year to realize their losses before the end of the year, the annual return is higher because the correlation between losses at the start of the year and losses at the end of the year is higher. lower than it would be if the law didn't offer such early liquidation incentives. They conclude that tax-loss trading has a role in the year-end return pattern.

Ellis et al. (2006) examined the effect of capital gains tax on security prices. They examine whether initial public offering (IPO) returns reflect tax capitalization and/or lock-in. They sampled 5,534 IPOs from 1987 to 2004 using the Thompson Financials Database SDC Global New Issues Database. They investigated the economic elements that are commonly assumed to impact undervalued IPOs and discovered that short-term capital gains rates were favorably related with undervalued IPOs, whereas long-term capital gains rates were adversely connected with underestimating IPO prices. Furthermore, they discover that the gap between the short-term and long-term individual capital gains tax rates is positively associated with the drop in IPO prices.

Toerien and Marcus (2014) examine the impact of South African taxes, particularly secondary corporate taxes and dividend taxes (which replace secondary corporate taxes), on investors' expected returns and firm value. They modeled the relationship between CGT and expected returns and used this relationship to hypothesize the expected behavior of the initial action on the implied cost of capital for a sample of South African firms. Taxable retail investors have been found to use realized capital losses to reduce taxes on realized gains or to offset a limited number of nonprofit organizations. Because taxes are calculated on income in a calendar year, capital losses before the end of the year can accelerate tax relief from losses for up to 12 months.

Seyhun and Skinner (1994) looked at direct evidence of tax-cutting methods' importance. They rely on a range of individual tax return data provided by the Internal Revenue Service of the United States. They make connections between tax information and stock prices and closed investment funds. They discover that just a small percentage of investors trade stocks to lower their taxes and that tax-induced trading has little impact on stock prices. The findings reveal that, on average, stock prices are unaffected by capital gains tax rates.

Mutwiri and Okello (2015) looked at how VAT incentives affect NSE-listed businesses' capital structure decisions. This study relies heavily on correlation and regression analysis, as well as descriptive results. The results of the correlation suggest that VAT incentives have no substantial impact on capital structure decisions made by enterprises registered with BNN. Because of the low Pearson correlation, the nature of the effect is assessed to be weak. Overall, research demonstrates that local tax advantages do not play a significant role in encouraging investors to engage in NSE-listed companies.

More listings, according to Leuz and Verrecchia (2000), lead to more active exchanges and more liquidity, giving an exit route for investors and issuers. This encourages the usage of long-term illiquid projects since investors can sell their stock positions in the market and do not have to wait for long-term projects to pay off to balance their consumption plans (Leuz & Verrecchia, 2000).

However, YairListokin (2012) found that not taxing liquidity distorts the identity of wealth owners - a distortion known as the clientelism effect. Without taxation, holders of assets that do not need liquidity must own illiquid assets, while those who need more money must own liquid assets. Because returns are taxed while liquidity is not, low-taxpayers reap the benefits of holding illiquid high-yield securities by encouraging them to hold illiquid securities regardless of their financial needs.

Chen (2015) examines the impact of stock market pressures on the trade-off between corporate and shareholder tax relief. The results show that private companies are more likely to choose investment tax credits for shareholders and ignore corporate tax breaks than public companies. Public companies with a relatively high return on earnings ratios tend to choose the 5-year corporate tax exemption because it can increase reported profit after tax. In addition, firms that opt for a 5-year corporate tax exemption show significantly lower earnings sustainability over 5 years after selecting certain tax incentives than firms that opt for a shareholder investment tax credit. However, this study addresses equity market pressures for the trade-off between corporate and shareholder tax benefits, while the current study intends to examine tax incentives for trading and capital market performance.

Munyanyi and Chiromba (2015) used Zimbabwe as an example to look at the impact of tax incentives on tourism investment growth in developing nations. Face-to-face and

telephone interviews with important tourism stakeholders were conducted as part of this study, and participants were chosen using stratified and random selection procedures. In circumstances when interviews were not possible, questionnaires were sent by hand, mail, and email. The basis for the extensive investigation was secondary data. Most politicians employ tax advantages to entice investment into the tourism industry, according to the study, but these moves are not accompanied by additional supportive measures in other parts of the economy that help expand tourism investment. Other key issues to examine are corruption, government policy openness, and the time and expense of establishing a firm in the country. However, the research was conducted in Zimbabwe which is less developed than Kenya, so the performance of the capital markets is not comparable.

Teraoui, Kaddour, Chichti, and Rejeb (2011) looked at the impact of tax incentives on the financial performance of a company. The following are the findings of an empirical study conducted on a sample of 60 businesses: Tax rises harmed these two financial performance parameters, according to benefit and performance evaluations. In addition to using temporal data, the questionnaire-based approach confirms the results of other approaches. However, this study looks at the financial performance of firms, in contrast to current research, which assesses capital market performance, and thus presents contextual differences.

Ofori-Abebrese, Amporfu, and Sakyi (2016) investigate how economic policy decisions influence the growth of Ghana's stock market. The effect of macroeconomic policies on the development of the Ghana stock market from 1991 to 2011 is examined using the Autoregressive Distributed Lag (ARDL) technique. According to this analysis, government revenues and exchange rates stifle stock market growth. The yield on government spending and the interest rate on government bonds do not affect the

stock market's development, according to the combination of metrics determined. This report advises, among other things, robust macroeconomic governance to ensure that equity investors do not immediately transfer their investments in reaction to changes in macroeconomic policies. However, this research was conducted in Ghana, where the farms are different from those in Kenya, therefore it is necessary to carry out current research.

2.5 Critique of the Literature

The literature on tax incentives and their impact on capital market development is incomplete. The topic of whether tax incentives are a reward or a motivator in the capital market remains unanswered, which supports the study's goal of determining the influence of tax incentives on equities and debt market performance.

Although great emphasis has been dedicated to studying the projected benefits of tax incentives, little empirical research has been done on their impact on diverse capital markets. Much research on stock market incentives has been undertaken, with the focus on the impact of tax incentives on other specific variables such as investment.

It is therefore unclear from the current empirical literature whether the tax incentives currently offered in the Kenyan capital market act as a motivator and lead to more stock trading, increasing investor confidence and encouraging stock market participation.

2.6 Conceptual Framework

The study conceptualized the relationship between constant variables of stock markets, debt markets, and trading tax incentives and the performance of the capital markets, as measured by market capitalization, based on the literature review. The goal of the study was to establish a link between the independent and dependent variables, as shown below:

Independent Variables

Dependent variable

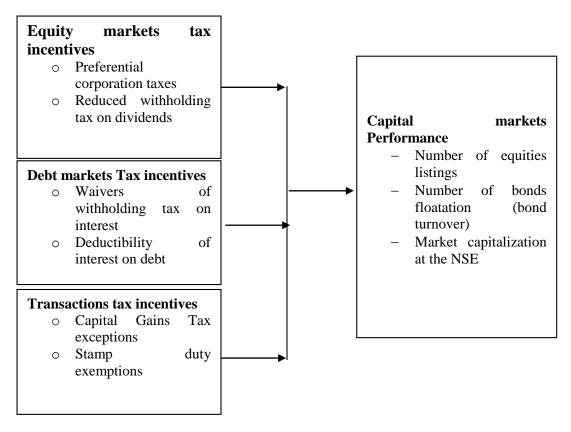


Figure 2.1: Conceptual framework

Source: Researcher (2021)

2.7 Research Gaps

Research on the relationship between tax incentives and capital markets performance in Kenya has not been comprehensive. Most of the studies highlighted have not specifically explored the linkage between tax incentives and capital markets, which is an objective of this study. These inadequacies in previous research have left unanswered issues about whether tax incentives on the capital markets are viewed as a gift or a motivator by diverse capital market actors.

Various studies have majorly focused on single variables mainly focusing on tax incentives influence on variables like foreign direct investment or economic growth, but barely delving on the influence of tax incentives on segments of the capital markets.

The study, therefore, sought to fill these gaps and investigated whether policymakers should concentrate on tailoring tax incentives for the capital markets or should innovate other non-tax measures and incentives.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes how the research was conducted. It outlines the research design, target population, research sample, data collection and analysis, model specifications, and research ethics.

3.2 Research Design

A research design is the researcher's plan of action for achieving the research's specific objectives. It encompasses all of the processes that a researcher takes from submitting a study proposal to assessing the pertinent data at the end (Sukamolson, 2007). Research design, according to Odoh and Chinedum (2014), is an arrangement that tries to provide solutions to research questions raised in the research. In general, research design provides a framework for collecting and analyzing data.

In this study, the researcher used an explanatory research design, intending to determine the causal relationship between tax incentives and capital market reactions. Explanatory research is a study that aims to explain the link between two or more variables (Rahi, 2017). Researchers begin with a broad concept and use research as a tool to generate future study ideas. As a result, in this study, an explanatory study design is used since it considers the impact of tax incentives on capital market performance in Kenya.

3.3 Target Population

The target population is a measurable collection of individuals, instances, or objects that share some observable species-specific traits that set them apart from other populations. Population, according to Ngechu (2004), is a well-defined group of people, services, goods, and events, or the houses under investigation. The homogeneity of the

population of interest is ensured by this definition. All elements in the research area make up the population. The target audience of this study is the sum of all the tax incentives available in the capital market tax laws from 1990 to 2020. The unit of analysis in this study is the capital market in Kenya.

3.4 Sampling Design

3.4.1 Sampling Frame

The sampling frame, according to Tedley and Yu (2007), is the source document or device from which the sample is taken. This is a list of items that have been removed from the population. The sampling frame for this study included the equities and debt markets of the Nairobi Securities Exchange as of 31st December 1990 and the tax incentives contained in the taxation laws as of that date.

3.4.2 Sampling Technique

The sampling approach, according to Etikan, Musa, and Alkassim (2016), is the procedure for selecting a collection of items from the total population that are considered representative of the entire population. In this study, the researcher applied a calculation technique because tax incentive data is already available in the Income Tax Law, as amended from time to time, and secondary data on the capital market used is available on the official websites of the Capital Market Authority and Nairobi. Stock exchange manual. The census sampling technique is defined by McMillan and Schumacher (2014) as research that investigates all members of the population in the study.

3.4.3 Sample Size

The sample size indicates the exact number of participants that the researcher physically addresses to answer a particular question using a research collection tool (Webster,

2007). Based on the census technique adopted, all selected tax incentives in the tax laws from the year 1990 were used in the study.

3.5 Data Collection Methods

Researchers utilize a logical approach to obtain research data called the data collecting method (Alshenqeeti, 2014). For the research period, this study relied on secondary data from tax laws, Capital Market Authority publications, and the Nairobi Securities Exchange. From the Capital Markets Authority publications, the researcher used a data collection sheet to gather necessary information about the tax incentives measured in terms of their effects on market performance.

3.6 Research Procedures

Research procedures are guidelines used by researchers to conduct research. These include, among other things, data collection procedures, appropriate sampling, and ethical considerations (Creswell, 2013). The researcher explored the relationship between tax incentives and the performance of the capital market segment using secondary data in this study. The researcher sought permission from the university research office to conduct research. The researcher obtained secondary data from the Capital Markets Authority website and research handbooks.

3.7 Data Collection Instrument

Data collecting tools are tools that are used to gather data to serve or verify certain truths (Mugenda & Mugenda, 2003). The goal of the study determines the data collection strategy. According to Teddlie and Tashakkori (2010), the type of data collected with the suitable tool is defined by the study's goal.

This study used secondary data. Louis et al. (2007) describe such secondary data using information from studies conducted by other studies for a particular site. This

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information is gathered from an in-depth analysis of tax laws, publications from the

Office of Capital Markets and the Kenya National Bureau of Statistics.

3.8 Data Analysis and Presentation

There was a quantitative analysis of secondary data obtained. The data was analyzed

using EVIEWS software. The dependent variable has been expressed as a function of

various tax incentives as demonstrated in the conceptual framework. The following

model has explained the independent variables and the dependent variable:

$$Y_t = \beta_{0t} + \beta_{1t} X_{1t} + \beta_{2t} X_{2t} + \beta_{3t} X_{3t} + e_t$$

Where:

Y = Capital Markets Performance

 X_1 = Equity Markets Tax Incentives

 $X_2 = Debt Markets Tax Incentives$

 X_3 = Trading Tax incentives

The constant term in the model is $\beta 0$; the coefficients $\beta 1$ to $\beta 3$ measure the sensitivity

of the dependent variable (Y) to unit changes in the independent variable (X1, X2, X3,).

 e_t is the error term that captures the model's inexplicable variances. Tables and graphs

are used to present the findings.

3.8.1 Regression Assumptions

To verify the accuracy of the time-series data, this study tested many regression

assumptions, including normality, autocorrelation, heteroscedasticity, and the

multicollinearity test. The Jarque-Bera test was used to determine normality. All data

have a normal distribution if the probability of JB is greater than alpha (0.05). The

correlation matrix was used to test multicollinearity. Multicollinearity is defined as an r correlation coefficient of 0.8 or above. The Breusch-Godfrey test was used to determine heteroscedasticity. If the probability value of the test statistic is greater than 0.05, the data is homoscedastic. The Breusch-Godfrey LM serial correlation test was used to confirm the autocorrelation test. If the chi-square probability is greater than 0.05, autocorrelation does not exist.

3.8.2 Unit Root Test

To test if the data series was stationary, the Augmented Dickey-Fuller (ADF) method was used. The ADF test is used to confirm that the regression findings are accurate and dependable, indicating that the mean and other relevant statistical parameters should remain constant over time if the regression assumptions are followed. The ADF test is a useful stationarity test since it takes into account the possibility of autocorrelation in terms of errors while remaining simple to implement.

3.8.3 Co-integration Test

If the variables are not integrated in the same order, cointegration is used to establish whether the dependent variable and the independent variable have a long-term relationship. The purpose of Johansen's test was to see if there were several cointegration relationships between tax incentives and capital market performance.

3.8.4 Hypothesis Testing

The OLS regression model was used to evaluate hypotheses in this study. If the p-value was less than the 0.05 critical threshold, the null hypothesis was rejected. The null hypothesis, on the other hand, was accepted if the p-value was greater than the 0.05 critical value.

CHAPTER FOUR

DATA ANALYSIS, RESULTS, AND DISCUSSION

4.1 Introduction

The data analysis and discussion of the results are presented in this chapter. The goal of this study was to see how tax incentives affected Kenya's capital market performance. The findings are given following the study's objectives.

4.2 Descriptive Analysis

This section presents findings on descriptive statistics based on the study variables. The findings are summarised in Table 4.1.

Table 4.1: Descriptive Summary Results

	Capital Market Performance	Equity Markets Tax Incentives	Debt Markets Tax Incentives	Trading Tax incentives
Mean	850.4003	0.269355	0.117742	0.004839
Std. Dev.	901.8878	0.024757	0.050906	0.012615
Minimum	10.9	0.25	0	0
Maximum	2539.98	0.3	0.15	0.05
Observations	31	31	31	31

The study findings indicate that the average annual capital market performance measured using market capitalization in Kenya for the period 1990 to 2020 was Ksh. 850.4003 billion with a standard deviation of Ksh. 901.8878 billion. The minimum value was 10.9 billion while the maximum value was 2539.98 billion. The findings also show that the average yearly equity market tax advantages, as measured by company tax, were 27 percent on average, with a 2.5 percent standard deviation. The minimum and maximum percentages were 25 and 30 percent, respectively.

Further, the results reveal that the average annual debt markets tax incentives measured using withholding tax on interest were 12% with a standard deviation of 5%. The minimum value was 0 and the maximum value was 15%. The variance results from the fact there were years when full interest waivers were granted. In addition, the results show that the average annual trading tax incentives measured using stamp duty and capital gains tax were 0.5% with a standard deviation of 1.3%. The minimum value was 0 and the maximum value was 5%. The capital gains tax on trading has been waived except for the year 2015 when it was introduced but scrapped the following year. However, the stamp duty has been applied with varying gradations on trading instruments in the markets.

4.3 Unit Root Tests

Time series data are usually not stationary, so it is important to perform a single root test to determine whether the data is stationary or non-stationary before performing a regression analysis. In this study, the ADF test was used to search for single roots. The findings are shown in Table 4.2.

Table 4.2: Unit Root Tests at Level

Variable	ADF TEST	Prob	Comment
CMP	-2.044365	0.2674	Non-stationary
EMTI	-1.471376	0.5340	Non-stationary
DMTI	-1.856319	0.3474	Non-stationary
TTI	-3.206644	0.0295	Stationary

The findings of the study indicate that data for capital market performance, equity markets tax incentives, debt markets tax incentives were non-stationary at a level (*P-value* >0.05). Data for trading tax incentives were, however, stationary (*P-value* < 0.05). Data for the three (capital market performance, equity markets tax incentives,

debt markets tax incentives) were, however, found to be stationary at first differencing as shown in Table 4.3.

Table 4.3: Unit Root Tests at First Difference

Variable	ADF TEST	Prob	Comment
CMP	-4.183449	0.0029	Stationary
EMTI	-5.196152	0.0002	Stationary
DMTI	-5.209990	0.0002	Stationary

4.4 Lag length Selection Procedure

Before performing the Johansen co-integration test, the best lag duration for analysis was determined. The Akaike Information Criterion is used to determine the ideal lag duration (AIC). The AIC value of the model with the lowest AIC value is chosen as the decision rule. The AIC values for lags 1, 2, and 4 are shown in Table 4.4.

Table 4.4: Lag Length Selection

LAG	AIC
Lag 1	-16.33812
Lag 2	-15.66373
Lag 4	-16.69440

The findings indicate that lag 4 gave the lowest AIC value; therefore, the study used lag 4 as the optimal lag length.

4.5 Johansen Co integration

The Johansen co-integration test was used to check for co-integration. Table 4.5 shows the outcome.

Table 4.5: Johansen Test Results

Hypothesized		Trace 0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.89199	104.974	47.8561	0.000
At most 1 *	0.5737	47.1118	29.7971	0.0002
At most 2 *	0.49122	24.9439	15.4947	0.0014
At most 3 *	0.24696	7.37466	3.84147	0.0066

Trace test indicates 4 cointegrating eqn(s) at the 0.05 level

The results indicate that there were 4 co-integrating equations for the model linking tax incentives to capital market performance.

4.6 Vector Error Correction Model

The Vector Error Correction Model (VECM) was conducted given that there was more than one equation. VECM allows interpretation of long term and short equations. Additionally, VECM has more efficient coefficient estimates. The results are shown in Table 4.6.

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

Table 4.6: Vector Error Correction Model

	CMP	EMTI	DMTI	TTI
CMP(-1)	0.521591	0.01798	-0.20765	0.033715
	-0.30414	-0.03421	-0.08992	-0.0295
	[1.71495]	[0.52563]	[-2.30918]	[1.14277]
CMP(-2)	0.036692	-0.01158	0.080852	-0.0276
C1.11 (2)	-0.31433	-0.03535	-0.09293	-0.03049
	[0.11673]	[-0.32754]	[0.86999]	[-0.90519]
CMP(-3)	-0.104	-0.00013	-0.01255	0.021706
CIVII (3)	-0.28863	-0.03246	-0.08534	-0.028
	[-0.36032]	[-0.00399]	[-0.14710]	[0.77529]
CMP(-4)	0.07307	-0.00689	-0.00227	-0.01205
CIVII (4)	-0.17687	-0.01989	-0.05229	-0.01716
	[0.41314]	[-0.34655]	[-0.04345]	[-0.70221]
EMTI(-1)	-0.27284	0.489797	-0.01828	0.134311
LIVITI(-1)	-2.42861	-0.27315	-0.71805	-0.23559
			[-0.02545]	[0.57011]
EMTI(2)	[-0.11234] 1.929497	[1.79317] 0.111791	0.020018	-0.12841
EMTI(-2)			-0.93451	
	-3.16072	-0.35549		-0.3066
EMTL(2)	[0.61046]	[0.31447]	[0.02142]	[-0.41882] -0.01571
EMTI(-3)	-7.64836	-0.00717	0.248346	
	-3.25875	-0.36651	-0.96349	-0.31611
	[-2.34702]	[-0.01956]	[0.25776]	[-0.04969]
EMTI(-4)	-2.56305	0.138649	-1.90875	0.301063
	-3.8599	-0.43412	-1.14123	-0.37443
DMEL(1)	[-0.66402]	[0.31938]	[-1.67254]	[0.80406]
DMTI(-1)	-0.59454	-0.03508	0.672093	-0.0534
	-0.81628	-0.09181	-0.24134	-0.07918
D) (TTV (2)	[-0.72835]	[-0.38211]	[2.78480]	[-0.67441]
DMTI(-2)	0.436516	0.017661	-0.19353	0.207191
	-1.06973	-0.12031	-0.31628	-0.10377
	[0.40806]	[0.14679]	[-0.61190]	[1.99667]
DMTI(-3)	-1.03775	-0.04912	0.220721	-0.15388
	-1.23337	-0.13872	-0.36466	-0.11964
	[-0.84139]	[-0.35409]	[0.60528]	[-1.28618]
DMTI(-4)	-0.43686	0.046621	-0.81422	-0.0351
	-1.10192	-0.12393	-0.3258	-0.10689
	[-0.39645]	[0.37618]	[-2.49917]	[-0.32838]
TTI(-1)	1.771002	0.234402	-0.72818	0.633
	-2.83714	-0.31909	-0.83884	-0.27521
	[0.62422]	[0.73459]	[-0.86808]	[2.30002]
TTI(-2)	1.955125	-0.20717	1.685715	-0.7521
	-3.374	-0.37947	-0.99757	-0.32729
	[0.57947]	[-0.54595]	[1.68983]	[-2.29796]
TTI(-3)	-0.13234	0.362697	-0.40324	0.423809
	-3.2041	-0.36036	-0.94733	-0.31081
	[-0.04130]	[1.00647]	[-0.42566]	[1.36356]
TTI(-4)	3.501305	0.708982	1.287907	-0.49468
•	-3.19241	-0.35905	-0.94388	-0.30968
	[1.09676]	[1.97461]	[1.36449]	[-1.59741]

С	3.759003	0.065565	0.945106	-0.11179
	-1.16602	-0.13114	-0.34475	-0.11311
	[3.22380]	[0.49995]	[2.74144]	[-0.98832]
R-squared	0.98403	0.882494	0.843361	0.735538
Adj. R-squared	0.958477	0.694485	0.592739	0.312398
Sum sq. resids	0.13074	0.001654	0.011429	0.00123
S.E. equation	0.114342	0.01286	0.033807	0.011092
F-statistic	38.50993	4.69388	3.365071	1.738286
Log likelihood	33.64881	92.64574	66.54927	96.63984
Akaike AIC	-1.23325	-5.60339	-3.67032	-5.89925
Schwarz SC	-0.41735	-4.78749	-2.85442	-5.08335
Mean dependent	2.706667	0.264815	0.112963	0.004074
S.D. dependent	0.561125	0.023266	0.052974	0.013376

The study's findings show that equity market tax incentives (EMTI (-3)) have a long-term link with capital market performance, as evidenced by t statistics greater than 1.96. There was, however, no long-term link between debt market tax advantages, trading tax incentives, and capital market performance. The short-run association between tax incentives and capital market performance was investigated further using the OLS regression model.

4.7 Diagnostic Tests

Prior to conducting the OLS regression, several diagnostic tests were tested to ensure that findings were accurate.

4.7.1 Normality Test

The Jarque-Bera goodness of fit test was used to determine whether the sample data displayed bias and excess in accordance with the normal distribution.

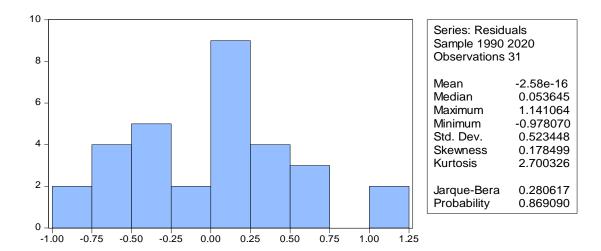


Figure 4.1: Jarque-Bera Test of Normality

The results in Figure 4.1 reveal a probability value of 0.2806 >0.05 implying that the data was normally distributed.

4.7.2 Multicollinearity Test

To check for multicollinearity, a correlation matrix was used. A correlation coefficient of 0.8 or above indicates substantial multicollinearity, which could lead to skewed results. The results are shown in Table 4.7.

Table 4.7: Correlation Matrix

	CMP	EMTI	DMTI	TTI
CMP	1	-0.5572	-0.5579	0.09476
EMTI		1	0.37968	-0.043
DMTI			1	-0.0084
TTI				1

The findings reveal that the independent variables were not multicollinear. Correlation coefficients of 0.8 supported this hypothesis.

4.7.3 Heteroscedasticity Test

Heteroscedasticity test was performed to verify that the error terms were correlated between observations in time series data. Breush-Pagan-Godfrey test accepted.

Table 4.8: Breush-pagan-Godfrey Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey					
F-statistic	1.389389	Prob. F(3,27)	0.2674		
Obs*R-squared	4.145677	Prob. Chi-Square(3)	0.2462		
Scaled explained SS	2.673633	Prob. Chi-Square(3)	0.4447		

The results showed the probability value of 0.2674 > 0.05. Therefore, the null hypothesis that the data does not experience heteroscedasticity is not rejected. In this way, the data does not suffer from heteroscedasticity problems.

4.7.4 Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test was used to conduct the autocorrelation test. Table 4.9 shows the results.

Table 4.9: Breusch-Godfrey Serial Correlation LM Test

Breusch-Godfrey Se	rial Correlation LN	A Test:	
F-statistic	15.11412	Prob. F(2,25)	0.312
Obs*R-squared	16.96732	Prob. Chi-Square(2)	0.571

The results show that the probability value is 0.312 > 0.05. As a result, the null hypothesis that the data is free of autocorrelation was not rejected, implying that no autocorrelation exists.

4.8 Regression Analysis

This section presents the results of the regression model. The empirical estimation was based on OLS technique.

Table 4.10: Regression Results; Tax incentives and capital market performance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EMTI	-11.46910	4.402518	-2.605123	0.0148
DMTI	-5.651615	2.139157	-2.641982	0.0135
TTI	4.171474	7.993199	0.521878	0.6060
C	6.264828	1.121584	5.585697	0.0000
R-squared	0.456063			
Adjusted R-squared	0.395625			
F-statistic	7.546032			
Prob(F-statistic)	0.000805			

The findings indicate an R squared of 0.456063, which imply that tax incentives account for 46% of total variations in capital market performance. The results also show that tax incentives are strong predictors of capital market performance, with a F test of 7.546032 and a reported p value of 0.000805<0.05.

The results further indicate that equities tax incentives had a negative and significant effect on capital market performance (β = -11.46910, P=0.0148) at 5% level of significance. Debt tax incentives had a significant negative impact on capital market performance (= -5.651615, P=0.0135). The impact of trading tax incentives on capital market performance was not statistically significant (P value =0.6060 > 0.05).

From the hypothesized model (Y = β 0+ β 1X1+ β 2X2+ β 3X3+e), the estimated model becomes;

Y=6.264828-11.46910 X1 -5.651615 X2

Where:

Y = Capital Markets Performance

 X_1 = Equity Markets Tax Incentives

 $X_2 = Debt Markets Tax Incentives$

4.9 Hypotheses Testing

The first null hypothesis (H_{01}) was that equities tax incentives have no significant effect on capital market performance in Kenya. Based on the P-value (Table 4.10) of 0.0148<0.05, the null hypothesis was rejected. This implied that equities tax incentives significantly affect capital market performance in Kenya.

The second null hypothesis (H_{02}) was that debt tax incentives have no significant effect on capital market performance in Kenya. Based on the P-value (Table 4.10) of 0.0135<0.05, the null hypothesis was rejected. This implied that debt tax incentives significantly affect capital market performance in Kenya.

The third null hypothesis (H_{03}) was that trading tax incentives have no significant effect on capital market performance in Kenya. Based on the P-value (Table 4.10) of 0.6060>0.05, the null hypothesis was not rejected. This implied that trading tax incentives do not significantly affect capital market performance in Kenya.

4.10 Discussion of the key Findings

The first objective of the study was to assess the effect of equities tax incentives on capital market performance in Kenya. In the short run, tax incentives for stocks have a negative and considerable impact on capital market performance, according to the research. This was supported by a regression coefficient of -11.46910 and P value of 0.0148<0.05. This implied that an increase in equities tax incentives is expected to reduce capital markets performance by 11.46910 units.

The findings of this analysis support Githaiga (2013) observation that the benefits of NSE grow even when tax incentives are reduced, and drop even when tax incentives are raised. According to the findings, there is no direct link between stock market incentives and stock market performance.

The study's second objective was to determine the impact of debt tax incentives on Kenya's capital market performance. Debt tax incentives have a negative and considerable impact on capital market performance, according to the research. This was supported by a regression coefficient of -5.651615 and P value of 0.0135<0.05. This implied that an increase in debt tax incentives is expected to reduce capital markets performance by 5.651615 units. The study finding was contrary to Barton and Harcourt (2011) who established that tax exemptions and reductions exhibited a positive relationship with share market performance.

The study's third objective was to see how trading tax incentives affected Kenya's stock market performance. Trading tax incentives had no discernible impact on capital market performance, according to the data. This was indicated by a P value of 0.6060>0.05.

The results of the study reflect the conclusions of Mutwiri and Okello (2015) that VAT incentives do not have a major impact on decisions about the capital structure of companies registered with BNN. The nature of its action is defined as weak. Overall, research demonstrates that local tax advantages do not play a significant role in encouraging investors to engage in NSE-listed companies.

CHAPTER FIVE

SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

5.1 Introduction

The findings, conclusions, and recommendations are summarized in this chapter. This is in line with the study's objectives. It also makes recommendations for future research.

5.2 Summary of Findings

5.2.1 Equities tax incentives and capital market performance

The study assessed the effect of equities tax incentives on capital market performance in Kenya. Equity tax incentives, according to the research, have a significant detrimental influence on capital market performance. The null hypothesis that equity tax incentives have no influence on Kenya's capital market performance was rejected.

5.2.2 Debt tax incentives and capital market performance

The study established the influence of debt tax incentives on capital market performance in Kenya. According to the findings, debt tax incentives have a negative and significant impact on capital market performance. The null hypothesis that debt tax incentives have no effect on Kenyan capital market performance was found to be false.

5.2.3 Trading tax incentives and capital market performance

The research evaluated the effect of trading tax According to the findings, debt tax incentives have a negative and significant impact on capital market performance. The null hypothesis that debt tax incentives have no effect on Kenyan capital market performance was found to be false.

5.3 Conclusion

The study concluded that paradoxically equities tax incentives had a negative and significant effect on capital markets performance in Kenya in the short run. The

probable cause of this situation was that the introduction of a tax incentives in capital markets would serve as a signal to investors as conceptualised in the signalling theory, subsequently triggering a stampede out of the market hence the negative performance of the markets. However, after lagging the model, it was noticed that tax incentives were neutral concerning their influence on the equity markets performance. The import of this is that an introduction of equities tax incentives will negatively impact on capital markets performance because the existing investors majorly view the tax incentive as a savings offered by the government rather than a motivator to invest more.

In addition, the study concluded that debt tax incentives had a negative and considerable impact on Kenya's capital markets. This implies that an increase in debt tax incentives will negatively impact on capital markets performance on account that debt investors and issuers, just like in equity market, perceive the signal of incentives as a savings, that generally impact the market performance. Finally, the research found that trading tax incentives had no discernible impact on capital market performance.

5.4 Recommendations

The study found that tax incentives for equities and debt had a negative and significant impact on capital market performance in Kenya. The study recommendation is that the government need not depend on the tax incentives associated with equities and debt capital markets such as corporation tax and withholding tax on interest to deepen the capital markets. This is because they do not contribute to the overall performance of capital markets.

Further, to deepen capital markets, the government should prioritize other not taxes incentives such as broadening the investor base and increase on offer capital markets products. These are likely to have more influence on capital markets than tax-based

incentives. However, trading tax incentives should be retained as they do not affect the performance and may be a motivator for continued trading and liquidity maintenance.

5.5 Limitations of the Study

The study was limited to investigating the influence of tax incentives on performance of the capital markets in Kenya. The study was also limited to three tax incentives, which included equities, debt and trading tax incentives. Further, the study was limited to the period from 1990 to 2020.

5.6 Areas for Further Studies

The study sought to investigate the influence of tax incentives on performance of capital markets in Kenya. Future studies should consider a comparative study including other East African countries for comparison. The focus was on equities, debt, and trading tax incentives, which accounted for 46 percent of changes in capital markets performance. Future research could look at other tax incentives such as tax holidays, which can further explain the variability of capital markets performance. Future studies further consider expanding the study period to include most current period.

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APPENDICES

Appendix I: Data Collection Sheet

	Capital Markets Performance	Equity Markets Tax Incentives	Debt Markets Tax Incentives	Trading Tax incentives
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Appendix II: Authorization Letter from KESRA





REF: KESRA/NBI/036

15th September 2021

TO: WHOM IT MAY CONCERN

RE: REQUEST FOR RESEARCH PERMIT

THURANIRA GATUYU - REG. NO.: KESRA/105/0037/2017

This is to confirm that the above named is a student at Kenya School of Revenue Administration (KESRA) Nairobi Campus pursuing Masters in Tax and Customs Administration.

The named student is undertaking Research on TOPIC: "INFLUENCE OF TAX INCENTIVES ON THE PERFORMANCE OF THE CAPITAL MARKETS IN KENYA."

The purpose of this letter is to request your good office to assist the above student with the information he requires to enable him work on his project.

Your support to KESRA in this regard will be highly appreciated.

Thank you.

Dr. Marion Nekesa, PHD, Head Academic Research KESRA



P. O. Box 48240 – 00100, Nairobi

Email: kesratraining@kra.go.ke

Tel: +254715877535/9

Tulipe Ushuru Tujitegemee!

Appendix III: Plagiarism Report

INFLUENCE OF TAX INCENTIVES ON THE PERFORMANCE OF THE CAPITAL MARKETS IN KENYA

ORIGINA	ORIGINALITY REPORT				
		8% STUDENT PAPERS			
PRIMAR	SOURCES				
1	ir.mu.ac.ke:8080 Internet Source	3%			
2	ir.jkuat.ac.ke Internet Source	3%			
3	erepo.usiu.ac.ke	1%			
4	Submitted to Independence Community College Student Paper	1%			
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